Anexos

Carlos Chagas Filho
Declaration on Prevention of Nuclear War*

I

Throughout its history, humankind has been confronted with war, but since 1945 the nature of warfare has changed so profoundly that the future of the human race, of generations yet unborn is imperiled. At the same time, mutual contacts and means of understanding between peoples of the world have been increasing. This is why the yearning for peace is now stronger than ever. Mankind is confronted today with a threat unprecedented in history, arising from the massive and competitive accumulation of nuclear weapons. The existing arsenals, if employed in a major war, could result in the immediate deaths of many hundreds of millions of people, and of untold millions more later through a variety of aftereffects. For the first time, it is possible to cause damage on such a catastrophic scale as to wipe out a large part of civilization and to endanger its very survival. The large-scale use of such weapons could trigger major and irreversible ecological and genetic changes, whose limits cannot be predicted.

Science can offer the world no real defense against the consequences of nuclear war. There is no prospect of making defenses sufficiently effective to protect cities since even a single penetrating nuclear weapon can cause massive destruction. There is no prospect that the mass of the population could be protected against a major nuclear attack or that devastation of the

* Texto apresentado ao papa João Paulo II por uma assembléia de trinta e cinco presidentes de academias científicas e outros cientistas de todo o mundo. (N.E.)
cultural, economic and industrial base of society could be prevented. The breakdown of social organization, and the magnitude of casualties, will be so large that no medical system can be expected to cope with more than a minute fraction of the victims.

There are now some 50,000 nuclear weapons, some of which have yields a thousand times greater than the bomb that destroyed Hiroshima. The total explosive content of these weapons is equivalent to a million Hiroshima bombs, which corresponds to a yields of some three tons of TNT for every person on earth. Yet these stockpiles continue to grow. Moreover, we face the increasing danger that many additional countries will acquire nuclear weapons or develop the capability of producing them.

There is today an almost continuous range of explosive power from the smallest battlefield nuclear weapons to the most destructive megaton warhead. Nuclear weapons are regarded not only as a deterrent, but there are plans for their tactical use and use in a general war under so-called controlled conditions. The immense and increasing stockpiles of nuclear weapons, and their broad dispersal in the armed forces, increase the probability of their being used through accident or miscalculation in times or heightened political or military tension. The risk is very great that any utilization of nuclear weapons, however limited, would escalate to general nuclear war.

The world situation has deteriorated. Mistrust and suspicion between nations have grown. There is a breakdown of serious dialogue between the East and West and between North and South. Serious inequities among nations and within nations, shortsighted national or partisan ambitions, and lust for power are the seeds of conflict which may lead to general and nuclear warfare. The scandal of poverty, hunger, and degradation is in itself becoming an increasing threat to peace. There appears to be a growing fatalistic acceptance that war is inevitable and that wars will be fought with nuclear weapons. In any such war there will be no winners.

Not only the potentialities of nuclear weapons, but also those of chemical, biological and even conventional weapons are increasing by the steady accumulation of new knowledge. It is therefore to be expected that also the means of non-nuclear war, as horrible as they already are, will become more destructive if nothing is done to prevent it. Human wisdom, however,
remains comparatively limited, in dramatic contrast with the apparently inexorable growth of the power of destruction. It is the duty of scientists to help prevent the perversion of their achievement and to stress that the future of mankind depends upon the acceptance by all nations of moral principles transcending all other considerations. Recognizing the natural rights of humans to survive and to live in dignity, science must be used to assist humankind towards a life of fulfillment and peace.

Considering these overwhelming dangers that confront all of us, it is the duty of every person of good will to face this threat. All disputes that we are concerned with today, including political, economic, ideological and religious ones, which are not to be undervalued, seem to lose their urgency compared to the hazards of nuclear war. It is imperative to reduce distrust and to increase hope and confidence through a succession of steps to curb the development, production, testing and deployment of nuclear weapons systems, and to reduce them to substantially lower levels with the ultimate hope of their complete elimination.

To avoid wars and achieve a meaningful peace, not only the powers or intelligence are needed, but also the powers of ethics, morality and conviction.

