POLEMOLGY

Conceptual Model & Case Study

By

Paris Arnoopoulos

GAMMA

Concordia University
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INTRODUCTION

"War" has always been one of the most serious problems of mankind. By the middle of this century, with the dawn of the atomic age, the potential for nuclear war has become clearly the most serious problem.

Although conventional wars are still with us, in spite of all efforts to curtail them; we have so far managed to avoid nuclear war. This situation, however, is too precarious and could break down at any time with catastrophic results. The question, therefore, is how to decrease the probability of such breakdown and stabilize the situation in the long run.

Statesmen and diplomats, of course, are trying to do just that, but their efforts are ad hoc and characterized by political expediency. In order to support these efforts, social scientists can provide better theoretical foundations and systematic methods in the study of war. This area of research has made great strides lately, but a lot remains to be done to bring together the many and disparate works going on.

This preliminary study, attempts to look at the problem of war from a holistic, interdisciplinary and policy oriented perspective. Its focus will be on a synthetic, systematic, and systemic process of social problem solving which will be particularly applicable to war.

In the two chapters which follow, we shall first
outline a conceptual framework for the scientific study of social problems and then apply this model to the subject of war. In this way, we shall construct and illustrate a structure and method for polemology. Of course, for a complete understanding of war, in depth studies on the various aspects of this phenomenon will have to be made at a later time.
1 - CONCEPTUAL MODEL

We begin this treatise by setting up an ideal model which will allow the systematic study of our chosen subject. Such model must contain both a methodology for processing the study and a taxonomy for structuring the subject-matter. The two sections of this chapter will give a general description of these concepts. For more details, see the other writings of the same author in the bibliography.

1.1. METHODOLOGY

Any systematic study should follow an explicit methodology. In this case, we shall adapt the scientific method as it best suits our purposes. Science provides a powerful method for understanding "reality", so it should help our quest for knowledge.

As we utilize it here, this method consists of a step-by-step procedure divided into two phases. Let us look at each one in turn.

1.1.1. Situation-Exigetic

The first requirement of science is the complete elucidation of the situation under study. This means the empirical description of all significant aspects of the subject in question. To do so, one must proceed in three steps, outlined next.

1.1.1.1. Diagnosis

This primary step requires the identification of the indicators or symptoms which define a problematic condition.
By such identification, one situates the problem in its present context.

1.1.1.2 Analysis

In this step, one has to go beyond the apparent facts of diagnosis to discover the underlying causes for them. Establishing causal factors for an existing condition places it in its historical context.

1.1.1.3 Prognosis

The final step of this phase, tries to foresee the probable outcome of the situation if it continues in its natural course. Forecasting projects past and present trends into the future and thus provides us with a glimpse of things to come.

1.1.2 Policy-Dialectic

Once the situation has been clarified as much as possible, the next phase is to determine what can be done about it. In this phase, we go beyond knowledge and decide our intentions for action. The three following steps adapt the dialectical process to policy-making.

1.1.2.1 Thesis

To begin with, one has to specify one's position on the basis of certain values or standards. The thesis defines the goals sought after and the desires to be fulfilled on a result of the application of given principles.

1.1.2.2 Antithesis

Opposing the thesis are certain antithetical principles which present themselves as obstacles to be overcome. These obstacles are in effect the costs or price to be paid for
establishing the thesis and must be taken into account in one's calculations.

1.1.2.3. Synthesis

Given the limits of one's capabilities and the imperfection of one's position, some compromise must be made between thesis and antithesis, if an impasse is to be avoided. The synthesis is such accommodation of opposites which resolves conflicts of interest and maximizes the common good.

1.2. TAXONOMY

Complementing the methodology just described, we have worked out a classification scheme which orders the various elements of our "reality". Such reality consists of a system and its environment. This dichotomy fits in well with the criteria of importance demanded by our subject-matter. The following two sections will deal with each of these aspects of reality.

1.2.1. Natural Environment

We first look at the environment or externalities of our system, since they set the parameters in which we operate. Natural factors of some significance to our study fall into three areas.

1.2.1.1. Technological

This group of factors arise from the impact of various human artifacts upon our system. As technology develops, its importance in human affairs increases progressively and in some cases it becomes preponderant.
1.2.1.2 Logical

The second group of factors derives from the use or abuse of human reason. These factors emanate from the mental powers and weaknesses of human nature, thus affecting behavioural expression.

