

The Role of Science in the Intercultural Education: A Criticism of UNESCO Seville Statement and a New Proposal

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UNESCO Seville Statement is criticized because it shifts the debate from the operative plan to a methodological plan on which the political authority of international organisms is opposed to independent critics and their substantial criticisms. A new Declaration is suggested that responds to the criticisms on the merit and that, moreover, does not assume the usual mythical position of scientists as invested by a superior light.

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The Seville Statement: Its Scientist Attitude

The large amount of violent phenomena does not have to divert our attention from the structural violence generating them. It is a crucial decision in intercultural education the role of which has to be attributed to our present science with respect to conflict resolution in a nonviolent way. Since “peace begins in the minds of men”, first of all it begins in the collective, social mind of mankind, which is formalised in the academic science. I know an official document only on the role of science in education.

The Seville Statement (S.S.) (Adams, 1991) is a pronouncement by 20 authoritative scientists that are university professors about subjects-matter ranging from psychiatry to psychology, anthropology, sociology, ethology, animal behavior, biochemistry. They met in Seville in 1986, the International Year of Peace.

S.S. includes an introduction, five propositions, and a conclusion. In synthesis, its content is to say that:

there is nothing in our biology which is an insurmountable obstacle to the abolition of war or other institutional violence...The Statement was based on the latest scientific evidence, and it is endorsed by scientific and professional organizations in the World....The Statement was adopted by UNESCO in 1989. (Adams, 1991, p. 7)

The purpose of S.S. is welcome and excellent: “The statement is a message of hope. It says that peace is possible and that wars can be ended” (Adams, 1991, p. 10). It negates that science shows that violence and war cannot be eradicated from mankind.

Yet, it is unfortunate that a cursory inspection of S.S. gives rise to an uneasy feeling. The document results to belong to the commonly shared paradigm which may be called scientism, the same paradigm which refers to the supporters of the thesis according to which war is unavoidable.¹ Moreover, although it wants that science

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¹ By “scientism” I mean the complex of four main features of science reception: (i) only one scientific truth; (ii) science is the only one intercultural value; (iii) conflict resolution relies on—rather than personal commitment—a delegation to specific experts in order they apply science and technology to the particular case at issue; (iv) being the society of institutions more informed by scientific rationality, it has to be favourite with respect to grassroots movement.

will promote a tolerant, peaceful, and intercultural society, it pronounces solemn condemnations. Rather than to look some common points of agreement in order to overcome the conflict at issue, or else to directly state what is the recognized scientific truths on the subjects at issue, its “rejections” (“It is scientifically incorrect...”) are based on a science which appears as an absolutist power; moreover owing to its recourse to the level of methodology of science (What is scientifically correct?) it appears as an imperscrutable document to a layman. The overall attitude of S.S. echoes the typical way of the 50s for presenting a scientific verdict.

The Self-amendments of Seville Statement

However, a more accurate analysis shows a doubtful attitude by the undersigned scientists.

First of all, a presentation in “Plain Words” (p. 7) precedes and then comments the text of S.S. The presentation by a colloquial language illustrates the content in more specific terms. However, it is not acceptable, in my opinion, a dual version of a same document. Rather, the necessity of this paraphrase gives evidence for an authoritarian attitude of the document.

A further amendment is apparent from the structure of each proposition which follows the preamble. Each proposition does not start by saying “It is scientifically correct...” as past philosophies of science of the scientist kind suggested; instead, it starts by means of the following words: “It is scientifically incorrect...” It is well-known that according to Popper (1959), it is better to define what science is not; precisely, science is demarcated from metaphysics by the capability of the former one to disprove a hypothesis. Hence, the *incipit* of S.S. disqualifies what does not constitute a scientific statement, but it is at all insufficient to say what is a scientific statement. Then, in each proposition the addition to each negated statement of an affirmative part—as S.S. does—is philosophically incorrect and is somewhat cheating with respect to the large public. Moreover, Popper was surely one of the most authoritative philosophers of science of our century. However, his “falsifiability thesis” is not shared by all philosophers of science. Kuhn, Lakatos, Feyerabend—for mentioning the most known alternatives—presented different views, all presenting science in a not absolutistic way (Chalmers, 1976).

