Peace Studies and the Peace Movement

Antonino Drago

The aim of this paper is to describe a set of philosophical underpinnings and thereby to suggest a foundation for Peace Studies or Peace and Conflict Studies programs. To develop and understand this position fully, we suggest two intellectual tools. The first is a list of peace definitions rooted in ethical values. On the basis of these definitions, we discuss several proposals for Peace Studies curricula, with particular attention to that of Johan Galtung. The second tool is Galtung's notion of four models of development, which we define in structural terms through their two originating options of social organisation and social development. This notion points to the heart of the matter in this study, namely, the intrinsic pluralism of peace education. These two tools suggest at least a quartet of disciplines that characterize Peace Studies in each model of development. The result is a pluralist Peace Studies curriculum based on the multiple meanings we attribute to peace.

INTRODUCTION

In 1948 the first course on Peace Studies was introduced at Manchester College, a small liberal arts college in North Manchester, Indiana, USA. There was a subsequent proliferation of such courses, with the number reaching some hundreds in the United States and Northern Europe. Celebrated intellectuals such as Johan Galtung, Kenneth Boulding, and Anatol Rapoport improved upon this academic innovation. However, most academics saw its introduction more as an emotional reaction by students and scholars to crucial war events such as the Vietnam War than as a legitimate program

of studies to be added to the traditional university curricula. Even now its intellectual status is highly debated.

This article presents an intellectual framework that combines several contributions of the last fifty years in order to gain more recognition for this kind of academic study. This framework describes the basic disciplines of a Peace Studies curriculum as well as its main intellectual characteristic, a pluralist view of reality. My aim is to achieve a more authoritative course of Peace Studies in line with the two goals suggested by José Manuel Pureza and Teresa Cravo: "the qualification [in the academic milieu] of intended peace as sustainable peace . . . [and] the epistemological decolonization of Peace Studies [from oppression by traditional study programs]."[1]

A NAÏVE APPROACH TO PEACE STUDIES

Let us recall that in the past, the State understood making peace as a process that could lead, as a last resort, to waging war. The military academies had a well-defined task, namely, to teach how to apply force against an enemy's force in the most efficient possible way. Intellectually, the universities provided the study of International Relations for the practice of diplomacy, and Strategy was a specific field of study for military leaders.

For a century now, however, workers' unions, feminists, pacifists, and nonviolent activists have claimed that peace can be achieved through completely different processes. Further, the promotion of a world politics by the UN and its several agencies (such as International Courts, agencies for food and health) led people to expect civil actors such as grassroots movements and international nongovernmental organisations (INGOs) to play a greater role in the promotion of peace initiatives, including those on the battlefields. Thus both the UN and the peace movement have initiated a transition towards a new political situation.

At the same time, scholars have introduced new theories of peace processes that challenge the military monopoly on the intellectual field of Peace Studies.[2] What is Peace Studies according to this new attitude? Carolyn Stephenson, an American professor of Political Science with expertise in alternative security systems, offers a minimum-level definition of Peace Studies:

> Peace Studies is an interdisciplinary field encompassing systematic research and teaching on the causes of war and conditions of peace. It focuses on the causes of increases and decreases in

violence, the conditions associated with those changes, and the processes by which those changes happen. While there is disagreement on the exact content of the field, and even over the definition of peace, most would agree that Peace Studies began to be identified as a separate field of inquiry during the first decades after World War II.[3]

Stephenson's definition presents Peace Studies as merely one new complex of disciplines among many. While admitting that the field struggles with some fundamental internal disagreements, she stresses that it rests upon solid subjects of study. Most teachers of Peace Studies will likely share this definition.

Maire Dugan and Dennis Carey offer a definition that considers Peace Studies to be a means of finding a new intellectual perspective: "Peace Studies is an academic field which identifies and analyzes the violent and non-violent behaviors as well as the structural mechanisms attending social conflicts, with a view towards an understanding of those processes which lead to a more desirable human condition."[4] Although the academic community may attribute naïveté and imprecision to the notions of conflict, nonviolence, and social processes linked to values, this definition courageously asserts that these so-called naïve notions play a central role in Peace Studies.

From quite an opposite direction, voices within the peace movement criticize most attempts to define Peace Studies on the grounds that they include only the "study" of peace but not peace activity. Charles Webel's definition reflects this perspective:

It was and is considered an inter- or multi-disciplinary inquiry into human conflict, aggression and violence, as well as their causes, consequences, and alternatives to violent conflict and war. Peace Studies was and is in a complex and somewhat contested relationship with Security (or Conflict) Studies, which has tended to be more "mainstream" and statist in orientation, the "hard-minded" or "realpolitik" approach to the same species-wide problems. . . . Like engineers, scholars and practitioners of Peace Studies attempt to build bridges—between people, between communities, and between sometimes hostile nations and political elites. Accordingly, Peace Studies is ultimately a kind of applied field training for the practitioners and researchers of the 21st century. . . . And like medical doctors and public health

workers, Peace Studies theorists and activists seek to assess and diagnose the sources of social "illness" in order knowledgeably and effectively to "intervene" and "treat" the "disorders." This implies that Peace Studies is a "committed" worldly activity, as well as an historical and analytic scholarly enterprise.[5]

Here Webel, after delineating Peace Studies subject matters and method, recognizes a conflict within the academic milieu. Despite the attraction the course contents have for teachers and students, their recognition in traditional academic circles is contested. Due primarily to their explicit value orientation, the new courses in Peace Studies are even in opposition to some well-established fields of study. With regard to traditional courses, Webel emphasizes the progressive nature of the new studies. For him, the continued academic suspicion of their explicit value orientation corresponds to a somewhat primitive scientific worldview, particularly regarding the concept of peace; he suggests comparing Peace Studies to the more traditional academic fields of medicine and public health.

We might begin our attempt to achieve a comprehensive view of a Peace Studies program by first considering what subjects it should include. Since political, economic, cultural, and social relationships are an integral part of the study of peace, these surely need to be included. But we are also talking about a much wider range of subjects than those taught in an International Relations program, for the definition cited above suggests activities whose motivations rely on the examination and comparison of value-orientations.

Given this, what connections empirically exist, or should exist, between the suggested subject-matters and values? Let us consider the historical experience of such programs. A 1972 investigation by the Consortium on Peace Research, Education and Development (COPRED) of bona fide Peace Studies courses showed that they usually combined values and a scientific outlook, although a "dichotomy between the two cultures" might occur.[6] One scholar noted in 1985 that, although the number of courses on Peace Studies might decline due to the lack of financial support or student grants, their numbers were relatively stable over time, so this dichotomy did not destabilize or thwart the ongoing presence of university Peace Studies courses.[7] Thus, a group of teachers, although heterogeneous in their values and orientations, may, on the subject of "peace," reach a cultural agreement on which to base a valid university curriculum. Encouraged by this academic situation, we tackled the following problem: how might the

supporters of several quite different mindsets on matters of Peace Studies reach this cultural consensus?

