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SPECIAL FEATURE

Cultural Analysis and International Security

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Introduction

Maintaining international security and avoiding nuclear war requires both technological and social understanding.¹ Accurate information about the social and cultural dynamics of groups involved in the conduct of international affairs is a necessary complement to the formal and technological analyses now routinely conducted in the field of international security.² This is because wise strategic decision-making requires, at a minimum, taking account of a wide variety of information and using it in flexible ways.³ In general, however, social and cultural information is not regarded by the strategic studies community as particularly useful, except, perhaps, for *post hoc* regional analyses.⁴

Some anthropologists are concerned that a preoccupation with technical models of and technological factors in world affairs is dangerous.⁵ They argue that policies based on a view that sees all international security problems from a perspective of inter-state conflicts leads to the mistaken belief that these problems can be solved by reference to material power and models of technical rationality.⁶ This belief in the existence of “technical fixes”⁷ for all international security problems inevitably leads to recommendations that are out of touch with social and cultural realities.

The potential value of social and cultural information for international security studies is now often noted. Yet, the international security literature remains heavily dominated by technical analyses and technological concerns.⁸ International security professionals have found that it is very difficult to integrate substantive social science knowledge into their models and policy recommendations.

There are many different accounts of why social science knowledge has not been more fully integrated into international security analysis. Some focus on the economics of the military industrial complex.⁹ They argue that the economic and political self-interests of those in positions of power make impossible the fuller use of social and cultural information which threatens

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the status quo. Others focus on the epistemological differences between the quantitative approaches of the international security community and the qualitative methodologies needed to gain social and cultural information.¹⁰ These people argue that the vastly different rules of evidence and inference of the approaches make them incompatible. Others argue that the professionalization of the international security field produced an orthodoxy that socially enforces a narrow definition of what kind of knowledge is useful in international security work.¹¹ Each account captures an important aspect of the difficulties that meet attempts to bring cultural considerations to bear on strategic studies.

Anthropologists who wish to contribute to international security discussions also are handicapped because the relevant anthropological literature appears to those in the international security community to be a collection of local-level, often exotic studies. In contrast, the disciplines that form the core of traditional strategic thinking embrace general and generalizable principles of analysis and method (like game theory or econometric modeling).¹² Anthropological studies are thought to be tangential to problems of international security, in part because the anthropological literature contains no clear statement about the substantive and methodological principles of anthropology that unify this work and relate it to international security concerns. This paper describes some of the common themes in the anthropological literature related to peace and war and indicates some of the ways that the resulting anthropological data provide important information for international security studies.

International security and the paradigm of “political realism”

When anthropologists seek to contribute to discussions of peace and international security they enter a community of practitioners who share a common paradigm. As Kuhn points out,¹³ a paradigm limits how a community defines the domain in which it is interested. At the group level, paradigms function by providing (1) theoretical statements about a class of phenomena; (2) shared belief in particular models that legitimate the use of particular analogies and metaphors; (3) common values about what is important; and (4) concrete problem solutions that are firmly accepted by the community and that constitute a critical aspect of the training of young researchers.¹⁴ The paradigm that characterizes the world view of the international security community has been called “political realism.”¹⁵

The paradigm of “political realism” proceeds from a number of theoretical premises about (1) what the proper unit of analysis is for understanding world affairs; (2) what kinds of information ought to be taken into account by decision-makers; (3) how “rational” decision-makers act; and (4) the nature of power.

The state as unit of analysis. “Political realists” assert that in international affairs the State is the most important unit of analysis.¹⁶ Thus, in this view, international security is to be understood on the basis of the actions and interests of States. Discounted (if not completely ignored) are questions of

intergroup relations at levels other than the state, issues of meaning and symbolism, and local-level views of the significance of conflict situations.

