

International Human Rights Network of Academies and Scholarly Societies: Proceedings - Symposium and Seventh Biennial Meeting, London, Mistragional Human Rights Network of Academies and Scholarly Societies, Committee on Human Rights, The National Academies

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Proceedings

Symposium and Seventh Biennial Meeting London, May 18-20, 2005

International Human Rights Network of Academies and Scholarly Societies

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THE INTERNATIONAL HUMAN RIGHTS NETWORK of ACADEMIES AND SCHOLARLY SOCIETIES

THE NETWORK AIMS TO PUT INTO PRACTICE THE PROFESSIONAL DUTY OF SCIENTISTS AND SCHOLARS TO ASSIST THOSE COLLEAGUES WHOSE HUMAN RIGHTS HAVE BEEN—OR ARE THREATENED TO BE—INFRINGED AND TO PROMOTE AND PROTECT THE INDEPENDENCE OF ACADEMIES AND SCHOLARLY SOCIETIES WORLDWIDE.

[Approved unanimously at the May 11, 2001, fifth biennial meeting of the International Human Rights Network of Academies and Scholarly Societies, held at the French Academy of Sciences in Paris, France.]

Overview of the Network's Mission

The International Human Rights Network of Academies and Scholarly Societies assists colleagues (scientists and scholars) around the world who are subjected to severe repression solely for having nonviolently exercised their rights as promulgated by the Universal Declaration of Human Rights (UDHR). It also promotes human rights consciousness-raising and institutional commitment to human rights work among counterpart academies and scholarly societies worldwide and encourages and protects their independence.

The Network was created in May 1993 at the National Academy of Sciences in Washington, D.C. It has met biennially—in 1995 in Amsterdam at the Royal Netherlands Academy of Arts and Sciences, in 1997 in Rome at the Accademia Nazionale dei Lincei, in 1999 in Stockholm at The Royal Swedish Academy of Sciences and The Royal Academy of Letters, History and Antiquities, in 2001 in Paris at the French Academy of Sciences, in May 2003 at the Centro Stefano Franscini at the Monte Verità in Ascona, Switzerland when hosted by the Council of the Swiss Scientific Academies and, most recently, in 2005 at the Royal Society in London.

The next meeting of the Network will be held in April 2007 in Colombo and will be hosted by the National Academy of Sciences of Sri Lanka.

Some 70 academies and scholarly societies have sent representatives to attend Network meetings. National academies and scholarly societies that have human rights

committees and actively support the work of the Network are considered to be members. The Network has an Executive Committee that administers the Network. In addition to founding members François Jacob (France), Pieter van Dijk (Netherlands), and Torsten Wiesel (USA), (sadly, founding member Max Perutz died in February 2002), the Executive Committee includes Arjuna Aluwihare (Sri Lanka), Claude Cohen-Tannoudji (France), Belita Koiller (Brazil), John Polanyi (Canada), and Edoardo Vesentini (Italy). The Committee on Human Rights of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine in Washington, D.C. serves as secretariat for the Network. Carol Corillon directs the committee and is Executive Director of the Network.

Other academies that want to consider the creation of a human rights committee and full involvement in the Network are welcome to send a prominent member as an observer to a Network meeting before making a final decision. Both members and observers are encouraged to refer potentially relevant cases and human rights issues to the Network's secretariat for investigation and possible action.

Institutions that are members of the Network have full autonomy and act at their own discretion. They intervene, in the name of their institutions, on cases and issues brought to their attention by the Network secretariat through regular Action Alerts. These alerts often involve colleagues who are held without trial or who have received harsh sentences. Many are confined under deplorable conditions, often in solitary confinement. Some have been tortured, most have been mistreated, and many are in poor health

All members of the Network are expected to actively support its goals and to keep the secretariat informed of their efforts and any subsequent results. The Network secretariat also prepares private petitions for imprisoned colleagues that are submitted to UNESCO's Committee on Conventions and Recommendations by selected academies and individuals. The Network occasionally sends observers to the trial of a colleague or colleagues.

Members of the Network believe that academies and scholarly societies worldwide are in a unique position to help promote and protect human rights, to raise the consciousness of academies and scholarly societies about human rights abuses and what they can do to help resolve them, to gain the freedom of their imprisoned colleagues, to assist others whose rights are unjustly and severely restricted, to support the independence of sister academies throughout the world, and to encourage scientific exchange and cooperation. Because academies and scholarly societies are held in high esteem and their dignity, integrity, and objectivity are widely recognized, their efforts, through a worldwide network, can be a powerful and effective tool in advancing respect for human rights.

Summary Statement The International Human Rights Network of Academies and Scholarly Societies May 2005 Meeting, The Royal Society, London

The International Human Rights Network of Academies and Scholarly Societies, created in 1993, met at the Royal Society in London from 18-20th May 2005, at its 7th biennial meeting, with representation from 42 scientific academies around the world.

The participants of the meeting noted with considerable concern that human rights violations are increasing, sometimes behind a façade of legal rectitude and particularly in reaction to the major terrorism events of September 2001. It was affirmed that torture, detention without due process, and other human rights violations cannot be accepted, even in light of urgent measures needed to combat and weed out terrorism.

It also was affirmed that basic rights and freedoms must be maintained, even under the most difficult of circumstances, and that the Network is appropriately and particularly concerned with the basic rights of scientists and scholars. The meeting participants were gratified to review the documentation on the many individual human rights 'cases' that the Network had addressed, and in some instances helped redress, during the previous two years and expressed determination to continue those efforts.

During the meeting it considered amongst other issues the rights of scientists to work and communicate with others, in different situations in the world. The importance of maintaining the rights of these colleagues to freely work and travel in the pursuit of science, and exchange ideas with others in their field, even across the most apparently intransigent political divides, was strongly endorsed by the Network. The participants expressed their opposition to boycotts and moratoria of scientific exchange between institutions and among individuals. The members of the Network also expressed concern about excessive difficulties in obtaining permission to, and visas for, travel.

The Network members were pleased to note new and positive developments regarding scientific cooperation, for example, those between Israeli and Palestinian academics and institutions which promote the exchange of ideas and may serve as an example for constructive non-violent action in other similar situations.

With Gratitude

On the occasion of its seventh biennial meeting, the members of the Executive Committee of the International Human Rights Network of Academies and Scholarly Societies acknowledge with gratitude the generous support received from the British Academy, Horace W. Goldsmith Foundation, Richard Lounsbery Foundation, Scherman Foundation, Inc., Alfred P. Sloan Foundation, Open Society Fund, Royal Society (UK), National Academy of Sciences (USA), National Academy of Engineering (USA), and Institute of Medicine (USA).

The Executive Committee would particularly like to thank the Royal Society, London for graciously hosting this three-day event and the British Academy for its generous organizational and administrative assistance prior to and during the event, as well as for hosting the meeting of the Israeli-Palestinian Science Organization following the Network meeting. We are particularly indebted to Ruth Cooper at the Royal Society, Jane Lyddon at the British Academy, and Jennifer Baky at the U.S. National Academies for their to the Network's assistance secretariat in overseeing many programmatic, logistical, and administrative aspects of the meeting.

INTERNATIONAL HUMAN RIGHTS NETWORK of ACADEMIES AND SCHOLARLY SOCIETIES

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--

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Claude Cohen-Tannoudji *France*

Pieter van Dijk*
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François Jacob* *France*

Belita Koiller Brazil (as of 2006)

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INTERNATIONAL HUMAN RIGHTS NETWORK of ACADEMIES AND SCHOLARLY SOCIETIES

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Derek Denton

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Bangladesh – Bangladesh Academy of Sciences M. Shamsher Ali

Belgium – Royal Academy of Belgium Amand Lucas

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Canada – Royal Society of Canada Eva Kushner

Chile – Chilean Academy of Sciences Tito Ureta

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Introduction

The International Human Rights Network of Academies and Scholarly Societies (the Network) held its seventh biennial meeting on May 18-20, 2005, at the Royal Society in London. The meeting began on Wednesday afternoon with an informal lunch and warm welcome by Torsten Wiesel, on behalf of the Network's Executive Committee. He noted that, for more than 300 years, the Royal Society has hosted some of the most important events in the scientific world and some of the world's most prominent scientists and said that it was indeed an honor for the Network to meet at the Royal Society to address issues of science and human rights and to contribute, as best it can, to making a better world.

In opening the plenary session, Dr. Wiesel provided an overview of the three-day event and the operations of the Network, particularly noting that each participant had been given a copy of the Universal Declaration of Human Rights, the document on which the Network bases its work. Wiesel noted that an increasing number of academies represented at the meeting have taken action based on the declaration over the years to promote and protect the rights that are enshrined in it.

Wiesel expressed the wish that the meeting serve to inform and inspire those in attendance to return to their academies and do some consciousness-raising among their members and truly support the work of the Network. "We are in our 12th year so it is now past time to decide whether or not you and your academies truly want to support the Network." He noted that, during the workshop on Friday, one of the primary tasks would be to look at the work and mission of the Network and the structure and composition of the Executive Committee. "I hope that all of you, but particularly those of you who are genuinely active in the Network, will give this serious thought between now and Friday as you listen to the various talks and have discussions with other participants."

Wiesel went on to say, "We would all like to right the wrongs of the world, but to accomplish anything we have to have a focus and achievable goals. This Network must work to find a balance between the abuses that we abhor and those that we can reasonably and appropriately address. We are scientists and scholars with rights and responsibilities and access and influence. How can we best exploit these qualities to uphold and defend human rights? We need to think seriously about this question during the next few days."

Carol Corillon, the Network's Executive Director, then announced that, since what began as an experiment at the last Network meeting appeared to be a success,

breakout sessions for participants from various regions had been arranged again so that participants could become better acquainted, discuss issues of science and human rights of particular concern to their academies and within their specific regions, and identify what steps might be taken to strengthen representation within the Network by their own academies and scholarly societies and those academies in their regions that are not involved with the Network.

[The Plenary session was then interrupted so that participants could join their specific geographic breakout groups for several hours of discussion before rejoining the plenary at the end of the day.]

This proceedings has been prepared from audio tapes made during the Network meeting. We have tried to transcribe what was said as accurately as possible and to properly identify the various speakers during the discussion sessions. However, we experienced some audio problems, various participants failed to identify themselves every time they spoke, and others neglected to speak directly into the microphone so certain questions and comments were not audible. We apologize for any consequent inaccuracies in the text or if we inadvertently misidentified or misquoted any of the participants. Every effort was made to maintain the accuracy of the original presentation.

Reports: Regional Breakout Groups

Wednesday, May 18, 2005

[The substantive aspects of the meeting got under way with rapporteurs from the five breakout groups summarizing the very lively and positive discussions that took place. This session was chaired by Torsten Wiesel.]

Africa (Sub-Saharan)

Felix I. D. Konotey-Ahulu reported first.

Of the five countries represented by the team from Africa (Uganda, Nigeria, Kenya, Morocco, and Ghana), only Kenya has not had a coup d'etat since independence. So our understanding of human rights is a little variable.

In Ghana, we had about five coups d'etat in our short span of life. The effect they have had on the Ghana Academy of Arts and Sciences is extraordinary. One fellow of the Academy might sit at the right hand of another fellow, who belongs to the junta. Then he might have a fellow who is in the oppressive party on his left. So, it is clearly difficult to talk about human rights. This booklet containing the Universal Declaration of Human Rights, published by the United Nations, is excellent, and we could use it as a blueprint. We could say that what this book says is what goes, irrespective of whether the fellow on your left or on your right belongs to the junta or not. But we also agreed that the interpretation of the function of the International Human Rights Network, as far as Africa is concerned, is too narrow, because human rights abuses on our continent are not identical to those elsewhere. We feel that to limit abuses of human rights to those that involve scholars and academics is too narrow, and the human rights abuses addressed by the Network should be expanded.

Gideon Barak A. Okelo continued the report.

The group discussions are very useful. They enrich the agenda of the Network, giving us the opportunity to review conceptualized human rights abuses, not just narrowly in terms of one or two regions of the world, but globally. There have been as many human rights abuses in Africa, perhaps more than anywhere else in the world. The only difference is that there has been very little effort to articulate these abuses. Nevertheless, the scene in Africa is changing, and many of us are taking on some of these challenges.

I will begin by addressing what our committee at the African Academy of Sciences is doing. Since we last met, two years ago, the African Academy of Sciences, of which I am the Secretary General, has set up a network of science academies in Africa. In all the countries and independent states of Africa, there are only about 10 national academies, so the African Academy of Sciences has championed the formation of a network of science academies in Africa. This was done at the end of 2001.

The second thing we have done is to form a committee on human rights, which is headed by a well-known political scientist who is now a minister in the current government in Kenya. He was unable to come to this meeting, so the African Academy ended up sending me as its representative, a medical person.

The third thing we have done is to set up the Special Commission on Africa within the African Academy of Sciences. The Special Commission deals with each and every issue in Africa, including human rights abuses. A lot of efforts have been made in this direction. For example, some three years ago, the African Academy of Sciences organized a meeting to be attended by all the warring parties in the Southern Sudan, including the Sudanese government. We were able to speak freely about various abuses. This was very useful because the information was then published and made available to all concerned people globally.

The next issue is to raise three or four of the most prominent problems related to science and human rights in our country. Of the human rights abuses that we see in Africa that I would like this Network to address, I would include female genital mutilation (FGM) which, as you know, the World Health Organization has taken up. We, as scientists in Africa, especially the medical scientists, have always argued against FGM, and it has been a human rights abuse for a very long time. I'm glad the World Health Organization is taking this up.

The second problem in Africa is corruption. Perhaps to a European, corruption does not appear to be an abuse of a human right, but it depends on the details and the facts. The type of corruption that you have in Africa also involves Europe, because a lot of the money that is stolen is actually taken to a few European countries. Some Europeans in those countries assist the corrupt in Africa and try to simply keep the loot. How does a network like this get concerned about this issue? There is no way that the Network can work in isolation, because it is a human rights organization addressing human issues. Corruption affects human health, for example. If I see a patient or a child who is anemic and very malnourished, it is because the parents are poor, there is no job for them, and the economy is bad because of corruption. Ultimately it has health dimensions.

It took us a decade to tell our politicians that HIV is not just a health problem, but also a human rights issue. Some of the patients have a right to be given drugs; drugs should therefore be available, and the various ministries should be given enough money to provide them.

Corruption in Africa is an issue that both Europeans and Americans should be concerned about. It will not do to keep quiet about this and say that it is a political issue that has to be sorted out. No, there are many dimensions to it. If everybody is talking about it, that is when a solution may be reached.

The third problem of human rights abuse in Africa is civil strife. Some of this is flagrant human rights abuse—denying people their civil rights. Take for example the case of the Ivory Coast. The current government is formed by people from the south, and therefore nothing is allowed to go to the north. There is constant civil strife, resulting in a very large number of

refugees. The biggest victims of this abuse, as all of you know, are the less advantaged, who nearly always include women and children.

These problems—female genital mutilation, corruption, and civil strife—are the ones I would like a network like this to be aware of and to develop an agenda for. Approaches need to be made to develop arguments around them that emphasize correction of these human rights abuses.

The third issue to address is, Does the Academy have a human rights committee? Yes, we do, as I've mentioned. We also encourage each of the 10 science academies in Africa to try and have a human rights committee that will maintain surveillance regionally.

What steps have we taken to encourage other academies? One step is the formation of the network, and another is to encourage groups of scientists in different regions of Africa to form science academies very much independent of politicians. This is important because the few national academies that exist are entirely dependent on government with little discretionary money in the budget. Sometimes, even when an academy feels strongly that human rights are being violated or ignored, the members are afraid to raise their voices, because if they do, next year there will be no money. We encourage them to form independent science academies.

We have recently launched the first newsletter by the network of science academies in Africa. This is going to be a forum in which to raise concerns about human rights abuses in Africa.

We want to develop several regional academies. An academy has just been formed in Zimbabwe, and some six years ago an academy was formed in Senegal. Some other African countries are in the process of establishing academies as well. This will eventually enable the academies in Africa to speak collectively on all issues, including human rights issues.

My final point is to suggest what this Network can do to help protect the integrity of the academies and promote freedom of responsible research. This Network will be very useful to offer ideas—not money—to the national academies on how they can raise funds without necessarily getting them from government. This is very important with regard to being able to speak freely and express opinions. The African Academy of Sciences has this advantage because it is not getting money from any government on a regular basis, although an endowment was given to us by Nigeria. We are approaching other governments, on the basis of an endowment; if they don't like our request, they will not give us the money. If they do give us money, we are still able to speak freely without being afraid.

Ideas on how to fund this, to make the academies independent financially, as has been suggested to some of my colleagues at the National Academies, would be very helpful. One of the ways would be to ask a government for a one-time donation. It might agree to donate \$5

million or \$1 million. That way, one doesn't have to go back to them again. One can say thank you, disappear, and then try to invest that money so that the academy remains independent.

In Africa, dealing with human rights abuses is a very difficult issue because of the political atmosphere. Our scientists have not spoken out, although it is necessary for them to do so. Sometimes the boundaries are clear-cut on issues, but sometimes the boundaries are very gray. It would be morally wrong for scientists to stand aside, particularly when it is a gray area, because very few problems are well defined.

Americas

Eva Kushner reported for the group.

I'm afraid this will be disappointing and not nearly as extensive as the report we have just heard. I was supposed to be the coordinator and not the rapporteur. I took a few notes, and I'm sure my colleagues will supplement what I'll have to say.

We represent five countries: Colombia, Costa Rica, United States, Canada, and Chile. The first thing we discussed was mutual information about our academies. No one claimed absolutely perfect performance in cooperating with the Network. In fact, on the contrary, we reported difficulties in persuading colleagues, persuading ourselves, to respond each time there is a call to intervene in a case.

Besides human frailty, a more fundamental reason is that the academies represent different models. In all cases, there was doubt or at least hesitancy as to whether such activity is automatically part of the definition of an academy. Very often, institutions and individuals retreat into that definition, saying that is not a primary function for an academy. I certainly encountered that attitude in Canada. Nevertheless, there was great admiration and great approval for the activity of the Network and certainly evidence of activity in the various academies.

Some of the weaknesses related to the infrequency of meetings and that, in turn, poses the question of whether action should be undertaken by the institution itself or by individuals. Sometimes the results are better if individuals intervene rather than to try and obtain the official approval of the academy. The U.S. academy is an exception, because one of its functions is to advise government on policy. It therefore has a very powerful committee with 1,700 members supporting it as "correspondents." In Canada, The Royal Society has a committee that has about six members and usually acts through its chairman.

A substantial part of our discussion was how to improve this performance. The underlying question is whether it is our primary function to intervene in individual cases. If all human rights committees of all academies did this 100%, that would be marvelous performance—and in many cases, it is. There was also a lot of discussion about other domains in which a network could be helpful. We defined the universality of science as being perhaps the ultimate territory. Not only should we defend colleagues who are in difficulties or in prison or

otherwise persecuted, but also to what extent should we be defending freedom of research and scholarship?

My committee in Canada, the Committee on Freedom of Scholarship and Science, recognizes the importance of all aspects of potential defense of the universality of science, as well as the freedom of scientists individually and collectively to engage in research fruitfully. Our conclusion was that, although ideally it should be a goal, and it can be the calling of the Network, it is perhaps too much to undertake, at least for several of the countries represented in this group. I'm not asserting anything, but I'm submitting this as a question to the Network.

Our two main conclusions are yes to the strengthening of the present activity of the Network and certainly research into all aspects of the defense of freedom of research universally. This implies quite a bit of opposition to government interference and corporate interference, but hesitancy as to wider engagement.

Asia

Arjuna Aluwihare introduced the report.

Asia has nearly half the world's population. Although the two biggest countries are not directly represented here, there are points of view from the region that are interesting. What goes on vis-à-vis science and human rights now in Asia may have much further and longer impacts into the future than could otherwise have been imagined.

M. Shamsher Ali then gave the report.

First, we discussed Latsami Khamphoui from Laos (a former political prisoner). He made a request that his participation here should not be recorded, so we listened to him very carefully. He is an economist.

We examined the cases of scientists from Pakistan, Iraq, Kuwait, and Cuba and appreciated the way these cases were handled. We expressed all-out support of the cases recorded in the documents included in the agenda book.

Our first point of consensus is that the Network could suggest that each academy should form a human rights committee. I think this is the call of the hour.

Such a committee could procure information about the unjust treatment of scientists who have merely expressed their opinions and could act in close collaboration with the Network to

give more support globally to the cause of scientists. The work that is being done has been quite appreciated, but if each academy has a little cell or committee, this work could be reinforced.

The next point discussed is that the scientists in many countries have had to impose a kind of self-censorship on their own work and their own voices. There are countries in which international banks, like the World Bank, bring in large amounts of money for scientific projects. Some patriotic scientists may think that these projects of far-reaching consequence are not really going to be beneficial, and history may prove them right. However, if they speak freely, this difference of opinion is often taken to be of an anti-state sentiment, especially for projects for which the funds flow from outside. Governments are afraid that these kinds of differences of opinion may cause the funds to be withdrawn. As a result, the voices of those in opposition are hushed and not listened to. This is very unfortunate.

The Network should encourage them to speak freely, not just by opposing the projects but analyzing them from the right perspective, and then to work, irrespective of whether their voices are heard or not.

What is the power of science? What is the power of a scientist? It is the power to think. The capability to think is the greatest asset that we have. Since the Network has been involved in this very big task, we are defending the rights of scientists, the free voices of scientists, but the basic right is the ability to speak, to say the right thing at the right time. If that right is usurped, then it is the scientist's death, in a way. He can live physically, but his mental powers are gone.

The Network should encourage scientists to say whatever they should say, irrespective of the development projects of their own countries.

The Network should also work with other human rights organizations to plead the case of scientists. In this connection, our colleague from Taiwan mentioned that he was asked to find out how many scientists were killed in the Tiananmen Square incident. He said, it was not just scientists, a vast number of people died. In such a case, the movement should be not only for scientists, but also for every person who died. The 17th century English poet John Donne said "Each man's death diminishes me, for I am involved in mankind. Therefore, send not to know for whom the bell tolls, it tolls for thee." We are a subset of the total set. So, while we are doing our subset well, we should also be taking care of the bigger set of which we are a subset—the other human rights activists.

There was also some discussion on why scientists are tortured just because they did, under one government, some scientific work or another. In Banff, in Canada, we were having a PUGWASH meeting to which we invited students. One student who came said, I don't understand scientists—are you mad? You are developing weapons, and then you are asking why this weapon should not be utilized? Why are you developing it in the first place? This question is very, very important, but we must realize and appreciate the conditions and mind sets in which scientists work globally. They are under terrible pressures. They are involved in some kind of

work that is not beneficial to mankind. I can quote the case of Enrico Fermi; he was a physicist, and some of his letters have been declassified. One wouldn't think that such a man could say, if we want to kill people by the thousands, what kind of radioactive arrangements should be involved. It is necessary to take into account the mind set of scientists at that time [World War II]. In order for scientists not to be roped into such conditions, they do not get involved in work and then repent later. I saw Oppenheimer in later years; he could never smile after Hiroshima and Nagasaki. Never in his life could he smile again.

We should try to arrange meetings between important leaders in science and the Network, which has been headed by no less a person than Torsten Wiesel. We must also appreciate that they work under pressure, especially in the case of Iraq and the weapons of mass destruction. Many people were taken into captivity on mere suspicions. When this came up, we said that we must understand the conditions of scientists. It is not in their particular land—the situation is global, and the scientists are often forced into doing certain work.

We considered the visibility of the Network and how to increase its clout. The quality of the people involved in it is essential. People power is the greatest of all powers. Nevertheless, Amnesty International has consulting status with the United Nations.

We are thinking that if the Network can secure a position with the United Nations, along with Amnesty, its voice can be heard at the highest level, both internationally and by the national governments, increasing its visibility.

In order for these voices to be heard, something more should be done. For example, on matters of public interest, such as cloning, the Inter-Academy Panel has been issuing statements of public concern. We have been issuing statements saying that cloning should not be banned, because a lot of good things can come of it, and it is necessary for agriculture. It is generally accepted, however, that human cloning is not recommended. If the Network makes public statements on matters of importance, then its credibility, apart from its visibility, should increase, as governments see that here is a body to which they can turn for sound advice for the sake of mankind. Its visibility and credibility should increase because of the good advice and the quality of the people involved.

The wisdom and power of scientists should be used. How to do this, how to plead with governments, and how to improve the national academies are all questions that need serious thought. It is only when local scientists fail to deliver the goods that the international agencies bring in their own experts. We highlight the point that the only commonwealth of mankind is knowledge, and this knowledge is not being shared properly, especially after the 9/11 events. International cooperation among nations is being hampered, because of the restrictions.

Scientists must not work in isolation. They must collaborate with their counterparts everywhere in the world. Access to information, access to laboratories, and access to data—their right to work and collaborate freely with each other—must be preserved. Security should not stand in the way. How we accomplish this is something we should give more attention to.

Question – We talked about cooperation, and you assumed that all scientists of the academy all agree. If half of the scientists working on a project agree with that project, and the other half don't agree, do you assume that they can speak with one voice? It is the same with cloning—half of scientists say human cloning can be done.

Ali – The intellectual debate is always very healthy, and we should not discourage it. The question is, at the end of the day, we must come to a conclusion. No government, no organization has advocated human cloning. But if you make a total ban on cloning, the research, especially in the agricultural sector, could suffer. Sensible people are bound to come to the conclusion that some part of it is good. Look at the revolution in agriculture. It is possible only because of research.

Torsten Wiesel – The Network was not created to worry about stem cells or scientific issues of this nature. That is more the purview of the Inter-Academy Panel, which was created after this Network because of the need to address this kind of question.

Comment – The rights of scientists and the rights of science are inseparably connected. There has to be some interactions between these so that we can all act in tandem.

Europe

Hermann Hunger presented the report.

We discussed how the different Academies interact with the Network and what can be done to improve it. I want to pick out a few things that came up again and again. One was human rights in the face of what is called the fight against terrorism.

It is not so easy to distinguish between a fight against terrorism and a fight for liberty. But human rights are now frequently violated in the guise of governments needing or wanting to fight terrorism or what they take to be terrorism. This was seen as a problem that we in the Network will have to deal with.

It was suggested that this conference could propose a resolution on this topic. Also mentioned in our group was the need for a comprehensive report on this meeting. There was some discussion whether the Network and the Academies should focus more on the cases of individual scientists or on principles and under what conditions should attention be paid to cases.

There was also discussion of a particularly European experience, which is the change in government that came about from the breakup of the Soviet empire. People from states that are now free of it can offer help in dealing with cases because they have experience from the past. In some cases, the consequences of what happened are still felt. For instance, in the former Yugoslavia, a representative from Kosovo said that, while in principle they are free, the isolation

of scientists from the outside world is a problem because their movement is restricted. People can't get visas to go to conferences, for example. In this context, we are missing representation from Russia and the Ukraine. It is suggested that we or the Network could try to increase the participation of European academies.

Middle East and North Africa

Driss Dahak presented the report.

Addressing the situation of human rights in the region has taken a new, positive step in the creation of a National Council in Morocco, Jordan, and Egypt and by passing some legislation for the protection of human rights. I know the road is long, but the beginning is most important.

Morocco started experiencing important changes in the early 1990s. The new era in Morocco's history was marked, among other things, by the great commitment in 1992 to revisit the constitution to universally recognize the human rights standards and by the creation of the National Council of Human Rights.

The council achieved many positive works because of its composition as representative of various segments of society, and the decisions of the council represented the consensus of Moroccan society. Perhaps its most outstanding achievement is the creation of the Independent Arbitration Commission to look into complaints by victims of human rights abuses and to request the state to compensate them accordingly. This was a unique experience in the developing world. This experience is also unique because it did not occur as a result of political challenges, as was the case in other parts of the world. At the conclusion of its work in the year 2003, the commission gave grants totaling U.S. \$100 million in compensation to victims of human rights abuses or to their families.

Also at the end of 2003, the Justice and Reconciliation Commission was created. This commission conducts public hearings about instances of past human right abuses. During its hearings, victims of human rights abuses give accounts in public and on live television of the physical and mental torture and other degrading treatment to which they were subjected. This has been for many a painful but healing experience, which was recorded in the national memory so that similar abuses can never happen again in Morocco.

Morocco has not only addressed the wounds of the past, but also has been marked by a forward approach. That is a rare move by a Muslim country. In 2003, Morocco adopted a new family law that gave women and children more rights while preserving the unity of the family. An ombudsman has been appointed also to look into complaints by citizens.

With regard to the protection of rights of scientists and other scholars in Morocco, there is currently no record of any abuse concerning them.

Morocco still has a few challenges to meet in the future, particularly in the promotion and protection of social, economic, and cultural rights. This is a vast and complex subject, so I limit myself to the issue of genetic research and its legal and moral dimensions. How will the provisions of the Universal Declaration of Human Rights be implemented in the 21st century? What might the Network do to protect the integrity of academies and their research and promote freedom of responsible research? Science and human rights is a complicated issue. It is a vast and complex subject. Will the different interpretations of its provisions clash? Or, will those provisions have to adapt to the rapid evolution of our world?

The cornerstone of the Universal Declaration of Human Rights, as stated in its preamble, is the recognition of the inherent dignity of human rights and families. What is the meaning of human dignity? Article 6 of the statute of the International Military Tribunal, for instance, known as the Nuremburg Statute, gives particular attention to the dignity and worth of man and provides that it should be protected from crimes. Furthermore, according to some constitutional codes and laws, the protection of human dignity means the preservation of integrity of the human race. It seems that interference with the genetic heritage of mankind may violate human dignity. As a judge and human rights promoter, I would like to ask, Is genetic engineering in any way a danger to the integrity of human rights? Are the legal and moral standards always respected, or at least taken into consideration? The answer to the questions is important, especially as recent developments in genetics such as cloning experiments, the use of sperm banks, and the conception of human beings out of the normal biological context have created big controversies. What would be, for example, the legal status of a child conceived by a woman in country X after she had received the sperm of a man living in country Y? Have the human rights of the child been protected? Are we about to witness a controlled process of genetic manipulation and selection as more and more men and women with special beauty, intelligence, skills, and other attributes are advertising the sale of their genetic features? I think the Network should react against any measures of science, especially in the field of genetic engineering, so that the ethical foundation of the Universal Declaration of Human Rights is preserved.

Discussion

Torsten Wiesel – I attended this discussion in which there were also representatives from Egypt, Jordan, and Israel. We discussed a number of issues that relate to the situation in each country and also the crisis in the Middle East. We will have an opportunity to get into that discussion when we meet on Friday, when some representatives from Palestine and Israel and others will be present. Again, our mission is to address issues that can be looked upon as a violation of our rights as humans. The issues have been raised in different ethical, legal, and medical/scientific contexts.

What I found particularly interesting with this presentation was that here is a man high in the judicial system who, before becoming Supreme Court Chief Justice, was involved in various efforts—the Council for Human Rights among others—that have been able to change the laws in that country. In this way the policy relative to human rights has been influenced. Most people are in prison because they have broken the law. Addressing the laws in various countries is a

way of looking at it that perhaps could be interesting. Maybe we could have a discussion about this issue at some point, although it is not on the program.

Question – One question is, Should there be a code of conduct of scientists who call themselves responsible research scientists, or should there be a code of conduct for responsible research scientists? Some of the professional organizations have what they call a code of conduct or a code of ethics, and for some of them you have to take an oath that you will never do ABCD. I think the medical profession is one such profession. But in the question of responsible research, there should be a code of conduct of the people doing that research, or a particular group of professionals—in this case, scientists.

Arnold Wolfendale – I want to comment about responsibility. Perhaps I should say that I am imbued with enthusiasm, as a scientist, for a code of conduct. I tried very hard to get it through the European Academy and failed. I also mentioned it to this body in Paris, and it fell on stony ground because of the difficulty of implementation. So, I'm with you in spirit.

Wiesel – I think we are all trying to be responsible. With the Hippocratic Oath in medicine, we will discuss that again, as it will come up tomorrow and Friday. The violation of this principle has been obvious in recent cases.

Comment – In our discussions we mentioned that in Nazi Germany you had scientists who were extremely brilliant on both sides. The whole question of unethical behavior in science is very difficult. There isn't an objective standard, so if the blue book [containing the Universal Declaration of Human Rights] could be expanded to include that, I wonder if scientists would be forced to adhere to it?

Wiesel – When it comes to articulation of these issues, it is hard. There have been books written on how the Universal Declaration of Human Rights was created and all the struggles that were involved. But to emphasize responsibility, as an example, with Fermi, who could never smile again after the atomic bomb attack on Japan, as a brain scientist, I think about that, too, because there are certain responsibilities you have, and there are dangers also. How do we protect the world, societies, and the individual from future threats that can be created by new discoveries? Science moves on, and you can't say, You can't do this and you can't do that. You have to leave the door open. At the same time, you have to create a society in which the people are responsible and ethical. Once you formulate that, then bureaucrats take hold of it and before you know it, you lose your freedom of speech and all kinds of other freedoms. It is a tricky issue.

Yuan T. Lee – I am somewhat disappointed that there is nobody at this conference from Russia, Ukraine, or China. Can you explain to us why they are not here?

Wiesel – National Academies in all of these countries have been invited, and Russia came to some of the earlier conferences. The Chinese Academy of Sciences, in the early years, said that we should work with their Chinese Academy of Social Sciences. There is a certain reluctance, because it is a sensitive issue in China, so to have public involvement has been difficult. With the Ukraine, it's unclear because of the current situation—maybe next time they will be present.

Carol Corillon – I did get a letter from the Russian Academy of Sciences. They are having their annual meeting at this time, which happened the last time as well. I think that was the reason they didn't come. Previously, they said they would come if we paid for the travel, and we did. But no subsequent action was taken, so I was hesitant to continue to pay for the travel.

Comment – I think the issue of cloning has been complicated by a lack of understanding between religious groups and scientists. Both have a responsibility to come together. Let me tell you how this gap has widened. When the human genome project was completed in two different laboratories, both of the directors said, in almost identical language, now we are beginning to understand the language in which God created life. God was not dispensed with, although the religious groups are afraid that God, and the kind of society that has evolved through generations, will be dispensed with.

The molecular biology can be summed up in a nursery rhyme: Humpty Dumpty sat on a wall, Humpty Dumpty had a great fall, and all the king's horses and all the king's men couldn't put Humpty together again. I was presiding over a conference in Los Angeles in 1988, and Robert Seitz, whose book I was reading when I was at the university, said this is a very unkind remark. Even the modern biologists, with all the tools and techniques at their disposal, are not in a better situation because biology is not a negative process, it is a holistic approach. Even if you are able to know exactly what the individual cells are, and if you have a factory in which you manufacture each one of these, and you put them together, it is no longer life. You have to have a cell from which you manipulate. You are not creating a cell, and even if you are able to perform some feats, it depends on the mental attitude. You can say if man can do that much, God can do even more. There is a lot of misunderstanding, and we should not stop the march of science. At the same time, we have to be very responsible as to what applications should go forward. There are a large number of very pressing areas in agriculture and botany in which the research could be of vital interest. It doesn't interfere with the planning of God or the domain of God. It shouldn't be interpreted in that way.

Wiesel – That is, of course, a personal viewpoint. In the United States, as you know, there is now a strong movement called intelligent design, which some of us look upon as a scam, in which it is not clear who the designer is. The designer is not necessarily God, as you would like to say. This is an area that one has to treat very gently. There are many scientists who may be reductionists and who are still religious. It doesn't necessarily have to be a conflict, but I don't think they have much to do with each other. That is the way I will put it.

Wolfendale – There may be some doubt about the existence of God, but there is no doubt about the existence of the devil.

I hope there will be time to debate or discuss the problem of 9/11 and the world overreaction and its influence on human rights. I view with great distaste activities in various countries to counter terrorism that often isn't there. I hope that we will issue some sort of statement that would go to the appropriate authorities. It is not for me to say what the statement would be. It is up to everyone else.

Wiesel – It is a problem—as with cancer—you want to kill the disease, but you don't want to kill the patient. It is a problem that we still are trying to understand. Once we can better understand the basis of behavior better, maybe we can also help fight terrorism on a scientific rather than an emotional basis.

Corillon – The Network did make a statement in 2001 titled Responding to Terrorism while Respecting Human Rights.

Marino Protti – The actions that can be taken by regional networks or regional academies, as well as a lot of the work that the Network is doing on some particular issues, may not be effective in some areas. They might, however, be effective regionally, in countries with a similar history and similar religions. There should be more encouragement through the regional academies to bring the issues of human rights into the discussion.

Wiesel – As you heard, there is a human rights council in Morocco, and apparently also in Jordan and Egypt. I didn't realize how important these organizations are. The members are appointed by the government in Jordan and in Egypt, but in Morocco three are nominated, and the government selects one of the three. Clearly the government has a finger in the pie. On the other hand, it shows that these governments, by appointing a council of human rights, are trying to address these issues in the various regions. Each country has a different culture, different tradition and so on.

Erling Norrby – I made a rather wide inventory of issues that the Network could be involved in. I think the importance of a meeting like this is to try to focus and decide on some particular issue that would be the emphasis for the forthcoming two years. It was very commendable that at the meeting in Switzerland, for example, the emphasis was to engage in the formation of IPSO (Israeli-Palestinian Science Organization). Something like that coming out of this meeting would be useful.

Peeter Tulviste – Sometimes the authorities exert pressures on scientists, and scientists are not always free. I spent most of my life in that state, and I would like to say that it is a very complicated question. I would not agree with what you said as a general thesis. For example, millions of people in the former Soviet Union taught the students in all those universities the history of the Communist party, scientific communism, so-called political economy of socialism, and so on. Most of it was a total lie. It was just there because these disciplines existed to support a regime that violated human rights massively every day. Nobody pressed those people to do it. You can see that they were not real scientists. That is true. The other example I would give is Estonia, in Tartu, an old university city, there used to be a monument to a very well-known medical scientist who graduated at the beginning of the 20th century from our university. His name was Nikolai Bordenko, and later on he was the main surgeon of the Soviet Army during the war.

You won't find this monument there anymore, and the reason is that after Germany and the Soviet Union divided Poland between themselves, 21,000 Polish army officers were killed by Russians. The Germans discovered this and made it public. When this territory was in the hands of the Soviets again, Stalin made a special commission, which had to say that it was the Germans

who killed those people and not the Soviets. Stalin appointed Bordenko as head of the commission. Of course, it gave the conclusion that Stalin wanted.

If you put yourself into Bordenko's position, you might think that these 21,000 people are dead, and if you don't want to become dead very soon yourself, you had better say it was the Germans who killed them. But that is a very dangerous logic.

My last example is to imagine these terrible experiments made in German concentration camps. If you go on the least kind of logic, you can say that probably very soon these people will die in the camp anyway, so it is possible to make experiments that you can't do under normal circumstances. Going one step further, you can say that all of us are mortal and will die, either soon in this camp or later in some other place.

Comment – Did our group say something that contradicts you? What are you not agreeing with? What did we say?

Aluwihare – There have been situations in which scientists may or may not have been pressured into a variety of situations.

What we discussed is that scientists have a responsibility to speak out based on evidence and, if necessary, disagree or fight against the governments that are trying to pressure them. If scientists suffer as a result of having to fight such governments, it should be known that there is a Network that will come to their defense. If that is widely enough known, that could exert a preventive effect on certain governments trying to terrorize their scientists. In fact, it may embolden scientists to speak out and to do what they think is correct on the basis of scientific evidence and not capitulate in doing genetic experiments on people and so on. The integrity and respect of the scientific community may be strengthened by knowing that there are organizations like the Network so that they can actually oppose their government safely. Governments may feel that they need to handle the scientific community with kid gloves because if they don't, they are going to have a ton of bricks coming down on their heads.

[Torsten Wiesel ended the session by announcing that a reception for Network participants and guests was immediately to follow at the British Academy and would be hosted by the British Academy's President, Nicolas Mann, and attended by the President of the Royal Society, Lord May, and other officers.]

Symposium: Scientists, Human Rights, and Prospects for the Future

Thursday, May 19, 2005

Welcome

Professor Dame Julia Higgins, Foreign Secretary, The Royal Society; Professor of Polymer Science, Imperial College London, U.K.

Good morning, everybody. My name is Julia Higgins, and I'm the foreign secretary and one of the vice presidents of the Royal Society, where you're sitting today. Many of you know it very well. It is my great pleasure to welcome those of you who were not already welcomed yesterday. The Network members had an opening session yesterday afternoon and were welcomed by Bob May, the President, on behalf of the Royal Society, and by Nicolas Mann on behalf of the British Academy. We have a wider audience today, so this is another welcome. Lord May is very sorry he can't be here to welcome you himself, but he has a two-year standing engagement to be somewhere else in the country, and even he cannot be in two places at once.

It is a very great pleasure for us, as a society, to host this biennial meeting. I'm not going to say very much, partly because I'm not an expert, and also because there are much better people here whom you are waiting to hear.

There will be members of the Royal Society and officers around all day. If there is anything you want to talk to us about particularly, we are delighted to do so. The main thing is that this meeting on such an important subject should get going and should introduce a lot of interesting discussion. I already saw last night a large number of helpful, new, and renewing interactions between members of the Network and now, hopefully, members of the broader audience.

Overview and Introductions

Dr. Torsten Wiesel (Nobel Laureate), Secretary General, Human Frontier Science Program; President Emeritus, The Rockefeller University, U.S.A.; Network Executive Committee Member

Thank you very much, Julia, for your introduction and for the welcome by the Royal Society and by the British Academy. We feel enhanced by being in this historically very important building, where science has been fostered over hundreds of years. We want to bring into the discussion philosophical and legal aspects that underpin, in many ways, the defense of human rights.

In the program, there is a mission statement that we formulated at our meeting in Paris. It reads, *The Network aims to put into practice the professional duty of scientists and scholars to assist colleagues whose human rights have been, or are, threatened and to promote and protect the independence of academies and scholarly societies worldwide.*

This is something that has been in the front of my mind for a long time. I grew up during World War II, and subsequent events have kept me, and I'm sure many people of my generation, alert to these aspects of freedom of speech and the imprisonment of individuals because they express their point of view. We want to keep this flame alive, to keep the discussion open, and to encourage our colleagues not to forget that it is a part of our duties as scientists, doctors, engineers, and scholars to protect these valuable assets that we have.

The meeting yesterday to start this off included a very impressive list of academies who are here from all over the world, not only Europe and Asia, but also Africa and Latin America, and the Middle East and North Africa. We wanted this to be a truly international movement, because each country and each region has its own problems and needs. Yesterday, in the regional discussions, academy representatives in each region met to discuss the issues they were particularly concerned about. Then we all met together to discuss what we had in common. In informal, friendly, collegial fashion, we try to build a sense of community among individuals and academies to work on these issues.

I will chair this morning's session, and Claude Cohen-Tannoudji will chair the afternoon session. This morning, we are addressing some of the legal and philosophical aspects of human rights, as well as the policies of some countries regarding torture.

We start out with the more philosophical, legal aspects, just to remind ourselves of both the history and importance of having strong legal and philosophical foundations for what we are trying to do.

Philosophical and Legal Aspects of Human Rights

Theoretical Underpinnings of the Human Rights Concept Baroness O'Neill, President-elect British Academy; Principal, Newnham College, University of Cambridge, U.K.

To be handed the topic "The Theoretical Underpinnings of Human Rights" is to be handed rather a lot. I decided that the talk I should give would be a questioning talk, "putting the cat among the pigeons" as we say here. It is often said that practice is weak in the observation of human rights; the contrasting thought is that theory is strong and underpinnings are available. I agree that practice is weak, but I'm afraid that the underpinnings are also fragile. If we care about the things that human rights are intended to protect, we have some reason to think quite critically about the theoretical underpinnings. This is not meant in any way to be critical of efforts to protect the things that we take human rights to protect.

The ideology of human rights has become a dominant ideology. And we know what happens to dominant ideologies in the long run. That is why, if we have reasons to care about the things that human rights protect, we better think about why and how this ideology is vulnerable. I do not, of course, mean that it is well respected. In fact, I think it may get too much complacent lip service. But it may be in quite deep danger. The deep problem, in my view, is that human rights claims have not been well justified philosophically; they have not even been well defined. I'm going to illustrate some defects in justification by commenting on the historic emergence of the human rights culture, and I shall illustrate some defects and confusion of definition by brief comments on one right that matters to academics, which is freedom of the press or freedom to publish.

The first point I wish to make is that the idea of rights as the fundamental ethical category is a historical curiosity. It is very unusual to look at morality or politics or society, not from the point of view of agents, but of recipients, which is what the culture of human rights does and often commends itself for doing. I think it may be salutary to remember that, traditionally, the primary normative claims have been claims about human obligations or duties. That switch from talking about the duties of man to the rights of man was first made in the late 18th century.

It is not easy to establish what duties human beings have. If we could establish that, then we could show who ought to do what for whom and under what circumstances, and that is the important or practical thing. If we have duties, we can be clear also about who might benefit from their discharge and who might have a claim to their discharge. If we can't establish anything about duties, then we'll have only grief by making claims about rights. Duties, obligations, actions, are the business end of normative requirements, whether moral, legal, or professional. I'm arguing for obligations before rights.