1.2.1.3. Psychological

The last group of natural factors concerns human feelings and emotions. Like the previous ones, these factors are independent variables, largely beyond conscious human control which we consider as inputs into the system.

1.2.2. Social System

We now come to focus on the system proper of our concerns. This is, of course, the social system which exists within the natural environment. For our purposes, we will distinguish three sub-systems as the main components of society.

1.2.2.1. Cultural

This sector of society comprises human relations and interactions which determine the characteristic way of life shared by the people. The culture of a social system includes traditions, morality, education, ideology and communications.

1.2.2.2. Political

The polity is the cybernetic sub-system of society which controls the public policy-making process in the system. The political sectors includes the government machinery as well as parties and pressure groups influencing its decisions.
1.2.2.3 Economic

The economy consists of the productive and distributive structures of society. The economic sub-system includes creation and exchange of goods and services which are mainly consumed by the cultural sub-system.

This completes the verbal presentation of our conceptual model. What remains to be done now is put it all together in a diagramatic form which shows its structure at a glance. The synoptic table at the conclusion is a two dimensional matrix, where the horizontal axis represents the methodology and the vertical axis represents the taxonomy. The six sub-divisions of each, cross-cut to produce a thirty-six box schema, which forms the totality of our concerns.

In the next chapter of this report, we shall fill-in all the boxes with the substantive information of a case study. It will then be evident for the reader to see where each item of the discussion which follows fits in the schema of things.
2. CASE STUDY: POLEMEOLOGY

The subject matter we have chosen in order to illustrate the conceptual framework presented in the previous chapter is "polemology": i.e. the systematic study of war. As a working definition, we take "war" to mean: large social violence, and as such it is considered a problem.

This definition of war focuses on the act of physical destruction (violence), involving many (large) groups of people and taking place in some organized (social) context. These traits of war set the scope of the phenomenon we wish to study by using the methodology outlined above. In what follows, we shall take a step by step sequence of operations which will cover the entire exigetic process.

2.1. PROBLEMEOLOGY

Since we considered war to be a social problem, i.e. an unacceptable situation, we shall use the scientific method to study it in a systematic way. As we have seen, this method involved three steps which we shall now follow.

2.1.1. Diagnosis

The first step is to perceive and interpret the indicators or symptoms which spell out "war". The signals of war are to be found all around us by empirical investigation, so it should not be too difficult to diagnose the problem on that basis. Per definition, these symptoms manifest themselves, both in the natural environment and the social system.
2.1.1.1 Natural

The most obvious of what we have called natural symptoms is the technology of war: i.e. the hardware and software of weapons systems. The statistics of nuclear and conventional arms as well as the military establishments which operate them indicate the potential for war.

These systems and their institutions are a result of human ingenuity for destructive thinking and behaviour. Developing the machinery for war as well as imbuing it with rational strategies and game theories set the logical and psychological symptoms of the war environment.

2.1.1.2. Social

More important than the natural are the social symptoms of war, which show man's inhumanity to man. These symptoms are the cultural contradictions and ideological confrontations which divide the world into opposing religions and nations.

Moreover, there are the tensions and conflicts among sovereign states and governments whose armies confront each other along political and military battlefields all over the world. Finally, there are the symptoms of maldistribution of wealth, which pit the poor against the rich, both within and between communities. Economic scarcity and inequality are, therefore, glaring indicators of discontent and a potential for war.

2.1.2. Analysis

Going beyond the mere phenomena to discover the causes
of war is a much more difficult endeavor. The etiology of human behavior depends on a complicated interaction of many factors, both natural and social. In this analysis, we shall consider the most salient in each realm.

2.1.2.1. Natural

It may be said that technological developments are the most important independent variables to war. The changes which nuclear technology has brought to mass destruction revolutionized warfare in the last generation. Since the dawn of the atomic age, total war has become a reality and its potential occurrence a nightmare haunting mankind. This technological revolution for war has not been matched by any revolutionary change of human mental and psychological capabilities to handle these infernal machines. Man's weaknesses and pathologies are as apt to abuse his inventions as ever before. Human stupidity and insanity are still rampant in the world and thus may be the causes of accidental or irresponsible war.

2.1.2.2. Social

Developments in society always tend to lag behind those in science, thus causing a dangerous gap between human capacities and intentions. A dramatic increase in destructive potential together with the traditional ignorance and intolerance which characterizes intercultural and international relations creates an explosive situation which can result in unprecedented catastrophe.

