A PRELIMINARY EMPIRICAL INVESTIGATION INTO IMPERIALIST THEORY

by

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ABSTRACT

This study is a modest attempt, from a behavioural perspective, to sort out some of the conceptual difficulties in the imperialist literature. Several objections are raised pertaining to marxist determinism and a less deterministic model is opted for. The empirical implications of testing the whole model militate against it in a study of this size so that only two important propositions emanating from the model are tested; first that interactions in the international system are rank-dependent, and second, that they are feudally-structured. Support for these two hypotheses can be found in the behavioural literature, but the advantage of this study is that it offers an explanation - imperialism (with requisite qualifications) - for these interaction relationships. The results are far from conclusive; several problems regarding conceptual ambiguity remain. Future study rejecting the marxist mode of inquiry will have to concentrate on further specification of an alternative model.
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I. INTRODUCTION

Inequality has often been cited as a factor influencing behaviour in stratified social systems. Theoretical international relations scholars have posited relationships between inequality of nations and interaction\(^1\), aggression\(^2\), and conflict and war\(^3\). To parallel these empirical findings, the focus of inquiry in the field has turned, in the last five years, from the assessment of East-West relations to that of North-South relations. This newfound interest seems to have evolved initially as a result of the actions of the OPEC cartel and the consequences of those actions for the more industrialized countries. Subsequent developments at such gatherings as the fourth UNCTAD Conference, the Seventh Special Session of the UN General Assembly on a New World Economic Order, and the recent Habitat Conference on Human Settlements, have highlighted the plight of the underdeveloped countries to the extent that the vernacular of development theory appears to be gaining currency among conflict theorists.

Beyond the statistical associations, the empirical behavioural literature to this point, provides the contemporary scholar with little theoretical rigour so that the current fascination with North-South relations appears to be fadish and temporary. The normative label loosely ascribed to this body of literature, to reflect the nature of the unequal relationships, is "dependency theory". It is the intention of this paper to give some body to the current empirical literature - to provide a potential theoretical explanation for many of the relationships found to exist by behaviourally oriented scholars. Of the many forms that North-South dominance-dependence relationships can exhibit within the purview of the current body of literature known
as dependency theory, it is the intention of this study to examine one of the
oldest and most controversial - imperialism.

The question may be asked, in view of the opening remarks about conflict,
as to why we study imperialism today. To historians, imperialism has tradi-
tionally referred to the colonial and mercantilist periods of the eighteenth
and nineteenth centuries. Whatever imperialism means (and we shall elaborate
on a definition presently), it was seen as a potential source of conflict bet-
ween great powers over prestige as indicated by territorial holdings or as a
result of competition for markets for the powers' products. It is generally
recognized in the academic literature, however, that the political map of the
world has changed considerably since the turn of the century and especially
since the second World War. While the United Nations began with fifty-two
state members, today it boasts a membership of approximately one hundred and
fifty nominally independent states. The question which has been asked more
and more recently is: have the relationships between the established states
and these newly "independent" states actually changed since the colonial
period? It can probably be said without too much argument that they, in fact,
have not. The potential sources of conflict, however, may have changed.
Since 1648 and the Treaty of Westphalia, nation-states have laid legal claim
to territorial sovereignty, legitimate recourse to violence within their terri-
tory, and political independence. The great powers no longer have legal right
to territorial expansion (as most of the world's territory has been claimed).
It has been suggested by such recent writers as Magdoff and Jaléé that the
three basic "rights" of the less developed states are being violated in more
subtle ways than outright territorial hegemony. The posturing of the less
developed states in the last few years however, leads one to suspect that the
less developed countries are becoming less tolerant of great power activity and influence within their borders. This development represents a new source of potential conflict.

The question remains as to whether we can call these developed-less developed relationships imperialistic. Most scholars today perceive imperialism in a negative, pejorative sense. This suggests that there is something different about imperialism from other dependency (or interdependence) relationships which can be beneficial to both parties. For the most part, however, discussions of imperialism, since the word entered the English language, have dealt with causes and have neglected an adequate discussion of definitions (which has thus resulted in vagueness and ambiguity). This study represents an attempt to clarify the notion of imperialism and to test some propositions derived from a theory of imperialism. This will require, first, a review of the literature to date. This review, it is hoped, will illuminate the conceptual ambiguity in the literature. Specifically, we will try to demonstrate that conceptual ambiguity derives from related implicit ideological and procedural controversies which we will try to make explicit.
II. IMPERIALISM - DISCUSSION OF CAUSES
IN HISTORICAL PERSPECTIVE

Most early non-marxist discussions of imperialism saw imperialism from a psychological standpoint. Schumpeter, in repudiating the marxists, defines imperialism as "the objectless disposition on the part of a state to unlimited forcible expansion" which derives from a warrior-class social structure. Like the marxists, Schumpeter saw the drive for expansion arising from the class structure of society. Others, however, tend to anthropomorphize whole societies and attribute imperialism to nationalistic tendencies. Hayes, for example, states that imperialism is a nationalistic phenomenon. "It expressed a resulting psychological reaction, an ardent desire to maintain or recover national prestige." Similarly Arendt saw imperialism as a nationalistic expansionist phenomenon but motivated by the desire to find a remedy to problems of over-population and excess capital. Since the nation-state was limited (in the late nineteenth century) by territorial boundaries, she had to move outside her bounds forcibly in order to relieve pent-up pressures.

Others saw imperialism, still from a psychological point of view, as a drive for "power". Raymond Aron, in using the example of Hitler, tries to show that expansion was not motivated by economic reasons but by the desire for power. In the same vein Thornton states, "what is being looked at is power - power itself, not its use." "Imperialism is less a fact than a thought. At its heart is the image of dominance, of power asserted; and power is neither used nor witnessed without emotion." The discussion of imperialism to this point has been rather vague mostly because the scholars reviewed thus far are themselves rather vague.
It is not clear that we know much more about imperialism at this point than when we set out. Davis' radical critique (in relation to the so-called conservative writers reviewed thusfar) serves to set the stage for the more theoretically rigorous marxist writers. He asserts that the conservative writers

... can not show the organic connection among events, the rise and fall of long-run movements, the dynamics of imperialism; and this approach is characteristic of many conservative writers.

Another technique of conservative theorists is to define imperialism in such a way as to avoid the main question. Imperialism in their terms, is something innate and therefore inescapable ... What Seillière and other such theorists omit is the element of exploitation, which is not inevitable.\textsuperscript{13}

Davis comes a bit closer to the meaning of imperialism when he includes the ancillary concept of exploitation. His discussion of exploitation and its place in the definition of imperialism is consistent with marxist theory to which we now turn.

Although influenced greatly by writers of his time (especially Hobson and Hilferding), Lenin set the stage for the current debate by distinguishing traditional imperialism from what he called the "new imperialism."

Lenin's work first published in 1917, signalled a new direction in marxist thought in that the conception of international behaviour shifted from a struggle between the classes to a struggle among countries caused indirectly by an international stratified division of labour among countries. To Lenin, imperialism was "the monopoly stage of capitalism".\textsuperscript{14} A definition of it, for Lenin, must include the following five features:

1) The concentration of production and capital developed to such a high stage that it created monopolies which play a decisive role in economic life.

2) The merging of bank capital with industrial capital, and the creation, on the basis of this "finance capital," of a financial oligarchy.
3) The export of capital which has become extremely important, as distinguished from the export of commodities.

4) The formation of international capitalist monopolies which share the world among themselves.

5) The territorial division of the whole world among the greatest capitalist powers is completed.¹⁵

Lichtheim notes that there were four different kinds of relationships which Lenin distinguished:

(1) National oppression of the sort practiced in the old dynastic East European empires before 1914-18; (2) colonialism of the Anglo-Indian type during and after the mercantilist era; (3) "liberal imperialism," classically represented by the British and subsequently the American drive to throw foreign markets open to Western capital; (4) the transfer of surplus value from the poor countries to the rich through trade relationships which in practice discriminate against undeveloped economies.¹⁶

Lichtheim proceeds to state that types (1) and (2) have become historically outmoded and of the remaining two types, recent emphasis has shifted from type (3) to type (4).¹⁷

Marxist and radical scholars posed two alternative explanations for the relationship Lichtheim has designated "type (4)."¹⁸ The first, represented by writers such as Rosa Luxemburg, has been called the underconsumptionist hypothesis. This posits that the transfer of surplus value to underdeveloped countries is necessitated by a declining propensity to consume by the workers who are the mass in society, and therefore a declining average profit margin. This phenomenon is precipitated by the tendency toward monopoly capital which allows the bourgeoisie to reap higher profits than in a competitive situation, but necessarily detracts from the spending power of the worker. The alternative hypothesis, which might be called the inertia hypothesis, stipulates that the transfer of surplus value is necessitated by the nature of capital formation and the profit motive which requires capitalist enterprises to keep
expanding and increasing marginal and average profits. Moran, for instance, explains foreign investment expansion by U.S. firms in terms of "institutional necessity" as opposed to "profitable convenience".\textsuperscript{19} Present day marxist analysts seem to adhere to the latter approach.\textsuperscript{20} This is the view from what could be called the monopolist's side of the equation; the dominance relationship. On the periphery side, the dependency relationship is seen as involving exploitation and unequal exchange. The marginal benefits accrued from exchange go to the monopolist power and therefore the "gap between the two countries continues to grow wider."\textsuperscript{21} Frank\textsuperscript{22} adds that the structures of imperialism, as a result, become rigid in the underdeveloped country which leads to the perpetuation of the dominance-dependence relationship, and the gradual stagnation of the underdeveloped economy. The marxist approach, of course, assumes the paramountcy of the economic relationships from which follow parallel political, cultural, military and other relationships.

Marxist theories of imperialism have been progressive in that they have outlined imperialism as a process in some concrete tangible form. This has allowed for more sophisticated criticism and development of imperialist theory per se.

Cohen, for instance, renounces marxist determinism by purporting to show that the third world countries actually benefit from the exchange relationship (although perhaps not as much as the monopolist power), and that the monopolist powers are not as dependent upon third world markets as the marxists would have us believe. Thus, he derives an amorphous political "theory" (actually a definition) of imperialism, where imperialism is defined as "any relationship of effective domination or control, political or economic, direct or indirect, as one nation over another."\textsuperscript{23} To give credit where credit is due, he does emphasize the ancillary concept of exploitation (measured in terms of opportunity costs of exchange) as a necessary ingredi-
ent of a definition of imperialism, but he does not go far enough towards incor-
porating the concept into a formalized theoretical structure. Imperialist
ations are said to be motivated by the need for prestige and power; the
relationship between business and state, so essential to marxist theory, is
in fact non-existent in the form claimed by marxists, but imperialism remains
nevertheless. While Cohen's criticism of the extension of Lenin's theory by
contemporary writers is good, he does little to advance the state of theory
beyond his conservative predecessors.

It is not the intention to belie any of the proposed "explanations" to
date, but rather to proceed to extract a workable definition of what imperial-
ism is. It is perplexing to the reader sifting through the literature that
he never comes across an attempt to make the concept more explicit, and there-
fore comes away from the discussion none the better than he started, wondering
if the discussants actually knew what they were talking about. It appears
that some scholars assume some knowledge by the reader of what imperialism is
before they begin and therefore start the discussion somewhere "in the middle".
This assumes of course that all readers have the same conception of what impe-
rialism is, which is most assuredly not the case. The subsequent discussion
by the scholar, therefore, serves to add more confusion to the debate by
adding yet another approach to the study of the concept.
III. CONCEPTUAL CLARIFICATION AND DEFINITIONS - INTERPARADIGMATIC CONVERGENCE

The examination of imperialism in a formalized manner invites two distinct, but related, paradigmatic controversies. The first controversy develops from the pejorative, normative conceptions of the implications of the imperialist relationship. The majority of North American scholars, in absorbing the brunt of the radical European and third world denunciation of the perpetration of the imperialist relationship, exude a diffident attitude towards the subject. This has led to the exclusion of imperialism, in the North American literature, as a possible explanation of the consequences of stratification in the international system and a potential source of conflict. The second controversy involves modes of analysis. Behaviourists, in attempting to construct generalized explanations of human behaviour, are reluctant to follow in the path of, and to a certain extent, have been led astray by marxist writers on imperialism who confine their explanations of behaviour to a particular historical era. This is to say that behaviourists refute the historical argument that behaviour in different time periods is non-comparable because systemic structures change over time which thus affects human behaviour. This discussion is developed in the following pages.