TEN CONCEPTIONS OF "PEACE" AND THEIR IMPLICATIONS FOR PEACE STUDIES

The most serious problem concerning both Peace Studies and peace research may be the lack of a unanimous and authoritative definition of "peace."[8] In order to portray most of the likely implications that arise from the notion of Peace Studies, I have listed in Table 1 ten rather different meanings of peace. These are an attempt to represent a full spectrum of interpretations of peace. They are ordered according to personal motivation, ranging from neutral and purely intellectual to ethical and religious.[9]

In the second column of Table 1, I have listed the short conceptions of peace with their proponent's name in parentheses. The first column consists of a short-hand categorization—with letters whose meanings are explained in the legend—for the type of definition. In the third column we find the corresponding subject matter or "kind" of Peace Studies. In the last column we find the matching (or hoped for) social institutions (in political, labour market, educational, and/or religious fields) whose personnel would hold to the corresponding conception of peace.

Table 1: Cultural Attitues to Peace Studies with Respect to Various Meanings of the Word "Peace"

	PEACE	**KIND OF STUDIES**	**SOCIAL APPLICATION**
1. *N*	*A generic subject of study (Bouthoul)*	*On* War and peace, neutral	State intellectual bureau-cracy, in particular of military studies centres
2. *D*	*Diplomacy—Real-ist UN (K. Boulding)*	*On* Peace: New interdisciplin-ary subject	Diplomats
3. *D*	*Inspired by the Einstein-Freud correspondence*	*On* Peace: New cultural perspective	Teachers with a critical attitude to culture
4. *Pr*	*Inspired by the Einstein-Russell Manifesto*	*For* Peace: New historical perspective	Responsible scientists; trade union representatives for international cooperation

5. *Pr*	*Inspired by the vision of a new anthropological era—UN as world democracy (Kant, Maritain)*	*For* Peace: Human rights, new political practice in interna-tional relationships	Movements against the arms race and oppressive states; movements for peace
6. *Pr*	UN *Agenda for Peace (Boutros-Ghali)*	*For* Peace: New political practice in tackling inter-national crises	ILM: new officials for solving interstate conflicts through PM, PK, and PB interventions
7. *Pr*	*Supporting also a new rational-ity (UNESCO, Naess, Muller)*	*For* Peace: Toward a general theory of con-flict management and conflict mediation	ILM: As in #6 above NLM: new professionals for intrastate conflicts
8. *Pr*	*Supporting a paradigm shift (La Pira, Nagler, Sharp)*	*For* Peace and justice together: as in #7 above, plus a new philosophy of knowl-edge, a paradigm shift in each subject matter	ILM: As in #6 and 7 above, plus Track 2 diplomats NLM: As in #7 above, plus social operators for peace (e.g., teachers for conscientious objectors in civilian service)
9. *Pe*	*Ethical commit-ment to win-win solutions of all conflicts (Lanza del Vasto, Don Milani, Galtung)*	*For* Conflict transfor-mation, grassroots, non-Machiavellian, non-violent politics	ILM: As in #6, 7, and 8 above, plus NGO professionals for international conflict transformation and nonviolent interposition NLM: As in #7 and 8 above plus nonviolent politicians
10. *Pe*	*Religious commit-ment to positive conflict resolution (Gandhi, Capi-tini, M. L. King, Thich Nhat Hanh)*	*For* Peace: New politics resulting from a non-violent religious attitude	As in #9 the above, plus professionals for religious institutions and inter-religious relationships

Legend: N: Negative Peace; D: Descriptive Peace; Pr: Prescriptive Peace; Pe: Persuasive Peace; PM: Peacemaking; PK: Peacekeeping; PB: Peacebuilding; CS: Civilian Service; NLM: National Labour Market; ILM: International Labour Market.

The many and varied conceptions of peace in Table 1 shows the complexity of the choices to be made by those envisaging a Peace Studies program. It also shows how difficult it may be for a consensus to be reached among teachers

who normally hold quite different views of what constitutes "peace."

PROPOSALS FOR PEACE STUDIES PROGRAMS ACCORDING TO THESE MEANINGS OF PEACE

Let us now analyse what designs for a Peace Studies program the conceptions in Table 1 imply. The first meaning conceives of peace in terms of security, both personal and national—what we have come to know as the absence of threat or war, or "negative peace." Although the second and third meanings enhance this first meaning of peace, none of them introduce new values compared to the pre-existing dominant ones. The Peace Studies in line with these first three meanings are appropriate for the training of military and diplomatic officials, whose professional roles in present society are already defined by a corpus of law. With these definitions Peace Studies can effectively serve the ends determined by States. Here Peace Studies differs little from the domains treated in Political Science and International Relations; indeed, International Relations programs might include these Peace Studies if they are open to innovation.

A second group of three meanings (4, 5, and 6) gives the conception of peace a prescriptive and persuasive character. These different ways of understanding peace call for new social roles and challenge the political system's resistance to persuasive notions of peace. These new perspectives stem from movements that believe they must promote peace in the world. An early example of this, seen in the fourth meaning, is the Western workers' movement, which in international relations consistently pursued a policy of peace since its supporters knew very well that they gained nothing from a war. War, in their view, tended only to serve the aims of the bourgeoisie. However, such a far-reaching strategy for peace is ancillary to the broader political aims of Western leftists such as social justice and the defence of workers.

A second major movement, also seen in the fourth meaning, was that of scientists for peace, whose guiding light was Albert Einstein. Einstein's Manifesto, produced together with Bertrand Russell and other Nobel Prize winners, is still the most impressive warning so far about the future of the human species in the face of the nuclear threat. The manifesto argues that only radical changes in the very nature of society can ensure that disastrous wars will be avoided. Regarding the arms race, the Einstein-Russell Manifesto was the first conception of peace to insist on a radical change in the

structure of society by ending the construction of the very weapons the scientists themselves had invented.

The fifth meaning of peace offers guidance and inspiration to the United Nations Organization. While it is true that the UN is an institution created by sovereign and even absolutist States, it is nonetheless an agency designed to promote human rights and international law for and in all countries. By attempting to fulfill this mandate, the UN also meets some central expectations of the larger peace movement.[10] The social implications of this particular understanding of peace are vast, given that the United Nations for the first time created a whole new world-wide bureaucracy to deal with the peace question in relation to its many interrelated issues.[11]

One proposal for Peace Studies based on meanings 3, 4, and 5 of peace comes from Stephenson, though with little reference to the UN. Listing five items pertaining to negative peace and four pertaining to positive peace, Stephenson marks all the intersections where the traditional disciplines and the specific subjects of Peace Studies meet.[12] In her view, the innovative substance of Peace Studies may be added to the existing set of college disciplines without a radical change in the latter's contents.