Added to that is the institutional insecurity of states and the mistrust which different governments have for each
other, which causes a condition of permanent political tension and potential for conflict. This situation is further exacerbated by the sense of injustice which people feel when they do not get their fair share of economic rewards. Put together, all these reasons underlie the symptoms of war and increase the probability of its occurrence.

2.1.3. Prognosis

Now that we have looked at the present symptoms of war and its historical causes, it remains to foresee its probable future course of action. Prognosis is as difficult as analysis, so it must be attempted with caution. In the case of war, forecasting trends towards the end of the century present a bleak picture, both in the natural and social spheres.

2.1.3.1. Natural

Following the nuclear age, the space age is bringing about new dangers for unprecedented kind of war. High technology used for military purposes increases the qualitative escalation and quantitative proliferation of weapons. By the year 2000, one can expect the machinery for war to be more complex, sophisticated and permeate the global system. This highly destructive technology in the hands of inexperienced and irresponsible people will indeed increase the probability of war to almost certainty. The incidents of mistakes and accidents will be proportioned to the number of weapons available to people who can misuse them; so unless extraordinary care is taken, we can expect more and worse
wars in the foreseeable future.

2.1.3.2. Social

The impact of technology on society is expected to bring about a post-industrial era at least for the most advanced countries of the world. This development will exacerbate the differences between cultures and could increase the frictions and conflicts among them. Although governments are supposed to control technological impacts on society, they show themselves to be ineffective and helpless faced with such rapid and radical changes. There is little indication that nation-states will become more efficient in solving problems which seem to surpass them. Many of these megaproblems appear out of control and our cultural, political and economic institutions are floundering about trying to handle them from day to day in a haphazard manner. War, more than any of the other megaproblems, appears to have escaped any long range, global solution. Our prognosis is therefore rather pessimistic, given past trends of social and natural history.

2.2. PRAXEOLOGY

Once the problem has been studied from all its aspects: i.e. diagnosis, analysis, prognosis; it is then time to attempt some solution. In order to be as systematic in the study of solutions as we are in the study of problems, we move from problemology to praxeology.

In the case of war, praxeology becomes the phase where one determines what action is required for conflict-
resolution or pacific settlement. Thoughtful action presupposes conscious selection of goals, consideration of alternatives and decision making to choose an optimal policy. According to our methodology, this process is best represented by the dialectic which follows the thesis, antithesis, synthesis sequence, the application of which is given below.

2.2.1. Thesis

Like any other study of social problems, polemology requires an explicit position on values or preferences. In our case, of course, we study war because we value peace. Our thesis then becomes that polemology increases the probability for peace.

In order to apply this general statement to specific situations, it is necessary to consider its interpretation in each sector of our system and its environment, in the same way as was done in the problemology chapter.

2.2.1.1. Natural

Starting with the technological sector, we can specify its values as efficiency and effectiveness. These functional values aim at perfecting the operation of our mechanical tools so that they become more reliable means to our ends. In the case of war, this means more sophisticated and fail-safe weapons systems.

These improved and more powerful systems will have to be used by more rational and prudent people. Thus increased logic and care become important values of our times. These
values, along with sanity and health, complete the environmental desiderata for a more peaceful world.

2.2.1.2 Social

Since man is a social animal, natural values must be supplemented with cultural, political and economic norms. If the social causes of war lie in intolerance, insecurity and injustice, the central values of peace must then be increased morality, trust and equity.

The axiology of peace is a complex of social precepts tying together the values of justice and freedom, law and order, as well as knowledge and harmony. Unfortunately, all these ideals cannot be maximized at the same time, thus sacrifices are demanded by one to promote another. This is a perennial dilemma of the human condition which we must face and try to resolve in each case.

2.2.2. Antithesis

Although the values posited in the thesis are generally accepted in principle, there is great controversy as to their interpretation and application in any particular situation. This is especially so because the same end may be achieved by different means opposed to each other. The result is a continuous confrontation of various options and priorities, as well as combinations of means and ends. The on-going debate on what is the best strategy for peace, attests to this difficulty as we shall see presently.

2.2.2.1. Natural

Beginning with the classical "si vis pacem para bellum", the road to peace has been thought to lie in armed
might. Accordingly, military build ups and arms races have been justified as preventive measures against war. Similarly the development of more sophisticated nuclear and conventional weapons is supposed to increase the probability of peace.