Let's think a bit about the structure of universal obligations. There are some—the duties that correspond to what we often call liberty rights—that are connected to first-generation rights, which are seen as universal duties owed by all agents to all agents. If we can justify them, that will be very good news. We may be able to, because we would thereby justify rights claims. If

we show there are universal duties not to deny others free speech, this would justify a universal right to speak freely, because that right could be claimed—one would know where to claim it.

The duties that correspond to supposed goods and services, often slightly inaccurately called welfare rights, are more difficult. Such duties, even if universal, cannot be owed by each to all. If you think about a right to food, for example, it cannot mean that each of us has an obligation to feed all others, but rather at most by each to some or some to some. These are duties that cannot be owed to all others and cannot be discharged to all others. Such duties have to be allocated to specified agents, who carry the duties. In this case, any counterpart rights that we're hoping for are going to be undefined pending an allocation of duties until duties therewith some rights are institutionalized.

Historically the arguments about establishing duties have been of many sorts, and many within religious traditions. Some have been based on theories of the good for man. Some of those theories have been objective, Aristotle for example, some subjective, utilitarianism for example, and some pure theories of duties, Kant for example. But until the late 18th century, nobody argued that rights were the fundamental, normative issue. Actually, I'm not sure they argued the case—they proclaimed it.

There is much to be said for giving up on justification and going for proclamation. Bertrand Russell put it rather nicely, "The advantages," he said "of the method of postulation are great—they are the same as the advantages of theft over an honest dollar." That is to say, you get your conclusions without working for them.

Now, twice in human history, we have seen this shift to making rights discourse the prominent or a prominent public discourse, not by justification, but by proclamation. The first time was in the 18th century, in 1789, in the Declaration of the Rights of Man and of the Citizen, and it was criticized from very early on. Burke campaigned against it. Bentham famously wrote, "Right is a child of law," (only positive rights). "From real laws come real rights, but from imaginary laws, from the 'law of nature,' come imaginary rights. Natural rights is simple nonsense; natural and imprescriptible rights, rhetorical nonsense - nonsense upon stilts." John Stewart Mill argued that rights were a derivative notion. Positive rights were important precisely because they contributed to utility and human happiness.

Finally, 19th century historicists and legal positivists put the notion of human rights in such bad odor that it sank from human history. Proclamation, when you think about it, is a use of the argument from authority, and none of us as scientists and scholars would wish to take an unalloyed view of the argument from authority. Of course, it has a somewhat different status in limited context and in legal argument, which often explains quite a lot.

In the 20th century, there is a second attempt, with the 1948 Universal Declaration of Human Rights. This was devised in an utterly different historical context—a need to find universal standards. There was great difficulty in agreeing on serious arguments for those standards and, therefore, certain rather general phrases were agreed to, the so-called "human rights," to which some universal obligations were then alleged to correspond. Essentially it was a second version of proclamation. That declaration was codified in 1966. We have the

International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights. In all these documents, and in many other international documents and regional documents like the European Convention on Human Rights, it is clear that the obligations are seen as secondary.

When you look closely, the covenants and other documents do not assign to the states obligations to meet rights, but second-order obligations to ensure that rights are secured and are met. That may be a very reasonable route. For example, in the Covenant on Economic, Social, and Cultural Rights, we read that each state party to the present covenant undertakes to take steps individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources with a view to achieving progressively the full realization of the rights recognized or proclaimed in the present covenant by all appropriate means, including particularly the adoption of legislative measures. One might again think Bertrand Russell's thought. In fact, some people, in the very era in which the Universal Declaration was drafted, did warn (prophetically, I think) that it was dangerous to be looking at the rights without looking at the obligations.

I cannot resist quoting to you the first sentence from a book that should be better known, by Simone Weil, a French philosopher who came as an exile to this country but died before the Second World War ended. Those two sentences read, "The notion of obligations come before that of rights, which is subordinate and relative to the former. A right is not effectual by itself, but only in relation to the obligation to which it corresponds, the effective exercise of a right springing not from the individual who possesses it, but from other men who consider themselves as being under a certain obligation towards him."

Lawyers have a way of dealing with these issues about difficult underpinnings. Maybe we should take a tip from Jeremy Bentham and think about law and institutions sooner, rather than trying to treat proclamations as justifications. That is not going to make everybody happy, because many people want to think that human rights are pre-conventional and that law just comes along afterward to tidy up, recognize, institutionalize, and secure preexisting rights. There may nevertheless be something to be said for taking some of the arguments of the legal positivists seriously.

One view quite often found among international lawyers is the following. When human rights were first proclaimed in the declaration and the covenants, they indeed lacked authority. That was mere proclamation. But now, the relevant covenants have been signed and ratified by the states parties, so now they are binding. Now they are real obligations. Note, however, that there is a sting in the tail here. Signature and ratification will not establish universal rights, and human rights are meant to be universal rights. What signature and ratification will establish is a special obligation on those states that sign and ratify—hence not on all states, and it is not a universal obligation. Moreover, they establish a special obligation that is not the counterpart of any universal right, but an obligation to institutionalize certain positive rights—that obligation to achieve progressively the full realization, etc. We are not going to find a justification, theoretical underpinnings, down that route.

Let me give you one example that shows that we also suffer from poor definitions of rights. I've chosen press freedom, and one of the reasons why we are not so good at justification—we all take it for granted that it is important, that justification needs argument—is that we are relatively unclear about what exactly this freedom is, what right holders can claim, and what the obligation bearers ought to do and ought not to do. The unclarity, of course, has short-term advantages. Paper over the cracks and you get seeming agreement, but down the road you may get deep, radical dissension.

This freedom of the press matters to all of us as scholars and scientists, and, in the United Kingdom, we have a particularly lively debate because of certain features of our press, which many of you will be aware of. A character in a play by Tom Stoppard exclaims to another, "I'm with you on the free press; it's the newspapers I can't stand." I think we could all sympathize with that thought. In fact, when you look at it, freedom of the press is so poorly defined that it is not clear to many people whether the newspapers that we can't stand are acting within freedom of the press or violating it.

Some see freedom of the press as an unconditional right to publish just about anything, providing you don't harm or injure an individual—libel, slander, clear and present endangering. There are four arguments in common use. One of them is the jurisprudential argument, which, in many ways, is the one I've already mentioned. One appeals to authority. One says, look, the First Amendment of the U.S. Constitution says Congress shall make no law abridging the freedom of the press. Or one appeals to Article 10 of the European Convention on Human Rights. Unfortunately, as noted, arguments from authority, effectively proclamations, don't provide justifications. All press freedom can be defended, and it often has been defended by academics as the means for discovering truth. I think the earliest and probably most famous formulation of that argument was by John Milton in the 17th century in Areopagitica "Who ever knew truth put to the worse, in a free and open encounter?" Well, I'm not sure that is true. If you actually think about what it takes to get truth in your own discipline, it is not as if it were completely untrammeled self-expression. It is, as the late Bernard Williams pointed out in his book Truth and Truthfulness, "A matter of very careful communication that is regulated in very careful ways." Williams wrote, "In institutions dedicated to finding out the truth, such as universities, research institutes and courts of law, speech is not at all unregulated. We have processes. We do not regulate content, and we do not forbid the utterance of content, but we have fierce procedures for finding the truth. The search for truth needs structures and discipline and is undermined by casual disregard of accuracy or evidence or process that permits casual disregard." The needs of truth-seeking actually weren't justified, unconditional press freedom.

A more contemporary way of going at it is to say press freedom is just a special case of freedom of expression—Article 19 of the Universal Declaration and Article 10 of the European Convention. Freedom of expression might be justifiable for individuals as an aspect of individual freedom. Kant called it the most innocuous freedom; Mill saw it as a merely self-regarding activity with which others shouldn't interference. Could freedom of expression justify unconditional press freedom, particularly in an era in which the media have become powerful, as they were not in the 19th century? We don't permit companies to invent their balance sheets on the grounds that they need freedom of expression. We don't permit public authorities to be imaginative in their accounts and reports. Should we permit the press to be inaccurate? Can we

find arguments for allowing the powerful, unconditional freedom of expression not only to inform, but also to misinform and to disinform? I doubt we are going to get a good argument for freedom of expression for the powerful.

Appeals to democracy seem to me a better way to go with press freedom because democracy needs a press that informs citizens. But if requirements for accurate reporting were too tightly drawn, that would be intimidating for the press. Nobody can be sure of getting things right all the time—not even scientists and scholars. A press that serves rather than damages democracy needs to aim for accuracy, but it cannot be required to achieve it. We can require truthfulness but not truth. This standard can be met by providing evidence, by including caveats and qualifications, by prompt correction of error, by distinguishing reporting from commentary, rumor, gossip, and the like. These forms of epistemic responsibility allow our readers to judge for themselves, but they are not arguments for unconditional press freedom.

These four, or, if you dismiss the argument from authority, three arguments for press freedom are arguments for quite differing and carefully configured rights, which we can see only when we think what the counterpart obligations are. If we look at the obligations, we may also be able to reach some justifications.

In the end, I believe that if we care about the things that human rights are intended to protect, we ought to focus, not on the rights, but on the business end of the matter, which is the counterpart obligations. We ought to focus not only on the enactment of such obligations, on requiring them and reinforcing them by law, but also on the underlying arguments.

Think about what happened in the 19th century. Think about why rights disappeared from public discourse, and I think it is a salutary reminder. Thank you.

Discussion

Arnold Wolfendale, Academia Europaea – It seems to me the pendulum has swung a bit too far in the direction of promoting human rights, without at the same time promoting responsibility for those who are speaking about them. I was wondering whether the Network should be devoted not just to human rights, but to human rights and responsibilities. Our advice to presidents, kings, and others would be more appreciated if it were clear that we are interested in responsibilities as well as rights.

O'Neill – I was making a slightly different and rather stronger claim than the usual one about rights going with responsibilities. I think that claim is true. Most people who have rights, for example, each of us, also have responsibilities. But some people who have rights do not have responsibilities—for example, infants. I was making the stronger but more limited claim that nobody has a right unless somebody (usually somebody else and some other institution) has obligations. That is why I stuck to the obligation vocabulary and not to the rights and responsibilities, which I think is a much softer claim.

Should we be talking about obligations in our institutions? Yes, I believe so, and I believe if we are to carry the day in many institutional contexts, it is extremely important to talk

about the duties of scientists, scholars, academics, and lawyers. With regard to the Network, I suspect you carry more weight by including obligations.

Gregg Bloche, U.S.A. [Invited Speaker] – Could you say something about freedom from torture?

O'Neill – I stayed away, as you notice, from substantive arguments, and I'll declare my hand: I do the whole Kantian thing in a tough way to get the justifications. The easiest justifications, if you're going that route, are to look at those principles that cannot be principles of action for all, and so cannot be principles of duty for all. And the principle of torturing cannot be a principle for all because if you torture, you maim, kill, and destroy some other agents, and you are assuming you are in an exclusive and privileged position. I believe we can get quite strong and convincing arguments for obligations not to torture. In an extreme case—somebody has his finger on the button of a nuclear bomb, and you could shoot him. I don't think, on the whole, that principles deal well with hard cases, and there it may be that we say something. But as a routine thing, I think we can justify an obligation not to torture.

Michiatsyu Kaino, Science Council of Japan – Yesterday we talked about rights and human development. In order to implement human rights, it must be necessary to have some common understanding about the human rights issue, which is a very Westernized idea. Obligation means some exception or some concept of the meaning of rights. Obligation naturally has some ideas of structure within certain societies. In that sense, I think the obligation talk would be much more closely related to future ideas of society. It is very difficult to harmonize the different interests of poor countries and rich countries. Human rights is, of course, a very universal concept. Do you think there is a possibility to set up some kind of international organization to implement this idea of obligation?

O'Neill – Of course, the world has been here before. The world has worked over many centuries on the institutionalization of obligations. It is part of most religious and cultural traditions. That is one of the reasons why it is not alien in other parts of the world. You might ask, why did we get away from that in the West? I think the answer has to do first with wishing to make it clearer that those in danger or victims could make claims. The legal institutionalization was important because it created the possibility of claiming. You can make that argument equally well from an account of the obligations. But why, ultimately? I'm driven to the thought that one thing is that politically the rhetoric of rights has more appeal and travels like wildfire, whereas the rhetoric of obligations doesn't. Thinking about one's rights has so much more charm than thinking about one's obligations.

Joseph Otieno Malo, Kenya National Academy of Sciences – This dimension of human rights and responsibilities and obligations is an interesting one. Do you remember yesterday when we brought up the idea of female genital mutilation and things like civil strife and corruption? Those areas are important and related to corruption in Africa. When you talk of corruption in Africa, the money is attached to the European countries. What is their obligation, and what is their responsibility? This is a big problem in Kenya and in most African countries. You can see the problems of children suffering simply because somebody has taken public monies and stashed them in European countries. What are the responsibility and the legal obligation? I think it is something we must be looking into.

O'Neill – I do not think the problem lies at the level of formal legislation. Corruption is usually forbidden, and money laundering too. This lies too at the level of the effectiveness of the institutionalization of these procedures. There has been an enormous tightening up now, so if you go into a bank here with over 5,000 or 10,000 pounds, you are going to have to demonstrate where the money came from. But this merely displaces activity to places where the rules are less sharp, or where they are less enforced, or where there is corruption in the enforcement of the anti money-laundering rules. I'm absolutely with you. I think when you come to international justice, it is most important to make anticorruption legislation. In my view, that starts exactly with your point of making it virtually impossible to transfer money around without it being known how you came by that money—known and published. Then there is a question of where it should be prosecuted, and there lies a second layer of difficulty, because in some of the states in which the prosecution could most readily happen, it won't happen, and that goes for both states in which there is plundering of public monies and for states in which there is laundering of public monies.

Effectiveness of Domestic and International Legal Remedies Dr. Pieter van Dijk, State Councillor, Netherlands Council of State; Former Judge, European Court of Human Rights; Network Executive Committee Member

Introduction

It is obvious that terrorism cannot be prevented or combated by legal instruments and procedures alone, and not even primarily.

Secret intelligence devices and police investigations may have, in themselves and in combination with legal follow-up, a more direct preventive and suppressive effect. It is clear, however, that the powers of these agencies and police, and their limitations, have to be regulated by law and effectively supervised by the judiciary. Only then will there be an optimal, but even then not a full-fledged, guarantee that individual and collective measures are not adopted in an arbitrary and discriminatory manner, thereby abusing the fear for terrorism as a pretext.

In recent years, and especially after 9/11, there has been a tendency to consider certain domestic and international rules and procedures as standing in the way of an effective prevention of and fight against terrorism, and consequently, in several countries we find a policy of adapting those rules and procedures, or at least their interpretation and application, to the security needs of society. In several cases, the relevant proposals resulted in a weakening, if not a setting-aside, of the guarantees of the rule of law, democracy, and protection of human rights, including the right to freedom of thought and expression, and consequently the freedom of education and research. In Great Britain, the law concerning administrative detention without habeas corpus for persons who could neither be expelled nor prosecuted was an example of such an overreaction, and the judgment of the House of Lords of 16 December 2004 an example of effective judicial review.

Of course, it cannot be denied that individual and collective security represents a basic human interest, and indeed a human right, and that it is an imperative duty of states to protect their populations against possible terrorist acts. Indeed, freedom from fear is a basic human right, as it was proclaimed by President Roosevelt in his famous statement on the Four Freedoms. This may require, and justify, certain limitations of the exercise of some human rights. The international human rights instruments provide for such limitations, but only on certain grounds and under strict conditions of necessity and proportionality. It must be stressed that, in the long run, security is best protected by the enhancement and not by a weakening of the rule of law and protection of human rights. As was said at a recent conference on Terrorism and Human Rights in the Peace Palace: terrorists are deterred by human rights, not by restrictions of human rights. Indeed, terrorist attacks are themselves a direct assault on the fundamental values of human rights, democracy, and the rule of law; weakening those values by legislation in reaction to those attacks would precisely favor the aims of terrorists and undermine the foundations of our society.

Indeed, terrorist attacks are themselves a direct assault on the fundamental values of human rights, democracy, and the rule of law; weakening those values by legislation in reaction to those attacks would precisely favor the aims of terrorists and undermine the foundations of our society.

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¹ See: *Human rights and the fight against terrorism; The Council of Europe Guidelines*, Preface by the Secretary General of the Council of Europe (March 2005).

Primary Responsibility at the Domestic Level

While we see a proliferation of international standards and procedures for the protection of human rights, we witness at the same time a decline of, or at least less attention on, guarantees of human rights at the national level. From the perspective of the protection of human rights, this development results in an imbalance of rules and procedures. After all, the primary and most effective responsibility for the promotion and protection of human rights rests on the national authorities.

Even in Europe, where we are so proud of the European Convention on Human Rights, with a supervisory mechanism that is generally considered to be the most developed and effective international mechanism for the protection of human rights in existence today, it has to be acknowledged that it can guarantee the protection of human rights to a very limited extent only. If the European Court of Human Rights, after a very long procedure, concludes that a certain provision of the convention has been violated by the state, that conclusion may be important for the interpretation of that particular provision of the convention, and thus may prevent similar violations for the future, but it will offer redress to the victim of the violation only to a very limited extent after such a long period, mainly in the form of moral satisfaction and financial indemnification. Effective protection of human rights can be achieved only at the national level, with a subsidiary and reparatory role at the international level.

This primary responsibility of the state—through its legislature, executive, and judiciary—is expressly recognized. Thus, Article 1 of the European Convention for the Protection of Human Rights and Fundamental Freedoms provides as follows, "The High Contracting Parties shall secure to everyone within their jurisdiction the rights and freedoms defined in Section I of this Convention." And Article 13 of the same convention stipulates, "Everyone whose rights and freedoms as set forth in this Convention are violated shall have an effective remedy before a national authority" This subsidiary principle is fully recognized and welcomed by the European Court of Human Rights, which is of the opinion that the national authorities, because of their direct knowledge of their society and its needs and resources, are in principle better placed than the international judge to appreciate what measures are appropriate.

Legal economy, as well, pleads for this subsidiary system. If an effective and satisfactory domestic remedy is obtained, it takes away the necessity of using a time-consuming and costly international mechanism. Indeed, international practice indicates that states in which the domestic courts have jurisdiction to directly apply international human rights standards are less often found in violation by international courts.

Role of the Civic Society

At the domestic level, it is not only, and perhaps not even primarily, the judiciary that has to defend human rights and remedy their violations. And the judiciary cannot prevent violations from happening. Effective protection is equally, and perhaps primarily, a matter for the legislative and executive branches of government, at the national but also at the local level, including the law-enforcing authorities, such as the police, intelligence agencies, prison staff, and public prosecutors. These authorities, in turn, are supervised by the domestic and international

courts. That independent national and international supervision is the more important in times and circumstances in which national security and personal security are given priority, because that may lead to overstepping the boundaries of the minimum level of human rights protection. However, as said before, such supervision takes place only in an incidental way and very often only at a moment at which the situation can no longer be remedied.

Therefore, I wish to stress once again, as I did at previous meetings of the International Human Rights Network of Academies and Scholarly Societies, the important role of the socalled vigilant civil society. As a lawyer I have to admit—and I am quite ready to admit that there are several non-legal methods that may be highly instrumental in promoting and protecting human rights and thereby fighting the causes of terrorism. The most important method, in my opinion, is the creation of an atmosphere and of an attitude of vigilance and tolerance. In a tolerant society—which is by no means the same as a permissive society each and every human being is equal, irrespective of differences in race, religion, ethnic origin, sex, or any other status. Tolerance connects awareness of one's own rights, needs, and values with the rights, needs, and values of others. It means recognition of and respect for the rights of others, with an implication that this respect may require certain limitations of one's own rights. The very concept of human rights implies a balancing between freedom and responsibility, between rights and duties, between individual interests and the general interest, and between one's own rights and those of others. It is my strong belief that a general attitude of tolerance does not clear the way for terrorist acts but takes away their main causes. Therefore, balancing human rights is much more effective than derogating from or limiting human rights.

The most important and effective way to promote tolerance is through the personal example of parents and other persons in charge and through education at all levels. The crucial role of education for the promotion of human rights has constantly been stressed, in particular by UNESCO. Awareness that a humane society requires and implies equality and tolerance should be imparted to children at a very early stage, when they are most receptive to it. Attitudes learned in childhood have a lasting and profound influence on one's approach to life and to society. The learning process should continue at the secondary school level and universities, not only as part of the different subjects taught, but also by example and guidance inside and outside the classroom.

Nongovernmental organizations, with their grassroots affiliations, are appropriate initiators and performers of programs directed at creating awareness of the importance of and mobilizing tolerance. And there is the special role of the media in educating society in the spirit of tolerance. On one hand, they have the power and use it too often to manipulate reality, create wrong impressions, and provoke unjustified reactions; on the other hand, they may effectively contribute to suppressing prejudices and intolerance. More in general, public opinion is very important in creating mutual understanding and respect.

Scholars and scientists have a special responsibility in mobilizing public opinion, providing the right information, and giving good example. If they sacrifice their own free opinion, or allow the free opinion of others to be suppressed or silenced, in the framework of the fight against terrorism, they mislead public opinion and provide fuel to terrorism instead of extinguishing it.

A Special Role for Scholars and Scientists

In the framework of this vigilant civil society, from the viewpoint of division of labor and professional responsibility, it would seem appropriate that scholars and scientists focus primarily on the freedom of thought and expression, in particular the right to academic freedom and the right to education. They are the most qualified and effective group to stand up for their fellow scholars and scientists whenever and wherever those rights are violated or are threatened to be violated. In doing so, they also support and enhance respect for human rights in general, because freedom of thought and expression, and the right to education and academic freedom, are instrumental for the enjoyment of other rights and freedoms, and indeed for the creation of a climate in which terrorism and fundamentalism do not flourish.

In this context, tendencies after 9/11 to restrict, in a direct but more often an indirect way, the freedom of expression at universities and scientific institutions are unjustified but also counterproductive. As the European Court of Human Rights has emphasized repeatedly, freedom of expression constitutes one of the essential foundations of a sound and resilient democracy. That holds good not only for the expression of ideas that are favorably received by the majority, but also for those that offend, shock, or disturb, provided that they are not expressed, for the main reason, to hurt personal feelings or to instigate concrete attacks on physical or moral integrity or national or personal security. The slogan "who has nothing to hide has nothing to fear" is too simple.

Without a liberal climate of pluralism, tolerance, and broadmindedness, democracy cannot survive. This holds good for national societies; it also holds good for the society of nations, for which the powerful should not dictate what the requirements of security are, and which abrogation or limitations of fundamental rights are justified for the protection of that security.

Scholars and scientists have a special responsibility to defend those values at the domestic and international level. Scholars and scientists also have a special demand for protection. It is the core purpose of the Network to defend those values and to support their defenders by their own academies or learned societies and in a coordinated way.

Limitations of Human Rights to Combat Terrorism

Finally, I would like to make some observations about the justification of limitations of human rights to combat terrorism. Guideline III of the Council of Europe Guidelines on Human Rights and the Fight against Terrorism reads as follows:

- 1. All measures taken by States to combat terrorism must be lawful.
- 2. When a measure restricts human rights, restrictions must be defined as precisely as possible and be necessary and proportionate to the aim pursued.

In fact, this guideline does not contain any new legal principle or rule. The human rights treaties all contain the provision that limitations of human rights must be provided by law—which also means that their regulation must be accessible and transparent—and must be proportionate in their impact to the aim which the limitation purports to protect. What is important, however, is that the member states of the Council of Europe, shortly after 9/11 (i.e., on 11 July 2002), clearly indicated that the fight against terrorism does not, as such, justify limitations of human rights, but has to meet the normal standards of legality and proportionality. And Guideline IV expressly confirms the international standard that torture and other inhuman treatment are not allowed under any circumstance, including the need to gather information about terrorist acts committed or to prevent future terrorist acts.

Guideline V prescribes that the collection and processing of personal data must be subject to supervision by an external independent authority, while Guidelines VII and VIII determine that a person may be arrested on suspicion of terrorist activities only if the suspicion is reasonable and after he has been informed about the reasons for his arrest. He must be brought promptly before a judge and may challenge the lawfulness of the arrest before the court at reasonable intervals. He benefits from the presumption of innocence and is entitled to a fair hearing, within a reasonable time, by an independent and impartial tribunal. Finally, Guideline XVI stresses that, in their fight against terrorism, states may never act in breach of peremptory norms of international law, nor in breach of international humanitarian law, where applicable.

Again, these guidelines do not offer any additional guarantees compared with what has been laid down in the European Convention on Human Rights and the International Covenant on Civil and Political Rights, but give expression to the firm belief that the committed terrorist acts, and the threat of new ones, have created the need for special vigilance but have not created a situation that justifies ignorance of these internationally recognized standards. For limitations and for derogations there are criteria and procedures, which have to be respected (see Guideline XV). An overreaction in this respect under the threat of terrorism would undermine our democratic values and human rights standards, and that would be precisely what terrorists aim at.

Concluding Observation

It is my belief that scholars and scientists, within the framework of the activities of the Network, within their own professional circles and as individuals, should, on one hand, be realistic and recognize the dangers that terrorism and terrorists present but, on the other hand, be

conscious of the danger of such an overreaction. They should plead for respect of minimal guarantees of legality and proportionality and should speak out for those against whom these guarantees have not been respected. In this way they supplement, in situations and in countries where that is necessary, the domestic and international remedies. It is only appropriate to mention, in our host country, brave men like Max Perutz, who fought for these values his whole life, and to mention the House of Lords as an independent tribunal that protects society and the weakest persons in society against extremism ("no nonsense") on the part of the legislature and the executive.

Discussion

Question – A very important question has come up, and that is the role of the media. After 9/11, the entire world witnessed what the terrorists were doing at one point in time. But there has never been a serious diagnosis of the violence. When a child is violent in the family, you can just punish him, but then the mother and father think, Why is he violent? We must have ignored him at one point in time or another. What is the root cause? The media should go a bit deeper into the causes of violence rather than showing the acts of violence itself. We must have rules for tackling violence—rules that society has formed from time to time. But one can always question institutions and the order that exists in the world. We will discuss this tomorrow: we live on a planet in which half the planet is hungry, with deprivations, and people suffering, and conditions that are a potential source of violence. There has to be a diagnosis of violence rather than just framing rules and regulations, and the media have not been doing this well—in fact, some of them are very biased. There is one kind of story for one section of mankind, and another kind of story for another section of mankind.

van Dijk – Perhaps here, too, I may start from the national level. In the Netherlands, violence has increased enormously in these last years, perhaps also because of 9/11. But there are also other causes. In our media, there has been an analysis of the main causes, which are not so very different from the main causes at the international level. The main cause in the Netherlands is the lack of full integration of foreigners who came to the Netherlands and who have established their lives there, in combination with a lack of tolerance as to their own values and their own cultures, so people feel frustrated. They think the Netherlands is only in a formal sense a tolerant society, but in a sense it is tolerant by ignoring a part of the population.

At the international level, terrorism is stimulated by violating the basic social, economic, and cultural rights of groups of people.

G.B.A. Okelo – I'm from Kenya and am the secretary general of the African Academy of Sciences. One must observe that our views on what constitutes abuse of human rights or what we conceive of as human rights has changed quite a lot. I think, in a way, terrorism and human rights are like what pain is in medicine: a lot of patients, if there wasn't any pain at all, would not show up at the doctor's office, so they may end up dying without being diagnosed. I think terrorism itself is interesting in some ways, but what was conceived as terrorism about two decades ago is now known to have been a wrong assumption. For example, in a number of countries in Asia and Africa, when people were fighting for their freedom, they were called terrorists, and this was generally accepted by the United Nations and world opinion then. Later

on, it was discovered that these people actually were under a lot of oppression—economic as well as political. So, in a way, terrorism should enable us to reflect without condemning it wholesale, but to find out why is this so. And at the moment, there are no freedom fighters, but you will get formal issues that may also encourage what one may refer to as terrorism. One of them is a revolt against economic and political repression in developing countries.

Henrik Zahle – I'm a law professor from Denmark. I would like to point out another relationship between the two excellent lectures we have had, and my question would be with whether Pieter van Dijk would agree with this relationship. Normally when we talk about human rights and the threat against human rights, we are talking about state intervention. For instance, when you talk about the freedom of science, it is state censorship and state control of scientists' work that is a problem. Pieter van Dijk, when he elaborated on this specific freedom, not only related it to state intervention but also to private activity, that is, the importance of private persons engaged in supporting the freedom of science. This might be related to the first lecture by going to a discourse of duty, that is, to talk about the duty for private persons, as academics, to support this freedom or to make it a reality. If we are entering these duties into the scope of this organization, we should consider not only the duties of the public authorities—we shouldn't neglect that—but also the duties of private persons.

van Dijk – The problem at the international level is responsibility. You cannot prosecute an individual at the international level, at least generally you cannot. So you have to construct some artificial state responsibility in order to make the state responsible. That is why the international criminal court is such an important establishment, because it is the first international mechanism in general where individuals can be prosecuted without any artificial construction of state responsibility.

Justice Gone Awry: The Imprisonment of Dr. Thomas Butler Dr. Peter Agre (Nobel Laureate), Chair, Committee on Human Rights, U.S. National Academy of Sciences, National Academy of Engineering, Institute of Medicine; Professor, Department of Biological Chemistry, Johns Hopkins University School of Medicine, U.S.A.

The Thomas Butler case is a very confusing case that raises big questions. The United States has long viewed itself as a country with a tremendous justice system, always looking to the defense of beleaguered individuals. The Butler case, depending on how you look at it, involves either a rogue scientist who conducted his work with total disregard for guidelines, or a beleaguered humanitarian investigator who was caught up in an Alfred Hitchcock type of drama related to his studies.

Tom Butler is a 64-year-old medical doctor, a graduate of Vanderbilt University and Johns Hopkins University. While serving in the U.S. Navy during the war in Vietnam, he took care of Vietnamese children in the countryside who were infected with the plague bacillus—plague being the organism of the Black Death and one of its most malignant forms of the disease, which nearly always causes fatal pneumonia. Butler became committed to the well-being of these children and dedicated his career to infectious disease research, particularly concentrating on infectious diseases in the developing world.

When I was a medical student at Johns Hopkins, Tom had just returned from Vietnam, so I got to know him well. When I was a medical intern and resident at Case Western Reserve University, he was one of the attending physicians. I worked alongside him and always admired him. He was a very dedicated and humanitarian individual.

Our careers diverged. I returned to Hopkins for research in biochemistry, and Tom Butler went to Texas Tech University, where he became the director of the infectious diseases research operations and continued his research on infectious diseases affecting people in developing countries.

The plague bacillus has long been a problem to humanity—the Black Death of the Middle Ages was caused by this organism. Despite the emergence of modern antibiotics, the treatment of plague bacillus has lagged behind, because it is not commonly found in the developed world. Nevertheless, it is quite endemic in parts of Africa. You may recall that, about two months ago, 60 miners in the Congo died of plague bacillus. It is quite a bad problem, and a modern treatment of this disease is not known.

Tom Butler, on his own, organized a research protocol, receiving funding from a number of reputable drug companies, with some support going directly to Texas Tech University for work that he would pursue in his own lab, and some support also going directly to Tom Butler for his work in Africa, where he conducted the study. In Tanzania, where this organism is found frequently, Butler traveled to the back country and obtained samples from patients in collaboration with physicians employed by the Ministry of Health of the Government of Tanzania. He brought these samples back to the United States by methods that had been, in the

past, standard, by simply protecting them carefully by bringing them back in his own personal luggage. He cultured the organisms in his laboratory and then provided organisms to the Centers for Disease Control and Prevention in Atlanta, the U.S. Army Institute for Infectious Disease Research in Ft. Dietrich, Maryland, and the Food and Drug Administration—all government laboratories that were very eager to gain these samples so they could determine antibiotic sensitivity.

In the summer of 2002, a series of anthrax mailings occurred in the United States and caused a number of deaths. A U.S. Senate office building, at one point, was evacuated, a number of postal workers—I believe five individuals—died having handled these mailings, and the United States was in somewhat of a panic. The Federal Bureau of Investigation (FBI) was charged with sorting this out and making arrests. Although they did profile an individual, they were never able to make an arrest. They were apparently quite frustrated.

In January of 2003, CNN News had a breaking story. On the 15th of January, 30 samples of plague bacillus were reported missing from a laboratory of Texas Tech University Health Sciences Center. This was Tom Butler's laboratory. Butler had noticed the samples missing, couldn't account for their whereabouts, and reported the missing samples to university personnel who, in turn, informed the local police, who in turn informed the FBI. The FBI responded in force with 60 FBI agents visiting the university, where they interrogated everybody and did an extensive evaluation. CNN News covered this live throughout the investigation. The U.S. Department of Homeland Security was immediately notified, and President Bush was alerted to the apparent theft of bioterror organisms in Lubbock, Texas.

After an extensive evaluation, the FBI concluded that there was no evidence of a breakin, there was no evidence that Al Qaeda had visited Lubbock, Texas, and, although the citizens were locked in their homes with armed weapons, the FBI concluded that the samples must have been destroyed in a routine lab clean-up and not recorded in the log book.

After an extensive interrogation of Dr. Butler, they concluded that there was no harm done, and if he would simply sign a statement admitting to some knowledge that he had actually destroyed these accidentally, everyone could return home and that would be the end of the case.

Butler felt he couldn't sign such a statement, because he had no recollection that these samples had been destroyed, but he was willing to compromise and signed a statement in which he admitted to a "misjudgment" concerning the handling of these samples. He returned home only to be arrested, taken to the local jail where he was held without bail for six days, and brought before a federal magistrate. He was charged with lying to the FBI and 14 additional charges, including charges that he had been smuggling bioterror weapons, that he was in noncompliance with the guidelines for shipping organisms, and even tax evasion. These charges were regarded by Butler and his lawyers as gross distortions. In fact, he was never smuggling weapons—he was bringing samples back for humanitarian purposes. The tax evasion related to a vehicle he had rented in Africa, for which he had misplaced the receipt and didn't have the documentation.

In May 2003, the U.S. National Academy of Sciences' Committee on Human Rights, led by Torsten Wiesel and directed by Carol Corillon, took interest in the Butler case and decided to take it on as one of their cases for attention. They notified Jonathan Turley, a well-known constitutional law expert at George Washington University, and some media. The story was covered by the *New York Times*, the *Wall Street Journal*, and 60 Minutes (a CBS television program). But it was a very confusing case.

Butler was given the option of a plea bargain. If he confessed, he would go to prison for six months and then be released. He declined the plea bargain because he contended that he was innocent of all the charges. At this point, federal prosecutors added 54 additional charges. These charges were grouped as theft, wire fraud, and mail fraud. Apparently the university had been coerced into charging Butler with theft of funds for the monies that he was sent directly for the studies in Africa, which is really better described as a contract dispute.

A very prolonged trial occurred in November 2003. On the very last day of this trial (and I've forgotten if it was three or four weeks, but it was an exhausting trial for Butler), the theft charges were raised. After prolonged deliberation, the jury cleared him of all serious charges—the lying to the FBI, the smuggling of bioterrorism weapons, and the like. But he was convicted of three charges related to the shipping of the organisms back to Tanzania, since these were the property of the government of Tanzania's Ministry of Health. For example, he neglected to put a biohazard sticker on the side of the Styrofoam box, and a number of other relatively minor issues. Of the 54 theft charges, he was convicted of 44.

Some of the original 69 charges could have brought Butler a 469-year prison sentence. But the judge, looking very carefully at these, was sympathetic and actually praised Dr. Butler at the sentencing as being an example of an outstanding humanitarian. The theft charges, in his view, were really not well founded; the university would have never received this money if it were not for Butler. But he was restricted to a two-year minimum prison sentence; anything below that could have then been protested by the federal prosecutor. Dr. Butler is presently in prison in Ft. Worth, Texas.

I visited him in November. I had never visited an inmate in a federal penitentiary before. It was a very strange and in some ways shocking experience. Dr. Butler was wearing the prison khaki uniform. He is referred by his number—you can't visit him unless you have his federal inmate number. In some ways it is dehumanizing, but it is a tidy institution. This is not Devil's Island. Nevertheless, he appeared quite depressed, and he had lost 40 pounds.

An appeal to the District Court has been placed by Jonathan Turley, which he feels is very strong, because the grouping of the theft charges and the original bioterrorism charges is apparently unprecedented and very good grounds to overturn the conviction. At the same time, the federal prosecutors decided to counter appeal, seeking to add years to his sentence. Dr. Butler is 64 years old, so two years in prison is a large percentage of his remaining life, and 10 years in prison, which the federal prosecutors want to add, would be a really severe sentence.

The appeal will be heard in New Orleans in a U.S. District Court on June 8. Butler is due to be released from prison at the end of this year, but he has no medical license—this was

forfeited during the prosecution. He has huge legal fees, and he has no job. When you think of the problems of human rights, you can think of many different examples, particularly in the developing countries, where we are very quick to take the side of an individual. Dr. Butler represents a very strange but very sad example of what many of us consider a miscarriage of justice in the United States.

Discussion

Malo – What is your opinion about embryonic stem cell research?

Agre – My own view? I have some personal views. I don't think it relates to the Butler case.

Question – My question relates to scientific research, and we are talking about the science of research. It is something to do with human rights, something to do with religion, something to do with ethics, and something to do with freedom of scientific research. The story I can see is a simple one. Two friends, a chicken and a pig, wanted to feed some people. The chicken said I'll provide the egg, and you provide the pork. For the pig to provide the pork, he has to kill himself. But the chicken can always lay the egg. What I'm saying is that I believe strongly that all these things have something to do with scientific research, freedom of scientific research, and human rights at a certain level.

Harald Reuter, Council of Swiss Scientific Academies – Peter, are there any other cases that you are aware of on a similar scale in the United States? People aren't aware of the implications of what they are doing with their scientific material. Many of us aren't, really. It could happen to anybody.

Agre – There is a well-known case that preceded this one, which was taken on by the Committee on Human Rights: the case of Wen Ho Lee, a computer scientist at the Los Alamos National Laboratory in New Mexico. He is a Taiwanese-born, U.S. naturalized citizen who was arrested and charged with providing nuclear secrets to the People's Republic of China. He was held in solitary confinement in shackles for nine months while the charges were being evaluated. Many of the charges in the Wen Ho Lee case were secret, and he and his lawyers were actually prevented from seeing them. This was during the Clinton administration, so this is not a Republican or a Democrat problem. This seems to be a U.S. problem.

In the end, an independent review of the charges was ordered by the magistrate, and they were reversed entirely. Wen Ho Lee was given the option of fighting them or pleading guilty to one minor charge. He chose the minor charge because he could have received the death penalty if he had fought and lost.

When Wen Ho Lee was charged, he was described in the media as the spy of the century, routinely regarded as a bad person. As with the Butler case, people assumed that he must be Al Capone or someone of that magnitude to have this degree of federal prosecution.

Michael Howard – I am from the British Academy, a historian. Is there, in fact, in the Butler case any kind of hidden agenda, in that Dr. Butler is regarded for some reason as being an

unreliable citizen, or is it simply a matter of totally unimaginative applications of laws without any kind of hidden agenda about it?

Agre – I think it is assumed by many of us that there is a hidden agenda, not necessarily against Dr. Butler. He is the unfortunate individual who happened to drive into the speed trap when they were on alert, and the infractions in terms of the bioterror guidelines would be treated very seriously to make an example for other scientists. That is my belief, and the federal government has refused to comment. There is nothing that we, or others, have discovered that indicates that Dr. Butler is a seriously deranged individual or a criminal individual. They got him by whatever means they could. I think this is an example of someone being deliberately persecuted, and he had to go to jail. The publicity and the extent of the federal investigation of this presumed bioterror scare was such that the embarrassment caused the problem.

Rosemary Foote – I am a professor of international relations from Oxford. To Dr. Agre, but also to Baroness O'Neill, I'd like to bring the two ideas together and refer to some of the dangers in the discussion of duties and obligations at a time when the government's claim is high threats to national security—in other words, terrorist threats. In your case, the federal government would have claimed that it was the duty of the government to protect its U.S. citizens from terrorism. The problem is that the language of duties and obligations has been captured by governments in this particular era, or in all eras in which there is a high national security threat. You could find it in the cold war, too. Although I accept your argument on theoretical, philosophical grounds, in the same way that rights have taken off for all kinds of political reasons, duties and obligations have been grabbed by governments that actually let loose their security services. If we hear about a case like this with respect to the United States, which has the so-called separation of powers, imagine what is happening in so many other countries around the world in this era. Therefore, this society, the Network, and others should be really careful, if you adopt the language of duties and obligations in this political era because of the misuse of these terms. I see the point made by the Danish professor of law about civil society and trying to grab hold of this language of duty and obligations. I see more hope for it in their hands, than in the hands of current governments.

O'Neill – My argument was not that we could shift to the vocabulary of duties and obligations as against that of rights. I couldn't have argued that because I argue that the two vocabularies are too completely inextricable and that some obligations are mirror images of duties and conversely. There is no choice there. Again, I know I did use the phrase once, and it was not the sort of looseness I like to use. The choice of vocabulary seems to me to be an unwise phrase in this era, unless one is only talking about public rhetoric. I think when we get down to what actually happens, we need to use whichever of the vocabularies can be made adequately precise. In this terrible case [of Thomas Butler], it is clear, among other things, that it was considered wholly acceptable to pursue. It goes back to the issue of the media. For the media to refer to this person as if he were a criminal convicted of a crime against humanity, at the point when he had been charged in very specific ways, that is called throwing the book at someone—when you charge them with many, many things, hoping that one or two will stick. That is hardly, as it were, an indictment of talking about obligations. Everybody will use both vocabularies, but the grounding is what I was recommending.

Agre – I agree. We use the term "piling on" of charges when things are thrown with the hope that something will work to bring this "dangerous criminal" to prison.

Arjuna Aluwihare – I am a surgeon from Sri Lanka. The debate and the case are very interesting, raising the question, Is might always right, or does might allow people to define their obligations in a way they want that is not necessarily related to anything absolute about correct and moral ways of handling obligations, or for that matter, rights? Do the countries that have might, or the regimes that have might in poorer countries, are they prepared to stick to the norms they promulgate for others when they themselves feel they are under threat? In this case, looking at it from outside, when the anthrax threat was going on, it seemed clear that an organization as clever as the FBI in a country as advanced as the United States could find it very difficult to admit that it couldn't actually catch the guys who did it. They had to find a scapegoat and then cloak it in a terminology that was apparently both confusing and acceptable. The question is, Is there any absoluteness in any of this, or is everything so relative that it can be manipulated to serve a particular agenda and expediency at a particular time?

Agre – It is an egregious example when the U.S. Department of Justice, with unlimited resources, can pick out an individual like this. Alfred Hitchcock did a good job in his movies with the dilemma of an individual who is suddenly a suspected criminal. With its unlimited resources, the government could probably find something wrong in almost any of our backgrounds. If loss of a receipt for a car rental results in a federal felony charge for tax evasion, then goodness knows where this can end. The punishment should meet the seriousness of the crime, and, in Butler's case, it clearly does not. It is something that we in the United States are very concerned about. We like to hold ourselves up as a nation as an example, but clearly this is not always justified.

O'Neill – Rights and obligations are wholly general normative notions. They apply to governments and individuals and less to institutions—even probably to institutions with fairly minimal decision-making procedures, like networks. You can find an obligation slapped on you as a business, for example, or you can find that you have a right. It seems useful to have a common, practical coin in which we talk about who, including which institutions, are required to do what for whom.

Wiesel – I think also this case illustrates individual jeopardy when government power is misused.

Torture and Cruel, Inhuman or Degrading Treatment or Punishment

Torture in the 21st Century Sir Nigel Rodley, Professor of Law, University of Essex, U.K.; Expert Member, United Nations Human Rights Committee

I am going to focus on a specific issue, which is a kind of lawyering that has been done in the United States around interrogation practices as a response to terrorism.

Let me start with a presidential directive issued by President George W. Bush on the 7th of February 2002—the Presidential Directive on Humane Treatment of Al Qaeda and Taliban detainees. In it, he says, our values as a nation, values that we share with many nations of the world, call for us to treat detainees humanely, including those who are not legally entitled to such treatment. As a matter of policy, the United States Armed Forces shall continue to treat detainees humanely.

Some of your laughs have already stolen some of my thunder, I think. These seemingly encouraging words purport to reaffirm the best humane traditions of the United States and other nations, but, in fact, they are a high-profile representation of a serious and sustained assault on basic legal values previously asserted by the United States and other nations. For the words "unmistakably assert a legal right not to treat at least some detainees humanely," if that is so for the United States, it is also so for other nations, whether or not they share the United States' values as a nation.

The statement was made on the basis of legal opinions emanating from and signed by political appointees from the U.S. Department of Justice's Office of Legal Council (the OLC)—opinions at least partly contested by the U.S. Department of State's Legal Advisors' Office. Some of you in this country will be aware that the legal advisers in the Foreign Office aren't always able to convince our attorney general of what is right and proper, either.

