

1975

# Power Parity in Dyadic Disputes: Towards an Analysis of International Organization Success

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POWER PARITY IN DYADIC DISPUTES: TOWARDS AN

ANALYSIS OF INTERNATIONAL ORGANIZATION SUCCESS

(TITLE)

BY

JERRY D. FLORENCE

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY

CHARLESTON, ILLINOIS

1975  
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING  
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## CHAPTER I

### 1.1 Introduction

International organization is the process whereby states establish and develop formal, continuing structures for the conduct of certain aspects of their relationships.<sup>1</sup> It is representative of an effort by statesmen to reduce the extreme decentralization of the traditional nation-state system, and to establish the mechanics necessary to adapt to the constantly increasing requirements posed by the complexity of the interdependence of states. In this paper, we shall seek to explore one of the manifestations of this developmental process---the effectiveness of peacekeeping efforts by international organizations who expressly engage in conflict management operations.

Here, we shall consider the peacekeeping process in light of its degree of success relative to the comparative power capabilities and potentialities of adversary nation-states. This is a hypothesis testing effort. It is not an attempt to examine the legal aspects of international organization, nor a quest for effective structural reforms. It is, however, a study cognizant of the importance of these aspects of the interplay of states within the present international system. The results shall be evaluative to be certain, but just as surely this is not an exercise in reform.

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<sup>1</sup> Inis L. Claude, Jr., International Encyclopedia of the Social Sciences, vol. 8, p.33.

## 1.2 The Hypothesis

In that which follows, this author shall attempt to analyze existing international organizations as to one aspect of their effectiveness in abating and controlling conflict situations. Our hypothesis shall be this: In two-party disputes, the success of international organization peacekeeping efforts increases as the difference in their national power decreases.

To test the above proposition will require a great deal of operationalization of terms and methods. Due consideration will be given to that task in the methodology section below, and as the situation warrants.

## 1.3 Methodology

Essential to this study is the work of Haas, Butterworth and Nye in Conflict Management by International Organizations. Without it, this study would be infinitely more difficult.

In their book, the authors seek to determine the effectiveness of intergovernmental organization. They hope to answer a series of questions through systematic examination of the success of the United Nations, the Organization of American States, the Organization for African Unity, the Arab League and the Council of Europe.

They establish a universe of 146 disputes, considered because they meet certain criteria relevant to the study, entered into by one of the above mentioned organizations for the purpose of controlling the situation. They scored the organization's success as to effectiveness in 1) abating the conflict, 2) stopping the hostilities, 3) isolating the conflict and 4) settling

a conflict. Summed scores on the four variables gave them a raw success score for each dispute. The raw success scores were reduced to a "dimensionality scale"(DS) rating of one to four. DS1 means the organization completely failed to make a difference to the outcome of the dispute. DS2 indicates the organization made some difference on each of two dimensions(one of which must be abating). DS3 indicates moderate success and effectiveness on a minimum of three dimensions. And, DS4 means the organization made a great deal of difference on one dimension and at least some difference on the three others.

In attempting to draw a conclusion upon our hypothesis, this study is of great importance. We can take each of the four groups derived by Haas et al., and extract the two-party disputes within each group.

To determine relative national power, this author has chosen to use six indices of power, 1) armed forces personnel, 2) domestic food production, 3) population, 4) gross domestic product, 5) trade value and 6) area. For each state involved in a dispute, these variables will be determined.

Then, we can determine the difference in each variable. For each group we can sum the differences and determine the mean for each DS group.

The next step is to compare the means of each DS group. To begin, a t-test of significance will be done to determine if there is a significant difference between the means of the grouped data. If a significant difference does exist, we can move on to further examination. We can then graphically examine relationships between the variables and increased organization success

as measured by Haas. We can look for patterns and regularities in this relationship. If no significant difference exists, as determined by the t-test, we can move immediately to a conclusion on our hypothesis.

#### 1.4 Justification for this Operation

For each beginning there are reasons, and this study had very clear beginnings. Its early motivations stem from statements made by two different men, each a widely read international relations expert.

In The Intermediaries: Third Parties in International Crisis, Oran R. Young made this statement,

"It is clear that the probability of success for an intervening party in any given crisis will be related to the existence of at least a rough parity of power between the principal parties to the dispute. In cases where the margin of power favoring either of the protagonists is small, even an intrinsically weak third party may be able to intervene with some real effect."<sup>2</sup>

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This in itself was enough to give form to our hypothesis. It clearly implies an inverse relationship between the power parity of contending nation-states and the potential success of an intervening party.

However, further investigation turned up another statement conveying a similar idea. George Liska has stated that, "The smaller the margin that favors either of two contending parties, the more relevant is the total power of even an intrinsically

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<sup>2</sup>Oran R. Young, The Intermediaries: Third Parties in International Crisis, p. 43.

weak third party.<sup>3</sup>

Both of these statements point in the same direction. Either of the two could lead to our hypothesis. The quote by Young is of even greater interest because it was made without supporting evidence. This author finds that hard to take from a book published in 1967. A test of his unsupported contention seems justified.

Why is this study in order? What can it accomplish? What positive good may come of it? It would seem to be easiest to approach these questions by listing the reasons and hopes for this study.

1) This first reason is also the foremost. It is long and involved. It must, however, be fully explained.

The twentieth century has witnessed the tremendous growth of political science as a discipline. It has undergone a gradual process of development, culminating in acceptance as a separate field of study. The dawn of political consciousness dates at least to the code of Hammurabi and the Talmudic legends. Early writers advanced numerous theories of the rise of political consciousness. The overriding effect of such speculation is that man has come to realize that there exists both a political and a non-political aspect of his life.

The evolution of political science as a discipline has precipitated a number of conceptual and developmental orientations. Throughout its evolution, political science has undergone a

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<sup>3</sup> George Liska, "The Third Party: The Rationale of Non-Alignment," in Neutralism and Non-Alignment, p.80.

number of significant changes. One such change has been the development and adoption of differing paradigms of methodological analysis. At various times, political scientists have embraced historicism, game theory, field theory, input-output analysis, symmetry models and ends-means chains as legitimate analytic models. But, it is with a discussion of one of the newer conceptual schemes---behavioralism---that this list begins. The purpose of such will soon become evident.

The movement called "behavioralism" began in the 1920's and 1930's under the stimulus of the Chicago school of Merriam, Lasswell and Gosnell. They sought to set the discipline in a new direction.<sup>4</sup> Scholars such as these rightly observed that nineteenth century academic political science was wedded to the realist theory of knowledge.<sup>5</sup> Later, the principles of realism were rivaled by those of the idealists. Idealism gradually began to gain acceptance as the basis of modern science, as evidenced by the acceptance of the works of Percy W. Bridgeman,<sup>6</sup> Alfred North Whitehead,<sup>7</sup> and later, Anatol Rapoport.<sup>8</sup> With this, the behavioralists began to construct and apply models

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<sup>4</sup> David Easton, International Encyclopedia of the Social Sciences, vol. 12, p. 291.

<sup>5</sup> Michael Haas and Henry S. Kariel, eds., Approaches to the Study of Political Science, p.5.

<sup>6</sup> Percy W. Bridgeman, The Logic of Physics.

<sup>7</sup> Alfred North Whitehead, Science and the Modern World.

<sup>8</sup> Anatol Rapoport, Operational Philosophy.

both analytically in building theory and empirically in guiding research.

The behavioralist movement underwent massive rethinking with the end of World War Two. Many political scientists were serving as governmental officials during that period. They were astonished to discover that their advice went unheeded, while that of psychologists, economists and sociologists was quite readily implemented. The reason, they soon discovered, centered upon the observation that their research was conducted by persons of similar scientific orientations. Political scientists, in contrast, were not regarded as having scientific competence.<sup>9</sup>

In response to this, and the popular notion that political science was closely linked to matters of public policy, post-World War Two political scientists presented the behavioral program for change. They urged one another to build theories, to assemble data, test hypotheses and to disregard values. The 1950's saw the heyday of formalistic behavioralism, and the 1960's were the apogee of empirical behavioralism. As a movement, behavioralism moved scientific political science to the fore.

Behavioralism, however, did not evolve without challenge and criticism. Alfred Cobban,<sup>10</sup> Christian Bay,<sup>11</sup> and Hedley Bull<sup>12</sup>

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<sup>9</sup> Haas and Kariel, p.13.

<sup>10</sup> Alfred Cobban, "The Decline of Political Theory," Political Science Quarterly, September 1953, p. 321-337.

<sup>11</sup> Christian Bay, "Politics and Pseudopolitics: A Critical Evaluation of Some Behavioral Literature," American Political Science Review, September 1957, p. 734-746.

<sup>2</sup> Hedley Bull, "International Relations: The Case for a Classical Approach," World Politics, April 1966, p. 361-377.



stand out among the most vociferous critics. They, and others, criticized the overemphasis upon facts. David Easton has termed the behavioralist era a period of "hyperfactualism."<sup>13</sup> Others pleaded for a greater use of theory, for they viewed theory as a counterforce to the brutal empiricism of the early behavioralists. To them, theory would lend substance and direction to the methodological rigor imposed by the behavioralists.

Some feel that behavioralism has run its course. Such is the opinion of Robert A. Dahl, as evidenced by his "epitaph" to the behavioral paradigm.<sup>14</sup> He, and others, feel that behavioralism has functioned well as one of a number of schemes of political inquiry, but that there is a need to move ahead and create a new mode of investigation. In his 1969 address to the American Political Science Association, David Easton called for a new revolution---one seeking to refine certain behavioral techniques, while disregarding others. Easton calls for a forward looking perspective dedicated to the advancement of the premises and purposes of political research.<sup>15</sup>

With the passing of one movement, and the calling forth of another, one must pause and reflect upon the present state of the methodology of political science. What has behavioralism left

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<sup>13</sup> David Easton, The Political System, p.12.

<sup>14</sup> Robert A. Dahl, "The Behavioral Approach to Political Science: Epitaph to a Monument to a Successful Protest," American Political Science Review, December 1961, pp. 763-772.

<sup>15</sup> David Easton, "The New Revolution in Political Science," in Approaches to the Study of Political Science, p. 512.

us? Perhaps its primary purpose was to awaken our collective scientific consciousness, and turn our thoughts to the tenets of scientific inquiry. A primary fault was that it was almost entirely a technical movement seeking to disregard the remnants of classicism. Theory was dropped along the way, resulting in the loss of a possible theoretical matrix in which to define the boundaries of political science, and in which to carry on relevant, timely scientific research. Whatever the present state, only time can truly tell. However, it is apparent that, at the least, the legacy of behavioralism is a recognition of the usefulness of scientific methods---tempered by a synthesis with theoretical concerns about the fundamental issues of political systems.

The above statement by Young seems to betray this legacy, and represents a breach in the development of a forward-looking discipline. Young seems to completely ignore scientifically structured inquiry. Statements entirely lacking of scientific justification are to be disdained. Political science has been moving forward in its goals and hopes. It is an aim of this study to denounce the publication of unsubstantiated generalizations. If our hypothesis proves the Young statement incorrect, the danger of making such unverified statements becomes obvious.

2) As was demonstrated in the methods section, the study by Haas is a cornerstone of this paper. It is a hope of this study to take Haas' findings and further profit from them by following up on hypotheses it generates. Young's book did a theoretical study of third party intervention in international crisis. The Haas study takes us further. Here, we mutually enhance the theoretical and the empirical.

- 3) Any timely empirical operation of potential value is self-justified. It lends substance to accumulated theory and speculation, while lowering the level of our abstractions.
- 4) It is very possible that this study will turn out to be of little worth<sup>in</sup> itself; however, it could prove a move in the right direction. It may move a potentially solvable hypothesis (which this may turn out to be) closer to solution.
- 5) This is an investigation into one aspect of international behavior. International events; notably war, are closely tied to everyday events for a major war may cause mass conscription, mass suffering, mass economic deprivation and mass grief.
- 6) Though decidedly narrow, our hypothesis may prove of worth to our understanding of international peacekeeping operations and of our understanding of war as the ultimate instrument of statecraft.
- 7) It may serve to point out a regularity in the workings and success of international organizations.
- 8) If this study indicates some significant relationship between two variables, then we can move on to the more critical question---What is the causal relationship of the variables? Is it caused by a third variable? Or, is it due to a more complicated inter-relationship of the two variables?
- 9) This study can be viewed as a response to a need for the explanation of complex social problems, though it is somewhat insignificant in itself.
- 10) Lastly, this study may prove serendipitous. The term serendipity derives from Walpole's book "Three Princes of Serendip," in which three princes set out on a futile search

for something, but accidentally discovered many valuable things not sought. Doing this could lead accidentally to some things of even greater value. One could blindly stumble from the insignificant to the significant.

### 1.5 Review of the Pertinent Literature

A section reviewing the germane literature should include a look at all previous works relevant to the experiment. The study of it is important for three particular reasons.

