ASIAN CONFLICT IN SYSTEMIC PERSPECTIVE; APPLICATION OF FIELD THEORY (1955 AND 1963)

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN POLITICAL SCIENCE DECEMBER 1969

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ACKNOWLEDGEMENT

The data for this study were collected at the Dimensionality of Nations Project, University of Hawaii. I am deeply indebted to the Project, for making this study possible.

Thanks are due to Mr. Warren Phillips for intellectual dialogues at the stage of theory building, Messrs. Charles Wall and David McCormick for their assistance in computer programming. Mr. Tudor Chirilla for data collection of the cooperation space, and Mr. Kwang-Woong Shim for initial typing of tables. The dedicated help of my wife Ye-Young as a bibliographer and typist cannot be over-emphasized.

ABSTRACT

The purpose of the research presented here is threefold: first, to predict conflict and cooperative behavior between any pair of Asian countries from a knowledge about their political orientations and similarities in power, economic development, culture and values; second, to delineate subregional groupings of Asian nations with respect to their conflict and cooperation; and third, to develop profiles distinguishing each of these groups.

Data were collected on several measures of conflict and cooperative behavior, as well as various attribute similarities involving 342 nation-pairs (dyads) for 1955 and 1963. Theoretical models linking conflict and cooperation space to national attributes were tested and subregional Asian groupings of cooperatively behaving nations were delineated.

For an Interaction Model empirical tests have supported the hypothesis that the capability of two nations to span the geographic distance and the degree of actor dominance predict both conflict and cooperation between two Asian nations.

The overall predictability of a Net-Conflict Model was weak, but some specific relationships were significant. The 1963 analysis, for example, showed two very strong relationships between attributes and behavior. First, approximately one-third of the variation in unofficial violence and relative exports was dependent upon the distances between two Asian nations on such attributes as economic development and political orientation. Second, less than one-third of the

variation in military action, negative communications, and diplomatic representation was accounted for by power parity between two nations alone.

Applying clustering techniques to a Net-Cooperation Index has resulted in a clear picture of the configuration of Asian nation groups. Two of the distinguishing characteristics of the groupings are: (1) bipolar structure of the Communist-Non-Communist confrontation which underlies the Asian behavioral system and (2) Japan's strong sphere of influence encompassing all of Asia.

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CHAPTER I

INTRODUCTION

Since World War II Asia has been a land of political instability, social friction, and violent conflict. This report describes a line of research that was undertaken with the conviction that the prerequisite for restoring peace and security in this area is systematic and scientific research. Only when we have reliable knowledge on the causes of conflict and the conditions for cooperation will we be able to move toward peace and development in Asia.

The purpose of the research presented here is threefold: first, to predict conflict and cooperative behavior between any pair of Asian countries from a knowledge about their political orientations and similarities in power, economic development, culture and values; second, to delineate subregional groupings of Asian nations with respect to their conflict and cooperation; and third, to develop profiles distinguishing each of these groups.

Data were collected on several measures of conflict and cooperative behavior, as well as various attribute similarities involving 342 nation-pairs (dyads) for 1955 and 1963. Theoretical models linking conflict and cooperation space to national attributes were tested employing canonical and regression analysis. Subregional Asian groupings of cooperatively behaving nations were delineated by applying hierarchical clustering and direct factor analysis techniques to an index of Net-Cooperation.

The main focus of this study is on the overall interaction between nations, rather than any specific aspect of the behavior. It is assumed that the interaction between two nations is some mixture of conflict and cooperation. In order to uncover some fundamental knowledge on Asian system of interaction, two theoretical models were formulated.

First is an Interaction Model. This model stipulates that the total behavior (conflict and cooperation) to be initiated by nation i toward nation j is a function of the propensity of two nations to interact and the power capability of i relative to the joint power of i and j. The propensity to interact is measured as the ratio of joint power capability of i and j to the geographic distance between them.

Second is a model of Net-Conflict behavior. Most current research efforts have tried to analyze conflict behavior as an entity separated from cooperation (Rummel, 1963; Tanter, 1966; Richardson, 1960b; Wright, 1942; McClelland et al., 1965; North et al., 1967). The present research, however, deals with conflict and cooperation as components of interaction. Consequently, my study of conflict focuses on the difference between observed conflict behavior and observed cooperation. In other words, the elements of cooperative acts linking two nations are held constant while their conflict behavior is investigated.

This differential between conflict and cooperative behavior is hypothesized as a function of similarities in value, political orientations, power, economic development, and their power parity. Power parity is the absolute value of the difference in power capability. Power parity is included in the model to measure the deterrence relationship between two nations. It is hypothesized that if nation i is considerably more powerful than j, j is unlikely to initiate a conflict with i because of the deterrence capability of i; i is also less inclined to resort to conflict with j, knowing that i's demand may be achieved without using violence. There is a zone of near equality, however, in which conflict potential may become actual.