Several subsequent opinions from the OLC continue the legal construct that was calculated to allow the military and/or the CIA or similar shadowy bodies to take off the proverbial gloves. They were supplemented by a 2003 Department of Defense Working Group report, also apparently finalized by politically appointed lawyers.

At the end of last year, on the 30th of December, 2004, the key OLC memorandum on the issue of torture, a memorandum that had been issued in August 2002, was replaced, and I'll come back to that later

Let me make a couple of preambular points.

Unlike some, I do not view the atrocities of September 11, 2001, as just another set of terrorist acts of the sort that much of the world has had to endure in recent decades. The images and reality behind them will haunt us for decades, maybe centuries. They are the stuff of evil. The scale of the attacks, their enormity, places them on a qualitatively different scale from prior situations characterized by terrorism. Other societies may have lost more people in facing ruthless terrorist enemies, internal or external, over a protracted period. But precisely the fact that the perpetrators of 9/11 could destroy in a single hour lives and property that other terrorist movements have taken years or decades to destroy, make them an enemy requiring maximum resistance. That is why, with or without a Security Council resolution, I should have had no problem in considering the invasion of Afghanistan, the perpetrators' base at the time, as being a necessary and proportionate response to the challenge. But, as you will gather pretty soon, I simply don't think the case has been, or can be made, that it is necessary or proportionate to rewrite international law on the humane treatment of detainees.

My second preambular point relates to the interrogation practices that have been the subject of national and international concern. It would not be appropriate of me, as a member of the Human Rights Committee under the International Covenant on Civil and Political Rights, to address contested matters of fact. I shall not comment on how abhorrent or otherwise were the notorious violations of Abu Ghraib, in respect of which some courts marshal have taken place, whatever the low level of responsibility. But a number of techniques approved by the U.S. secretary of defense for possible use by interrogators could constitute torture and/or cruel, inhuman treatment.

The methods include sleep adjustment, for example reversing sleep cycles from day to night, which we're told is not sleep deprivation; false flag; threat of transfer, that is, threatening to transfer a person to a third country, in which the subject is likely to fear torture or death. The threat would not be acted on, nor would the threat include any information beyond the naming of the receiving country. Isolation for up to 30 days; forced grooming; use of stress positions, such as prolonged standing for up to 4 in any 24 hours; sleep deprivation; removal of clothing; increasing anxiety by the use of aversions, such as the presence of dogs; deprivation of light and auditory stimuli; sensory deprivation techniques.

Any combination of these, especially over a protracted period of time, would certainly amount to torture. Many of these techniques have clearly been used at Guantanamo Bay. The sin apparently committed at Abu Ghraib is that they were used without the appropriate safeguards and perhaps on camera. It was not done by the book, even if it was contemplated by the book. Somebody called it "amateur hour." It is a book approved by people with legal credentials. I'm looking forward to seeing the case for the following also—not to constitute torture or cruel or inhuman treatment—seizing and transferring people to the other side of the world for months or years without end; holding them isolated from the outside world, sometimes hidden from the International Committee of the Red Cross (ICRC) as so-called "ghost detainees;" and so-called "extraordinary renditions" to countries where the rendered person faces

torture. I won't, as others have done, comment on the kind of language that is used to make more anodyne these practices.

What has been the legal strategy to permit some of these things to happen, to whatever extent they may or may not have happened? Well, first of all, there has been a look at the international law of armed conflict, particularly the Geneva Conventions relative to the treatment of persons in armed conflict. The relevant conventions being the Geneva Convention III on the treatment of prisoners of war and the Geneva Convention IV on the treatment of civilians.

In an international armed conflict, say the U.S. lawyers, the Geneva Conventions don't apply to the people they've detained, not to Al Qaeda and not to the Taliban. They don't apply to Al Qaeda because Al Qaeda is not associated with a contracting state, and only people connected with armies as connected with a contracting state party can be protected by the Geneva Convention on prisoners of war, and only civilians protected by a contracting state can be protected under the Fourth Geneva Convention. Since Al Qaeda is not a contracting party, anybody having anything to do with Al Qaeda is automatically not protected insofar as the Geneva Conventions protect people in international armed conflict—the Taliban too, for that matter, but they are history, and I won't spend time on them, given the limited amount of time I have.

What about common Article 3 of the Geneva Conventions, which applies in non-international armed conflict? There is no criterion of having to be a party to any particular conflict, there is no particular threshold. Nobody in the hands of a party to the internal conflict can at any time or at any place whatsoever be subjected to torture or to inhuman or cruel treatment. There is no ambiguity. Torture and inhuman treatment, we know, are war crimes. Well, that doesn't apply because it is not a non-international conflict. It is an international conflict that they are dealing with—global war on terror. The situation is not a non-international conflict, and so the minimal protection offered by common Article 3 doesn't apply. If it is not an international conflict, therefore, the greater protections offered by the rest of the Geneva conventions don't apply either.

It was generally thought, and I think it is still arguably the case, that, in fact, common Article 3 has to be seen as reflecting the basic norm within the convention as a whole. But we don't have to go that route. I don't want to take you down a complicated legal argument, because international law doesn't have to rely just on treaties. Maybe I should just add a little gloss on something Baroness O'Neill said this morning. It isn't necessarily just a treaty that gives you international law. There is also such as a thing as customary or general international law, which gives you a so-called source of international law. And there can be not the beginnings of doubt that the prohibition of torture and cruel and inhuman treatment in international humanitarian law is a rule of customary humanitarian law, and it is a rule that applies to anybody in the hands of a party. It is a position that operational law handbooks of the United States themselves have taken in the past.

So, does that resolve the issue? No, it doesn't, at least not for the United States. It may, for us, as the international community. The Department of Defense legal memorandum has a heading at one point: Customary International/Views of Other Nations. There it takes on board

some of the points I'm making. But all that is irrelevant because Customary International Law isn't incorporated into United States law. The issue is: What will the U.S. courts do? The Geneva Conventions are incorporated, and the kinds of activities we are talking about will be potentially criminal under the legislation incorporating the Geneva Conventions, but not if the Geneva Conventions don't apply. The incorporating legislation doesn't incorporate customary international law, just the Geneva Conventions. Customary international law can be left to discussions with other nations.

Another issue that is looked at is the area of human rights law. Very short shrift is given to the International Covenant on Civil and Political Rights, which the United States is party to, primarily because it is the U.S. position (and this is an issue that I won't go into; it is a highly contested position, and the World Court doesn't agree with it) that the covenant does not apply outside the territory and it does not apply to armed conflict. So that gets rid of that.

The United States does acknowledge the relevance of the U.N. Convention Against Torture, to which it is also a party. I suspect the main reason it acknowledges its relevance is that in its incorporating legislation it only criminalizes torture committed outside the United States by U.S. personnel, on the argument that internally U.S. federal and state law already cover it. So, if to incorporate the convention they have applied extraterritorial criminality, then they can hardly interpret the convention as precluding extraterritorial criminality. Otherwise, it has a jurisdictional clause that is rather tighter than the jurisdictional clause of the Covenant on Civil and Political Rights. They accept the applicability of the torture convention—so then what do they do? They say what we are doing isn't torture.

I need a couple of minutes to explain the problems of definition. Back in the mid-1970s, the European Court of Human Rights made a very serious mistake. It decided, when looking at five interrogation techniques used by the United Kingdom in Northern Ireland (which the European Commission of Human Rights had already found to be torture), that it is inhuman and degrading treatment, but it is not torture. It doesn't deserve the stigma of torture—whatever legal significance stigma is supposed to have. Those techniques involved being spread-eagled against a wall on tips of toes for up to 24 hours, forced by physical force if necessary, subjected to loud noise, deprived of food and drink, subjected to hooding, and being kept awake. Those treatments for up to 24 hours, in combination, were found to be a violation of Article 3 of the European Convention on Human Rights, as constituting inhuman and degrading treatment.

What is the line taken by these Department of Justice memoranda and other official memoranda? Well, given the kind of techniques we are going to be concerned about, we shouldn't have to worry because we have incorporated this understanding of torture as being at the pyramid of a continuum of pain or suffering. It is not an interpretation of the torture convention that flows naturally from the convention, although I don't have time to explain why.

In the first memorandum, the one of August 2002, there was a wonderful explanation of relevant pain. The pain would have to be "excruciating and agonizing" or "equivalent in intensity to the pain accompanying serious physical injury, such as organ failure, impairment of bodily function, or even death." That was one of the statements that caused so much disgust in the United States as well as around the world. The December 2004 memorandum expressly

disagrees with that statement so it has to be considered as being revoked but they still stick to the pyramid threshold, in which torture has to be more severe pain or suffering than even the pain or suffering induced by cruel or inhuman treatment. They cite the Northern Ireland case for their proposition. What they don't cite is the 1998 Mooney case, in which the court maintained the pyramid approach but reduced the threshold so substantially as to make it barely perceptible, by indicating that brutal behavior that they previously considered inhuman but not torture will now, with evolving standards of decency, be considered to be torture.

Well, does it matter if it is not torture—it is still cruel or inhuman, right? What's the problem? The problem is, of course, that the torture prohibition in the torture convention, which is the full title of the torture convention—the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment—is incorporated, but the bit on cruel and inhuman or degrading treatment or punishment (1) has not been incorporated, and (2) there is a reservation saying that it means cruel, unusual, and inhuman treatment or punishment within the meaning of the 5th, 8th, and 14th Amendments to the U.S. Constitution. Careers have been made and broken on finding out what that means, even in the United States. And, even cleverer, because it is within the meaning of the U.S. Constitution, and the U.S. Constitution applies only within the main United States and possibly Guantanamo, too, despite the administration's protestations after the Supreme Court judgment of a couple of years ago that the provisions relating to cruel and inhuman or degrading treatment or punishment don't apply abroad. The convention doesn't apply to cruel, inhuman, or degrading treatment or punishment abroad because of the United States' reservation relating to the nature of what is inhuman or degrading.

Again, from an international legal perspective, there isn't a major problem. The prohibition is of torture and cruel and inhuman or degrading treatment or punishment. Let's assume for a moment that even with the U.S. reservation, the odds are that the kinds of practices as applied, if they applied cumulatively over a protracted period of time, might easily fall within those terms. It doesn't matter, because U.S. law isn't going to catch it, and that, again, is ultimately the problem. The problem is, to quote Justice Oliver Wendell Holmes' famous line in *The Path of the Law*, "The prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law." I think we now have a position in which we see that a prediction of what U.S. courts will do, in fact, and nothing more pretentious, is what the Department of Justice means by international law.

I don't want to be cavalier about this. I do think there are important issues at stake. I mention again what I said before about the nature of the enemy, and, at some point, I suspect our discussion will take us back to the ticking bomb scenario which, by all means, we can discuss, but I won't address it right now.

Let me just do what British politicians often do (and quote myself). I think British academics ought to be allowed to do it occasionally. In my valedictory statement to the U.N. General Assembly, as I left the Office of Special Rapporteur on Torture, some two months after 9/11, I said:

However frustrating may be the search for those behind the abominable acts of terrorism, and for evidence that would bring them to justice, I'm convinced that any temptation to resort to

torture or similar ill treatment, or to send suspects to countries where they would face such treatment, must be firmly resisted. Not only would that be a violation of an absolute and preemptory rule of international law, it would also be responding to a crime against humanity with a further crime under international law. Moreover, it would be signaling to the terrorists that the values espoused by the international community are hollow and no more valid than the travesties of principles defended by the terrorists.

I probably put that in there to show that I'm not really being wise after the event. It took a while for Abu Ghraib and all the legalities to emerge. But there was obviously the fear that things like this might happen, and regrettably that fear has turned out not to be ill founded. I hope there are developments in place that might also lead to a rolling back of this nasty slope we started going down. Thank you very much.

Discussion

Rodley – [in answer to an inaudible question] There is a legal definition in the Convention Against Torture, and maybe it would be sensible to just put it on the table. This is the definition in the U.N. Convention Against Torture: "For the purposes of this convention, the term torture means any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person or for any reason based on discrimination of any kind when such pain or suffering is inflicted by, or at the instigation of, or with the consent or acquiescence of a public official or other person acting in an official capacity." In other words, it is severe pain or suffering for a particular kind of purpose by a public official.

Torture in Times of Terror Professor Upendra Baxi, School of Law, University of Warwick, U.K.

Before I get to the subject of torture in times of terror, it is a bit intimidating to be in the presence, let alone follow, Sir Nigel Rodley, who is a world authority on the torture convention. Nevertheless, I'll add a few footnotes to what he said. Before I turn to that, I do want to add a word of concern to the voices of anxiety heard this morning concerning the addition of the word responsibility and the title of the Network. I must say that we must be mindful that, not too long ago, colonized people were not considered worthy of human rights because they were not found responsible enough to be bearers of human rights. This went on for 250 years or more. I find that the same can be said about women, who were not considered fit to be responsible and therefore were denied all kinds of human rights for a very long time by the state. We must be extremely careful in the responsibilities of the language and politics of human rights as a governance device. Everyone who works on the theory of human rights knows well that all human rights imply an order of human responsibility. I used to be a smoker. I loved my pipe and cigar, and then there emerged the slogan that "your right to smoke ends where my nose begins." And ever since then I've found the world too full of noses. So there is always an order of reciprocity. So rights are a relational situation, and responsibilities are implied.

On the area of my discussion, I would like to divide it into three parts. I'm not going to do justice to any, given the time constraints. First I would like to speak about torture in the conditions of the ongoing two terror wars. I describe these as War of Terror and War on Terror, and I think the distinction is quite important.

Secondly, I would like to briefly mention the relation of torture and cruel, degrading, and inhuman treatment and punishment in the torture convention, to which Sir Nigel referred, and, thirdly, the problem of outsourcing of terror practices through the practices of rendition.

But, more importantly, the major part of my remarks will focus on the so-called justifications for the use of terror in the standard case, elaborated after 9/11 by my friend Alan Dershowitz in his 2002 book, "Why Terrorism Works," where he proposes, to meet the standard case of the ticking bomb scenario, we should have recourse to a system of judicial torture warrants from the courts.

I agree that certainly 9/11 is a crucial date, but I don't believe it was the most important date after the Crucifixion. A lot more things have happened in between in terms of the history of terrorism. While we must not belittle the importance of 9/11, one cannot understand wholly the history of torture and terror without looking at other episodes and other structures of terrorism.

9/11 remains important, if not singular, in terms of delineating two kinds of terror wars—war on terror and war of terror.

I believe there is some kind of symmetry or connectivity between the two terror wars. Perpetrators of both wars say theirs is a counter response to the violence on the other side. They both offer some messianic and redemptive justifications. I've compared several militant fatwas,

both pro-U.S. and anti-U.S., and I found that the justifications for violence offered by the extremists from Al Qaeda and other sources can be translated into or resonate well with the language of justice, freedom, and responsibility of the Bush/Blair cadre. They have a commonality of a future made of a just world, violently achieved. Both wars feed on the horrors of each other; they are self-fulfilling monsters, as it were.

We could start by appreciating the great insight of philosopher Alain Badiou, a French thinker, who describes the situation we are in, and the crimes in New York and the battles that followed, as constituting a "disjunctive synthesis of two Nihilisms." Nihilisms that self-destruct the norms and values that we thought existed earlier. The violence that is ushered in by the two terror wars operates over rights, international law, human rights law, and humanitarian law in many ways.

First of all, it is only after 9/11 that we have seen such serious concern in the United Nations and elsewhere to somehow produce a unanimous definition of terrorism. If you look at the history of the United Nations' approaches to defining terrorism over the last 30-40 years, there was not a similar enthusiasm and ingenuity as now appears on the scene and the horizon. Most recently, in an interesting report in March 2005, called "In Larger Freedom," the distinguished Secretary-General Kofi Annan has proposed a definition that he hopes the General Assembly will accept later this year. So that is one extraordinary convergence of interest.

Second, and this is what Sir Nigel already referred to, there is a whole issue of semantic manipulation of the distinction between torture and non-torture. What is lethal violence and what is non-lethal violence? Which is torture and which is cruel and degrading treatment and punishment?

I am quite familiar with semantic manipulations, which are quite exploited. I've appeared several times before the Supreme Court of India concerning starvation death in the Eastern State of Orissa. Ultimately the Supreme Court was moved and asked the State to file an affidavit, and the State said there had been no starvation deaths in the State of Orissa. The petitioners are quite wrong. What may have happened is a series of deaths owing to progressive malnutrition.

There have been cases before 9/11, in which the dividing line between torture and non-torture has been ruthlessly manipulated. Since it is a common practice to benignly refer to the South or the Third World in this regard, I would rather focus on the First World and share with you some examples.

One is found in a 1972 article by Professor Ian Brownlie when he analyzed in depth the interrogation techniques used in the British colonies and their dominions as far apart as Palestine, Cypress, Malaya, British Cameroon, Kenya, and Aden. It was a quite shocking exposé. This was before the torture convention, and it is a sad account.

[inaudible]

Similarly, the Landow report in 1989, followed by the Israeli Supreme Court decision against torture in Israel, as the State of Israel, practically allowed the General Security Service of the State of Israel full rights to go ahead with torture in the interest of national security. The same must be said about the United Kingdom's Compton committee report in relation to Northern Ireland which described as falling far short of brutality the sustained interrogation techniques of ill treatment. You remember perhaps Lord Gardiner, following the Compton report, saying that the report seemed to justify "the regrettable necessity of cutting off the fingers of a detainee one by one to get the required information out of him for the sole purpose of saving lives" as this would "not be cruel and, because not cruel, not brutal." There you have the whole history of semantic manipulation of this kind of brutality. Between torture and non-torture, the American jurists, if I may so call them, use the distinction in terms of torture "lite" versus torture. I think this is the Budweiser impact on naming the practices of torture.

The second aspect of the two wars on terror has unfortunately shattered the image of a growing consensus on what international law has called the jus cogens character of the prohibition of torture. There was a growing belief over the last 50 years or more that certain kinds of practices of torture were prohibited because they treat human beings as objects, they deprive them of dignity, etc. I think this kind of imagery is now in ruins.

With regard to the third aspect or impact of the two terror wars, I defer again to the United Nations' Secretary-General's report of 2005 March, in which he says the following, "It is time to set aside debates on so-called state terrorism. The use of force by States is already thoroughly regulated under international law." He is concerned about fostering a definition of terrorism by non-state actors. When we talk of torture and histories of torture and the efforts to fight it on a human rights platform, we surely know that here are available to us the defining laws that constitute elements of proposing a definition of State terrorism. It is most astonishing that this is a one-sided focus on non-state terrorism, or what I call practices of violence by nomadic, insurgent multitudes. This is now supposed to be controlled, and we are asked to believe that state terrorism is a matter of the past. I think this is something we ought to refute.

I do want to come to the question of justifications of torture. There has always been talk about some good reasons for using torture in certain calamities of catastrophic situations. This goes back in English/British jurisprudence to a posthumous manuscript of Jeremy Bentham called *On Torture* which was discovered some 20 years ago. Although he considered torture an evil, Bentham thought it could be justified in various ways, provided certain of its vices are cured. He therefore proposed, and I'm speaking from memory, what I call the bureaucratization of application of decisions to apply torture. He proposed some kind of judicial tribunal to which people could make appeals for a suitable amount of torture or a just measure of pain, as somebody has said, to be inflicted because of the ticking bomb scenario.

What is peculiar about post-9/11 discourse on terror, is an extension of the Bentham idea of judicialization of application of decisions of torture. For those of us concerned about the future of human rights, it raises all kinds of issues and should be taken extremely seriously by those of us concerned for the future of human rights.

Dershowitz proposes the revival of the practice of torture warrants. Why? Because he says, more or less in line with Bentham, that this is making the whole process visible. What is off the radar screen, below the radar screen, and off the books will now come on the books and on the radar of public discussion.

This is a consequentialist justification that has been contested by people who believe that prohibition of torture should be an absolute norm—that under no circumstances should there be any authorization of torture. This is a vanishing tribe. This tribe is, on the whole, subjected to, on the one hand, the post-9/11 schizoid/paranoid state formation and on the other hand the manipulation of public anxiety, justly based, about future violations of the rights to life and humanity.

Very distinguished American jurists and thinkers have now come around to the view that, in rare situations, the application of torture must be publicly authorized by an articulate and publicly transparent process. This amounts to some kind of legalization of the decision to apply torture for the wider good. Some people, but they are tiny voices, under the pressure of this argument, argue that ex-ante legalization of torture and re [inaudible] edifies the prohibition on torture and cruelty. This is ex-post-facto legalization of torture. In other words, those public officials who feel the urge to apply torture in the name of public good should defend their action, subsequent to the event, in judicial forums—maybe under plea of necessity or some other basis that would make rationality of torture application more visible.

Some people argue that torture and the application of torture in the worst situation of the ticking bomb should be considered as acts of political disobedience. In other words, a detaining authority or an FBI official, or whatever, may be compared with Mahatma Gandhi or Martin Luther King, or Nelson Mandela—that a person who applied torture does so as an act of civil disobedience, against the laws prohibiting torture. Like a good person who practices civil disobedience, he or she should take punishment for the act which he knows to be illegal. There is a whole notion that if torture is morally worthy in certain rare situations, it should be a moral act, and if it is a moral act, it should be considered only as an act of ethical disobedience, and therefore the other consequences follow.

In sum, I've done a diagnostic survey of the fantastic creativity of American legal thinkers since 9/11, and I don't think we should underestimate it because these are some very eminent minds, and not all of them are among the 168 lawyers of the State Department who justified preemptive targeting against Iraq or justified "torture lite" practices.

Finally, I would like to say that someday, when we have time to consider the torture convention in detail, we need to look at five types of phenomena that are linked together. One is interrogative or custodial torture or degrading treatment; another is preemptive torture, where it is used to prevent other kinds of violent happenings; the third is penal torture; the fourth is the entire regime of extradition, asylum, and refugee law; [inaudible] and, finally, the outsourcing of torture, in which you send people to another place of detention.

Nothing is more crucial for the future of human rights than an agonized examination of the new moral or ethical discourse on the justification of torture in rare cases. It is a discourse that is growing, a discourse that we cannot laugh out of the courts.

Comments

Rodley – Just because international human rights and humanitarian laws aren't always respected, doesn't mean to say that international humanitarian law doesn't define a whole load of obligations. If those obligations were respected, I think this is Kofi Annan's point, then there wouldn't be state terrorism. The problem is that there is not anything equivalent to the international level to describe the phenomenon that people understand. Different people understand different things. This is why it has taken so long to get there, and we may not be there yet. It is not fair to say that Annan was saying there isn't a problem of state terrorism. I think he was saying there isn't a problem of defining what obligations states are violating when they commit state terrorism. They are already there. But he is not here to defend himself.

Also, I just felt the need to point out that in the 2004 memorandum from the Office of Legal Counsel, the memorandum starts by acknowledging (1) that torture is prohibited under customary international law and (2) that many consider that it is a norm of jus cogens and then cites some very credible authorities for that proposition. Again, they are not necessarily trying to write out the idea. What they are trying to do is change the understanding of what kinds of acts fall within the idea.

I just wanted to say one thing about good lawyers in the United States, and there are a lot of them. It was lawyers in the United States, military lawyers, who have broken the story. It was people in the Department of Defense who leaked it to Scott Horton of the New York City Bar Association Human Rights Committee. The military lawyers were appalled at what was being said about what they could and couldn't do, should and shouldn't do. It is a small number of lawyers who have been doing it. I gave a similar talk in a venue in which high-level officials from the judge advocate general's office were present, and I didn't mention the fact that these lawyers were political appointees. The first question was from one of them, commenting that you didn't point out that it was political appointees who were responsible for these memoranda, and indeed some of them were not in the loop as they were finalized.

One shouldn't assume that the whole system has decided to go Dershowitz or to go Ashcroft or go to Gonzalez, although those people are doing their best to create the substance of Upendra Baxi's or my fears. I also don't want to be as pessimistic as Upendra, because there are very strong forces at play in the United States with very strong professional consciences also fighting the same fight.

After Abu Ghraib: Medical Ethics, Human Rights, and the Laws of War Dr. Gregg Bloche, Professor of Law, Georgetown University, U.S.A. Professor Jonathan H. Marks, Barrister, Matrix Chambers, London; Greenwall Fellow in Bioethics at Georgetown and Johns Hopkins Universities, U.S.A.

Gregg Bloche – The involvement of physicians and scientists in torture has been a macabre interest of mine for many years—in Uruguay, South Africa, Turkey, the former Soviet Union, and elsewhere. This was not just a story of Nazi or Japanese militarists; it has been a post World War II story. We Americans, of course, didn't do that sort of thing, so of course physicians didn't participate in torture. This, as it turns out, was a matter of blind luck. At Guantanamo Bay and Abu Ghraib and elsewhere, our luck has run out.

Jonathan and I have been doing a little bit of research into the question of what doctors did, and it is pretty difficult to find out because there are orders for people not to talk. You have to get stuff on the sly and meet people in unusual places and then connect the dots with documents. Our picture is pretty incomplete, but we are also going to talk about some of the wider issues.

A little bit of context: American clinical caregivers have often acted heroically. Under frequent attacks by mortars and improvised explosive devices and small arms fire and the like, they have provided lifesaving care to U.S. soldiers, and they have had a historically unprecedented ratio of wounded to killed in action—a traditional measure of effectiveness in military medicine. And they have provided care to civilians and enemy combatants, often under life-endangering conditions. However, a variety of alleged forms of complicity by American physicians and post-9/11 abuses have been uncovered, including failure by both caregivers and forensic pathologists to record evidence of abuse, failure by caregivers to report evidence of abuse to higher authorities, failure of the whole military health system to plan for the medical needs of detainees, and—what we're focusing on today and what we have focused on in our research—medical complicity in interrogation practices, including so-called counter-resistance practices (there is another euphemism to add to the bunch), that violated international law.

What did the doctors do? How did the doctors' roles support post-9/11 interrogation strategies, and what were these strategies? And what are the ethical and legal issues posed by medical roles in these practices?

This is from a slideshow that was presented. Imagine, for a moment, you are a new interrogator assigned to Abu Ghraib, and it is December 2003. You see a slideshow on your first or second day of orientation and early on in the slideshow is this slide. The database is lonely but you can help, tell the database about what a fun conversation you and your guest had, and give the database more background on our guest. These folks did have a sense of wit. This is at the end of the slideshow. It is hard to make things out, but there is an interrogation going on, and the interviewer has a hand puppet, and he is saying, I realize it sounds rather cliché, but we have ways of making you talk.

How did military health professionals support this sort of thing? At Guantanamo Bay and Abu Ghraib and probably elsewhere, interrogation teams gained access to medical records kept by caregivers, something the Pentagon at first denied and later admitted and defended. Medical treatment was occasionally a reward for cooperation with interrogation, and denial of care was, at times, a punishment for insufficient cooperation. Physicians and psychologists and other health professionals were, in the jargon of the military, attached to military intelligence units (I'll refer to them as MI units) to assist in developing and implementing interrogation plans. There are unsubstantiated reports that some drugs were given on occasion to try to make interrogation more productive.

Now, take a step back and look at a new doctrine that developed shortly after 9/11. Major General Jeffrey Miller, who has not been disciplined and according to some of our sources is about to be promoted, had a vision for Guantanamo and Abu Ghraib that was actually quite different from what traditional interrogation doctrine called for. Above all was the principle of fusion, as he put it in some internal memos, of all prison functions to support the interrogation mission. He called for the creation of behavioral science consultation teams, known as BSCTs, to develop integrated interrogation strategies and to assess interrogation intelligence production. And there would be individualized interrogation plans for the highest priority detainees.

This approach was developed at Guantanamo Bay by General Miller and his team in 2002 and early 2003. In the late summer/early fall of 2003, with the Iraq insurgency worsening and Saddam Hussein still at large, General Miller and his team visited Abu Ghraib to assess MI operations. Almost certainly accompanying this team was a forensic psychiatrist. Miller issues a scathing rebuke at the end of this review. And with support from senior Pentagon officials, operations at Abu Ghraib are quickly refashioned along Guantanamo lines with a major infusion of resources.

Here is a flowchart showing interrogation rules of engagement, and you see some of the practices mentioned earlier by Sir Nigel—stress positions, sleep deprivation, etc. But also notice, under safeguard number three, medically burdened detainees must be medically cleared prior to interrogation. A new medical procedure has been introduced. I won't walk you through all of this. This again comes from the slideshow. We focus on where the interrogation is conducted, the interrogator plus the interpreter.

What is this BSCT team about? They were staffed by psychologists and/or psychiatrists, and this concept met resistance from traditional MI personnel, who didn't think these folks, psychiatrists and psychologists, had anything to contribute. I talked to one of these traditional fellows—a colonel from Fort Huachuca, where these guys were trained, and before turning me over to the public relations person, he said, my job is to hurt people—I don't involve doctors. I didn't think much of this.

There is a training program at Ft. Bragg, called Psy-Ops, involving various kinds of psychologists in particular. These BSCT teams were carefully assembled at Guantanamo, but assembled on the fly with professionals not trained for the mission at Abu Ghraib. Consider, for a moment, one member of the team at Abu Ghraib, and I'll tell you in a moment how we learned about him.

Major Scott Uthaw, a young forensic psychiatrist arrived in Iraq in November 2003. He was neither trained at Ft. Bragg nor otherwise schooled in BSCT doctrine, and he is told that he is going to join a combat stress support team. That is a typical assignment for a military psychiatrist. Instead, almost immediately he is taken off that team and attached to Abu Ghraib's military intelligence interrogation unit, the now legendary unit commanded by the recently disciplined, but not criminally charged, Colonel Papas, under the supervision of the neither disciplined nor charged and perhaps about to be promoted General Sanchez. He is assigned to the BSCT. Here is a flow chart for the interrogation operation at Abu Ghraib. This is a close-up of the flowchart, and here is our friend, Dr. Uthaw. The Army just doesn't have a lot of forensic psychiatrists so you can identify, through Google, most or all of the Army forensic psychiatrists. Uthaw is not a common name, so we could not earn a Nobel Prize for this work.

So, what did Dr. Uthaw do? According to testimony by Colonel Papas, who was chief of MI at Abu Ghraib in one of the earlier inquiries conducted by the military, MI teams prepared individual interrogation plans for detainees, including a sleep plan (not the sleep plan you prepare for your infant) and medical standards, and—directly from Papas's testimony—a physician and psychiatrist are on hand to monitor what they are doing. Then the doctor and the psychiatrist look at the files to see what the interrogation plan recommends, and they have the final say as to what is implemented. The psychiatrist, Uthaw, also went with interrogators to the prison, and one of his jobs was to review all those under a "management plan" and to provide "feedback as to whether they were being medically and physically taken care of." That is a little bit more ambiguous—we don't know what that means.

We have some additional pieces of the BSCT puzzle from documents that were disclosed as a result of a Freedom of Information Act request by the American Civil Liberties Union. There are one-way mirrors at both Abu Ghraib and Guantanamo to allow observation of the interrogations. In a statement made during the course of an Army criminal investigation, a psychologist admitted sitting in on random interrogations. From sources that we interviewed on background, we know that Abu Ghraib had an interrogation site that basically had a central hallway with three interrogation rooms on each side, and you could stand in the central hallway and look at these rooms through a one-way mirror.

One of the things that happened in the BSCT teams was psychological profiling for the purpose of developing individual interrogation plans. There was quite an internal debate over whether you should pursue rapport-building interview strategies or aggressive approaches aimed at breaking down interviewees. The database is crucial, so if you have your friendly, smiling computer there to quickly check on the accuracy of the information, then the logic is that you can use more aggressive techniques because you have ways to use technology to check on the accuracy of the information.

Now, there is a more confusing picture with respect to the extent to which interrogation teams had access to medical records. Basically, the Pentagon at first denied this, then admitted it, then rationalized it, as evidence leaked out to various sources, including us and the International Committee of the Red Cross. David Tornberg, Assistant Secretary of Defense for Health Affairs, told us back in November 2004 in an interview, just a few days before the Pentagon official denied the access to medical records, that of course they had access to medical

records, "They couldn't do their job without that information. To the extent it is militarily relevant, the information can be used."

Jonathan Marks is going to pick up with the issue of medical gate keeping and medical oversight over interrogation and then continue with some international law issues. Then I will pick up with some related international medical ethics issues.

Jonathan Marks – Sir Nigel has saved me some work by doing a fine job of going through some of the international legal instruments. One of the issues that I want to flag before we touch on the issue of gate keeping is that key in the minds of the creative lawyers in the administration, the political appointees, was this focus on torture in the original August 2002 memo, which is sometimes referred to as the Bybee memo. It defined torture incredibly narrowly—requiring pain of an intensity leading to death, or organ failure, or serious impairment of bodily functions, and then it went on to deal with mental and psychological torture and suggested that the requirement was that it be prolonged to severe—that is, lasting months or possibly years.

This focus was on a very narrow definition of torture—a definition that, as Nigel has already said, the administration withdrew from in its December 2004 memo, the so-called Leven memo, released just days before the Gonzalez confirmation hearings. But at the time the events we are discussing were going on, the Bybee memo was at the forefront of people's minds.

When we talk about gate keeping, Gregg has already told you about Papas' account, we are referring to the idea that physicians essentially have the final say as to what is implemented and that there are facilities for them to monitor the interrogations. It raises the real question: What are we asking physicians to do when we require them to monitor and approve interrogations and, in fact, interrogation plans?

As a result of perusal of a large number of documents obtained by the American Civil Liberties Union in Freedom of Information Act requests, we do know that there were interrogation plans designed by military intelligence tiger teams (the name of the interrogation teams) in consultation with medical personnel. We haven't seen any of these interrogation plans, because the ones disclosed on the ACLU's request have been entirely redacted [blacked out], so all you have is the title "Interrogation Plan" and a few subject or paragraph headings. But we have a good idea of what an interrogation plan looks like from a leaked document.

This is a document dated November 30, 2003. It is a request from Colonel Papas's head of military intelligence at Abu Ghraib to Lieutenant General Ricardo Sanchez. What he says in the memo is that they have a Syrian fighter who was caught trying to set off an improvised explosive device. They believe he has information regarding safe houses and the smuggling of foreign fighters into Iraq. They want permission to use harsh interrogation or more aggressive interrogation techniques. The first one they want to use is "fear up harsh," in which interrogators "will, at a maximum, throw tables, chairs, invade the detainee's personal space, and continue to yell at him, of course taking all necessary precautions that all thrown objects are clear of the detainee and will not coerce the detainee in any way." Should this fail, Papas wants authorization to go into the so-called segregation phase, in which the detainee will have an empty sandbag placed over his head. He will then be transported while sandbagged, and then he will

undergo a body cavity search with the bag still over his head for the protection of himself as well as others. Following that, he will then be subjected to one of these 72-hour sleep schedules, or management plans, during which he will be interrogated continuously, using techniques described as fear up harsh, pride and ego-down, silence, and live music. Of course, please, please, can we use stress positions to "intensify" the approach?

The question for us, and we're still undergoing our factual inquiries, is What did interrogation plans look like? and Which physicians and psychiatrists actually provided input into those plans and improved them? A psychiatrist or a physician on a BSCT would face a number of difficult ethical and legal questions, some easier than others. I've just flagged a few of them on the screen just now. They may be asked to review medical records to find a detainee's weak spot ,or, when examining a detainee, they may suspect that he has already been abused, or they may be asked to approve an interrogation tactic and confirm that the detainee won't suffer long-term harm, or be asked to administer drugs to render the detainee more compliant.

I move on in the list to an issue that I think is important: psychiatrists or physicians may often see or may have seen aggressive interrogations, but take the view that it didn't pose a risk to the physical or mental health of the detainee and may not, as a result, have been inclined to intervene. That, in our view, is problematic for reasons I'll make clear in a minute.

We've already heard a great deal about the scope of applications and some of the arguments of the administration regarding the scope of application of the laws of war and international human rights law, so I don't want to repeat the arguments about scope, but I just want to draw your attention to the standards themselves for a minute.

First, if one looks at the Geneva Conventions—let me make one scope point in parentheses: Secretary of Defense Donald Rumsfeld acknowledged that the Geneva Conventions applied to detainees in Iraq, irrespective of their arguments about Guantanamo Bay. They accepted that the conventions applied to the detainees in Iraq. Of course, as we know, the now Attorney General Alberto Gonzalez had previously described some of these provisions that I have on the screen as being quaint and obsolete, but, nonetheless, they are the provisions of those conventions. It is important to note that there is not simply a prohibition on torture or coercion. You see in Article 17 there is also the requirement that prisoners of war be treated humanely and protected from acts of violence and intimidation, and, indeed, the threshold is incredibly low in Article 17. Prisoners of war who refuse to answer may not be threatened, insulted, or exposed to any unpleasant or disadvantageous treatment of any kind. One can see that withholding meals, for example, from a detainee would clearly violate Article 17.

I won't say any more about the common Article 3 because Nigel has already spoken about that.

In addition, the Fourth Geneva Convention protects civilian detainees, and, again, one sees the requirement for humane treatment, the prohibition on physical and moral coercion. Then interestingly in Article 32, the parties specifically agree that they are prohibited from taking any measure of such a characteristic as to cause the physical suffering of protected

persons. This applies not only to such things as torture and medical and scientific experiments, but also to any measures of brutality, whether applied by civilian or military agents. This is interesting, because civilian contractors, such as CACI International, were involved in the interrogations at Abu Ghraib.

It is important to note that there are some violations of the Geneva Conventions, such as withholding a meal from someone for hours, which would simply be a violation, but other forms of conduct rise to the level of grave breaches. They, of course, include torture, inhuman treatment, or willfully causing great suffering or serious injury to body or health—and of course these are war crimes in the United States too.

The provisions of the International Covenant on Civil and Political Rights, about which we have already heard, prohibit not only torture but also cruel, inhuman, or degrading treatment or punishment. Also in Article 10 the emphasis is on the obligation to treat with humanity and respect for inherent dignity. Similarly, one sees in the provisions in the torture convention, not simply the absolute prohibition on torture, even in cases of states of emergency, but also the obligation to review interrogation rules and practices to ensure that cruel, inhuman, or degrading treatment doesn't occur. Again, I won't make the point about the U.S. reservations because you've heard that already.

In addition there are some norms in the body of principles for the protection of all persons under any form of detention or imprisonment adopted by the U.N. General Assembly in which there is a very broad definition compared to the torture convention of the kinds of conduct that is prohibited including the temporary deprivation of the use of ones natural senses, sight or hearing, awareness of place and passing of time, and, again, the requirement that no detained person shall be exposed while being interrogated to threats or methods of interrogation which impair his capacity of decision or judgment.

Before I hand this back to Gregg, let me say that the implications of these international legal laws are important because it is clear, particularly in the case of the Geneva Conventions, that the legal barriers are going to be crossed long before the mental or physical health of the detainee is implicated. Medical personnel who design or monitor or participate in interrogations will violate international law if they solely keep their eye on the question of mental and physical health. In fact, as may be the case, if they design, monitor, or participate in interrogation plans of interrogations that rise to the level of torture or inhuman treatment, then obviously they will also be culpable for war crimes.

It seems to us there is also another important question, which is not simply placing physicians in positions in which they are being asked to apply medical standards without regard to legal standards, but also that institutional culture may also make it very difficult for physicians. I've heard some military physicians express their desire not to be involved in this process. It may be difficult for medics to intervene because of institutional pressure. In Abu Ghraib, they are relying on these people to save them from incoming mortars and all the rest of it, and they may be reluctant to intervene or want to save their intervention ammunition for the most egregious abuses. Of course, the effect of physicians and psychiatrists holding back is that

they may implicitly encourage those involved in the interrogations to use more abusive techniques.

Gregg will now deal with the question of whether, in addition to international law constraints, there are ethical constraints that prohibit physician participation.

Bloche – There are several international codes of medical ethics that bear on this question, and, unfortunately, these are not nearly as much help as they ought to be or could be. First of all, there is the World Medical Association Declaration of Tokyo in 1975. This was a series of provisions that basically say a doctor shouldn't participate in torture. The doctor shall not countenance, condone, or participate in the practice of torture or other forms of cruel, inhuman, or degrading procedures, etc. The doctor shall not provide any premises, instruments, substances, or knowledge to facilitate the practice of torture. The doctor shall not be present during any procedure during which torture occurs, etc.

Then there are the U.N. Principles of Medical Ethics, which are thought to be a bit more specific and perhaps a bit more helpful. The U.N. Principles of Medical Ethics has a very long title, but basically the idea is that principles and medical ethics bear on the question of torture. This was approved by the General Assembly more than 20 years ago. Therefore, it has a legal status, as well as, although there is some question about this, perhaps being evidence of customary international law.

Let's look briefly at Principle 2 from the U.N. Principles of Medical Ethics: "It is a gross contravention of medical ethics as well as an offense under applicable international instruments for health professionals, particularly physicians, to engage actively or passively in acts which constitute participation in, complicity in, incitement to, or attempts to commit torture or other cruel, inhuman, or degrading treatment or punishment." We know what participation is, or complicity, but these are plainly terms of art.

Then there is Principle 4, which may help us a bit more:

It is a contravention of medical ethics for health personnel, particularly physicians:

- (a) To apply their knowledge and skills in order to assist in the interrogation of prisoners and detainees [we're getting more specifics] in a manner that may adversely affect the physical or mental health or condition of such prisoners or detainees AND [emphasis added] (it is an AND not an OR) which is not in accordance with the relevant international instruments; (The question becomes, what are the relevant international instruments? Jonathan has already touched on some of them.)
- (b) To certify, or to participate in the certification of, the fitness of prisoners or detainees for any form of treatment or punishment that may adversely affect their physical or mental health AND [emphasis added] which is not in accordance with the relevant international instruments, OR [emphasis added] to participate in any way in the infliction of any such treatment or punishment which is not in accordance with the relevant international instruments.

There is a lot of buck-passing here as to what the relevant international instruments are and to the questions that we have been talking about—the famous Judge Bybee memo to Gonzalez, defining torture, etc.

Principle 3 may be more helpful; "It is a contravention of medical ethics for health personnel, particularly physicians, to be involved in any professional relationship with prisoners or detainees, the purpose of which is not solely to evaluate, protect, or improve their physical or mental health." This seems more sweeping in its reach than Principle 2 or 4, but Principle 3 allows for professional relationships for the purpose of evaluation—in other words, for a non-therapeutic purpose. Assessing ones fitness for interrogation? Perhaps. Does or should this permit a psychiatrist or other health professional to put his or her skills to use on behalf of the interrogation mission, subject only to international laws and constraints, or are there other additional ethical constraints involved? Footnote here—notice the murkiness with respect to health professionals who are not physicians—should a psychologist be constrained by the same ethics norms as a physician, or is a psychologist freer with respect to these ethics norms?

There are three ethical stories that get told, consciously or semiconsciously, about this question of complicity in interrogation. First there is the Hippocratic ideal of undivided loyalty. There is the related notion, although it is not a line from the Hippocratic corpus, "First do no harm," "into each house I enter, I shall enter only for the good of my patients." One translation of the Hippocratic oath. The implication here is just say no. Stay out of the business of interrogation.

Then there is "medical ethics don't apply." A physician attached to MI, to assist in interrogation, isn't acting as a physician and isn't bound by ethics—people in the Pentagon say this. The implication here is that it is not unethical to employ clinical skills to support interrogation.

And then there is the so-called mantra of the modern bioethics movement—autonomy, munificence, non-malevolence, and justice. Let's look briefly at each of these three. First, the Hippocratic ideal of undivided loyalty is appealing in its moral clarity but it is at odds with the pervasive reality that medicine serves public purposes in pervasive fashion, often at the expense of individuals. Examples include forensic psychiatry, eligibility for employment, insurance or other benefits, and public health—for instance vaccinations to achieve immunity. When my kid got vaccinated, that vaccination created extra risk for her without any benefit because—since everybody else had been vaccinated—she already had immunity. So doctors routinely impose a risk or harm to the individual for the purpose of some collective good. This underscores the need to draw lines between acceptable and unacceptable social purposes and perhaps to be too blunt, it gives the lie to the Hippocratic ideal of undivided loyalty. At least it underscores that there are exceptions.

Then there is the flip side. We toss it out the window. Medical ethics don't apply. The physician isn't acting as a physician. This is the emerging Pentagon position, although they find ways of not admitting it. Some of you may be familiar with the so-called "Church Report." Admiral Church's so-called "comprehensive inquiry" is the only thing that has been released as an unclassified summary that kind of hints at the Pentagon officially taking this position. But,

others within the Pentagon don't acknowledge it. It has also been urged recently by some forensic psychiatrists and occupational health physicians, and this issue has been disputed in the context of the American debate about clinical evaluation that determines whether someone is competent for execution. This notion is at odds with the reality that it is medical knowledge and skill that is being applied. It is the doctor being called upon because he or she is a physician, and it bootstraps on the cultural authority and the humanitarian ethos of medicine.