First, it may help to formulate the problem and make it more concrete. A review can lead to a more valuable notion of what the problem represents. Secondly, a survey of the pertinent knowledge indicates whether or not the experiment needs to be done. There is certainly no point in fully repeating past experiments-- unless the purpose is to update, confirm or disprove a previous finding. Thirdly, past works may give helpful hints as to the proper conduct of the inquiry.

The literature relevant to this study is concerned with two areas---international organization peacekeeping efforts, and the assessment of national power. It is difficult to discriminate between the substantive and the methodological literature. They are closely linked and, therefore, not entirely considered apart from one another. There are no clear lines of demarcation, though an attempt is made to consider and study them separately.

The history and development of international organization has attracted the attention of a number of scholars. Of little direct relevance for this paper, it, however, seems proper to review it because it will allow us a better understanding of the conceptual basis of international organization. Even a brief

look at any one of a number of works makes obvious the fact that international organizations are characterized by efforts to arrange cooperation among states. They seek to minimize the element of conflict and maximize the potential for harmony and cooperation in the relations among states.

Given only this, one might view international organization as overly idealistic. However, a closer look at the structure of international organizations will reveal that they are well aware of the dualistic nature of international relations. There is an acknowledgement of both the cooperative ideals and the conflictual realities. The former is characterized by the Economic and Social Council of the United Nations, the latter by its Security Council.<sup>16</sup>

There are a number of fine books dealing with the history and development of international organization. Of particular use was Inis L. Claude's Swords Into Plowshares. For a less incisive study, one could consult Gerard J. Mangone's A Short History of International Organization.

Some other books in this area sought not only to review the history and development of international organizations, but also to evaluate the record of such organizations. Robert E. Asher, in The U.N. and the Promotion of the General Welfare, attempts a summary review of the record of the economic and social organs of various international organizations. Similarly, Goodrich and Simons assess the role of a number of specialized agencies in

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<sup>16</sup> Claude, International Encyclopedia of the Social Sciences, p. 37.

The U.N. and the Maintenance of International Peace and Security.

For a different approach to the subject, one might consult Ernst B. Haas in Beyond the Nation-State. Therein, he formulates an eclectic approach to international integration based upon a form of functionalism attributable to early works of functionalists such as David Mitrany.

The literature devoted to quantitatively assessing the role of international peacekeeping efforts seems nearly non-existent. The Haas study, which forms a foundation of this study, Conflict Management by International Organizations, is one of the scant few. One other fine quantitative study was conducted by J.K. Gordan. He undertook a study of the operation of the United Nations in the Middle East and the Congo.<sup>17</sup> He hoped to discover the preconditions of success or failure. He concludes that no peacekeeping operations will succeed without sustained great-power support, and the agreement must take into account the security needs and human needs of those most directly involved in crises.

Political science can be viewed as a discipline still in search for its boundaries and exclusive concerns. One outgrowth of this search has been the conceptualization of political science as a set of interrelated functional-behavioral processes, one of which is the competition for national power.

A great deal of effort has gone into espousing the view that the state is a set of social groups in competition for power over

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<sup>17</sup>J.K. Gordan, "Prospects for Peacekeeping," International Journal, Spring 1970, pp. 370-387.

others. In the 1930's, George E.C. Catlin published A Study of the Principles of Politics. In 1934, Charles E. Merriam published Political Power: Its Composition and Incidence, wherein he, as did Catlin, argued for an interpretation of politics as a set of power relationships. These works were soon followed by Harold Lasswell's Politics: Who Gets What, When and How?, and V.O. Key, Jr.'s Politics, Parties and Pressure Groups.

These seminal works did much to stimulate research at all levels of human interaction---from the nation--state level to the community--organizational level. As a means of approaching the analysis of political phenomena, power found further support in Power and Society: A Framework for Political Analysis, jointly authored by Harold Lasswell and Abraham Kaplan. Bertrand de Jouvenal contributed to the movement with his Power: The Natural History of Its Growth.

There also exists a set of literature questioning the validity of power as an approach to the study of human interaction. Two outstanding works come immediately to mind. First, is J.G. March's The Power of Power and secondly, William Riker's article entitled "Some Ambiguities in the Notion of Power." Riker points out the ambiguities inherent in the usefulness of power as an approach to analysis and research. He says that power is at one and the same time too narrow and too broad. It fails to recognize that power involves more than control and that power relations do not exist exclusively in that area of life considered political. March takes it one large step further and suggests the total abandonment of power as a useful approach to study and research.

The usefulness of power as an approach, however, seems to have outlasted its critics. A look at any number of recent textbooks reveal that power as an approach is not lost. Rather, it remains a theme central to the study of political interaction. This is certainly so at the international level. Donald Puchala's International Politics Today is not atypical. In his book, designed as a text for introductory international relations courses, he deals with power as an approach, and with power reference.

Traditional political science has emphasized the role of power. Indeed, "balance of power" and "spheres of influence" are basic terms. Catlin has stated in Systematic Politics that "all politics is by nature power politics."<sup>18</sup> Also, a number of theories on the causes of war, such as A.F.K. Organski's, speak of war as changes in national power,<sup>19</sup> but few of these specify in quantitative terms what is meant by national power. It is unfortunate that the outstanding feature of this body of literature is its brevity.

In the 1950's, researchers began to question the notion that power was solely dependent upon military strength. They wondered if national power might also depend upon population, degree of industrialization and type of government. Organski was the first to suggest it depends upon all three.<sup>20</sup>

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<sup>18</sup> George E.C. Catlin, Systematic Politics, p.79.

<sup>19</sup> A.F.K. Organski, World Politics, p.332.

<sup>20</sup> Katherine Organski and A.F.K. Organski, Population and World Power, p.29.



Early attempts to move from the intuitive to the empirical yielded a most rudimentary index of power. Organski states that the "best index of national power currently known" is national income.<sup>21</sup> Kingsley Davis drew the same conclusion.<sup>22</sup> After some reconsideration, Organski called for the use of gross national product as a single indication of power. These indices have the merit of simplicity, but fall short of being comprehensive.

Only recently have significant advances been made. At present, two techniques are being explored for possible utility in assessing national power.

In The Anatomy of Influence, Robert W. Cox and Harold K. Jacobson use five indicators of power, 1) gross national product, 2) gross national product/capita, 3) population, 4) nuclear capability and 5) prestige. Each indicator is reduced to a scale. The score on each is summed, yielding a "power rating" score. Then, for each year considered, all countries were rank ordered. This gave the authors a stratification of power scale. In his article, "Tentative Evaluation of World Power," F. Clifford German employs a similar scaling technique. He gives special weighting to nuclear capability and includes a morale variable, while ignoring prestige. His much more complex computation yields a rank ordering of states.

Others are investigating the possible utility of psychophysical measurement techniques to the study of national power. Psychophysical scaling techniques are based upon the perception of certain variables.

Alcock and Newcombe, in "The Perception of National Power,"

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<sup>21</sup> Ibid., p.436.

<sup>22</sup> Kingsley Davis, Freedom and Society, pp. 206-243.

have moved us closer to a quantitative definition of national power. In doing so, they asked 38 Canadian subjects to rank 123 states "in order of power as they think<sup>of</sup> them."<sup>23</sup> The authors analyzed the results by averaging the rank orders and using regression analysis techniques. The result was an equation, usable in quantifying national power.

Allen M. Shinn, Jr., has developed a technique similar to the above. He, too, uses psychophysical scaling and perceptions. His equations employ three variables (GNP/capita, militarization, and population), each treated as a multiple of a coefficient and summed.<sup>24</sup>

These two efforts represent a significant advance, for they make a methodological statement. It is regrettable that these techniques cannot be used here. This author is willing to put trust in perceptions, essential to the use of psychophysical techniques. However, this study covers a period of time beginning with 1946. It is impossible, at this time, to assess perception as far back as that year. The Cox technique is simply unacceptable because point values for each variable are based upon artificially constructed scales. It is based upon intuitive divisions, not scientifically significant divisions.

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Norman Z. Alcock and Allen G. Newcombe, "The Perception of National Power," Journal of Conflict Resolution, p. 336.

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Allen M. Shinn, "An Application of Psychophysical Scaling Techniques to the Measurement of National Power," Journal of Politics, November 1969, pp. 932-951.

## CHAPTER 2

### 2.1 The Nature of Power

When one approaches the study of one aspect of international politics through the analysis of national power, one assumes, at a minimum, that the relations of power are among the relevant aspects of a political system. National power is a many sided national characteristic. It can play many roles. It can denote and connote many things. Power relations may be viewed as one feature among a number of other salient features. On the other hand, an analyst may view power as the one most important distinguishing feature of that part of human activity called politics. Those of the first viewpoint would consider power sufficiently important so as to warrant description and emphasis. Those of the former may hold that "political sciences, as an empirical discipline, is the study of the shaping and sharing of power."<sup>25</sup> In short, it is a complex national quality important to an understanding of international politics.

What follows is a discussion of the varied aspects of national power as a national characteristic. Operationalization and discussion of national power is essential. This authors use of power signifies his assumed belief that differences in the distribution of power is a useful tool for interpreting changes and events between societies.

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Harold Lasswell and Abraham Kaplan, Power and Society, p. xiv.

What, then, is power? Power has been the subject of human study since time immemorial. From Aristotle to Hobbes, Machiavelli, Rousseau, Montesquieu and others, power has been of central concern. Knorr says power is "the ability to affect behavior."<sup>26</sup> A.F.K. Organski believes it to be "the ability to determine the behavior of others."<sup>27</sup> Herbert Goldhammer and Edwin A. Shils go a step further and state that "power is the ability to influence the behavior of others in accordance with one's own ends."<sup>28</sup>

It is obvious that not all agree on the exact definition of power. However, the common ground is quite substantial. For our purposes it is necessary to keep in mind that, 1) power is a relationship between individuals or groups and, 2) that power is the capacity of one to modify the behavior of others to some desired end.

How is power exercised? The answer is not a simple one, but for our purposes let us consider four means. First, Nation A can persuade Nation B to do what A wants it to do. For Nation A, this is by far the easiest method of exercising power. All A need do is redefine the situation such that B perceives A's definition of the problem as the just one. Secondly, Nation A can offer B a reward for doing what it wants. A could intervene in B's decision by offering to reward B for choosing A's desired course of action. Thirdly, A can threaten B with punishment

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<sup>26</sup> Klaus Knorr, Military Power and Potential, p.3.

<sup>27</sup> A.F.K. Organski, p.94.

<sup>28</sup> Herbert Goldhammer and Edwin A Shils, "Types of Power and States," The American Sociologist, vol. 45(2), p. 171.

if it does not follow A's wishes. Related to reward, punishment threatens B with some unpleasant consequence. Lastly, A can take military action to force B into what it views a desirable decision. 29

We see, then, that power can be a subtle thing or a forceful thing. However, it consists not only of definitional characteristics, but, as an ability, it may be enhanced by the possession of certain attributes and instruments of power. This point leads us to a discussion of a topic of direct concern, military power potential.

National power is a relationship among states. It is relative. It is comparative. Measures of power have no meaning outside a comparative scheme. Saying that State A is a great power is meaningless, unless compared with the national power of another state.

An understanding of national power and military power potential is most useful in understanding the processes undertaken in this study. Beyond this, it is helpful to conceive of power potentials as having two components. First, there are the mobilized military capabilities. They are supplies, weapons and personnel ready to be mobilized. Secondly, there are those factors which confer upon a state the means to further produce military power capabilities. Total power is the sum of these two factors. Together, the mobilized and the potentially mobilized form the power component.<sup>30</sup>

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<sup>29</sup> A.F.K. Organski, pp. 105-107.

<sup>30</sup> Knorr, Military Power and Potential, p.16.

The history of military power potential as a concept is a rather abbreviated one. The concept did not gain appreciable currency until after World War Two. One of the more well-known students of power potential is Klaus Knorr. His typology of military power potential is our next consideration.

Knorr distinguishes three major determinants of military power potential, 1) economic capacity, 2) military motivation and 3) administrative competence. He feels that potential lies within the quantity and quality of such available resources. Resources within these categories are those most suitable for efficient input into the military sector.

Economic capacity has to do with production for both civilian and military use. It depends upon the quantity and quality of available factors of production. Here, we speak of a state's labor force, total population, natural resources, capital, energy resources and the like. Power depends, also, upon the composition and mix of these factors, as well as the speed with which these factors may be diverted to a mobilized military.<sup>31</sup>

Military motivation is the willingness with which members of a society supply men and resources to the military. Knorr views it as a most important concept, as a nation may possess enormous economic potential, but it is of little military worth unless the populace is motivated to act and is able to maintain its morale. Thus, power is not automatic. It is dependent upon a willingness to enter a conflict situation and forgo

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<sup>31</sup> Ibid., pp.45-117.

the satisfaction of certain needs and demands.<sup>32</sup>

Administrative capacity determines the efficiency with which military goods are employed. It is a measure of the military sectors' coordinated actions. It deals with the speed and skill with which goods may be utilized and decisions made. Administrative potential lies within the efficiency of an available bureaucratic organization. Persons of skill, intelligence and training are required. With a rapidly changing military technology, military mobilization would call for untold numbers of skilled bureaucrats, in addition to those presently engaged in making decisions affecting the military.<sup>33</sup>

Knorr's conceptualization of the determinants of national power was most useful here. It helped guide the selection of power variables. The properties of power are innumerable, and categorization is a risky endeavor. Knorr's scheme is helpful in transforming an intricate structure of factors into a form more easily employed.