In line with what Galtung and others calling for more peaceful relations had previously asked,[13] in 1992 the UN *Agenda for Peace* decisively introduced new UN functions—a multiple peace intervention program (meaning 6) far beyond that of preventive diplomacy and promoting human rights.[14] In the legal language of the then UN Secretary-General Boutros Boutros-Ghali, peacemaking, peacekeeping, and peacebuilding in international conflicts must be enlarged to include unarmed intervention by civil personnel. This legal proposal promotes NGOs' international interpositions launched from below at the institutional level, and places the actions of civil personnel on a par with military action and personnel. In other words, the UN started a civil kind of international peace force that anticipates an alternative to the solely military defence of sovereign states. This enhancement of UN policy for resolving international conflicts represented an enlargement of its political support, now coming not only from States but directly from citizens of the world. To be able to carry out these kinds of UN interventions, new civil professionals would be required in the field of international relations (meaning 7). These new professionals would best be trained in Peace Studies courses that embody the new value orientations.

None of the proposals illustrated thus far weakens the teacher's freedom

in teaching his or her own subject. However, from the sixth meaning of peace onward, the new value-oriented ways of understanding peace include a philosophy of how to solve conflicts positively. Here, the teacher's attitude cannot be neutral because it must be consonant with the subject matter, and to further this aim, the teacher may have to question the received culture and consider how to change it.

In line with this new perspective, in 1987 Chadwick Alger put forward a proposal for Peace Studies specific to the eighth meaning of peace. He summarized the proposal as follows:

> Peace Studies should be in the midst of four crossroads. First, Peace Studies must be at the crossroads of peace research, peace education, and peace action. . . . Peace Studies must be at the second crossroads, between approaches of negative peace—stopping violence—and those of positive peace—overcoming social injustice. Peace Studies must also be at the crossroads of a growing array of grass root movements, a challenge to more traditional peace-research methodologies. Peace Studies should endeavour to create a new crossroads, between grass-roots movements and global organizations [UN as the first]. Only through grass-roots practice can the peace efforts of global organizations acquire legitimacy.[15]

Alger's suggestions call for a new interplay between the UN and "the Peace Movement," in particular grassroots movements promoting both peace and justice through a list of major issues including human rights, self-determination, the international economic system, communication, ecology, and the common good. But a translation of these issues into a list of disciplines to be studied is lacking. Alger did not specify more precisely the intellectual means to achieve this brand of Peace Studies. His proposal seems especially ambitious if we look at the present academic culture, for it appeals to those intellectual spheres (engagement in peace, the positive meaning of peace, a new methodology of social studies, and a vision of the world from both the bottom and the top) that are rarely present in the current academic milieu.

In 1972, fifteen years before Alger's paper, COPRED had specifically examined experiences in this field of studies. To constitute Peace Studies programs, COPRED suggested recognising four cultural areas:

1. a futurist or world order approach (based on an alternative system design in order to ensure a set of world order values to bolster such

a system);

2. a conflict regulation/management approach (based on reducing conflict tensions, mostly through existing systems and structures);

3. a nonviolent values and lifestyles approach (focused on the personal dimension and on personal solutions);

4. a war/peace systems approach similar to International Relations; it concerns the structure and dynamics of the current world situation.[16]

Implicit in COPRED's proposal we recognize a scientific attitude (areas 2 and 4, the former including nonviolent conflict resolution) considered essential by academia, and a values attitude (areas 1 and 3) pertaining to the more ethically involved meanings of peace (meanings 8, 9, and 10). COPRED's proposal suggests combining them and in this way gives specific content to the kind of studies that Alger only locates in broader social dynamics. The conclusion of Ho-Won Jeong's *Peace and Conflict Studies*[17] offers further specification. It lists nine topics for Strategies for Peace: (1) control of military power; (2) conflict resolution and management; (3) human rights; (4) self-determination; (5) development; (6) environmental politics; (7) global order and governance; (8) nonviolence; and (9) peace movement. The last two topics explicitly take a stand on behalf of specific values.

GALTUNG'S PROPOSAL FOR UNIVERSITY PEACE STUDIES

Let us turn to Galtung's proposal for Peace Studies located in meaning 9 of Table 1. Galtung sees Peace Studies as an application of peace research in order to resolve (or, more accurately, transform and transcend) conflicts, much as medical studies are concerned with the health of people and society. In his view, Peace Studies can help people resolve conflicts by nonviolent means in much the same way as the spread of hygienic practices throughout society over the last two centuries has eliminated many diseases.[18] This analogy between peace and health has much pedagogical value; it makes simple, easily grasped, and suggestive a field of studies that otherwise the mass media all too readily depict as utopian. Notice that with this analogy Galtung emphasizes the similarity of their basic values (that is, the active search for peace on one hand and human health on the other) and the extension of the scientific endeavour to control not only health but also violence and wars.

However, Galtung does not reduce peace issues to personal notions such as health and illness.[19] In a paper at the 2006 International Peace

Research Association (IPRA) biennial gathering in Calgary,[20] Galtung presented a proposal on the professionalization of peace. In his concluding section, he laid out his conception of Peace Studies in ten points. The title of this section and Galtung's first point both state the peace-health parallel. Then follow more suggestions as to what constitutes a complete or productive Peace Studies program. Galtung's ten points on Peace Studies may be summarized as follows:[21]

1. Viewing peace as parallel to health;

2. Viewing conflict theory as the epistemological point of departure;[22]

3. Overcoming the tenets of studies that reiterate the conceptual mistakes of declining post-industrial States, and fostering a new form of studies centred on social sciences;

4. In any analysis of conflicts, including many more fault-lines (conflict formations of long duration, such as gender, generation, race, nation, class, environment); [23]

5. Specifying the major purpose of theory and practice, namely the avoidance of massive category killing;

6. Counterbalancing security studies, which are more concerned to justify militarization and state secrecy than to reduce societal suffering;

7. Overcoming a professionalism detached from basic human needs;

8. Co-opting more disciplines such as peace psychology, peace mathematics, and macro-history;

9. Overcoming the old Westphalian diplomacy with its intrinsic confusion of "national interest" and peace;

10. Linking Peace Studies with peace action, understood as conflict resolution and mediation expertise.

Several items here call for attention. First, Galtung's proposal radically changes the common view of Peace Studies, for rather than only linking them to other proposals, it links them to peace action. Second, in order to avoid the characteristic academic way of studying violence (that is, cultural violence), Galtung's proposal requires inter- and transdisciplinary studies. It also questions the adequacy of the received epistemic and philosophical underpinnings of the conventional social science disciplines including history, journalism, psychology, and economics. Third, it imagines Conflict Theory

as an epistemic innovation, quite different from the usual conceptual approaches to conflict analysis, which normally focus on phenomenology and behaviouristic aspects at the expense of effective conflict resolution.