Charles McClelland, in a now slightly dated article, described the evolution of (behavioural) theory in the field of international relations: a field in its infancy. He described a discipline in its early stages characterized by entropy. Scholars displayed a propensity to borrow approaches and methods from other, more developed social sciences in an effort to further theory, with little regard for applicability or for the theoretical implications that would be lost in the translation. As the movement evolved, it
stopped to reflect on its early development. As it stands now, it is beginning to move ahead again much more cautiously and with respect for the implications of borrowing. However, empirical, scientific, behavioural theory in general, and dependency theory in particular, has been hindered in its progress by a reluctance and ambivalence on the part of scholars to synthesize scientific and historical modes of analysis.

While empiricists do profess to be historical by virtue of longitudinal data analysis, most of their work is in fact "snapshot-type" work which examines only a small period in time. From this, they attempt to construct predictive theory. Little attention is given to prior historical analyses which may have important insights into the results they obtain. All too often the excuse of the poor nature of historical data, which portends of a fetish for data gathering, stands in the way of rigorous historical reasoning. Thus, the problem about which George Modelski lamented many years ago, has not been rectified:

... earlier models of political society which, without fully analyzing the agrarian and industrial international system as such, identified some of the international implications of differing modes of economic and social organization. They seem to have been passed over by later students of international relations, most of whom were aware of and paid attention to at least some of the consequences of the industrial revolution for world politics, but have not treated the subject systematically or at length.23

Imperialism as an historical concept, has not been treated adequately, if at all, in the behavioural literature. Knorr contends that "One reason for this striking difference vis-à-vis Europeans lies no doubt in the traditional reluctance of Anglo-American social scientists to generalize about the causation of historical events and, without such generalization, no theory of imperialism is possible."26 The discussion thus far should not be interpreted as a harangue on the merits of behavioural research as a behavioural
investigation of imperialism is possible in principle. The criticism levelled here against behaviourally-oriented dependency theory pertains to the recalcitrance on the part of such scholars toward using a vast body of literature available to them that has been accumulated over many years. One speculative explanation that could be put forward for this repugnance, largely on the part of American scholars, is that "[w]ith the emergence of the world socialist sector, an ideological dimension has been added in which socialist versus capitalist rivalry has transcended intra-capitalist rivalry." For the most part, popular imperialist theory, beginning with Hilferding, Kautsky and Lenin, has been couched in marxist terms. In an effort to purge their analyses of ideological bias, empiricists also appear to have forsaken the more palatable methodological (i.e. historical) aspects of the marxist approach. This, I believe, has been a mistake.

It would be incorrect, however, to single out empiricists for criticism in a discussion of the state of imperialist theory. Marxist and liberal historians alike display a reluctance to put their arguments in formal terms. Marcuse, for instance, argues in the negativist philosophical tradition, against the operationalization of universal concepts, of which imperialism is one. This aversion to operationalization stems from a confusion of the substantive aspects of the imperialist relationship at different points in time with the broader relational concepts associated with imperialism. Empiricists would argue (rightly, I think) that imperialism, as a relational social concept, transcends historical epochs, in spite of the marxist dictum that imperialism is a particular phase in historical evolution. The latter statement should not be taken to imply (in light of the previous discussion) that a definition of imperialism can be extracted without historical referents. These are necess-
ary in order to operationalize a nominal definition of imperialism in terms of present-day indicators.  

In summary, this study makes the behavioural assumption that forms of behavioural relationships are trans-epochal. At the same time, contemporary imperialism and its forms must be examined empirically from the point of view of contemporary historical referents and manifestations.

As a social concept, imperialism precedes the nation-state although that is our primary interest here. Though the manifestation or mechanism of imperialism may change depending on the historical circumstance, the social relationships encapsulated in the idea of imperialism do not. Thus, while the marxists may be right (but are probably only partly right) in identifying components of imperialism in conjunction with the mechanisms of capitalism, they are clearly wrong in submitting that imperialism is the highest stage of capitalism. "We must now ask ourselves whether there is something in the notion of "empire" that is independent of the conceptualization undertaken, at different times and for different purposes".

We should now be able to lay the foundations of a preliminary investigation into the nature of imperialism at a level of abstraction removed from the particular circumstances of the present historical period. This requires a definition of imperialism. However, in most cases, as pointed out earlier, there is a noticeable absence of explicitness in the literature when it comes to definitions. Tom Travis outlines six difficulties which are evident in the present literature:

1) Conceptual ambiguity - the literature abounds with various definitions of imperialism. While most definitions include the notion of dominance, there is disagreement over the precise meaning of this term. Also, there are differences about whether dominance (or dependence) is a sufficient condition or whether it must be associated with the concepts of inequality and/or exploitation for imperialism to exist.
2) Conceptual parochiality — most studies seem to restrict their definition of imperialism to a particular dimension, either economic or political.

3) Lack of explicit, operational measures.

4) Data access — where attempts are made to measure imperialistic behaviour, the data base is often meager.

5) Lack of comparative focus — most studies focus on the imperialism of a single country, usually the United States, rather than several countries.

6) Ideological bias — the study of imperialism seems to be accompanied by more ideological fervor than work in most other areas of international relations.

This study will address itself to these inadequacies.

Imperialism is a dominance relationship, but this is not a sufficient definition, as many earlier writers on imperialism had believed, because there are many types of dominance relationships which are not imperialistic. Marshall Singer draws the analogy to the parent-child relationship. The child is dependent on the parent because he must be, but this does not imply that the parent is exploiting the child. At this point, then, we must part company with writers such as Cohen who define imperialism as any type of dominance relationship.

A second component of imperialism is that the two parties are unequal in some way. Dependence and inequality, however, are still not sufficient conditions for imperialism to exist as they still describe many types of dominance relationships. The crux of the definition lies in the interaction process between the dominant entity and the dependent entity. If the relationship is exploitive, then we may say that we have necessary and sufficient conditions for imperialism to exist. Travis, in citing Caporaso, sums up the three components of the definition in the following manner; "[i]nequality
refers to the uneven distribution of an attribute; dependence to a relational inequality of asymmetrical control of one country by another and exploitation to the unfair distribution or transfer of values." This definition is adopted for purposes of the ensuing enquiry.

One contentious aspect of the definition is what we mean by "unfair". Cohen, Travis and Caporaso maintain that "unfair" is a normative term. Cohen states that "here can be no agreement on the empirical question of whether exploitation even exists unless there is prior agreement or consensus on the conceptual question of the relevant normative beliefs." Travis goes so far as to suggest that the inequality component be dropped from the definition, assuming that inequality and unfairness of exchange are not conceptually related.

A relationship may manifest both attribute equality and exploitation. For example, two people may have an equal amount of food and clothing, but judge this distribution to be unfair, given their different physical or psychological needs. Similarly, goods may be distributed unequally and given unequal personal needs, be judged fair (and non-exploitative). To this writer, it is the unfair allocation of goods and not their attribute inequality that is essential to imperialism, even though, as mentioned above, the two usually (but not always) coexist. It seems preferable, therefore, to exclude attribute inequality from a conceptual definition of imperialism.

In fact, however, as the ensuing discussion will attempt to point out, inequality, control, and asymmetry are the very essence of imperialism. Travis here distinguishes between inequality of control in the asymmetrical relationship and attribute inequality, while this writer does not (since one of the attribute inequalities is the inequality of control).

Another point to be made about imperialism is that, formally, it is multidimensional. This is an attempt to be theoretically trans-paradigmatic. We diverge from the marxist view and do not make a commitment to economic
determinism; but neither do we make a full swing of the pendulum backwards and make a commitment to political or psychological determinism as some scholars have done in the past. Imperialism can occur in anyone of several dimensions. Galtung's typology of economic, political, military, communication, and cultural imperialism appears to be more arbitrary than exhaustive, but the point is that imperialism is not unidimensional. Where the confusion may arise is that when one nation is ranked low on one attribute dimension, it is usually ranked low on the others and vice-versa. Marxists interpret the causal flow as running from the economic dimension to the others. No such commitment is made here and it may be some time before our analytic techniques are refined to the degree that we can examine this hypothesis.
IV. STRUCTURALISM AND IMPERIALISM

It would be helpful at this point to draw from sociological theory in order to put imperialism into a formal analytical conceptual framework. To the chagrin of many analysts of imperialism, we have no common grounds for the examination of the phenomenon. Travis, as noted previously, scolds contemporary scholars for their "conceptual parochiality" and "lack of comparative focus". Johan Galtung provides a formal theoretical framework that appears to satisfy others' analytical deficiencies. There are some important differences, to be sure. For example, Galtung's theory is a structural "theory", or to be more precise, a set of hypotheses about the structure of social relationships between and/or among entities in a (stratified) social system. Thus he denies the contention of many of his predecessors (Aron, Arendt et al.) that imperialism is psychological in nature. It also makes imperialism operational empirically, through the concepts of inequality of exchange, dependence and perhaps exploitation, since we are only interested in the consequences of the structural relationship rather than the motivations behind it. It is the structural attributes of entities in a social system that are the "causes" of imperialism. Although motivations, which are individualistic and psychological in nature, can be considered causes of imperialism, it is not always true that the motivation to exploit results in an exploitive relationship; nor is it necessarily true that the imperialist relationship is a result of the motivation to exploit. On this point Galtung is in agreement with the marxist line of reasoning, although he disagrees that it is necessarily only the capitalist system that
constitutes the structural attribute of the imperialist nations that causes imperialism.

To Galtung, imperialism is a dominance relation which imposes a structure on the system of collectivities such that there is inequality in living conditions between the dominant and subordinate constituent parts of the system. He makes a major contribution to the literature when he distinguishes between the constituent parts of the dominant (center) nation and subordinate (periphery) nation. Previous writers had conceived of the imperialist relationship as a relationship between two monolithic entities. To Galtung, imperialism is a system in which there is a harmony of interest (no exploitation) between the center in the center nation and the center in the periphery nation. There is more disharmony of interest (exploitation) within the periphery nation than within the center nation.

Galtung defines true interests as opposed to false consciousness of parties in terms of "living conditions." In terms of our definition, differences in living conditions appear to be a manifestation of unequal exchange, although it is unclear from Galtung which way the causal arrow flows. To paraphrase Galtung, exchange is said to be fair and equal between the center in the Center and the center in the Periphery, while it is unequal and unfair between the center in the Center and the periphery in the Periphery and the center in the Periphery and the periphery in the Periphery. Exchange is more equal and fair between the center in the Center and the periphery in the Center than it is between the center in the Periphery and the periphery in the Periphery. The structure is such that:

In the Periphery nation . . . the center is more enriched than the periphery . . . however, for part of this enrichment, the center in the Periphery only serves as a transmission belt for value forwarded to the Center nation. This value enters the Center in the center, with some of it drizzling down to the periphery in the Center. Importantly, there is less disharmony of interest in the Center than in the Periphery, so that the total arrangement is largely in the interest of the periphery in the Center.
Dynamically speaking, these relations are said to define the mechanisms of imperialism, or, the principles of the vertical interaction relation and the feudal interaction structure. Galtung states that:

If the first mechanism, the vertical interaction relation, is the major factor behind inequality, then the second mechanism, the feudal interaction structure is the factor that maintains this inequality by protecting it.

The vertical interaction relation refers to an interaction relationship between Center and Periphery actors that is hierarchical. While Galtung is not clear on what determines the hierarchy, we shall make the case at a later point that from this earlier work, he means that the vertical relation is a control relation where the Center actor dictates the terms of interaction with the peripheral across on the basis of differential power and status.