## 2.2 Evaluating Power Indicator Variables

Number of military personnel is an indicator of the number of troops quickly available for mobilization. The quantity of men and arms is a barometer of the over-all strength of a state's military capacity.

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<sup>32</sup>Ibid., pp. 139-141.

<sup>33</sup>Ibid., pp. 119-136.

The substantive literature is filled with accounts of the importance of maintaining a ready military force. Those points made by Morgenthau, in Politics Among Nations, are typical.<sup>34</sup> However, one of the few methodological studies to consider it is that of Wayne H. Ferris in The Power Capabilities of Nation-States. In this excellent case study, Ferris makes the point that the number of military personnel is one of the few sure measures of immediate military capability.<sup>35</sup>

Among those factors most often considered is population. It is widely supported in both the methodological and the substantive literature.

In their respective studies, Robert Cox and Ferris use it as one measure of national power. Most recently, Nazli Choucri used it as an empirical-analytic tool in the examination of the relationship of population and the problems of politics among and between states.<sup>36</sup>

Among the first to consider population as an element of national power was Morgenthau. To him, population was an effective means by which we can quantitatively assess those purely human factors that determine national power.<sup>37</sup>

In his article, "Science Will Change the Balance of Power,"

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<sup>34</sup>Hans Morgenthau, Politics Among Nations, p. 124.

<sup>35</sup>Wayne H. Ferris, The Power Capabilities of Nation-States, p. 35.

<sup>36</sup>Nazli Choucri, Population and International Violence.

<sup>37</sup>Morgenthau, pp. 124-128.



B.K. Blount discusses the relationship of new technologies and population. He notes that for the last few hundred years, European states have been the dominant powers in the world. Present day European states warrant greater international consideration than their population would otherwise indicate. The emerging states of Asia and Africa include many heavily populated states, yet the preponderance of power still lies in the United States, the Soviet Union and Western Europe.

This is true due to the advanced industrial economies of powerful states. However, some feel that the development of a new technology will bring ultimate power to those states which possess large populations, as they can potentially produce more technicians, engineers and scientists. For example, since "genius appears to turn up random in the population of the world,"<sup>38</sup> China has the potential for producing ten times the number of geniuses as does the United Kingdom.

Blount concludes that population trends favor the development of great centers of power in Asia. As the populated Asian states, such as India and China, industrially and scientifically come into their own they will become the dominant powers. The United States and the Soviet Union may remain powers, but the small states of Europe---Britian, Germany, France and The Netherlands---will sink into obscurity.<sup>39</sup>

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<sup>38</sup> B.K. Blount, "Science Will Change the Balance of Power,"  
The New Scientist, June 27, 1957, p. 9.

<sup>39</sup> Ibid.

Katherine and A.F.K. Organski have devoted an entire book to the examination of the relationship of power to population. They view population as a nation's greatest resource.<sup>40</sup>

If, indeed, one is of the view that population is the greatest national asset, what can one conclude? The Organskis make the point that vast numbers of able-bodied citizens are needed to run an effective economy. Without a large population, no state can begin to prosper.<sup>41</sup>

Population limits the number of persons available for recruitment into the military.<sup>42</sup> A nation possessing a large army can potentially attack or defend. Total population is not the only factor affecting potential military strength. Age sets a limit as to the number of available recruits, and, for many states, the cost of fielding a large army is prohibitive.

Population, in part, determines economic wealth.<sup>43</sup> The exceptions to this are most important. A state filled with starving peasants will not likely become an industrial power. In fact, it might be said that the exception is more important than the rule.

Lastly, they point out that a great population improves domestic confidence, and creates fear abroad.<sup>44</sup> This is a qualitative

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<sup>40</sup> Katherine and A.F.K. Organski, Population and World Power, p. 3.

<sup>41</sup> Ibid., p. 4

<sup>42</sup> Ibid., p. 13.

<sup>43</sup> Ibid., p. 19

<sup>44</sup> Ibid., p. 26.

aspect. Inspired men may exceed normal limits. Power may become a reality when millions of individuals are working toward a common goal with a common frame of mind.

Area:

History has witnessed the generally uneven development of levels of national achievement and influence in international politics. These observations have motivated men to search for satisfying explanations of past events and to formulate meaningful hypotheses with which to predict the future ordering of political relationships. Over the past 88 years, numerous geopolitical hypotheses have been offered which purport to explain international reality on the basis of some master variable.<sup>45</sup>

Geopolitical hypothesis building represents efforts to identify a decisive factor or a limited number of factors, the uneven distribution of which, in man's living space, provides the key to understanding the past and predicting the future. While most factors have fallen victim to severe criticism and an advancing technology, national area continues to gather support as a national power determinant.

Extreme claims for a geopolitical basis of national power include those voiced by Sir Halford Mackinder. Mackinder's view was that geography favored the eventual emergence of a globally dominant empire located in the "heartland," a region

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<sup>45</sup> Harold Sprout, "Geographical Hypotheses in Technological Perspective," World Politics, March 1963, p. 186.

roughly occupied by the Soviet Union. His view was summed up in his famous maxim: "Who rules Eastern Europe commands the heartland, who rules the heartland commands the world-island; who rules the world-island commands the world."<sup>46</sup>

The approach of this paper is much more moderate. In fact, Mackinder modified and altered his views shortly before his death. However, because of a number of considerations, area is used in this study.

Area does not automatically confer power upon a state. This must be understood. However, it is a powerful influence. For example, it surely is no accident that the world's two superpowers are both large in area. Nor is it accidental that no small states are great powers. Some middle sized states have, at a certain time in their history, attained great power. However, as was the case with Great Britain, these middle sized states ruled colonial empires and controlled a large land mass.

Area can function as both a positive influence and a negative influence. A large, unpopulated land mass may turn into an economic burden, costly in terms of transportation and defense.<sup>47</sup> However, as Napoleon and Hitler discovered in Russia, a large land mass can make conventional conquests impossible. The Soviet Union contains one-seventh of the world's land mass. To conquer Russia would require increasing numbers of troops spread over

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<sup>46</sup>

Hans W. Weigert, "Mackinder's Heartland," The American Scholar, Winter 1945, p. 45.

<sup>47</sup>

Knorr, Military Power and Potential, p. 36.

an ever larger area inhabited by a hostile native population. Clearly, area was a prohibitive factor.

A large land mass makes possible the support of a large population and a varied supply of natural resources. <sup>48</sup> Area, here, represents a potential.

Among those stressing the related location and distribution of raw materials have been Brooks Emeny and Robert Strausz-Hupé. Emeny felt that only a limited number of states possessed the size necessary to potentially possess a complex base of raw materials. Thus, only a few states could ever achieve the status of great power. <sup>49</sup> On the basis of such thinking, Strausz-Hupé predicted, in 1945, that by 1970 the world's major powers might well consist of the United States, the Soviet Union and an industrially united Western Europe. <sup>50</sup>

A large, united land mass is evidence that a state possesses the people, motivation, skills, resources and military capability to govern. That it exists in tact, symbolizes the fact that a state does possess a certain power. <sup>51</sup>

Thus, area is a factor affecting national power. It cannot be used as an index in itself; but only in combination with a number of other factors.

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<sup>48</sup>  
A.F.K. Organski, p.121.

<sup>49</sup>  
Nicholas Spykmar, The Geography of Peace, p.47.

<sup>50</sup>  
Harold Sprout, p. 201.

<sup>51</sup>  
Ferris, p.36.

In today's age of nuclear weaponry, area will allow population dispersion so that strategic nuclear strikes are of a less formidable magnitude. A more advanced technology may someday render it of no importance, but today it still possesses some effect.

**Food Production:**

It is most necessary to consider a natural resource-raw material variable. Without certain mineral resources industrial production is not possible. From this it follows that without the possession of certain raw materials-resources, a state will be ill-prepared both to defend itself against aggressors and to wage war.

The use of raw materials as a power variable leads to a string of problems. It is not easy to construct a balance sheet of resources.

The problem begins with the very nature of what constitutes a raw material. We may feel we know what is and what is not a raw material, but this knowledge can only be superficial for resources range from nutrient-products and fibers, to fuels and metals. These, in turn, require a wide variety of activities to make them useful.

What is of value is determined by man's level of technology.<sup>52</sup> Has society developed the technology and skill necessary to capitalize on available resources? Or does the raw material

remain a potential reserve? Nature provides us with an opportunity and a potential. However, few resources are easily attainable. Man must develop the means by which to exploit a resource. Petroleum lies deep in the Earth's crust and must be mined through sophisticated techniques. Precious metals are of value only if they can be retrieved.

Technology, further, determines what resources are of value. During the sixteenth and seventeenth centuries, wood was widely used in industry. Today, oil is of great significance, but in the early eighteenth century it meant little. A century ago, such synthetic metals as aluminum and magnesium were unknown. Today's technology and human wants nearly require them. In short, a list of resources is governed by technological progress.

It is for these reasons that this author has chosen to use a food variable as the resource variable. It seems to be a more stable factor. It is the most elemental of all resources. Man cannot live without it.

History records the advantage of the self-sufficient state. Such states need not import foodstuffs to feed their populations. They are not dependent upon the efficient functioning of another's farming system, another's capricious leadership, nor an open sea lane. Such states need not divert their foreign policies from their primary objectives in order to make sure their populations will not starve in case of conflict.

Hans Morgenthau provides us with these examples of the importance of food. Before World War Two, Great Britian grew only 30% of the food consumed in the British Isles. Thus, she

was dependent upon unrestrained shipping for vital food supplies.<sup>53</sup>  
 The agricultural systems of the Middle East and North Africa were based on irrigation. According to Morgenthau, one can trace the parallels between the decline in power of Babylon, Egypt and the Arabs and the ruin of irrigation systems.<sup>54</sup> The disappearance of regulated irrigation systems transformed all the arable lands, except those near the Nile River, into virtual desert.

Abundant food is a source of strength. Conversely, permanent scarcity is a source of permanent weakness.<sup>55</sup> Food availability as a source of power is a relatively stable factor. India, today, is a geographically large and populous state. It possesses many assets of national power. However, Indian leadership and policy must concern itself with the constant threat of mass starvation. For lack of food, a great potential goes unrealized.

What is the historical relationship of man to his foods? In Food and Man, Miriam Lowenberg addressed this problem.

Lowenberg states that for the past 10,000 years man has fed upon grains.<sup>56</sup> Further, "grain has been the world's chief food

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<sup>53</sup> Morgenthau, p.115.

<sup>54</sup> Ibid., p.116.

<sup>55</sup> Ibid.

<sup>56</sup> Miriam Lowenberg, Food and Man, p.33.



throughout history." Grain is a high-caloric food product that has the advantage of being cheaper than meat. Man may like meat, but when food is short and land scarce for pasture, he can and must feed on grains.<sup>57</sup> Additionally, livestock feed on grains. Therefore, grain production is a key to the food supply. Grain can be consumed or it can be diverted to livestock production. Either way, the better part of man's food supply is dependent upon his staple grains.

The measure used here is the sum of the metric tons production of corn, rice and wheat per capita per year. It measures domestic production and does not take into account those food-stuffs imported at the mercy of another state. It is a measure of a states self-sufficient food supply. But, there are limitations to its validity. Food habits are influenced by religion, culture and geography. But, perhaps this combination of grains will outweigh this factor. Plus, there are few religious restrictions involving cereals.

What of the future relationship of food supply and national power? In Famine-1975, William and Paul Paddock address themselves to this question. Their opinion as agricultural experts is that we are headed for an unavoidable food-population collision. It is inevitable. The result will be mass starvation in Asia, Africa and Latin America coupled with revolution and mass social turmoil.<sup>58</sup>

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<sup>57</sup> Ibid., p.34.

<sup>58</sup> William and Paul Paddock, Famine-1975, p. 13.

They envision a world in which international politics will be based upon the allocation of surplus foods by self-sufficient states to a select few of the many starving. They foresee an Age of Food in which food is not only life, but wealth and power.<sup>59</sup> To the Paddocks, the United States seems uniquely suited to be the dominant power of such an era. The United States can further her own self-interests through the selected distribution of her limited foodstocks. Whether the United States will make good of this chance depends upon whether she can overcome many difficult psychological problems associated with the use of food as a persuader.<sup>60</sup>

Food, then, is a good choice. It is necessary and it appears a stable factor. Relatively<sup>un</sup>affected by changing technology, it provides us with a variable of constant importance.

#### Gross Domestic Product:

Gross domestic product is gross national product minus trade value. It is a useful power index that measures the total productive capacity of an economy. In time of war, the end use of that capacity can be shifted from civilian goods to military goods.