Useful knowledge as objective fact. Underlying “political realism” is the view that useful knowledge must be based on “objective,” “scientific” facts. Most frequently, quantitative indices of interstate relations are taken as the hallmark of useful knowledge. That it is the “political realist” paradigm itself that determines what counts as fact and what as fantasy is rarely discussed, and is most often expressed in the rejection out-of-hand of descriptions of world affairs that do not conform to “realist” expectations.¹⁷

Yet, scientific facts are never “just facts.” Indeed, they depend on value judgments that can be consciously presented and explored, or, for whatever reasons, hidden. As Myrdal observed:¹⁸

biases in social science cannot be erased simply by “keeping to the facts” and refining the methods of dealing with statistical data. Indeed data and the handling of data are often more susceptible to tendencies towards bias than is “pure thought.” . . . Biases are thus not confined to the practical and political conclusions drawn from research. They are more deeply seated than that. They are the unfortunate results of concealed valuations that insinuate themselves into research at all stages, from its planning to its final presentation. As a result of their concealment, they are not properly sorted out and can thus be kept undefined and vague.

The state as rational actor. A corollary of the first two aspects of the “political realist” paradigm is the belief that once States have the objective facts they (through their leaders) will act rationally. Actions are judged more or less rational to the degree that they conform to the behavior that is predicted by formal models (of econometric analysis or game theory) that are based on objective facts. Such “technical rationality” excludes a wide range of substantive cultural and social information,¹⁹ and is perhaps more appropriately described as logical rather than rational.

Power as material. To understand world affairs and ensure international security, the “political realist” view calculates the relative power of states acting “rationally” on the basis of “objective” knowledge. Only physical and material resources are included in the calculations of power. Kim²⁰ notes that “the concept of ‘power’ in mainstream realism is excessively narrow and limited. This realism respects only material and physical power and is contemptuous of ‘normative power,’ . . . It denies the existence of the world normative system.”

One result of this is that powerful actions based on normative or nonmaterial strength are difficult to understand from the “realist” perspective. Yet normative imperatives form an important basis for many activities important for international security. Indigenous peoples have successfully challenged the actions of materially more powerful groups, and stopped the self-interested actions of those more powerful groups. For example, the Dené²¹ successfully oppose uranium mining and other nuclear

related actions, and the Cherokee successfully resist economic and cultural extinction.²² The Dené, Cherokee, and other indigenous peoples' resistance is based on normative not material resources. Normative cultural aspects play important roles in the affairs of many countries, like Iran²³ and China.²⁴

Some current implications for strategic studies

Although the "political realist" view has for a long time been criticized as over-narrow²⁵ it has dominated discussions of international affairs for the past four decades. The principles underlying it were given clear statement by scholars.²⁶ Despite mounting evidence that such a preoccupation with technical analysis and technological concerns is inadequate for achieving international security, "political realism" remains the predominant paradigm.

In fact, the "political realist" view is the most widely taught approach to international affairs. In a review of the literature in this field, Olson and Onuf²⁷ report that Morgenthau and Thompson's work is "the most influential textbook of the early post-war period," and Rosenau et al²⁸ report in their study of university training that it ranked as the top textbook. Korany²⁹ notes that the influence of "political realism" has become widespread: "The power paradigm has been presented to the Third world as the most valid, since *Politics Among Nations* has been translated into such languages as Arabic, Chinese, Turkish and Swahili."

The cross-cultural experiences central to anthropological work leads to the recognition that different groups conceptualize security and power differently, and that such concepts are always socially situated. Frequently these conceptions employ symbols and metaphors other than those acknowledged by "political realists" as those that guide actions. Once one acknowledges the legitimacy of these alternative conceptions it is difficult to accept the "realist" analysis as satisfactory. Indeed, cultural and social considerations are as important as technical and technological concerns in reaching a satisfactory understanding of world events.