Finally, there is the bioethics mantra, "autonomy, munificence, etc." Well, autonomy is of little help here. Military detention just isn't a situation that most view as conducive to the exercise of autonomy, and detainees don't choose to be interrogated. And the obligations of beneficence and non-malevolence to individual patients who are clinical subjects don't address dilemmas created by putative social benefits. And, finally, justice—little guidance here. It considers larger social purposes but it begs the larger question of whether interrogation and counter resistance practices at issue are desirable. Where we are ending up is with an appeal for a move toward an ethics of clinical role conflict—an ethics that acknowledges the problem of conflicting clinical loyalties or dual loyalties and the reality that medicine serves other social purposes, pervasively, but still holds as primary, medicine's obligation to individual patients. It is our belief that the bioethics movement of the last 30 years or so has not paid nearly enough attention to the role of the old Hippocratic ideal of loyalty and care and we have to get back to that while, at the same time, acknowledging that medicine serves social purposes.

Wiesel – We had cases in Turkey of doctors who reported that some of the prisoners had been tortured, and the doctors, in turn, were imprisoned because of their reports. I was impressed because the standards of doctors in Turkey seem to differ from what we have seen happening in the cases that you've described here.

Bloche – [in answer to an inaudible question] There was a lack of translators in Iraq. At Abu Ghraib, there was a large number of detainees with psychiatric problems. In addition to there being no psychiatrists, there were very few people who could translate what the detainees were saying. As part of the interrogation team, however, there were various personnel who did have experience in languages. Some of these were employees of an American corporation called Titan and, indeed, a few members of the military forces themselves were translators. One of them, Erik Saar, just published a book called *Inside the Wire*.

Derek Denton, National Academies Forum of Australia – Have any medical staff been struck from the medical registers as a result of participating in these procedures you are outlining?

Bloche – That has a really short answer—no.

Denton – Second question: Is there any evidence that could be put up by the government that these procedures that they've followed have revealed, unambiguously and unequivocally, data that prevented large-scale destruction and lots of people being blown up and so on? Can they use that sort of argument as a counter?

Bloche – We know of no example of this happening. I would bet that if they had one, they would find a way to handle the classification issues to bring it forth.

Elizabeth Hodgkin – I work for Amnesty International. One thing I want to ask about is the role of medical organizations in acting proactively or taking action about doctors' interrogation centers. We had a lot of discussions with the Israeli Medical Association, which wasn't taking much of a role in stopping doctors from participating in interrogations. They were not exactly participating in interrogation sessions, but examining detainees before they were interrogated.

Bloche – A great example is the Chilean Medical Association during the Pinochet regime, when its leaders took great risks. We Americans haven't done so well. The American Medical Association (AMA) simply has not come out with any sort of denunciation of this. There was a limpid letter by the AMA President in a recent issue of the New England Journal of Medicine in response to our article on medical involvement in interrogation. We tried to point out in our response how limpid it was. That was disappointing to us.

Rodley – National medical associations from time to time have behaved well. The Mauritanian one did, in refusing to allow their members to participate in amputations, for example. There is nothing at the international level. There has been international level stuff, including at the World Medical Association, to protect doctors who comply with medical ethics, but nothing to discipline doctors who don't comply. I think there is a serious gap.

Bloche – After 1979, General Zia, the dictator of Pakistan, enacted an Islamic law including requirements for amputation. The Pakistani Medical Association got together and successfully organized an embargo of medical involvement in these procedures. The AMA, by contrast, according to a couple of sources that we have spoken to, told us that they don't want to be too harsh on this because they don't want to alienate the Bush administration vis-à-vis medical tort reform and keeping medical reimbursement rates under our Medicare program rising.

Question – [inaudible] I am a human rights lawyer in London. You raised an interesting point about semantics. The issue of setting a precedent or setting an example is being raised. The actions of the Americans set a very dangerous example.

Rodley – It has been raised by many commentators, and you've heard it stated in this room by many. The United States, people say, holds itself out as an authority, as a beacon, so if they backslide, that can have an effect on others. First, the United States is a superpower, and international law is made up by states. What the superpowers say and do is really quite important for the content of international law. Second, they have serious influence, so what is good for the U.S. goose may also be good for some poor tin pot dictatorship's gander. That is very much a part of the problem; you're quite right.

Marino Protti – I am from the National Academy of Sciences of Costa Rica. Is there any international interest in changing or rewording the Geneva Convention on Torture to close the doors that the United States is using, or is it not needed because it is obvious that they are just playing with semantics?

Rodley – The problem is that it is not as simple as that. Who is going to be doing the rewording? It is the states themselves. International law is created by states. What is happening now is that

the United States, in the U.N. Commission on Human Rights, for example, is trying to avoid language in the resolution on torture that focuses too strongly on cruel and inhuman and degrading treatment or punishment. What would happen if there were an attempt to rewrite the Torture Convention or the Geneva Conventions? The United States would have a very influential role in making sure that, if anything, things went backward rather than forward to the extent they wanted them to go backward rather than forward.

Wiesel – I don't want to criticize the whole country, but there are problems here as well, so both the United States and Britain have used methods that would not be condoned.

Question – Lawyers take both sides, and we are arguing that one takes one side and the other defends the other one. You are saying that, according to the U.N. conventions—I don't understand them—you have a suspect and you want to get information from him and he refuses to speak. What do you do? How do you get that information? I'm not condoning these things. If you want to get information from a suspect, but you are not allowed to do certain things to get that information, and he refuses completely to speak, what is the next thing to do?

Rodley – The next thing is to try and find professional ways of getting the evidence. There is a human right not to be compelled to testify against oneself. There is a human right of the presumption of innocence. One thing you do not do is coerce people into testifying if they don't want to speak. That is the answer to your question. There is no next thing. The next thing, if it is done, that you may have in mind, is likely to be a crime committed by law enforcement officials, and that is not a very good way of bringing about respect for the law.

[End of morning session.]

Human Rights, Tolerance, and Peace

Welcome and Overview Professor Claude Cohen-Tannoudji (Nobel Laureate), Professor of Physics, College de France; Network Executive Committee Member

I am particularly happy to chair this session, because it reminds me of a similar session two years ago in Switzerland, when we had the same speakers, Professors Sari Nusseibeh and Menahem Yaari. Two years ago, the subject of the session was the Israeli-Palestinian Science Organization (IPSO), which was just starting. I hope we will hear some news about this association today and after the Network meeting on Saturday and Sunday.

First I would like say that one of our main goals as scientists and scholars is to promote the free exchange of ideas. Before Professors Nusseibeh and Yaari speak, in reaction to the academic boycott of Israeli academic institutions declared by the British Association of University Teachers, Professor Nusseibeh, President of Al-Quds University, and Professor Menachem Magidor, President of the Hebrew University of Jerusalem, today will sign a joint statement calling for academic cooperation in affirmation of the continuing academic cooperation between their two universities. I will read the statement and then ask each of them to say a few words.

Cognizant of the moral leadership universities should provide, especially in already turbulent political contexts, we, the President of Al-Quds University and the President of the Hebrew University of Jerusalem, have agreed to insist on continuing to work together in the pursuit of knowledge, for the benefit of our peoples and the promotion of peace and justice in the Middle East.

Our position is based upon the belief that it is through cooperation based on mutual respect, rather than through boycotts or discrimination, that our common goals can be achieved. Bridging political gulfs—rather than widening them further apart—between nations and individuals thus becomes an educational duty as well as a functional necessity, requiring exchange and dialogue rather than confrontation and antagonism. Our disaffection with, and condemnation of acts of academic boycotts and discrimination against scholars and institutions, is predicated on the principles of academic freedom, human rights, and equality between nations and among individuals.

We therefore call upon academics here and worldwide to act in support of our mission, as one which might allow for ending our shared tragedy rather than prolonging it.

[The statement was then signed by Sari Nusseibeh and Menachem Magidor, they shook hands, and were applauded. The signing was subsequently covered in an article titled "End to Boycott of Israeli Universities is Urged," that was published in *The New York Times* on May 20, 2005.]

Menachem Magidor – This is a very emotional moment for me, because this is really the formalization of something that we at the Hebrew University, and I'm sure in most of the parts of the academic community of Israel, have believed in. We believed, in spite of the fact that we are living in a period and a region of violence and confrontation, that academic cooperation and the interchange of ideas should go on. In spite of all the political obstacles, security obstacles, and whatever you call them, still we should find ways in which to exchange ideas. We will not necessarily agree on everything, but still the free exchange of ideas should go on.

If you want to build, in a deep way, a future of a peaceful, prosperous Middle East in which Israelis and Palestinians and other Arab countries could live together in peace, the only way to build such an intellectual and spiritual infrastructure is by the free exchange of ideas, cooperation in research, and trying to understand the world in which we live. We are trying to make this knowledge useful, to improve the lives of the people living in our region. We are very proud of the fact that, in spite of all the troubles and obstacles, we have managed to keep a level of cooperation and open channels. We are grateful to Professor Sari Nusseibeh, President of Al-Quds University, and his colleagues, for being our partners in this very important venture. Thank you very much for working with us for these goals. Hopefully, that will be another step in the right direction of creating a peaceful, prosperous Middle East.

Sari Nusseibeh – First of all, thank you for providing this opportunity to Professor Magidor and myself to sign this statement in your presence. This came about in a sense somewhat suddenly. Professor Magidor was coming to England, and we have been working on something like this for some time. We therefore decided this would be an opportune moment and indeed an opportune context in which to sign the statement.

The statement is signed between the two universities, and it is important to point out we have, in fact, been trying in the past few years, and in better times and worse times, to create bridges of cooperation, with the aim of bringing people closer together, exchanging ideas, and also in a sense building up trust, at least in the scholarly community, between Israelis and Palestinians.

It has been a very hard effort. It is not easy to build peace and bridges in a context of war and conflict. Indeed, if you look at the overall picture, and you take into account that it has been many years, many decades in which Israelis and Palestinians, Arabs and Israelis, Jews and Arabs, have been fighting. If you look at that, it is amazing, that we have been able, in the past few years—10-15 years perhaps—to build bridges of understanding in the hope that the past will change, that the condition we live in, of war and conflict, will change, and that we will be able to make peace.

In the last three or four years, things have gotten a bit worse, as you know, so there has been even more pressure on everybody to try and find a way out of this. Some people have decided, it seems, that perhaps the only way out is to exert additional pressure, at the level of the civil society, and in particular the academic community.

In our opinion, and this is actually expressed in the statement, it is precisely the civil community where bridges should be maintained and relations should be intensified. It is precisely in the academic sector and the scholarly sector of the two communities that leadership should be provided in order to make sure that we are able, as societies, to return to the path of peace.

Therefore, as you heard from the statement, whether in the role of educators, as a moral duty, or in the role of people whose responsibility it is, as the avant-garde in their own societies—however you look at it—our role should be to try and convey the message to the rest of society that cooperation between Israelis and Palestinians is the way forward, and that it is necessary and that it is commendable. It is nothing to be ashamed of. It is nothing to look upon as a negative future. On the contrary, it is a positive future, since it is a future that will allow us to work toward the creation of the peace that we all, in fact, crave. Therefore we have come up with this statement.

One of the very sensitive and important areas of cooperation the universities have been engaged in is to set up a virtual library on Jerusalem—you know how sensitive Jerusalem is. Nonetheless, people from the Hebrew University and our university, for three years, have been talking, negotiating, fighting, agreeing—they have actually managed to put together this wonderful project on the most sensitive issue we have, which is Jerusalem, and it was done jointly. I believe it is an example, a model of how, even in the most sensitive areas, with good intentions on both sides and scholarship, if properly used, we can push ahead to create a better world for the people of the region.

That is why we have signed this statement, and we have come to sign it in front of you because we believe that this, as a context, is the right place to have it signed. Thank you.

Views of Science and Tolerance Today in the Middle East
Professor Sari Nusseibeh, President, Al-Quds University, Jerusalem; Rita E. Hauser
Fellow, Radcliffe Institute, Harvard University, U.S.A.
Professor Menahem Yaari, President, Israel Academy of Sciences and Humanities;
Professor Emeritus, Hebrew University, Israel

Menahem Yaari – Friends, colleagues, ladies and gentlemen, this is an exciting moment for me to see the presidents of two universities, a Palestinian university and an Israeli university, come together to sign a declaration of cooperation—that expresses a sentiment that will be the foundation for continued cooperation. It is no secret that the timing of the signing has coincided with the rebirth of an initiative to boycott Israeli scientists and scholars on the grounds of what Israel is doing in continuing the occupation of Palestinian territory. It is only natural that I should speak here, since I do have a slot of 15 minutes of your time, about boycotts.

I could say a few things specifically about why boycotting the Israeli science community is the wrong idea, particularly in view of the fact that the people toward whom this boycott is directed, the leaders of Israel, would like nothing better than to see the science and intellectual community being hit over the head, so this actually plays into the hands of these people.

I could also mention the initiative to which Professor Cohen-Tannoudji referred, IPSO (the Israeli-Palestinian Science Organization). I am very happy and privileged to be part of it, and I point out that one of the first casualties of a boycott would be this particular initiative, for which we hold great hope.

In doing so, in pointing out the ramifications for my backyard, I would probably be acting in a manner that here in England could probably be described as unseemly: one should not talk about oneself and one's troubles in public. But the general question of a boycott still warrants some discussion. It is a legitimate question to ask whether an academic or scientific boycott could be or is a legitimate tool in the quest for human rights. Since we are here in the meeting of the Human Rights Network, I say it is a legitimate question for the Human Rights Network to consider.

Let me say a few words with your permission on this more general question and leave the parochial context for some other time.

Let me remind you that when I go to buy tennis shoes and discover that these tennis shoes have been produced by little children in a sweatshop, I'm fully entitled to boycott these tennis shoes, to refrain from buying them as a way of expressing my own private displeasure at the manner in which these tennis shoes were produced. A boycott in that sense certainly is fully legitimate.

However, knowledge is not tennis shoes. The question is, Can the same principle be applied to knowledge, to scientific work, and to the work that scholars do, whether alone or together? For the sake of argument, let's imagine a scientist in one of the boycotted universities, let's say one of the two that are being boycotted in Israel. Let's imagine for a moment that this

scientist makes a significant scientific discovery. It may be unlikely, but it is possible. Suppose that happens—that a scientist from that university makes a significant scientific discovery. Can or should this discovery, this piece of new knowledge, be boycotted? In other words, what should the man here in the United Kingdom, who is in the Association of University Teachers (AUT), the organization that declared the boycott, what should that person do, assuming he or she is in the same field as the person in Israel? Should they boycott the truth? Should they say, this man over there in Israel made a significant discovery, but we are going to ignore it? We are going to close the doors to it. We are going to see to it that no one knows about this discovery, for example, by not allowing it to be published? Furthermore, suppose this person in the United Kingdom is in the same field in which the discovery was made. Should this person in the United Kingdom say, Ah ha, this discovery was made but I'm boycotting this institution, therefore I should continue my work as though this discovery had never been made? All this sounds absurd, and it seems impossible once a piece of knowledge is there to behave as though it isn't, or to close off that knowledge and deny it to others.

There is one case in which an argument could be made. If the scientific discovery is made in the course of terrible, inhuman experiments, which was the case in the 1930s on occasion, then I think the scientific community could say, well this finding was made, but we don't want to hear about it, and we will act as though this new knowledge doesn't exist. But on the whole, knowledge discovered by one scholar cannot be barred from other scholars. The attempt to bar knowledge in this particular way, by singling out the scholars who, when they work with this material, should be barred, is not a possibility.

There is also another problem even more difficult than the previous one. When a boycott is announced or put into place, the scientists and scholars who are targeted are not being boycotted for something they have done, but for something that others have done. In other words, in the boycott, the scientists and scholars are being used to pressure other people, in this case some particular government, into changing their wrongful actions. That is using one person to pressure another person to change their action. There is only one word for that; the scientists in this case are being held hostage for the actions of others. And hostage-taking, I think we all agree, is generally held to be repugnant. Hostage-taking is not something that we can condone, and a boycott of scientists is very much in the manner of hostage-taking.

I tried to look into the history of this and could find no instance in history in which the science community, as such, has been boycotted. I asked some historian friends of mine—I am no expert—and they could not find an example, either.

There are, however, many examples of individual boycotts among scientists—personal boycotts of one scientist, not being on speaking terms, never to be seen speaking with Professor X until kingdom come—that has been quite common. In fact, you probably know the story about Henry Kissinger, who, when asked why in the academic world acrimony is so high, famously answered, it's because the stakes are so low. It happens a great deal.

The most famous and perhaps the most serious case of that was the case of Einstein and Max Planck. Max Planck, you will remember, essentially invented quantum mechanics, was the mentor of Einstein, and was responsible for bringing him to Berlin. They were very close to

each other, and when Max Planck did not resign the presidency of the Kaiser-Wilhelm-Gesellschaft in 1933 (he did resign, by the way, in 1937), Einstein broke all ties with him and they never spoke again, until Planck's death in 1947. At his death, Einstein prepared a eulogy for him. I'd like to read a passage from it, ending the period of 14-15 years of absolutely no contact between the two. Einstein says:

Yet it is good—indeed, it is indispensable—that representatives of all who strive for truth and knowledge should be gathered here today from the four corners of the globe. They are to bear witness that even in these times of ours, when political passion and brute force hang like swords over the anguished and fearful heads of men, the standard of our ideal search for truth is being held aloft undimmed. This ideal, a bond forever uniting scientists of all times and in all places, was embodied with rare completeness in Max Planck.

This is what Einstein said about his friend after his death.

Discussion

Magidor – [In response to a question about the virtual library.] I'm not dealing with the project directly. I've got other things to do, although it is not too far from academic disciplines. I'm a computer scientist. Jerusalem is definitely the most difficult and thorny issue in the conflict between the Israelis and Palestinians. Jerusalem carries the weight of history, the different narratives, and the different stories. The idea was to try to create some agreed-upon database of documents, information, both graphic and verbal, about Jerusalem that would be acceptable to both sides, the scholarly communities of both Al-Quds University and the Hebrew University. If you look at possible solutions for Jerusalem, it will be very relevant. In Jerusalem, you can't find a solution without considering the demographic and political, or the history, the emotions or stories behind it, if you want to deal with the problem. The idea was to take every possible document that mentioned Jerusalem, put it in a virtual library in Hebrew, Arabic, and English, with appropriate digital indexing and cross-linking to relevant information.

It sounds like a very technical project, but it is not. It is really an intellectual and almost a political project. Just think about the issue of translation. How do you translate the different terms? What type of translation do you use in different documents? What should be indexed and what shouldn't be indexed? This is a major process of trying to agree on the terms. While there may be and are definitely disagreements about what could be a possible solution, at least there is a huge library of documents in which both sides agree on what they say and what is an appropriate translation in the different languages. That is basically what the project is. There are technical aspects, of course, in creating a huge database with cross-linking. There is the intellectual effort of trying to get a common ground. It is an exercise in trying to reach a common conceptual framework. It is a fascinating exercise.

It is far from being finished—let me be quite honest about it. There are problems all the time. But the fact that the two teams can try to deal with them in a relatively civilized way is something that should be a model, that should be adopted at other places.

Question – Aside from this project, is this the beginning of similar initiatives with other universities in Palestine and Israel? Is it an isolated event, or do you have plans for further development of this idea?

Magidor – It is very far from being isolated. There are many, many projects going on. I'm not sure that I know the whole picture. Maybe Menahem Yaari, as President of the Israel Academy, may know more. But at least at the Hebrew University, I could immediately get you a list of about 40-50 projects with Palestinian universities that are going on. Many times it is done for obvious political reasons under the umbrella of a third party—the European Union or the U.S. Agency for International Development. Definitely things are going on.

Question – I didn't ask specifically about projects. What is interesting is the exchange between two universities. Does that mean the exchange of students and other kinds of exchanges are taking place? I wonder if there are other universities in these communities that are thinking about it.

Magidor – I don't think there is anything close to that. The closest thing was probably a project by the two schools of education at the Hebrew University and Bethlehem University. It was stopped but hopefully we can renew it. I don't think there is anything with other universities in Israel, although there will be, I'm sure.

The education project was trying to examine the stereotypes of both sides. You take each side of the conflict, stereotype the other side in a textbook in the school system and a stereotype of the other side. Most stereotypes of the Jews or the Israelis are characterized in the Palestinian school system and textbooks. The stereotypes are on both sides. They should be cleared. There is a lot of work to be done there, but identifying it and getting it to the surface is the first step. This was a very interesting project and hopefully it will be renewed.

Yuan T. Lee, Academia Sinica – I just wanted to make one comment. There is a scientific project in the Middle East, which is a scientific project called SESAME, a synchrotron light source that involves all the countries in the Middle East, including Palestine, Jordan, and Israel. And this is high level moving rather well. I'm chairman of the National Synchrotron-light Source in Taiwan, and last year we offered a fellowship to SESAME for two scientists to come to Taiwan to work with us. That fellowship was increased to five people for the coming year. I'm really happy to see people in the Middle East working together on a synchrotron light source. This is really a high-level collaboration.

Question – I have a small inquiry to make. It is a very nice thing that you have a joint project on Jerusalem. I wonder whether you needed a kind of approval from your government to start this joint project, or is it quite independent of the government's blessing?

Nusseibeh – It is independent, of course. One doesn't start investigating things by getting approval.

Arnold Wolfendale – Being a European today rather than British has released my tongue. Could I ask about scholarly attitudes to boycotts? Are they efficient on the whole? I'm a mere

physicist and I don't know about these things, but I presume there has been scholarly work on the efficacy of boycotts. Is there a conclusion? In my limited experience, they tend to have the opposite effect in the long run to what was intended.

Wiesel – It seems to me that ignorance is probably more of a hindrance to the spread of knowledge than specific boycotts. You can think of many examples in which scientists have been ahead of their times and have not been boycotted, but ignored.

Yaari – There have been sanctions, but they were not directed specifically at scientists. Sanctions have included boycotts, and those have been effective in South Africa. We don't know of specific boycotts of scientists and scholars. So we can't really answer the question because we don't have data. But that is the general wisdom, which may not be the final word.

Question –I wanted to ask if this wonderful example of academic cooperation might be met by examples of cooperation with professional bodies such as organizations of doctors, organizations of lawyers, and the like. This morning we heard discussion of the absence of initiatives by certain professional bodies, and I wonder whether there are examples.

Yaari – In Israel, there is an organization called Doctors for Human Rights. These are Israeli doctors who do nothing but work the Palestinian countryside looking after patients in various Palestinian communities. There they cooperate intensively with the doctors locally attending the population. That is a marvelous example of what you have been asking about. There have been instances of cooperation in the area of pest control, since pests don't recognize borders. Those are normally done in cooperation, and the cooperation is quite intimate and successful. Those are the two examples that come to my mind, but there must be others.

Nusseibeh – Can I just pick up on this and go to the extreme? There is known cooperation between the underworlds, the Israeli and Palestinian mafias. Beginning with that, and you can go across the spectrum, there is in fact a lot of cooperation. You have to realize that the Palestinian areas are almost part of the state of Israel and have been since 1967. So, for various reasons, good or bad, there have been very strong relationships.

I mentioned the mafia, but there has also been strong cooperation between the professional security organizations on the Israeli and the Palestinian sides. In the last four years, something went wrong, and this kind of cooperation began to suffer. We have mentioned doctors and lawyers, and cooperation exists with nurses and others. There is a lot of cooperation.

Throughout those years, it is important to note that, on the Palestinian side, the wisdom has been that academic cooperation should be singled out, that everything else was fine but academic cooperation was not fine. The academic cooperation should wait until peace comes. Once it comes, then it can be worked upon. This has been the situation in general, and the question now posed is what should academics be doing, what should scientists be doing, what should institutions be doing? Should we sit on the side? Should we support this process toward breaking up the bridges that have been built? Or should we show some kind of support for developing those bridges? There is a lot of cooperation, and some of it, as I say, is not all commendable. Take the cooperation in gambling between Israelis and Palestinians. Palestinians

developed the only casino in the Middle East, the Arab world probably, in Jericho, as soon as they got a hold of Jericho, in cooperation with Israeli businessmen. It is devastating that whereas you have cooperation in all of that, including the mafia, scientists are not allowed to talk to each other? It is crazy.

Question – It has been almost forgotten, but Israel, from its very inception, was under boycott by Arab countries. This was a general boycott, not specifically scientific but also included the universities. A boycott actually had two aspects, one direct, and the other a so-called secondary. If an American or a British corporation did business with Israel, it also came under the boycott and sanctions were actually levied against it. This boycott did cause some damage to Israel, but I think it also damaged those who made the boycott. The damage was mutual. Both suffered and I think it is now on the decline simply after the peace agreement with Egypt, but I don't think it has been completely lifted, at least not as far as I know officially. It is a very great thing that we now have at least the beginning of cooperation between the Hebrew University and Al-Quds.

Nusseibeh – There was a lot of cooperation, even at the level of the major associations that you speak of. But in the past four years, things have been breaking up again. I'm not aware of anything major, but cooperation exists. For example, a major association in Israel would invite professionals in that field from Palestine to a conference or vice versa, or the two major associations would cooperate in having a conference in some field of common interest. This kind of thing happens, but we don't have peace, so it doesn't happen in a normal way. This is what one has to work for, to try and push in this direction. It will take time. One thing that can help is to get these people from the [U.K.] teachers' association together, rather than help them to push themselves apart from each other. One can go wrong in the boycott, and one can also go wrong in the other direction—being provoked to such an extent as to create anger or provocation on the other side.

We have to somehow look at this from the point of view of the Israelis and the Palestinians. They are and will be and should continue to be allies in their common interests. They should be brought together. They should be made to see this, so that friends of Palestinians or of Israelis who wish to help should encourage this common evolution, the evolution of commonality between Israelis and Palestinians. It just adds to the number of enemies that exist by coming on to one side against the other. The friends of either should be the friends of both.

Human Rights and Our Future Lord Dahrendorf, House of Lords, London, U.K.

I am greatly honored by the invitation to speak to a group that is committed to my own deepest beliefs—the belief in a free world that is a world of basic rights and liberties for all.

I'm not going to dwell at any length on the question of the concepts of human rights. You've probably heard quite enough about that in the course of this day, and above all, you have heard my good friend, Baroness O'Neill, who will have done as well as anybody on this matter. I would like at least to state that I'm one of those who use a narrow concept of human rights, and I say this in order to make my subsequent remarks more comprehensible. In my view, even the United Nations' Charter of Human Rights, as well as many other recent statements, include in the concept important matters, even crucial matters, but matters that I personally do not describe as human rights.

For me, human rights have to do with the inviolability of the person, habeas corpus, the inviolability of the person in the sense of the basic dignity of every human being. They have to do with the right of expression, and the right of expression includes not only such matters as freedom of speech, but also and crucially the freedom to pursue and conduct scientific research. And the concept of human rights includes the right of participation. It implies an element of inclusion. It implies that every human being should be able to take part in what happens in her or his society. That is my concept of human rights as I'm going to employ it in my subsequent remarks.

It is undoubtedly one of the tasks and one of the great interests of the scientific community to pursue the defense of human rights and, indeed, the implementation of these basic rights. But it is undeniable that the scientific community has not always done terribly well in this process. I am, just now, writing a little book on the question of who, among the public intellectuals, and they include quite a few of the members of the scientific community, prove to be immune to the great temptations of totalitarianism in the 20th century. The number of those who truly proved immune is not very large. It is quite amazing, as one looks at the history of Europe, and not just of Europe, between the First World War and 1989, the end of the cold war. It is quite amazing how many intellectuals, how many scientists and scholars have preferred the comfort of life to the strains of fighting the temptations around them. It is amazing how many have made their peace with the regimes that were, after all, regimes of [totalitarianism], but they have made their peace and hoped that in this way they would be left in peace.

It was a short-sighted attitude by many. It was short-sighted because, without any doubt, the regimes that were thus tolerated, and in an indirect way supported by those who do not insist on basic liberties and rights, were in fact strengthened. It is also beyond doubt that these regimes removed the foundations of free research, free thought, and other creative activity on the part of scholars, scientists, and public intellectuals in general.

The history of scientific communities with regard to the defense of human rights is a triumph, and it is therefore particularly gratifying that perhaps from 1945 onward, but certainly in recent decades and recent years, a growing number of those who are assembled in the academies of science and who have a chance to speak up for innovation and scholarship have, in fact, defended human rights. I am pleased about the trend, and I'm particularly pleased to see here representatives of a network of academies that is committed to the defense of human rights.

In the invitation, I've been asked to speak about the future, and I shall try to do so without making too many predictions that I will later regret. I am going to make three points relating to current threats to human rights, and I suspect that they will be with us for some time to come. These three points may well give rise to a discussion. I look forward to the discussion above all, and I regard my introductory comments as a stimulus to a discussion.

The first point is the least surprising. Despotism, tyranny, totalitarian or otherwise, are with us and are likely to be with us for some time to come. There are plenty of countries in which unwelcome views are suppressed. There are plenty of countries in which the exploration of new frontiers of knowledge is, if not prevented, at least hindered in a whole variety of ways. There are plenty of countries in which freedom of expression is severely curtailed.

As one looks at scientists and the scientific community, it is quite striking how many have, at some point in their lives, been forced to leave their country simply because they weren't able to pursue their objectives or to express their views in freedom. As I look at some of the names associated with this Network, I see quite a few who have had this experience themselves. I, too, changed countries at one point in my life, but I did not have to, much as I have appreciated and still appreciate the air of liberty that has been characteristic of this country for a long time and is still characteristic of it.

Immigration is one of the responses to tyranny and despotism, and immigration, of course, has a whole lot of consequences, both for the community left behind and for the communities to which people go. There is very little doubt that it will take my country of birth, Germany, many, many generations, if it ever happens, to recover the distinction of scientific and intellectual life that was characteristic of it before the Nazis came to power.

I like the statement on the letterhead of this organization, at the bottom of the page, which says primarily the Network assists colleagues who are unjustly detained or imprisoned for the nonviolent exercise of their basic human rights.

I would like to make what is perhaps a minor but to me an important point here. The assistance of individuals who are unjustly detained or imprisoned for the nonviolent exercise of their basic human rights is a crucial task of those of us who are committed to human rights. And I insist on the word "individuals." Like many others, I have a great deal of respect for the organization Amnesty International. But I'm bound to say that, deep down, I am slightly uneasy about the change that has happened in the history of Amnesty. Amnesty originally was an organization set up almost exclusively for the support of individual prisoners. Indeed, members

of Amnesty adopted particular prisoners and saw to it that their names were not forgotten and that their destiny was part of the awareness of those who were fortunate enough to live in free societies.

I believe one of the important ways in which those of us committed to human rights can fight the violation of human rights in despotic or totalitarian regimes is by keeping in the public consciousness the names of particular individuals who have been detained, imprisoned, or otherwise unjustly treated in violation of human rights.

Since then, Amnesty has coupled the concern with individuals with a wider campaigning activity about political systems in general. That is perfectly comprehensible to me, and it certainly makes sense to someone who is himself interested in political analysis. But I wonder whether in the process that great organization hasn't lost some of the effect of the insistence on specific individual cases, and indeed not cases, but specific people, persons, individuals in that sense.

And there is the phenomenon of failing or failed states. In many parts of the world, we now see communities that seem to be incapable of sustaining the elementary organizational framework of states as we know them, the elementary political framework that is so utterly necessary. This is a strange phenomenon. In Europe, the region in which this is most evident is the Balkans, where the political framework has dissolved. There are some functioning local communities, sometimes even regions, but there is great uncertainty about the rules that govern the lives of people generally. The Balkans, however, are just one example.

There are important parts of the Middle East in which one can't really speak of functioning states with which one could deal. There are parts of Latin America in which there are increasing signs of failed or failing states. And there are parts of Asia, quite a few parts of Asia, in which this is also true. There is an absence of authority, an absence of basic structures, and, in that sense, a degree of anarchy.

In my view, these failed or failing states remind us of the crucial need for the rule of law if we want to establish human rights and be sure that they are guaranteed. I say this not only because I want to continue the debate, which I understand you had in the course of the day, about legal aspects of human rights. I say this for an even more fundamental reason. I have increasingly, and if I may say so reluctantly, come to the conclusion that, in the kind of society I want to live in, even more important than democratic procedures is the existence and prevalence of the rule of law. I have increasingly felt that, as we try to assist countries in which the state has failed in the attempt to rebuild structures in which human beings can enjoy their rights, we should look first at the rule of law and not assume that by organizing elections we will automatically create a state of affairs in which the dignity of human beings, freedom of expression, and participation are guaranteed.

This is a statement that requires many qualifications and additions. The rule of law requires, perhaps first, that rare thing: an independent judiciary that is incorruptible and is one of

the great achievements of a civilization in which it exists. It is also quite frequently threatened in countries in which it is supposed to exist in terms of their constitutional foundations but is, in fact, not there.

Of course, the rule of law requires the existence of a minimum state power, the power of enforcement, for example, and also, to some extent, the protection of the independence of the judiciary. But in a minimal state, the rule of law itself implies and includes those principles that I set out in the beginning. Establishing the rule of law certainly was my advice to those I knew who were charged by international organizations to go, for example, to the Balkans in order to assist there in creating conditions of an acceptable liberal order.

This takes me to my third point, one that is close to my own current concerns and, incidentally, to the concerns of Baroness O'Neill. And that is the peculiar risk we find in many countries that can legitimately be called part of the "free world" of what I called creeping authoritarianism. That is a very peculiar phenomenon. It has a great deal to do with, at the moment, the question of countering terror or terrorism. In the fact of this question, a need is perceived, perfectly understandable, to protect the citizens of countries from the risks and dangers of terrorism. And it is not just citizens who have to be protected but visitors, anyone living in these countries. At the same time, there is the other risk that in trying to protect citizens from terror, we introduce measures that actually lead to the powerful destruction of that system of the role of law and human rights that we cherish.

It is a very difficult balance that hardly anyone will ever get right. Incidentally, this is one of the areas in which democracy is crucial. It is a system of politics in which it is possible to correct mistakes when you've made them. It does happen that measures are taken that destroy some of the foundations of the liberal order, but it is also possible to undo this and reverse whatever decisions have been taken.

We are watching, in quite a number of countries in the free world, the introduction of controls of citizens, and even more of noncitizens or visitors, that damage human rights, even if they do not destroy them. I think we are in the process of doing that. Perhaps in this country we should feel triumphant about the effects of visa restrictions on foreigners in the United States, because, up to this moment, many of those who now find it too burdensome to try and get access to the United States have a tendency to come to the United Kingdom. All universities in this country, at the moment, benefit to a considerable extent from being the second choice of people in many parts of the world who would like to be in an English language country at university but don't want to go through the difficult process of gaining access to American universities.

Here, too, we are faced with a peculiar conflict. As a member of the Upper House of Parliament and the House of Lords, I could tell many a story about recent debates we had on legislation that would enable the police and thus, indirectly, the government to arrest suspects and detain them for long periods contrary to those basic rules of habeas corpus that I included in the inviolability of the person. There is a great risk that a climate of fear of terrorism turns into a

general climate of fear, with quite serious threats to individual liberties. There is also a very great risk, which is always a serious one, of people beginning to censor themselves—no longer saying things that they believe might be objectionable or might seem suspicious or no longer conducting research that they fear may be unwanted and would certainly not attract public funding or perhaps no funding at all. There is the risk of a voluntary reduction of human rights, and that is something that we have to watch very, very carefully.

Authoritarianism is not totalitarianism. The first of my three points relates to regimes that are based on the attempt of those in power to organize society totally and keep it under control. Authoritarianism is more designed to keep people quiet and create conditions under which they try not to offend prevailing views, but it is just as limiting on basic human rights.

It is therefore my general conclusion, in looking at the risks that await us in the future—the risks of new despotism, the risks of failing states, the risks of creeping authoritarianism—that remaining active in the defense of human rights is absolutely crucial. That is to say, human rights do not remain in force just by themselves. They require the activity of those who cherish them. And what I hinted about or said at the beginning I will say again at the end—I believe that those of us who live in the world of ideas, in the world of research, committed to innovation and the exploration of new frontiers, have a very special obligation to preserve these human rights in the face of the threats of the future.

Discussion

Baxi – I teach currently at the University of Warwick, which is neither a function of the first nor the second choice. Thank you very much for your most illuminating observations on the risks facing human rights and our duties to face the future together. There are very few occasions on which we have such a sagacious address, so I thank you again. I do want to clarify a question that relates to the second threat, namely that of failing states. There are states of political communities that fail because of endogenous causes and there are states that are made to fail by external forces—the cold war is one such historic tidal wave that made political communities otherwise existing fail, as do the structural adjustment programs of the World Bank and the International Monetary Fund, and so does the unfair international trade system. How do we address this problem? The problem comes from societies of the North committed to the rule of law and human rights in their own territories but significantly lacking in the will to treat other nations equally and constructively.

Dahrendorf – The question, as I understand it, was that some states are failing for endogenous reasons, but others are made to fail by the way the international community treats them or the conditions that the international community creates that make it exceedingly difficult, if not impossible, for states to succeed. Well, what am I to say? I agree with you. I think it is a very important distinction, and, if you had given examples, I'd be happy to discuss these examples. It is a mistake for the international community (whatever that is) to believe that there is anything to gain by making states fail. There is a lot to gain by trying to persuade states to change their

ways. But the deliberate or unintentional but effective destruction of state structures is just very, very bad politics in the interest of human rights. So, I entirely agree, and I would be happy to look at particular examples.

Robert Hinde – I'm from Cambridge University. You mentioned the question of scientists being allowed to do the research that they want to do and not being restricted. I'd like to ask your view about research. Since the boundary between pure research and applied research is so vague these days, What is your view about research on weapons, on potentially dangerous chemicals, and, even beyond that, research in which human subjects are used insensitively and even inflicts unnecessary pain on animals?

Dahrendorf — We are talking about human rights and therefore talking about the question of whether there are kinds of research that are potentially so damaging that it is a matter of human rights and their application to do what? To prevent it from happening, to stop it in some way? Let me make first the point—I would be very reluctant to draw easy boundaries of permissible and impermissible research. I would be inclined to say that we should, as a matter of presumption, be wide open to the attempt to explore new boundaries of knowledge, and my inclination would always be to allow more, rather than less, research. I don't find it easy to draw an early boundary.

You mentioned the use of animals in research. As it happens, along with Baroness O'Neill, I was on a committee of the House of Lords about stem cell research, and we went through, in detail, many of the ethical issues there. As you know, we came to the conclusion, which was then implemented, that there should be an agency which has a say in the public financing of such research, but there should be no legislation that prohibits or limits it. I strongly supported that conclusion. Countries that take a view, through legislation, that certain kinds of stem cell research should be prohibited, are limiting research in a way that I regard as dangerous in principle. I would draw the boundaries very, very far away from what is happening most of the time.

It is not always easy to tell what research can be used for military or for other purposes. It has always been true that the findings of research are, in a certain sense, morally neutral—that is, they can be used for terrible purposes and for good purposes, and you can't assure good purposes by preventing research. If we had an extensive discussion, we would probably find points at which I agree that these are limits that must not be transgressed, but my basic approach is, in most cases, possibly including those you mentioned, that research should be free.

John Sulston, The Royal Society – I wondered if I could just go back to the first question. I was very pleased that Professor Baxi asked you about that, because it was exactly in my mind as well, about the reasons for failing. I also wanted to ask you about your point that Amnesty had weakened its approach to individual cases by looking at policy matters. This is something that is happening across the board. I have had nothing to do with Amnesty, but I do work with both Oxfam and Médecins Sans Frontières (MSF). In both of those cases, they have realized that their efforts to bring food and medicines to impoverished people are fruitless unless they correct the causes of poverty. So, for example, I joined Oxfam's fair trade campaign, and I'm now part of the MSF's access to essential medicines campaign. I'd like to have your views about this,

because my impression is that this is part of the changing world. What these organizations are doing of necessity is offsetting globalization, which we all agree is a good thing, drawing together people, and drawing together in terms of power and particularly a financial power. The NGOs speak in some way for the people at large and the dispossessed when governments cannot because of the transnational financial powers that push against them. I just wondered if you'd like to say any more about that, and whether your disappointment in the NGO's change in individual cases is real, or if you have seen that the world is moving on, and also perhaps relate these views to the activities of the human rights Network here.

Carol Corillon, U.S.A. [Network Executive Director] – There is one other question about Amnesty International from the Norwegian Academy, so maybe you'll be able to answer both of them?

Arne Haaland, Norwegian Academy of Sciences and Letters – It has been a long time since I've thought much about Amnesty [International], so what I'm saying now is not properly organized. I attended a meeting about Amnesty International in Oslo in 1962, that was one year after the organization started. There were five or six people in the room, and I joined. It was a very strange organization. In Norway, there were probably 50-60 people who were active through the first part of the 1960s. They all had to know English because there was no material in Norwegian. So people who did not speak a foreign language were excluded. We had no office. We had no typewriters. Members bought typewriters. Members paid the rent for the office. We adopted prisoners. We had to get 30 colleagues each to collect enough money each month to send. Here in London, there was a secretariat. There were four people there who were salaried—very low salaries and hardly enough typewriters. The expert on the Soviet Union and the rest of Europe had a degree in Russian literature, and he was the only expert we had. The rest of the world was shared between two women who were very intelligent, very dedicated, but had to do it all themselves. Typing was done by the volunteers. I can remember a meeting in the mid-1960s discussing that the secretariat in London, on which we had all depended, had money enough for just six more weeks. The Norwegian section was one of the larger ones, so I promised to send everything we could. They asked how much we had, and I said 500 pounds. The other sections were not rich. The context in which Amnesty operated was the cold war. There was very little faith in an organization that "pretended" to be neutral. We all knew that if we made two bad mistakes, the organization would not survive. I would also say that most of the people involved had personal histories relating to World War II.

This was a heroic time. Many people gave a lot of time and effort to the organization. But if we look back at it now, what happened is the best that could happen. The world needed a large organization that would survive for another year and have the expertise to treat things professionally. I can only repeat I think this is the best thing that could happen and the enthusiasts can go elsewhere and they will be needed.

Dahrendorf – Well, that is quite an important issue here. One aspect of it is simple. The key sentence in this second comment is one you tucked away when you said we adopted prisoners. That is what Amnesty was about: adopting particular prisoners and making particular individuals in free countries responsible for keeping this in the public awareness. I am not against what Amnesty is doing today at all. But I think these are two different things.

Adopting prisoners without making general political statements was curiously effective in quite a few cases. I'm sure there are dozens of human beings, maybe more, who owe their freedom to the fact that they were adopted as particular prisoners by an organization that was not regarded as being in principle against particular political systems. All I wanted to say with my remarks about Amnesty is that I wholly understand the train of thought that leads you to say that, unless we deal with the causes of things, we will never come to grips with the actual problem. These are two different approaches that both have their right, and it is a pity if one of them is lost because there is too much insistence on dealing with a cause that is essentially a campaigning issue, and a campaigning issue that does not necessarily lead a single individual to freedom. I'm not opposing what Amnesty is doing, but the other job did exist and still exists.

I can't really comment on your Network, but my understanding from what I see in the subcommittee of the National Academy of Sciences in the United States is that one deals with the particular individual scientists and doesn't say very much about whatever one thinks about the regime in which they operate. That is my basic point, so I don't want to be misunderstood. I think what Amnesty is doing today is splendid. I'm one of those who, when they are asked to give their royalties to a charity, quite often name Amnesty. I nevertheless regret that the original function of Amnesty is not taken care of to the same extent anymore.

Second point, I'm unimpressed by your arguments about the enthusiasm that you had to put into the early activity of Amnesty. I think that is what NGOs are really about. I sometimes feel, quite honestly, that they have become too professional. There is something curiously non nongovernmental when international conferences take place in which the NGOs, (incidentally looked after by quite a large department in the United Nations or looked after by similarly large departments in other international organizations), meet and discuss matters in ways not fundamentally different from the discussions in the U.N. General Assembly or in formal, more governmental international bodies. There is, in other words, the opposite risk as well—the risk of over-professionalization.

Voluntary activity, NGO activity, is in a certain sense always specific, local, and at the most regional. The moment the NGOs become large international organizations, they are as remote from where things actually happen as governments often are. For that reason, I have always taken the view that NGOs must, from time to time, be discontinued. There is no particular reason why Oxfam should exist forever, or Amnesty, for that matter. Every now and again, the enthusiasm that led to their creation would be a highly desirable force to rekindle and to create a new and different organization. That is the line that I took when I was a trustee of the Ford Foundation, and that is also the line I take when I deal in a variety of capacities with charities here. We are just debating a charity bill that has just been reintroduced into the House of Lords and one of my key points is there must be not even an attempt to give charities a guarantee for life forever. That is one of the differences between nongovernmental and governmental activity.

So, I have perhaps a slightly different approach, although I think it is quite important that my first point is understood: that is, I don't object at all to what Amnesty is doing. I just think there is the other task as well of dealing with individuals. That whole argument means that, yes, sometimes NGOs may speak for the dispossessed. But sometimes NGOs sound awfully like

government or public organizations. I believe in the creative chaos of organizations that are set up by people because they want to do something. I don't believe in a highly organized world system of so-called nongovernmental organizations.