The catastrophe of nuclear war can and must be prevented. Leaders and governments have a grave responsibility to fulfill in this regard. But it is humankind as a whole which must act for its survival. This is the greatest moral issue that humanity has ever faced, and there is no time to be lost.

II

In view of these threats of global nuclear catastrophe, we declare:
1) Nuclear weapons are fundamentally different from conventional weapons. They must not be regarded as acceptable instruments of warfare. Nuclear warfare would be a crime against humanity.
2) It is of utmost importance that there be no armed conflict between nuclear powers because of the danger that nuclear weapons would be used.
3) The use of force anywhere as a method of settling international conflicts entails the risk of military confrontation of nuclear powers.
4) The proliferation of nuclear weapons to additional countries seriously increases the risk of nuclear war and could lead to nuclear terrorism.

5) The current arms race increases the risk of nuclear war. The race must be stopped, the development of new more destructive weapons must be curbed, and nuclear forces must be reduced, with the ultimate goal of complete disarmament. The sole purpose of nuclear weapons, as long as they exist, must be to deter nuclear war.

III

Recognizing that excessive conventional forces increase mistrust and could lead to confrontation with the risk of nuclear war, and that all differences and territorial disputes should be resolved by negotiation, arbitration or other peaceful means, we call upon all nations:

1) Never to be the first to use nuclear weapons.

2) To seek termination of hostilities immediately in the appalling event that nuclear weapons are ever used.

3) To abide by the principle that force or the threat of force will not be used against the territorial integrity or political independence of another State.

4) To renew and increase efforts to reach verifiable agreements curbing the arms race and reducing the numbers of nuclear weapons and delivery systems. These agreements should be monitored by the most effective technical means. Political differences or territorial disputes must not be allowed to interfere with this objective.

5) To find more effective ways and means to prevent the further proliferation of nuclear weapons. The nuclear powers, and in particular the superpowers, have a special obligation to set an example in reducing armaments and to create a climate conducive to non-proliferation. Moreover, all nations have the duty to prevent the diversion of peaceful uses of nuclear energy to the proliferation of nuclear weapons.

6) To take all practical measures that reduces the possibility of nuclear war by accident, miscalculation or irrational action.

7) To continue to observe existing arms limitation agreements while seeking to negotiate broader and more effective agreements.
Finally, we appeal:

1) To national leaders, to take the initiative in seeking steps to reduce the risk of nuclear war, looking beyond narrow concerns for national advantage: and to eschew military conflict as a means of resolving disputes.

2) To scientists, to use their creativity for the betterment of human life, and to apply their ingenuity in exploring means of avoiding nuclear war and developing practical methods of arms control.

3) To religious leaders and other custodians of moral principles, to proclaim forcefully and persistently the grave human issues at stake so that these are fully understood and appreciated by society.

4) To people everywhere, to reaffirm their faith in the destiny of humankind, to insist that the avoidance of war is a common responsibility, to combat the belief that nuclear conflict is unavoidable, and to labor unceasingly towards ensuring the future of generations to come.
Senhoras e Senhores:

Penhoradíssimo agradeço esta homenagem que me prestam meus companheiros da comunidade científica brasileira.

Sei que ela é a conseqüência da generosidade daqueles que, como eu mesmo, nada mais fazem do que se empenhar na certeza do ideal de dar ao Brasil uma base científica e tecnológica capaz de facilitar a vida de todos aqueles que vivem em nosso querido Brasil.

Devo agradecer especialmente à Faperj e à minha querida Academia Brasileira de Ciências. Ainda que os achaques de uma longa vida derrubem uma grande parte da nossa memória, ouso, entretanto, me aventurar a assinalar que cabe-me um pouco na criação das Fundações Estaduais de Pesquisa.

É que, em certa ocasião, trabalhava eu na preparação de uma tese no laboratório da Praia Vermelha com o deputado Rui Santos, digno representante da Bahia. Sugeri-lhe que apresentasse um projeto pelo qual os estados criassem um sistema próprio de fomento à pesquisa.