Gross domestic product(G.D.P.) has not been popularly used in national power studies. Most have chosen to use gross national product. An exception is Marshall R. Singer in Weak States in a World of Powers. Singer suggests the use of G.D.P.

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<sup>59</sup> Ibid., p.232.

<sup>60</sup> Ibid., p.233.

as an indication of "relative manifest wealth."<sup>61</sup>

G.D.P. was chosen for three main reasons, 1) as a practical matter, better data was available for G.D.P. than G.N.P., 2) since trade value is used also, the use of G.D.P. rather than G.N.P. reduces the repetition of data, and 3) by considering G.D.P. and t.v. separately, we separate the domestic aspect from the international. The domestic factor is a source of strength, while the international factor is potential weakness.

Trade value:

Trade value is defined as the sum of a state's annual imports and its annual exports. It is an economic resource, and an indicator of economic capacity.<sup>62</sup>

This international trade figure enables states to acquire a larger national product than they would otherwise obtain. States produce goods and services for export in which they have a comparative advantage and, in turn, import products and services that would require a greater outlay of indigenous resources.<sup>63</sup>

Trade value as a national power attribute has not enjoyed the popular support accorded such other factors as population and area. Its acceptance has been more recent. R.J. Rummel used it in The Dimensions of Nations, and Knorr speaks of it in The War Potential of Nations. Ferris considered it in The Power

<sup>61</sup>

Marshall Singer, Weak States in a World of Powers, p.64.

<sup>62</sup>

Ferris, p.35.

<sup>63</sup>

Knorr, The War Potential of Nations, p.83.

### Capabilities of Nation-States.

As was discussed in an earlier section, a state's power may depend, in part, upon the administrative capability its authorities possess. This factor is not easily quantified, and trade value can help us here. States with highly advanced economies are likely to engage in greater international trade to supply their populations with diversified materials, products and services required to maintain an advanced economy. This high degree of international trade requires skilled administrative personnel who conduct efficient trade activities. In time of crisis, these administrative personnel could be shifted to meet the needs of government. Thus, trade value can be viewed as a rough measure of a state's administrative capacity.

Trade value does have a weakness as to our use. In certain cases, a large trade value may be the result of a state's dependence upon imports for necessary goods. This would indicate a weakness. This fact, however, varies from state to state and with individual circumstances. This fact, however, should not disqualify trade values as a factor for all states. Its use in combination with other indicators should sufficiently counteract this weakness. For our purposes it is a most useful determinant.

### 2.3 Assessment of Power Variable Blend

Why have these six variables been chosen? The reasons go beyond those stated above. All but our food variable have been mentioned in the substantive literature and used in one methodological approach or another. Together, these six variables form

an effective measure of power that goes beyond their individual contributions. Considered together, they compliment each other, and allow one to infer certain other relevant variables. These six take into account both mobilized military capabilities and potential capabilities. Further, they cover, by direct measure or inference, each of Knorr's three major determinants of military power potential. Some of the information stated below is repeated from the above sections for added emphasis, and in order to make a necessary point.

The number of military personnel indicates the forces-in-being. It records the number of able bodied individuals immediately available for mobilization against another state. Defense expenditures, another measure of mobilized capabilities, could also have been used, but lack of data was prohibitive. However, in The Dimensions of Nation project, Rummel determined correlation coefficients for all pairs of the 236 nation-state variables employed. He has determined a correlation coefficient of .80 between number of military personnel and defense expenditures.<sup>64</sup> As a rule, the greater the number of military personnel, the greater the amount of resources allocated to their training and equipment.

Mobilized capabilities are not, in themselves, enough. This is where potential capabilities enter the picture.

Population represents a state's potential for mobilized troops. Some may argue that nuclear weapons void the importance

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<sup>64</sup>

R.J. Rummel, The Dimensions of Nations, p. 454.

of troops. However, even in our nuclear age, territory is still invaded by manpower. It is taken and defended by troops. It is a definite advantage. Again, a large population can be diverted to military service as well as to the task of supplying armed forces, and activating an economy.

Area is a factor which is relatively stable over time. A large area represents a potential for varied resources. If a state holds a number of colonies, it reflects that state's military motivation, as sustained morale is necessary to hold and govern a large area.

Another stable factor is our food variable. It is a resource variable. It represents both an immediate supply of the most elemental resource variable, and the potential ability to divert foodstuffs to the military without seriously affecting civilian food supplies.

Both gross domestic product(G.D.P.) and trade value are measures of government revenue and economic capacity. G.D.P. reflects the wealth of a state's economy. Productive economics can potentially supply more resources to the military and an active economy.provides taxes. Trade value, also, enlarges the national product.

Similarly, both variables indicate a measure of administrative capacity. Skilled personnel are needed in the economic and political sectors to efficiently conduct the domestic economy and matters of international trade.

Lastly, as an example, literacy would be reflected indirectly in measures of economic wealth. Thus, this economic resource might indirectly indicate something about a human

resource.

#### 2.4 Certain Factors Defy Quantification: The Example of Decision-Making Processes

The number of factors affecting national power seems endless. The choice of those to use in building a matrix of power variables is most difficult. However, the conduct of this operation requires quantification. This fact alone limits the choices. For inclusion in this study, a variable must neatly lend itself to statistical techniques.

To illustrate the difficulty, or near impossibility, of quantifying certain relevant factors seems appropriate. For purposes of illustration, let us consider what Knorr terms the decision-making competence of a state's leadership.<sup>65</sup> A general discussion of the decision-making process and decision-making analysis would best serve to illustrate how this factor eludes quantification.

Decision-making analysis is centuries old, however decision theory really began in 1955 when a mathematician, John von Neuman, and an economist, Oskar Morganstern, published their book entitled The Theory of Games and Economic Behavior. Their concern for the utility of alternative choices in the economic realm stimulated research efforts in psychology, business, philosophy, and somewhat belatedly, political science.

What is decision-making? It can be defined as the act of

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Knorr, Military Power and Potential, p.121.

choosing among available alternatives, about which a certain amount of uncertainty exists.<sup>66</sup> This definition implies that the decision process involves a gamble and a consequence. It further implies that decision-making is a form of micro-analysis which must consider both the individual characteristics of decision-makers and the salient features of the decisional environment.<sup>67</sup> A brief consideration of both of these factors is revealing as to our main point.

The behavior of states is determined by the emotion, desires, ideas and aspirations of those in positions of leadership. These very human decision-makers are affected by a number of individual and social variables.

First, decisions are affected by the rationality of the decision-maker. Decision-theory involves the age-old quest of the social philosopher for the power relationship of human actions to reason.<sup>68</sup> Epistemological rationalists and ethical rationalists argue that reason is the key to human knowledge,<sup>69</sup> and the road to proper action.<sup>70</sup> Others, such as Bacon, an empiricist,

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<sup>66</sup> James E. Dougherty, Contending Theories of International Relations, p.312.

<sup>67</sup> Ibid., p. 315.

<sup>68</sup> Wayne Lee, Decision Theory and Human Behavior, p.3.

<sup>69</sup> Ibid., p. 2.

<sup>70</sup> Ibid., p. 6.



and Bentham, a utilitarian, warned of the limits of such thinking.<sup>71</sup>

Secondly, decisions are based upon one's perceptions of the facts. Perception is dependent upon our notoriously fallible senses.<sup>72</sup> Given that perception (and thus reality) is relative to the observer, and that our senses can give us only an approximation of reality, it is not difficult to understand the distorting effect perception can have upon the decision-making process.

Thirdly, decisions are affected by the personality of the decision-maker. In The Psychological Dimensions of Foreign Policy, Joseph de Rivera outlines numerous important facets of one's personality which affect the decision-making process.<sup>73</sup>

Fourthly, how do individuals and groups respond to the pressure and tension of crisis? Do they respond to the stress with high motivation, a keen sense of purpose and enhanced creativity? Or, is our capacity seriously impaired? Psychologists have spent a great deal of time studying the effects of stress. They have much to say as concerns the relationship of stress to the perspective and adaptability of decision-makers.

Lastly, decisions are affected by such social phenomena as group pressure and intergroup conflict. Decisions made in group or committee situations exert severe pressures on the

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<sup>71</sup> Ibid., p.4.

<sup>72</sup> Ross Stagner, Psychological Aspects of International Conflict, p. 9.

<sup>73</sup> Joseph de Rivera, The Psychological Dimensions of Foreign Policy, p. 166.

individual not to deviate far from the group decision. Similarly, competition between groups may cause the conflict to become more important than the decision itself.<sup>74</sup>

Thus, we see that a decision-maker suffers serious limitations. He is constrained by the limits of rationality, perceptual distortion, personality, stress and social characteristics. Even this brief glance at the decision-making process makes obvious the non-quantitative nature of that process. It is not presently possible to quantify and statistically compare decisions.

This<sup>is</sup> not an isolated case. Other factors of national power do not lend themselves to quantification, and, thus, could not be considered for use in this study.

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<sup>74</sup>

Kenneth Knight, Decision-Making in a Changing World, pp. 52-57.

## CHAPTER 3

### 3.1 Exposition of Data Sections

#### Data Charts:

This chapter is devoted to three tasks, (1) presentation of the raw data, (2) graphic analysis, and (3) presentation of the results of t-test analysis. Chapter four contains our conclusions.

Data charts contain information used in this operation. Information recorded for each DS group includes the name of disputes considered, the year of the dispute, the parties to the dispute and, for each variable, the value, as scaled, of the absolute difference between variable values. For added clarity, each variable group data has been summed, and the mean determined.

DS I and DS II data appear on pages 43-45, and DS III and DS IV data appear on pages 46-48. In reading from left to right over three pages, one may note that within group N varies. This was taken into account in handling data.

DATA CHARTS

Population---DS I  
(expressed in thousands)

<u>Dispute</u>	<u>Year</u>	<u>Disputants</u>	<u>Pop. Difference</u>
Lebanon-Jordan 1.	1958	Lebanon-Syria	2733
Civil War 2.	1958	Jordan-Syria	2703
Arbenz Ouster	1954	U.S.-Guatemala	156,578
Kuwait Independence	1961	U.K.-Kuwait	52,603
Ghanaian Border	1964	Ghana-Upper Volta	2787
Mauritania-	1960	Mauritania-	10,899
Morocco Border		Morocco	
Spanish Sahara	1963	Sp. Sahara-Morocco	12,632
Falkland Islands	1964	U.K.-Argentina	32,191
Katanga Exiles	1960	Congo- Belgium	4,996
Dominican Moral	1965	Dominican Republic-U.S.	190,953
Aggressions			
Peruvian Border	1955	Peru-Ecuador	5790
Invasion of Haiti	1963	Haiti-Dominican Republic	1114
Luaca River	1962	Bolivia-Chile	4452
Saar	1955	France-West Germany	8700
	N=14	Sum diff.=489,131	Mean diff.=34,938

## DS II

Algerian	1955	France-Algeria	31,570
Independence			
Laos Civil War	1959	Laos-N. Viet Nam	13,410
Somali Borders 1.	1963	Somalia-Ethiopia	19,500
2.	1963	Somalia-Kenya	6547
Cambodian Border	1964	Cambodia-S. Viet Nam	12,170
Corfu Channel	1946	U.K.-Albania	47,965
Panama Canal(UN)	1964	Panama-U,S.	190,934
Caribbean Plots	1960	Cuba-U.S.	173,873
Panama Canal(OAS)	1964	Panama-U.S.	190,934
Algerian-Morocco	1963	Algeria-Morocco	1065
Border			
French in Levant	1946	Lebanon-France	38,850
Sarawak/Sabah	1961	U.K.-Malaysia	44,788
U.A.R. Dissolution	1961	Syria-Egypt	21,665
	N=13	Sum diff.=793,371	Mean diff.=61,029

Note: The symbol (\*) indicates that a value could not be determined due to the unavailability of data.