Let us now inspect the scientific content of the document. Rather than a scientist emphasis on science’s power for the improvement of mankind’s knowledge, S.S. defends science from some “mis-statements” (p. 16). Its words make apparent a dispute which, although very relevant to society, properly belongs to the scientific world. Nevertheless, no reference to specific publication including the above mentioned mis-statements is unfortunately given, contrary to the scientific correctness. I think that to speak to a large public does not allow missing scientific references—a fact definitively negating to the public the power of participating in it in an independent way.

The Political Role of Seville Statement

The first statement too in S.S. wants to bound the authoritarianism of scientists’ attitude. “Believing that it is our responsibility to address from our particular disciplines the most dangerous and destructive activities of our species, violence and war...” (Chalmers, 1976, p. 3). Hence, the scientists of S.S. do not attribute to themselves the task of merely reporting to the public some results obtained by a neutral science, but they renounce to the neutrality of science for following an impulse which dictates them to advise the public about “dangerous and destructive activities”. Yet, it is unclear with respect to which they feel their responsibility: to themselves? to people? to the institutions to which they belongs? Evidence for the last case is given two sentences after, when they “...gratefully acknowledge the support of authorities...”

A more radical amendment is the second statement of the “Introduction”. It “recognises that science is a human cultural product that cannot be definitive or at all encompassing”. This amendment goes beyond the point. It is so radical to put doubts about the necessity of a public pronouncement by some scientists. If science is not certain—and thus the same holds true for its statements of 20 scientists—why do this particular group of scientists present as decisive some statements to the public?

We have to conclude that being their declaration composed by some contingent, partial, disputable truths it introduces in a political debate only, not in a scientifically circumscribed set of well-founded, commonly shared truths. In sum, the latter amendment, forced by the awareness that science is not scientism, destabilises the whole declaration, by definitely pushing it to introduce people in a political dispute.

By passing, the document charges an un-named opponent of misinterpreting the great common value supporting the life of our society, intercultural aims included. Why do not the 20 authoritative scientists quote the adversaries? It is not a fine way to disqualify someone without precisely addressing the charge to specific persons. In past times this behavior characterised the highest authoritarianism.

At last, the 20 scientists can only show that in fact the opposite theses do not receive the support by the most relevant institutions in the world, UNESCO as first. They properly offer a political statement, which addresses people to conform their minds to the major institutions. In conclusion, the self-proclaimed scientific propositions suggest a political attitude rather than a scientific attitude.

From the analysis of S.S., I conclude that today: the best the most authoritative scientists in the World can say about a relevant scientific subject is not to solve some problems from a neutral viewpoint, but to take part through a well-known particular epistemological position, to a well-known institutional position and, last but not least, to a particular position in the scientific debate. Indirectly, they confess that at present time about some relevant scientific issues there is a scientific conflict which involves—not only the financial support and the support of public opinion—but also the scientific results and at last the epistemological bases of science. Indirectly, S.S. is the most authoritative document giving to a teacher evidence for concluding that no more science may be considered the commonly shared background by all peoples and hence the common intersection of all cultures. In final words, it is not the science that solves the crucial social problems; instead, reasonably it can only confine the range of the possible solutions. The solution of an interpersonal or social conflict is not usually in the power of scientific means.

For a New Intercultural Education

These conclusions implies dramatic consequences for the intercultural education.

(i) Even the universalistic values endorsed by science—i.e. rationality, objectivity, etc.—when applied to some crucial issues like war and violence, may give room to debates among irreducible positions.

(ii) Institutions’ effort for promoting an authoritative science as the main factor for the mankind’s progress, may be contested—as actually inside the Western society Feyerabend did and outside the Western society the Islamic people presently do. In particular, one may contest that in the curriculum of a pupil, scientific education has to enjoy a privileged role.

(iii) By going beyond the scientist ideal of a unique science for all peoples, in order to promote an intercultural education it is necessary to find out a new common background for a universalistic rationality and cooperation. In my opinion no other possibility exists out to worldwide establishing as common values the promotion of human rights, together with a widespread involvement of people in supporting nonviolence for

solving the inevitable conflicts. This policy does not reject the scientific rationality, it goes beyond scientism. It is based upon convictions, rather than opinions or even other people's knowledge.