Galtung's proposal so radically revises the foundations of traditional academic culture that it actually generates an intellectual conflict between the old studies and the new. Indeed, in Galtung's view, all analysis and study of social events and conflicts in particular aims at the active transformation of violence, suffering, pain, discrimination, marginalization, exploitation, and alienation into interaction patterns marked by mutual and equal benefits.[24] This is not surprising, since he explicitly supports Peace Studies based on values. We should note that these values are not accepted by the supporters of the traditional studies, which, they claim, are value-free, while, in fact, they accept the political orientation of existing States as an absolute value. Regarding values, Galtung recalls his well-known epistemological conception:

> Without rejecting empiricism linking data and theory, and criticism linking data and value as basic modes of intellectual activity, the focus [of the mind of a peace professional, hence also of Peace Studies] will be on the third possibility: Constructivism, linking values and theory. The values emerge from the legitimate goals of the parties to a conflict, and the theory from the viable realities.[25]

Galtung's proposed guidelines for new Peace Studies programs in this paper are innovative and courageous. However, a number of unsolved intellectual problems arise. He does not here suggest how to select from among the great variety of values those suitable for a specific conflict. But elsewhere, he clarifies that these values must be legitimised "on the basis of Human Rights, International Humanitarian Law, Basic Needs and local systems of law." Further, he names the values that constitute the foundation of his peace ethics: "the sanctity of life is central, killing is not legitimate."[26] To this, however, he adds,

> But I face a problem in not forcing this attention to legitimate goals into a pre-judgement. We are not allowed to pre-judge the other's "truths" or terms of reference, but when we legitimise on the basis of Human Rights, International Humanitarian Law, Basic Needs and local systems of law, we are already formulating a strong judgement. I do not feel comfortable using outside

frameworks, except with the killing-not killing model.[27]

The novelty of this proposal directly concerns the professional role of one who teaches courses in this kind of a Peace Studies program. Let us recall that teachers make a personal, cultural synthesis of their intellectual activity and their deep values. They answer in a personal, specific way the following questions: What is the reason for acquiring the knowledge included in a specific subject matter? What connections exist with other subject matters? To what ethical hierarchy do they belong? In what ethical perspective should Peace Studies be set notwithstanding the variety of its subject matters?

Their resulting cultural and ethical choices shape the teaching activity and, moreover, bring them into conflict with the basic beliefs of other teachers, thus influencing the global orientation of the program. As a consequence, at the eighth meaning of peace in Table 1, different teachers inevitably have to look for mutual agreement on their educational activity, although such agreement is not easy to achieve. What cultural agreement should there be among different intellectual stances? Further, how should we circumscribe a set of the common values that can be shared by a group of teachers? What kind of pluralism is possible?

In my opinion, Galtung's proposal constitutes a sure way to overcome tradition, for it constructs something new on several levels, including the methodological level; however, it is not enough to establish a new tradition.

SUGGESTIONS FOR CURRICULA IN PEACE STUDIES

Let us compare the Peace Studies proposals based on the first five meanings with the proposals based on the last five meanings. Whereas the first ones are consolidated by a long tradition of intellectual and academic experience, the latter ones attempt something new, namely, the joining of values to formal studies through a list of subject matters belonging to complex subjects such as political studies.[28]

Let us illustrate this point in each of the latter proposals. Alger's proposal for Peace Studies (in the eighth meaning) suggests changing much more than a single discipline—International Relations—or the contents of old disciplines of the traditional academic culture on peace. But his identification of four crossroads concerns simply the social premises, that is, the actions to be performed by the peace movement in order to support a correct Peace Studies curriculum. Certainly, putting Peace Studies at the crossroads of peace research, peace education, and peace action suggests the method

these new studies should follow. But the other three crossroads (negative and positive peace, various grassroots movements, grassroots movements and global organizations) concern not so much the studies as the type of political action that could provide them with a political basis. Alger did well to recall these methodological aspects since they constitute the premises for a curriculum in line with the peace movement's political aims, but they do not suggest a specific academic discipline.

COPRED suggests how to balance the different contents of Peace Studies among four cultural areas, but it says little about the specific disciplines. Stephenson's proposal is more detailed. She suggests four subjects to be studied as "Conditions of [positive] Peace": Basic Needs, Human Rights, Equity, and Peaceful Processes of Conflict Resolution. Although they begin to illustrate a panorama of studies, they do not claim to exhaust all conditions for positive peace; moreover, they are not translated into a set of recognized, specific disciplines.

Galtung's proposal explicitly changes the disciplines of traditional academic studies. Inspired by his analogy of Peace Studies with health care, in points 2 to 5 of his ten points he lists several disciplines: Conflict Studies, (Peace) Psychology, Anthropology, (alternative) Economics, and studies on all the causes of conflicts (the fault-lines of gender, generation, race, nation, class, environment). Moreover, says Galtung, all these disciplines have to converge and contribute to preventing the various forms of mass killing, just as medical disciplines as a whole work to prevent epidemics. Further, Galtung also rejects respected academic subjects (security studies, traditional social sciences) while including the new and crucial discipline of conflict theory—and peace psychology. Through Galtung's proposal the panorama of Peace Studies is now clearer, but it does not translate studies of the fault-lines—whose number is potentially very great—into specific disciplines.[29]

From Parts 3 and 4 of Barash and Webel's *Peace and Conflict Studies* (2008) we can extract a list of subjects that approach the definitions of some disciplines. In Part 3, under the title "Building Negative Peace," the authors discuss several subjects: Diplomacy Negotiations and Conflict Resolution, International Cooperation, Disarmament and Arms Control, International Cooperation, International Law,[30] Beyond Peace Movements, Peace through Strength, and Ethical and Religious Perspectives.[31] Barash and Webel view all these items under "Building Negative Peace" as problematic. Under the title "Building Positive Peace" they list Human Rights, Ecological Wellbeing,

Economic Wellbeing, National Reconciliation, Beyond Nonviolence, and Towards a more Peaceful Future.[32] Here we have an overview of some disciplines, but without a definite list or a clear demarcation between them. The same may be said of Jeong's proposal, although its list of subjects is different from Barash and Webel's. In conclusion, none of them provides an exhaustive list of disciplines, and none of them suggests the core disciplines of a university degree course in Peace Studies.