Before discussing some selected themes that unify anthropological work, it is useful to mention two examples of how "realist" models of strategic thinking ignore social and cultural information. These examples illustrate many that could be selected from the international security literature.³⁰

US positions at disarmament negotiations are guided in part by estimates of how many and what kinds of weapons systems need to be retained in order to ensure the country's security. These "bottom line" positions result in part from estimates of how much damage our weapons would inflict on the Soviet Union in the event of a nuclear war. One measurement of this damage is the length of time it is estimated it would take the Soviet economy to recover to its preattack level. Published information suggests that after a nuclear war the Soviet economy would recover in between four and 15 years.³¹ Kennedy and Lewis report that, "Typical results suggest full recovery to prewar GNP within about five years if a U.S. attack destroys, say, less than half of Soviet capital and relatively little labor; seven to ten years with population-only civil defense; and perhaps fifteen years in any event. The U.S. force committed to the attack in such models often runs to several thousand warheads."³²

Kennedy and Lewis critique these models from a technical perspective, showing that the speed of recovery that this modeling predicts depends on the use of statistical assumptions about capital and labor that may not be warranted. They demonstrate that these models may in fact over-estimate the speed of a recovery.

From an anthropological perspective, models of postnuclear war economic recovery (even Kennedy and Lewis's critique) are unrealistic. This is because they include in their calculations only considerations of the survival of labor and capital (the quantitative fact that they are still here after an attack *not* the quality of that existence) and the acceptance of technical, *a priori* assumptions about the operation of any economy. To an anthropologist, such models are unacceptable because they do not recognize the internal dynamics of human societies in general (see below) or include any specifically Soviet elements.

For example, strategic calculations include assumptions about the resources that the Soviets would commit to a nuclear exchange. These influence estimates of how much capital and labor would be left after the exchange on which the Soviet's could rebuild their economy. These assumptions are based, in turn, on further assumptions that each side would seek to limit the damage resulting from a nuclear war by preserving the chance for a ceasefire. This is called "escalation control." In theory, escalation control will be achieved by using only the minimally necessary amount of arms to bring the Soviets to negotiations. Thus, particular patterns of nuclear attack on the Soviet Union are seen by US strategic planners as being more or less severe than others. This depends on Soviet strategists giving the same meanings to patterns of attack as do US strategists. From the Soviet perspective, however, due to geographic considerations an all out US attack would be indistinguishable from a small-scale attack.³³

Technical models are used to guide actions in nonnuclear areas of international affairs. One vivid example is the recent history of US policy and actions toward Iran. The thoroughly "realist" US approach in dealing with Iran is reflected in its handling of the 1979-1981 Iranian-American hostage crisis³⁴ and more recently in the administration's attempt to cultivate "moderates" in Iran (leading to "Iran-Contragate"). In both instances, analysts consistently failed to treat as legitimate normative rather than material considerations, especially those actions that stemmed from social dynamics in Iran "below" the state level.³⁵ US policy failed because it did not include a specifically Iranian element in its analyses of these situations. This left foreign policy officials frustrated by the Iranians' seeming "irrationality" and "untrustworthiness."

Consequences of environmental deprivation and stress

Anthropological analyses of situations of environmental deprivation and stress can add an important human dimension to discussions of the consequences of the effect of nuclear war. One such discussion focuses on whether a nuclear exchange—meaning nuclear war—would cause a "nuclear winter." The technical question is: will enough smoke enter the Earth's atmosphere after nuclear war so that enough sunlight would be absorbed by

the smoke to cause the Earth's surface to cool significantly? Considerable technical literature analyzes variations in the atmospheric system resulting from various sorts of nuclear exchanges. It is not always agreed that sufficient smoke would be injected into the atmosphere to cause a widescale problem. Yet, the assumption among people working on this as a technical problem is that if a sufficient amount of smoke is produced it will precipitate significant changes in the Earth's atmospheric and geological systems.

This technical work has not been equally concerned with projecting the effect of a nuclear winter on human social systems. Although the fact that common sense tells us that if there is a nuclear war which causes nuclear winter that life as we know it will be significantly changed, and perhaps disappear, even very recent work has focused on the narrow technical questions of whether the atmospheric systems will be greatly effected. Much of the nuclear winter debate results from researchers refining their models of the environmental impact of nuclear war and asserting that its consequence for people will be much less than imagined (and hence that we should plan more for post-nuclear war life).