Area Difference  
(sq. miles)

67,483  
33,760  
3,637,344  
810,061  
13,769  
225,542  
69,711  
351,679  
839,675  
3,662,131  
386,741  
8,102  
131,907  
4,255,856

N=14

Sum=14,493,761  
Mean=1,035,268

G.D.P. Difference  
(million U.S. \$)

249  
475  
319,222  
163,404  
1,472  
1719  
\*  
71,232  
11,155  
628,199  
492  
573  
2,256  
18,634

N=13

Sum=1,219,082  
Mean=93,776

Military Personnel  
(number)

33,450  
16,188  
2,996,414  
577,700  
9,000  
24,100  
225,000  
369,200  
57,895  
2,699,231  
25,347  
11,620  
34,500  
626,800

N=14

Sum=7,733,445  
Mean=552,389

3,432,222

30,135  
225,578  
21,240  
3,949  
2,383,580  
3,651,738  
3,636,729  
3,651,738  
747,181

4,551,712

732,809  
315,164

N=13

Sum=16,100,299  
Mean=1,238,484

28,932

\*  
852  
700  
790  
\*  
595,441  
\*  
595,441  
114

\* 117

168,117

721

N=9

Sum=1,391,108  
Mean=154,568

752,800

240,483  
26,000  
2,000  
185,850  
4,178,050  
2,714,861  
2,357,016  
2,714,861  
23,000

563,200

525,500

49,400

N=13

Sum=13,807,521  
Mean=1,062,117

Food Difference  
(metric tons staple  
grains/capita)

.1169  
.0826  
.5489  
.0494  
.0052  
.1219  
.1321  
.6924  
.0416  
.6687  
.0000  
.0070  
.0966  
.2011

N=14  
Sum=2.7644  
Mean=.1975

Trade Value Difference  
(million U.S.\$)

76  
214  
25,191  
20,836  
583  
658  
740  
25,280  
6,935  
48,324  
359  
254  
894  
2,277

N=14  
Sum=132,621  
Mean=9,473

.1379  
.0833  
.0066  
.0033  
.1915  
.0729  
.4825  
.5270  
.4825  
.0056  
  
.1848  
.0938  
.0043

N=13  
Sum=2.2760  
Mean=.1750

8,492  
\*  
124  
271  
168  
8,234  
44,715  
33,949  
44,715  
616  
  
2,556  
21,004  
854

N=12  
Sum=165,698  
Mean=12,746

## DS III

			<u>Pop. Difference</u> (thousands)
Kashmir negotiations	1950	India-Pakistan	272,960
Revolutionaries in Panama	1959	Panama-Cuba	5575
Azer Baijan	1946	Iran-U.S.S.R.	114,320
Kashmir Secession	1948	India-Pakistan	268,799
Bizerte	1961	Tunisia-France	41,706
Aden Independence	1963	Aden-U.K.	53,587
Second Kashmir War and Negotiations	1965	India-Pakistan	380,124
Intervention in Dominican Republic	1961	U.S.-Dominican Republic	180,644
		N=8	Sum diff.=1,317,715    Mean diff.=164,714

## DS IV

Cyprus Civil War	1963	Cyprus-Turkey	29,667
Football War	1969	El Salvador-Honduras	853
Second Costa Rican Exiles	1955	Costa Rica- Nicaragua	280
Kuwait Independence (Arab League)	1961	Kuwait-U.K.	52,603
First Costa Rican Exiles	1948	Costa Rica- Nicaragua	346
Indonesian Independence	1948	Indonesia-Netherlands	62,400
Chinese in Burma	1953	Burma-Rep. of China	17,011
British Camerouns	1959	U.K.-Cameroon	50,506
West Irian	1954	Indonesia-Netherlands	69,180
Honduran Border	1963	Honduras-Nicaragua	483
Congo Independence	1959	Congo-Belgium	4717
Togoland	1958	Togoland-France	43,484
Thailand-Cambodia Border	1958	Thailand-Cambodia	16,734
Eichmann Abduction	1960	Isreal-Argentina	17,892
Ifni	1963	Spain-Morocco	17,412
		N=15	Sum diff.=383,568    Mean diff.=25,571

Sources: Disputes-Conflict Management By International Organizations, pp.12-13.

Disputants and Years-Issues Before the Assemblies of the U.N., vols.1-5, and Everyman's U.N., 1968.

Population data-U.N. Statistical Yearbook, various years.

Area data-U.N. Statistical Yearbook, various years, and

The Statesman's Yearbook, various years.

G.D.P. data-U.N. Statistical Yearbook, various years.

<u>Area Difference</u> (sq. miles)	<u>G.D.P. Difference</u> (million U.S. \$)	<u>Military Personnel</u> (number)
896,348	14,495	186,000
15,009	*	23,405
8,013,204	*	*
896,348	13,488	171,000
3,133,050	37,127	1,012,000
816,089	74,742	483,000
896,348	35,685	740,000
		2,380,141
3,660,570	527,802	2,380,141
N=8	N=6	N=7
Sum=18,326,966	Sum=703,339	Sum=5,005,546
Mean=2,290,870	Mean=117,223	Mean=713,650
297,810	6,688	368,400
35,017	280	850
30,618	7	2,300
810,061	163,404	577,700
30,618	56	2,338
666,858	2,019	43,560
247,905	576	424,352
748,077	164,011	589,750
666,858	4,386	32,000
6,916	23	720
839,675	10,594	57,500
4,308,523	42,306	1,024,800
128,559	1,603	41,000
1,064,081	10,422	153,200
135,164	13,375	225,000
N=15	N=15	N=15
Sum=10,016,740	Sum=419,750	Sum=3,543,470
Mean=667,783	Mean=27,983	Mean=236,231

Personnel data-The Statesman's Yearbook, various years.  
 Food data-U.N. Statistical Yearbook, various years.  
 Trade data-U.N. Statistical Yearbook, various years.



Food Difference  
(metric tons staple  
grains/capita)

.1153  
.1585

.2008

.1026

.2080

.0566

.0920

.6192

N=8

Sum=1.5530

Mean=.1941

Trade Value Difference  
(million U.S. \$)

1,586

1,377

1,713

2,306

13,567

24,847

3,042

35,245

N=8

Sum=83,683

Mean=10,460

.2663

.0540

.0474

.0494

.0198

.1153

.0416

.0562

.1260

.0491

.0523

.2167

.1319

.4054

.0750

N=15

Sum=1.7064

Mean=.1138

862

67

26

20,836

41

2,037

96

19,921

3,776

33

5,941

10,693

573

1,621

1,864

N=15

Sum=68,387

Mean=4,559

### Graphs:

Pages 51-56 graphically present our raw data. Success is plotted against DS group means. In each case the x-axis is our independent variable---international organization success. As indicated in the methodology section, success increases as you move to the right, from DS I to DS IV. The y-axis scales a dependent variable---one of the power variables.

Our hypothesis predicts an inverse relationship between decreasing power parity and international organization success. How do these graphs compare to the predicted graphic relationship? Are there any recurring features indicating what might properly be concluded?

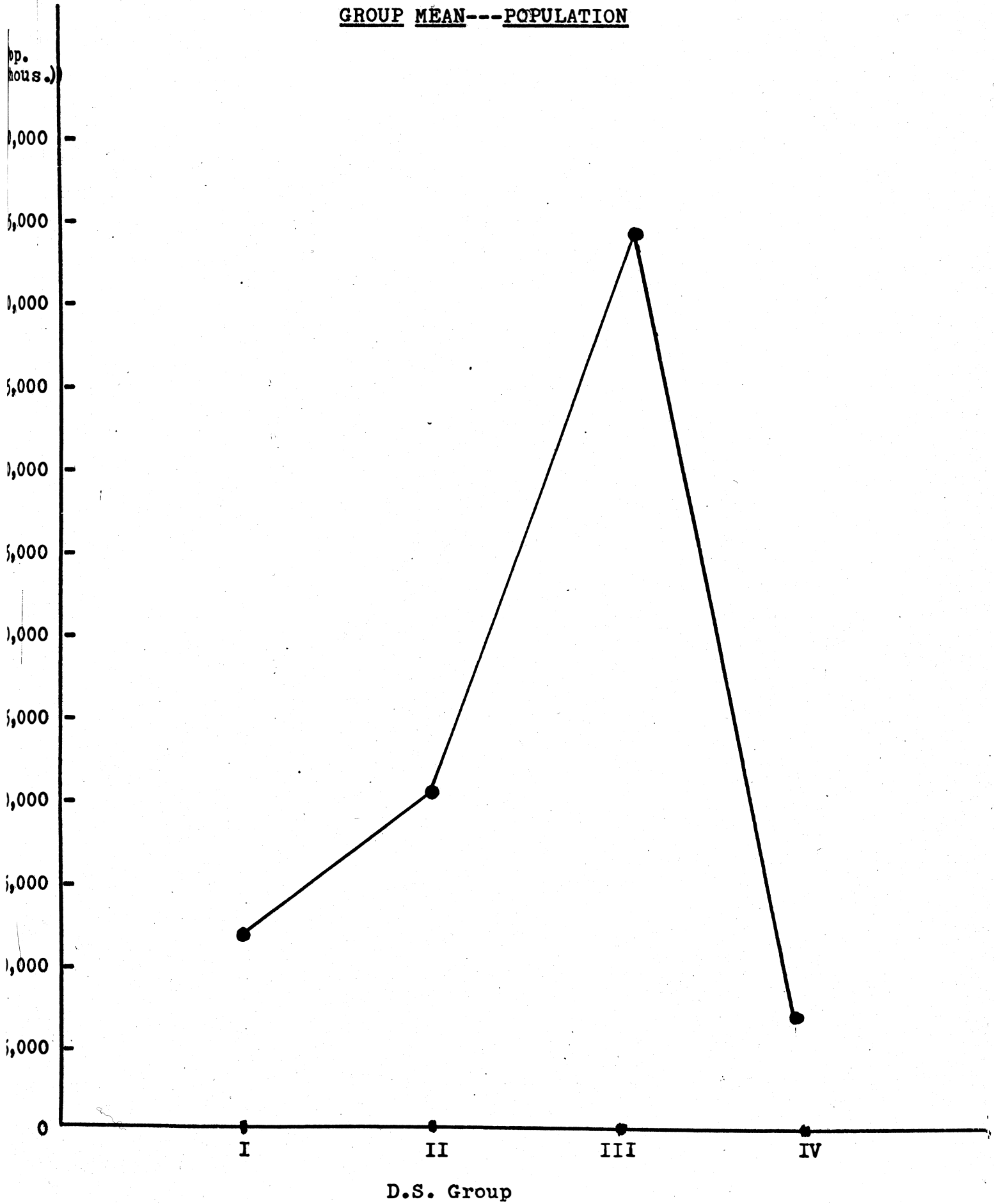
Examination reveals three consistencies. First, none of the graphs plot a line with a slope of -1. The only one to roughly approach this is graph 5. Secondly, in all but graph 5 the means of DS II and DS III are higher than those of both DS I and DS IV. Thirdly, in all six cases the mean values of DS IV are the smallest values.

What do these observations indicate? As to our first point, a negatively sloped line would indicate that our hypothesis is true. That, indeed, parity increases as success increases. But, this is not the case. No consistent pattern appears.

The mean values of DS II and DS III are, except in graph 5, the highest values. This would indicate that international organizations are only slightly(DSII) or moderately(DSIII) successful when relatively greater differences in power exist. That is, when there is a greater non-equivalence of power, international organizations are of little or moderate effect.

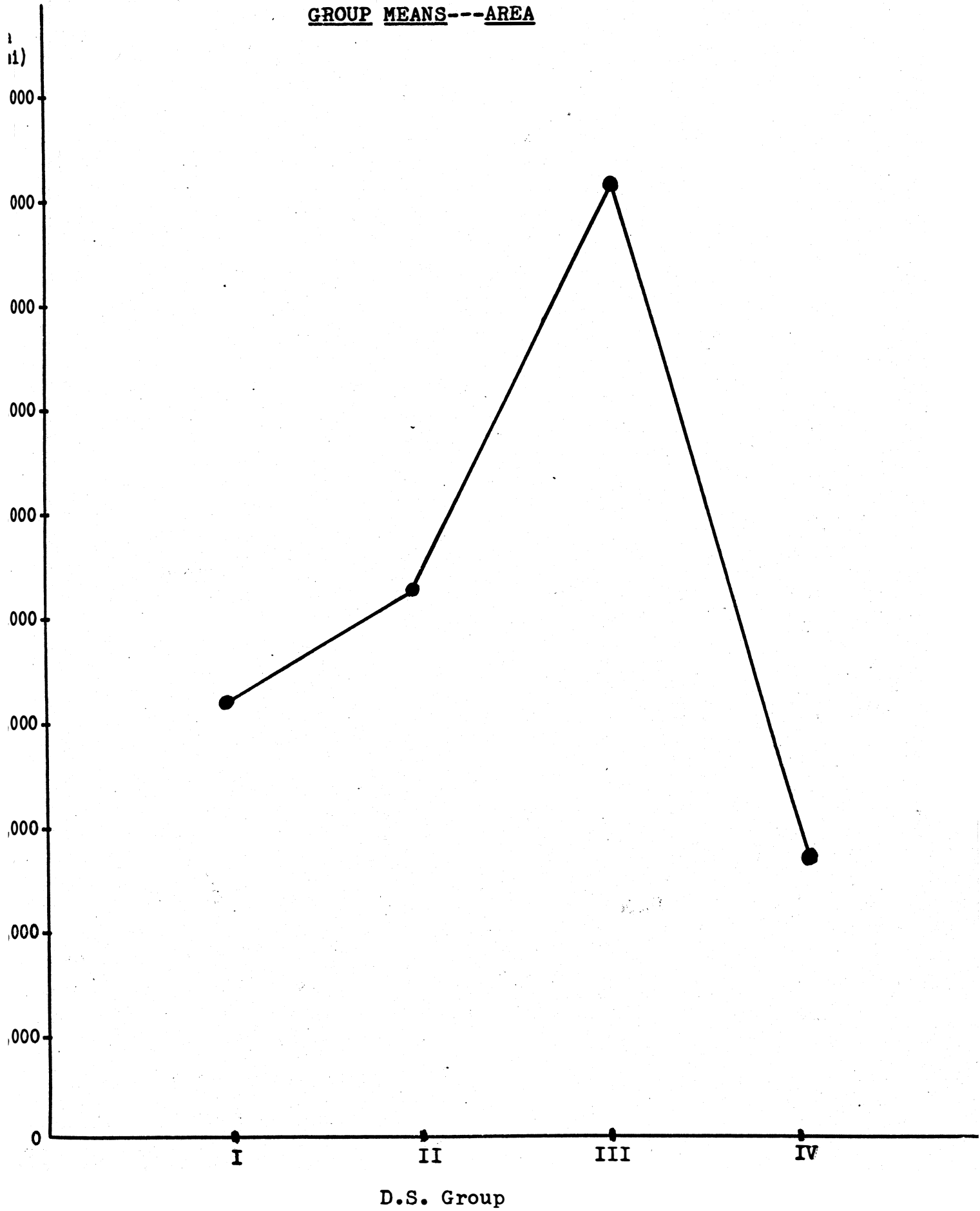
The lowest mean value for each variable appears in DS IV. This would indicate that in cases where international organizations were most successful, state power was also most equivalent. This is a point exactly consistent with the hypothesis.