Four rules define the feudal interaction structure:

1. interaction between center and periphery is vertical
2. interaction between periphery and periphery is missing
3. multilateral interaction involving all three is missing
4. interaction with the outside works is monopolized by the center, with two implications:
   (a) Periphery interaction with other Center nations is missing (the sphere of influence notion).
   (b) Center as well as Periphery interaction with Periphery nations is missing.

The effect of this structure on interaction, as Galtung notes, is political in that it protects the Center against the periphery along the lines of "divide and rule."

In examining these relationships between parties, it would be essential to take into account both inter- and intra-actor effects as each is a necessary but not sufficient condition in demonstrating the existence of the concept of imperialist relations. It is the essence of imperialism that the interaction is asymmetric (in terms of rewards) in favour of the center in the Center and the center in the Periphery.

This theory of interaction between states appears to be intuitively satisfying as an ideal type, but a face validation of the theory in empirical reference to interaction in the system reveals that the structure of system as outlined in the theory is not always apparent. For instance, it is
not difficult to find peripheral interaction in the system, which would appear to invalidate the theory in a strict sense (e.g. OPEC, OAU, etc.). This suggests that in adhering to the structure outlined in the theory, we look merely for tendencies in the designated structure rather than adhering to the theory rigidly. Indeed Galtung is aware of this point when he states that:

Imperialism is a question of degree and if it is perfect it is a perfect instrument of structural violence. When it is less than perfect, something must be substituted for what is lost in structural violence: direct violence, or at least the threat of direct violence. This is where the military type of imperialism becomes so important, since it can be seen as a potential to be activated when the other types of imperialism, particularly the economic and political types, show important cracks in the structure.
V. STATUS AND POWER

Contemporary writers on the concept of imperialism appear negligent once again in providing definitions of what they mean by dominant (Center) and subordinate (Periphery) nations. They assume implicitly that their discussion will bear out the obvious differences between the two sets of countries. To marxists it is clear what denotes the differences - economic assets and capabilities. One who does not follow the marxist line completely, wonders how he can analytically distinguish the dominant nations and the subordinate nations along other dimensions. A clearer conception of this analytical distinction can be gleaned from the literature although it is not always made explicit. Such writers as Thornton, Morris, Wallerstein, Holsti, and Ferry have implicitly referred to status and power as differentiating factors between Center and Periphery states. We now proceed to a discussion of power, status, and the relationship between them.

Imperialism, as noted above, is a dominance relationship. As such, power is perhaps the central concept associated with the concept of imperialism. It is, however, an elusive concept to deal with empirically. The belief held by many eminent political scholars that the essence of politics is debate over the effective distribution of means, or, the capacity to achieve ends (i.e. power), has spawned a diverse literature attempting to elucidate the concept of power. Much of the discussion has taken place within the realm of the elitist-pluralist controversy which deals with the locus of decision-making capability and authority in (stratified or plural) social systems. The elitist-pluralist debate assumes purposive behaviour. The difficulty lies in determining the objects of pursuit (i.e. salient goals) and the delineation of the relevant social groups in competition to achieve those goals. This
boundary problem has traditionally been an important one to power theorists. Parsons notes that; "no collectivity, even the nation, . . . stands alone as a total society since it is integrated with norms and values." The point is that to contemporary power theorists outside the field of international relations, the discussion of power must be contextual and circumstantial.

Wagner maintains that

... "Sam has power" is an incomplete sentence. Just as the statement "Sam can" ought to evoke the reply, "Sam can do what?"; so the statement "Sam has power" ought to be followed by the query, "the power to do what?" The answer to the latter part of the complete question, "the power to do what?", is dictated by the contextual aspects of the situation to which the analyst is referring. Thus to Wagner, a theory with power as its focus must be "a theory of interdependent decisions in conflict situations." The advantage of looking at particular situations and the groups relevant to those situations is that it avoids the problem of the ambiguity of the notion of power as a universal concept and confines the definition of power to the attributes of the groups in a particular situation. This disadvantage of a contextual definition of power, however, is that it ignores secular trends in the expression of power by particular groups in any given social system (i.e. it is ahistorical). As Marcuse illustrates in his criticism of the positivist mode of thought, universal concepts (which power, and even imperialism are) can refer unambiguously to nothing and yet mean much. This is a problem that we encounter in the present discussion of imperialism which is clearly an historical concept.

When we speak of imperialism, we are, as has already been noted, speaking of a power (dominance-dependence; superordinate-subordinate) relationship between and/or among groups of nations (or territories prior to World War II)
over an extended period of time. Unlike the pluralist-elitist decision-making theorists, at our general level of analysis ("third-image level" in contemporary international relations parlance), we cannot be bound by the contextual attributes of groups in any given decision-making situation. Power, as a concept, must be broadly defined and interpreted so as to include those general aspects of the imperialist relationship among states over time.

Given this rather elaborate prelude, we can now present a definition of power which seemingly reflects the intent of the prefatory discussion.

Power then is generalized capacity to secure the performance of binding obligations by units in a system of collective organization when the obligations are legitimized with reference to their bearing on collective goals and where in case of recalcitrance there is a presumption of enforcement by negative situational sanctions - whatever the actual agency of that enforcement.67

This widely accepted generalized definition of power, however, was intended to refer only to institutionalized social systems.

But for power to function as a generalized medium in a complex system, i.e. to mobilize resources effectively for collective action, it must be "legitimized" which in the present context means that in certain respects compliance which is the common factor among our media is not binding, to say nothing, but is optional.

This, however, is only possible effectively within the range of a sufficiently stable, institutionalized normative order so that the requisite degrees of freedom are protected.68

Parsons concludes, on the basis of the evidence of the incidence of war, that power, defined as the mobilization of resources effectively for collective action, is non-existent in the international system; war is counterproductive to effective collective action and is evidence of the failure of power to work.69 This conception of the international system is consistent with the likes of Hobbes, Machiavelli and Morgenthau, who see the system as an anarchic one in a perpetual state of nature (or war). The alternative,
in the tradition of Grotius and the positive jurists, is the conception of
the international system as an anarchic, but orderly, self-enforcing homeo-
static system. Imperialist theory is a part of the latter tradition as will
be shown in more detail in the ensuing discussion. This involves drawing a
connection between the concepts of status and power.

Parsons, in fact, recognizes the connection between the status and power
but does not see fit to apply his analysis at the level of the international
system:

The most serious ambiguity here seems to derive from the assump­
tion that authority and its attendant power may be understood as
implying opposition to the wishes of "lower-order" echelons which
hence includes the prerogative of coercing or compelling com­
pliance. Though this is implicit, it may be that the higher-order
authority and power may imply the prerogative is primarily signi­
ficant as "defining the situation" for the performance of the
lower-order echelons. The higher "authority" may then make a
decision which defines terms within which other units in the
collectivity will be expected to act, and this expectation is
treated as binding.70

It is Galtung's impression that power is relative to status in a strati­
fied social system. To Galtung, an entity's status is defined by its
rankings on certain salient attribute dimensions.72 Rankings tend to be
rank concordant, "a nation that ranks high on one dimension also has a tend­
ency to rank high on others and vice-versa.73 Its power then will be relative
to its total configuration across all attribute dimensions salient to status
in the system. In a particular circumstance, one country may be able to
influence another that might normally be considered more powerful than it.
But in terms of total status configuration, it may be said that the latter
countries have more total power. Since we are taking a "third image" view of
the world here, our interest lies primarily in the concept of what we call
"total power" which is a term meant merely to distinguish the systemic concept
of power from the case study or issue area usage of the word.\footnote{74}

The relationship between power and status is still not clear. It may be said that power is related to both achieved and ascribed status in some way. Ascription, in a stratified social system, implies that there are certain attributes which, more than others, are agreed upon by most if not all actors in the system, to be recognized as the parameters of importance in the system. Achievement may be defined as having more of an attribute or a greater ranking on the attribute dimension recognized as important by the collectivity of actors. We have inferred therefore that, in a sense, power is what everyone in the system recognizes it to be.\footnote{75} Furthermore, the attribute dimensions are knowable and operational. The most powerful or Center nations may then be interpreted as those nations having the most status in the system.\footnote{76}

We have been skirting the issue of the difference between power and status. From the previous argument, it may be said that status is the rank of a nation with respect to its attributes whereas power is the exercise of that rank; the concomitant freedom from restraint in acting (foreign policy decision-making) that is associated with one's status (keeping in mind the distinction made between power and influence; see footnote 75). The emphasis in this sense is on ascribed status. If one country is ascribed more status, and therefore, it is recognized or perceived to have more power, then that country will have more opportunity to exercise that status legitimately, or without external opposition and with compliance. Achieved status becomes more functional than ascribed status when power is used to "prevent influence being exercised over oneself."\footnote{77}

Imperialism, conceptually points a relationship between achieved and ascribed status. The more capability or achieved status a state has on
those dimensions of capability deemed to be desirable by the majority of actors in the system, the more status will be ascribed to that state. Hypothetically, there will be an impetus to enter into exchange relationships with that state, or in other words, nations high on dimensions of achieved status, will tend to interact (an indicator of ascribed status) more than nations of lower status both diplomatically (politically) and organizationally. It will be the purpose of this paper to examine this hypothesis empirically.
VI. HYPOTHESES

As this study is only an attempt at a preliminary empirical enquiry, we will only attempt at this time to test one important part of Galtung's rendition of the theory of imperialism, that is, in terms of inter-actor effects only, to demonstrate the existence of a vertical interaction relation and possibly go so far as to show that a feudal interaction structure exists. While it may be asserted (even by Galtung himself) that the existence of a Center-Periphery vertical interaction relation does not imply the existence of imperialism unless it can also be shown that the same relation applies equally to the intra-actor relations and effects, we nevertheless maintain that the vertical interaction relation is an integral component of imperialism, which, if it can be shown to exist empirically inter-nationally, may be a starting point for future research and testing, intra-nationally. If it can be shown alternatively, that the vertical interaction relation does not exist, then it may be inferred that future research on imperialism may be misleading. Indeed, Galtung admits that "the theory developed above is too complex in its empirical implications to be tested in its entirety," so it would appear that garnering support for the assumptions of imperialism, as made explicit through sociological theory by Galtung, would be a likely point of departure towards corroboration of the theory. In addition, few empirical attempts have been made to verify the theory, or at least parts of it, so it would appear that empirical investigation of the assumptions is called for before we may use the theory to explain substantive issues in the system. In this sense, the majority of contemporary scholars have put the cart before the horse in examining the substantive issues. This attempt is not viewed as an alternative to those studies already undertaken, but as a complement to them in the
hopes that it provides further support for them. Two primary hypotheses can now be gleaned from the previous discussion:

Hypothesis (a) - The more power and status a state has, the more interaction it will have in the system (both horizontally and vertically).

Hypothesis (b) - The less power and status a state has, the more interaction it will have with one particular center nation, and the less interaction it will have with nations of approximately equal or higher ranking.

To be perfectly clear, we must reiterate that the study does not represent an exhaustive investigation into the nature of imperialism, but will only attempt to test for the existence of a vertical interaction relation, an integral part of the theory of imperialism.

A logical addition to hypothesis (a) might be that the less power a state has, the less interaction it will have in the system. Also, if hypothesis (a) is true, we may expect to find that nations will tend to have more interaction with other nations of higher status than with nations of equal or lower status within the imperial domain defined by hypothesis (b).

These assertions are consistent with Galtung's dictum that interaction has a tendency to be rank-dependent. This involves the "third-image" level assumption that, to a great extent, a state's behaviour is determined by its rank among the hierarchy of states in the system. Therefore, while we may expect a particular state's rank to fluctuate over time, system structure and interaction patterns should not change. Interaction follows attribute rankings. Galtung notes that there will be much interaction between nations of high status, less between one of high status and another of low status, and even less between two nations of low status.