For instance, in May 1987 the Federal Emergency Management Agency (FEMA) released a report asserting that life after nuclear war will be better than strategists had earlier concluded.³⁶ The report used "refined" targeting assumptions to show that only 130 million people would be in the high risk category in the event of a nuclear war (this category is the group that has a "sure probability of being injured or killed"). This contrasts with earlier FEMA estimates that 156 million people would be in this category.

In a similar vein, Thompson and Schneider review the scientific literature about nuclear winter and conclude that it is unlikely to happen. They say that they:

show on scientific grounds that the global apocalyptic conclusions of the initial nuclear winter hypothesis can now be relegated to a vanishingly low level of probability. Thus the argument that nuclear winter provides the sole basis for drastic strategic arms reductions has been greatly weakened. But, at the same time, there is little that is thoroughly understood about the environmental effects of a nuclear war.³⁷

Missing from nearly all of these discussions is a principled understanding of the effects of prolonged environmental deprivation and stress on the dynamics of human societies.

Anthropological studies of situations of prolonged environmental deprivation and stress can help predict the dimensions of changes in social relationships that would result from nuclear disaster. There is a growing body of studies of societies that have experienced extreme environmental stress and of societies in which there has been massive destruction due to war or natural disasters (including studies of Hiroshima and Nagasaki after they were atom bombed).

Nuclear war would bring about very real changes in the way that people treat one another. The result would be ways of interacting that might be called "not human." Recognizing this can clarify the effects of nuclear winter,

perhaps especially in terms of the common social goal of preserving particular cultural patterns, or “defending *our* way of life.”

Models predicting change in human social systems also make it clear that, for human beings, it won't matter whether a nuclear winter actually occurs because the stress on human systems in the event of nuclear war will be so severe that it will trigger social changes even before nuclear winter comes to pass.³⁸ Consideration of the effect of nuclear war on human systems, in conjunction with consideration of its effect on physical or environmental systems forces a change in the definition of the international security problem: The question ceases to be, will there be a nuclear winter? and becomes what are the implications of the changes that will occur in the environmental and human systems as a result of nuclear war? The implications for human life are grave.

For example, anthropologists recognize that human society is based on reciprocity—the exchange and manipulation of goods, services, affections, symbols. Food sharing—how food is distributed and with whom we eat—serves as a primary example of this. We know from studies of societies undergoing prolonged stress that the patterns of food sharing change in particular sorts of ways. To oversimplify, these changes can be characterized as a pulling in of the bounds of social relations so that societies become increasingly atomized or individualistic. The ethnographic record is replete with reports of general increases in competition and decreases in cooperation, increased incidence of infanticide, of older and ill members of society being allowed to fend for themselves and to starve, decreases in parental displays of affection for their children, and secrecy rather than sharing in the consumption of food. In other words the kinds of caring, positive affective relationships that we have come to consider as characteristic of humanity disappear.³⁹

Turnbull⁴⁰ for instance, describes the effects of prolonged environmental stress on the Ik of northeastern Uganda. For historical reasons, the Ik have during the last 30 or 40 years been living in an environment that has become increasingly depleted. Ik society has adjusted to the insufficiency of the environment by dramatic shifts in the patterns of social relations among its members. Parents report separating from their children at younger ages than their own parents left them as children. In fact Turnbull says, “the family itself has, *as a socioeconomic unit*, become dysfunctional. It simply does not exist in any form recognizable to us as such. Even the conjugal pair, whether formally married or not, does not form a cooperative unit except for a few specific purposes.”

This fragmented social life is reflected in the architecture of Ik settlements. Historical construction patterns that fostered social interaction by providing common and central meeting places has been replaced by architecture that includes no common spaces and orients entrances to homes so as to emphasize privacy and, perhaps, secrecy.