GROUP MEAN---POPULATION



GRAPH 1

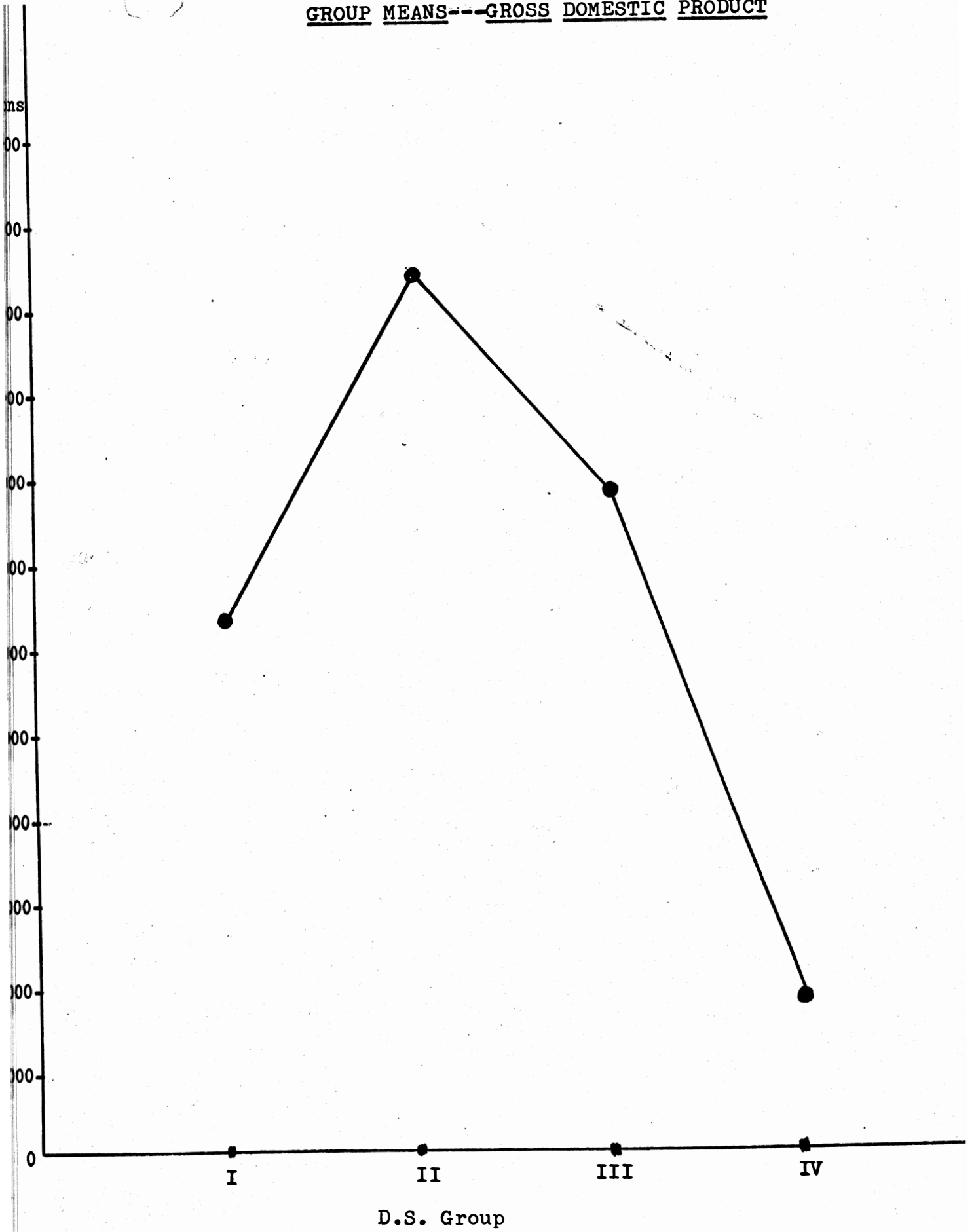
GROUP MEANS---AREA



GRAPH 2

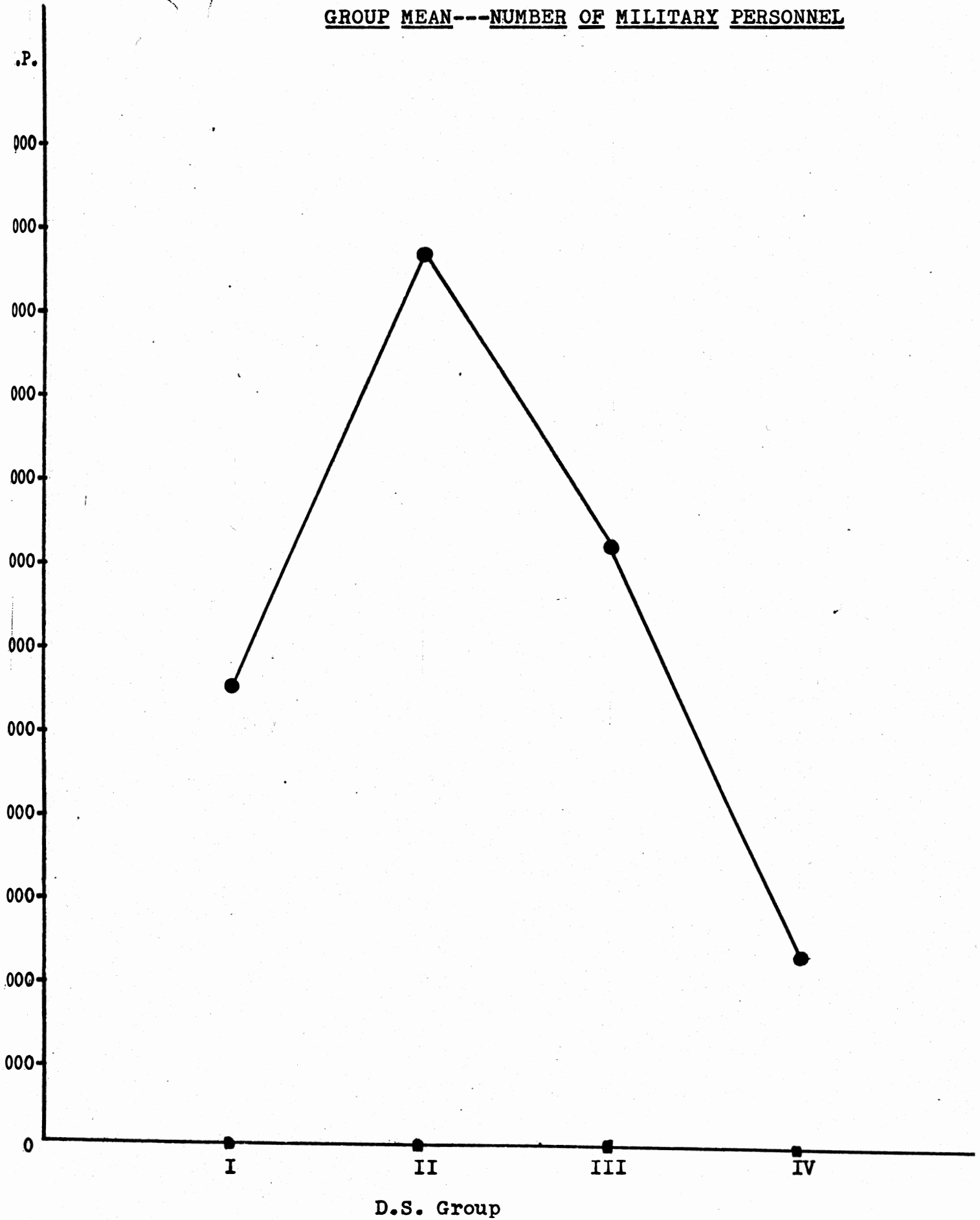
(53)

GROUP MEANS---GROSS DOMESTIC PRODUCT



GRAPH 3

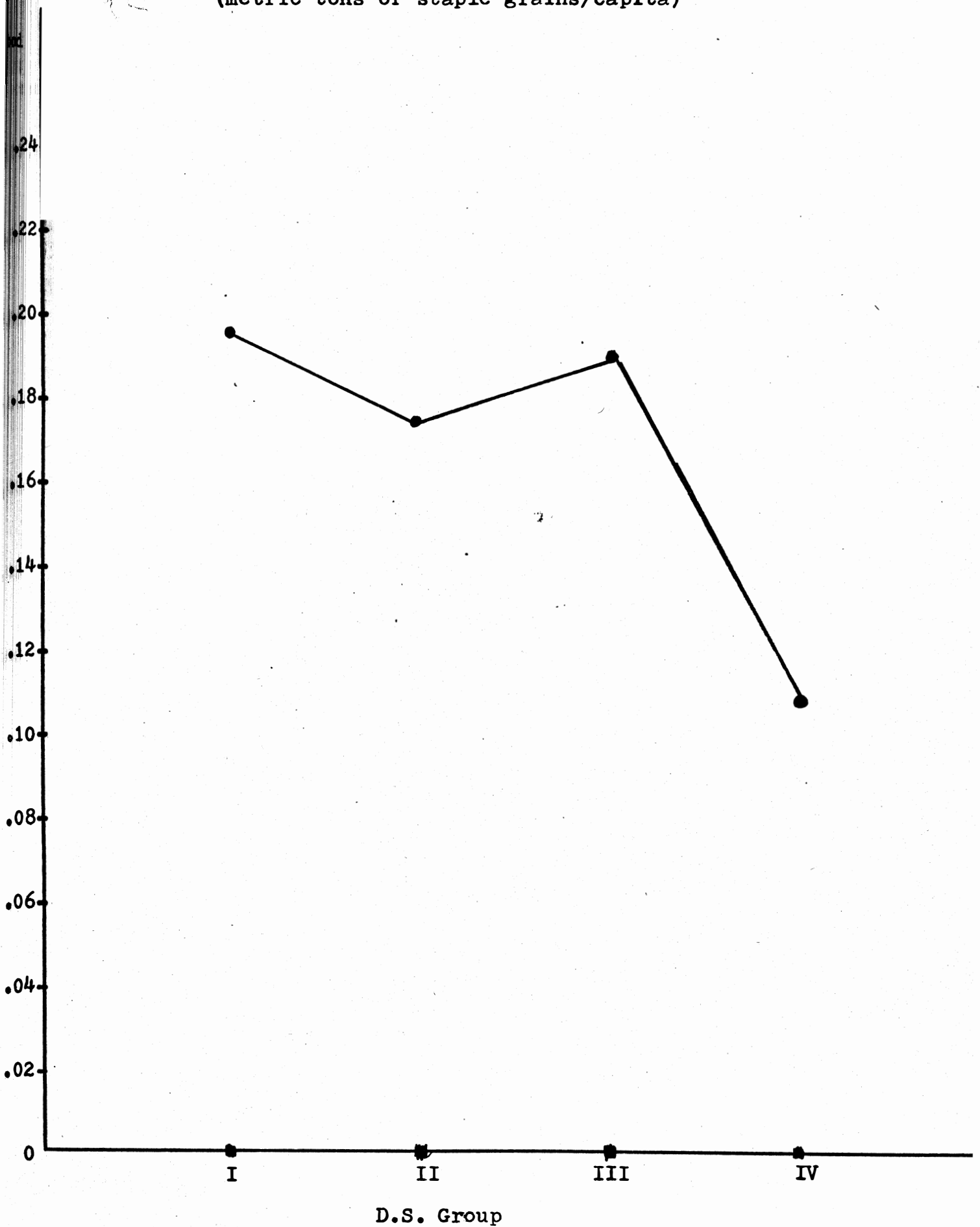
GROUP MEAN---NUMBER OF MILITARY PERSONNEL