This improvement of the technology of war goes along with more and more sophisticated deterrence strategies, super-rational game theories, and cold-blooded behaviour of military establishments. The peace through strength school, is of course, denied by many others in various degrees of opposition; the extreme end of which is held by the unconditional disarmament pacifists.

2.2.2.2. Social

Social reality is too complex to allow for extreme solutions on either end of the arms range. Since man has acquired the knowledge to make weapons, purely technical solutions are too simplistic to work out in the long run. The debate, therefore, will have to take into account social solutions as well.

In this area, we have to resolve the issues of ideological confrontation, national defense, and class conflict. The questions here are how to establish peaceful coexistence, collective security, and equitable distribution of wealth. The controversies in all these areas are continuously raging, so we still have a long way to go towards a lasting consensus.
2.2.3. **Synthesis**

The dialectical process suggests that social solutions are best arrived at by a combination of opposites, rather than by adoption of any single position. If all sides are to accept the solution, it must lie in a compromise of different points of view. This is an eclectic way of selecting apparently contradictory proposals to form a coherent package of mutually supporting elements. In trying to resolve the issue of what is the best policy to maximize peace, we must necessarily aim at an accommodation of disparate viewpoints, so as to satisfy, at least partly, the demands of conflicting interests and opinions. An outline of such attempt is given below.

2.2.3.1. **Natural**

Since we cannot go back to the halcyon days of our innocence, we have to live with the fruits of our technology. Mankind will have to adjust to living with nuclear weapons and other arms of mass destruction. The only solution, therefore lies in the control of these arms, both in quantitative and qualitative terms.

This arms-control will have to include the necessary hardware and software which go with the maturing security system of increasing interdependence and vulnerability. Collective policies have to be devised to increase credible deterrence and ensure our survival in spite of constant threats to it.
2.2.3.2. Social

Complementing technical solutions, we must develop our capacity for social conflict resolution and war prevention by attacking the roots of problems and not merely their symptoms. This means that we must work towards long range solutions which come with a cosmopolitan education, confidence building measures and economic development.

More specifically, this will involve increasing intercultural information and communication, international law and organization, as well as foreign aid and compensations. All these difficult tasks will have to be arrived at by multilateral diplomacy and collective policy-making, otherwise the prospects of humanity are bleak indeed.
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CONCLUSION

Before we conclude this brief metastudy of war, we shall summarize our findings in tabular form. The synoptic table above shows at a glance all the salient points we have made in this report. Since the structure of the matrix has already been explained at the end of the first chapter, all that remains to be done is to highlight its contents.

It would appear from the key terms in each box that polemology is a study of a complex phenomenon whose manifestations show up in various areas of human activity. Although, per definition, war is a social violence, its roots extend to individual as well as collective behaviour. The causes of war are thus both natural and social, unconscious and intentional.

The task of the polemologist is to minimize the former and control the latter areas. Accepting that social violence can never be completely eradicated from human affairs, the only solution to the problem of war is to contain its violence within acceptable limits. These limits will be set by social and natural constraints, whose extent can be manipulated by human beings.

The conceptual framework and methodology presented here should help this task by clarifying the various elements involved in the war system. The study presented here for war in general can be applied to any particular war, either historical or hypothetical. If our assumptions are correct,
further case studies should elaborate the war problematique and suggest policy lines to be taken for its alleviation.
BIBLIOGRAPHY


Benson, Bernard Le Livre de la Paix, Fayard, Paris, 1980


Johansen, Robert C. How to Start Ending the Arms Race. World Policy Institute, New York, Fall 1983.


Kennan, George The Nuclear Delusion, N.Y. Pantheon 1982.

Kim, Samuel S. The Quest for a Just World Order, Croom Helm Ltd., Kent, 1983


Perry, W. & Hua Di The Role of Technology in Meeting the


Powers, T., Thinking About the Next War, Knopf, N.Y. 1982.

Raanan, Pfaltzgratt, Kemp (eds.)Projections of Power (Shoestring, Hamden, 1983).


Regehr, Ernie & Rosenblum editors: Canada and the Nuclear Arms Race Forward by Margaret Lawrence, Toronto Lorimer 1983.


Swadesh Rana, ed. Obstacles to disarmament and ways of overcoming them Paris, Unesco 1981.

Thompson, E.P. Beyond the Cold War Pantheon, N.Y. 1982.
Towle, Philip Arms Control and East-West Relations Croom Helm Ltd., Kent, 1984