Wiesel – Your thoughts reflect very much the way I feel and think about this issue. This organization is not an NGO. It is a network and each of the members here, representing academies, are independent. They make their own decisions on actions to take. In this way, we don't want to get rid of the academies in the world and we want to build strong science and that is why a number of academy representatives have said they feel we should work more in the direction of Amnesty and make policy statements about things. But, some of us who founded this organization feel that that would be a mistake. We wish to focus on individual cases. That said, there are times, like with the AUT's call for a boycott, when statements are made on the principle that scientific freedom is essential for the future. Otherwise, we have tried not to get political in our operations. We are very grateful to you for making this clear and succinct and beautiful statement of your principles.

Question – There is a need for many kinds of organizations. In the field of human rights I think there is a need for an independent, strong, professional source of information which is recognized as impartial. And Amnesty has taken up much of that part. Newspapers need it, media need it, and organizations that want to relate to situations in different countries need somebody to ask who is professional and independent. The Red Cross is an example. Where would we be without the International Red Cross for inspections? It is big. It looks like a government. But we need it.

Dahrendorf – I don't disagree at all.

Hodgkin – I'm not here as a representative of Amnesty International. I was invited by a fellow and I have come on my day off, so I don't want to talk about Amnesty International. But I agree, don't make it the be-all and end-all of all organizations such as Human Rights Watch. In all of our countries, there are organizations on guard that are facing day-by-day difficulties. I wanted to make a point about individuals. I do think that the individual is absolutely important. When you stop having the names of the individuals, then you lose their identity. This is why I noticed when I was in Iraq that the people's brothers would be shot by the Americans and they would be taken off to a hospital, where they died and were buried, and the Americans had no idea who they were because the hospital didn't take any notice of them. And their brothers would go around from place to place trying to find them, but they would never find them again. For instance, in the Palestinian-Israeli conflict, the Palestinians keep the names of those who are killed. The Israeli government doesn't really notice how many it has killed.

I work now in Sudan and in Darfur. We tried to take down the names. There is a play on numbers on how many have been killed. Once you start saying 1,000 people are killed in the marketplace, instead of being able to say what their names are, you've lost them. So the names of the individuals, of each person, are very important.

About the rule of law, again, I agree that the rule of law is important, but the laws have to be good as well, because if you have a rule of law that is going to allow torture, then it is not

such a wonderful rule of law. Again, when things started getting worse and worse in Darfur, we went to the judges and said, people are being killed and you and prosecutors don't prosecute anyone. They said, oh well, there weren't any complaints and there wasn't any evidence. Of course there weren't complaints, because people were running away as fast as they could.

Question – When you are mentioning failed or failing states, you weren't giving examples, but I don't know why you never mentioned Africa. I hoped you were going to continue. On that basis, I wanted just to say that in the African states, you have failing or failed states and part of the problem is because of conflicts from our side. But also the long history of the Democratic Republic of Congo has been such as it is because of the conflict of interest of a few European countries. Then creeping authoritarianism has been a problem in a large number of African countries. It is important that the outside world gets to say something about this.

Dahrendorf – My notes certainly included Africa as a part of the world in which failed or failing states are much in evidence. It is certainly true that in the case of Africa, the gentleman from Warwick could quote many examples of external intervention leading to the failure of states. I'm afraid the Congo is one of the worst examples. Incidentally, one of Europe's failing states is Belgium. But that is just by the way. It is quite an interesting problem arising in that particular case. I wholly appreciate your point and agree that I shouldn't have omitted to mention it. I don't want to go into a detailed discussion of particular cases, but the Congo is an extreme example.

Concluding Remarks Dr. Arjuna Aluwihare, President-elect, National Academy of Sciences, Sri Lanka; Professor of Surgery, University of Peradeniya, Sri Lanka; Network Executive Committee Member

Colleagues and ladies and gentlemen, it is a privilege to be here and participate officially for the first time today. The first thing I have to do is thank the speakers and the participants, because without them, nothing would have happened; then, the people of the Royal Society and the British Academy—I say people, present and past—because it is very easy to be overawed by the buildings, but the buildings are quite unimportant. It is the people and the history that have led to the existence of the edifice, which is essentially temporary. There are various people here, and some of them aren't here right now, but thank you all—Torsten and Carol and others. They obviously can't thank themselves, but I think they need a lot of appreciation from all of us.

Torsten Wiesel reminded us of our mission statement and the importance of keeping our activities focused—more of that just now, and, in fact, more of it tomorrow.

Baroness O'Neill suggested that in order to give human rights a strong and a more sustained legal and intellectual framework, it is important to point out that there is a duty and a responsibility on lots of people to look after the interests of others. Then the fact that the others have rights can be derived from that kind of background. Of course, these others whose rights have been championed have, in turn, duties and obligations and responsibilities.

Pieter van Dijk talked about the fact that the law cannot prevent terrorism. He touched on security measures and the need for norms in the application and consideration of security methods, and that maybe some of these things have been ignored recently. He made the point, among others, that civilized society can help in promoting human rights, which, in turn, may help to fight terrorism or keep terrorism under control or emasculate terrorists—although he didn't use the word emasculate.

Peter Agre described the Butler case, which is an extraordinary situation. It is the kind of thing that happens in Sri Lanka usually, and you wouldn't have expected it to take place in the United States. All the reasons and confusion are really quite sad. The might is right debate is very interesting, whether countries under pressure, including developed countries, can feel that the ends justify the means or that security or economic self-interest can override rules and regulations and norms. That whole debate arises out of the whole of the morning's work.

Sir Nigel is unfortunately not here. He pointed out a variety of things about what he perceived to be the activities of the United States government and how a variety of manipulations can take place to allow things that are thought to be in the national interest. That concept is very dangerous and, interestingly, it almost matches this concept of creeping authoritarianism, in which you can fiddle the system to achieve what you think is an end without recognizing that the means may be becoming unacceptable. The words "professional conscience" emerged during that talk and discussion—I'll come back to that later.

I was personally delighted to see Professor Upendra Baxi here today, as eloquent as he was when I first met him many years ago. Again, he pointed out that words can be manipulated. Semantics are used to justify anything. One has to be very careful to see that people don't fiddle with words and thoughts so much that they actually get away from the original law or original idea. I thought that we should actually bring the Greenwich meridian here, because now the Navy is not so important in this country. There are no guns there now. Cutty Sark is somewhere there, but that's about it. If we can manipulate semantics to fiddle laws and get away from norms, why can't we bring the Greenwich meridian here? We can rename this part of London Greenwich II or something.

In science, we feel that there are absolutes and there are things that are inviolable. When we do scientific experiments, we aim to have controls—even in my field of medicine, even in surgery, we aim to have controls. We have to be very careful to see that the controls are, in fact, like original norms or basics. There is a huge tendency in drug research sometimes to fiddle the controls so that the conclusions that are desired are presented.

Now, in this whole field, I couldn't help wondering, as I listened to much of the morning's discussion, and the Butler case and Professor Baxi's presentation, whether we are worried that in this field of human rights and law, things are happening that we would not find at all acceptable in the field of science, where we recognize that there are some absolutes that cannot be touched.

With regard to the matter of medical involvement being very deep and devious in the torture environment, if you use the word devious and how people are trying to skate round it, again we go back to people using semantics to get away from a variety of things. In that discussion the words ethics of clinical role arose and, again, it suggests to me that there are, in much of what we said today, implications that there is a moral or ethical principle or dimension which may not be wholly definable by law or precept and that maybe the things that prevent people from fiddling the laws and using semantics may have origins in some of these ethical and moral dimensions which cannot necessarily be written down the whole time.

The joint statement was fantastic. The points made about the boycotts being counterproductive and the interchange of knowledge being vital were very important. I think it is remarkable that these joint projects, one of which was about Jerusalem, were highlighted. There are so many conflict areas in the world today in which this concept of scientists and professionals getting together and exchanging knowledge and doing what they can could be effective, without needing to concentrate on what is apparently impossible or difficult. That philosophy of doing what one can is absolutely crucial in going forward, and I think it is fantastic that there is an example of this.

With Lord Dahrendorf, I have to be careful what I say because he, of course, is here in the front of the row, unlike some of the others. I think the matter of the inviolability of the individual was stressed both in his talk and in the subsequent discussion. In the matter of names, in the Tsunami in Sri Lanka and Indonesia and so on, one of the very unpleasant tasks that doctors had to do was to go around and cut the fingers off those who died so they would have DNA from the unidentified bodies to eventually give them a name and tell their families what

happened and where they are. The idea is that because a state or community consists of individuals, if you safeguard the individual, you will actually look after the state, eventually. But safeguarding the individuals is crucial, as is the role of the scientists in safeguarding the principles of political systems—law, human rights, respect of persons, etc. It was very interesting that the United States and the United Kingdom seem to have forgotten that you can change the political systems if you want to, but that is another debate. We have to accept that there are some inviolable norms and that if we start shifting the norms or goalposts, there is going to be no end to the chaos that we are going to see. And I think we have to remember that. Thank you.

Cohen-Tannoudji – Thank you for this excellent summary and to all the speakers of today.

The Max Perutz Memorial Lecture The Archimedean Lever: Right in the Face of Might

Welcome: Dr. Torsten Wiesel

Max Perutz was representing the Royal Society in this Network, but he came originally, as you know, from Austria, and his ability to communicate, both in his writing and as a scientist, made him more a citizen of the world. He was admired and respected by us all and a real role model in terms of his science and also his modesty.

Max stood for something very special. He was one of the founding members of the Network, and we wanted his tradition for respect for human and civil rights to be kept alive. So this lecture in his honor is the first lecture of this sort by the Network, and it is meant to celebrate Max.

We are very fortunate in having a good friend of Max from Cambridge, Sir John Meurig Thomas, here with us to help pay tribute to Max. He is a very distinguished chemist and has received a number of awards. Dr. Thomas wanted to speak about Max as a good friend. So, I will invite Sir John to come up and give his presentation in honor of Max.

Max Perutz: Chemist, Molecular Biologist, Human Rights Activist[†]

John Meurig Thomas

(Department of Materials Science, University of Cambridge, Cambridge CB2 3QZ, UK and Davy Faraday Research Laboratory, Royal Institution, London W1S 4BS)

In tracing the trajectory of Max Perutz's life, future historians of science will doubtless highlight several great scientific adventures and achievements:

- (i) He founded, with Sir Lawrence Bragg and John Kendrew, the Medical Research Council (MRC) Unit of Molecular Biology in the Cavendish Laboratory, Cambridge, in 1947, and then he was the principal scientific architect of the Laboratory of Molecular Biology (LMB), which he founded in Cambridge in 1962.
- (ii) Along with his associate, John Kendrew, he solved the first protein structures⁽¹⁾ (haemoglobin and myoglobin), and this earned them the Nobel prize in chemistry in 1962.
- (iii) Again, with John Kendrew, he founded the European Molecular Biology Organisation (EMBO) and became its founding chairman in 1963.
- (iv) By focusing on numerous mutants of haemoglobin from a large range of living creatures and numerous humans, he gained a deep understanding of several inherited diseases, enabling him to open up the new field of molecular pathology and adding to our knowledge of molecular evolution. He elucidated the nature of such tragic diseases as thalassemia and sickle-cell anaemia.
- (v) In 1970, he finally worked out the mode of action of haemoglobin⁽²⁾ and, in 1986, nearly a quarter of a century after his Nobel Prize—winning work, he discovered how haemoglobin acts as a drug receptor.
- (vi) As Francis Crick wrote in 2002, (3) Max Perutz was still the centre of the revolution in molecular biology that occupied the second half of the 20th century.

And the careful historian of science will also record that, in 1948, the 34-year-old Perutz solved the problem of how a glacier flows. (It moves, not like treacle, but more like a ductile metal when it is extended, with planes of atoms gliding over one another.)

All these, and many other scientific achievements, are associated with Max Perutz's name. But to those who knew him, to those who worked or lived alongside him, to those who observed his quiet, effective negotiating skills, and to those who had the pleasure of talking to or corresponding with him, or attending his lectures, or of reading his evocative book reviews, essays and letters, there was far more to Max Perutz. He combined, in a singular fashion, all the noblest instincts of mankind.

[†] Tribute paid to Max Perutz prior to the Max Perutz Memorial Lecture given by Professor Sari Nusseibeh at The International Human Rights Network of Academics and Scholarly Societies, Royal Society, London, 19 May 2005.

Max Perutz was a man of warm humanity and of great human decency and compassion. He had immense moral courage. He was morally incorruptible. And he possessed huge reserves of intellectual energy, as well as a youthful voracity for new knowledge. He was a stylish and incisive author of popular scientific articles and reviewer of books—books that he meticulously researched and fastidiously, though eloquently, analysed. He wrote charming and sensitive personal letters. Above all, he was an indefatigable warrior, passionately committed to social and political justice. Intellectual honesty and freedom, and especially human rights, mattered to him profoundly.

Max Perutz often exhibited the temperament of the artist and the imaginative sensibility of the poet. It pleased his many admirers, and Max himself, when Rockefeller University accorded him their first Lewis Thomas Prize, recognising the Scientist as Poet.

Max delighted in the beauty of the natural world. He was the kind of man who, before starting his laboratory work at the LMB on a Spring morning, would occasionally take a walk on the Gog-Magog hills (outside Cambridge), filling his heart and soul, in so doing, with pantheistic pleasure.

But Max was resolute in his opposition to what he perceived to be wrong-headed and erroneous arguments or decisions. Long before his work at Cambridge came to fruition—long before he made his monumental scientific breakthroughs—he felt impelled to resign from his post as lecturer in the University of Cambridge, as a protest against the decisions of the central authorities.

Another example of how forthright he could be is seen in his attack on certain philosophers and historians of science whose theses he disputed. Max rejected as nonsense the view, popular among modern sociologically oriented philosophers of science, that scientific truth is relative and shaped by a scientist's personal concerns, including his or her political, philosophical, even religious instincts. When he attacked such opinions, he once quoted Max Planck's memorable assertion:

"There is a real world independent of our senses: the laws of nature were not invented by man, but forced upon him by that natural world. They are the expression of a rational order."

Max would probably have agreed with Richard Feynman's flippant remark:

"Philosophers of science are about as helpful to scientists as ornithologists are to birds."

Max's long, labyrinthine path as a research scientist began when he studied chemistry at the University of Vienna, his home city. He acquired a special interest in organic biochemistry and heard about the work of Sir Gowland Hopkins, the discoverer of vitamins. Max decided that he wanted to solve a great problem in biochemistry. His teacher, Hermann Mark, visited Cambridge and had planned to pave the way for Max to join Hopkins' group there. But Mark met J.D. Bernal, a pyrotechnically brilliant conversationalist, who said he would take Max as his

student. (Mark forgot to approach Hopkins!) So, in 1936, Max became a researcher in the Cavendish Laboratory, where Bernal taught and researched in physics, and a graduate student at Peterhouse.

On Bernal's advice, he learned X-ray crystal structure analysis in the Department of Mineralogy. A year or so later, he visited his cousin Felix Haurowitz (in Prague), who convinced him that an appropriate target for his ambitions was the structure of haemoglobin, first, because it was the protein that was most abundant and easiest to crystallise, second, because oxyhaemoglobin and deoxyhaemoglobin had different crystal structures—but no one knew what these structures were. Gradually, it emerged that each unit repeat volume in a crystal of haemoglobin has about 12,000 atoms. In 1937, when Max made his decision, X-analysis had solved structures containing no more that about 100 atoms. *That* was the magnitude of the problem Max set himself.

He had been encouraged, however, by the success that J.D. Bernal and Dorothy Crowfoot (later Hodgkin) had achieved in obtaining in 1934 beautiful X-ray diffraction patterns of the protein crystal, pepsin, in its mother liquor. Soon, he, Bernal and Fankuchen obtained⁽⁴⁾ similarly encouraging diffraction patterns from haemoglobin and chymotrypsin. But it was not until the late 1950s, under the aegis of Sir Lawrence Bragg, that he finally reached his target of elucidating the structure of haemoglobin. And when he did, it made him famous. From 1936 to the late 1950s, however, he suffered a succession of setbacks: there were many scientific, personal and political obstacles to surmount. In 1940, his studies at the Cavendish Laboratory were rudely interrupted by his internment (along with hundreds of German-speaking people then living in the UK), first in the Isle of Man, then in Quebec, Canada. He returned to work of national importance during the war. In 1942, after a whirlwind romance, he married Gisela Peiser, a Berlin-born lady then working in Cambridge; in 1943 he became a British citizen. In 1944, he was back again at the bench in the "Cavendish", where, in 1945, he was joined by John Kendrew. Francis Crick, a physicist, joined the group as Max's Ph.D. student in 1948. Jim Watson, a geneticist, came in 1951 and was soon working with Crick on DNA.

In early 1951, after some six years extracting what X-ray crystallographers call Patterson maps (which, in the case of haemoglobin crystal, consisted of some 25 million lines between the thousands of atoms in the haemoglobin molecule), Max Perutz felt elated when they seemed to tell him that haemoglobin consists simply of bundles of parallel chains of atoms spaced apart at equal intervals. I quote his words:

"Shortly after my results appeared in print, a new graduate student joined me. As his first job, he performed a calculation which proved that no more than a small fraction of the haemoglobin molecule was made up of the bundles of parallel chains that I had persuaded myself to see, and that my results, the fruits of years of tedious labour, provided no other clue to its structure. It was a heartbreaking instance of patience wasted, an ever-present risk in scientific research."

That graduate student made himself unpopular in the MRC unit of the Cavendish at the time. But he was very clever. In fact, years later, Max Perutz told me that that student turned out to be one of the cleverest men he ever met. His name was Francis Crick—a man who won the Nobel Prize, with Watson and Wilkins, before he completed his PhD!

After a period of deep depression, which disturbed Max emotionally and physically, a ray of brilliant light appeared in 1953. Max, remembering an earlier suggestion by Bernal, realised that he could benefit by tagging molecules of haemoglobin with heavy ions, such as silver or mercury. Being the expert crystallographer that he was, he knew immediately that such heavy-atom-tagging should enable him to solve the structure of haemoglobin in a manner quite different from his early approach, which Francis Crick had so comprehensively and unceremoniously demolished. Both Perutz and Kendrew redoubled their efforts. Max it was who first demonstrated the validity of the method, by computing the X-ray diffraction patterns of haemoglobin with and without a mercury tag. (Sir Lawrence Bragg was so thrilled that, to quote Max, he "went around telling everyone that I had discovered a goldmine").

But John Kendrew, in 1958, working both at the Cavendish and with David Phillips at the Royal Institution, solved the three-dimensional structure of myoglobin, an achievement greeted world-wide as sensational. Max was both pleased and somewhat depressed with this breakthrough. Pleased because his method and his laboratory and his partner, John Kendrew, had triumphed. But he said later that he was also depressed, partly because he had not "got" to haemoglobin first, but partly also because he had a nagging uncertainty that the solution of the haemoglobin problem might prove bewilderingly and interminably elusive. In September 1959, however, Max Perutz and his colleagues, using 40,000 measurements from crystals of haemoglobin and six heavy-atom derivatives, calculated the three-dimensional structure of the molecule. At last, he had reached the longed-for shore.

Max officially retired from the LMB in 1979, but he worked there almost every day until the time of his death in 2002. And only a few days before he entered hospital during his terminal illness, he completed the text of a research article that followed on from his important work on the fundamental causes and molecular aspects of neurodegenerative diseases.

It is universally acknowledged that the LMB is one of the most famous and successful research laboratories now in existence. Max had set up a simple structure for running the LMB from its inception in 1962. "I persuaded the MRC" he said "to appoint me as Chairman of the Governing Board rather than Director, a Board to be made up of Kendrew, Crick, Sanger and me" (four wise men, five Nobel Prizes!). "This arrangement reserved major decisions of scientific policy to the Board and left their execution to me. The Board met only rarely!"

Shortly after he passed away in 2002, I discussed elsewhere ⁽⁵⁾ the scientific and humane legacy of Max Perutz. In particular, I sought to divine the secret of the extraordinary success of the LMB and to contrast his methods of running a research laboratory with the advice nowadays given to scientists by the Paladins of accountability in various funding and research councils, and increasingly by university administrators. The principles he used were: choose outstanding people and give them intellectual freedom; show genuine interest in everyone's work and give younger colleagues public credit; enlist skilled support staff who can design and build

sophisticated and advanced new apparatus and instruments; facilitate the interchange of ideas, in the canteen as much as in seminars; have no secrecy; be in the laboratory most of the time and accessible to everybody when possible; and engender a happy environment in which people's morale is kept high.

These are lofty principles, obviously and compellingly correct, but difficult to live up to. A crystallographer friend of mine, who visited me recently, said of them that they reminded him of the Sermon on the Mount or the Declaration of Independence. Max, however, complied with these principles, and he was ably assisted for many years by his devoted wife, Gisela, who made the canteen of the LMB a focal point of intellectual stimulus.

My friendship with Max extended over the last 24 years of his life: we lived a few doors from one another; we were members of the same Cambridge college, Peterhouse; and for part of that time I had responsibilities for running the Royal Institution and the Davy Faraday Research Laboratory, places where he and John Kendrew had been readers for 13 years, from the time of the appointment of my predecessor-but-one, Sir Lawrence Bragg, as director. Through my friendship with Max, I benefited enormously from his wisdom, guidance and humour, which I grew to appreciate during our numerous walks around the playing fields adjacent to our homes, while strolling in the Botanical Garden, or sitting for tea in the intimacy of our homes. During those discussions, I recall particularly two anecdotes worthy of reciting here. The first relates to an incident that occurred while he attended a human rights gathering. A Soviet scientist had said that one should cease to use the term "freedom of speech" and replace it with "freedom after speech." The second involves his retort when I asked him how he had become such a skilled negotiator. He replied by quoting what a former fellow of Trinity College, Cambridge had once said:

"In Cambridge, to reach your goal, you must learn to combine the linear persistence of the tortoise with the circuitous locomotion of the hare."

Max was utterly repulsed by the thought of the use of torture on political or other prisoners. He could be seen to cringe while talking about it. His revulsion of such practices was partly what animated him as a human rights activist. But he detested injustice of any kind and was dedicated to the eradication of ignorance. He did something about it. Members of this audience will know that, ten years ago, in Amsterdam at the Dutch Academy, he read a paper on "By What Right Do We Invoke Human Rights?" This widely published lecture (6) is a closely reasoned history of the concept of human rights from the days of Aeschylus (458 BC) to the present day. His response to the terrorist attack in New York on 9/11 was to organise a petition intended for world leaders. Amongst other things it said, "Avoid military actions against innocent people. Military retaliation does not solve the problem of fanaticism, but instead fuels the anger by demanding 'counter' revenge."

In closing this tribute, having heard repeated mention today of liberty, freedom, the pursuit of truth and the elimination of injustice, I can think of no better way to remember Max, and to remind us of the things that he stood for, than to quote some of the words of the Hindu mystic and poet, Rabindranath Tagore (Gisela, Max's wife, had met Tagore in Berlin). Tagore

and Einstein had an interesting correspondence some 90 years ago. Tagore held that scientific truth was realised through man, whereas Einstein maintained (as did Max Planck, whom I quoted earlier) that scientific truth must be conceived as a valid truth that is independent of humanity.

Knowing that the premier academics and scholarly bodies of the world are committed to the restless pursuit of truth and knowledge (as Max was), it is appropriate that I should recite, to end, Song 35 of Tagore's "Gitanjali":

Where the mind is without fear and the head is held high;

Where knowledge is free;

Where the world has not been broken up into fragments by narrow domestic walls;

Where words come out from the depth of truth;

Where tireless striving stretches its arms towards perfection;

Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;

Where the mind is led forward by thee into ever-widening thought and action –

Into that heaven of freedom, my Father, let my country awake.

References

- 1. The protein structure data base in the United States now contains over 30,000 structures, essentially all derived using the crystallographic method pioneered by Perutz and Kendrew.
- 2. The words used by him were: "Haemoglobin is not just an oxygen tank: it is a molecular lung. It changes its structure every time it takes up and releases oxygen. You can hear your heart going 'thump, thump'; but in your blood the haemoglobin molecules go 'click, click, click' but you can't hear that".
- 3. Francis Crick, *Physics Today*, **2002**, Aug. issue.
- 4. J.M. Thomas, Angew Chemie Intl Ed. Eng., 2002, 41, 3155
- 5. J.D. Bernal, I Fankuchen and M.F. Perutz, *Nature*, **1938**, *141*, 523
- 6. M.F. Perutz, *Proceedings Amer. Philos. Soc.*, **1996**, *140*, 135.

Wiesel – We very much appreciate your tribute to Max, whom we all admired. It is interesting to see how his devotion and professionalism to science led to openness. I think the comment after 9/11 that you cited is exactly what you would expect him to say.

The first lecture is by Sari Nusseibeh, who is a professor in philosophy and also President of Al-Quds University. He actually got his bachelor's degree in economics and politics and philosophy at Oxford University and then he went to Harvard, where he got his Ph.D. in Islamic philosophy. He has a background that would prepare him for the world in which he has come to live. He was a professor at Birzeit University for a number of years, teaching philosophy, and then, in 1995, he because President of Al-Quds University. There was a time when the university was in some trouble, and I think his presence as its leader has been significant for its now strong status.

The Archimedean Lever: Right in the Face of Might

Sari Nusseibeh, President, Al-Quds University

The human propensity to use violence as force or to threaten its use (whether explicitly or implicitly) for the achievement of ends is quite common. This propensity in the political sphere is so common that it has led many to believe, especially in the context of international relations theories, that force is necessary, in the sense of its being irreducible or inevitable. Typically force has been viewed, in Machiavellian fashion, as the midwife in the birth of political institutions or systems. More generally power, as a second-generation and a generic notion encompassing all of the state's negotiating cards or assets, including, typically, that state's military capacity (whether independent or indirect, through alliances and agreements), has been regarded, alongside self-interest, as the main determinant of relations between states. The political world map, it has been argued, is determined by power and interest. In short, states in this view, whether at birth or in the course of their existence, are not regarded as moral agents. but as power brokers. This can be observed at many levels, including, even in peacetime, typically, at the level of negotiating international trade or border treaties or agreements between them. Typically and in the first instance, states do not seek justice or fairness in the process of formulating such treaties or agreements, but the fulfillment of interest, the achievement of which is viewed as being a function of the power they possess (Albin,).

Let us assume that this so-called realist view in international relations theories is correct, and that the building mortar with which states and political systems are constructed is power and interest. It would then only be logical to extrapolate from this that legal as well as moral norms associated with those systems—or constructed and adhered to by those systems—must in some basic manner be secondary to, if not wholly derivable from, the mortar with which these systems have been constructed. This observation is so simple but fundamental, that a fuller explanation of it is in order. If one were to view, in a unilateralist manner, human action and human forms of association brought about and reinforced by such action as being informed in the first instance by such considerations as power and self-interest, then one would be forced to concede that moral principles, as well as the legal norms that come to express them, are but secondary outgrowths or constructs or appendages whose *origins* are rooted in that power and self-interest. Furthermore, such principles and norms, unless specifically conceived to undermine the primary principle of self-interest—a matter which the realist view does not entertain as being consistent with its understanding of human nature—will by definition play the role of reinforcing that self-interest. and the political order or system that is built upon it. Indeed, even any formal action undertaken by such systems, whether an act of war or of charity, must necessarily come to be defined in its bare bones as being simply an act that reinforces an exclusively self-interest- and power-based human order.

Understandably, such an explicit formulation of policy would not sit well with unilateralist world powers, which would like to have their cake as well as eat it. For example, if they wished to carry out a war, they may like to present this as a *just* war, meaning both that it is a war that is aimed at achieving justice as an end, and that is being carried out justly. If they

wished to carry out a trade agreement, or an international act of charity, or an act of political intervention, they may also like to present these as being morally inspired or morally informed acts. But in a realist view, such interpretations or representations of intention would not make any sense (except, perhaps, as delusory devices). Unless such acts are conceived in the first instance to be fundamentally at odds with the underlying mortar of power and self-interest, they can be understood only as being acts that serve and reinforce that power and self-interest and the political order on which it is founded.

There is no escaping this logical trap laid by the realist view. This is why, hard as it may try by using the right language on the values of freedom and democracy, the United States (and Britain of course behind it) finds it hard to convince the Iraqi people, and the Arab world more generally, of its good intentions in Iraq or the Middle East. Indeed, this is why the insurgency in Iraq, however ugly and brutal, finds sympathy across the Arab and Moslem worlds. Because, offensive and extreme as it may appear, a realist view in fact provides justification for the beheading or kidnapping of innocent civilians, just as it does for a formal—even a so-called surgically clean—armed intervention. Terrorism, as defined in the annals of the United Nations, or in the U.S. Congress, can perforce be seen only from the perspective of the "other side" but as part of a legal and moral framework or package that is conceived to protect the unilateralist, self-interest—based intentions and real aims of the aggressor. Also acting unilaterally against such an aggressor and informed by its perception of its own self-interest, the aggressed party is and feels fully entitled to the use of whatever force is at its disposal as it fights back. Indeed, in a realist view, that party would be acting perfectly legitimately as it goes about constructing its moral norms to fit its circumstances and its own interests.

Fortunately, a realist view, though upheld by some for whom our conclusions should come as no surprise, is not a *realistic* view of human nature. It accounts for only a *part* of this nature, as well as for only a frozen or only a *temporal slice* of it. A realist view, in other words, fails to provide a *comprehensive* or a historic and full account of human nature, and it fails equally to provide a *unified* theory of human behavior.

A *realistic* view, on the other hand, would provide both a unified as well as a comprehensive account. In this different view, egotistic impulses as well as calculative skills, simultaneously or over time, interact or compete, in the same plane, for informing human behavior. Calculative skills in particular address the individual's contextual placement and consequently the social or associative requirements, even on egotistic grounds, for defining that behavior. Such skills are just as inherent to human nature as that nature's egotistic impulses, but as they come to be applied to the latter the *resultant* products, as *principles for action*, in proving to be a more effective means for the achievement even of egotistic ends, therefore come to occupy a higher logical order, so to speak, than the objects defined exclusively by the egotistic impulse. Starting off as being calculatively associative rather than blindly egotistic or unilateralist in their nature, these principles can be shown eventually to develop into basic and universal values, such as the primary human concerns for freedom and equality, and these, in turn, can thus gradually come to be seen as assuming a leading role in informing human behavior.

A behavioral theory that takes account only of the crude egotistic impulse in human nature is thus *incomplete*, while one which totally sets out a generic separation between this egotistic dimension as a natural human quality and the calculative faculty as a divorced and Platonically objective "reason" or set of moral values, will perforce yield two separate and often contradictory accounts of human behavior, or two irreconcilable dimensions, often described as an unbridgeable chasm between is and ought—a natural as opposed to a moral account of behavior. A *unified* theory, on the other hand, would provide us with an understanding of how the two primary and natural components of human nature, egotism and the calculative skill, combine to yield principles for action—those of freedom and equality—which are best suited to the robust evolution of that nature. The calculative propensity towards these principles can only be further reinforced by that other, equally natural sentiment in human nature of *compassion*, a sentiment that makes the adoption of these principles fulfill the psychologically inherent disposition in an individual to care for others. Care and compassion can thus come to be viewed, not as sentiments which typically conflict with reason, but as ones that naturally complement and reinforce those principles of action that are formulated by the calculative faculty in its interaction with the egotistic impulse.

However, the objection may now be raised that while a unified account such as the one just described makes ideal sense, in fact human beings as well as states do not behave in accordance with that sense, but are rather observed as acting primarily out of interest. This objection can be countered on the grounds that it is once again incomplete, in that it takes account only of a temporal slice of human nature. Indeed, human beings or states, at certain periods of their evolutionary histories, can be observed to act purely on the basis of blind egotistic interest. More often than not, however, as a child grows older and becomes more familiar with her calculative skills and her contextual human surroundings, she learns to temper that instinct by those skills in cognizance of the requirements of being part of a context, if not also by natural sympathy or instinctive compassion toward others, or by what can come to be described using these terms as a moral sense. Similarly, even states conceived by an act of force tend toward adjusting that force by a tempered view of their place among nations. Basic values such as freedom and equality, being claimed in the first instance as the associative cornerstone of their own citizenry, eventually have to come to be recognized as the associative cornerstone of international association. Often, indeed, the citizenry in those states are quicker to reach that recognition than their respective governments. Where this is the case, history shows that those governments come themselves to be replaced, or their foreign policies are cumulatively if gradually made to become different through the mounting pressure of their citizenry.

The *realistic* view, then, is one that accounts for the gradually and historically transformative character of human behavior, as one which, through conscious *will*, constantly seeks and reaches out for a well-formed balance or higher logical order of primary motivation, defined by what we described as the principles or core concerns for action, namely, freedom and equality. One may speculate a gradual historical process of convergence toward those principles, as well as a process of gradual refinement and universalization of their application—i.e., a process of both qualitative as well as quantitative development. Viewed in light of this perspective, one may then regard the evolution of law and law practices of political systems that are grounded historically in force and self-interest, not as acts that necessarily reinforce that order, but as acts that seek slowly to emancipate that order from its purely or exclusively

egotistic foundations. A recurrent historical theme, and a sine qua non, associated with this emancipation is the emancipation and increasing participation of the individual herself in the political order, or her transformation from object (passive) to subject (active), or from subject (passive) to citizen (active). Such transformative processes even in one order tend to trigger parallel processes in other orders, and tend eventually to impact how one order allows itself to treat another. One could view these historical processes as a general *pattern*, rather than as descriptions that are true of specific *instances* of political orders. To deny this process of evolution in the identities of individuals and political orders is to be blind, for example, to the way in which the concept of citizen evolved from Athenian or Roman times, or to the way in which the attitude to slavery has also changed—indeed, even to the way marriage as a relationship between two individuals has evolved. On the other hand, to be cognizant of these transformational processes is to be cognizant of identities, whether of individuals or of political orders, not as being temporally or qualitatively static objects or selves—i.e., frozen in temporal slices of time—but as being dynamically transforming identities, or as self-organized systems which are constantly being shaped by an internal emancipatory agency or will. History, in other words, constantly evolves, however painfully slowly it might seem (to the point, sometimes, of creating the illusion that it cyclically repeats itself) reflecting the active agency of the human will.

A paradigm or prototype of such an agency or will is what we might call "an Archimedean *moral lever*": Archimedes, it is said, claimed that if he had a lever that was long enough, he could then cause the world itself to move, however heavy it might be. One might ask oneself if one could conceive of a moral lever and a specific point in human relationships at which it might be placed, such that the world's moral order can be caused to change, or such that the emancipatory process of transformation referred to can be reinforced. Let us pose this question in another, down-to-earth way: assuming that Israel, informed by a *realist* perspective, unjustly and by force deprives Palestinians of the basic values of freedom and equality, would Palestinians then have no choice, or be better off, responding in *the same way*, or could we conceive of a situation in which, cognizant of a higher logical order of principles for action, Palestinians stand to gain from remaining steadfastly committed to that higher order, while refusing to respond with violence or force, and insisting on acting as a paradigm of the moral will?

Before answering this question, let us address and answer another question behind it: assuming that in the face of unjust situations as the one described Archimedean moral levers instead of guns are brought to bear as tools of change, wouldn't the transformative process toward universal freedom and equality be enhanced? One "scientifically respectable" way of answering this question would be to refer to a success function: to the extent that nonviolent movements for emancipation prove to be a cost-effective and successful means of change, and their use therefore more widespread, the transformation process toward a better world order will clearly be enhanced. For positive returns in this context to be regarded as effective or successful, they will clearly have to relate specifically to the conflict or predicament under review, and not only (nor even at all in the first instance) to general world order. Indeed, such examples are in abundance, whether in the area of labor disputes or political conflicts (Gene Sharp, '05). To return to the Palestinian case, therefore, it would seem that our question is not inappropriate, since the choice of a cost-effective and successful nonviolent response at least in theory exists.

At this point, I wish to introduce another feature, underlying nonviolence, to our moral lever: conflict situations are typically situations in which the protagonists or players posit themselves as being enemies of one another. In conceiving of nonviolent as opposed to violent responses between enemies, emphasis is often placed—the *pressure* tactic associated with violent means still being uppermost in one's mind—on resistance as a form of pressure, or on a "power greater than force" (...). Such responses have indeed proved to be highly effective, even in the Palestinian context, and they may indeed become a requirement in some possible future context. But it is a mistake to assume that all nonviolent responses need by definition to be instances of resistance (or the application of pressure) for them to be effective, regardless, that is, of context. What we might call an "attraction" tactic, as another form of nonviolent response, conceived not to apply pressure but contrariwise to create what one might call "a gravitational pull" is also appropriate in certain contexts. A pressure tactic presupposes resigning oneself to the identity (and position) of one's protagonist, while a gravitational tactic presupposes the ability to positively transform the identity (and position) of that protagonist. Arguably, it is (at least) sometimes more profitable to address the situation "from outside the box"—i.e., by not resigning oneself in the first place to a prefixed notion of protagonists having static identities. Viewed from *inside* the box, the protagonists are typically assumed as fixed variables, or as having fixed identities (and positions), and the question raised becomes one of whether it is best to employ violent or nonviolent forms of pressure by one protagonist against another as a means to extracting a desired objective from them. Viewed from *outside* of the box, protagonists need not be regarded as being prefixed or preset in their political identities, and the question that could be raised is one of whether one protagonist can so act as to help shape or define the identity of the other protagonist to one's advantage. An identity or substantive attitudinal change can then provide the basis for reaching that objective. Coincidentally, while this observation can inform the foreign policies of such world powers as the United States, instead of being informed by what we earlier called "the unilateralist or realist view," nowhere does this observation seem to be as valid or applicable as in the case of the Israeli-Palestinian conflict.

Two elements, besides context, are presupposed in this view from outside the box: one is the element of agency, or will, as a means of affecting or shaping one's own identity or that of others; and the second is the notion of the de-ideologized or de-constructed human being, or citizen—admittedly a clumsy expression, but one which I hope will do the job of conveying the idea meant. The first element draws on the notion of human identities being constantly shaped or formed by conscious acts of will rather than as being a priori and static. The second element draws on the related notion that ideologies are second- or third-order constructs relative to basic human concerns.

Let us take as an example of the first element two cases from the Israeli-Palestinian context, one being that of Israel's Labor Party loss of the elections in the aftermath of the Camp David talks, which resulted in the replacement of Barak by Sharon as a negotiation partner; the other being that of Israeli polls, which show a dissonance between electoral behavior and political desires. The argument has been cogently made that Sharon's election was partly made possible by an apparent or perceived Palestinian rejection of peace with Israel; and that, likewise, a persistent popular support for the draconian measures by Sharon are partly a result of Palestinian acts of violence. In both cases, therefore, a pressure-based "repellent" dynamic is

argued to have been set in motion, in that Palestinians, though the weaker of the two parties, have actually contributed negatively through their actions to the formation of the identity of their protagonist in the relationship, whether in the form of producing a different protagonist altogether, or in the form of producing a negative electoral or public attitude. It is easy to surmise the effect of such a repellant dynamic on the negotiating posture of the Israeli protagonist, and the negative outcome of such negotiation as it affects the Palestinian side itself. One can likewise surmise the effect of a gravitational pull or an attraction dynamic, or of causing contrary changes to occur on a negotiation outcome. In short, one major variable in a negotiation or contestation model, besides how two protagonists view the exchange values of the items being contested or which are under negotiation, is the identity or posture of one protagonist in the relationship as this is affected by the other. The main principle in this argument is that a positive negotiating partner is often *made*, not *found*—and can indeed be *lost* after having been made or found (one need hardly point out that this principle is just as valid in ordinary human relationships, such as marriage or friendships, as in political contexts). Unless, therefore, one views one's own acts as being fatalistically predetermined or statically preset (as one might indeed view the acts of one's protagonist), there is clearly a political and psychological space in which the activation of the human will can be so articulated as to help shape the best form or posture of one's opposite in the negotiation. This is an incredible source of power. But it is a power that can be used either way: one of the protagonists, wishing that negotiations never succeed, may well help through certain actions to so demonize or indeed provoke the second protagonist such that the latter can no longer pose, or indeed even wish to consider himself, as a potential peace partner.

The *second* element of an Archimedean moral lever is the recognition and employment of the distinction between the ideological and the more mundane or basic clusters or layers making up the identity of the individual human being: opinion polls both in Israel and among Palestinians show an overwhelming support for a workable two-state solution. But the same polls also show an overwhelming support for those political parties or movements that do not aim at (or work toward) such a solution. Expressed political behavior does not correspond with latent dispositions—even as these are translatable into deep political convictions. Primarily, both Israelis and Palestinians overwhelmingly believe that the employment of force is necessary, though they sadly also see eye to eye on what they believe deep down is an inevitable solution and a better alternative to continued conflict or the continued use of force. Cognizant of this distinction, an Archimedean lever in this context would therefore be one that, in addition to its nonviolent feature, will also and through a gravitational dynamic be so manipulated as to succeed in "lifting up" or "drawing out" these latent dispositions to the political surface, making those dispositions, rather than surface and immediate concerns, inform expressed political behavior and attitudes.

Nonviolence as a moral means of effecting political change therefore consists of both pressure, as well as of gravitational dynamics. *Pressure* and *gravitational* dynamic forms of nonviolence methods need not be seen as mutually exclusive tools. They need only be recognized, and valued, as different types or forms of political tools, one or the other or both being appropriate in terms of the political context in which they are to be employed. Indeed, in a given political system, the employment of a gravitational dynamic at the public level can be the best means of generating a pressure dynamic at the upper political level, in that a public that

comes to be disaffected through a gravitational dynamic with the unilateralist policies of its leadership can apply pressure to change that policy or leadership—to the advantage of the other protagonist.

Combining the two main elements (i.e., nonviolence and gravitation) of an Archimedean lever, it becomes obvious that the most effective manner in which it can be used, at least in some contexts in which a latent positive disposition at the public level exists, is when one party to the conflict, using attraction or gravitational—rather than pressure—dynamics, so organizes its behavior as to bring about (or draw out) the desired attitudinal change in the other. This can, of course, in principle work both ways or be employed by either one of the two parties. Paradoxically, however, given what one normally assumes to be the strategic imbalance between the two parties, or the fact that one party is under the forceful occupation of the other, the option of using this lever is realistically—strangely as this may sound—available only to (and is in the immediate interest of) the party being held down by force: while the perceived strategic advantage of the party "on top" stands to be lost if it decides to replace force by a moral lever, the perceived absence of this advantage to the other party allows it to draw on this lever as an option without the risk of losing that advantage. Once set in motion by the second party, however, it immediately comes to be viewed as being in the interest of the first party to embrace this approach, as doing so would be perceived as preempting a potential future threat to itself arising from the existing imbalance. While logically, therefore, the option of embarking on such a reconciliatory approach is available to the two sides, realistically it is amenable for use by the "grounded" side. This leads to the following unexpected, and rather astounding, conclusion: that if one were to define power (even in Machiavellian language) in terms of the ability to cause political change to one's advantage, it is paradoxically the Palestinians who hold this power even though (or precisely because) they are held down by a mighty military force!

A political context in which a predominantly pressure dynamic is used is of course also conceivable and sometimes preferable—but only, exactly as one assumes in the case of a military operation, in the context of an overall strategy. For it to be successful, however, a gravitational dynamic is sometimes needed to accompany it. For example, having finally become wise to Sharon's plans in which they unwittingly played the role of an obliging accessory, Palestinians can abruptly decide on and implement a policy of wholesale suspension or boycott of *formal*, i.e., governmental relations (including negotiations) with Israel. Indeed, the pressure effectiveness of such a policy can be enhanced only if it were to be backed by some form or another of international reinforcement. However, for such a policy to bring about the desired change, and not simply to succeed in creating a hardened opposite force, it must first be selectively aimed at government institutions, and, even more importantly, it must be accompanied by a gravitational force aimed toward the Israeli public, with a view to mobilizing this public in support of the Palestinian political objective. This can be achieved, again at the formal level, through the announcement, as the clear objective of Palestinian policy, of an unambiguous commitment to that peace that the Israeli public can at once view as constituting a "fair" or "acceptable" deal, and as being one that serves their own basic interests. Ambiguity here, with due respect to the Kissinger doctrine, is destructive rather than constructive. An unambiguous declaration of those principles that could mobilize the Israeli public would constitute the required gravitational force. It would identify a particular government policy rather than the people or civil society as "an enemy." The declaration could be made

conditionally—i.e., not as a negotiating position but as a final package, and not as a permanent offer but as a *last* offer for two states. The Israeli public can be *won over* to the Palestinian side, or to a rational solution, or *be made* into a peace partner, and can thus be mobilized to exert its own pressure dynamic to change Israeli government policy.

In conclusion, then, it would seem that Palestinians are best positioned to embody the role of an Archimedean moral lever. This not only consists in replacing force by nonviolence as they set about to achieve their human political objectives. It also consists in identifying what form of nonviolent response to be employed would be best suited to the attainment of those objectives. While resistance tactics would seem best suited in some contexts, attraction tactics may prove more effective in other contexts. The latter draw upon two principles: that a protagonist can be transformed (that a peace partner can be made), and that the most suited agent for such transformation is none other but the second protagonist.