GRAPH 4

GROUP MEAN---Food  
(metric tons of staple grains/capita)

(55)



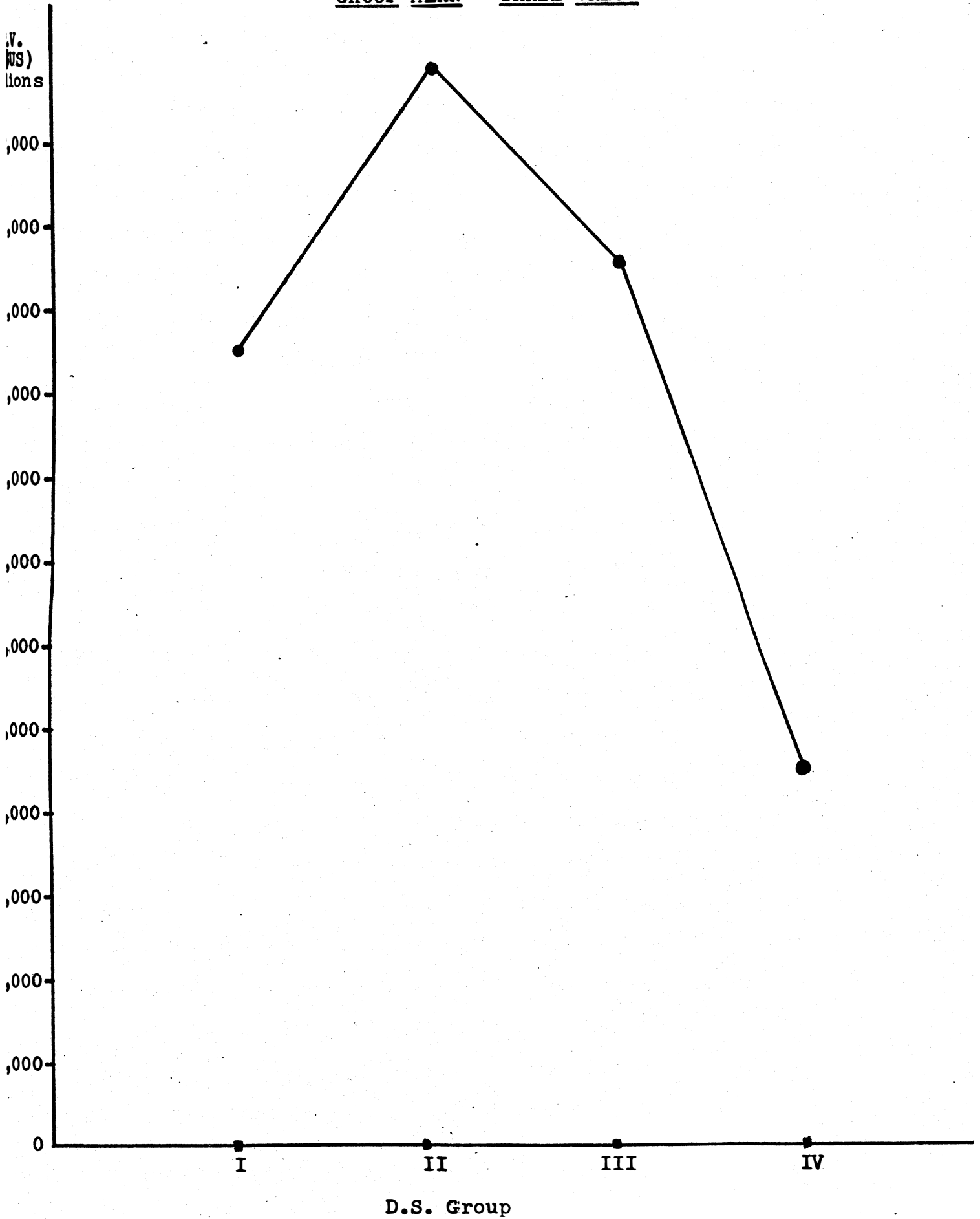
D.S. Group

GRAPH 5



GROUP MEAN---TRADE VALUE

(56)



GRAPH 6

**T-test analysis:**

T-tests test the significance of differences between means. For this effort, thirty-six t-tests were performed to test significance, at the .05 level, for each DS group mean against every other DS group mean for each variable.

The results are presented on pages 58- 60. Each comparison includes variable name, number of cases involved, the mean of each case, t value, p value (probability value) and a column concluding if the difference between means is significant. It should be mentioned that p value is the probability that the observed difference between means was due to chance. For a difference to be significant, p value must be .05 or less.

In 32 of 36 cases, no significant difference exists. This suggests two things. First, the prevalent trend towards non-significant differences suggests that differences between means are due largely to chance. That is, if one were to randomly select a group of states, randomly assign them to one of the DS groups and test our hypothesis, one would get similar results. Secondly, those graphic trends discussed above are not significant. Since graphic differences between means are not statistically significant, graphic trends cannot reliably guide conclusions.

Before moving on to a conclusion on the hypothesis, certain other matters must be considered. In section 3.2 below, the nature and use of statistical techniques, and the t-test in particular, is discussed. An understanding of those points made is a necessary precedent to forming conclusions.

RESULTS OF T-TEST ANALYSIS

Comparison of DS I means to DS II means:

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	I-14 II-13	34,938 61,029	1.02	0.319	no
Area	I-14 II-13	1,035,268 1,238,484	1.20	0.243	no
G.D.P.	I-13 II-9	93,776 154,568	0.65	0.525	no
Personnel	I-14 II-13	552,389 1,062,117	1.20	0.242	no
Food	I-14 II-13	.1975 .1750	0.26	0.797	no
T.V.	I-14 II-12	9,473 12,746	0.68	0.503	no

Comparison of DS I means to DS III means:

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	I-14 III-8	34,938 164,714	3.15	0.005	yes
Area	I-14 III-8	1,035,268 2,290,870	1.42	0.172	no
G.D.P.	I-13 III-6	93,776 117,223	0.25	0.806	no
Personnel	I-14 III-7	552,389 713,650	0.38	0.708	no
Food	I-14 III-8	.1975 .1941	0.03	0.974	no
T.V.	I-14 III-8	9,473 10,460	0.16	0.877	no

## Comparison of DS I means to DS IV means:

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	I-14 IV-15	34,938 25,571	0.55	0.586	no
Area	I-14 IV-15	1,035,268 667,783	0.19	0.853	no
G.D.P.	I-13 IV-15	93,776 27,983	1.31	0.203	no
Personnel	I-14 IV-15	552,389 236,231	1.16	0.255	no
Food	I-14 IV-15	.1975 .1138	1.25	0.223	no
T.V.	I-14 IV-15	9,473 4,559	1.16	0.258	no

## Comparison of DS II means to DS III means:

<u>Variable</u>	<u>Cases</u>	<u>Means</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	II-13 III-8	61,029 164,714	2.32	0.031	yes
Area	II-13 III-8	1,238,484 2,290,870	0.52	0.612	no
G.D.P.	II-9 III-6	154,568 117,223	0.30	0.769	no
Personnel	II-13 III-7	1,062,117 713,650	0.68	0.508	no
Food	II-13 III-8	.1750 .1941	0.22	0.825	no
T.V.	II-12 III-8	12,746 10,460	0.46	0.653	no

## Comparison of DS II means to DS IV means:

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	II-13 IV-15	61,029 25,571	1.79	0.085	no
Area	II-13 IV-15	1,238,484 667,783	0.81	0.427	no
G.D.P.	II-9 IV-15	154,568 27,983	1.87	0.075	no
Personnel	II-13 IV-15	1,062,117 236,231	2.36	0.026	yes
Food	II-13 IV-15	.1750 .1138	1.11	0.278	no
T.V.	II-12 IV-15	12,746 10,460	1.85	0.076	no

## Comparison of DS III means to DS IV means:

<u>Variable</u>	<u>Cases</u>	<u>Means</u>	<u>t value</u>	<u>p value</u>	<u>Significant at .05 level</u>
Population	III-8 IV-15	164,714 25,571	4.00	0.001	yes
Area	III-8 IV-15	2,290,870 667,783	1.07	0.298	no
G.D.P.	III-6 IV-15	117,223 27,983	1.61	0.123	no
Personnel	III-7 IV-15	713,650 236,231	2.03	0.055	no
Food	III-8 IV-15	.1941 .1138	1.42	0.170	no
T.V.	III-8 IV-15	10,460 4,559	1.42	0.169	no

### 3.2 Cautions on the Use of Statistics in Hypothesis Testing

Any study employing methodological techniques should necessarily include a statement of caution in the use of that approach. The logical point of departure for such an inquiry is the very nature of science, for within that nature lies an explanation for its use.

One thing which sets man apart from ~~other~~ animals is his ability to engage in abstract thinking. For example, man can consider a number of diverse items and abstract certain characteristics they have in common. He can survey a group of items, and abstract salient characteristics representing their relationship.

However, abstraction can be carried too far. Unthinking, overzealous attempts at quantification can make gibberish of a subject. Caution must be exercised so that guessing and speculation are not elevated to a level of respect far exceeding their true worth. The motive forces behind the use of quantitative techniques are admirable. Practitioners seek exactness and precision in seeking relevant summary data information and in evaluating non-random data <sup>75</sup> patterns. But these motives must be tempered by realities, and be directed toward the end of reflecting reality. We may fancy ourselves cybernetic sophisticates, but we must remind ourselves of the obfuscating limitations of the computational arts.

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David Sills, ed., International Encyclopedia of the Social Sciences, p. 209.

Because of this, it is desirable to employ and adhere to the general approach to solving problems called "the scientific method." This "method" is a serial process by which all of the sciences obtain answers to their questions. It need not be explicitly used, but selectively used. Here, one can employ a scientific approach effectively because political science does not consider unsolvable problems. Political science is not a metaphysical discipline. It considers real problems which have real answers. Political scientists have the capacity (though not as yet all the necessary means) to solve the problems which confront them. They examine the behavior of states and individuals, relationships and interactions, while avoiding such questions as those posed by classical philosophers (ex: What caused the universe?). A true scientist limits his work to the solvable. He stays away from the supernatural. To behave as a scientist is to employ sequential processes in the study of solvable problems.

Is this exercise scientific? Let us examine the criteria of the scientific. First, does it begin with a real problem? The answer is yes. The examination of the peacekeeping efforts of international organizations is truly a problem. We live in a world marked by conflict. Conflict resolution, likewise, is a daily exercise. The working of such endeavors is real.

It is this author's belief that our hypothesis represents a solvable problem. It scrutinizes an experienced situation which is potentially solvable. Thus, the second criteria, potential solvability, is met. We can observe the quest for conflict resolution. We can record its methods, interview its

practioners and analyze its consequences.

Building upon this, we move to the more concrete aspects of our methodology. The experimenter must express a tentative solution to the problem. The tentative solution called a hypothesis is a reasoned potential solution, or merely a vague guess. After this, the experimenter seeks to determine whether the hypothesis is true or false (or probably so). Does it solve the problem he has posed for himself?

Then, data must be collected. A group of workable subjects is selected. The nature of the problem will determine the subjects, and randomization is a must. Groups cannot be selected, studied and experimented upon unless their selection results from some equivalent process.

Given the rigor of such a process, one may move from empirical observation to inferences and conclusions (however qualified or limited). Inference may lead to the confirmation or denial of the hypothesis, a clue as to the next appropriate experiment, a narrowing of the range of possible alternatives, or to the conclusion that the observation is worthless.

This should be followed by a statement indicating the degree of certainty with which the inference is made. Inferences may be clearly true, or clearly false. Conclusions may be tentatively true, or tentatively false. Or they may be presently solvable, or potentially testable and solvable. Each alternative is of equal value and a significant contribution to the accumulated knowledge of a discipline. A researcher should not be prejudiced in favor of any over the others. He must adhere to the laws of



parsimony.

It is important to remember that whatever mode of analysis is employed, the inference to which a statistical method directly relates is limited to the population actually experimented upon.<sup>76</sup> One can seek to widen the breadth of inference, but a limit must be reached. For example, we here must observe temporal limitations, as data cannot be collected on future, unknown international events. Thus, inference is a two-step process involving, 1) direct inference to the sampled population, and 2) indirect inference from the sample to a wider realm.

Our hypothesis is justified because it questions a statement stated as a fact, but in actuality is not supported by observed realities. It is an unexplained bit of information offered up to those who read the works of Young and Liska. It represents a gag in our knowledge, an absence of verified information. It is potentially solvable, courtesy of scientific rigor. This testing process has been guided by the rules of scientific investigation.

In addition to the above discussion, this author wishes to include a note concerning the use of tests of significance in behavioral research. Their use must be meaningful and within the proper experimental context. Further, their use must not be indiscriminate, and inference from their results must be tempered by certain considerations.

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<sup>76</sup>

Ibid., p. 212.