In the face of this fragmentation and the disappearance of the family support structure children form age gangs. These gangs differ from traditional age grades in that they have no cooperative purpose other than to fend off predators, including adults.⁴¹

A new meaning of *marangik* "goodness" emerged in this predatory context: any adult who found a child with food and could take the food and eat it was a "good" adult . . . But since adults normally pursued their food quest alone, only a solitary child was in danger. [I] never heard of any adult rash enough to take food from a child with a gang nearby. The gangs roamed the ravines and when food was seen; [sic] the first child to reach it consumed it instantly. The others did not expect it to be shared.⁴²

Turnbull also describes how the general economic system among the Ik is characterized by a retraction of bounds of reciprocity, resulting in the expendability of people unable to fend for themselves. The Ik are not a unique case. Laughlin⁴³ describes similar social shifts among the So, also of northeastern Uganda.

The dramatic scaling back of reciprocity relations in response to environmental deprivation is also not unique to pastoralists in east Africa. Bishop⁴⁴ describes similar changes in the adaptive strategies of the Northern Ojibwa in Canada during the 1800s. Bishop observes changes in the traditional social organization of the Ojibwa (e.g., post-marital residence patterns became less regular). Further, reciprocity relationships became more competitive (in Sahlin's terms, more negative⁴⁵).

Parallel shifts in patterns of social organization, cooperation and reciprocity have been described in urban societies as well.⁴⁶ Rubinstein⁴⁷ describes the impact of stressful ecological circumstances on reciprocity among the poor in Mexico City. In the face of prolonged resource deprivation, exchange among the residents of the *Panaderos* *vencindad* is characterized by a shrinking of the social sphere within which generalized and balanced reciprocity occur and an increase in the kinds of people with whom negative reciprocity occurs, including even other family members.

Anthropologists distinguish situations of deprivation from those of disaster.⁴⁸ While environmental deprivation involves ongoing ecological degradation, disasters are unique events, "that culminate in physical damage to a community, or communities, so severe that most or all major public and private facilities no longer provide essential social and economic services without extensive replacement or repair." This definition applies whether or not people are killed.

Although many technical aspects differ, Torry's recent review of the ethnographic literature shows that the social and cultural effects of disasters parallel those of prolonged environmental deprivation. These changes are mostly in the direction of the more frequent occurrence of negative reciprocity (increased intergroup conflict) and less spontaneous cooperation among members of society ("dispersal of residences" as an economic strategy, "retrenchment of social activity"). In general "imperfections in the decision apparatus of government itself diminished effective community response to peril."

Dirks⁴⁹ describes social responses to environmental deprivation in the context of the possibility of nuclear winter and projects that the resulting social changes would lead to considerable atomism of social relations,

approximating what we today see as the least cooperative extremes of human social life. "The generosity, the trust, the affective warmth, the closeness that is generally valued in our culture will undergo serious erosion . . . [there will be] little latitude for relationships and actions that are not closely calculated in terms of their instrumental value." In short, not only would nuclear war "compound the ruin of the earth and its habitats, but [it would] degrade . . . the very qualities and relationships which we have come to realize as the fulfillment of our human potential."

This anthropological picture is frightening, especially in relation to the nonwestern, tribal, and preliterate peoples about whom the anthropologists' ethnographies most often speak. Some might object that because we are much more technologically sophisticated than they, we will be able to compensate for these ecological perturbations by either importing food supplies from other areas of the world, or by achieving a technological solution to the problem.

The response to this objection depends on understanding another very important anthropological principle: that the various facets of cultural and social life—political, legal, economic, religious, educational, symbolic, to name but a few—are critically interdependent. I have used food sharing as an example, but, the effects of ecological stress would extend into other parts of social and cultural systems, and cause social perturbations. Thus, a long-term food deficit cannot reasonably be treated in isolation because other social institutions will undergo similar changes. Perhaps most crucial will be the effect on the symbolic systems that undergird and support social and cultural life. Indeed, the record of the social effects of the atom bombing of Hiroshima and Nagasaki show that severe nuclear disaster will lead to the "total breakdown of human life."⁵⁰

Culture in international security

A recurrent theme in the anthropological literature is that all social behavior has a symbolic dimension. Although warfare and the construction of peaceful social relationships have much to do with considerations of economics and material force, they also have symbolic aspects that must be taken into account in order to resolve conflicts, avoid war or maintain an established peace.