In terms of operationalization, then, we must demonstrate the
existence of clusters of states interacting within the system such that there is a Center nation with a nebula of Peripheral nations around it where the Center nation acts as a terminal for Peripheral interaction in the system. Galtung portrays the ideal type in the following manner:

![Diagram](image)

A Feudal Center-Periphery Structure
(Galtung, 1971, p. 89)

It becomes a feudal interaction structure when peripheral interaction to other centers is mediated through its "own" Center and no Periphery-Periphery interaction exists.
VII. OPERATIONALIZATION - THE INDEPENDENT VARIABLES

We have established that, formally, imperialism is an exploitative, asymmetrical exchange relationship between Center and Periphery nations (with its concomitant intra-national effects). The currency of this exchange relationship is power as manifested through a state's status or rank in the system relative to other states on certain attribute dimensions. The relationship is economic in the liberal sense that the dominant power is attempting to maximize its benefit from the relationship and is usually able to do so, whereas the weaker state increases its dependency as a result.82 We have expressed these systemic relationships in hypothetical terms for purposes of testing, in order to determine the existence of vertical interaction, an integral part of the theory under examination here. The problem now arises as to how to translate the nominal hypotheses into measurable entities.

The purpose of the operational exercise should be to arrive at empirical indicators that adequately reflect the status dimensions salient to imperialism.

The temporal domain of the study will include the period 1950 to 1960. The reason for beginning in 1950 although data was available for earlier periods, was to test the hypothesis that imperialism is still present in the so-called "neo-colonial" period when the exploitative relationship is said to be perpetrated on newly independent states rather than on non-sovereign entities as was hypothesized prior to World War II.83 The reason for terminating the study in 1960, the availability of data, is admittedly rather pragmatic. Needless to say, future investigations should attempt to extend the temporal domain up to the present. The purpose of introducing the temporal domain at this point is to contrast it with the rationale behind the empiri-
cal indicators chosen. We have already pointed out on a couple of occasions that imperialism is conceived here as being a structural relationship that transcends historical epochs. It has also been noted that a test of imperialism, being a power relationship based on status, must include empirical indicators of status that are relevant to the particular historical era under investigation. We run the risk of contradiction, however, when we draw empirical indicators that are relevant to periods prior to World War II if we implicitly hypothesize that the period subsequent to World War II is substantially different from the antecedent periods. Avoiding a possible contradiction in choosing a set of indicators becomes a matter of historical ontology. It is possible that the period subsequent to World War II is substantially different to the period prior to the war in an evolutionary sort of way, but still part of an overall historical era in which status values are common.

The transition from one system to the other agraria to industry is not merely a process in which more and more states became industrial, as it were of their own volition; it is a change that is mediated through and powerfully reinforced by the international system, which itself changes in the process.

It has been hypothesized that the contemporary state system has its roots in the industrial revolution, beginning in the sixteenth century. Our indicators can be drawn from those status values attendant to industrialism, of which the nation-state system itself was a byproduct.

... after one member of the agrarian system had demonstrated the feasibility and also the profitability of such change in terms of new power and prestige, the competitive functioning of the international system ensured that other states would make every effort to attain similar capability in order to avoid a decline in status. Industrial values began to percolate into international culture, and culture in its turn, affected behavior in yet unindustrialized states. In time industrial power or affiliation with it became a sine qua non of national survival - that is, of membership in the international system.
A parsimonious solution to the problem of multiple indicators of power was attempted. Wallace discusses the disadvantages of unidimensional power indices. One composite index designed to tap all relevant power dimensions suffers from the inability to assign weights to each of the components of the index. On the other hand, a unidimensional index based on one indicator is likely to be exclusive of many important dimensions of power. Inclusion of multiple indicators by disaggregation is likely to confuse the results because of linear dependence of the indicators on each other. An effort was made therefore, to choose a profile of simple indicators that would reflect the industrial, commercial, and military dimensions of imperialism. These indicators will then be combined using multiple statistical techniques, to test their individual and multiple effects on the dependent interaction variables. Energy consumption was chosen as a measure of industrial capacity and economic development. Wallace justifiably rules out such indicators as gross national product on the basis of the availability of data, but also rules out energy consumption because it "tells us little about the capability of preindustrial economies." The post-World War II temporal domain, however, warrants inclusion of this index. The relative distribution of energy consumption throughout the world during this time period appears to tap the very type of relationship we are seeking to examine, that is the capacity of the developed states to impose upon the lesser developed ones.

Energy consumption is concentrated among a few nations during the entire time frame. At all times, a small number of nations, numbering fewer than a dozen and usually located in Europe and North America, consume over 80 percent of the commercial energy. Over the 100 year period 1870-1970, the gap between these "energy rich" countries and the remainder of the world increases, resulting in a highly and increasingly stratified system. The wide gap also illustrates the almost overwhelming problem of
development for poorer nations. An expansion rate of five percent in African consumption per capita over the next 40 years will bring Africa to the energy consumption per capita level of North America in 1925.

In the above quotation, Thompson appears to impute subjugation from differences in energy consumption (stratification and the problem of development). The present study attempts to use the index of energy consumption only as a gross indicator of status differences. Instances of exploitation can only be properly investigated using dyadic analysis which is beyond the scope and intent of the present enquiry.

The index is a composite measure including the sum of commercial energy consumed annually from all sources - coal, natural gas and hydro, and petroleum.

A second index, steel production (measured in coal ton equivalents) was used as a measure of infrastructure development. Several marxist writers have hypothesized a relationship between the capacity to produce iron and steel, and imperialism. First, iron and steel production enables a country to penetrate other less developed countries and develop their infrastructure by laying down railroads, telegraph lines and port facilities. This is seen as exploitive because it is not done without expected remunerative returns. Secondly, developed countries in an effort to maintain their own infrastructure development, are seen to exploit less developed countries for their sources of raw materials necessary to the production of iron and steel. Other less doctrinaire writers have also seen a connection between iron and steel production and power. Lichtheim, for example attributes the decline in power of such countries as Britain and France to the decline in iron and steel production which is seen as a stimulus to industrial development.
of two measures of industrial capacity (steel production and energy consumption) is warranted because it is felt that they measure two slightly different things. Energy consumption is a measure of relative differences in development of states, while steel production measures the capacity to continue to develop (and in terms of imperialist theory, at the expense of the lesser developed countries).

One problem with the steel index is that it may be an insensitive indicator at lower ends of the scale (i.e. those countries who produce little or no steel). While these countries are important theoretically with regard to imperialist theory, statistical analyses may fail to distinguish among them and they may tend to depress the magnitude of the results. Another problem may be that although we distinguish conceptually between energy consumption and steel production, the two indices will probably tend to be colinear mathematically, which may also tend to depress the magnitude of the estimated parameters. This can be determined by bivariate correlations between the indices. It was felt however, that the two indices were significantly different conceptually to warrant inclusion of both. Interpretation of results must therefore be necessarily cautious, bearing in mind the limitations of the data and the statistical methods.

A third measure, volume of trade (standardized as a percentage of total trade in the system) was chosen, not so much as a measure of industrial power or commercial capacity, but as a measure of wealth and organizational sophistication of a country. Wallerstein remarks that the capacity to trade efficiently and the endowment with products in high demand led to the evolution of England and France as the mentors of the modern state system. It "ensconced and codified a new European division of labor", and led to a
"specialization in the new skills required to run a financial and commercial focus of the world economy." It has been hypothesized in the literature on contemporary international relations, that the division of labour induced by trade relationships has been extended on a world scale; "trade perpetuates the artificial international division of labour between developing countries and metropolitan centers, a division established by imperial power and maintained by lop-sided trade." Cohen adds that the problem of the underdeveloped countries "may be the historical head start of the metropolitan center, which prevents them from breaking easily into established market patterns or denies them access to most modern advances in technology."

Trade patterns are therefore seen not only as a hindrance to economic development, but are also seen in historical perspective, as a hindrance to overall upward status mobility. The adoption of trade volume as a particularly good indicator of status differences is supported by Alschuler who sees trade as being representative of interaction structures which maintain and establish inequalities between nations.

A fourth and final indicator of achieved status was chosen to represent the military aspect of imperialism. Winslow, for example, states that "we shall use the terms "imperialism" and "militarism" repeatedly, and it may as well be said first as last that they are coeval terms, representing the same general pattern of thought and behavior in the ordering of human relationships." Winslow perhaps overstates the case and Galtung is more accurate in identifying militarism as a type of imperialism that is invoked only when other more subtle structural relations of deference and compliance, based on status and power, fail to function perfectly.

The indicator chosen was military personnel. Some may argue, rightly,
that the number of personnel does not adequately reflect the capacity for that army to mobilize. As Wallace notes, this index would tend "to inflate the military strength of large, poor nations with sizeable but ineffective armies," and would tend to deflate the strength of armies that are highly advanced technologically and have less need for manpower. While it is true that another indicator such as military expenditures might have been included as a counter-balancer to the deficiencies of the military personnel index, problems of availability and reliability mitigated against its inclusion. Local currencies standardized in terms of American dollars, for example, do not reflect the buying power of those currencies in different markets. Military expenditures, therefore, may be no more of an adequate reflection of strength than personnel.

These then, are our measures of achieved status in the system. We assume that they adequately reflect the industrial capacity, infrastructure development, wealth and organization, and military strength of a nation. We hypothesize that the greater a nation's total configuration on these indices, the more status that nation will be ascribed, or in other words, the more capable that nation will be, of getting nations below it on the status hierarchy to defer to its policies. To reiterate, our analysis will only attempt to reflect inequality in the system. Any inferences concerning dependency and exploitation on a dyadic basis or in a general systemic manner, must necessarily be speculative, even if intuitively satisfying, pending further enquiry.

We now proceed to a discussion of the dependent interaction variables.

Dependent Variables

Diplomatic recognition has often been adduced to be the epitome of status ascription and influence in the international system. Marshall Singer asserts
that "the most normal channel of influence, of course, has always been the regular diplomatic channel . . . The advisor is there precisely to exercise influence . . . Very often Powers are perceived in weaker countries as nearly omnipotent." 100 Cohen adds that, ". . . given the existence of international inequality and the interactions of specific groups and organizations, imperial control may be imposed directly, through extension of formal political sovereignty; or it may be accomplished indirectly, through informal diplomatic or military pressures . . ." 101 The first indicator of ascription then, is diplomatic recognition. As Singer and Small note, this indicator is appropriate because it (1) reflects a wide range of considerations that are germane to each nation's foreign policy; (2) it finds expression in a single behavioural event or decision; and (3) it is a decision that leaves a "trace" that is reliably and unambiguously observable and quantifiable. For purposes of testing the first hypothesis, the score for this variable was based on the number of missions received by each state.

Another variable, international governmental organization member, was included as an interaction variable that reflects ascribed status outside of the formal state apparatus. The more power capability or achieved status a state has, the more likely it is that it will enter into international organizations; the more it will be perceived as being important enough to be included. Claude, for example, states that "the achievements of international organization include notable gains in the field of noncoercive regulatory devices. The agencies of the United Nations system exercise substantial influence and control - in short, power - over the behaviour of states . . ." 103

Of course membership in an international organization says nothing about the way a state behaves in that organization. Inclusion of this index implies
some (tentative) assumptions about the decision-making process in the organizational context. Specifically it implies that the most powerful states will be delegated the authority to set the norms of behaviour within the organization, and to construct the organization in the first place. Organski is in agreement when he states that

The contention that the major international organizations serve primarily as instruments of legitimation is reinforced by the timing of their appearance at the end of the Napoleonic Wars and after World Wars I and II. Each of these periods saw the rise of a new dominant nation and significant changes in the dominant international order. Each was a time when new attitudes and new patterns of behavior were being established in international relations and when the need for legitimation was therefore most acute, a time when the new dominant nation was seeking ways to gain legitimacy for its own privileges and power and for the power structure it had come to head.104

Summarily, in operational terms we have hypothesized that the more achieved status a state has in terms of industrial capacity, infrastructure development and capacity to develop, wealth and organization, and military capacity, the more status will be ascribed to it; the more it will be called upon to interact in diplomatic and organization terms. We cannot, to reiterate, take this analysis further here, as the imperialist theorists do, and speculate that ascribed status is used to defer domestic and foreign policies of other less powerful states.
VIII. ANALYTICAL TECHNIQUES AND RESULTS

(a) Hypothesis I

The more power and status a state has, the more interaction it will have in the system (both horizontally and vertically).