Needless to say, a success achieved in the explicit employment by Palestinians of an Archimedean moral lever in their conflict with Israel should prove to be a lesson to the world. It would serve as a model in the universal effort at refining human conduct in international affairs. The super powers could perhaps draw a useful lesson from such an experiment. Rather than being informed by narrowly defined notions of force and self-interest, such powers could see how they would be better served through a peaceful and proactive intervention in international affairs that is informed by the principle of enhancing those economic and humanitarian conditions that would bring about freedom and equality and therefore peace and stability.

Discussion

Wiesel – From my perspective, the concept laid out here is, in some ways, revolutionary. We should give serious consideration to these issues. It is idealistic to think in those terms, but if we are not dreamers and visionaries, nothing changes. The fact that Sari is willing to put this forward at this time is beautiful as a concept, and this is in tune with this network's whole concept of trying to assist in various conditions. Are you going to publish this speech?

Nusseibeh – It is part of a longer piece that I'll be putting out. I'm trying to explain to people who ask, Why shouldn't we use violence? These people are shooting at us—aren't we correct in the response of shooting back? Could we actually affect anything? This example suddenly occurred to me and I told them, suppose two people among you were wrestling and one of you got the other to the ground, who do you think has more power? With this story, they liked it. They liked that you can actually tell that, if you are grounded, you have a choice—you can either lay quiet, or you can go out kicking. Either way, you're still grounded. You can always go back to kicking after laying quiet. Now, for the guy on top, once he lets go and the other party starts speaking, they might actually overthrow him. So, in terms of power, who has more power? If you define power as a choice, options, it turns out that the guy underneath actually has more choice and therefore has more power.

Wiesel – This is clearly something we all have to think about. One can think of Gandhi, who had a similar way of thinking about conflicts and how to solve them.

Nusseibeh – I think he is certainly a symbolic, spiritual father of all forms of nonviolent thinking. But having heard Tagore, I must also say that while one associates Gandhi with tactics, I would probably associate myself more with Tagore in terms of values because he was a humanist. He thought of himself as a humanist and actually thought that Gandhi was very limited in his view of nationalism. As far as method goes, Gandhi; but as far as vision goes, Tagore.

Question – I've been trying to formulate something about the way people feel as part of that conflict, and I have a feeling that in many cases the conflict has become the people. That is to say, they define themselves only in terms of the fact that they are opposing something. The conflict we know best in this country is the Northern Ireland conflict. When you look at the two sides, each side defines itself as not being the other side. Is there not an external agent that you need somehow in order to provoke a different vision of what the future might be, which is not part of "I am not them and they are not me"?

Nusseibeh – You need a different vision. In order to get people going in a direction, you need the vision. The question is, Who is best suited to provide such a vision? A third party or the parties themselves? The most powerful and direct way of actually changing the situation is if the person underneath somehow or another creates that change directly. Now, how do you create it directly? Partly through a vision. You have to propose a vision, and the vision has to be such that, in fact, it is appealing to the two sides. They have to see a life beyond the conflict, just as some time ago people went around creating faith in life after death—maybe they still do. You have to create faith in life after the conflict on the two sides. In other words, a life in which both sides were to gain if they were to do such and such. The ability to create this is with the people themselves.

Talking in terms of politics, I think it would be great and wonderful if tomorrow, Condoleezza Rice, together with members of the quartet, were to get up and travel to Jerusalem, lodge themselves at one of the hotels, and issue declarations to both sides that they have to come to the negotiating table today. Maybe not today but after Gaza—and tell them, I want you to negotiate now and agree on the final terms of an agreement. If it could be produced, this is what we want you to agree on, this will be the destination. Both the Israeli and the Palestinian leaders will be made to sign. If they don't sign, I think half a million people in Israel will go out in the streets, and similarly in Palestine, asking their leaders to go and sign, because in real terms, on both sides, the people are basically fed up with what is going on. Second, they realize it is getting worse and therefore something else needs to be happening. If the international community can provide such a dynamic, it would be great. If it doesn't, then there is a problem because things can just go from bad to worse. It is possible now to have two states, [but] in 3, 4, or 5 years, it will no longer be possible.

Question – I just want to add to the names of Gandhi and Tagore, David Hume, who developed a theory of evolution of nonselfish behavior

Nusseibeh – I used the term compassion because first of all it was used by somebody earlier than David Hume, by the name of Ibn Khaldoun. Khaldoun's theory of what compassion actually is, I think, far more developed than that of David Hume, although David Hume, of course, in terms

of the other people thinking and talking at the time, did develop quite a distinct theory from Hobbs and others.

Comment – I don't think Tagore should be taken as just one who was advocating selfishness. What he described was a symbiotic relationship. Translating his poem, he said, when a bee approaches a flower, the flower doesn't open up unless the bee is playing on its wings some music, and then the flower opens up. The flower needs the bee because otherwise there is no pollination. On the other hand, the bee needs the flower, but they would also have to have respect for each other. This is the symbiotic relationship. A time may come when the younger generations say enough is enough, we need each other for a peaceful existence, and I think of the flower and bee.

Comment – [inaudible]

Nusseibeh – I think the Israelis will not disagree with the fact that they are on top, although they will probably say they are the victims. We are on top, but we are the victims. That is the paradox we have. It is true that both feel they are the victims, and we Palestinians have to take that into account, even though we are underneath and can see that. We think that the only way to get out of this victimhood situation is by being on top. So you need to create a conversation in which attitudes change, create a vision that will produce and attract both sides, reflecting a symbiotic relationship between the two sides. Although in fact the Israelis and Palestinians are shooting at each other, in the long run, objectively speaking, they have to work it out. It is better for them to work it out, the sooner the better.

Talking about my own experiences, in the political drive in which I was personally engaged in getting people to sign this document, we had more than 170,000 Palestinians from villages, from everywhere, who were for peace with the Israelis. It was unprecedented. I think that, paradoxically, had Arafat still been alive and had there not been the kind of diversion that is now happening in Gaza, one might have been able to go ahead and push for general public support for a two-state solution based on reasonable terms of reference. Today, maybe it is a little more difficult because ordinary people have resigned their will to that of their governments, and they believe the government will do it. That is dangerous, because if the individual feels they have nothing to do with it, it is a major problem.

Wiesel – That surprises me. I think many of us in the Western world thought that this would provide an opportunity, rather than being a positive/negative development for future peace in the region.

Nusseibeh – The Gaza thing now—the Americans are looking at it as something that is happening. As long as something is happening, everybody is happy. But who knows what is happening? Who knows exactly what will happen after six months or a year, or two years. Sharon says this is part of the road map, the Americans say this is part of the road map, so a lot of Israelis have convinced themselves this is part of the road map. But maybe we will find ourselves a half-year from now in a difficult situation once again, unable to move forward. So it looks nice, but it might be diversionary—and not even intentionally diversionary.

Question – Thanks for such an inspiring speech. I want to ask a potentially gloomy question. This vision of evolution toward people connecting with each other, getting out of the dynamics of real politics, is so powerful, yet history has examples of the trend going in the opposite direction. One that comes to mind is Bosnia, where people lived with each other for generations. Muslims and Serbs would marry into each other's families, and it was not a conflict that was ancient and ongoing. All of a sudden, the thing blows up and people are butchering each other. How does that interaction fit into the theory that you've set forth? How do we avoid that awful result?

Nusseibeh – Rather than going shooting at each other for 300 years for fear that 300 years later we might start shooting at each other, we might as well try to get an agreement now. Bosnia is an example, you're quite right. That is why I said one has to look at patterns. What I'm claiming is that, in general, one basic, essential feature to take into account is what I call the participation of the citizen. That is the major element. To the extent that the citizens, the individuals, become true owners of the society in which they live, true partners, to the extent that the principles of freedom and equality are truly in effect, they fully become part of the political order, and the kind of thing that has happened in Bosnia would probably be avoided. The emancipation of the individual is the necessary ingredient.

Ideally, the Palestinian government would stand up and say very clearly to Israelis, these are the terms of a final agreement between us and yourselves with regard to borders, with regard to Jerusalem, with regard to refugees and settlements. But, they have to be very clear, because a lot of Israelis are not sure at the public level what the Palestinian aims are. Non-ambiguity and clarity are very important. If that is done on the part of the formal leadership, I think it would be a great thing. In order to get the formal leadership to do it, very often you need to *lead* the leadership to do it. That is why sometimes it is necessary for the people to take the lead.

Wiesel – I think this has been a very inspiring talk. We all should stand up and give Sari thanks for his presentation.

Workshop: Scientists, Human Rights, and Prospects for the Future

Friday, May 20, 2005

Welcome and Introductory Remarks Discussion Leader: Lorna Casselton

Lorna Casselton, The Royal Society, U.K. – It's a great pleasure to welcome you to the final part of this Network meeting, which will give us the chance to discuss more fully some of the important human rights issues that we touched on yesterday. I think I should like to say thank you to Carol Corillon and the other members of the Executive Committee for putting together such a remarkable program for yesterday's symposium. It was an impressive lineup of eminent speakers, who gave us such important insights into the topics talked about. This was reflected not only in the very lively discussion after each presentation, but also in the fact that it attracted a number of people from outside the Network.

The highlight of the day was the first Max Perutz Memorial Lecture. We're very proud to have hosted it here at The Royal Society. One thing Sir John Meurig Thomas did not say in his introduction was that yesterday, the 19th of May, was Max Perutz's birthday—the timing for that lecture could not have been more perfect. And, of course, the choice of speaker could not have been more appropriate.

One of the international issues that the Network has focused on is the Israeli-Palestinian conflict, and in Switzerland we witnessed the inauguration of the Israeli-Palestinian Science Organization (IPSO). Today, we shall be hearing more about the current status of IPSO and its future. Of course, it is very embarrassing for us here in the United Kingdom to have to revisit the issue of boycotts with respect to Israel, because the action involves our Association of University Teachers, who have voted for a boycott [of certain Israeli universities].

If you had been listening to the radio this morning, you would have discovered that this event is attracting attention. It was discussed this morning on *Today*, a very important program on the radio, in which important issues are talked about. I think we can be proud that our event was one of the issues discussed on the radio this morning.

As Torsten said on Wednesday, the world is changing, and we need to hear the voices of different cultures and countries. A very important part of the biennial meeting is the regional discussions—an important forum for bringing to the attention of all of us here the different human rights issues that regions face. I now hand this over to Torsten, who will start off today's workshop on the subject of the purpose, function, and future of the Network.

Purpose, Function, and Future of the Network Discussion Leader: Torsten Wiesel

Torsten Wiesel, The National Academy of Science, U.S.A. – Since this morning is set aside to discuss the future of the Network, we want to be sure that we hear all your voices and that we listen to you. It is very important, as representatives of academies, that you speak up for what kinds of issues you think the Network should deal with. We had some of that discussion on the first day in the afternoon, after the regional meetings. It is clear that there are some differences of opinion, and we want to hear from the members. Some of you haven't said anything yet, and some have said a lot—you should feel free.

I suggest that we begin with the mission statement. To us on the Executive Committee, we feel responsible for the formulation and direction of the mission statement. Lord Dahrendorf yesterday emphasized the importance of addressing the concern of single prisoners of conscience. From the outset this has been our sense of what the Network's purpose and function should be.

In the discussion yesterday, and on Wednesday in particular, some members expressed the view that the Network should have a broader mission than that which was narrowly defined initially. I want you to speak up now. What is your sense of the Network's mission?

Arne Haaland, Norwegian Academy – I think a Network of this kind must have as its goal to apply uniform standards to all countries. It is easy to accept as a goal, it is difficult to achieve in practice, but that should be the goal. All cases are different. I think we will have to learn to live with a situation where we disagree in individual cases. This is not surprising, because some people who are persecuted are not paragons of virtue or wisdom. This does not remove their human rights. When governments act, some of the motives are entirely unacceptable, and some motives you can understand and accept. Each person here, weighing the pros and cons, may not agree.

It is necessary that the Network and the Executive Committee have a large, comfortable majority whenever they decide to intervene. But I'm not sure that one should require absolute unanimity.

Wiesel – You should keep in mind that this is a network of independent academies. For example, the Norwegian Academy can do anything it likes, and you should use the Network to communicate your action and inform the members of the Network of cases that you are concerned about and actions you propose. But the Network as such is more a means of communication. The reason for this sort of meeting is for all of us to meet and have personal discussions, not just by email and so on. There is often a misconception that the Network is like an Academy itself. It is not. Just keep that in mind. The effectiveness of the Network depends on what you do in your own academies to carry out the work. Communicate with your members, ask them to write letters, use the information that Carol provides through the Network as Action Alerts from the Network secretariat.

Haaland – I think the Executive Committee has a certain amount of autonomy relative to the individual members. If you have a clear majority, you are not bound to satisfy every national affiliate.

John Eckert, German Academy of Sciences, Leopoldina – First, I think it is generally agreed that this Network should take care of the individual scientists or individuals in the academic field who are in trouble. Second, I think the Network should continue to support and enhance international scientific cooperation, as it was done in the case of Israel and Palestine, especially groups that are in political conflict. There may be other examples in which the Network could be active—China and Taiwan, even Korea, and other areas. In this connection, I would like to say that the Leopoldina had a long-lasting experience in bridging east and west when Germany was divided. The Leopoldina was the only institution that had a high degree of independence in East Germany. Therefore, people from western countries could be invited or international scientists could be invited, and this was a very important bridge for science at this difficult time during the separation of the country.

This group has discussed that the Network should be involved in issues like genetic manipulation and human rights and similar [human rights-related] issues. I think these issues are so complicated and so difficult that they should be dealt with by the national academies. This is already being done, and we would not be able to cover all these issues adequately. The last point I would make is that after each meeting there should be a summary of the points of discussion, the results, and conclusions that could be taken home and distributed to the media. Having a summary of some common points would help to disseminate more information about the Network.

Juha Sihvola, Finnish Delegation of Scientific and Scholarly Societies – This is the first time for me in this Network, and I've been very excited about what I have experienced. To a large extent, I agree with the previous speakers, especially my Norwegian colleague. I think there are at least three possible activities for this kind of Network. One is concrete cases, assisting individual scientists and intellectuals and so on. Of course, even in that activity, making distinctions in what kind of cases should be covered may be difficult. That is a very important core area of activity.

Another activity is promoting, in principle, peaceful solutions to international conflicts, like the activities related to Israel and Palestine. I would also gladly support this aspect, which is very important and would probably get good results.

The third aspect is related to principles of human rights, which, as we have seen, is a pretty complicated issue, even if we restrict the notion of human rights in a narrow way, for example, as Lord Dahrendorf did in his very excellent talk. Human rights is a much wider issue—social rights, cultural rights, and even so-called bio-rights related to biotechnology and stem cell research and that kind of thing. It might become too complicated for the Network to extend its activities to all these area. But because this Network has very high-level participants, drawing together institutions and prominent people from all over the world and in all academic fields, it is very important to also discuss theoretical difficulties in the protection of human rights. It looks very different not only from different countries, but also depending on your view

of the extent, nature, and contents of human rights. To promote this kind of discussion in all academies and in all fields in a cross-disciplinary and border-crossing way is also very important.

Wiesel – On the last point, could you be specific?

Sihvola – Take, for example, the speech of Baroness O'Neill on difficulties in the theoretical underpinnings of human rights. We could invite prominent philosophers and international lawyers to come together to examine potential difficulties in the interpretation of human rights, political rights, freedom of expression, and secondly, social rights, thirdly, cultural rights and the so-called bio-rights—fourth-generation human rights, as they are sometimes called.

Wiesel – Any comments from my colleagues on the Executive Committee?

Pieter van Dijk, Royal Netherlands Academy of Arts and Sciences – I just want to say, that is what we tried to do in the colloquium. At every biennial meeting, we have both a colloquium and a workshop. In the colloquium, we address more general questions of human rights and human rights issues. Your second point, regarding contributions to a peaceful settlement of disputes, is also very broad. I cannot imagine myself going for a mission to divide two fighting parties. But I suppose you mean the contribution of scientific cooperation, because IPSO is exactly that.

Claude Cohen-Tannoudji, French Academy of Sciences – I understand what you mean about enlarging our scope, but aren't you afraid it would be too much work? Too difficult to address all the important questions, and we would therefore be less efficient on the individual cases, in which sometimes we can get some success?

Sihvola – Actually, I talked too much about the general issues. It would be better to have the focus on individual cases, that is, the concrete results. That is something that can be achieved by a joint action. Action on the general issue could come through the individual academies.

Cohen-Tannoudji – What you have in mind is perhaps a new or different network, which would consist of people coming from all of academia, who could address the issue of human rights theoretically and find some basic principles and some general laws. That was not the initial mission of this Network, and I'm afraid it is too ambitious, although I like the idea. It is very important to have people coming from different countries and from various academies to think together about general problems.

Wiesel – If I understood you right, you said that the concept of human rights has different meanings for different cultures. We have had speakers in previous years from different countries expressing the point of view that freedom of speech may not be the most important thing in their culture. Other things are also important. We always invite the Chinese Academy of Sciences and the Chinese Academy of Social Sciences to come to these meetings because their representatives would perhaps be more interested in other social issues. We emphasize scientific issues here, rather than social issues like food and shelter and health care—which are also part of human rights.

Sihvola – My personal view is that the most important human rights are freedom of movement, freedom of expression, and freedom of participation. But there is some disagreement on this. So, in order to raise consciousness about the basic importance of these most important human rights, one should also have the broader discussion about their relations to the other aspects.

Paul Mugambi, Ugandan Academy of Sciences – I am President of the Uganda National Academy of Sciences. The history of academies in Africa, as you might know, is not a very rosy one. In Uganda, under the East African Community, we had an Eastern African Academy involving Tanzania, Kenya, and Uganda, and then Idi Amin came onto the scene. During his regime, the academies broke up, and people went underground. In Uganda, in particular, the Uganda Medical Association suffered heavily. Doctors were murdered in broad daylight because they spoke about these very issues that we are discussing. So, in Africa the academies are young, and, as mentioned yesterday, there is a whole mixture of scenarios of failed and failing states.

In terms of a mission statement—yes, I do support individuals. In addition, to promote and protect the independence of academies and scholarly societies worldwide attracts my attention in connection with the African academies. Most of them are very young. We have only 10 active academies. We hope that we will benefit from this Network to build the capacity of our academies to promote awareness of these rights. Some of our scientists suffer from self-censorship. They need to be made aware that they can speak out on issues. It is my hope that our membership in the Network will enable us to promote awareness of these issues in our countries.

Wiesel – We very much want to and have done our very best to try to support you in this.

Michael Clegg, National Academy of Sciences, U.S.A. – There is quite an array of global and regional academy organizations that emerged over the last decade. The Network plays an immensely important role in informing people about abuses of the rights of scientists. There is also the Inter-Academy Panel, which takes on a larger role of trying to articulate statements on major issues of concern to the global science community. These may range from statements about the health of mothers and children, to the importance of science education, to issues related to the global management of water resources. In my view, the Network plays a crucial role, but that role should be a focused and well defined role that is concerned with the rights of scientists and the suppression of the rights of scientists.

With regard to our [the U.S. National Academies] engagement in Africa, we have been very fortunate to receive a major grant from the Gates Foundation, which has allowed us to launch a program that is now in its very early phases, aimed at building the capacity of academies in Sub-Saharan Africa. There are seven academies that we are trying to work with—three in a more focused way, including Uganda, South Africa, and Nigeria. The goal is capacity building: helping to provide academies with the tools to be effective institutions in their own countries and to be effective, in particular, in influencing decision makers and policy makers in

their own countries. We are really delighted to be able to work with Paul Mugambi and Gideon Okelo on this wonderful project, but it is separate from the concerns of the Network.

Alenka Selih, Slovenian Academy of Sciences and Arts – I am from Slovenia, a new nation and an ex-socialist country. I have been following the work of the Network for the last four years, and we have become more active in supporting individual cases recently after some changes in our academy have taken place. When I was looking at the program of this meeting, it seemed to me as if the democratic and developed countries somehow pointed the finger at those who are not so fortunate. I was therefore very satisfied to see the program of yesterday's symposium. I think it is very important to address the problems of September 11, which really changed a lot of things in many democratic countries Measures have been taken, not against scientists or at least not in principle, but at a general level. As we know, such measures can always, even if taken only for one group of offenders or one group of crimes, be spread out to others. I think we in exsocialist countries know that quite well.

I have also been thinking about our obligation back home in the area of the Network's operation. Most probably, the academies and the scientific communities in ex-socialist countries should earlier or later (probably later) confront their own past during the past decades, because, in some cases, scientists and scholars have been prosecuted and also sentenced for what they have been studying and researching. I'm not sure the time has come for that yet. Perhaps more of a lapse of time is necessary.

I have been following how the German criminal lawyers have been studying their past, and I've noticed that the first articles on how German lawyers acted during the Nazi regime were published in the 1980s. So it takes a long time. I don't know whether we are, or when we will be, ready for that.

On the question or problem of individuals, we have been shown the example of Palestinian-Israeli cooperation between two universities. I do not want to make any formal proposal, but I have a suggestion that maybe, in ex-Yugoslavia, an initiative to arrange such collaboration, between say Serbia and Kosovo or between Serbia and Bosnia, could be fruitful.

Wiesel – The leadership in the academies or universities is critical for this to happen. It has to be initiated in the region. There is nothing we can do from the point of view of the Executive Committee without that. If such an initiative were taken, then of course we would be happy to facilitate and encourage such cooperation. I believe very much in bottom-up approaches. If such an initiative came, not from the Network, but from the region, then we could facilitate and assist it as a Network. Does your academy have a human rights committee?

Selih – No, we don't. We are a small academy, so our department of foreign affairs, the president of the academy, and I form an opinion together, and then the presidency, a body of 13 members which consists of representatives of all of the departments of the academy, takes a decision. Then we act.

Wiesel – That sounds like a committee in a way. Are you in charge?

Selih – There are two of us, the head of the department for foreign affairs and me.

Wiesel – In a sense, you have a structure within the academy to deal with these issues, which is all that is important.

Emmanuel Roucounas, Academy of Athens – I have three remarks. First, I strongly support the idea that our Network should encourage participation of more academies from Latin America, Africa, and Asia. Second, usually we react to the Alerts from Carol Corillon, and most of us act immediately on individual cases. Perhaps the academies that have an infrastructure for the protection of human rights should communicate what they are doing to the Network in order that other academies can become aware of the activities of the different members. Third, I enjoy the theoretical approaches and the lectures that are given here. They are very important, and one day may be published, not necessarily by the Network itself but by the lecturers themselves in different reviews.

I believe we should set up working groups before the next meeting and ask them to elaborate on a specific theoretical or practical question, in order to have a report to discuss, rather than just to react immediately after a lecture. Today we are speaking not only of human rights at large, but of human rights in very specific fields, such as patenting. I presided over a colloquium in Paris on human rights and the right to patent. If we touch on specific questions of general interest in the field of human rights and concerning learned societies, we should set up specific committees.

Wiesel – The issue of patents seems to me more of an Inter-Academy Panel discussion. Human rights don't necessarily come to mind when you want to patent. But, in terms of the other point, we do invite academies from all over the world.

Carol Corillon, U.S.A., [Network Executive Director] – We send an invitation to every academy in the world, and often I follow up because we really do want to have much more involvement, particularly from Asia, Latin America, and Africa. In fact, I follow up sometimes three, four, and five times. Some people here were quite pressured by us to come. We really want to get more academies involved. I was hoping that an outcome of the Regional Group Discussions would be that those from the various regions in the Network would decide to encourage other academies in their regions to participate in the Network or to do it through the regional academies themselves.

I also wanted to say that I took a look at the websites of many of the academies involved with the Network. Some of them have very detailed information about their involvement with this Network, such as the Turkish Academy. They show what they are doing, the different symposia they've held, the actions they have taken on human rights independently, and those that they've taken along with the Network. Other academies have nothing at all. No mention whatsoever of the Network. The Network would become much better known if every academy had a webpage devoted to their involvement with the Network.

And then, as you know, the Network also has a private site through the National Academies in the United States. We are working to improve this site and to make it more

independent of the National Academies. This is not easy because of the way in which our system is set up, but we are looking for a way to make it totally separate so if there is information that individual academies would like to have posted, they can send it to me. We really don't get much feedback from the individual academies, except the French and Dutch and a few other academies which do send us cases. We really need to have more back-and-forth; rather than having everything come from my office out to you.

Michiatsu Kaino, Science Council of Japan – This is my first time at this conference, and I am very greatly impressed. Before the conference I contacted Carol to ask if I should prepare a statement but she told me that each academy has its own mission and that our main agenda is to improve cooperation with other academies on human rights. Human rights issues should be closely connected to the agenda for peace, which has become a much more important subject, especially in terms of human security. I have brought a paper that describes our council's current activities.

This kind of meeting is very useful in dealing with individual cases, but the larger human rights issues are also important. So my proposal is that the meeting should have two parts: one for general theoretical issues and one for individual cases. Theoretical discussion is much more important because in Asia, we have no such human rights declaration as the European Convention of Human Rights, but there are so many human rights issues in Asia, so maybe we should combine individual cases with theoretical discussions. That is my proposal.

Wiesel – Most Asian countries have signed the Universal Declaration of Human Rights. Asia does not stand out in that regard.

Yuan T. Lee, Academia Sinica in Taiwan – I'm the President of the Academia Sinica in Taiwan. I agree with what Dr. Kaino said. Our Network tries to help individuals, but it is difficult when we target somebody from China, from Russia, from various countries that are not at the meeting, then the Network is broken. Although everybody has signed the human rights declaration, as soon as some of us target an individual in another country to rescue, the Network breaks down. What I'm saying is that something more general, more theoretical is needed. Then they might come and say that they don't agree with one-half of the discussion, but they want to participate in the other half. If what he suggested can remedy the shortcoming of the broken Networks, that might not be a bad idea. I come from Taiwan, and I try very hard to maintain the peace and stability in that area. So, I don't want to say too much, because if I do, then my role will be diminished. What is interesting is that yesterday, when Sari Nusseibeh was talking about the one who is underneath having more freedom and more power, you have to realize that if somebody on top is 50 times heavier than you, then you can't even breathe.

Wiesel – Could you expand a little bit about the theoretical part that you feel should be more emphasized?

Lee – When we talk about human rights or the universality of science, we could discuss in depth what does it really mean. This afternoon we are going to discuss the universality of science, and I can pursue that issue a little more. But the topic of human rights is really quite interesting, because different countries in Asia will have very different views. There are times when I can go

in and out of China, and at other times I'm not allowed. I don't protest strongly, because I do feel that I have a bigger role to play. It is a very important period now.

Henrik Zahle, The Royal Danish Academy of Sciences and Letters – I think we all agree about the importance of individual cases, and it works very effectively, so I will not elaborate on that. Concerning the more theoretical problems of human rights, where there is some disagreement, I agree that the Network consider this as part of its work, and it actually has done so. The lectures yesterday were in line with the theoretical approach. So perhaps we need to recognize what has already been done and rethink how it can be done more effectively in the future.

The suggestion that the discussions should be prepared somehow in advance is one thing that could be taken up. Another possibility would be to organize the discussions in a more debate-like manner so that various positions are represented. If this is organized more openly, it would open up our minds and give a more reflective position to what human rights are and what the work of the Network actually is concerned about.

I also agree with what has been said that it would be difficult for us to get an agreement or even distinct majorities on these problems. So, in the near future, at least at the beginning, I would suggest that we shouldn't look for decisions on such matters. It should be a forum for discussion and could be reframed so that we are not only dealing with two different topics, those of individual cases and the theoretical questions, but also applying different instruments. On the individual cases, we express, both as a nation and as a Network, criticism or concern in relation to governments or other authorities. On the theoretical or general problems, our instrument is general discussion and open debate in this Network, and perhaps we have it published afterwards but we do not end with conclusions from the Network.

Another topic that we might take up is human rights as a duty. When we think about human rights in scientific work, the question of duty is much more appropriate when you consider, for instance, biotechnology and human rights, the patenting law and human rights. As a scientist, you consider human rights as somehow a duty. This is a restriction on the work of the scientist, which is sometimes well founded and sometimes not, but it is basically a duty for scientists to respect some good, some value, that is always protected by somebody else's human right.

Wiesel – You're getting into the whole question of ethics. Of course we all want to be ethical, but that is not really what this organization is about. There are international and national committees on ethics in the area of patents, for example, as you mentioned. We don't have any special insights into that.

On the other issue you raised, about how we should prepare, it seems to me each academy has a responsibility. If there is an issue that the Danish Academy is concerned about and wants to have a working group on, then it makes a proposal or a statement, which can be sent out to all participants, who can then discuss it. We don't have a lot of resources—to have a meeting every other year taxes our resources beyond what we have so we are constantly trying to raise funds. Our National Academies in the United States have been doing this now for 10-12 years, trying to support this Network. We want other academies to also make some contribution

and not only the U.S. academy. If people say, I don't want to be part of this Network because it costs me money, then that says something. Maybe academies would become more engaged if they actually had a budget for these Network meetings.

Zahle – I didn't expect that what I am talking about should cost a lot of money. And I didn't expect that it should be a big change in the work of the Network. Actually, as I said, it is just a reframing of what is already being done. It is a proposal on how to organize the meeting in a manner that takes up the many voices which have asked for a more theoretical approach to some of the human rights problems than we apply when we work on individual cases.

van Dijk – It would be very helpful if this discussion would also clarify your opinions about the role of the Executive Committee between the biennial meetings. Our Norwegian colleague said very clearly that, in his opinion, the Executive Committee should have its own authority and could act on behalf of the Network irrespective of whether everybody agrees. Others will support the autonomy of their academies, which should not be represented by an Executive Committee without being consulted before hand.

Zahle – I am very much against the Executive Committee expressing a position somehow pretending to represent the global Network of scientific organizations.

Harald Reuter, Council of the Swiss Scientific Academies – I think we should go back to the roots of why the Network has been created, and it was very clear that the original idea was to help colleagues around the world who spoke up against what they believe was unjust in their countries or elsewhere and for that are imprisoned or badly treated, etc. It could be defined out of the environment where we live—namely the environment of academia. I am very much in favor to think also about what the theoretical reasons are for why we are doing this and what the theoretical reason is for human rights.

However, if we consider how we have acted over the last 14 years or so, we have been very much oriented towards the European scientific environment and spoke from that point of view. Six out of seven of our meetings have been held in Europe and one meeting in the United States in Washington. Do we really know by experience what the demands and difficulties are in countries in Africa or Asia, etc? So, to actually make ourselves familiar with the problems, at the site, where the problems primarily are, my suggestion would be that we have the next meeting, in a very practical sense, in a country outside Europe.

There is one special issue that has also arisen in the context of September 11 and that is visas. We discussed this already in the meeting in Switzerland and what we can do about it. Even in a country which is not known for particularly brutal actions, at least like Switzerland, even colleagues from my department had difficulties in going to meetings in the United States. One colleague applied for a visa three weeks before the meeting took place, and he got the visa when the meeting was over. This is a very common experience.

Wiesel – You must keep in mind that we have been very fortunate in that the countries in which we've had meetings, the academies in those countries have been able to help financially to organize the meeting. So, there is a question of resources. In some academies in other parts of

the world there is no money available so it would depend on the generosity of the participating academies in the Network.

Erling Norrby, The Royal Swedish Academy of Sciences and the Academy of Sciences, Antiquities and Letters – Part of this will be a bit repetitious, because there is consensus on a number of questions, but I'd like to make three points. First, we should continue to support the individual cases. My question to Carol is How is the Network operating? Do you get proposals with the information that you need, or could we enlarge that? Are we sure we are covering this in an efficient way? The individual academies could be activated to take more initiative. I think you are actually carrying the entire burden on your side.

Another issue is to improve contacts between academies to further peace. I think the initiative that was taken at the meeting in Switzerland for the organization of IPSO is an important one. It is also important that it is followed up right now. I understand that it is now at a stage at which there are a number of proposals for collaboration, but a lack of money.

Here is something that every academy can consider. Can you do something? We are taking some initiatives in Sweden and hope that maybe we can do something. I enjoyed the idea that this initiative could serve as a seed for new initiatives of the same kind, such as in the former Yugoslavia and other parts of the world. That is very attractive but the vehicle that we should use is contact between scientists because science, by definition, is without any borders, as is knowledge, and that is why we have this joint Network. So, we need to make sure that IPSO is successful in its efforts, and this is a critical time right now.

Regarding selected general statements, I understand that, over the years, two statements have been made—one after 9/11 and another on academic boycotts. So we need to consider very carefully when time is mature to make a statement of that kind. What I would like to leave on the table is the theme that we are coming back to and that is the fact that some countries, because of national security measures, are restricting the means of access to information and the freedom of its citizens. We should only deal with that situation when it concerns our fellow scientists—there are restrictions on freedom of movement of scientists, on doing research, on publishing, and storing information. It would be proper for the Network to reflect on making a statement on this. Also, it would be good to have a less then one page summary of what has happened at the meeting that individual members could bring back home. We could see if we can activate it in the press and get it out there. It was interesting, coincidentally, that this morning on the BBC News, the new committee for human rights in Morocco was discussed in depth, on which we have information here. But that is a little beyond our responsibility as a network of academies. I have found this meeting very constructive and rewarding so thanks to those who have organized it.

Moises Wasserman, Colombian Academy of Exact, Physical, and Natural Sciences – Most regional groups addressed the general but very specific problem of the threats to the free circulation of scientists. I think it is very clear to all of us, after this conference, that the personal cases are extremely important and appropriate to the activity of the Network. On the subject of the boycott, we were right to condemn it, as it was not against one particular person but against a group. I am not happy to tell you this, but for a citizen of Colombia to come to a meeting in

England, you have to submit a request at least one month before. You must submit your two-way ticket, three months of activity in your bank account, and at least two credit cards.

A veteran scientist like me can wait, but you can imagine that our graduate students cannot wait. If you want to go to the United States, the same papers are required, as well as additional certification of work and income. For graduate students, in the United States you went through the same thing, but one year and a half in advance. For a graduate student, it is impossible to wait, so the participation of our students in scientific meetings is extremely small, almost nonexistent. I am not sure, from a practical point of view, if this is very different from a boycott. The principle is different, but, from a practical point of view, it is a kind of boycott. I would propose that on the problem of the free circulation of scientists, I think it is a problem worth addressing, even if we are redundant with other institutions.

Recently Carol helped us with such a problem. A member of our academy, a professor at the national university, was invited to a meeting in Canada and was not granted a visa. Carol intervened with Eva Kushner and Professor John Polanyi, and he finally got the visa. But he is a professor of the university and a member of the academy of sciences. For a student, it is many times more difficult to get.

Clegg – Our academy is a private organization, and it does not receive direct support from the U.S. government. It is important to reiterate that to also show the limitations in our influence and abilities. Ever since the recent restrictions that followed the 9/11 events began, we have been engaged in a number of efforts to try to assist scientists to obtain visas to travel to the United States. Those efforts have been reasonably successful in the majority of cases but not in all cases. One of the things that we do is manage a website that provides the most up-to-date information on the visa process, and we stay in almost daily touch with the State Department to be sure that we have the most accurate information on how to get visas. That information is then posted on the website on a regular basis. We also provide assistance to individual scientists who write to us with requests for assistance with regard to visas. We are actually spending money from our budget to support a staff salary to assist with visa issues. There are also other organizations within the United States that are equally concerned about visa problems. This includes the American Association of Universities, which is a body of the presidents of major universities in the country. They too have issued statements to which we have been a party about the visa problems and their impact, both on scientists and on students. And there has been a progressive, but somewhat uneven, relaxation of the visa issues. This is a continuing battle, and it will probably remain so for a long time into the future.

I would also like to say that, to be effective as scientists, we have to have strong institutions to work from. We are not effective individually, and one of the important things about the creation of a Network like this is that it provides an institutional framework because it is a collection of national science academies working together to pursue a particular objective, which is that of supporting the human rights of scientists when they are threatened and, more broadly, scientific communication and discourse. But, over the last decade or so, there has been this accelerating trend towards globalization, and things like the Network and the Inter-Academy Panel are kind of the scientific world's manifestation of this globalization impulse. The difficulty is that it is hard to find resources to support these kinds of global bodies. There is not a

natural patron for these global organizations of science, although they are very important. It turns out with respect to the Human Rights Committee of the U.S. academies, as Torsten has alluded to, we have financial issues.

We spend a little more than a half million dollars a year on the human rights committee, which does a great deal of work in validating individual cases and making sure that they are bona fide before they are presented to our academies, which is a difficult and expensive process. Carol will discuss a little later our efforts to bring petitions to UNESCO as well, and much of this work has been supported in the past by the philanthropic communities in the United States. One of the fortunate things that we have in the United States is a philanthropic tradition, where major foundations are willing to support activities of this kind. But they will not do so in perpetuity, and Torsten has worked very hard to bring in money. Some of that has helped support the Network's activities, but a number of our philanthropic patrons have decided that they need to do other things so money is an issue for us. It is an issue for the Network.

An interesting thing happened in the past year. The Inter-Academy Panel is also a global organization of science academies, but takes on a broader mandate concerned with a wide variety of science issues that concern the global science community, including the capacity building of academies, education, and some of the other things I mentioned earlier. It has received permanent funding from the Italian government, which is a wonderful thing. The Italian government has seen it as a niche activity in global engagement, an opportunity to support the Third World Academy of Sciences, the Inter-Academy Panel, and the International Center for Theoretical Physics, all located in Trieste, as an Italian-based gesture to the importance of international science. We owe a great deal to Italy for taking on this important role.

The result is that the Inter-Academy Panel now has a secure base of financial support because of the generosity of Italy. It is also possible for the Network to consider speaking to the Inter-Academy Panel about a small amount of money. I'm not sure what the answer would be, but I think it is worth raising that question, to support things like future meetings of the Network, because the activities of the Network are so clearly consistent with the purposes of the Inter-Academy Panel that the two organizations should march forward in parallel.

Wiesel – Thank you, Mike. You've raised a number of issues.

Marino Protti, the National Academy of Sciences of Costa Rica – Two years ago, we joined the Network. My feeling is that the Network has been working very well and has been very efficient in the way it deals with cases and sends information through email. Email has become the way of communication. A lot of the issues that have been brought up here, theoretical and philosophical issues about our human rights, can be easily discussed through email throughout the Network. It doesn't have to be a change of mission of the Network. It can be just discussed. I don't think we need to take any action about the philosophical meaning of human rights. We can continue to work on cases, with the option that whoever doesn't want to sign an Action Alert is free not to do so. The way it works is, you receive information because there is an Action Alert; if we want to send an appeal letter, we send it, and if we don't want to support that Alert, we just don't send a letter. To me, the communication of the Network itself seems to be working pretty well and gives us the freedom to act individually. If an independent academy feels

strongly about sending a letter of support, it can do so. If there is internal opposition in the academy, internal members of the academy can do it. To me, the way it is working is fine, and we can incorporate other things as a forum to discuss through email. That doesn't mean we have to change; we don't have to change the mission to do that. It is just part of the concept.

Wiesel –I think it is important to emphasize this point, that communication is so easily available today. We have both email and the web site. The web site isn't visited enough, and your own academies should have something about the Network on their web sites. If you have that and, in addition, use the Network web site itself, these are the most natural means of communication.

The trouble is, you go to a meeting and get excited, and then you go home and forget about it. The only way to be effective is to constantly keep it in your mind and be actively involved. That is why we wanted each academy to have its own committee. You are here presumably because you have been asked by your academy to represent it at this meeting on human rights. That gives you a heavy responsibility.

There was a request to have a summary of the discussion and what happened at this meeting, to encourage your colleagues in your academies to provide their support and maybe form a committee if you don't already have one. It is important.

We are all very busy, but you have to try to do something in this area of human rights. If you don't have a personal commitment and passion for trying to help colleagues in trouble and deal with the issue of human rights and civil rights and freedom of speech, then you shouldn't be here. To me it is a very personal engagement in these kinds of issues. You have to try to convey that to your colleagues as well. You have to be a little bit of a visionary and believe that these are important issues that we are trying to deal with here. It is not just a routine meeting that you go to and then go home and forget about. That is not the way it should be.

Dayanand Bajracharya, Royal Nepal Academy of Science and Technology – I'm afraid that I may be repeating most of the things our colleagues have already said. I would especially like to emphasize what our colleagues from Switzerland and Colombia have said. The main purpose of this Network is to help scientists who are in trouble for having spoken the truth about what they feel. Of course, this is one of the objectives of this Network but, as our colleague from Switzerland said, we in developing countries have a different kind of problem. We don't have many scientists who are in trouble because of what they have said. The major problem in our part of the world is the denial of permission to travel and freedom of movement. This has become very serious now. Our young people especially get very little chance to go abroad to practice science because it is becoming very, very difficult to get visas.

I can cite you a personal example—my daughter was accepted for study in the United States, but she was denied a visa, so she couldn't go there. I spoke to our foreign minister,

asking, Do you think my daughter is going to do something wrong in the United States? How can you believe that my daughter is somebody who should be denied a visa? In the same way, we had an argument with one of the institutions in the United Kingdom. A young man had a full scholarship to come here, but he was denied a visa. Do you know why? Because, he was young and unmarried. Somebody has to prove that he will return home after his course is over. This is one of the major problems in our part of the world, and I don't know if the Network can help.

Wiesel – We realize that this is a problem. We can't address all the problems in the developing world. We can't solve them all. Are there human rights issues in your country? If you say there are no human rights problems in your country, that you don't have any cases to send in, then this committee may not be relevant. Your academy should talk to the U.S. academy to help your daughter with a student visa—you shouldn't talk to me, because I have no power. If you said you want to come here because of human rights, you are certainly not going to get the visa.

Bajracharya – I got a letter from you this time, addressed "To Whom It May Concern." That letter proved more effective in getting a visa than the recommendation of my foreign minister. Another time when I visited the United Kingdom, I had to be personally presented there, and, as our friend from Colombia has mentioned, I had to prove in so many ways that I'll return. I'm approaching 60. I don't have any intention of settling in the United Kingdom. I'll be happy to go back, but I have to prove that I will come back. Your letter, one simple letter, was somehow more effective. They didn't pose any questions.

Corillon - Dr. Lee and I both serve on the Standing Committee on Freedom in the Conduct of Science of the International Council for Science (ICSU). It deals specifically with these visa issues, so any scientists who are having problems getting to a scientific meeting—not just an ICSU-sponsored meeting, but any scientific meeting—should contact ICSU. In the United States we intervene immediately with a letter to the visa authorities, usually from Michael Clegg. They are quite effective, and other countries in which you have visa problems are supposed to do the same thing. You've got to apply well in advance and provide specific information. The ICSU web site explains all of this. I think there is also information in the agenda book. We will talk more about this issue during the discussion on freedom in the conduct of science and on free circulation this afternoon.

Jiri Niederle, Academy of Sciences of the Czech Republic – I don't want to repeat the things that were already said, but perhaps I will just stress some aspects. I think it is quite right to concentrate on the violation of human rights of individuals. In each case, each academy either supports it or not. We should keep in mind that combining all of our voices is in some sense more effective. In that respect, I think it will be very important for our next target to involve more academies. Perhaps each of our academies has some partners that could be enlisted. Also, even if we are involved in the support of a case, sometimes we are not completely informed about the result. It would be nice if some kind of summary can be printed, maybe for a period of one year, of successful cases, to see how effective we are in which cases.

The second thing is that times are changing. What was good in the past perhaps should be changed or modified. Science is playing a more and more important role in solving various complex problems. Science can flourish only if there is that freedom to doubt, freedom to

discover, freedom to inquire, and mobility. From this point of view, it is very important also to concentrate on those issues, and perhaps not only to give good arguments for fighting and public relations and so on, but also to take a joint action for some cases. I have in mind what was mentioned here many times, the mobility of scientists. If it will be done through joint action and also by UNESCO and other organizations, perhaps we may get exceptions for scientists. There is some hope that we shall succeed, and then maybe we can extend these exceptions to more and more general cases. What I would suggest is to concentrate now on the mobility of scientists and perhaps also on their human rights and their responsibility or duties. There are not very sharp boundaries, and some things can be shifted from one to the other. I think this is a clear distinction, and support will be justified right now.

Corillon – I would just say, as far as follow-up on the cases is concerned, that the cases are all updated regularly on the Network's web site. When a case is successfully resolved, it is listed on the public NAS site. We know who is looking at the website, and there aren't very many of you who are looking at it. We spend a lot of time and effort in keeping it up to date. I would beg you all to look at it once a week or once every two weeks, because there are case updates and the results of the appeals are there.

Niederle – I think maybe on this occasion of this meeting, it would be nice to mention the names and countries in which we succeeded.

Corillon – There are three or four reports on successful cases that are coming up after the break, and a list of resolved cases since the last meeting is in the agenda book.

Arjuna Aluwihare, National Academy of Sciences of Sri Lanka – These issues are dangerously close to coming within our purview. The right of scientists to travel is part of the right to interact and exchange views. It is not the only way, but one of the major ways to extend learning. If that right is being affected, it could be argued that it is a bit like the boycott situation. This boycott happens to be an Israel-Palestine one, but there could be a similar boycott between some other jurisdictions. The question is whether the travel issue is becoming a rights issue. One way to find that out may be to know whether the number of applications handled by organizations like ICSU is increasing. If it is increasing, then there is some evidence to indicate a new situation that didn't exist five years ago.