The dramatic consequences may be synthesised by the slogan that a meaningful intercultural education requires a complete pluralism in our culture, science included. Hence, we Western people have to abandon the scientific certainty as it may be drawn from a universally valid science—that is suggested by scientism.

Then, we have to shape anew the role of science in the intercultural education. Being no more science a fixed-point for the behaviour of peoples, the basic element to be developed by education is no more some cognitive elements—the scientific truths—but a positive attitude for improving the community and the world life. In other words, from a cognitive-oriented teaching it is necessary to shift to an ethical-oriented teaching. Exactly this direction was already suggested by the grassroots effort for introducing the education on human and people rights, inasmuch as this kind of education leads pupils to choose—among the infinite number of conceivable rights—for the positive rights; and to choose moreover for those positive rights which result to be positive not only for myself only or my little group only, but positive for all peoples.

Indeed, the highest rationality of mankind is to learn from the whole complex of the historical experiences—not only from the scientific ones only. In the present Century we have learnt that violence may lead to appalling destructions, as well as we have learnt it is possible to give adequate nonviolent answers to the most difficult conflicts. In our century the best answer to the problems of violence and war has been offered by Gandhi's nonviolence. Actually, several times Gandhi called his actions "my experiments with the Truth" and moreover considered nonviolence as a science—of course, it is not a science belonging to the paradigm that dominated Western science, but a new science, i.e. the science of conflict resolution which first of all involves the personal experience. Here, I see the gap between an institutional agencies' promotion of intercultural education—still following a scientist attitude—and the grassroots effort by single teachers, whose main support is constituted by their own forces and their motivations are the nonviolent ones.

Under this light one may re-read S.S. for a new interpretation. In the effort for giving a positive answer to the problem of violence and war, S.S. collects all that is at hand for supporting the wanted answer, according to the present institutions which actually rely on the trust in science only. In pages 36-37 S.S. takes into account nonviolence, which in the history already showed that war is evitable (but not the conflict as well as the struggle). But the two pages constitute a merely additive amendment by the commentator to the text of S.S.; so that then to the leaders of nonviolence—M.L. King and Gandhi—it is conceded a mere remembrance (pp. 38-39)—without mentioning Gandhi's books in the final bibliography. They seem to S.S. as a merely emotional way to meet a conflict. Apparently, S.S.'s attitude is bounded by the academic delay in recognising Gandhi's nonviolence as a science of conflict resolution.

Positive Additions to Seville Statement

There exist several methods for performing intercultural education, ranging from the informative one to the motivational one. However, all methods depend from two dichotomic variables, i.e. which culture is shared about the conflicts—either to cover them or to present them to the pupils—and which kind of conflict resolution. Here, the methods range from the scientist method, i.e. the belief that science will solve all conflicts by means of specific experts, to the non-violent method, i.e. the personal involvement in the conflict in order to solve it without the suppression of the opponent.

In a previous paper² I presented a table synthesising four methods of intercultural education. Among these models the most common model—owing to the enhancement it receives from the society—is called a paradigm. In it science is conceived as scientism. It represents an absolute value, overpowering any rival social actor, particularly in the processes of resolution of conflicts. Moreover, owing to its universalistic aims it claims to be a supreme good to be shared by all peoples. Under this light a process of intercultural education is defined to be performed by a minority social group when it gradually embraces science as its common value, whereas its original culture is preserved as a residual folklore for its occasional characterisation.

On the other side, in the non-violent models of intercultural education science plays a subordinate role to the capability of the minority group of overcoming social conflicts as well as preserving the basic issues of its group identification. In this latter case each social subgroup shares the democratic power of successfully promoting its own culture among the cultures supported by all different groups. As the main conclusion I say that there is no intercultural education without a criticism to the role played by science in society as well as in our culture. Science yes, but not the monopoly on the truth and human rationality.