One premise of anthropological work is that it is necessary to understand the social dynamics of the societies involved in world affairs. In the same way, it is important to recognize that international security work is conducted by a community, the social and cultural dynamics of which affect the decisions taken by its members. These dynamics produce a world-view that is embodied in symbols and that evokes both cognitive and affective responses in community members. All such symbols direct attention to a limited part of the world, and thus models based on them can easily be overly narrow. In fact, symbols can even "normalize the unthinkable."⁵¹ A self-conscious awareness of symbols and the content they convey can help to decrease that danger.⁵²

In a general sense, the disciplines on which international security and strategic studies is based embrace a world-view which discounts the

importance of symbolic aspects of human social life when considering political relations. There is a specific sense in which the activities of this community have been institutionalized. Social mechanisms set up to perform particular functions lose their capacity for achieving their goals if they undergo a process of institutionalization,⁵³ in which the social mechanisms set up for some purpose begin to receive more attention than the goal they were set up to achieve. Evidence that the international security community has been institutionalized is found in the elaborate system of symbols that it has created⁵⁴ and in the complex ritual processes for manipulating these symbols that it has developed to ensure common problem definitions and responses.⁵⁵

Anthropologists learn about a group's system of implicit meanings by looking at what the group does and listening to and observing the ways the group expresses itself in relation to its environment. When we do this we seek to understand the group's symbolic environment and to learn how symbols are manipulated. The importance of some symbols is that they evoke powerful responses from group members because they encompass both shared cognitive meanings and shared affective values.⁵⁶

Anthropological studies of the strategic community confirm that the community maintains its own world-view—at times in the face of large amounts of evidence that it is inadequate—in part through the manipulation (not necessarily conscious) of symbols. Cohn (and see Brasset)⁵⁷ for instance, described how learning to use the acronyms and imagery of the strategic community led to a subtle shift in her own perceptions of the danger of nuclear war. As she described the experience:

Nearly everyone I observed—lecturers, students, hawks, doves, men, and women—took pleasure in using the words; some of us spoke with a self-consciously ironic edge but the pleasure was there nonetheless. Part of the appeal was the thrill of being able to manipulate an arcane language, the power of entering the secret kingdom. But perhaps more important, learning the language gives a sense of control, a feeling of mastery over technology that is finally not controllable but powerful beyond human comprehension. The longer I stayed, the more conversations I participated in, the less I was frightened of nuclear war. . . . My energy was focused on the challenge of decoding acronyms, learning new terms, developing competence in the language—not on the weapons and wars behind the words. By the time I was through, I had learned far more than an alternate, if abstract, set of words. The content of what I could talk about was monumentally different.⁵⁸

The international security community uses linguistic symbols to maintain an inadequate conception of the complexity of human culture and society through linguistic symbols. Nuclear strategic planning has incorporated into it the notion of escalation control; this presupposes that the political and other social processes necessary for the exercise of restraint exist. Thinking about escalation control depends, in the language of international security analysis, on there being a surviving command, control, communications and intelligence system⁵⁹—or, as it is called a surviving “C³I.” By assuming that

assuring a surviving C³I is a technological problem which can be solved, the international security community is able to imagine scenarios about post nuclear attack society such as the estimates of time needed for economic recovery discussed earlier.

From an anthropological perspective *these projections are logical but not very realistic*. Yet, because they are taken to be based on “hard,” quantifiable data there develops around these projections a false sense of the adequacy of the problem definitions. The fact that such projections are based on partial information is obscured. Indeed, “No formal recovery model . . . incorporates the coordination function, and all models instead simply assume that it can be accomplished.”⁶⁰ It is only possible to take so lightly information about such symbolically based social processes if one generally discounts the importance of cultural analysis.

