Science for Peace

SCIENCE FOR PEACE CHARTER

The leading personalities in scientific, cultural, political, artistic and communicational fields, here convened for the second edition of "Science for Peace" (Milan, 18-19 November 2010), agree upon the following statements.

There is scientific evidence that:

1 – **War is not an evolutionary necessity**: biology does not condemn us to war and violence, but puts our minds before a range of different choices;

2 – **War is not a genetic fate**, because human culture gives us the ability to shape and change our nature;

3 – The evolution of complex social behaviours has been made by **an entanglement of competition, cooperation** and altruism;

4 – **War is not hardwired in our brains**: they can be devoted to peace and solidarity just ;

5 – We have influential natural precursors in our brains, for pro-social behaviours as well as for aggressiveness, but **none of our behaviours is so naturally determined that it cannot be changed by learning** and individual responsibility;

We have therefore the duty:

6 - To freely invent new ways of organizing societies: **peace is a realistic possibility**, besides being a social urgency and a moral imperative to human species;

7 – To emphasize all the educational and social tools that can **direct our cultural evolution towards peace**;

8 – To oppose the **strategies adopted by political leaders directed to create emotions of fear** and threat of an external enemy that make people support war;

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We reaffirm that:

9 – The ambiguities inherited from our own history as a species strengthen the principle that suggests **not to search in nature the foundation of any alleged "normal" or necessary behaviour**;

10 – Nothing in our genes and natural history justifies institutionalized violence as unavoidable, then **war is to be considered a social invention**. As highlighted in the Seville Statement's conclusion: "The same species who invented war is capable of inventing peace".

Milan, November 19th 2010

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Commentary

From *The Seville Statement on Violence* (1989) to *The Science for Peace Charter* 2010

On the occasion of "1986 - International Year of Peace" promoted by the United Nations, an International team of specialists from different disciplines convened to draw up a scientific manifesto that would take stock of the most advanced knowledge concerning the foundations of cooperative and pacific behaviours in the human species. The results of those researches released by the UNESCO General Conference on November, 16th 1989, have been collected in the "Seville Statement on violence" and showed clearly and in a farsighted way the weakness of the theories, prevailing at that time, related to an alleged "biological and evolutionary need" of aggressiveness and war conceived as deep human attitudes.
The five Seville Statement propositions, in their synthetic version, stated that:

1) "It is scientifically incorrect when people say that war cannot be ended because animals make war and because people are like animals. First, it is not true because animal do not make war. Second, it is not true because we are not just like animals. Unlike animals, we have human culture that we can change. A culture that has war in one century may change and live at peace with their neighbours in another century;
2) It is scientifically incorrect when people say that war cannot be ended because it is part of human nature. Arguments about human nature cannot prove anything because our human culture gives us the ability to shape and change our nature from one generation to another. It is true that the genes that are transmitted in egg and sperm from parents to children influence the way we act. But it is also true that we are influenced by the culture in which we grow up and that we can take the responsibility for our own actions;
3) It is scientifically incorrect when people say that violence cannot be ended because people and animals who are violent are able to live better and have more children than others. Actually, the evidence shows that people and animals do best when they learn how to work well with each other;
4) It is scientifically incorrect when people say that we have to be violent because of our brain. The brain is part of our body like our legs and hands. They can all be used for cooperation just as well as they can be used for violence. Since the brain is the physical basis of our intelligence, it enables us to think of what we want to do and what we ought to do. And since the brain has a great capacity for learning, it is possible for us to invent new ways of doing things;
5) It is scientifically incorrect when people say that war is caused by 'instinct'. Most scientists do not use the term 'instinct' anymore because non of our behaviours is so determined that it cannot be changed by learning. Of course, we have emotions and motivations like fear, anger, sex, and hunger, but we are each responsible for the way we express them. In modern war, the decisions and actions of generals and soldiers are not usually emotional. Instead, they are doing their jobs the way they have been trained. When soldiers are trained for war and when people are trained to support a war, they are taught

to hate and fear an enemy. The most important question is why they are trained and prepared that way in the first place by political leaders and the mass media."

Twenty-one years later, the bases for peace building prospected by the anthropologists, the ethologists, the physiologists, the psychologists and the sociologists who drew up the Seville Statement, still preserve their topicality. That manifesto, which, from its very premises, implied the commitment to a periodical update, represents even today one of the most shining examples of the contribution that the scientific community can provide for a culture of peace.