THE FOUR MODELS OF DEVELOPMENT

In order to strengthen the previous proposals, we first need to clarify two basic questions for a Peace Studies curriculum: how to be more accurate about values and how to represent pluralism in society. For this purpose, I turn to Galtung's Model of Development (MoDv). Forty years ago, Galtung obtained this notion while investigating the basic interactions of society: (1) "is the basic social theme inequity or equity? Is it predominantly vertical or horizontal?" (2) "Is the basic social theme uniformity or diversity? Is it predominantly collectivist or individualist?" By combining these dichotomies, Galtung obtained four models of social structure: Model 1: Conservative (inequity vertical plus uniformity collectivist); Model 2: Liberal (inequity vertical plus diversity individualist); Model 3: Communal (equity horizontal plus uniformity collectivist); and Model 4: Pluralist (equity horizontal plus diversity individualist).[33]

Notice that these themes or variables are of a subjective or relational nature. Let us consider two corresponding variables that are structural in nature and more suited for defining a MoDv. Galtung's two dichotomous variables present two basic structural options: (1) a social organization based on either (a) freedom of social initiative for the cleverest or (b) justice for all (in Parliamentary terms, ruled by either the political right or the political left); and (2) the main social values a given population holds, either (a) development aimed at super-goals or (b) development primarily concerned with interpersonal relationships.

If we translate these options into social structural terms, they become (1) a kind of *social organization* (either the Authoritarian Organization [AO] present in the traditional State organization, or the Problem-Based Organization [PO], such as the organization of the peace movement wanting to solve a problem such as the achievement of peace); and (2) a kind of *social improvement* (either Absolutist Improvement [AI], as with the introduction

of nuclear power, or a Personal Improvement [PI], such as the development of new methods for non-violent conflict resolution). The pairs of choices concerning the two options create a total of four MoDvs. I preserve Galtung's characterisation of them by means of four colours which allude to present States or movements in the World: blue for AO, red for PO, yellow for AI, and green for PI.

Galtung rarely used the notion of the four MoDvs as an interpretative category; indeed, after the revolutionary events of 1989 he seems to have dismissed it.[34] But in my opinion, this MoDv interpretive category, representing four ideal types of models of development, survives historical changes. For example, the collapse of the USSR did not cancel the Red (PO) model in history. The model survives whenever a people or a movement joins the two basic choices of a self-reliant social organization and social improvement with super-human aims (such as a historical mission, collectivist economic plans, a never-ending arms race). I also consider this notion crucial in order to characterize nonviolent political theory in accurate, structural terms.[35]

Notice that each choice is exclusive in nature; one cannot develop an authoritarian society and at the same time a grassroots organization; nor can one improve society by relying on both nuclear power and renewable sources of energy. In other words, the two different choices in each option represent a division so deep that basic notions have radically different meanings. For example, brotherhood is understood in two different ways by a military man and a conscientious objector. The same applies to notions such as force and love. The conflict between a pair of MoDvs may be so deep and radical as to become mutually untranslatable, a phenomenon that pacifists and military personnel often experience in their interactions. Thus a pair of MoDvs differing in at least one choice represents a case of incommensurability.[36] This implies that no higher viewpoint is possible; to plan to unify human culture into a single worldview is to follow a mythical hope.

Together the four MoDvs represent a conflictual political reality that can survive only if a continuous effort is made to resolve the conflicts arising among them. The green MoDv (PI), at least, implies just this effort, and this, in turn, produces an essentially pluralist political life.

THE FOUR KINDS OF PEACE STUDIES AS SUGGESTED BY THE FOUR MODVS

The four MoDvs also constitute a compass that can orient a mind tackling a crowded panorama of intellectual constructions. Let us verify the orientation-function of this structural notion by applying it—together with its associated notions such as options, choices, incommensurability, radical variation of meaning, and pluralism—to the complex theme of Peace Studies, in order to characterize their fundamentals.

As a first step, let us define four educational system models corresponding to the four MoDvs. By taking into account the main variations in meanings of the basic elements pertaining to peace education, we have the following table:

Table 2: Variations in Meeting of Peace Studies According to the Four Models of Development

MoDv	Value-free or not	On / For Peace	Kind of motivation	Professional profile	Professional role
AO Blue	Value-free	On Peace as subject of outside study	Individual	Already designed by scientific criteria	Officials subordinated to the military strategy (civilian support to military strategy)
PO Red	Value-oriented	On Peace for collective politics	Collectivist	Already designed by scientific criteria (but put in relation with the movement)	Officials to link both State and left political party with peace movement and its peace politics
AI Yellow	Value-free	For Peace as a means to enter a new profession	Individual	In progress, through cultural research	New national and international profession
PI Green	Value-oriented[37]	For Supporting peace in society	Communitarian	In progress, through research/action within the peace movement	The leaders of peace movement, educated at the first semi-public institution

Legend: MoDv: Model of Development; AO: Authoritarian Organization; PO: Problem-Based Organization; AI: Absolutist Improvement; PI: Personal Improvement.

We know, for example, that in present-day society, corresponding to the four MoDvs, at least four professional roles of peace operators exist; they are briefly illustrated in the last column of Table 2. When Galtung suggests the parallelism between a peace operator and a physician, he usually has in mind the social role of a physician as it was played at the beginnings of the

modern profession in the late nineteenth century. But now a physician, like the four possible roles played by a peace operator, assumes very different roles. Indeed, a physician operates in one of four basic health systems, which correspond to the different four MoDvs:

1. a (substantially) private health system (as in the USA) (AO, blue);

2. a public health system (as in the former USSR and now in the UK, Italy, and Canada) (PO, red);

3. a movement aimed at promoting health in society (such as the movement of physicians voluntarily operating in under-developed countries) (AI, yellow);

4. a local, communitarian or village system (such as the system that employs practitioners of "alternative" medicines such as acupuncture, chiropractic, and herbal medicine) (PI, green).

Now let us take a second step in order to construct an accurate proposal for Peace Studies. The co-existence of four different MoDvs fits with the essential plurality of meanings of the word "peace." Peace plays a central role in the politics of each MoDv, but it undergoes radical variations in meaning when passing from one MoDv to another. Its main variation is between the meaning of "negative peace" —pertaining to the Blue and Red MoDvs, whose numerous social institutions allow the individual to delegate the solution of all conflicts to these institutions—and the meaning of "positive peace" —pertaining to the yellow and green MoDvs, in which personal commitment leads the individual actively to construct a peace process. In Table 1 this distinction separates the first five meanings from those following.