Penso ter sido esta a oportunidade para que os membros da Federação desenvolvessem os sistemas das fundações de amparo que noblitam as atividades de pesquisas e em certos estados, como no estado de São Paulo, superam em muito as dotações federais ou municipais. No estado do Rio de Janeiro, hoje eminentemente dirigido pelo governador Anthony Garotinho, o mesmo vai acontecer dentro de pouco tempo.

* Último texto escrito pelo professor Carlos Chagas Filho, agradecendo a concessão do Prêmio Faperj, confiado pelo Governo do Estado do Rio de Janeiro. Apesar de Carlos Chagas Filho estar presente à solenidade, esta declaração não chegou a ser pronunciada, sendo aqui publicada pela primeira vez. (N.E.)
Quanto à Academia Brasileira de Ciências, tem sido ela uma das minhas preocupações constantes, desde o tempo em que nós nos reuníamos após as sessões que se realizavam no edifício da Escola de Politécnica, pois não tínhamos sede ainda, e tomávamos um pequeno *drink* na cervejaria que havia no andar térreo do edifício do Hotel Avenida.

Não éramos muitos, mas entre nós estavam Arthur Moses, que veio presidi-la com a maior dignidade durante anos, Álvaro Alberto, que logo depois ajudou o Brasil a criar o seu Conselho Nacional de Pesquisas, Dulcídio Pereira, Francisco Venâncio, Carneiro Felipe e outros.

Tive a honra de ser presidente da Academia Brasileira de Ciências por um certo prazo, já que o presidente Castelo Branco me convocou para substituir o insubstituível Paulo Carneiro na direção da Embaixada do Brasil junto à Unesco. Pouco pude fazer neste período pela Instituição, mas consegui, através da Presidência da República e do ministro Roberto Campos, uma lei especial que durante a sua vigência levou aos cofres da Academia um apreciável montante.

No terreno da pesquisa segui uma filosofia que me parece importante para países como o nosso. Creio que consegui, pelo menos em grande parte, realizar o que queria: associar a pesquisa ao ensino, o que dobra o valimento deste.

Porém não me considero de forma alguma, nem mesmo com a recompensa que hoje me é dada, uma pessoa realizada, o que explica o título de meu livro de memórias *Um aprendiz de ciência*.

Não teria sido melhor eu ter me ocupado dos pobres que vi no meu caminho, das almas preocupadas que cruzaram a minha vida, aquelas que eu vi na penúria em Lassance, ou com quem me encontrei num ambulatório do Hospital Oswaldo Cruz, hoje Hospital Evandro Chagas?

É uma questão que paira na minha consciência e que eu não sei responder, embora uma manifestação como a de hoje me faça crer que eu não tenha sido inútil para o Brasil.

Obrigado,

Carlos Chagas Filho
Rio de Janeiro, 21 de dezembro de 1999.
Vaticano, 18 de fevereiro de 2000.

Excelência Reverendíssima

Ao tomar conhecimento do falecimento do Prof. Carlos Chagas Filho, o Santo Padre encareceu-me fazer chegar aos familiares e amigos Sua expressão de pêsames abaixo transcrita:

"Exma. Sra.
Viúva do Prof. Carlos Chagas Filho
Rio de Janeiro (RJ)

Foi com profundo pesar que recebi a notícia do falecimento do Professor Carlos Chagas Filho. Este ilustre filho da nação brasileira, que como cristão exemplar e bondoso pai de família, será recordado pela sua generosa e abnegada dedicação como Presidente da Pontifícia Academia das Ciências, graças a qual a Igreja se tornou mais presente no mundo da ciência, pelos seus méritos de prestigiososo pesquisador, foi chamado à Casa do Pai. Em espírito de filial resignação aos desígnios da Divina Providência, desejo compartilhar com a dor dos seus familiares e amigos de todo o Brasil, e elevo ao Todo Poderoso ardentes preces em sufrágio da sua alma para que, à luz da gozosa esperança da ressurreição, o Senhor o acolha para sempre no Seu Reino de Paz e de Amor. Ao formular-lhe minhas mais sinceras condolências envio com afeto uma confortadora Benção Apostólica, extensiva aos seus familiares.

JOANNES PAULUS PP. II"