Wiesel – It is clearly a new situation and, again, ICSU is dealing with it. But is it a rights issue?

Corillon – When individuals have problems getting visas, they should go to the U.S. National Academies web site and report their problem. We really try to help them. We also try to gather statistics so we can go to our government and say, this number of students and these individuals from these countries have had problems. We've had stories like yours, Dr. Wasserman, and your daughter, Dr. Bajracharya—a lot of different stories. But we don't have the exact information to report specifically that 25 scientists were denied visas to such and such a meeting which is necessary to make a case. The other problem we are facing now is that many scientists are saying that it is not worth the hassle to apply for the visa, so why even try. We don't know how to assess that part, but it is another problem.

Reuter – The biggest problem is really that it is not an equal opportunity situation.

Wiesel – You have to think about how to be effective. It is good to raise issues and so on, but what is our mandate? What is the power we have? That is why it seems to me that your own academies back home would be in a better position to help. And then ICSU can also help and perhaps the Inter-Academy Panel. Most of your academies are members of the Inter-Academy Panel so you should go to your president or foreign secretary and ask what they are doing to help you travel. Have you done that?

Aluwihare – People don't have computers. They don't have broadband. Trying to access web sites to find out what somebody is doing is—if I can put it very strongly—almost like pie in the sky for many young graduate students and others who want to go to meetings. It is a totally different world. That is why I think the onus should be on the scientific organizations and the universities in the economic north to get the visa. They should talk to their home office or their state department or whatever, and the persons in the developing countries or even the guy who had a problem in Switzerland, he should tell the U.S. organization to get the visa. This is a totally different scenario in which people are trying to work and struggle.

Wiesel—You can say there are no cases anymore, so this organization can be dissolved and we could start a travel agency. But, the fact of the matter is, we still have a lot of cases, and there are still a lot of scientists and scholars who are in trouble. This shouldn't be forgotten, even if you have a problem getting visas. But we are not set up to help you with visas. It is just not possible for us to do that.

On another issue, I haven't heard anybody offer the services of their academy to host the next meeting. Maybe we should go to Nepal. I'm serious, because we don't have a site for our next meeting.

Reuter – So, I make a motion: let's go to Sri Lanka.

Wiesel – You can't just go to Sri Lanka. You have to be invited by the Sri Lanka Academy to go there. Dr. Aluwihare only represents the Sri Lanka Academy of Science, and, even if he is president-elect, you still have to be invited. They may not have the resources.

Reuter – Could the Executive Board put in a request to the Sri Lanka Academy? Would the group be interested in having a meeting in Sri Lanka, if this is possible and the resources are available?

Comment - One thing we are not mentioning is the tsunami. After the tsunami, at a time when they are just recovering from its aftereffects, this proposal could be a little embarrassing.

Aluwihare - No, on the contrary, this is the time at which such a suggestion would be very welcome. Not the other way around.

[Coffee Break]

Wiesel – We should be absolutely clear, before we leave here, where we are and where we are going. There may be some differences of opinion.

There is also the other issue that is important. You have heard from the U.S. National Academy of Sciences, which has supported this Network over the years, that their support is not a given. If no financial support is forthcoming from any of the member academies, then the whole Network will not exist. Money is critical. When you go home, tell your academies that we have supported the travel of many of you, but we can't do that in the future. You will have to think for yourselves: Is this organization important enough that we should do our utmost to keep it alive, or is it dispensable? That is really the issue.

Most of our cases are in the developing world, so you felt the meeting should be held in Europe because that is where these things are discussed. But there are problems in all parts of the developing world. I think we are in a situation in which there is a divide, and I don't think we should emphasize the divide. When you go home to your academies, ask whether they are willing to have a budget in order to support this activity? If your academy says no, then maybe it should be a membership request to make it possible for us to function in the future. There have been 12 years of a free ride, and now the situation is very critical for the Committee on Human Rights in the United States, which I chaired for many years. We raised money for it, and in addition half our budget was supported by the U.S. National Academies and half from private sources. Private sources are drying up, so even that committee's existence is threatened.

There is also the issue of the statement by Dagfinn Follesdal from Norway who was not able to attend this meeting. How many of you have read it? Do you agree or disagree with it? How many of you agree with it? Raise your hands. If you have not read it, please read it now. We need to be able to tell Dagfinn that it was discussed.

Norrby – This is a complicated issue, and I think that we cannot reach a decision now, we need to take it home and consider whether action should be taken or not and then communicate the decision to the Executive Committee. It isn't possible to make a decision right now on Dagfinn's statement.

[The text of the statement follows.]

STANFORD UNIVERSITY STANFORD. CALIFORNIA 94305

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To the participants in the Network meeting in London

A dilemma faced by the Network

Unfortunately, I am prevented from participating in the Network's meeting in London because of an earlier commitment. There is, however, a serious dilemma that the Network is facing that will be discussed at the meeting, and Torsten Wiesel has asked me whether I would be willing to write a short statement on this for distribution at the meeting as a point of departure for the discussion.

In the past few years there have been a number of serious violations of human rights against which the Network has not protested, since some members of the Network have regarded these cases as political and argued that therefore the Network should not take a stand on them. Other members regard these cases as very serious violations of human rights, more serious than many of the cases we have protested against. Some of these cases concern individuals, such as the case of Mordechai Vanunu, whose rights have been violated anew after he has served his long prison sentence. Others have to do with invasions and attacks that involve massive violations of human rights and international law and that affect the work and lives of thousands of individuals, including many scientists. All cases where we are protesting are political in the sense that they express disapproval of the actions of governments or other political institutions.

These cases raise the following dilemma for the network:

On the one side, the Network is speaking for all the member organizations, which in turn empower us to speak on behalf of their members. We then get a very difficult situation when some member organizations or individual members of these organizations disagree with our pronouncements.

On the other side, some violations of human rights and of international law are so grave that if we fail to protest against them we are undercutting our moral standing, and our utterances against individual cases of a minor kind will be regarded as hypocrisy and have no effect.

The Network is at risk whatever we do. Some members may threaten to withdraw if we protest against cases like the Vanunu case. Others will withdraw if we do not do it. My view is that standing up against all violations of human rights, whoever is the perpetrator, is the only option we can live with. We might offer those who are not willing to sign a protest in some particular case an opportunity to state this; the protest may make it clear that such and such members of the network are not joining the protest. This is not an easy way out for them, their not joining the protest will give the impression that they are condoning what is happening. They may therefore take the easier way out, which is to leave the Network. However, I believe that there will be few members who will choose this option.

Sincerely yours, Dagfinn Føllesdal

Address until September 25, 2005:

Staverhagan 7, 1341 Slependen, Norway, Tel: 0047-67 55 00 01, Fax: 0047-67 55 00 02

Wiesel – From the comments that most of you made this morning, this statement would not be a central concern to the Network. Most of you put individual cases as the priority.

Comment – What is the status of the Mordechai Vanunu case?

Corillon – There is a recent case summary on the Vanunu case from Amnesty International on the table.

Comment – We have supported many other cases of dissidents who have written things in the newspapers against the government. We protest about that. What is the difference in the Vanunu case? The man has been in solitary confinement for 12 years and in prison for longer. It seems to me it is a clear case. We're open to the suspicion that we would be protesting if we weren't condoning the American support for the supposed secrecy of Israeli nuclear weapons.

Wiesel – He broke the law and was imprisoned for that. Amnesty International has not formally adopted his case until quite recently. We are now looking at the case to see what the situation is. The good thing about Dagfinn's statement is that he brought this case to our attention, which otherwise might not have happened. We investigate each case before it is adopted and accepted. Vanunu's case is in that process now.

But, there are broader implications in Dagfinn's statement. My own feeling is that this Network was not set up to become a political organization. I agree with what Lord Dahrendorf said yesterday—many organizations were originally set up specifically to help individuals, and they have become political. Human Rights Watch is now telling governments that they should do this and that. I don't think this organization can survive if it becomes political. If we can survive at all under the current financial situation I think we should make it very clear that our concerns are very much to help our colleagues in various parts of the world. One member of the Network's Executive Committee resigned because she believed we should take broader, political positions, such as making statements against the Iraq war.

Derek Denton, Australian Academy of Sciences – This gentleman [Vanunu] has served a prison sentence subsequent to the judicial process. Do we have any information as to whether any due process has been set in motion against him now, because apparently he is having restrictions on his movement? I'm not clear exactly what the situation is at the moment. Are there any facts that you know?

Corillon – What I've got so far is extensive background information on the case and the recent statement from Amnesty International. When Mr. Vanunu was in prison, Amnesty International had not adopted him as a prisoner of conscience, although they expressed concern about the fairness of his treatment. Over the years, we have undertaken a few cases that Amnesty has not formally adopted. In fact, we have referred some cases to Amnesty for adoption, and they have eventually adopted them. So it is a two-way street. In this case, they hadn't adopted him, and we didn't either. Now he has served his full term and is out of prison, but he is being harassed. He wants to go to Norway but is not being allowed out of the country. We are still thinking about all the pros and cons, but I think it should be fairly simple, since all the academies act

independently, to just post it on the web site. I'll send out the sheet from Amnesty International, and the academies can do whatever they want. They can make their own decisions.

Wiesel – It is not our decision to make. It is your decision. In that sense, it is simple.

Corillon – There is another case in the agenda book that we haven't taken action on—one of a man in Russia who has been accused of espionage. It is a very confused case. There are a number of recent alleged "Russian spy cases." Some we have undertaken; others we haven't undertaken yet because we haven't fully investigated them and are still trying to get all of the relevant information. But, the information that we do have so far is in the agenda book, and, if the academies feel comfortable with it, they can take action on their own, because every academy acts independently.

Wiesel – If this case has been sufficiently discussed for now, how many of you feel that the Network should adopt a broader policy along the lines that have been suggested by Dagfinn and as some of you stated on Wednesday afternoon? Is there general support? Do you want this Network to become more political?

Corillon – On the topic of taking on cases, we recommend what actions should be taken on the cases that we have adopted. We at the U.S. National Academies probably have at least three times the number of cases that I send out to the Network. They are undertaken by the members of our academies. I pick those that I think would be most effective if there is an international appeal to send to the Network. There are other cases that we can send out that we don't take a position on. Whether or not the person is a prisoner of conscience, they are unjustly imprisoned.

Wiesel – Your academy will make the decision if you agree with the recommendation. That's all

Corillon – I think Torsten's point now, with the other issue, is whether this Network is supposed to make statements about general human rights abuses. Many people consider the war in Iraq a general human rights abuse and ask whether, if this Network is not making statements of a general nature, we can remain credible when we talk about individual cases? I think that is the point that Dagfinn is trying to make. After the discussion at the Switzerland meeting, Ayse Erzan resigned from the Executive Committee because it was decided not to take action on broad human rights abuses such as the war in Iraq. That doesn't mean that everyone there supports the war, it is a question of whether it is the appropriate role and most effective role for this Network.

Wiesel – I just wanted to know how many of you agree. I'm not saying Dagfinn is wrong or right. His point of view doesn't agree with mine, but that is a separate issue. We want you to have the ability to express your views on this issue, and some of you did so on Wednesday, without knowing about Dagfinn's statement.

Aluwihare – I think people are all heated up about Iraq and the World Trade Center because it happens to be Iraq and oil and Europe and America and so on. But if you look at similar events and situations, you will find them in Sri Lanka, in India, and in Sudan, Rwanda, Chechnya, the break-up of Yugoslavia, and other places that don't so immediately have an impact, if you like,

on the conscience of the economic north. I can produce a long list of places in which you will find a variety of things going on, but that don't so immediately impact the economic conscience.

I think this Network should concentrate on individual cases and make statements very cautiously. Statements should be restricted to situations in which the rights of individual scientists may be being infringed. For the general political scenarios, I don't think we are equipped, even if we had lots of money. Getting accurate information in order to be able to make sensible comments on many of the situations is not as easy as it sounds.

There are other organizations that are designed to address these problems.

Comment – I fully support that. I think that the letters that we send from our academies have much more impact if we are free from making general statements.

Comment – I would also agree that for big and complex problems, like the war in Iraq, it is not a good idea for this committee or Network to expose them. I talked earlier about expanding the activity beyond individual cases. When I did that, I was thinking about laws enforced in the country that are patently putting on the books, so to speak, the permission to impose on human rights. In such cases, which I call matters of principle, we could speak very clearly before somebody is in trouble. In that sense, we should be able to talk about political statements about laws and relationships in one country.

Wiesel – If we are competent to do so. For example, the U.S. Committee on Human Rights was concerned about the custom in Africa of female genital mutilation, and we asked the Institute of Medicine to study it. They did and, as a body that is competent to do so, came up with a recommendation. With regard to legal issues, there are international organizations of lawyers who address legal issues. Sometimes we can serve to alert these organizations to the problem, as we did with the Institute of Medicine. But we must stick to issues where we have credibility.

Reuter – From my own experience I do know that in some cases, when we protest, for example, in the case of Flora Brovina in Kosovo, we wrote to the Department of Justice in Serbia and they responded with a letter to me and pointed out that because of a protest incident, she was put into prison. In other words, if we point out strongly on individual cases that a certain action is wrong, that has a strong impact at the political level. Saad Eddin Ibrahim is another such case in Egypt. His case became very prominent not only because of the help from us, but worldwide attention.

Wiesel – Yes, we were very effective in that case.

Ahamed Saleh, Academy of Scientific Research and Technology of Egypt – Judging from the comments that I've heard today, appeals against big actions such as wars and government actions would really hinder the activities of saving individuals. But, nevertheless, we must go back to look at the political aspects of individual cases. On what basis should we deal with a case if it is political and has political implications and others do not? I would suggest that we discuss

criteria that we should agree upon in dealing with individual cases, which is the main thrust of the Network.

Corillon – You all have a copy of the Universal Declaration of Human Rights in your agenda books. This is what we base our work on. It is primarily Article 19, freedom of speech. People who are in prison for exercising their rights under the Universal Declaration of Human Rights qualify as prisoners of conscience. Those are the kind of cases we can take on automatically. Other types of cases are a little more "iffy" —the spy cases, unfair trials, and the like. The Thomas Butler case in the United States, for example, was not a case of a prisoner of conscience. He was not imprisoned for expressing his opinions. But we took it on in the United States because we thought we should look more closely at our own backyard. We have taken on a number of other such cases in the United States for that reason.

Saleh – We have created a gray area, and now we are debating about that gray area. If we are sticking to our basic mandate, then we won't have this problem. If you want to expand and explore more in this gray area, then we have to make rules that we agree on, so that whenever we have a case, we don't have to waste as much time debating whether we should take it or not. We should have some transparent, clear rules on those things on which we can all agree. Let's go and work on it.

Wiesel – But it is your academy's decision. Peter Agre, as chair of the U.S. Committee on Human Rights, and his committee members and Carol will make decisions on whether a case is adopted or not. In other words, we will send a recommendation to you, and you then have to present it to your academy, and your academy then has to make a decision if it wants to take an action of support.

Saleh – I understand that. But for the committee to recommend adopting a case, we all have to know what the rules for adopting these cases are.

Corillon – It is the United Nations Universal Declaration of Human Rights. These other cases would fall outside of that. The other cases that fall outside, like the Vanunu case, I can post at the request of the academies or individual members who want the cases up there. We have the case sent by Dr. Khatib in the agenda book, that of Akram Kharroubi, a Palestinian. For these cases, we haven't been able to establish that they are prisoners of conscience, but a member of the Network has requested that the Network be alerted. We can do that and then each academy can make its own decision, but we are clear that we do not consider this person to be a Prisoner of Conscience but his or her treatment has been unjust.

Saleh – Let me ask about the Vanunu case. The statement that you distributed this morning says that he is two days standing trial for 21 accounts of violating restrictions of movement. Would you consider this case to be one that the Network should adopt and, if so, on what basis?

Wiesel – It is not for us here to decide. We only investigate cases as well as possible and then send out the recommendation that we make on the case for you to consider. Most of us don't have the facts necessary to make that decision right now.

Corillon – If you look at the cases that are described in the agenda book, (I probably put in too many, but there are a lot of new people attending this meeting), you will see examples of how we analyze them. What we try to explain in the summaries is why we think a particular case is one that we can undertake, or what our reservations are, and then each academy can make its own decision or do further research on their own. I have a good staff, and we really try hard to be balanced and objective and fair. The easy cases are the ones that fall under the Universal Declaration of Human Rights, and those we really focus on. As for the others, we can't have rules for the gray areas because the cases are all different. I just try to explain how it is different and why it is different and then let the academies make their own decisions.

Arnold Wolfendale, Academia Europaea – I'm sure what you say is true and there are many items that we should not discuss, but I think the only sensible thing is to proceed as you suggested, by producing a document that summarizes what we've been about and makes some general statements that we can then take back to our parent bodies, if only to justify our existence.

[There was a general discussion of a draft summary statement. The final statement can be found on page v in the front matter of this proceedings.]

Peace and Security through Science Discussion Leaders: M. Shamsher Ali and Robert Hinde

M. Shamsher Ali, Bangladesh Academy of Sciences – Peace has been a long-cherished view of mankind, but since September 11, 2001, it has assumed a new dimension. I will only raise the issues, as will my colleague, and it is for you to answer the questions that we raise.

There has been a lot of talk, following the actions of September 11, about peace and security, especially security. It is known to all cultures that religion and cultures have never had any sanction for violence or terrorism, so it has nothing to do with religion. The terrorists have no religion of their own. This terrorism itself is a religion. It has to be treated harshly, but the question is Do you face terrorism with terrorism? In other words, do you globalize terrorism? In this process, things of a constructive nature may be affected negatively, as we have been discussing—exchanges between people, the building up of knowledge—that is one thing. The other thing is—although it is not within our purview—the root causes of violence and terrorism have to be understood.

Some individuals living in abject poverty have been known to get violent at times. It is just like treating a child in the family who breaks a glass—you have to understand the root causes of the violence.

In the book given to you by Torsten Wiesel the other day, there is a statement by Amartya Sen, who comes from my land, Why is half the country hungry? That is the problem that has to be addressed because, over the years, science has become a power, an instrument of change. So what do we do with these powers of change? There is, according to Ghandi, enough in the world for everybody's need, but not for everybody's greed. Are we sharing the technical know-how? Science has the power to convert things so why is it necessary, at this juncture of the 21st century, that the people should suffer? And because of the mundane problems of food, hunger, and disease, why should their peace and security be endangered? The politicians have the responsibility—and so have we, the scientific community—of seeing that science is actually put to the good uses of mankind. How actively have we been doing this?

Yesterday, many people were enamored with Tagore. Tagore addressed this question also. I will say it in Bengali and then translate:

If man disappears from this planet, it will be for the reason that he newly discovered the truth, but he didn't know the proper applications of this truth. He wanted to bless himself in the role of a god, but he did not obtain the divinity.

So if you have gods without divinity, those gods are not going to be constructive—whether it is a state power or despotism, science has to be put to good use.

These academies of science were built all over the world, from about the 17th century, for the promotion of science, for recognizing its challenges. The Chinese and the Russians have a different model, yet they recognize talent and address basic problems. The question is Are our

academies acting as the scientific think-tank of the country? For example, if there is arsenic pollution, is the academy helping the country to solve the pollution? There is an energy crisis. It doesn't have to be very high technology. The question is Are academies addressing the problems of the gravest interest to their own countries and to the region? That would give them credibility with the common people, who would not take them to be a bunch of ivory tower people, far removed from the miseries of life.

These are some of the questions involved in addressing what should be the role of our academies. We started with a very focused thing, namely reestablishing the rights of scientists to say what ought to be said, irrespective of the situation. Similarly, scientists have another right—using their talents for the well-being of mankind. Are these rights being exercised? Those are the general questions that I pose to you, and the answers are yours to give.

Robert Hinde – I've been a corresponding member of the Committee of Human Rights of the U.S. National Academy of Sciences for some years. I have immense respect for what it is doing. I've tried to help what it is doing. The policy of focusing, that Torsten has been emphasizing, is absolutely right. Nevertheless, I want to suggest one very little thing that aims straight at the heart of this question of human rights. (Carol, don't get worried, it would involve very little work and virtually no expense.) This is the first Network meeting I've been to, and I'm terribly impressed by its potential for influence in the world.

What I would like to see is a short statement, of the type we were discussing just before lunch, about the root causes of infringements of human rights. I know you shake your head at the word "ethics," but in the sense of urging academies all over the world to encourage their governments to promote education, especially in ethics.

In the early 1970s, UNESCO passed a resolution that was signed by nearly all the countries that were then members of the United Nations, asking them to promote peace education, peace and security. How many countries do you think did anything about it? One-Finland. Finland gets an honorable mention in this respect, Canada a little, but practically nobody else, so far as I'm aware. Finland had an organized scheme for peace education that started in preschool and went right through to the tertiary level.

Now, it depends how widely you want to take this. I'm focusing on ethics because I think it is least likely—although he didn't like it this morning—to get Torsten's hackles up. I mean the question of human rights in this case, but it could be extended more widely.

Now, this sort of education will strike at lots of the problems in the world—poverty, overpopulation, environmental degradation, and even understanding democracy, because one of the difficulties about establishing democracy is that people don't understand what it is. If we could encourage governments to educate young people about democracy, then, in the long run, for very little effort, we would do a very great deal of good work. I could go into details of how this would also be a potent way of stopping more wars, because all wars depend on only two things: a supply of arms and a supply of young people willing to carry them. It can get at both of those.

All I'm suggesting is that we get together a brief statement of the sort we were talking about this morning, have it discussed by the Executive Committee, and then disseminated through one of these meetings. Now you can start objecting. I know you're a wonderful facilitator, but I also read this morning that you are also quite good at being dismissive.

Wiesel – I'm also very practical, so how do you envisage this being done?

Hinde – Exactly in the way in which it was done this morning, with the statement we were discussing. It should then be up to the Executive Committee to decide whether it should merely go to all the members of the Network, to the heads of all academies, to all heads of government, but reminding them of the UNESCO resolution in 1972.

Ali – There were some later developments of this. In late 1999, the World Science Congress in Budapest addressed the problems of science and society in large measure. Again, the question is how to involve the scientific societies.

Wiesel – Is that something for consideration now?

Ali – Yes. The Inter-Academy Panel has sent some statements on science and society, and UNESCO has taken it as a notion, but it is up to the governments. I think it is time that this question of science and society should be more focused. I agree with Hinde that you should probably address this question once in a while, so that the good aspects of science are more focused.

Hinde – It could focus specifically on human rights with very little periphery. Then you wouldn't be diluting your mission. It isn't aimed at individuals, but apart from that, you wouldn't be diluting the way you're operating.

Wiesel – For the issues raised by these two gentlemen, you have to give the answers to the questions. I see lots of hands here to answer the questions.

Comment – These are laudable ideas, but I think they are beyond the rather restricted and focused areas that we work in. Nevertheless, it wouldn't hurt if you put a document to the Executive Committee to discuss. If they liked it, they could send copies to us to pass on to our academies. It would be like a second layer of activity or approach.

Hinde – That is all I'm suggesting.

Wiesel – But you didn't suggest that you would write it. If you make a proposal, we would like to see your proposal.

Hinde – I was only asked to do this a few days ago, so I'll need some time.

Wiesel – Would you prepare a document for the executive committee to look at? If the Executive Committee likes it and supports it, we could then send it to all the members. Do my

colleagues on the Executive Committee nod in approval? It would be sent first to the Executive Committee.

Comment – I would like to support this proposal that a recommendation should be sent to the various academies to put more emphasis on ethical aspects. There are quite a number of academies, for example, that do not have bioethics groups. I think this is really needed today, and the academies need help on this subject as they try to support and deliver education and information. I think it could be helpful and could support the Human Rights Network.

Wiesel – I used the word "preaching," and Mr. Hinde said what is wrong with that. That hasn't been our style, to tell people what they should do. Our style has been more like leading by example. I will look forward to seeing the statement. It could be very useful.

Hinde – I'm modeling it on the matter we have discussed this morning. I don't count that as preaching.

Wiesel – It is just a sensitivity. I have objections against human rights organizations telling governments what they should do. It may be a good thing to do, but it has a different flavor.

Aluwihare – I would like to go back to what Dr. Ali was saying. [audio problem] . . . this is my first science . . . starvation and poverty and that whole dimension. I think that is a very important . . . and scientific methods and social sciences can . . . Scientific methods, I presume, applies that we follow a hypothesis or evidence of something and we try to see . . . insofar as it is possible. And, that applies to the social sciences. . . . poverty and the relationship between poverty and causes of terrorism – so science can help . . . hopefully reduce terrorism and promote peace. There are some examples in . . . report which illustrates the . . . They are not within the purview of the Network as such . . . except that sometimes One example is someone not buying Nike shoes because all the shoes are manufactured by children in sweat shops. I know in his country that carpets are manufactured by children and he very correctly pointed out that, sad though it was, children are actually better off in the carpet places then if the carpet places closed and these people were thrown out in the streets. So, the evidence countered the reaction of people not to buy carpets . . . [audio problem]

Ali – Can I react to that? You mentioned the scientific method and the garment industry and things like that. What I was trying to say is something different. The science academies have to think as the scientific think-tank of the governments. They don't have laboratories like the Chinese and the Russians. Those academies are built on a different model from the western model. With respect to the Bangladesh Academy of Sciences, we have been recruiting talents, making them fellows, giving scholarships to poor but meritorious students, organizing seminars on topics of current interest—starting from particle physics right up to agriculture. But the government did not consider this enough. Then we thought Why don't we address ourselves to the problems from which the country is suffering, namely arsenic pollution? This is a very mundane problem. Then the fellows of the academy worked on this and brought out a device, and the country felt it was a very good thing.

Look at agriculture. Our population is 130 million; thirty years ago it was half this amount. The population has doubled, but we are still self-sufficient, because the agricultural scientists have put some very good inputs into agriculture. If the science academies of the world act as scientific think-tanks of the government and do something for the common people, then they garner high credibility. Then, if the same science academy says look, you are torturing this man, then that statement becomes much more credible. Otherwise, they will say Is your only duty to say who has been tortured and who has not been tortured? What are you doing for the country? Every academy must address the problems of its country. That is the point I was trying to make.

Aluwihare – Incidentally, I suppose most people know that oral rehydration fluid, which is now the standard treatment all over the world, even in the richest countries, for patients with diarrhea who are not vomiting, started in Bangladesh.

Ali – Yes, it is a very simple thing for prevention of diarrhea.

Peter Agre, U.S. National Academy of Sciences – Since we are mentioning oral rehydration, I would just like to mention that Thomas Butler was the principal in the study that contributed to the development of the oral rehydration fluid. Tom Butler does good work.

Wiesel – In some ways, I think the U.S. National Academy of Sciences is a model because it has the National Research Council, which is actually set up to address national problems. They get requests from government agencies, like the National Institutes of Health, the National Science Foundation, and others, to investigate, for example, the arsenic in water or the environmental impacts of global warming. The science community works very effectively and produces 220 volumes a year on different issues. This is a major effort by the scientists who volunteer their time and make these sorts of contributions. It is impressive. For some reason, there aren't too many other academies in the world that operate this way. Other academies could think about recommending to their government that they draw on all the knowledge housed in universities and research institutes. That is why it is also very important to have an academy that is active—not a retirement home for old scientists, but young, active, investigative academics who then could serve in various capacities.

Bajracharya – We are all very clear about what science can contribute to the benefit of society. There is little controversy about that. I am interested in this topic of peace and security through science. My country (Nepal) used to be a very peaceful one, until a few years ago. Most of our tourists, if you had asked them what they found most beautiful in our country, would have said the peaceful atmosphere. Women could walk freely in the middle of the night without any problems. In the last 10 years, things have totally changed to a situation of conflict. We have lost nearly 11,000 people, and, except in the main cities like Kathmandu, there is little security and peace in the county. Of course, every country is concerned about peace and security, but I tried to stimulate my colleagues to propose what we, as scientists, could contribute to peace and security in the country. I must admit that we couldn't find solutions, or we were not wise enough to address these problems.

So this topic is very relevant to a country like mine, and since there are so many distinguished colleagues here, I would like to deliberate on how we as scientists can contribute to the kind of situation that I just now described in my country.

Wiesel – Peace and security are sometimes obtained at a cost. When [a political] system collapses, you get these kinds of problems, which scientists are not particularly well prepared to deal with. An example of how scientists can use their expertise to help the government is to help them to understand violence, the brain mechanisms of violence, and how to prevent violence. What are the circumstances that lead people to terrorism and other violent acts?

Comment – Peace can be achieved in very, very different ways. If the basic needs of people are satisfied and the unemployment rate is not very high, then the influence of outsiders is much less. Satisfying basic needs is, in itself, a deterrent to violence. In the many places in the world where people take to violence, it is because of money, because of drug addiction, and because of social problems. If governments and scientific societies do not address themselves to these problems, they multiply.

You have to address the problems first. The unemployment rate has to be cut down drastically. We have problems with the World Bank and other international agencies. They give prescriptions. My African colleagues are not here. Africa is very resource-rich, but they don't have sufficient scientific capability. If they had the technical know-how and were able to add value to the basic resources, Africa would go sky-high. This is where the contribution of scientists comes in, and this is where we have to interact globally because we can't exclude the impoverished poor and then expect a global social order that will be good. That is unimaginable.

Wiesel – If you look, for example, at the biotechnology industry in the United States, it is now a \$200 or \$300 billion industry, which makes for a lot of work for a lot of people. In that sense, science has provided the possibility of social peace through employment. The same is true in many countries of the world. That is why some of us push to see that, in the developing countries, there is strong support from the government for education, both at the primary and secondary school levels and in universities. It is only by building an infrastructure of educated people that you can develop the kind of modern industries necessary for the future.

So I believe this is a good topic. We scientists have to make sure that we assist our colleagues in other countries in training their students and providing for industries in developed countries to move because they need local talent in order to build an industry. So this title is justified: the work for science and for peace go hand-in-hand. I helped organize a meeting in Trieste a year and a half ago on science and education in the developing world; if you are interested, there is a report that came out recently on it.

We need to make concerted efforts to see how many students are trained, how many universities have the Ph.D.s in the various countries, etc. Funders all over the world need good information about the development of science education in various countries.

Michiatsu Kaino, Science Council of Japan – I think the scientist is also the educator, especially so the common people understand that science is sometimes the cause of war. And the relation

between society and science is very important. Scientists have some responsibility to societies. They have to talk to people in general about what is the mission of science. Sometimes people misunderstand, cannot understand the meaning of science. Science sometimes causes some great disasters, such as weapons of mass destruction. Our concern now is to try to talk to people, because so many young students don't like to participate in science. It is essential to educate them to know what the mission of science is and that it is connected to the realization of peace. Peace does not mean simply the absence of war. Peace has to be connected to the solution of poverty problems.

Comment – I cannot accept the affirmation that science causes wars.

Comment – This year is the 50th anniversary of the dropping of the bomb on Hiroshima. When the bomb was dropped, science produced a scare. It is also true that a country that suffered heavily from atomic radiation has made wonderful advances in using that same radiation for health.

Wiesel – The Second World War was not caused by the production of the atomic bomb.

Comment – It was a different reason. It is not true that science is the root of things. It depends on how we use science.

Comment – On the subject of violence in New York, a study came out recently showing that the strongest correlates of juvenile violence in the streets are things like single parents, discord in the home, lack of education of the parents, and so on, all of which are things that could be ameliorated by better education.

Wiesel – We are all in favor of education. The question here is that this is a Network of academies working on human rights. Of course—if you read the blue book [Universal Declaration of Human Rights]—you know that part of human rights is to receive an education. If you specifically address the question that was raised here and that you want to have answered about what role can science play in promoting peace, it seems as if the answer would be by having scientists within their communities educating their young people.

The fact is that, in many countries in the developed world—as our Japanese colleagues mentioned, and the same is true in most European countries and in the United States—it is very difficult to get students interested in science. This problem seems to be general, and, even here in London, the Department of Chemistry is closing. These developments in science are in part because we, as scientists, are not exciting young talent to enter the sciences.

We have lived our lives as scientists and are excited about it, but still, we don't have our young scientists go out to our high schools to give talks. One of the great contributions of Bruce Alberts in the United States, as President of the U.S. National Academy of Sciences, was that he pushed very much for science education in high schools, using his podium as academy president for that purpose. All of you should keep in mind that one of your responsibilities in your academies is not only to keep your colleagues happy, but also to go out and see that students are

being educated by the best scientists in the country. They should stimulate the young, which is another road to peace.

Comment – I think you have raised a very important point. Yves Quéré at The French Academy of Sciences, through a program called La Main à la Pâte, has encouraged its academicians to go to schools and talk to schoolchildren, who are very encouraged by the experience. These people are saying in very simple terms what science can do. Science enrollment has been decreasing very rapidly, in favor of things like computer science and the M.B.A.—people are rushing to where the money is. That is a great danger for society. Academicians have the responsibility of inspiring the younger generation to the pursuit of science.

Torture, Psychiatric Abuse, and Health Professionals Discussion Leader: Tito Ureta

Corillon – I'm asking Gregg Bloche to join us up here so we can have an even more informative discussion of the role of medical doctors and collusion in torture. Gregg is not only a legal expert, but he is also a medical expert.

Tito Ureta, Chilean Academy of Sciences – I didn't receive the message to be present at this session, acting as discussion leader, so I have to improvise. Doing that, I'm going to recall that in 1973, in my country of Chile, there was a coup d'etat which brought in a regime with an incredible record of abuse. I was in my laboratory doing experiments during that time. But, slowly, there came the realization that at least 20,000 – 40,000 people were tortured and 5,000 died as a result of that treatment. Also, we began to know that medical doctors were involved in the torture and deaths. Being myself a professor at the faculty of medicine, I began to do some investigations of my own to try to know who was in charge because they were most probably former students of mine, though I taught biochemistry, not torture. (Yes, biochemistry is a torture, I know.) [Laughter] I learned the names of a few who were involved in the torture of prisoners, and they were students in the second year of medicine. At that time, I was thinking What is in the minds of people who have received an education in medicine, have sworn the Hippocratic oath, and are participating in an activity in which a human being is being tortured? I was able to speak to only one of them. I asked him what he was doing with these people in charge of torture to get information. His answer was terrible: "I was there to protect the people who were being tortured. Otherwise, the interrogators could have been much worse than they were." His perspective was that it was good to have doctors there to be sure the torture was mild.

That was during the regime, so I couldn't talk much more to him. This made me understand that people find answers to ethical problems in those situations. They were doctors hired by the Army, and they would do whatever they must do.

I found that terrible, and it told me something about human nature. What one can do is, again, what was proposed a few minutes ago. Teach people in the ethics realm to behave as human beings. However, I noticed that the curricula of medical schools are so full that the possibility of having a year on bioethics is almost impossible. They are not teaching ethics. They are not teaching ethical values. They are dealing with the religions of their patients and that is it.

I don't know if we can make a formal recommendation, but I think the only answer is to push ethical knowledge or ethics in the curriculum somehow. I don't know how to do it.

Wiesel – Would it be possible, just by giving a few examples, to put the issue in a context? It is very difficult to get ethics courses because most students don't like them. But, if you can illustrate very dramatically what has or can happen, then maybe they would realize what it is all about.

Corillon – Could you also talk about what the Medical College of Chile did in response? That is important because it has possible application to what is going on in the United States right now.

Urita – That is very important. The Medical College of Chile was, for many years, in charge of the ethical violations of doctors. If a doctor was doing something unethical, the medical college could oust him from the role of medical professional. However, the military regime, soon after taking power, decided that the ethical violations of several professions were not to be in the hands of these colleges. In former times, it was mandatory to belong to the college to practice. That was also eliminated by the Army. If a doctor was identified as being involved in torture, the medical college couldn't do anything about it, although they did try to get the lists of who was involved and to make the names known after 1990. However, that didn't have any value in my view. Those doctors who were involved in torture went to other countries and, as far as I can tell, nothing happened to them.

Bloche – Thank you; a few thoughts. First of all, in the sorry history of national medical associations' responses to physician involvement in torture, the Chilean College of Medicine is a shining exception because of the way in which a number of its leaders stood up at a time of great personal risk and acted. I can't think of another example of a national medical association marshalling that kind of courage.

Back in late 1985, I spent several weeks in Uruguay at a time when physicians were systematically involved in a regime of torture. This was just a few months after the Uruguayan military regime gave up power, so it was a great time to try to figure out what had happened. Everybody wanted to say "I didn't do it, it was the other guy who did it." I talked to some Uruguayan military intelligence folks who took great pride in the systematic role of physicians in the rough interrogation that they admitted was torture. They pointed to the Argentines and their 10,000 or more who disappeared. In Uruguay there had been only about 200 who disappeared. They took great pride in having only 200 people die in detention and pointed to the physicians setting limits. The Uruguayan military intelligence would say that the Argentine military were barbarians; but we were humane, we were civilized—200 compared with 10,000 and in large part because we had doctors.

What did the doctors tell me? Well, lots of things. But the point you made resonated. I remember a lot of them saying exactly that—that they were there to make the process more humane. They were echoing what the Uruguayan military intelligence people were telling me. I guess you could say they had a point—200 compared with 10,000. But what they were doing was legitimating the whole perverse and grotesque enterprise.

The other story I would hear was that they were acting just as technicians. There was one doctor, I remember quoting him—I did a piece for the *Journal of the American Medical Association* based on this. It was the first thing I ever wrote in an academic publication. There

is a Dr. Carlos Rivera, who talked about the exams he did to determine whether someone would be deemed fit for torture, but he didn't ask what was going to happen. He was a doctor, that wasn't his business. The idea was of the doctor as a technician—he was not personally responsible for the torture if he provided exams that might have led others to make the determinations. There was a diffusion of responsibility. He didn't perceive himself as a participant in torture. Others saw themselves as being more humane. The key point was that none of them thought of themselves as helping to administer torture. They were either humane counterweights in their own imagination, or they weren't participants at all because they were doing their normal clinical routine. They were making clinical evaluations or maybe even treatment before or after a torture session. Their evaluations or their treatments were different.

The same argument is made by American forensic psychiatrists with respect to evaluations of competence for execution. The same argument is made by American prison psychiatrists with respect to what the Sixth Circuit Court of Appeals, and more recently the Supreme Court, just upheld—the medication of people to make them competent for execution. I'm medicating this person to alleviate his or her psychotic symptoms. That is what I do as a doctor. Well, yes, if the psychotic symptoms are alleviated, then the patient will be executed, but that is not my business. It is a perverse twist on the saying, the operation was a success but the patient died. There is a universality to what you were talking about. I didn't think this would come home to roost in my country, the United States, but it has. It is not all to the degree or intensity of what happened in Uruguay and Chile, not nearly as systematic, but it has happened post-9/11, the same arguments and issues are being presented. The American Medical Association's ethics section has, on its staff, a person who is supportive of the need to engage in torture on occasion—the Alan Dershowitz argument, basically—and supportive of the need for doctors to play a role on occasion.

Torsten's point about ethics is crucial. The medical students don't like the ethics courses, and they are often pretty abstract. I love philosophers, but with the issue of concrete versus abstract, often they take on interesting but "boutiquey" issues, like stem cells. It is an important social issue, but not the sort of thing that the average doctor in a clinical situation is going to run into. A nitty gritty encounter with the ethics of role conflict is just not part of the bioethics educational experience. Bioethics theory is not designed to face these questions involving tension between obligations to the state and obligations to individuals. There is an unwritten curriculum in medical schools. What you really learn ethically is what the resident or the intern does at 3:00 a.m. faced with a crisis and fear and lack of sleep.

Wiesel – Was anyone in Chile or Uruguay arrested because they refused to participate in torture?

Urita – That is impossible to know.

Wiesel – In Turkey this happened. We have had cases, as I mentioned the other day. So, one would expect to have a few cases of doctors imprisoned and maybe tortured in turn because they refused to participate.

Corillon – In 1985, the president of the Medical College in Chile, Juan Luis Gonzalez, called us at the U.S. National Academy of Sciences and told us that a number of medical doctors in the

medical college had been expelled because they colluded with torturers. A number of doctors who had documented torture were sent by the military into internal exile on the southern tip of Chile.

We decided to take a mission there in 1985, (which included two Nobel laureates, Gerard Debreu and Baruch Blumberg), and we met with the medical college members. We had appealed to the Chilean ambassador, before going to Chile, to release the doctors and allow them to return to Santiago. While there, we interviewed some of the doctors who were examining the torture victims and documenting the torture. Before we left, all of the doctors who had been sent into exile were brought back on a train to meet us. We said, we will keep an eye on this because they will probably be sent back. They weren't—but subsequently Juan Luis Gonzalez was arrested. The medical college immediately called us again, and we went back to appeal to the ambassador because we had already established a relationship. Dr. Gonzalez was released after a few days. It wasn't anything that serious for him, but it was for a lot of other people.

In Turkey there are cases in which the medical doctors who are examining the torture victims and documenting the torture are themselves harassed, and sometimes arrested and ill-treated. We have just gotten one of these doctors a fellowship at Harvard, so that he can get out of the situation and have a break for a year.

Then there are the events occurring at Abu Ghraib and Guantanamo. There we have U.S. doctors who are alleged to not be reporting torture that they know has been going on, so we asked ourselves what we could do about it. We talked to Gregg, who went to Capitol Hill [the U.S. Congress], and it looks like the Institute of Medicine may now be invited to do a study related to this. That was how our human rights committee has dealt with the issue. We can't deal with it directly, but we can encourage our institutions to take on a study.

Comment – It is known that a lot of the torture that was going on in Chile and Argentina was done after training by the Americans. Was part of the training to train the doctors?

Bloche – I spent considerable time trying to get a handle on this. There was all this talk about the "School of the Americas." For those of you who know a certain old American TV show in the 1950s, Sergeant Joe Friday, I tried to be a Sergeant Joe Friday and ask: "just the facts, ma'am." I tried to do that, and I had the sense that there were a lot of urban legends and a lot of Gabriel Garcia Marquez magical realism. Things were imagined in the absence of knowledge that it seemed impossible to get a handle on, which is not to say that these things for sure didn't happen. The absence of evidence is not the evidence of absence. But I could not find evidence of medicalized torture during my several weeks interviewing these doctors who had been trained scientifically by Americans. I talked to a lot of doctors who had been involved, including some of those who were pretty ideologically committed to the regime. So, yes, there were all sorts of programs to help Latin American military officers to be trained by American military, but I could not find some secret torture school.

Wolfendale – What strikes me as psychologically interesting about all of this is that people keep on saying, I didn't actually do anything. All I did was make cattle prods.

Comment – In ethics courses, it may be very abstract to tell people in elaborate Latin words that you should be a good boy or a good girl. What has to be done in the medical profession, or any profession, is to take the students while they are young, while presumably the community and the society functions under normal norms, and give them a terrible warning that, sometime down the line, in 15 or 20 years, you may be put in this position and you better start thinking now about what you're going to do about it. If people have not thought about it and the society has already become brutalized, many of us would be easy prey.

Urita – That is a possibility, and it has to do with how we teach ethics. In most parts of the Chilean universities, what they try to do is a very broad ethics course, and the medical students and the science students get bored in the first lecture and then try to avoid going. So what I do in the ethics course I teach on the science faculty, is what I call an operational course on bioethics. That is, I deal with the biological standards involved in the problems of today and those that are going to be involved in the near future. I don't touch Aristotelian ethics. I don't touch Kant. I don't know if that could work in the medical school. I tend to think that it could be a solution and, of course, in that case, you could use the examples you gave us. But that means reforming the curriculum of the medical school.

Bloche – My observations reflect the fact that I'm a now long lapsed psychiatrist—that is what I did my residency in. I agree with you on ethics. People want to think good things about themselves. Nobody thinks of themselves as a torturer. People come up with understandings of how they made the best of a bad situation. They will go through all sorts of ingenious gyrations in order to do this work of preserving their self-concept.

The second thought is about medical school. There is a nasty little problem about medical education that physicians don't talk about. Maybe the scientists, that small subset of physicians who become scientists, who, in a sense, rebel against the clinical culture by going to the lab, may be least affected by this and perhaps more able to do something about it. What is deeply embedded in the culture of clinical medical education is an unspoken principle of obedience to authority.

One psychoanalyst writing about this and actually defending it called it super ego learning as opposed to ego learning. You learn by doing what people in authority do—following what they do, accepting their way under threat of what can happen to your career if, in the clinical crunch, you do things differently. Citing journal articles and arguing over the evidence plays less of a role at 3:00 a.m. during the third or fourth year of medical school or your internship, than complying with authority. You get good evaluations in your third year of medical school if you don't rock the boat—if you go along and get along. If you are somebody who challenges a journal article when the attending physician wants to do something different, you take a huge risk of an evaluation that will kill your chance to get that tony residency. At the end, there are a bunch of folks selected out who are going to be somewhat more inclined to comply, whether it is with the dictates of managed care organizations or the dictates of the military, depending on what country they are in and what circumstances they are in.

Comment – Yesterday I asked a question, and I was not understood. The case of North America is completely different from the Latin American cases in one aspect, which is the communication

between the torturer and the victim. In this case, you need a translator. You don't have the complete picture if you don't understand the role of the translator. Who is the translator? You don't use psychologists or psychiatrists to beat somebody. You use them to make a personal contact, a productive contact in terms of information. It is built on a human contact, on human psychological and cultural contact. Who did this? Are interpreters involved? Were there social scientists there? Were there simply local persons who were contracted for the job? Are there not cultural and social scientists involved in the process?