Further, the ten meanings of peace in Table 1 may be approximately divided into four overlapping groups, corresponding to the four MoDvs. The first two meanings pertain to the blue and red MoDvs; but these models may also accept the third, fourth, and fifth meanings.[38] Meanings three to eight pertain to the yellow MoDv and the last five meanings pertain to the green MoDv.

One more case of radical variation in meaning appears in the notion of "Peace Studies." Its main variation is between "studies *on* Peace," namely, on a cultural subject that is external to the students because it is a competence of specific institutions (blue and red MoDvs); and "studies *for* Peace," namely, studies that are oriented towards a personal project of transformation of reality and explicitly value-oriented (yellow and green MoDvs). The proposals of COPRED, Stephenson, Alger, Jeong, Galtung, Barash, and Webel all

more or less share the latter meaning.

A PLURALIST CURRICULUM IN PEACE STUDIES THROUGH A QUARTET OF SUBJECT MATTERS

Since the word peace is a poly-semantic word and thus implies an essentially pluralist attitude, Peace Studies cannot be reduced to a single discipline. Indeed, Galtung often stresses that Peace Studies constitute an inter- or transdisciplinary field.

Supporters of a green (PI) MoDv for a Peace Studies curriculum might first respond to the military academies, which at present offer a dogmatic curriculum according to the blue (AO) MoDv. Indeed, a curriculum that responds to a military academy's curriculum according to the green (PI) MoDv may be both a defensive act and a proclamation of the opposite viewpoint's intellectual capabilities. As each student in the blue (AO) MoDv is trained to be a one-dimensional professional, as military cadets are, this curriculum leaves this conflict unresolved at the social level. The exclusive nature of education in the present military academies reflects an outdated educational attitude, and the only solution, corresponding to the pluralist nature of the green (PI) MoDv, is a pluralist curriculum.

We conclude that although students must have the opportunity to develop their specific professional motivations, Peace Studies according to the green (PI) MoDv must suggest a non-partisan curriculum. At the same time, the pluralist nature of Peace Studies is an essential premise for any kind of professionalization of peace operators that the State will provide.

Certainly, scholars may question this pluralism as new within their Political Sciences and Social Sciences curricula. However, at the university level it is not new; in Architectural Studies, for instance, it is recognised that a personal choice is decisive. Therefore, the curriculum ensures that students are prepared in the basic disciplines of the profession, but it allows them to compose the curriculum creatively, according to several artistic orientations. Likewise, Peace Studies implies a creativity factor, provided that one does not delegate the exercise of its profession to an all-encompassing institution, as the State might be.

Let us start from the four possibilities listed in columns 2 to 5 of Table 2. First, let us consider the teacher's role. Let us remember that the educational aim of a pluralist curriculum cannot be imposed on teachers from above; teachers cannot teach in a pluralist way, but only present a subject

matter in agreement with their own convictions, which are visible to the students. Therefore, in the following we will consider a unity composed of a subject-matter and its specific teacher.

The next step is to ask the questions: Which curriculum? Or better, what is the core group of subjects of the curriculum? As noted above, a suggestion comes from COPRED's investigation on the historical experiences of the variety of curricula. It summarises their disciplinary contents in four broad areas: (1) a futurist or world order approach based on an alternative value-based system; (2) a conflict regulation/management approach; (3) a nonviolent values and lifestyles approach; (4) a war/peace systems approach similar to International Relations. This suggests that four disciplines may constitute the fundamental intellectual basis of a Peace Studies curriculum. In the fourth area we easily recognise the characteristic discipline of the Blue (AO) MoDv (International Relations), while in the third area we recognise the characteristic discipline of the Green (PI) MoDv (theory and praxis of non-violence). These two disciplines relate to the world of the great institutions and the peace movement. The characteristic disciplines for the red (PO) and yellow (AI) MoDvs respectively may be considered Economics and Political Science. Economics becomes more characteristic of the red (PO) MoDv when it is taught according to the principle of the international solidarity of the workers' movement; and Political Science becomes more characteristic of the yellow (AI) MoDv when it is taught according to the national context in which the students live.

As a result, an intellectual conflict is openly presented to the students through a set of drastically different disciplines. This conflict implies that each student is called by the pluralist nature of the curriculum to choose his or her own motivations among a well-defined set of possibilities. This involvement in a choice is the best premise of an educational process in Peace Studies that is based on value-explicit teachings and is developed in a pluralist spirit. In order to compose the entire curriculum, further disciplines can be added according to each of the four orientations represented by the above disciplines.

One may object that the four disciplines named are too mutually divergent to constitute a consolidated basis on which a student may construct a professional viewpoint. But, in fact, this educational situation is shared by two scientific curricula which have been developed by teachers over the last century—Physics and Chemistry. Here, where one would expect an

intellectual basis without divergences, both Physics and Chemistry offer four disciplines as a fundamental basis. High school Physics, for example, features a scheme of four theories, namely Newton's Mechanics, Electricity and Magnetism, Thermodynamics, and Geometrical Optics. In a more complex way, university studies of Physics also rely on four theories.[39]

CONCLUSIONS

In this analysis I have tried to show that programs for Peace Studies are not merely a cultural *élan*, motivated by noble values but lacking in both scientific bases and substantial contents for their professional roles. Instead, this description of Peace Studies programs highlights the following main aspects:

- A variety of motivating meanings of peace, ranging from the private realm (subjective motivations) to the public realm (all social structures, both traditional and future), and from theoretical neutrality to the highest ethical involvement that we find in the movement for peace;
- Different educational processes according to four foundational viewpoints that I call Models of Development;
- The old paradigm for Peace Studies;
- An innovative way to teach Peace Studies, which *per se* are of a highly conflictual nature, according to a basic pluralism.

Thus it is possible formally to create Peace Studies programs which, within the consolidated programs of academic culture, are well recognized in a specific set of foundational disciplines so that they can advantageously compete with the more accredited academic programs. The values and scientific prerequisites commonly associated with them are a valid basis for the training of new professionals working for peace. The main obstacle faced by Peace Studies in the academic milieu is pluralism. If this obstacle is overcome, several innovations result, introducing into universities a new kind of intellectual work whose main feature is to cultivate intellectual pluralism.

ACKNOWLEDGEMENTS

ENDNOTES

1. José Manuel Pureza and Teresa Cravo, "Critical Edge and Legitimisation in Peace Studies," in *Multidisciplinary Perspectives on Peace and Conflict Research. A View from Europe*, ed. Francisco Ferràndiz and Antonius C. G. M. Robben (Bilbao, Spain: HumanitarianNet, 2007), 77.