Using linguistic symbols in support of the “realist” world-view is not simply the result of continuing to use now out-of-date strategic concepts. Rather, these symbols are part of a powerful belief system underlying the conduct of international security analysis. At present international security analyses do not include information on the local-level, social and cultural dynamics of groups other than the state. Inconsistencies in the ways that people act from one point in time to another are too often dismissed as puzzling but unimportant. Attempts are often made to “factor out” these inconsistencies from the decision-making process. Treating these inconsistencies in this way may mask their importance but experience demonstrates that their importance is not diminished.

Strategic decision-making usually requires generating and considering multiple options. Wise strategic decision-making requires an informed choice of the data considered and flexibility in the use of interpretive strategies. Only then can we expect the decision-making process to lead to appropriate policy decisions and ways of implementing those decisions.

What is needed is a kind of revitalization of international security analysis. This in fact is what anthropology’s role can usefully be: to help create a potential for reexpanding this world-view and building a continuing flexibility into the resulting analyses. All culturally significant tasks require continuing tension and adjustment between varied ways of generating novel alternatives and of integrating those alternatives in useful ways. Perhaps anthropology can provide a way of rebuilding flexibility into what is probably the most culturally significant task for us today: achieving a stable world peace.

Notes and references

1. Preparation of this paper was supported in part by a grant from the Ploughshares Fund, which I gratefully acknowledge. Earlier versions of this paper were read at the 1987 annual meetings of the American Association for the Advancement of Science, Chicago, Illinois, and of the American Anthropological Association, Chicago, Illinois. For their comments on earlier drafts of this paper, I thank Sol Tax, Janet D. Perloff, Mary Anna Thornton, and Jeffrey J. Ward.
2. Academic writing in the international security area includes work conducted under a variety of disciplinary names including: “national security studies,” “international affairs,” and “strategic studies.” Although there are some differences in approach all share

- commitment to the "realist" approach to international affairs outlined by H. Morgenthau and K. Thompson, in *Principles and Problems of International Politics* (New York: Knopf, 1956). Therefore, in this paper I use these terms interchangeably. See also W. Schwartz and C. Derber "Arms Control: Misplaced Focus," *Bulletin of the Atomic Scientists*, Vol. 42, 1986, pp. 39-44.
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 14. R.A. Rubinstein, "Epidemiology and Anthropology: Notes on Science and Scientism," *Communication and Cognition*, Vol. 17, 1984, pp. 163-185.
 15. I place quotes around "political realism" because from an anthropological perspective this view is not realistic. R.A. Rubinstein, and S. Tax, "Power, Powerlessness and the Failure of 'Political Realism,'" in J. Brøsted, J. Dahl, A. Gray, H. Gulløv, G. Hendriksen, J. Jørgensen and I. Kleivan (editors) *Native Power: The Quest for Autonomy and Nationhood of Indigenous Peoples* (Bergen: Universitetsforlaget AS, 1985) pp. 301-308.
 16. S.S. Kim, *The Quest for a Just World Order* (Boulder: Westview, 1983); *op cit*, note 6; and *op cit*, note 11.
 17. *Ibid.*
 18. G. Myrdal, *Objectivity in Social Research* (Middletown, CN: Wesleyan University Press, 1969).
 19. H. Simon, *Reason in Human Affairs* (Stanford: Stanford University Press, 1983).
 20. *Op cit*, note 16.
 21. A.B. Kehoe, "Fourth World Responses to External Threats: The Dené," in R.A. Rubinstein and M.L. Foster (editors), *The Social Dynamics of Peace and Conflict* (Boulder, CO: Westview Press, 1988).
 22. *Op cit*, note 15.
 23. M.C. Bateson, "Compromise and the Rhetoric of Good and Evil," in *The Social Dynamics of Peace and Conflict*, *op cit*, note 21; and *op cit*, note 6.
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29. *Op cit*, note 11.
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