Testing these models would provide knowledge on how well the conflict and cooperation--either as an individual variable or as a linear combination--could be predicted from characteristics of Asian nations.

Grouping by types is fundamental in describing, predicting, and explaining phenomena. The role of grouping becomes very significant especially when the boundary of the system is ambiguous, as in the case of Asia. Most studies on regionalization have revealed that Asia, in a conventional geographic concept, hardly constitutes a subsystem by such criteria as socio-cultural homogeneity, similarity in political behavior, common institutional membership, and economic interdependence (Russett, 1967a; Cattell, 1949;

Rummel, 1970a; Gregg and Banks, 1965). The subregional groupings of Asian countries (in conventional geographic sense) will be delineated here with regard to their cooperation and conflict. These groups will then be compared on their attribute profiles so as to facilitate the study of Asian regional integration.

To repeat, the theoretical questions pursued are: (1) what is the linkage between national attributes and interactive behavior within Asia; (2) what is the relationship of Net-Conflict behavior to the similarities in national characteristics; (3) what are the subregional groupings of Asian countries in terms of conflict and cooperation.

Some partial answers to the above questions were provided by analyzing Asian data for 1955 and 1963. For the Interaction Model the empirical test has supported that interaction propensity and the degree of actor dominance predict both conflict and cooperation between two nations.

The overall linkage for the Net-Conflict Model was weak, but some specific relationships were significant. This implies that the notion of attribute similarities being general forces determining a nation's behavior toward another fits the data well with regard to particular kinds of behavior. The 1963 analysis, for example, had two very strong relationships between attributes and behavior. First, approximately one-third of variation in unofficial violence and relative export was dependent upon distances on such

attributes as economic development and political orientation. Second, less than one-third of variation in military action, negative communications, and diplomatic representation was accounted for by power parity alone.

The most striking of all findings is in the delineation of sub-regional cooperative groups. Applying clustering techniques to the Net-Cooperation Index has resulted in clear picture of the configuration of nation groups. Moreover, examination of attribute profiles has shown that, unlike other groups, the group with Japan at its core had no particular characteristic distinguishing it from all nations in Asia for 1955 and 1963. This evidences that Japan's interaction arena is the whole of Asia, while the rest of the countries are more inclined to form small collaborative groups.

CHAPTER II

STUDIES ON THE INTERNATIONAL RELATIONS OF ASIA

Just as an earthquake in the South America sends tidal waves crashing on the Hawaiian shores and inundates the east coast of Japan, so the political tremors in a corner of Asia can generate formidable impacts all over the world. The growing attention to Asian problems demands more systematic analyses of these political forces. Among numerous aspects of these forces, two are of main concern in the proposed study: the nature of conflict and cooperation in the Asian behavioral system, and the sub-regional groupings (cooperative) of Asian countries.

Conflict and Cooperation in Asia

For centuries the study of the international relations of Asia has involved the description of idiosyncratic foreign policies based upon diplomatic history. Studies of this kind have contributed to compiling and updating of historical events, but generalizations from them, if any, are purely intuitive: neither test nor replication is possible. A good example is the work of Gordon (1966). Far beyond the description of foreign policies, Gordon has generalized from empirical materials available to him, personal interviews, and regional histories to some of the major dimensions of dyadic Asian behavior. For example, a major dimension of regional cooperation, he points out, involves communication and collaboration on issues of economic development. As

Rummel argues, however, "his generalizations are still intuitive: the weighting of his data is unknown, the intuitive portions of the data cannot be reproduced, and the mode of combining the data to achieve generalizations cannot be established" (1968, p. 40).

It is surprising that there has been no published systematic analysis of Asia as a whole in terms of conflict and cooperation, even though Asia has been the locale of several violent conflicts since World War II, and is one of the more politically unstable and less known regions of the world.

There exist, however, some systematic studies done on the internal systems of Asian nations and specific issues such as China-Taiwan confrontation, Sino-Indian border conflict, Korean conflict, etc. Berry's (1966) work on the commodity flows and spatial structure of the Indian economy, Lee's (1931) analysis of the periodic recurrences of internecine wars in China, and MacRae and Smoker's (1967) Vietnam simulation are examples of the former category.