2. Popular readers on the subject are Joseph J. Fahey and Richard Armstrong, eds., *A Peace Reader: Essential Readings on War, Justice, Nonviolence and World Order* (Maryknoll, NY: Paulist, 1992); Ho-Won Jeong, ed., *Peace and Conflict Studies* (Aldershot, UK: Ashgate, 2000); David Barash, ed., *Approaches to Peace*, 2nd ed. (Oxford: Oxford University Press, 2010). See also Charles Webel and Johan Galtung, eds., *The Handbook of Peace and Conflict Studies* (London: Routledge, 2007) and *The Oxford International Encyclopaedia of Peace*, ed. Nigel Young (Oxford: Oxford University Press, 2010).

3. Carolyn M. Stephenson, "Peace Studies: An Overview," in *Encyclopaedia of Violence, Conflict and Peace*, ed. Lester Kurtz (London: Macmillan, 1999) 2: 809. Its content agrees with Hikki Patomäki's widely-accepted, short definition in "The Challenge of Critical Theory: Peace Research at the Start of the New Century," *Journal of Peace Research* 38 (2001): 732: "The main subject of Peace research [is] the transformations from politics to violence and *vice versa.*"

4. Maire A. Dugan and Dennis P. Carey, "Towards a Definition of Peace Studies," in *Proceedings of the IPRA IX Conference*, ed. Yoshikazu Sakamoto and R. Klaassen (Orillia, ON: International Peace Research Association, 1981); and Maire A. Dugan, "Peace Studies at the Graduate Level," in *Annals of the American Academy of Political and Social Sciences* (July 1989), 72-79.

5. Charles Webel, *Learning Guide for Peace Studies* (San Francisco: Saybrook Graduate School, 1999, 2000), 9-10. Recently, a textbook on Peace Studies received great attention: David Barash and Charles Webel, *Peace and Conflict Studies*, 2nd edition (London: Sage, 2008). It offers the following definition of Peace Studies: "Peace and Conflict Studies do, where possible, seek to develop new avenues for cooperation, as well as to reduce violence, especially organized state-sanctioned violence and the terrorizing violence perpetrated by and against non-state actors" (12).

6.   COPRED, "Questionnaire on Peace Research and Education: A Report," *Peace and Change* 1, no. 1 (1972): 62-67. In 1972 UNESCO also promoted an investigation of 140 Institutes and Peace Studies programs; see Philip P. Everts, "Developments and Trends in Peace and Conflict Research, 1965-1971: A Survey of Institutions," *Journal of Conflict Resolution* 16, no. 4 (1972): 477-510. This investigation, however, did not sever the many individual Peace courses from a Peace Studies program. Of course, a single course is influenced by the general curriculum and so it is not as relevant as an entire programme; for instance, a single course rarely includes a practical part, such as peace action. See also the PJSA and IPRA Foundation's *Global Directory of Peace Studies and Conflict Resolution programs*, 2007. It profiles over 450 undergraduate, master's, and doctoral programmes and concentrations in over 40 countries and 38 US states. For interesting comments on earlier situations, see Ian M. Harris, Larry J. Fisk, and Carol Rank, "A Portrait of University Peace Studies in North America and West Europe at the End of Millennium," *International Journal of Peace Studies* 3, no. 1 (1998): 91-112; http://www.gmu.edu/programs/icar/ijps/vol3_1/Harris.htm.

7.   George A. Lopez, "A University Peace Studies Curriculum for the 1990s," *Journal of Peace Research* 22, no. 2 (1985): 117-28.

8.   Anatol Rapoport, "Definitions and Concepts of Peace," in Kurtz, *Encyclopaedia of Violence, Conflict and Peace* 2: 669-78.

9.   Wolfgang Dietrich, "Beyond the Gates of Eden: Trans-rational Peaces," in *The Palgrave International Handbook of Peace Studies: A Cultural Perspective*, ed. Wolfgang Dietrich et al. (London: Palgrave MacMillan, 2011), 3-23, suggests five meanings of "peace": "energetic," "moral," "modern," "post-modern," and "trans-rational." The last three meanings appear to be the dominant ones; they reveal a viewpoint of the current modern culture without questioning the notions of both modernity and rational progress.

10.   Chadwick Alger proposed a table showing the extent of this advance with respect to both the history and the expectations of the peace movement. Chadwick Alger, "Peace Studies at the Crossroads: Where Else?," in *Annals of the American Academy of Political and Social Sciences* (July 1989), 120.

11. The number of UN Agencies is 54; they deal with a wide variety of issues such as Human Rights, Development, and University, but unfortunately not peacekeeping.

12. Stephenson, "Peace Studies," 811.

13. Johan Galtung, "Three Realistic Approaches to Peace Defence: Peacekeeping, Peacemaking and Peacebuilding," in *Impact of Science on Society* 26, nos. 1-2 (1986): 103-14.

14. Boutros Boutros-Ghali, *An Agenda for Peace* (New York: UN, 1992).

15. Alger, "Peace Studies," 117. See also Chadwick Alger, "Peace Studies as a Transdisciplinary Project," in Webel and Galtung's *Handbook of Peace and Conflict Studies*, 299-318. Here he provides "the reader with concrete examples of the vast range of involvements in activities that have an impact on peace and conflict conditions" (300).

16. COPRED, "Questionnaire."

17. Jeong, *Peace and Conflict Studies*.

18. Johan Galtung: *Peace by Peaceful Means* (London: Pluto, 1996).

19. One might erroneously consider this parallel between health and peace a negation of the structural notions that form the fundamental problematic of peace issues at the interpersonal, meso-social or macro-political level (e.g., social stability, war as a confrontation between two armies). An exclusive focus on Galtung's analogy would radically reduce the breadth of Galtung's inherently structuralist thinking.

20. Johan Galtung, "What Does Professionalization Mean in Peace Research?," Inaugural speech to XXI IPRA Conference, Calgary, 1 July 2006. The same points are illustrated in a previous paper by Johan Galtung: "Peace Studies: A Ten Point Primer," Nanjin University, China, 4 March 2006; see http://www.transcend.org/tpu/.

21. Currently, the ten points outlined in Galtung's "Peace Studies: A Ten Point Primer" are being implemented within the Galtung Institute for Peace Theory and Practice founded in 2011 in order to train Conflict Resolution Specialists along the very lines Galtung elaborated in Calgary in 2006.

22. Johan Galtung, *50 Years: 25 Intellectual Landscapes Explored*

(TRANSCEND University Press, 2008) and Johan Galtung, *A Theory of Conflict—Overcoming Direct Violence* (TRANSCEND University Press, 2010).

23. A fault-line according to Galtung is a "conflict formation of long duration, pitting the parties against each other; with incompatible goals, negative attitudes and negative behaviour. Like prejudice and discrimination, the issue often is access to power and privilege. . . . Peace Studies worthy of the name would focus on all fault-lines and violences." Galtung, *50 Years*, 20.