The myths concerning the innate violence of "killer apes" and the existence of specific "genes of aggressiveness" have been further debunked, although the optimism expressed in the first three propositions of the Statement is today lessened by the evidence that both uncontrolled individual aggressiveness and organized violence – that result in planned conflicts among groups, as repeatedly observed in nature, also through the use of "weapons" if necessary, – exist among different species of primates with a complex social life and a wide rage of behavioural options. Among these options, however, the institutionalized war in the modern sense, which is a sad human prerogative, never occurs. On the other hand, the latest scientific literature has highlighted the diffusion and diversity of adaptive pro-social strategies based on group solidarity, reciprocity, altruism, empathy, that exist among the above mentioned species, far beyond what was forecast just a few decades ago.

In many cases, we are dealing with reciprocal help attitudes expressed also among non-consanguineous individuals and strangers, sometimes even among individuals from different species, and this leads to suppose that natural selection acting among relatives - where the single individual carries out an altruistic behavior thus risking his own security, but to the advantage of the survival of a certain number of consanguineous individuals, who are bearer of portions of his own genes, that will thus be transmitted to his descendants – probably requires integrative explanations based on the advantages of a social cohesion in groups competition. It has been in fact noted that aggressiveness and cooperation often coexist: the former shows during conflicts for reproduction and resources among contending social groups, the latter prevails inside the groups, preserving social cohesion, reducing the effects of individual egoism of "free riders" and canalizing aggressiveness into non-lethal rituals.

Whatever the correct evolutionary explanation may be - likely a pluralistic one - it is evident that referring to bonds in our natural history and to corresponding genetic determinants, is in substance ambiguous: that is, we can find in ourselves, variously intertwined, both natural reminiscences of violence and aggressive competition, and those about reciprocal help and cooperation, that have acquired new, unheard modalities in human societies. Justifying through neurophysiologic and ethologic arguments the prevalence of the first kind of reminiscences or of the second ones – respectively considered as biological needs - results in an unsuccessful undertaking, also because in natural history structures and behaviours that developed for a certain evolutionary reason can be then co-opted and re-adapted for different functions when the environmental niches change. This is even truer for humanity, whose biological evolution is today deeply connected and strongly affected by cultural evolution and by the set of influences coming from developmental environment and learning.

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The ambiguities inherited from our own history as a species, the weight of cultural evolution and the entwinements between genes and ecological and social contexts, strengthen the principle of scientific and philosophical caution that suggests not to search in nature the foundation, nor the raison-d'être, neither of alleged "normal" behaviours (no matter how obscure and violent or pacific they may be, since the only rule in nature rather seems to be the great diversity of contingent strategies), nor of our hopes (towards, for instance, an edifying human nature, only pacific and cooperative, then corrupted by civilization), nor, least of all, of moral laws that we freely decide to share.

The excuse of a "biological need" has been used in the past to justify slavery and gender and racial discriminations, but today we have the rational tools to dispute those issues by means of scientific methods in addition to ethical reasons. If the category of biological necessity falls, it means that although still being affected by our universal "natural precursors"– term we should prefer to the word "instinct" nowadays – we are free (and responsible) to choose among different social inventions, based on war, or on peace, within each of the numberless human cultures that have been developed in the last thousands years of evolution, without thus betraying anything "intrinsic" to human nature. Biology does not condemn us to war and violence, but puts our minds before a range of different choices.

Opening to these possibilities implies that we can therefore decide to learn how to manage human aggressiveness differently from how we have done so far, that peace is a realistic global possibility, besides being a social urgency and a moral imperative to human species, and that the unbearable sufferings caused by war can be put aside as conflict solution instruments, particularly now that, for the first time in history, human beings have weapons of mass destruction that could cause the very extinction of our species. As highlighted in the Statement's conclusion, "The same species who invented war is capable of inventing peace".

The modern scientific knowledge, twenty-one years after the drafting of the Seville Statement, has therefore strengthened even more the appeal, there expressed, to a collective human responsibility for the actions that we will want to and should undertake in future in favour of peace, of human rights and of an education to non-violence. They also invite us to watch over the political and cultural strategies, unluckily experienced also in recent history, leading to the construction of collective propagandistic narrations – described in the fifth proposition – whose aim is cementing a community by predisposing it to fear and violence, to hatred towards an external or internal enemy, to investing in arm industries, and at times even to ethnic extermination and genocide.

For all these reasons, the essence of the Seville Statement message deserves today to be taken again and emphasized as a basic tool for educational curricula – starting from the early stages of the individual and community building – and as an occasion for fostering International public awareness. Science for Peace hopes therefore that the reference to the Seville Statement and its new launch as ***The Science for Peace Charter 2010*** may be undersigned and promoted again by numerous and eminent personalities, organizations and institutions of the scientific research, arts and culture world, to state once more that violence and war are not necessary.

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