We have stated on occasion that, according to our theory, a state's achieved power capability is not indicated by anyone index, but by all indices together. It was thus deemed appropriate to use a multiple variable analytical technique that would test the joint effects of the independent or predictor variables against the dependent variables. Ordinary least-squares multiple regression was chosen for this purpose.

Multiple regression provides that the dependent variable be written algebraically as a function of the predictor variables in the form

\[ Y = a + b_1 x_1 + b_2 x_2 \ldots b_k x_k + u \]

where \( Y \) is the dependent variable, \( a \) is the intercept or constant, where \( b_k \) tells us how much of a change in variable \( K \) is needed to produce a unit change in \( Y \) holding all others constant, and where \( u \) is the error term which tells us how much of the variance in \( Y \) is not explained by the independent variables in the equation.

Multiple regression is most commonly performed in an iterative stepwise fashion. This allows for the independent variable which explains (statistically) the most variance in the dependent variable to be slotted into the equation first. All the others follow in descending order of magnitude in terms of variance explained, until either all the variables are included or a certain threshold level is reached.
A second method of performing multiple regression was also used to act as a check on the deficiencies of the stepwise procedure. Often the amount of variance explained by any one variable in using the stepwise procedure depends upon the point at which it is slotted into the equation. One can get different results depending upon the iterative order of the procedure. It is often possible, using combinatorial regression, to get a fit of the model which is significantly better than that achieved by the stepwise procedure. This is done by regressing all combinations of the independent variables against the dependent variables. It is possible to obtain better results by excluding those independent variables which add little to the magnitude of the $R^2$ of the equation but are still within the significant threshold level to warrant inclusion in the stepwise model.

Before proceeding to outline the results achieved by the use of these methods, a couple of qualifications must be appended regarding the reliability of the methods. There is the possibility that our data violate the assumptions of the statistical method in two ways. First, if our independent variables are highly intercorrelated, we encounter a problem known as multicollinearity which violates the assumption of regression that the variables should be linearly independent. If, in the data input matrix, the values on the variables have a tendency to be equal or multiples of each other, the result of the analysis tends to reflect error variance as the distinguishing feature between two explanatory variables. Since our explanatory variables are multiple indicators of one concept, they are, by definition, theoretically related, so multicollinearity is conceivably a problem. This is borne out by examination of Pearson correlation coefficients among the independent variables for each of the three years included in the study. The implications
of high intercorrelation will become clear upon close examination of the regression results.

TABLE 1
PEARSON CORRELATION COEFFICIENTS AMONG THE INDEPENDENT VARIABLES

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<tr>
<th></th>
<th>Steel</th>
<th>Energy</th>
<th>Trade</th>
<th>Military</th>
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<tr>
<td>Steel</td>
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<td>Energy</td>
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<tr>
<td>Trade</td>
<td>.88</td>
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<td>1.00</td>
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<tr>
<td>Military</td>
<td>.51</td>
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<td>.76</td>
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<td>Military</td>
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<td>.55</td>
<td>1.00</td>
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</table>

A second problem that may be encountered when time is a factor in the model, is autocorrelation. This occurs when the error term or residuals, are serially correlated; i.e. variance in the dependent variable can be accounted for by non-zero correlation among the error terms over time. This is usually indicative of a factor being left out of the equation. If this should be the case, the variance of the estimates would be larger than they should be (i.e. our model would appear to fit much better than it should),
and we would obtain an underestimate of the variance of the standard error of the estimates; our chances of Type I error are increased - accepting the model when it should be rejected.106

Steps were taken to minimize the possible effects of autocorrelation in the present analysis. In effect, three different diachronic rather than longitudinal analyses were performed for comparative purposes, to net out time series autocorrelative effects. Since data on the independent variables were collected only at five year intervals (1950, 1955, 1960), they were measured against the independent variables in the same year. It can be questioned as to whether this is a valid approach. There is no intuitive reason however, that would lead us to believe that power in any one year would predict to interaction and ascription only in the future. The achievement of power is a slow process and not liable to fluctuate yearly or even quinquennially. Evidence has shown that rank positions and their concomitant interaction effects tend to be quite stable over relatively short periods of time, such as the temporal domain of this study.107 To be certain however, values on the dependent variable were correlated against prior values on the independent variables to test for the effects of time lags. The results are presented in Table 2.

An examination of the results in Table 2 supports the contention that there are few time series effects on the interaction variables. We can therefore safely say that we should not worry too much about autocorrelation due to the time factor.

The bivariate analysis illuminates some general trends that might be watched for in examining the regression results. Looking at the far right hand column in all cases, trade appears to be the best predictor of interaction.
TABLE 2
EXAMINATION OF POSSIBLE TIME LAG EFFECTS OF THE INDEPENDENT POWER VARIABLES ON THE DEPENDENT INTERACTION VARIABLES

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Secondly, scores on the energy and steel indices appear to be very close. Thirdly, the power indices do not appear to predict well to inter-governmental organization as an indicator of interaction.

The stepwise regression results are presented in Table 3.

Combinatorial regression produced only one different result that was worthy of noting (Table 4). For 1950 with intergovernmental organizations as the dependent variable, an $R^2$ of .77 was achieved by slotting in energy, steel and trade. This compares with the $R^2$ of .63 achieved using the stepwise procedure where only trade and military personnel were slotted into the equation before the tolerance level was achieved. The difference between these two results was, however, insignificant.

Using the steel index severely restricted the extent of valid inference of the model since many nations produced no steel in any given year. The effects of this for the model are such that the results are severely skewed towards one of the axes, since many scores are zero on one index. Although the zeros are valid scores, they cannot be handled well by the statistical technique; the results obtained by including the zeros were felt to portray a distorted picture. The zeros were therefore dropped from the analysis, but this amounted to making inferences on the basis of as few as 34 observations in some cases. Particularly affected by this procedure are the least developed countries which are perhaps the most important to the subject under discussion here, since they are most likely to be those countries most dependent on the countries at the upper end of the power continuum. Increasing the effective N to over sixty-five by including only three power indices, did not, however, significantly alter the results, so the complete results are reported here.
TABLE 3  
STEPWISE REGRESSION RESULTS

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- Intergovernmental Organizations 1950

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Tolerance Level Insufficient for Further Computation.

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- Intergovernmental Organizations 1955

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**Dependent Variable** - Intergovernmental Organizations 1960

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### TABLE 4
**COMBINATORIAL REGRESSION RESULTS - ALL COMBINATIONS OF THREE INDEPENDENT VARIABLES**

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<th>Steel</th>
<th>Trade</th>
<th>R² &lt;br&gt;</th>
<th>β weight</th>
<th>p &gt; .05</th>
</tr>
</thead>
<tbody>
<tr>
<td>R² = .12</td>
<td></td>
<td>2.77</td>
<td>-0.00</td>
<td>-2.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .77</td>
<td></td>
<td>4.89</td>
<td>-6.14</td>
<td>1.73</td>
<td></td>
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</tr>
</tbody>
</table>

Non-convergence
TABLE 4 (Contd.)

<table>
<thead>
<tr>
<th>Intergovernmental Organizations 1955</th>
<th>( R^2 = .14 )</th>
<th>( \beta ) weight</th>
</tr>
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<tbody>
<tr>
<td>Energy</td>
<td>2.19</td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>0.04</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Steel</td>
<td>-1.97</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>( R^2 = .47 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>-0.75</td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>0.03</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Trade</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>( R^2 = .57 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>1.52</td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>-2.52</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>1.23</td>
<td></td>
</tr>
<tr>
<td>( R^2 = .54 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>0.17</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Steel</td>
<td>-1.01</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>1.34</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intergovernmental Organizations 1960</th>
<th>( R^2 = .07 )</th>
<th>( \beta ) weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>0.53</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Military</td>
<td>-0.08</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Steel</td>
<td>-0.25</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>( R^2 = .45 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>-0.72</td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>0.09</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Trade</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>( R^2 = .61 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>0.51</td>
<td>( p &gt; .05 )</td>
</tr>
<tr>
<td>Steel</td>
<td>-1.27</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>( R^2 = .69 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>-1.65</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>1.65</td>
<td></td>
</tr>
</tbody>
</table>
The magnitudes of the stepwise $R^2$ go a long way toward confirming the hypothesis that interaction is highly associated with achieved status or power, but a note of caution should be injected into the discussion. Two of the trends observed from the bivariate associations appear to have been verified by the regression model. Firstly trade appears to explain most of the variance in all but a couple of cases. More specifically, although the power indices appear to have predicted well to interaction as indicated by intergovernmental organization membership, which could not have been predicted from the bivariate correlations, most of the variance is explained by trade. This is all the more noticeable from the combinatorial regression results when trade was not included in the equation. The $R^2$ tended to be very low, indicating that the power indices, exclusive of trade, do not explain well intergovernmental organization membership. While trade was highly correlated with the other indices, it does not appear that the effect was simultaneous with regard to the independent variables. Thus, although the magnitude of the $R^2$ is highly satisfactory, care should be exercised in generalizing too broadly from the results.

Although the best results of the combinatorial regression procedure were not significantly different from the stepwise procedure, the juxtaposition of the two highlights the problem of multicollinearity. Regressions deleting the trade variable have very low multiple $R^2$, whereas those including the trade variable improve the $R^2$ greatly and the other variables' influence appears negligible. Multicollinear effects have particular influence on the $\beta$ weights, the standardized regression coefficients. While the regression coefficients are standardized in terms of the relative distribution of the respective independent and dependent variables and these could range any
number standard deviations, the assumptions of regression modelling include that the distributions of the variables should be normal. If the distributions of both the independent and dependent variable are normal, then the weight would not fluctuate beyond the +1 to -1 range and could be interpreted in a manner similar to the Pearson correlation co-efficient. The fact that most of the significant weights lie outside the +1 to -1 range suggests that the distributions are not normal, but the pattern of fluctuation of the weights (as seen from the combinatorial regression results) also suggests that multicollinearity is having an inflationary effect on them. Specifically, the steel and energy variables tend to balance each other off, while the trade and military relationships remain relatively stable.

One should guard against interpreting a negative weight as indicative of an inverse relationship between the independent and dependent variables, in this case due to the effects of multicollinearity. We don't know how wide the confidence intervals are. It appears that the high negative value on the energy index is usually associated with a high positive value on the steel index.
Moreover, in some cases the sign changes on one value when the value for the other is dropped. Clearly this is caused by the pathological (in this case) effects of collinearity. A more realistic estimation of the values of the coefficients for the steel and energy variables might be achieved by taking the median score between the two values. This would provide a score that is not affected by the collinearity of the two variables and is only inflated by the effects of a non-normal distribution. In any event, the trade variable, which explains most of the variance in the dependent variable, does not appear to be affected greatly by exclusion or inclusion of other variables, although it is highly intercorrelated with the others. Again, the magnitude of its weight values is probably inflated, but only slightly relative to energy and steel.

In summary, although we may be justified in making fine distinctions between the conceptual categories indicated by energy, steel and trade, empirically they are interrelated and non-distinguishable statistically with any accuracy. Instead of having found indicators for industrial achievement, industrial capacity, wealth and organization, it appears that we have merely tapped an economic dimension *per se*. Nevertheless, the magnitude of the $R^2$ attests to the importance of the economic dimension of achieved status and power towards interaction in the system and confirms our hypothesis if only in a limited capacity. The military dimension as indicated by military personnel, does not fare as well by comparison. What appears to be missing from the analysis are indicators of a purely political nature. We shall return to the point later.
(b) Hypothesis II

The less power and status a state has, the more interaction it will have with one particular center nation, and the less interaction it will have with the nations of approximately equal or higher ranking.

The second hypothesis is designed to test for a feudal interaction structure. In order to test for this, we need to delineate configurations of interaction patterns. Smallest Space Analysis (SSA) was chosen for this purpose. SSA is a data reduction technique that does not require the strict assumptions of the input matrix that is required of older techniques such as factor analysis. It is non-metric; it is sensitive only to the rank orderings of the data and not actual values themselves. Therefore it is less susceptible to possible random error in the input data.