Bloche – I think you make a good point, and I was amazed in Uruguay. Montevideo is such a small city, about 1.4 million people. I would lots of times hear stories about torture victims knowing their torturers from before the time of the military regime. Certainly, there was no language gap or cultural gap there. That is a big difference from Abu Ghraib, where the military intelligence people don't even speak the same language. As Jonathan Marks mentioned yesterday, the United States had such a shortage of Arabic-speaking military personnel that they hired an outside firm to supply Arabic speakers. Since there are just not a lot of Americans who are learning Arabic on their own in secondary school, the average speakers available tended to be people who had emigrated from Arab countries. They tend to not be Iraqi but from other Arab countries—Egypt, or Palestine, or some other country. There are all sorts of cultural issues there. How is an Egyptian going to translate for an Iraqi, for example cultural issues that neither we—certainly not me—nor, I'm sure, those military intelligence folks are going to be tuned into? You raise important issues, and I think that to the extent the translation wall is a psychological wall, it just makes it easier to dehumanize the person who is being interviewed. It makes it easier for everybody in the community, including the doctors.

We did a piece for the *New York Times* several months ago (unrelated to the *New England Journal* piece in the packet for this conference) on a doctor who was unable to interview a psychotic patient. There were no translators around. They just figured the patient was psychotic, and, in the end, the doctor actually authorized use of a leash as a means of controlling this patient. This was amidst the medics (the minimally trained military personnel who provide first aid) joking about it. There is a culture of humor about the use of leashes. They referred to this particular individual by an expletive that I won't refer to here. The language issue was huge in making this dehumanization possible.

Wolfendale – Two quick comments. I'm appalled that, in Britain, no ethics is taught to science students whatsoever. But there is an effort being made in medicine in Cambridge, along the lines that you suggested, to get it in the back door. When you talk about controlled trials with drugs or whatever, you can get in an ethical element that raises students' consciousness and makes them aware of ethical issues.

The second thing I wanted to say is that, in physics, a number of groups are beginning to require students to take an oath when they graduate that they won't use their knowledge to the detriment of humankind. I'm not wholly in the favor of oaths because I think it puts students in a very difficult situation. But a statement of intent might be very important in raising consciousness and helping students to be aware of ethical issues.

Comment – I'd like to make a comment that has to do with new kinds of torture, such as sleep deprivation and forced positions that have to be held for hours or days. I think there is a problem with the public, who do not have the imagination to realize what these methods will do and that they are just as painful as the old and blunt ones. I wonder if the same might actually be true relative to doctors and the people who are tortured. The doctors may not realize that they are not doing "torture lite," they are just doing torture refined.

Bloche – That is relevant to the memos that we talked about and that Nigel Rodley talked about yesterday. There is an infamous memo by Judge Beebe that defines torture in a fashion that makes the practices that you're speaking of fall south of the line and count as not torture. Then there is the culture that reinforces that. The people doing it don't think of it as "torture lite," they think of it as "not torture." They think of it as humane treatment. Remember the quote from George Bush himself in that directive that Jonathan mentioned—"this is humane treatment." And everybody recalls the memo from Colonel Pappas to Sanchez—I think of it as the "request permission to throw chairs, sir, memo," and the references to something like humane treatment. We may throw chairs, but we will try to miss, and we will do this humanely. The people doing it don't think of it as torture.

Barriers to the Universality of Science, Including Boycotts Discussion leaders: Yuan T. Lee and Michael Clegg

Yuan T. Lee, President, Academia Sinica, Taiwan – Good afternoon. I'm Y.T. Lee. He is Michael Clegg [Foreign Secretary, U.S. National Academy of Sciences]. Since he is speaking about the boycott, I will speak first.

When I was a student at Berkeley, when George Pimentel came to give us an afternoon seminar, he always said, if you guys don't fall asleep, there is something wrong. You must not have been working very hard the previous night. So, it's okay if you fall asleep.

We are talking about barriers to the universality of science. When we talk about the universality of science, very often scientists will say that the law of nature discovered by someone, somewhere, will be universally applicable anywhere. For example, the Photoelectric Effect, discovered by Einstein 100 years ago. But, unfortunately, universality of science really doesn't mean that.

Six months ago the International Council for Science (ICSU) revised the wording on the Statute No. 5, the Universality of Science. Before we go into the barriers, I will read it very quickly:

The principle of the Universality of Science is fundamental to scientific progress. This principle embodies freedom of movement, association, expression, and communication for scientists as well as equitable access to data, information, and research materials. In pursuing its objectives in respect of the rights and responsibility of scientists, the International Council for Science (ICSU) actively upholds this principle, and, in so doing, opposes any discrimination on the basis of such factors as ethnic origin, religion, citizenship, language, political stance, gender, sex or age. ICSU shall not accept disruption of its own activities by statements or actions that intentionally or otherwise prevent application of this principle.

That is the revised wording given by ICSU six months ago, in November 2004.

Four months later, ICSU also made a statement called Universality of Science in a Changing World. In addition to the importance of the universality of science, it mentioned threats to universality because of the freedom of association and freedom of pursuit in science. When you read it, you will realize that it is really paying more attention to the practices of science itself and the right of scientists. Toward the end, the paper talks about "strengthening science for the benefit of society."

If you look at the document prepared by ICSU a bit earlier, in July 2004, it talks about the rights and responsibilities of science in society. In section 2.1.1. it discusses equity access and challenges to universality, and many other issues are raised. Among the issues are the distribution of scientific resources and information. Then there are intellectual property rights and how they are influencing the sharing of knowledge and technology, as well as new security issues. The growth of research in the private sector raises questions about the ethics of

conducting and communicating science and industry, as well as rights and responsibilities and the protection of whistleblowers who call attention to inappropriate practices. It also mentions ethical concerns.

With all these developments in the last couple of months, ICSU wanted more attention to strengthening science for the benefit of society. I think that is a good thing. Universality is not just for the activities of scientists but scientists have to pay more attention to society. I now turn the podium over to Mike.

Clegg – This has been a wonderful meeting for me. I've taken away a number of things from it. It has been extremely stimulating, especially in many ways the last topic, which I found very disturbing, but also important to think about.

One of the things that it helped me reflect on is that we are hugely privileged to work in science, and society supports us to do basically what interests us. As long as we do it to a reasonable level, we have generous support and are able to pursue the things that fascinate us. Along the way, if we are fortunate, that may also make some contribution to society in return. We are very privileged, and that is probably nowhere more true than in the United States, where the scientific community is well supported and the profession of science is a very rewarding one, materially as well as psychologically and spiritually.

But along with that go responsibilities and obligations. That was one of the things that impressed me so much about the talks we heard during the symposium—pointing out that these privileges are not free ones and that we have to return to the society that supports us as much as we are capable of individually.

One of the most important things we have to return is sharing the knowledge that we create. Humans are unique in that they can create knowledge and transmit it to successive generations. All other organisms lack that capability, or substantially lack it. There may be some very small level of transmitted knowledge in primate societies, but, by and large, they lack that capability. The thing that has made us so powerful, and so threatening to the well-being of the world as well, is this capability of creating knowledge, accumulating it, and then transmitting it to our children and to posterity. This makes it especially critical that we respect the free dissemination of scientific knowledge and be devoted to that goal. This leads me to the issue of boycotts.

My academy is strongly opposed to boycotts, and the Council, which is the governing board of the U.S. National Academy of Sciences, met just about three weeks ago. It considered, once again, this question of a call for boycotts against, in this case, two Israeli universities. They issued a statement that I'll read in part to you:

The Council of the National Academy of Sciences has always been opposed to academic boycotts and we continue to call on the members of the world scientific community to support freedom in the conduct of science and cooperative scientific exchange, as outlined in our August 2002 statement, . . . the critical importance of continuing international collaboration in science, the Council firmly believes that scientists provide a voice for rationality and moderation in political

affairs, and that they can and should work to build strong bridges of understanding between cultures.

I think that very well states the ethical framework that we try to operate under. It is disturbing and challenging to reflect on the complexities of my own culture and our role in the evil in the world.

I was thinking of the Chilean coup, which was, in part, facilitated by the government of the United States in the early 1970s, as well as other events before that. In 1954, our Central Intelligence Agency (CIA) played a role in the overthrow of a democratically elected government in Guatemala, and it has taken Guatemala 50 years to come back to some semblance of stability. We live in a very complicated world, and the scientific community can play a very special ethical role in that world. We try to do that to the extent that we are capable.

Another aspect of an open scientific community is the visa issue, which has been troubling for us in the U.S. National Academy of Sciences. We have tried to find various ways to facilitate the travel of scientists and students to the United States. We have not succeeded to the level we would like to, although we have had some successes, and we work hard to provide information to all people who seek to travel to the United States for scientific conferences or to study. But these are continuing challenges, and we are engaged in a battle for this balance between legitimate needs of national security—or what are seen as legitimate needs for national security—and the very important value of freedom of association. We haven't gotten it right yet in our country, but we are trying to be a force to get it right and to get that balance where it ought to be, so that there is a more open opportunity for people to travel, to communicate, and to work together.

Ironically, getting the balance right is important both because it helps science, but it also harms the United States economically to have that balance wrong. It harms us economically. We depend hugely on foreign scientists. I once read that over 25 percent of the members of our National Academy of Sciences were not born in the United States. We have relied enormously on the talents of people from around the world, to achieve the successes and to enjoy the good life and the material well-being that we enjoy in our country.

That also reminds me once again that this is truly a global community that we are a part of. One of the fun things about having the job that I've had for the last three years is to work with and meet scientists from throughout the world and to realize that we really do belong to a very common culture, and that working together on a global basis we can be effective in a number of ways.

I want to close by saying that the work of this Network is extremely important, and I hope that you will do everything you can to continue to perpetuate that work into the future.

Wiesel – I was wondering if the phrase "universality" scares you a little bit. It seems unapproachable for a practical person.

Comment – Could you say something about the extent to which you think scientists can really influence government, and how best that is done?

Lee – I think it depends. As president of the academy in Taiwan, which falls under the office of the President, I can access the president [of the country] at any time. If I want to persuade him to do certain things, such as discuss an increase in funding, for example, I can do that. I am also chief scientist for the Prime Minister, so I do have a group of people [working with me] to advise the Prime Minister. In that sense, in Taiwan, scientists are very powerful

Clegg – I guess I would say our record is mixed, but we have much more influence by being organized effectively, by creating strong institutions of science, than we would have otherwise. Our academy has a fairly good history of influencing decisions at the point at which science intersects public policy. We don't always succeed, but sometimes we do in the long term. We may do an in-depth study of a major issue that lies quiescent for a decade or more before, suddenly, the time is right, and it is picked up. In cases like the Alaska pipeline, economic forces and political interests are so powerful that they are determined not to hear the voice of science. One of the confusing things during our last presidential election was that, at one point during the election campaign, our president said that climate change was real because the National Academy of Sciences said so. That was a pretty remarkable admission for him.

There is recognition, particularly in the United States, that a substantial portion of our wealth and success traces directly to science and technology. For example, everybody expects to have better health care, which is rooted in science. In some sense, the science community has been vital to the success of the country. So they do listen—not always—but they tend to listen. For us to be effective, we have to create the institutions and organize them in ways that amplify their voice in public policy—and that has happened. It has evolved for us over 150 years; it wasn't really done by design. Our academy was started, unlike almost all other academies, with a service mission, which was to advise government. It was created not only as an academy, but also as a think-tank. That role has amplified over the years and become more and more influential. I think the record is a pretty good one.

Clegg – [in response to inaudible comment] As I said, the record is mixed. We don't have a perfect record. We don't have absolute control. It is a pluralistic society in which we are only one voice among many. But we feel we have been successful enough, that it is a model worth studying. One of the big aims of the global science community, as reflected in the Inter-Academy Panel, is to try and help other academies acquire the tools and capabilities to be more effective in influencing the policies of their government that have a science and technology component. We think that is a worthy aim.

Wolfendale – Could you enlarge on what you mean by creating institutions? Do you mean ad hoc for each program?

Clegg – I don't mean ad hoc. What I do mean are institutions—and I hope our academy is an example—that are strong and well embedded in the society, so that their voice not only is heard, but also provides support for the scientific community. There are two big themes that we focus on: one is what we call science for policy, and these kinds of issues that relate to global climate

change or medical errors or endangered species management. There is a huge array of them. The other is policy for science. What should our government and our society be doing to be sure it has a healthy scientific enterprise and how do we do that?

Wolfendale – I suppose in a sense the most important scientist in the world is the scientific adviser to your president, whether you like it or not. My question is Will he get the output of our Network? For example, that document that we agreed on this morning, short and sharp, is the sort of thing that would be useful for him to actually see from us, rather than through a biased and circuitous route.

Agre – I don't have a good answer, but the sad truth is that the presidential science advisor is a fairly new institution. Jerome B. Wiesner was the first one, with President Kennedy in 1961. Science adviser to the president has been downgraded: the office is now three blocks away, and the group is staffed. He may get the mail, but I'm not sure he will be able to convey that to the higher office that makes decisions. So I think we are in a difficult time.

I'd like to ask Mike a question: Is the delay you describe frustrating? An outstanding committee deliberates and evaluates all the information on a scientific topic and the government doesn't act on it for 10 years. Is there something that can be done?

Clegg – That is not always the case. In some cases, there is pretty quick action, and in some cases, there is never any. What can we do? We have to move the public. It is the people to whom the government responds in one way or another, so that means we have to be able to communicate the values and importance of science, health, and engineering, to the communities in each of our countries, so that the public stands behind science as an investment that they value. If that is the case, then the politicians will be moved. We try to do that, although we have limited resources as a private organization. We don't have a pipeline into the government's tax revenues or anything, but we try to do that by reaching the press effectively. We are very careful about seeing that high-profile reports that address important, often controversial issues are presented to the press in a way that it can assimilate them and, in turn, present them to the public. We do make every effort to do that, although more could be done.

Comment – I have two questions. First, you have spoken of the natural sciences and engineering. What about the social sciences? Second, your reports—are they part of your mission, or are they your own initiative?

Clegg – They are both. Taking the second question first, a little more than 80 percent of the reports are issued in book format. They are quite detailed, and often either the Congress or an agency of government, or sometimes the executive branch will make a request for us to look at a specific question. Let me describe one that came up in an interesting way, because it had political overtones.

Shortly after the election in 2000, the new government decided to relax the standards for arsenic in drinking water. Arsenic in drinking water is a problem in many communities around the country and in many other countries as well. They decided this policy change on political grounds and didn't even bother to consult with their newly appointed head of the Environmental

Protection Agency (EPA), the former governor of New Jersey, Christine Todd Whitman. When they released these relaxed standards, it created a small political furor and also embarrassed the new director of the EPA. She came to us and requested a fast-track study on the medical and health evidence related to levels of arsenic in drinking water. What could we say? We did a study, looked at all the evidence that was available, were very careful to be sure that everything was evidence-based, not opinion based—the evidence has to be cited in the report in a way that shows how well founded the conclusions and recommendations are. The report found that the preexisting standards were, if anything, a little too lax, and certainly the new standards were much too lax. That caused a rolling back of the policy almost immediately. It is interesting that the study was commissioned by an agency of the federal government, the same government that relaxed the standards in the first place.

A certain number of studies we do with our own money. Over the years, the academy has managed to accumulate an endowment. It is not a huge endowment by the standards of major private universities in America. It is a very small endowment, but it is an endowment that we can use on our own to address issues that we think are so crucial that we can't wait for the public or the government to come and ask us.

There are several examples every year of high-profile studies that are self-financed. One I can cite was done shortly after the 9/11 event. The academy took \$1.3 million of its own money to do a very complicated study on homeland security issues in the United States, because it was quite clear that fast-track legislation was going forward to create a new department of government, and there was a huge amount that science could say about what the real threats were and how they might be intelligently managed. It was unlikely that, without our advice or the advice of some other science and technology organization, they were going to get it right. There were a lot of vulnerabilities the government had never even thought about—chemical plants, for example, and how to manage containers coming into the country. There was a huge range of issues that had to be thought through. That is why it cost \$1.3 million to do the study. That study turned out to be very influential in the way in which the organization of this new agency of government was approached. We felt that it was a service to the country to ask that question, even though we had to pay for it.

Ali – Can I make a comment about this issue of increasing the public education of science and this universality of science issue? I think it is true that there are leaders of science who can act, as was said yesterday [audio problem] leaders of science who can act as head of the state, like . . . said in the case of Korea. Things change. The same thing happens . . . in India. You know the famous seven o'clock race . . . story how that was the beginning of Indian science and technology, immediately after the British So, the . . . man will definitely do what he says because he is a man of action. But, then he will cut out the technology . . . so, . . . bureaucrats . . . 10 percent of people should have brought from outside for the sake of political control . . . immediately knew where to begin that since we still have doubts about our capability to produce that quality . . . 10 percent of our people should give

So, every state has to be of course convinced, but, more than that, I think if the public position of science [audio problem] that is the . . . science should be that now we are living in an information age . . . and I personally am always recommending that every nation have a

knowledge network like they have in Vancouver, in Alberta . . . For example, in Bangladesh, child mortality rate has been drastically reduced. How? They showed on the media that if you give the six shots, then the child is immune from these diseases. Irrespective of the fact that the mother has a school education or not, everybody takes the children in the rural clinics, and the child mortality has decreased a lot. So, once in a while, how we are today and why we came to the state in which we are now, 150 years ago there was no electricity, 125 years ago there was no radio, and 30 years ago there was no So, how do we come here?

I think this development should be conveyed to the members of the public as to how much science can do for the betterment of life, so we are using these unfortunate . . . in all countries – all these challenges and information [audio problem] but they are using more for entertainment and other things, apart from increasing and promoting the cause of science. So, I think the importance of the media is a very important tool for increasing the public position of science.

Lee – I want to make two comments. We are facing enormous problems as we enter the 21st century. Some of the problems are scientific, and although current scientific knowledge or technology cannot solve them, if we keep on acquiring new scientific knowledge and developing new technologies, then we can solve many of the problems we are facing. That is part of the reason we keep on saying that science can do wonders.

If we look from a different angle, if I were to look at the development of human society and we follow the trajectories, then we will find that at the present time we have enormous problems. The problems come about because the earth used to be an infinity—without too many people, and human activity was quite limited. But, as we enter the 21st century, there are six billion people, and every human being is consuming about one ton of fossil fuel, an enormous consumption. Suddenly, we realize that the earth is finite. When I say "we" realize, some of us realize; especially those who lived in the United States and have come back to Southeast Asia and see the trajectory from infinity to finite earth as a cross-point that we are already exceeding. So, I would say that the way human society is developing, in the future we are going to face enormous difficulty, but somehow we are not awakened yet. If you see recent developments, with China becoming a military center, she will buy all of the natural recourses that she can buy, from copper . . . and all over the world, is not sustainable. Whether we talk about universality or not, within the next 10-20 years, we are going to face an energy crisis that will come about because of the debt between the supply and the demand for petroleum. When the energy crisis comes, the world will not be peaceful anymore. Very often we glorify what science can do, but when we look at the trajectory of human society, we have to worry.

In the universality of science, we talk about ethnic origin, religion, citizenship, language, political stance, and so forth. Unless the entire world operates as one community—last year at the APEC (Asian Pacific Economic Community) meeting in Chile, the slogan used was "One Community, Our Future"—unless we learn to work together and the science keeps on developing, then we will continue to see high-tech economic competition that is nation-based. There will be winners and losers. To my American scientist friends, (I used to be American), it is really important to take on the carbon dioxide problem and to become energy-sufficient with renewable energy. This is the challenge that I always give to my friends. In 1989 I served as a

secretary of energy advisory board member and came up with a national energy strategy and worked on the energy-sufficient program. The book is still there, although it has been delayed for so long.

Wiesel – At the same time that scientists are aware of the energy crisis, the investment made by the government in support, for example, in physics, has declined. The National Science Foundation (NSF), which is the main funding agency in the United States for fields outside biomedicine, had a decline in their budget last year. The center of work on fusion has moved away from the United States. Europe and Japan are now the strongest. Russia used to be, but, with the collapse of the Soviet Union, this has disappeared. This is where we have to hope that you, [Yuan T. Lee] with your expertise in chemistry, and Claude Cohen-Tannoudji, as a physicist, can make the difference.

The National Institutes of Health (NIH) budget in the United States is \$29 billion for biomedical research. NSF support for all other sciences is at about \$5 billion. It is a tragedy for science that more resources are not allocated to basic science. Universality of science is a good thing, but one has to address these real problems more openly. So many reports are written and put on shelves, and nothing happens.

Armand Lucus, Royal Academy of Belgium – I come from one of those failing or about to fail countries. All nations are destined to fail. If there is only one thing in history that we can remember, it is that not only nations fail and states fail, but also empires fail if you wait long enough. Belgium has been going along since 1830, and it hasn't failed completely yet, but it has had some difficulty. For the moment the United States is dominating the world economically and culturally and militarily, but that may not last for more than 50 more years. Since we are universal-oriented intellectuals, we should realize this and certainly not be arrogant with respect to the rest of the society.

You just mentioned a number—\$25 billion for biomedical research for NIH in the United States. In Europe, research spending is not more than 2-3 percent of the gross national budget. Agriculture spends 25 percent of the budget. The military may spend 50 percent. Education is 50 percent. It is really nice to be conscious that we are doing a universal business, but, let's face it, the public is not convinced of that. The public is not aware of the very important role that we think we play in society. In fact, it may even be the reverse. The public suspects us of being the source of all the problems. As Professor Lee mentioned, we are at the same time creating problems by developing technology, and the problems are now universal and fantastically difficult.

As it has been said several times here, the media are probably the best tool to attempt to use, as people having some credit, since we pertain to academies. In Belgium, the relationship between the academies and the media is severed more or less. Why? Because most of us are more than 65 years old, we have nothing to say anymore, and we don't even advise the government. You are lucky in the United States that the academy is consulted sometimes. In my country, the academies are just a bunch of retired people.

Let's be not too arrogant and try to improve our public image. Maybe then, because the public is the voters, our budget will be increased and we can exercise our responsibility better.

Wiesel – I think this is a good point. The reason the NIH budget is so large is not because of the administration, but because of Congress. They have pushed very hard, and they increase the president's budget allocation for NIH every time. You are absolutely right: if you want change, you have to operate through your elected officials. They should speak for you and for the people. In the United States, many of the scientific societies send scientists to talk to the members of Congress and the staff working for them, to educate them about the importance of science. This is legwork that you need to do in your own countries if you are really going to influence policies in science.

Clegg – There may be some other things that ought to be said about this funding issue. In the United States, about 65 percent of research dollar is actually spent in the private sector. Only about 35 percent is spent in the public sector. If you look at the total fraction of domestic product that is spent on research, it is about 2.7 percent, and that includes both the public and private sectors. That places us somewhere down around 6th. Sweden spends about 3.7 percent of domestic product on research, so our level of investment is not necessarily as high as it could be, or as high a fraction of domestic product as it once was in the United States. It was higher back in the 1960s as a fraction of the gross domestic product than it is today. We're doing okay, but we could do a lot better. We all agree that the pressing issues that the science community ought to be concerned about on a global level are how to accommodate another 3 billion people, how to deal with emergent diseases, and how to deal with global water resources. There is a long list of very pressing issues that we can see coming down the pike. They are all driven by demographics, so in the short term we know they are going to confront us as societies.

Casselton – We had a meeting at the House of Lords to which we invited experts on such diseases as HIV and malaria to present these issues to government. Unless we have the press on our side, the public is frightened, and the press can manipulate the public. In this country, we tried so hard to sell genetic modifications, but the press had already destroyed the case before it ever came up for public debate. By the time it came up for public debate, the people had lost interest. I think it is very important that we are in a position to present to governments and give informed opinion.

Wiesel – These are all obviously pressing issues, as is the failure of us as scientists to communicate. I think that what has happened with genetically modified foods in Europe is very interesting. It didn't happen, for the most part, in Asia or the United States. That shows the kind of erratic behavior that can occur. We fail all the time because we don't pay enough attention to informing the public.

Before moving on to the next topic I would like to thank our two discussion leaders. Also, we've already thanked Ruth Cooper here at the Royal Society, and I would also like to mention Jane Lyddon, from the British Academy, who has played a tremendous role in the organization of this meeting and showed uncommon kindness and generosity in making it possible not only for us to hold a reception at the British Academy but also agreeing to host an

IPSO meeting there, following this meeting. I know from Carol that you have been invaluable in making all this possible. So, we want to give you a token of our appreciation.

Status and Future of the Israeli-Palestinian Science Organization (IPSO) Discussion leader: Harald Reuter

Harald Reuter, Council of the Swiss Scientific Academies – I can make this brief because I believe most of you, if not all of you, are aware that an organization, IPSO, the Israeli-Palestinian Science Organization, does now exist. The main players and the originators of IPSO are all here.

The first idea of IPSO, as far as I'm aware, actually came up at a UNESCO meeting in Paris in the fall of 2002, in which Menahem Yaari, Sari Nusseibeh, Torsten Wiesel, and, of course, Carol Corillon, came together and discussed the possibility of setting up a science organization between Israelis and Palestinians.

The next step was in the last meeting of our Network in Ascona, Switzerland. Menahem and Sari were invited to present the idea of this organization, and they did it very forcefully. There were, of course, discussions. There was even skepticism with respect to the question of political impact. I think they handled the situation very well. The outcome was that the Network, our Network here, supported the idea of IPSO unanimously. From then on, they went ahead. When I say "they," I mean Menahem and Sari and two other people who were instrumental, Dan Bitan and Hasan Dweik. Dan Bitan is one of the directors of IPSO on the Israeli side, and Hasan Dweik is the director on the Palestinian side.

Right from the beginning, the idea of IPSO was that the business was handled equally on both sides. Of course, there needs to be very close cooperation. The cooperation started between Menahem and Sari, on the basis of friendship. This apparently carried over to Dan and Hasan, because the way they are now directing IPSO as an organization is really quite admirable.

After the meeting in Ascona, there were approximately 25 or 26 academies in our Network who endorsed IPSO strongly.

Endorsement is a very questionable thing, because it is very easy to write down a name and say yes, morally we support this wholeheartedly, but we don't know what to do further on. The main impact of the ideas of IPSO needs more than moral endorsements.

What is the idea? I will read it as it was actually worded in the initial statement:

The Israeli-Palestinian Science Organization will rekindle, foster and fund scientific cooperation and scholarly endeavors between Israelis and Palestinians. This bi-national, non-profit and non-political organization, to be located in the city of Jerusalem, will support cooperation in high quality research, in science and learning between Israeli and Palestinian scientists and scholars, working together typically in institutions of higher learning.

I think that sets the borders of what IPSO is supposed to do and what they want to do. Two issues: scientific cooperation and learning.

How can this be done in such a troubled region? It can only be done from the bottom up. I'm a very strong believer, just like Torsten, in bottom-up approaches. It is a very lucky situation because there are two people, now four people, who are strongly in favor of this sort of cooperation between Israelis and Palestinians.

There have been two meetings of the International Scientific Council (ISC) of IPSO so far. The council is supposed to oversee IPSO's progress in the short and the long run. The ISC, at the moment, consists of 13 people from various parts of the world, seven of whom are Nobel laureates. We have met so far twice, once in Washington a year ago, when the goal of IPSO was again discussed extensively and measures were being taken to constitute the organization. It is certainly a great achievement, mainly by Dan Bitan, that IPSO is now registered in Belgium as a legal organization. It is a lot easier to convince governments that this is something real and to try to raise money when it is written down legally. Such an endeavor requires not only moral support but also money.

What we did in Switzerland—and that is the second part of my report—is that three people set up an organization to support IPSO: Swiss Friends of IPSO. One is a lawyer and businessman, Dr. Rolf Bloche. He was also the chairman of the Jewish community in Switzerland. The other two are Peter Shindler, who was here earlier, who is a physicist, and myself. We set up statutes for our goal to support IPSO morally and financially. The moral support is very easy. We have to go to various people and tell them what a good organization it is. We tell them and they say yes, we wholeheartedly support this. The hard thing is to convince them to give money.

Since IPSO is an academic institution, we decided to ask the academic community whether they would be willing to support it. There was great enthusiasm among individuals to provide financial support for IPSO. We ask the faculties of the universities to spread the word by means of a leaflet in which the IPSO organization is explained, and people are invited to join the Swiss Friends of IPSO by contributing 200 Swiss francs a year. That is basic, because we need the support of the academic community.

From this point, we can go on to ask the government to provide money. This negotiation has just started. We had a negotiation with representatives from the Ministry of Foreign Affairs and Internal Affairs. They are quite willing to help, although it is not quite clear yet in what way and at what level.

The third party that we address in Switzerland is, of course, industry, and we have started doing this. So far, it is still very much at the beginning. We have made some progress in this beginning year. We have accumulated some money and hopefully will continue to do that for the next few years. Money is essential to the support of 30 projects a year, which is the goal of IPSO. We will see how well we can succeed.

I can only encourage other academies in the Network to do similar things and try to raise money from their own environments in order to support this very important organization in a troubled area.

Corillon – The list of all 63 proposals received from Israelis and Palestinians who want to do joint scientific research studies are in your agenda books. So far, 25 academies have endorsed IPSO. Some have given money; for example, the U.S. National Academy of Sciences has given \$20,000, the academy in the Netherlands has given \$10,000 and the Academy of Athens has given \$1,000. If your academy has not yet endorsed this organization, we ask that you consider doing so.

Wiesel – We must keep in mind that each grant is estimated to be about \$75,000 per year, and they are for three years. To give a grant, we must be able to fund the entire duration. We are discussing an annual budget of around \$2 to \$3 million to run the program. There is a great sense of urgency here because those who apply for the grants want to be funded if they successfully pass review by the International Scientific Council.

Johannes Eckert, German Academy of Natural Sciences-Leopoldina, Germany – The human rights committee of the German academy of sciences has also considering establishing a small supporting committee but then we made some inquiries and discovered that the German Science Foundation is supporting research programs in Israel since 1995—about 27 projects. The German Federal Ministry of Education and Research has special programs for cooperation between Israel, Palestine, and Jordan. [audio problem] We therefore came to the conclusion that it makes no sense to establish a small group of a few people but, rather, it is better to refer projects to the large science foundations in Germany. We would be happy as a human rights committee to help make the links and to lend our support.

Dan Bitan, Israel [Co-Director, IPSO] – In doing our fundraising for research proposals we have found that it is best if the various academies contact high level officials in their governments and we in Palestine and Israel also contact the embassies or local delegates to get their reaction and guidance. This approach could work in Norway because we've begun to work in this way, and in France it begins to work too, because a letter from the President of the French Academy went to President Chirac and he replied and referred it to the French Prime Minister. There was a contact with the Foreign Minister, and we worked with the French embassy in Tel Aviv. Sometimes we must mount a siege to get the funds that may be available in the different countries.

Reuter – For example, the Swiss Minister of Internal Affairs will go to Israel in September. He will be informed about IPSO and its goals. I'm sure, Menahem, that he will also be in contact with you at that time. It is at that level at which people could get together; at a relatively high or a very high level, and from there it could spread down. It is a useful approach, at least in our relatively small country.

Corillon – We are creating a Friends of IPSO organization in the United States. We have five members from the U.S. National Academies who are serving on the board; they are well connected and are helping also with fundraising, approaching both foundations and individuals.

Our academy's council put up \$20,000 for staff support and to have the first meeting of IPSO. It is allowing me to volunteer time through the academies to help IPSO when it needs assistance. They have now, through the Bronfman Philanthropies, hired Janet Lowenthal, who I seated in the back, and is now actively helping to raise funds in the United States for IPSO.

Wiesel – Thank you all for coming here, for spending two and a half days listening to the discussion, participating, and making very fine comments. I think the value of these meetings is that we can become friends and look each other in the eye and exchange our views. I am concerned that, because of financial problems, it is possible this could be our last meeting, but the Network will still survive. As the representative from Morocco left, he said he would welcome a letter from us on the possibility of having a meeting in Morocco. But we will need some kind of miracle for us to continue having these meetings.

Remember that the Network is primarily a Network, and Carol is sitting in the center of this web. We will continue to update you on cases. Please look at our website, both the public and private ones. At your own academy, you should talk to the persons who are in charge of the website to post information about the Network there. You will receive, through email, the report that we discussed, with some agony, this morning. I think there was general agreement on the final wording. And there is also the excellent report that Arjuna made as a record of this meeting.

Of course, these reports are very brief. To make a full report of this meeting, everything has been taped. Anyone who has organized a meeting knows the amount of effort and time and money that needs to be spent to transcribe tapes from meetings and put them into order.

Some have said it would be nice to have Sari Nusseibeh's speech, which you all enjoyed very much and was one of the high points of this meeting. If there are other things that you would like to have, let us know and we can see if it is possible to get a tape of this event and then maybe make it available, in some form, to you.

I would like to conclude by thanking the person who has been instrumental, much more than anyone else, in making this meeting possible. You can't imagine the amount of effort and work, the number of hours, weekends, and overtime that she has spent in making this all possible. We want to show Carol that all of her efforts have been worth it so we should all show our appreciation by standing up and giving her our applause.

Thank you, this 7th Biennial Meeting of the Network is now adjourned.

APPENDIX A

SPEAKERS' BIOGRAPHIES

Dr. Peter Agre, United States

Peter Agre is a professor in the Department of Biological Chemistry at Johns Hopkins University's School of Medicine. He is a member of the U.S. National Academy of Sciences and chair of the Committee on Human Rights of the U.S. National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. He received his M.D. from Johns Hopkins University. In 2003 Dr. Agre and Dr. Roderick MacKinnon were awarded the Nobel Prize in Chemistry "for discoveries concerning channels in cell membranes." In June 2005 Dr. Agre will become vice chancellor for science and technology at Duke University in North Carolina.

Dr. Arjuna Aluwihare, Sri Lanka

Arjuna Aluwihare is professor of surgery at the University of Peradeniya in Sri Lanka. He was vice chancellor of the University from 1988 to 1989 and then chairman of the University Grants Commission of Sri Lanka from 1989 to 1993. He is president-elect of Sri Lanka's National Academy of Sciences. Arjuna Aluwihare has been a member of the Human Rights Commission of Sri Lanka since 1997.

Professor Upendra Baxi, India

Upendra Baxi is a native of India and currently a professor of law at the University of Warwick in the United Kingdom. He is the president of the Indian Society of International Law and former vice chancellor of Delhi University. Professor Baxi received a Master of Laws degree from the University of Bombay and a Ph.D. in law from the University of California at Berkeley. He has contributed substantially to public interest litigation in the Indian Supreme Court, in particular by increasing access to the judicial process by disadvantaged groups in India. Professor Baxi has also been a leader in taking legal action and promoting law reform on the issue of violence against women.

Dr. M. Gregg Bloche, United States

Gregg Bloche is professor of law at Georgetown University in Washington, D.C. and co-director of the Georgetown-Johns Hopkins Universities' Joint Program in Law and Public Health. Dr. Bloche is a member of the Committee on Scientific Freedom and Responsibility of the American Association for the Advancement of Science. He has been a consultant to South Africa's Truth and Reconciliation Commission, the National Institutes of Health, the World Health Organization, and other public and private bodies. Dr. Bloche received his M.D. and J.D. from Yale University. He completed his residency in psychiatry at the Columbia Presbyterian Medical Center.

Professor Claude Cohen-Tannoudji, France

Claude Cohen-Tannoudji is a research scientist in the Department of Physics at the Ecole Normale Supérieure in Paris. In 1973 he became professor and chairman of the nuclear and molecular physics department of the Collège de France. He is a member of the French Academy of Sciences and secretary general of its Comité de Défense des Hommes de Sciences. In 1997 Claude Cohen-Tannoudji, Steven Chu, and William D. Phillips were awarded the Nobel Prize for Physics "for their development of techniques that use laser light to cool atoms to extremely low temperatures."

Lord Dahrendorf, United Kingdom

Ralf Dahrendorf, a philosopher and sociologist, is a member of the House of Lords of the British Parliament. Originally from Germany, Lord Dahrendorf became a British citizen in 1991. In the early 1970s he was German State Secretary of Foreign Affairs. Later he was director of the London School of Economics and warden of St. Antony's College at Oxford University. Lord Dahrendorf received a Ph.D. in philosophy from the University of Hamburg and a second doctorate in sociology from the London School of Economics. He has received 26 honorary doctorates and has been decorated by seven countries. Lord Dahrendorf is a member of the British Academy and a foreign member of the U.S. National Academy of Sciences, the American Philosophical Society, the Royal Irish Academy, the Russian Academy of Sciences, and the Polish Academy of Sciences.

Professor Dame Julia Higgins, United Kingdom

Dame Julia Higgins is foreign secretary and vice president of The Royal Society in London. She is a professor of polymer science at the Imperial College London and director of its recently formed Graduate School of Engineering and Physical Sciences. Professor Dame Julia Higgins is also chair of the Engineering and Physical Sciences Research Council and a member and former chair of the Steering Committee of the Athena Project. She is a fellow of the Institute of Physics, the Royal Academy of Engineering, the Royal Society of Chemistry, and a foreign associate of the U.S. National Academy of Engineering. She received a doctorate in physical chemistry from the University of Oxford.

Professor Jonathan H. Marks, United Kingdom

Jonathan Marks is a barrister in Matrix Chambers, London. He is currently Greenwall Fellow in Bioethics at Georgetown and John Hopkins Universities. He formerly taught at Worcester College, Oxford and King's College London, and in Australia. In recent years Professor Marks developed a course on terrorism and the law, which he has taught in Europe and in the United States, including at Princeton University and the University of North Carolina at Chapel Hill.

Professor Sari Nusseibeh, Palestinian Authority

Sari Nusseibeh has been president of Al-Quds University in East Jerusalem since 1995. Previously, from 1978 to 1994, he was professor of philosophy at Bir Zeit University on the West Bank. He is the founder and head of the Palestinian Consultancy Group, which conducts research projects on Palestinian infrastructure management. Professor Nusseibeh formerly served as the Minister of Jerusalem Affairs for the Palestinian Authority, as a member of the Palestinian

steering committee on the 1991 Madrid talks, and has written dozens of articles on Jerusalem and the prospects for a peace agreement with Israel. He received his doctorate in Islamic philosophy from Harvard University. Professor Nusseibeh is currently on sabbatical as Rita E. Hauser fellow at Radcliffe Institute, Harvard University.

Baroness O'Neill, United Kingdom

Onora Sylvia O'Neill is president-elect of the British Academy. She is a cross-bench member of the House of Lords and was made a Life Peer in 1999. Baroness O'Neill currently is principal of Newnham College at the University of Cambridge. She lectures in philosophy and has written books and articles on ethics, political philosophy, the philosophy of Immanuel Kant, and bioethics. A former member and chair of the Nuffield Council on Bioethics and the Human Genetics Advisory Commission, Baroness O'Neill chairs the Nuffield Foundation. She studied philosophy, psychology, and physiology at Oxford University and received her doctorate from Harvard University.

Sir Nigel Rodley, United Kingdom

Sir Nigel Rodley is an expert member of the Human Rights Committee of the United Nations and former U.N. Special Rapporteur on Torture (1993-2001). He is also a commissioner of the International Commission of Jurists and was the founding head of the legal department at Amnesty International's Secretariat in London. Sir Nigel currently teaches human rights and international law at the University of Essex. He has published widely on human rights issues with a particular focus on the treatment of prisoners and prevention of torture. In 1998 he was awarded a knighthood in recognition of his services to human rights and international law.

Dr. Pieter van Dijk, The Netherlands

Pieter van Dijk is state councillor of the Council of State of the Netherlands. He was a judge on the European Court of Human Rights from 1996-1998. Pieter van Dijk was a professor of international law at Utrecht University and a member of the Court of Appeal of The Hague. He has been chair of the Netherlands Institute of Human Rights since 1982 and is a member of the Royal Netherlands Academy of Arts and Sciences. He was bestowed a knighthood in 2004.

Dr. Torsten Wiesel, United States

Torsten Wiesel, M.D., a neurobiologist, is secretary general of the Human Frontier Science Program and chairman of the Board of the New York Academy of Sciences. He is also president emeritus and Vincent and Brook Astor professor (active) at The Rockefeller University in New York City. He is chairman emeritus of the Arms Division of Human Rights Watch and of the Committee on Human Rights of the U.S. National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. In 1981, Torsten Wiesel and David H. Hubel were awarded the Nobel Prize in Physiology or Medicine "for their discoveries concerning information processing in the visual system."

Professor Menahem Yaari, Israel

Menahem Yaari is president of the Israel Academy of Sciences and Humanities and a foreign member of the American Academy of Arts and Sciences. He is professor of economics emeritus at the Hebrew University of Jerusalem. Professor Yaari was president of the Open University of Israel from 1992 to 1997. He formerly was professor of economics at Yale University and has been a fellow of the Econometric Society since 1969. Professor Yaari is the recipient of several academic awards including the Israel Prize in Economics and the Rothschild Prize in Social Sciences. He received his Ph.D. in economics and statistics from Stanford University in California.

APPENDIX B

EXECUTIVE COMMITTEE MEMBERS' BIOGRAPHIES

Arjuna Aluwihare, Sri Lanka

Arjuna Aluwihare is professor of surgery at the University of Peradeniya in Sri Lanka. He was vice chancellor of the University from 1988 to 1989 and then chairman of the University Grants Commission of Sri Lanka from 1989 to 1993. He is president-elect of Sri Lanka's National Academy of Sciences. Arjuna Aluwihare has been a member of the Human Rights Commission of Sri Lanka since 1997.

Claude Cohen-Tannoudji, France

Claude Cohen-Tannoudji is a research scientist in the Department of Physics at the Ecole Normale Supérieure in Paris. In 1973 he became professor and chairman of the nuclear and molecular physics department of the Collège de France. He is a member of the French Academy of Sciences and secretary general of its Comité de Défense des Hommes de Sciences. In 1997 Claude Cohen-Tannoudji, Steven Chu, and William D. Phillips were awarded the Nobel Prize for Physics "for their development of techniques that use laser light to cool atoms to extremely low temperatures."

François Jacob, France

François Jacob is professor emeritus at the Collège de France and the Institut Pasteur in Paris. He is a member of l'Académie Française and l'Académie des Sciences. François Jacob is president of the Comité de Défense des Hommes de Sciences of the Académie des Sciences. In 1965 François Jacob, André Lwoff, and Jacques Monod were awarded the Nobel Prize in Physiology or Medicine "for their discoveries concerning genetic control of enzyme and virus synthesis."

Belita Koiller, Brazil

Belita Koiller is professor of theoretical physics at the Instituto de Fisica Universidade Federal do Rio de Janeiro. She is the first woman physicist to be elected a full member to the Brazilian Academy of Sciences, and she has been a senior research fellow of the Brazilian National Research Council since 1985. She was nominated by the International Council of Scientific Unions (ICSU) to become a member of its Committee on Capacity Building in Science from 1994 to 1996. Belita Koiller is a L'Oréal-UNESCO 2005 Laureate for Women in Material Sciences.

John Polanyi, Canada

John Polanyi is professor of chemistry at the University of Toronto. He is a member of the Royal Society of Canada. John Polanyi was the founding chair, in 1960, of the Canadian Pugwash Group, and he remained chair until 1978. He has published over a hundred articles on peace and human rights and is founding member and president of the Canadian Committee of Scientists and Scholars. In 1986 John Polanyi, Dudley Herschbach, and Yuan T. Lee were awarded the Nobel Prize in Chemistry "for their contributions concerning the dynamics of chemical elementary processes."

Pieter van Dijk, The Netherlands

Pieter van Dijk is state councillor of the Council of State of the Netherlands. He was a judge on the European Court of Human Rights from 1996-1998. Pieter van Dijk was a professor of international law at Utrecht University and a member of the Court of Appeals of The Hague. He has been chair of the Netherlands Institute of Human Rights since 1982 and is a member of the Royal Netherlands Academy of Arts and Sciences. He was bestowed a knighthood in 2004.

Edoardo Vesentini, Italy

Edoardo Vesentini, a mathematician, is president emeritus of the Accademia Nazionale dei Lincei in Rome. He is presently a full professor of mathematical analysis at the Politecnico di Torino and a member of the Accademia delle Scienze of Turin. Edoardo Vesentini is a recipient of the Gold Medal for contributions to education, culture, and art and the Commander of the Order of Merit of the Italian Republic.

Torsten Wiesel, United States

Torsten Wiesel, M.D., a neurobiologist, is secretary general of the Human Frontier Science Program and chairman of the Board of the New York Academy of Sciences. He is also president emeritus and Vincent and Brook Astor professor (active) at The Rockefeller University in New York City. He is chairman emeritus of the Arms Division of Human Rights Watch and of the Committee on Human Rights of the U.S. National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. In 1981, Torsten Wiesel and David H. Hubel were awarded the Nobel Prize in Physiology or Medicine "for their discoveries concerning information processing in the visual system."