In particular, in pupil's curriculum the two subject matters, science and human rights, have to be put on the same foot. Moreover, scientific teaching has to give room to the inside alternatives. Indeed, by taking into account the recent results in foundations of mathematics, logic suggestions may be offered for a new scientific education, which decisively introduces pupils in that pluralistic science which only is compatible with an intercultural education according to the nonviolent model.³

In our century we knew several scientists that promoted nonviolent initiatives for solving, together with the people, great social problems. Einstein, Russell, Pauling, Sacharov, etc. felt themselves so strongly involved in their ethical responsibilities to decide extraordinary actions. They chose to behave according to their consciences rather than their professional roles, their ethical commitments rather than the political will of the financing funders, the expectations of people rather than the expectations of their institutions. We conclude that the task of those scientists wanting to serve people's interests—even when their institutions do not agree—is to popularise by means of both statements and public actions the scientific basic tenets of the crucial issues, in order for people to be able to grasp the whole set of the alternative solutions of a scientific conflict, hence, being aware about some critical issues, to be able to take crucial decisions in a responsible way.

Under this light, I suggest some variations to S.S. in order to both exit from scientism and enhance a constructive approach even when we are facing to apparently erroneous cultures and erroneous peoples. The aim is not to enounce conclusive statements, but to search all together the solution; not to re-affirm science's leadership in society, but to collect together all suitable energies for promoting a nonviolent conflict resolution, in scientific terms too.

² (Drago 1994a). This paper constitutes an application to peace education of a general scheme about conflict resolution (Drago 1996a).

³ A detailed presentation of the pluralism in mathematics is the book by (Kline 1982); in science it is given by (Drago 1991; Drago 1996b). In general, the radical differences inside science may be underlined by presenting two disciplines whose mathematics and methods are mutually at variance; for ex., in mathematics, computer mathematics vs. calculus; in physics, Newton's mechanics vs. thermodynamics (see Drago 1994b). For both levels of the secondary schools and high schools several hints are included in my above mentioned book. For a new didactic at both high school and undergraduate level, one may contrast in each scientific theory two main opposite schools. I suggested for physics teaching two alternative formulations of mechanics (see Drago 1966c). However, for an intercultural education the best suggestion is to teach the theory of scientific solutions of conflicts, in particular, game theory, difference and differential equations about conflicts, statistics about quarrels, etc. (a good reference is (Newmann, 1954, vol. II). A more up-to-date, and much easier presentation of similar contents is (Insegnanti nonviolenti, 1987).

A New Kind of Declaration by Scientists

We scientists, belonging to some scientific and political institutions, want to speak to all mankind in force of a long successful work in science, which we accomplished in the hope to contribute to an amelioration the conditions of mankind's life, and which was appreciated by the most relevant institutions in the world. We are speaking on behalf of neither our scientific institutions nor the political institutions funding them; but "as human beings"—as Einstein-Russell's manifesto against nuclear weapons suggested first; in other words, we speak as persons belonging to the people, likely to everyone else, since we are worried for some major political issues which include a relevant scientific content.

Our experience as well as our long-term reflection to these scientific contents may be useful to scholars, students, and common people concerned with the same questions of violence and war. At present we start to speak by suggesting awareness on these questions and their possible solutions and since the present time we feel ourselves obliged to directly communicate to common people, because the problems require an extraordinary effort which goes beyond the professional work of everyone, for us scientists, first of all beyond our technical jobs devoted to produce revenues of the science funding. If this direct communication to the people may disturb some institutions—even the institutions to which we belong—it is for us a subordinate fact with respect to the great relevance the following questions have for the future of our society.

This is not the only one our purpose; since we are persuaded that as scientists we have—as first—the responsibility to communicate outside the institutional milieus the real problems and their possible solutions; yet, as human beings we have the responsibility to act as everyone else; hence, our declaration constitutes moreover a promise, to be in service to all further requests of clarification, as well as illustrations, participations to public debates, interpositions with our institutions in order they satisfy the public expectations; lastly, we will adhere to manifestations on agreed issues....

Then the five Seville propositions follow, but by substituting for the starting words "It is scientifically incorrect.....", "Our group disagrees with the supporters of the following statement...."

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