... the dimensionality of the output configuration (the number of dimensions or factors) is usually much lower with SSA than with factor analysis; in fact, SSA always produces the minimum possible dimensionality with the constraints of a permissible "fit". A second and somewhat related advantage is the ease with which the SSA output configuration may be represented spatially. Although the input matrix need not fulfill the requirements of a Euclidean space, the output configuration is transformed to do so by applying Guttmann's principle of rank images; the distances between the points in the output configuration will then fulfill all the metric requirements while simultaneously preserving the original rank order among the points to a very close tolerance. Since a good fit to most data can be obtained in very few dimensions, this allows us to represent the underlying relationships in the matrix as real distances in two-or three-dimensional space, greatly facilitating interpretation. The output will in fact constitute a multidimensional map ...109.

Furthermore, the use of SSA circumvents the theoretical-logical metric problem implied by the hypothesis. The use of power indices implies a discrete power continuum; i.e.: for which there must be a determinate beginning point and end point. A test of Hypothesis II using a metric technique must logically begin by specifying a country or group of countries at the
upper end of the power continuum deemed to be the most powerful. Determining a cutoff point mathematically between countries that are dominant and those that are dependent becomes an *a priori* theoretical problem which, since we have no definitive power criterion, is unsolvable. Similarly, such non-metric techniques as those used by Brams and Kegley and Wittkopf also require initial specification of the most powerful or "influential" countries, and are, to some extent, self-validating. The SSA technique, however, arrays states in terms of relative rank differences from each other, or closeness to each other (depending on the construction of the coefficient). It is thus an ordinal measure which requires no specific criterion to distinguish among clusters. The Coefficient of Alienation gives some idea as to how tightly groups cluster and the rank image configuration shows the general manner in which they cluster, which, with *some a priori* theoretical reasoning (but not to the degree expected by metric techniques), can be interpreted with ease.

The analysis was performed in two steps. In the first step, dyadic coefficients of association were computed in order to construct an input matrix for SSA. This was done for the two dependent interaction variables, intergovernmental organization membership and diplomatic missions, and for the best predictor variable, trade, chosen from the preliminary regression analysis. Secondly, the data was transformed again so as to arrive at a method for comparing the structure of the trade relationships with those of the diplomatic missions and the intergovernmental organizations.

The following three measures of dyadic association were constructed for the three indices:
\[ \alpha_{ij} = \frac{\text{total number of intergovernmental organization memberships in common}}{\text{total number of IGOs}_i + \text{total number IGOs}_j} \]

\[ \phi_{ij} = \frac{\text{total number of diplomatic missions received in common}}{\text{total amount of trade in common}} \]

\[ \mu_{ij} = \frac{\text{total amount of trade in common}}{\text{total amount of trade by i} + \text{total amount of trade by j}} \]

The larger the number, the "closer" the two nations are on a particular dimension and vice-versa. SSA was performed on these data for 1960 and while a fairly good, but not excellent fit, was achieved for each configuration in three dimensions, the system structures of the three relationships were quite dissimilar. Figures one, two, and three illustrate the systemic configuration.

Quite broadly, the results are illustrative of a rather intuitive notion; that interaction tends to be geographically concentrated. Western Europe (including North America) and South America appear to be the most tightly knit blocks. The structure of the relationships appear to add some support to Galtung's notion of a feudal interaction structure. Those regions that one might think would be the most powerful, Western Europe and North America, appear in most cases to center the interaction relationship, while the other countries fall in fairly homogeneous blocks about them. In Galtung's terms then, interaction tends to be vertical (from the regression results); direct periphery interaction (if one conceives of each block of nations as a peripheral entity) appears to be missing, and, from the location of the Western European nations in the configuration, peripheral interaction appears to have a tendency of being mediated through the center nations.

An interesting result was brought to light in the second portion of the analysis. The data were transformed in terms of presence or absence of re-
FIGURE 1A
SMALLEST SPACE ANALYSIS TRADE CONFIGURATION 1960
(3 DIMENSIONS - COEFFICIENT OF ALIENATION = .21)
(DIMENSION 2 VS 1)
FIGURE 1B
(DIMENSION 3 VS 1)
FIGURE 1C
(DIMENSION 3 VS 2)
FIGURE 2A
DIPLOMATIC MISSIONS CONFIGURATION 1960
(3 DIMENSIONS - COEFFICIENT OF ALIENATION = .13)
(DIMENSION 2 VS 1)
FIGURE 2C
(DIMENSION 3 VS 2)
FIGURE 3A
INTERGOVERNMENTAL ORGANIZATION CONFIGURATION 1960
(3 DIMENSION - COEFFICIENT OF ALIENATION = .12)
(DIMENSION 2 VS 1)
FIGURE 3B
(DIMENSION 3 VS 1)
lationships (1 and 0), and matrices were constructed to measure the simi-
larity of the structures on the three indices. For instance, with respect
to diplomatic missions, a one was recorded if two countries had a mission in
common, and a zero if not. Similar matrices were set up for trade and IGO
membership for the years 1950, 1955, and 1960. The similarity of the
matrices was measured using a Pearson's correlation coefficient. As in the
regression analysis, trade is correlated against IGO memberships and diplo-
matic missions. The results are presented in Table 5.

<table>
<thead>
<tr>
<th>TABLE 5</th>
<th>1950</th>
<th>1955</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade - IGO Memberships</td>
<td>.18</td>
<td>.21</td>
<td>.15</td>
</tr>
<tr>
<td>Trade - Diplomatic Missions</td>
<td>.06</td>
<td>-.02</td>
<td>.47</td>
</tr>
</tbody>
</table>

As one can see from the results, the interaction structures are quite
dissimilar. The result worthy of note is the correlation between trade and
diplomatic missions in 1960 of .47. While the correlation is not large, it
is highly significant relative to the other figures. It suggests that while
prior to 1960, trade patterns tended to be regionally based, after 1960, they
begin to spread out on a more global scale. This might not be significant
if it were not for the apparent existence of a feudal interaction structure,
but at this point we can only speculate as to causes and effects. For in-
stance, the addition of the African countries which became independent in
1960 may have had as much an effect on the configuration as any change in the
structure of relationships that may have been caused by the extension of
imperialist relationships between 1950 and 1960.

The regional basis of the interaction structures also warrants cautious
interpretation. Doubtless, there exist imperialist relationships within the
structures, but the regional concentration may also be caused by complementarity
of goods for trade, technology, inexpensive communication, cultural affinity,
*ad infinitum*. Many intergovernmental organizations, for instance, are formed
for the sole purpose of solving regional problems among equals and have no
function on a global scale (e.g. International Joint Commission). Other
organizations however, have been touted as prime agents of imperialist re-
relationships on a world scale. The International Bank for Reconstruction and
Development, because of its liberal economic banking policies, has been
attacked as a perpetrator of dependency and exploitative relationships.\(^{112}\)

In the same vein other organizations can be seen as mechanisms devised to
circumvent the detrimental effects of imperialist relationships (e.g. Group
of 77 and the Organization for African Unity). The point to be made is that
the analysis includes many types of relationships, many of which have a
potential for imperialist relationships, and others where imperialism would
not even be considered an issue. At the systemic aggregate level, however,
we appear to have provided some empirical evidence of feudal interaction
structures.

The fact that the interaction structures are dissimilar is not necessa-
arily proof negative of the feudal interaction structure hypothesis. Upon re-
lection, there is no reason why the structures should be similar across all
dimensions. The fact that they are not, and yet the fit is fairly good for
all the configurations with Western Europe and North America at the center,
is a favourable demonstration that there are potentially different types of
imperialism depending upon the type of interaction.

In summary, the intent of the analysis has been to provide evidence
in favour of a vertical interaction relation and a feudal interaction struct-
ure at a global level. While this has been done (even if only to a limited
degree), we have adduced no evidence to demonstrate the existence of imperialist relationships, but have only speculated as to the potential for their existence. The concluding remarks will reflect upon further lines of enquiry given this starting point.
IX. **THREATS TO RELIABILITY AND VALIDITY**

Before advancing some possible interpretations of our results and outlining some lines for further enquiry, we must address the question of the extent of valid inference from the statistical analysis.

Firstly, one may question the reliability of the data. Reliability really only comes into question with respect to the trade data. The steel, energy and military personnel data might be subject to question prior to the temporal domain covered in this study. In recent times, however, reporting and collecting techniques have become standardized to the extent that we need not rely on several contradictory sources, or sources that we may suspect are less than accurate.\(^{113}\) Regarding the trade data, several problems were encountered. It was never clear whether a colony's trade was included with the trade of its mother country before its independence. This could account for the drop in percentage total trade in the system of some European and North American countries over the period 1945 to 1960 when a plethora of countries became independent.

One always encounters problems when it comes to standardizing monetary values. The trade values for the Eastern European countries, for instance, are not pegged to United States currency and are therefore "derived". Their accuracy as true representations may therefore be suspect. A more serious problem arises when there is a difference in the figure reported as exported by the trader for example, and the figure reported as imported by the tradee. In such an instance, we turned a blind eye and chose the larger of the two figures. Since all of the data was standardized in terms of proportions
(hypothesis II(a)) where reliability is not at issue, and since the raw data was never used, we felt that accuracy of reporting did not constitute a major reliability problem. The standardization procedure serves to eliminate or deflate the effects of random error in the data.

Our results may be rendered invalid or subject to qualification by virtue of the relatively short time period chosen for the study. No doubt, the analysis should be extended into the future (past 1960), and there is a theoretical justification for not examining the pre-World War II period. Nevertheless, the results from analyses performed at five year intervals may be based on random fluctuations, as could the whole ten year period itself. We have demonstrated however, that the status hierarchy and values on the variables are not subject to change over short periods of time barring some sort of catastrophe or stepfunction effect on the nature of the functioning of the system. Since the second world war, this has not been the case, so the random error effects on the data from this source can be assumed to be negligible.

As explained in the reporting of the regression results, systematic error exacerbated by a low effective N was not a problem. The results obtained by eliminating the steel index from the analysis (as inclusion would reduce the N to a minimum of 34 in one case) did not significantly alter the results, but increased the effective N to a minimum of 65. The effects of a non-normal distribution of the data are perhaps more serious. On the steel, energy, and military personnel data, the raw data was used directly in the analysis. The analysis therefore, may be more sensitive to the larger values at the upper end of the power continuum where proportionately most of the power capability is concentrated in the hands of a few. Minute discrimination
at the lower ends of the scales was not the intent of the analysis and there was enough variation there (except on the steel index) to render this problem minor.

The effects of intercorrelation among the independent variables as a threat to the reliability of the regression results have already been discussed. We summarized at that point that the threat was more to the precision of the results rather than to the evident trends that could be gleaned from them. In conclusion, the potential threats to the reliability of the data and the analyses do not pose a serious threat to the study relative to potential problems of validity, now to be assessed.

The validity problem can be approached on several levels. First, we can ask whether rank-status theory is a valid approach to the study of imperialism. Secondly, if we accept that it is, we must ask if our research design is adequate to test the kinds of relationships dictated by the theory. This involves firstly an examination of the correspondence between the concepts and their empirical indicators, and secondly, an examination of the levels of analysis problem.

The problem of whether rank-status theory is a valid approach to the study of imperialism is less a problem of empirical validity, and more a problem of face validity - intuitive satisfaction, or if one wishes to become so cryptic, faith. Broadly, one must accept the conception of imperialism as a structural relationship. To be sure, all social scientific research deals with human behaviour. It is an attempt to reconstruct and describe the motivations for certain behaviours. At this level of analysis social behaviour is inherently psychological. To accept a conception of imperialism as a structural relationship is, however to circumvent the necessity of a psycho-
logical examination of motivations of particular individuals. It moves up a level of analysis to the group level, and dictates that the structural attributes of the situation will set the parameters of behaviour of different groups. With regard to imperialist theory, the range of behaviours is circumscribed by the structure of the system, namely the stratified social system. We have thus far been speaking of "causes" of imperialism. It may be true that to examine effects or consequences, we need to look at the psychological level of analysis because of the exploitative nature of the imperialist relationship. Alternatively, it may be true that imperialism is only exploitative in a plural sense; we may be able to speak of exploitation at the group level without having to resort to an examination of individual consequences.