24. Galtung, *50 Years* and Galtung, *A Theory of Conflict*.

25. Galtung, "What Does Professionalization Mean."

26. Johan Galtung, "If You Want Peace, Abolish Hunger," *Nepali Times*, 12 October 2012.

27. Galtung, "If You Want Peace."

28. Several curricula join live experiences in international crises with classroom and table studies and even role-playing exercises. But the academic milieu give to such experiences no more than a supplementary or even lateral role with respect to intellectual activities. In the following I will not deal with these experiences since the present confrontation with the academic milieu focuses on the intellectual activities only. That said, according to an investigation of the *desiderata* by INGOs and public institutions looking for Peace operators, foreign experiences constitute the first *desideratum*. Craig Zelizer and Linda Johnston, *Skills, Networks & Knowledge: Developing a Career in International Peace and Conflict Resolution* (Alexandria, VA: Alliance for Conflict Transformation, 2005), sect. 1 E, table 7.

29. Although Galtung founded a number of post-doctorate schools, he did not suggest a detailed curriculum. However, he actualised his proposal with post-graduate Master's studies in peacekeeping, as in the European University Centre for Peace Studies (EPU, affiliated with the Austrian Study Center for Peace and Conflict Resolution [ASPR] in the Austrian town of Stadt Schlaining), the advanced online courses of Transcend Peace University (see http://www.epu.ac.at and http://www.transcend.org/tpu/), and the recently instituted nine-month full time Master's program in Basel (2010) by the World Peace Academy in

cooperation with Basel University.

30. By International Law they mean the present effort to change the international system of States and their relationships.

31. Barash and Webel, *Peace and Conflict Studies*, vii-viii.

32. Barash and Webel, *Peace and Conflict Studies*, viii-ix.

33. Johan Galtung, "Social Structure and Science Structure," *International Journal of Critical Sociology* 1, no. 1 (1974): 63; also in *Ideology and Methodology* (Copenhagen: Ejlers, 1976), 13-40, 247-51.

34. Galtung, "Peace Studies: A Ten Point Primer" sect. 1.6, final sentences of point 1.

35. Antonino Drago, "The Birth of Non-Violence as a Political Theory," *Gandhi Marg* 29, no. 3 (2007): 275-95. In addition, my studies of the history of science, physics in particular, discovered a similar notion, i.e., four models of scientific theory, as determined by the two options on the organization of theory and mathematical infinity. Of course, the four scientific choices are not exactly the same as the social choices because the social sciences are not the same as the natural sciences; but the two kinds of sciences may be interpreted from a common philosophical viewpoint, according to which their basic notions change in meaning according to the field of application. This philosophical viewpoint is arguably to be found in the diplomat Gottfried Leibniz (1646-1716), a committed worker for peace in Europe; he recognised "two labyrinths of human reason," i.e., "laws or free will" and "potential infinity or actual infinity" (we easily recognise in them the two basic options); the former labyrinth expresses (in subjective terms) the option concerning the kind of the social organisation; the latter labyrinth expresses, in social terms, the kind of development. From this philosophical viewpoint the MoDvs and the models of scientific theory have the same structure. Antonino Drago, "I quattro modelli della realtà fisica," *Epistemologia* 13 (1990): 303-24; Antonino Drago, "A Gandhian Criticism to Modern Science," *Gandhi Marg* 31, no. 2 (2009): 261-76.

36. The notions of "radical variation in meaning," "incommensurability," and "untranslatability" were first introduced by both Paul K. Feyerabend, *Against the Method* (London: Verso, 1975) and Thomas S. Kuhn, *The*

Structure of Scientific Revolutions (Chicago: Chicago University Press, 1969). Kuhn related these notions to the mutual conflict between a pair of paradigms. I agree with this notion of paradigm inasmuch as it represents the dominant model with respect to the others; but I maintain that in history (or even science) a co-existence at the same time of two or more models is the rule; as a result, my view interprets history not along a single line, but along four independent lines of development, mutually interacting in various ways.

37. In section 4 of "Peace Studies: A Ten Point Primer," Galtung depicted a new "Peace worker." In opposition to the present professionals of peace, Galtung takes up structural notions of his philosophy of science, which he presented three decades earlier in "Empiricism, Criticism, Constructivism," *Synthese* 24 (1972): 343-72; they support his celebrated definition of a conflict as a triangle A-B-C (Attitudes, Behavior, Context). A new "Peace worker" is a person who (as one belonging to the Peace movement) rejects violence (hard facts), is inspired by the idealism of the heart (values), and combines this idealism with the hard-headed realism (theory). In other words, the new Peace worker espouses empiricism—which joins "theory" to "data"—and (ethical) criticism—which joins "data" to "values"—and therefore focuses on the third attitude, constructivism—which joins (ethical) "theory" and "values" (here recognised as the only two basic options). In this view, the aim of the work of a "Peace worker" is both the resolution of past conflicts (which implies creating the prospect of something new) and the mediation of current conflicts by assuming a conflict theory conceived as a triangle A-B-C, which agrees with the above tripartite methodological vision. One may add the suggestions that Luc Reychler draws from the experience of graduates in some Peace Studies programs and from questionnaires regarding students' aspirations. Luc Reychler, "Researching Violence Prevention and Peace Building," in Ferràndiz and Robben, *Multidisciplinary Perspectives on Peace and Conflict Research*, 147-95.

38. Of course, we cannot expect a comparison between a set of structural notions and a set of subjective notions in all cases to result in sharp relationships or distinctions.

39. Regarding the four theories of Newton's Mechanics, Electricity and

Magnetism, Thermodynamics, and Geometrical Optics, some high school physics textbooks substitute Statistical Mechanics or Gas Kinematics for Thermodynamics in order to be more representative of the fundamental theories of the twentieth century. These theories, like Thermodynamics, are also at variance with Newton's Mechanics, given that they are based on the notion of velocity and energy instead of the notion of trajectory, acceleration, and force. University studies of Physics also rely on four theories, plus other theories that link or support some of the previous ones. See Antonino Drago, "Lo schema paradigmatico della didattica della Fisica: la ricerca di un'unità tra quattro teorie," *Giornale di Fisica* 45, no. 3 (2004): 173-91. Even university studies of Chemistry agree on this fourfold scheme. See Carlo Bauer and Antonino Drago, "Didattica della chimica e fondamenti della scienza," *Atti del XI Convegno Nazionale di Storia e Fondamenti della Chimica, Accademia Nazionale delle Scienza XL*, vol. 29 (2005): 353-64.