T-tests have been the center of some controversy. Certain analysts would have us limit their use to strictly experimental settings.<sup>77</sup> Others encourage its use in non-experimental settings as well, but would issue these two cautions. First, care must be exercised in the interpretation of test results. Tests of significance yield statements of probability. They do not afford any insight into the cause of an observed relationship. Such tests tell us if the data is worth interpretive attention, and if a real difference between groups exists.<sup>78</sup> Secondly, one must not equate statistical significance with substantive significance.<sup>79</sup> They are not the same, and must not be confused.

As a last point, let us consider, again, the problem of inference. There are a number of problems involved in inferring from the part to the whole. In the social-behavioral realm, true experimentation is made difficult by a lack of experimenter control over a large number of extraneous variables. Potential influences must be taken into consideration, and generalizations must be made with a degree of tentativeness.

This experiment owes its particular form to the processes of quantification and statistical analysis. The above cautions

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<sup>77</sup> Hans C. Selvin, "A Critique of Tests of Significance in Survey Research," American Sociological Review, p.520.

<sup>78</sup> Robert F. Winch, "Proof? No. Evidence? Yes. The Significance of Tests of Significance," The American Sociologist, p.140.

<sup>79</sup> Donald Gold, "Statistical Tests and Substantive Significance," The American Sociologist, p. 44.

have been necessarily heeded. In seeking systematized knowledge, we must be ever aware of the limitations of present techniques. Then, and only then, can we as social scientists substantially increase our knowledge, and advance the position of our judgments.

## CHAPTER 4

### Conclusion and Speculations

As the above discussion makes clear, there are two levels of inference. In this chapter, both will be considered, but apart from one another. Direct inferences are conclusions having to do only with the sampled population. Conclusions are limited, as they must be, if scientific rigor is to be maintained. Indirect inferences are speculations. Here, one attempts to widen the possible utilities and applications of the drawn conclusion.

#### 4.1 Conclusion

As noted in section 3.1, there is a definite pattern of non-significance of differences between group means. Due to this, this author must conclude that our hypothesis is false. Differences in power of parties to two-party disputes appears not to affect international organization success. Power differences do not affect the workings of international organizations in their quest to maintain world order and promote human welfare.

#### 4.2 Speculations

Speculations are reasoned extensions of the conclusion. They are of limited validity and involve considerable risk. However, only through speculation can one hope to profit from any investigation.

#### Implications:

First, let us consider certain implications that this

study may have in regard to four other works. In Conflict Management and International Organizations, Haas et al., touch upon the relationship of power of the parties to a dispute and degree of success. Their approach is somewhat different from that of this study. They plot, in tabular form, success (none, some, moderate or great) against power rankings of antagonists (smallest vs. smallest, middle vs. small, super power vs. middle power, etc.). They conclude that success increases as the power of the antagonists decreases. That is, the organizations are most successful in dealing with weak parties.<sup>80</sup>

They indicate that power can be interpreted as an important factor in determining the success of international organizations. Further scrutiny indicates that as the difference of power between pairs of antagonists decreases, international organization success increases. This corresponds with our hypothesis. However, this more incisive and complex consideration of this relationship indicates that success is not dependent upon power parity.

Thus, it must be due to some other factor. Three possible influences come to mind.

(1) Situations may have been affected by how an antagonist views the situation. Is it important? Can it gain, or can it only lose?

(2) Is success due to the fact that one particular issue <sup>recurrently</sup> is brought before international organizations, and the organizations

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<sup>80</sup> Haas et al., p. 24.

happen to be successful at it? For example, cases brought before the U.N. often involve decolonization. An examination of the Haas study cases reveals that the U.N. is most successful at working with that issue. Perhaps an inordinate number of such cases considered in the universe of a study would suggest international organization success over-all, while a closer look would show a clustering of successes around one issue.

(3) Perhaps patterns of success would be affected by this: an organization may be virtually controlled by a state involved in many conflicts brought before the organization. Thus, that party could maneuver the organization into acting in its interests. Conflicts would be quickly decided in favor of that party. Many have claimed this to be the relationship of the O.A.S. and the United States. Others have observed that Egypt has attempted a similar manipulation of members of the Arab League, but has fared poorly.

Oran Young feels that the U.N. can take measures to facilitate the non-violent termination of disputes between the Soviet Union and the United States. He indicates that the U.N. need not confine its activities to preventive diplomacy and efforts to restrict the spreading of the Cold War. On the contrary, there are a number of roles the U.N. might play in the event of such a serious dispute.<sup>81</sup>

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<sup>81</sup>Young, chs. 5-8.

Young further criticizes those who would suggest the U.N. could play no role in a serious situation because neither the Soviet Union or the United States would accept third party intervention.<sup>82</sup> This problem of acceptability is based upon the idea that these two states are so very powerful relative to other states. Their high level of military strength would preclude any chance of U.N. success at mediation.

This study suggests that power differences in two-party disputes have no effect upon international organization success, and that this functions without regard to level of power. Therefore, the fact that a U.S.-U.S.S.R. crisis would be one of a more severe level would not have the effect of precluding neither U.N. success or failure. The absolute difference in the measures of their powers, regardless of level of power, would not affect organizational effectiveness.

Inis L. Claude's Power and International Relations is an analysis of the theoretical approaches to the problem of the management of state power---balance of power, collective security, and world government. Claude argues that the latter two share the virtue of recognizing the requirement for some degree of centralized management of power.<sup>83</sup>

He insists that theorists of collective security and world

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<sup>83</sup>Inis L. Claude, Power and International Relations, p. 274.

<sup>82</sup>Young, p. 173.

government are correct in their belief that our world requires a measure of central direction and an agency capable of maintaining orderly relationships among the component parts of the system.<sup>84</sup>

This study would indicate that if such an agency evolves, out of the U.N. system or some other organization, the nature of the functions of that organization will be complex. Intuitive indicators of the problems of management of power will not bear out. The mechanics of power management will be intricate. Theorists and practitioners should heed the evidence of this and similar studies.

Stephen S. Goodspeed feels that the task of international organization is two-fold. International organizations seek to further political and national security, as well as promote economic welfare. To peacefully settle disputes, organizations must successfully develop the necessary means. This study suggests that the nature of those means is very complex. Their nature is one of many and varied aspects. Here, we have helped clarify one of those basic variables involved in international organization intervention in conflict situations.

Possible influencing factors:

What factors may have influenced the outcome of this study? One possibility is that organizational success in cases involving powerful states is affected by a paradox in the

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<sup>84</sup> Ibid., p. 275.



relationship of wealth and national power. That is, states of wealth and power do not necessarily exercise sole control in shaping their destiny. Often, the greater ones wealth, the greater the dependence upon other states. The inability of great powers to accept the idea that their wealth depends, at least in part, upon developing countries may cause them to withdraw from effective mediation with them. International organizations may not possess the means necessary to help a great power deal with the irony of this relationship.

When there is a large power-small power confrontation, and thus a large disparity of power, there are two possible factors influencing the outcome of the dispute. First, the weak, less wealthy state will have more to gain from the dispute, and, thus, may act as a severe, disruptive force. It has little, if anything, to gain by accepting a solution which is part of the status quo.

Or, the powerful power will have so much leverage over the weak party that it must accept the great powers solution, or a solution proposed by an international organization favoring the more powerful party. The weak may relent to save face.

When power differences are small, international organization success may be minimal because neither party fears the other. Entry into a conflict holds the possibility that ones adversary might gain an advantage, or expose ones weaknesses. Quick compromise and withdrawal from the conflict may obscure the true measure of organization success. In any case, organizations may facilitate conflict abatement, but it may be in such a way as to conceal the more important influencing forces.

Suggested modifications for further consideration:

How would this author modify and complete this study if he had unlimited time and unlimited resources at his disposal? There are a number of possibilities.

(1) A better statistical test, yet unknown, could be used. One might include an analysis of variance test to check if with-in group variances caused any between-group differences.

(2) One could work with psychophysical techniques, or regression analysis in the hope of discovering that their use, in a modified form, would allow the compilation of an acceptable national power ranking. The Cox technique might have been used here to fulfill this purpose. It would have made things easier and neater. However, as stated before, the Cox technique is inadequate and is not sufficiently reliable. This author feels that validity cannot be sacrificed for the sake of expediency.

(3) Given the proper techniques for doing such, disputes involving more than two states could be considered.

(4) One could expand this study to include a whole series of hypotheses in the hope that this would paint a more complete, less tentative picture.

(5) Attempt, through yet unknown means, to eliminate extraneous variables influencing this effort, so that the relationship of the factors in the hypothesis can better be determined. This would move us toward a more pure experimental setting.

(6) This study could be organized into sections considering the United Nations and the various regional organizations apart from one another.

(7) A content analysis study would be helpful in determining those factors which make a state powerful. States perceived as powerful could be tested as to existing power, and the possession of power factors.

(8) The number of power factors employed could be increased.

(9) The universe of cases considered could be expanded.

(10) Complete and accurate data would be sought, perhaps directly from government publications.

(11) One could use some yet unknown technique to determine the cause of observed relationships.

(12) Lastly, correlation coefficients determining the concurrence of power factors could be determined. Their use would enhance the regularity of the data and the particular mix of power factors.

Man<sup>and</sup> his nature:

This brings us to one last consideration. The examination of power as an instrument of international political interaction brings to mind an important philosophical question: Is violent human interaction the result of a psycho-biological need, or is it a product of environmental factors? Since the Treaty of Arras(1482) man has suffered more than 280 major wars.<sup>85</sup> Is this the result of an inborn biological trait, or is it a learned behavior?

These questions elicit two differing responses. Some say that violence is the natural condition of man. Others contend that

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<sup>85</sup> Mortimer Lipsky, Never Again War, p. 21.

it is possible for man to live in peace.

Those of the former view include the influential seventeenth century philosopher, Thomas Hobbes. In his monumental work, Leviathan, Hobbes states that men are by nature equal. This equality leads to an intensely competitive atmosphere in which there is "always war of everyone against everyone."<sup>86</sup>

A more recent exponent of this pessimistic view of the relationship of human nature to war is Hans J. Morganthau. Morganthau is convinced that "the struggle for power is universal in time and space and is an undeniable fact of experience" because "the drive to dominate is common to all men."<sup>87</sup>

Among those opposing this notion of a fixed human nature are a number of cultural anthropologists including Margaret Mead. Miss Mead characterizes warfare as a "bad invention."<sup>88</sup> It is not an inevitability, for evidence exists to show that war has not existed at all times in all societies. For years, we have been aware of the Eskimo example. More recently, the discovery of the Tasaday tribe of the Philippines, has highlighted this idea. Easily the most primitive tribe on Earth, they have no word for war, nor do they have an understanding of it as a concept.<sup>89</sup>

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<sup>86</sup> Thomas Hobbes, Leviathan, p. 82.

<sup>87</sup> Morganthau, p. 88.

<sup>88</sup> Margaret Mead, "Warfare is only an Invention, Not a Biological Necessity," Asia, August 1940, p. 402.

<sup>89</sup> John Nance, The Gentle Tasaday.

This author is of the latter view. Environment does seriously affect our competitive and warring behaviors. Studies such as this allow us to take that first, all-important step toward a comprehensive understanding of national power and conflict, as well as the dominant and benign aspects of power.

#### 4.3 Closing

It is worth repeating that a primary goal of this study was to help us move toward a more systematic study of international politics. In doing so, many of the advantages and pitfalls of this search were revealed. Theory is often unstructured, but it can successfully guide research. Power, as an approach to the study of international politics, is complex. The results of any study are suggestive, rather than conclusive. The problems and qualifications seem endless, but the search is worth all the time, and all the energy required to succeed.

POSTSCRIPT

Though this study is narrow in scope, it is a useful and good exercise for man lives in an era known as the Atomic Age. He is often filled with fear, and a longing for a greater understanding of his hopes and inadequacies. He fears irrational death, and wonders about the inevitability of his own ultimate self-destruction.

The ultimate question begs answering---Can man summon up the will to control his own expressions in an age characterized by advanced destructive science? This question launches us on the long and arduous journey of self-scrutinization and soul-searching. It calls for man to mobilize his scientific and intellectual energies so that he may control his own destiny, and no longer serve as his own greatest enemy.

Man must face the realities of his time, and act upon the adjustments those realities require. If it calls for a radical transformation of his patterns of behavior and thinking, so be it. In an age where mass destruction is only a push-button away, he must break away from time worn expressions of his nature. Self-scrutiny is a necessity, and he must welcome positive change in himself. He has little choice but to attempt to do away with his moral datedness. Human wisdom and intellect must evolve to a level at least equal to that of technology. The struggle between science and morality must be won by morality. Only then can man's incongruities be lifted to his consciousness and

acknowledged. He must span the gap between his destructive capabilities and his will to have a meaningful existence.

This paper has dealt with International Organizations and one dimension of their peace-keeping efforts. It is the hope of many that these regional and world bodies will, through their efforts, provide man with ample time and means to span the gap. Building bridges is necessary, but so is the study of those mechanisms which deter destruction in the hope that man is capable of meeting the challenges of his own existence.

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