Secondly, acceptance of the validity of a rank-status approach to the study of imperialism involves the acceptance of certain assumptions about group behaviour in the stratified social system. Such assumptions include the tendency for the upper groups to want to maintain the status quo. These assumptions are based on further assumptions about how rewards are distributed in the system. We have postulated that rewards are distributed on the basis of status and power. Our formulation of the imperialist relationship therefore has more in common with the ecological stream of thought rather than the psychological or social psychological stream of thought. To accept such assumptions is a matter of faith or ontology. To deny such assumptions and concomitant definitions is to deny the empirical validity of the enquiry at the outset, and is a problem which is perhaps unresolvable.

Assuming that we have correctly described the imperialist relationship, we turn now to the empirical adequacy of the indicators of our concepts. It
can not be emphasized enough that the empirical approach taken was rather modest, and if you like, primitive, and that the results are correspondingly modest. We have tried merely to determine an association, not to specify causes or approach predictive precision. With regard to precision, we could have particularized or made more sophisticated our measures of national power base. For instance, we could have constructed measures that tapped the efficiency of production, the distribution of the productive effort among social and economic sectors of the nation, or the efficiency of social mobilization within the nation. But to a certain extent, albeit limited and unspecified, our indicators have tapped these dimensions implicitly. They have provided us with results enough to confirm or deny our hypotheses at the intended level of simplicity. If there is one major shortcoming of the analysis, it is the fact that the indicators on the regression analysis failed to tap a political dimension of status and power such as cultural, geographic or ideological contiguity. The SSA emphasized to some extent the multidimensionality of interaction patterns; that even though they appear to be feudal, the structures are different. Further analyses should be aimed at delineating dimensions of interaction as potentially different manifestations of imperialist relationships.

Including a political dimension may have increased the level of variance explained by the statistical techniques. However, we should not expect that interaction in the system is fully dependent upon status and power relationships, and therefore, we should not expect to be able to explain all the variance in the dependent variables using status and power indices. Nor can we expect that the amount of interaction explained by power and status relationships is indicative of imperialist relationships. To examine imperialism
at a more than general level, we must move from the general system level to the subsystem (even dyadic) level of analysis.

In summary, the study is valid to the limited extent that it was intended to be. We cannot predict or explain until we have described. It was the intention of this exercise merely to describe - to provide some empirical corroboration as a prelude to more exhaustive analysis. The intent was not to provide precise measures of causation but merely general measures of association. This has been achieved; it remains only to outline what has to be done.
To begin, it must be stated that we have proven nothing. We have merely added empirical support to a small portion of a logical theoretical structure. The accuracy of the results was never at issue; statistical sophistication was sacrificed in favour of intuitive sense in light of the theoretical structure. As Lykken notes:

... if one considers the supplementary assumptions which would be required to make a theory compatible with the actual results obtained, it becomes apparent that the finding of a really strong association may actually embarrass the theory rather than support it.

The only really satisfactory solution to the problem of corroborating such theories is that of multiple corroboration, the derivation and testing of a number of separate, quasi independent predictions.  

The value of any research can be determined, not from the statistical results, but only by skilled, subjective evaluation of the coherence and reasonableness of the theory ...  

This is to say only that explained variance does not constitute theory; something else is still left to be explained.

We can find, in the behavioural literature, studies that lend support to our empirical results. They, in effect, stand as multiple corroboration of our results. For example, Rummel finds that the more economically developed a state is, the more interaction it will have in the system. Whereas we have only measured interaction in terms of diplomatic missions and intergovernmental organization memberships, Rummel found the relationship to hold for treaties, mail, tourists, emigrants, and student migrations, using export patterns as an independent variable. Similar studies by McGowan and Chadwick also tend to confirm our results.  

Brams, Deutsch
and Russett find positive relationships between trade and other transactions, and former colonial ties in the system.\textsuperscript{118}

This study stands partly as a replication and confirmation of previous results, but facts as it were, are of little value in and of themselves. We have attempted to provide an explanation of these statistically "explained" relationships. This explanation is couched in terms of sociological theory. It provides that more economically developed and powerful states are high interactors because of the status ascribed to them and because of their ability to interact resulting from their achieved power base. We have said something about unequal exchange resulting from the structure that is imposed on the system by virtue of these power and status relationships. When it came to empirically describing the nature of the imperialist relationship however, we could only speculate about the potential for dependence and exploitative relationships to arise from relationships of unequal exchange at the systemic level.

The next step in an empirical investigation must take place at the subsystem or dyadic level. This becomes apparent when trying to define or operationalize the concept of exploitation. Galtung speaks of imperialism as a structural relationship involving inter- and intra-actor effects. More specifically, more value accrues to the center parties by virtue of unequal exchange, than to the periphery parties. Our analysis has had little to say about the exchange of value. Indeed, at the systemic level, it makes little sense to say that there is a tendency for exploitative relationships to predominate, or that international relations have a tendency to be imperialist. This has been a mistake with marxist theories of imperialism. As Kurth notes,

\begin{quote}
The pro-capitalist imperative retains at least two important problems. One is what can be called the problem of overprediction:
\end{quote}
the theory would have predicted events that have never occurred. The second is the problem of overdetermination: other theories can also explain the events and can do so just as well or better.

Our SSA confirmed that although the interaction structures appeared to be feudal, they differed depending on the type of interaction. Further enquiry would have to specify how the structure of the particular type of interaction relationship in question prevents the periphery from gaining as much value from the relationship as it would from an alternate relationship. More to the point, we would have to explain how the center prevents the periphery from entering into that alternate relationship; i.e. how the dependency structure is maintained. If the SSA was correct, this dependency and value exchange analysis would have to be done on an individual level, depending upon the type of interaction taking place. But even at the individual level it may be difficult in many cases to determine what is exploitative and what is not. Caporaso sums up the existential problem well when he states,

First, there is the problem of supplying criteria by which to assess what is "fair" and "equal".

Second, there is the problem, perhaps insolvable, of constructing a measure of exploitation that is acceptable both to a Marxian world view as well as to a philosophy nurtured by classical liberal economic thought. What I am asking here is whether there is a concept (and hence a measure) of exploitation that is transparadigmatic in that it retains a common meaning in both perspectives ... if this is so, it inevitably follows that an empirical test of imperialism is unlikely to satisfy members of these two intellectual traditions.

Even at the intraparadigmatic level, the problem arises as to how to measure exploitative value exchange as a result of interaction patterns, outside the economic sector. How does one measure unfair political, cultural and ideological exchanges? These types of exchange cannot be measured in one single
consummate transaction as can economic exchanges. The effect of a powerful nation on the ideological character of a weaker nation can only take place over a matter of time. This implies the need for more careful longitudinal historical analysis in conjunction with any manipulative techniques such as those used in the present study. Given these immense conceptual problems, the writings of most contemporary writers on imperialism (primarily the marxists), pale in comparison.

Since it would not bode well to end on such a pessimistic note, we might conclude by emphasizing the need for the continuance of studies into the nature of imperialism. Much of the current attention in the imperialist literature focuses on the actions of multinational corporations. Clearly, our study has neglected these, but this can be justified from the conflict theory and peace research point of view. The case may be made that the nation-state is still the dominant actor in the international system, and furthermore, that the state system is still evolving and will continue to evolve for some time. The components of the definition of imperialism - inequality, dependence, and exploitation - may be seen as factors leading to wars and other forms of conflict behaviour. States have a monopoly on the legitimate means of coercive control which implies the right to arm for "defensive" purposes, a right not granted to multinationals. Thus the normative implications of inequalities among states should be the primary motivating factor behind further investigations into imperialism.

It may be argued that this study shows nothing in conclusion, but an interaction relationship and structure which could be interpreted in any one of a number of ways. We can only reiterate that given the tools (the level of statistical theory and the reliability of international relations data),
this is all we can produce at a reliable and valid level. Intercorrelations among our indices were already playing havoc with our results. Thus problems of sensitivity, reliability and validity warrant maintenance of a rather facile stance at a high level of abstraction. Only by outlining the difficulties encountered in pursuing such a line of enquiry, can we draw up an agenda for, and provide a stimulus to future research.
FOOTNOTES


12 Ibid., p. 2.


15 Ibid., p. 194.


17 Ibid., pp. 134-135.


21 Jalée, chap. III, Magdoff, chap. I.

22 Frank, *op. cit.*, passim.

23 Cohen, p. 16.


In this vein Caparaso states:
The problem here is to allow for this diversity of indicators without paralysing the theory by appending to it a set of singular, unique propositions. I think this can be done by distinguishing between the form of imperialism on the one hand, and the mechanisms of imperialism on the other.
I will argue that the form of imperialism is constant... However, the particular mechanism through which this value transfer can take place varies greatly.


For example Lichtheim states,
What we mean when we speak of empire or imperialism is the relationship of a hegemonial state to peoples or nations under its control.
It is pointless to inquire whether it is "in the nature" of this or that form of social organization - feudalism, capitalism, socialism or whatever - to encourage or permit external aggression against weaker states. The only thing that matters to those concerned is the actual possession or loss of their freedom.
What counts is the relationship of domination and subjection, which is the essence of every imperial regime.
Lichtheim, pp. 5, 8, 9.
Morris asserts that the term "persists because it capsulizes the idea of domination and control. The idea is clear; the mechanism is not."
Morris, p. 7.
Thornton adds that
Colonialism is only imperialism seen from below. It is that view of the controllers which is held by the controlled.
For not every form of imperialism undergoes the test of being seen and judged from below. Colonialism therefore, as a concept, comes into being only when the status of subordination is recognized as unwelcome.
Thornton, pp. 6, 13.

It is not clear from the above "definitions" exactly what imperialism is and in some cases the renditions appear to be contradictory. Several questions come to mind; for example, is subjugation equivalent to control? Does
control imply exploitation? How do we define exploitation; must it be felt and recognized, or is it perpetuated by some sort of false consciousness? Is imperialism equivalent to colonialism?, etc.


36 Cohen, pp. 16, 92.

37 Travis, p. 5.

38 Cohen, p. 209.

39 Travis, p. 5.

40 While the concept of exploitation is necessary to a definition of imperialism, it is a difficult one to deal with empirically and has not been treated adequately in the literature (see for example Footnote 29). This preliminary exploration, however, will not have to pursue exploitation as a component of imperialism beyond the definitional stage. We will return to it in our concluding remarks when we discuss future directions of enquiry.


42 M. Singer, p. 38.

43 Galtung, 1971.

44 Caporaso concurs with Galtung's line of reasoning when he points out that:

An analysis of motives fails on two counts. It is both too broad and too narrow. It is too broad because not all attempts to dominate and exploit have resulted in domination and exploitation.

It is too narrow because imperialism as a system of dependence, inequality and exploitation can result even in the absence of motives designed to bring these conditions about . . . The danger is present any time people are not aware of the consequences of their behavior.

Caporaso, p. 90.

45 It is at this point that we make a leap in faith in accepting Galtung's theory (which is actually a set of hypotheses rather than a theory). The argument that would ensue between Galtung and his predecessors is a classic case of sociological existentialism found prevalent in the writings of Durkheim and Weber on holism versus individualism; i.e., we encounter a level of analysis problem.

Strictly speaking, an examination of imperialism should include an examination of dispositions to exploit as causes of imperialism. Durkheim would contend, however, that what is true at the individual level is not true at the group level. Writers such as Aron attribute individual motives
to groups which, alternatively, Galtung would argue is wrong, given his line of reasoning. Thus the matter of whether one chooses to begin an examination of imperialism at the individual level or at the group level is a matter of academic ontology; a matter of "faith". Galtung would argue, and this author would agree, that it would serve no purpose to examine individual dispositions because imperialism would ultimately result from the actions of groups of individuals whose behaviour as a group would differ from individual behaviours; i.e., from the structure of intra- and intergroup relations.

The "Center-periphery" rubric appears to be adapted from André Gunder Frank (1969) without the attendant references to the capitalist structure. With respect to Galtung's specific proposition, Jalée (1972, p. 161) follows his reasoning, but again specifies capitalism as the agent of imperialism which Galtung does not do.

As an aside, it is interesting to compare Jalée and Galtung with Wallerstein's analysis of center-periphery relationships in the sixteenth century. Wallerstein appears to take the position that imperialism was fostered by the inability of imperial powers to create indigenous local bureaucracies in the colonies (due to costs). This led to an exportation of bureaucratic expertise from the imperial power to the colony or, there existed what Galtung would call a harmony of interest between the cC and the cP.

Wallerstein, pp. 188-189.

This is Galtung's definition of exploitation. While it is clear from the marxist perspective what exploitation is, it remains unclear in Galtung's analysis. In marxist terms, exploitation refers to the manner in which surplus capital accumulation is distributed among the classes (i.e., unequally relative to different classes' input into the mode of production). Galtung, on the other hand, defines exploitation simplistically in terms of disharmony of interest, but it is easy to think of many situations where there is a disharmony of interest which we would not inter-subjectively evaluate as being exploitative.

Lack of specificity of Galtung's model underlies difficulties with the notion of unequal exchange. As with the notion of disharmony of
interest and exploitation (see footnote 46), he never makes it clear which types of exchange, if not all types, are considered relevant to the theory of imperialism. In light of this difficulty with conceptual ambiguity, it is difficult to operationalize his model. We will, however, make an attempt by putting forward our interpretation of what we think he means.

49 Galtung, 1971, pp. 81-83; structurally, Jalée is once again in agreement (p. 162).

50 Galtung, 1971, p. 84. It seems strange that Galtung would posit that the total arrangement favours the periphery in the Center when it is usually assumed that the imperialist relationship maintains the status quo in favour of the center of the Center. While it is not important, it can be seen through a discussion of status and power (which will be detailed presently), in conjunction with Galtung's theory of aggression (1964), how he arrives at this conclusion.

51 cf. Jalée, p. 150.

52 Galtung, 1971, p. 89.

53 cf. Jalée, p. 150

54 Galtung, 1971, p. 89.

55 An interesting manifestation of this argument is presented by Marcuse:

The techniques of industrialization are political techniques; as such, they prejudice the possibilities of Reason and Freedom. But as all freedom depends on the quest of alien necessity, the realization of freedom depends on the techniques of this conquest.
Technological rationality reveals its political character as it becomes the great vehicle of better domination, creating a truly totalitarian universe in which society and nature, mind and body are kept in a state of permanent mobilization for the defense of this universe.

Marcuse, p. 18.


Thornton refers to what is known in the sociological literature as "ascribed" status and its concomitant implications for violence if it is not in balance with a nation's perceived level of achieved status.

... most of us prefer to live in what novelist Anthony Powell has called an "acceptance world." Only when this acceptance is withheld, is recognized as entailing a loss of respect, does a "movement" against it develop, similar to the anti-colonialist resentment in modern nationalism.

Thornton, p. 16.

He also refers to the relationship between ascribed status and the use of power:

After Waterloo the world was compelled to accustom itself to the fact of British power, since no one had the means of challenging it. In international as in domestic affairs the privileges of power were acknowledged to include action and influence; and therefore the question of justifying their use did not arise.

Thornton, p. 25.

Morris, like Thornton, refers to the dynamic mechanism at work in a stratified social system based on acceptance of status positions:

The inner logic of domination consists of the fact that there is instability in any relationship of unequal power. Since the weaker power will not accept its inferiority, the stronger party must ceaselessly concern itself with the security of its position. In so doing, the imperial power assumes a spiral of increasing commitments and obligations that cannot be attributed primarily or basically to economic motives.

Morris, p. 39.

Morris does much to illustrate the concepts of status and power at work in the imperial relationship, although there is some disagreement in the sociological literature as to the source of aggression in a stratified social system. Galtung (1964), for instance, would disagree that inferior powers must necessarily not accept their rank position. He would further disagree that the source of aggression comes from the top; those wishing to maintain the status quo. Morris is in agreement with Weber on the maintenance of the status quo and the use of power, however.
Wallerstein outlines some possible attribute dimensions that are salient to power and status relationships in an international stratified social system:

There are also semiperipheral areas which are in between the core and the periphery on a series of dimensions, such as complexity of economic activities, strength of state machinery, cultural integrity, etc.
Wallerstein, p. 349.

Holsti attempts to establish a link between conflict theory and development theory through the implicit use of the concepts of power and status:

Hence as has often been noted in the literature, many visible indicators of modernity - commercial urban centers, national airlines, heavy industries, middle class suburbs, and a plethora of private vehicles and consumer goods - are promoted less to assuage popular economic expectations than to bring diplomatic influence and prestige to the nation.

Prestige is a notion central to many non-marxist writings on imperialism as was evident in the previous review of the literature. In formal sociological terminology, prestige can roughly be equated with ascribed status, since prestige is a relative term. One gains prestige only in the ezes of others. Influence is associated with the concept of power, although not equivalent to it. The ability to influence is relative to the amount of power one has, and is, in some measure, also relative to status. There is, however, much debate in the power literature over operational definitions of the association between influence, status, and power; the relationship is not entirely clear.

As was noted in the opening passage, there has recently been a convergence among development and conflict theorists. Holsti's work is valuable in this respect as a transparadigmatic exercise; an attempt to broach questions posed by leftist theorists on conflict (broadly conceived) to liberal theorists on development.

Jules Ferry, former French premier, provided evidence of the concepts of status at work in foreign policy decision-making, when he stated "... that if France refrained from imperialism, she would "descend from the first rank to the third or fourth."

Galtung disagrees implicitly with Parsons on this point. If we are interpreting Galtung as defining imperialism as a power-status relationship, then he must necessarily disagree with Parsons when he includes among his types of imperialism, military imperialism. In further support of this, see the text to Footnote 53.

Parsons, p. 263. This is consistent with Marcuse's (and implicitly, Galtung's) analysis of the relationship of the contemporary underdeveloped world to the developed world (including the Communist sector). The latter, Marcuse maintains, structurally dictate the terms of development for the third world. Marcuse, pp. 46-47.


Galtung, 1966; M. Singer, p. 56.

It should have become evident at this point that there are two usages of the word power, and in discussing the concept one must distinguish them. For example, it has been said that if we define power as the ability to influence others, then we must define Israel and North Vietnam as the two most powerful nations in the world. To be sure Israel and North Vietnam have a great deal of pull in the international system. However, we would not really say that they are more powerful than certain other actors in the system overall. If rules of diplomacy and protocol did not mitigate against the manifestation of power in recourse to violence, it is clear in most cases who would prevail in a confrontation. But playing within the rules
of the game in order to influence a decision as Israel and North Vietnam have been known to do, is clearly a form of power.

Several writers attempt to circumvent this problem of dual meaning by dismissing either power as status or power as influenced as a meaning of power. Marshall Singer, for instance, terms power as overall status an "imprecise" way of defining power:

If power is relative and contextual, how then can one speak of "weak" and "powerful" states? One can do so in the same way one can speak of any relative term in an absolute sense.

When relative terms are used in an absolute way, they are inevitably somewhat imprecise. Thus in a sense every reference in this work to a group or a state as weak or powerful is somewhat imprecise.

Marshall Singer, p. 55

Parsons, on the other hand, dismisses recourse to violence as a form of power and an indication that power as influence has failed to work. In this author's opinion, Parsons and Singer are incorrect. It should be possible to define a word in two different ways depending on the context in which it is used.

75 Here we must distinguish between power and influence. Influence as used here, would refer to an overt attempt by one actor to modify the behaviour of another. Power on the other hand, does not have to be expressed in overt behaviour. The power of one nation (as perceived by another) may define the limits of choice alternatives for the other nation in an exchange relationship. See also footnote 72 on the relationship of power and status.

76 The last two sentences must be qualified in certain respects. First, regarding operationalization, we have already made much of the fact that the substantive aspects of the imperial relationship during any historical period of time must be distinguished from what imperialism is conceptually. To reiterate, imperialism as a concept, transcends historical eras as manifested differently in each period. We have also spoken of how imperialism has been manifested differently since the second world war in that it has become a relationship among states rather than among states and their respective colonies which are not sovereign. As such, our operational indicators will reflect the status dimensions salient to imperialism in the temporal domain following the second world war. These indicators or status dimensions may change should historical circumstances change.

Second, with respect to the relationship between power and status, it has been noted by such writers as Michael Wallace, that the two concepts are not always co-terminous. He states that status is multidimensional, that "there are many facets of status and deference between nations which can scarcely be subsumed under the rubric of power" (1973a, p. 5). Those status dimensions used here, however, will reflect imperialism as a power or dominance relationship and therefore, for our purposes, they are co-terminal.

Marshall Singer (p. 61) includes in his definition of power, wealth, organization and status. The contention in this inquiry, however, is that wealth and organization are merely different dimensions, albeit important dimensions, of status. Singer appears to be using a narrow definition of status in that it seems he conceives of it only in terms of ascribed status whereas organization and wealth are dimensions of achieved status.
We specify political (or diplomatic) and organizational interaction here although again, Galtung's lack of clarity in specifying the model leads to ambiguity in determining what types of interactions are relevant. See page 65 for some implications of this ambiguity in interpreting the results (i.e., peripheral interaction in the OAU).


Several qualifications come to mind here. "Economic" is used in the broad sense, referring only to a system of exchange, whether the commodities being exchanged goods or power. Therefore, in making this qualification, we make no commitment to capitalist determinism.

Second, we do not wish to pay tribute to any form of conspiracy theory in making the assertion. The consequences of the exchange may be unintended. In fact, the theory states that if the exchange happens to be exploitative, it is most likely as a result of the structural difference between the states in terms of status. The more powerful state is in more of a position to exploit (i.e., is more likely to exploit by virtue of its position).

Third, we do not wish to imply that the exchange relationship is a zero-sum relationship. Classical liberal economic theory dictates that an exchange should be beneficial to both parties, but it does not state how the benefit is to be distributed among the parties, nor does it dictate that each party should benefit in an equal manner. In terms of our theory of imperialism, both parties could benefit, but the Center nation would benefit more than the Periphery nation. Galtung seems to imply, as we have already noted, that this is a form of exploitation.

Theoretically, we do not encounter Galtung's problem of not taking a random sample of secular trends to verify our hypotheses, since an implicit hypothesis in our study is that we have entered a new historical period since the second World War (i.e., the proliferation of nationalist sentiments and new sovereign states). This implicit hypothesis of course assumes that imperialism was present prior to the second World War.
87 Wallace, 1973a, pp. 32-33.

88 Ibid., p. 35.


91 Jalée, p. 43.

92 Lichtheim, pp. 70, 75, 110.

93 It may be that trade is directly related to diplomatic missions merely because many missions are responsible for foreign trade. We assume this is not a problem however, since we are dealing with ambassador-ships and not consular or trade missions.

94 Wallerstein, pp. 198-200.

95 J.F. Rweiyemamu, in L. Alschuler, p. 48.

96 Cohen, pp. 155-56.

97 Alschuler, p. 49.

98 Winslow, p. 3.

99 Wallace, 1973a, p. 36.

100 M. Singer, p. 314.

101 Cohen, p. 15.


107 See Barbera, *op. cit.*

108 The significance test between the two procedures consists of taking the ratio of the mean-square error of the two equations and looking up the result on the F-table using the respective degrees of freedom as parameters.

\[
\text{MSE} = \frac{MSE_1 - MSE_2}{\frac{df_1}{df_2}} 
\]


113 See Thompson, *op. cit.*


115 Ibid., pp. 158-159.

116 Rummel, *op. cit.*


120 Caporaso, pp. 106-107.

121 Wallace, 1973a; Holsti, 1975; Galtung, 1971, on structural and physical violence.
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