A longitudinal study of conflict behavior has been carried out on the Taiwan Straits confrontation (McClelland, et al., 1965). The international behavior of China, Taiwan, the U.S., and the U.S.S.R. (1950-64) was examined by a quantitative analysis of 2,600 news items, taken principally from The New York Times and The Times (London). Complementary to this study is Sullivan's (1964) research on

U.S.-Chinese relationships, particularly the Quemoy-Matsu crisis. Beside the Taiwan Straits studies, the response patterns of China vis-à-vis the U.S. and U.S.S.R. have been analyzed. Bobrow (1965) attempted to clarify the nature of processes by which the Peking regime has responded to American defense policy choices, and to predict what Chinese behavior would probably follow from different American active and passive defense postures. Employing a stimulus-response model and content analysis, Zaninovich (1964) tried to build an empirical theory of state response between China and Russia.

Time series analyses of the Sino-Indian conflict have been performed with communication data (Smoker, 1964a; 1967; and Greaser, 1966). Serial correlation with time lags revealed some regularities in the patterns of crisis behavior. Border conflict between North and South Korea also drew some scholarly attention. Works of Whiting (1960) and George (1967) are notable, while the efforts made by Snyder and Paige (1958) to apply a decision making model to the Korean case opened a road for future research. Simon's (1969) work on the triangular relationship among Peking, Djakarta, and P.K.I., and Russett's (1967b) analysis of Japanese decision of Pearl Harbor also must be noted.

Asia as a Subsystem

When we define a system as "a set of objects together with relationships between the objects and between their

attributes" (Hall and Fagen, 1956, p. 18), it becomes clear that any given system can be further subdivided into subsystems. Then immediately arises a question of how to delineate the boundaries among subsystems so as to maximize within-system similarity and minimize it between systems: what are the criteria of differentiating one subsystem from the others? Since my main research goal is to unfold conflict-cooperation patterns in Asia, the prerequisite task is finding out what "Asia" is. Is Asia a region embracing a number of nations which constitute a subsystem?[1] To probe this question, a "region" must be defined.

Many students of international relations and comparative politics have tried to establish some criteria of a region, either by empirical findings or by some educated hunch. One popular attempt has been to identify an area isolated from another by natural barriers, while others emphasized the relative homogeneity in physiographic terms: "any portion of the earth's surface whose physical characteristics are similar" (Vance, 1951, p. 123). Further pursuing the latter point, Odum and Moore maintained that a region is a composite of "a relatively large degree of homogeneity measured

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[1] It is worth noting that Michael Brecher conceives a region as purely geographic. He contends that a subsystem is a political as well as a geographic concept and, therefore, the region is a necessary but not a sufficient condition for a subsystem (1963, p. 220). In the present study, however, a region and a subsystem are considered as interchangeable terms.

by a relatively large number of purposes or classifications. This means it must comprehend both natural factors and the social factors" (Odum and Moore, 1938, p. 30). Based upon a framework of systems analysis, Brecher set six criteria for a subsystem: the delimitation of scope, existence of at least three actors, recognition by others as constituting a distinctive community, self-identifications, the units of power being relatively inferior to those in Dominant System, and changes in the Dominant System having greater effect on subsystem than the reverse (Brecher, 1963).

From above, it becomes obvious that "regionalism is not one thing, but many things" (Wirth, 1951, p. 392). Depending upon the perspectives of individual researchers, several different definitions and criteria may develop. Dissatisfied with the proliferation of definitions, some students ventured to establish the criteria of a region by empirical findings employing multivariate analysis.

In his original study, Raymond Cattel (1949) factor analyzed 72 widely chosen variables gathered for 69 different countries extracting 12 dimensions of national syntality. He then devised an index of pattern similarity to find the clustering of nations (1950). His findings did not reveal any tight clustering of so called Asian countries. What he called an "oriental pattern," for instance, had only three nations in it: India, China, and Tibet. The rest of the Asian countries were spread over several other groupings.

R.J. Rummel (1970a) found 9 groups based upon a similarity measure between nations. He first calculated Euclidian distances between nations in a 14 dimensional space derived from a 236 variable factor analysis on data gathered for 82 nations in 1955. Then he scaled these distances so that they varied from zero to unity: zero standing for complete dissimilarity, unity for perfect similarity. His 9 groups were generated from a direct factor analysis of the similarity matrix. Again, none of his groups could be labelled as Asian.

Recently Phillip Gregg and Arthur Banks (1965) performed a Q-factor analysis of 68 political variables based upon the Cross-Polity Survey (Banks and Textor, 1963). They found five groupings which they named as "polyarchic," "centrist," "elitist," "personalist," and "traditional." Among these five, no single factor could represent Asian states, implying that Asian countries do not share political similarities: the "centrist" factor, for example, has Afghanistan, Czechoslovakia, and Spain.

Deeply concerned with the failure of several attempts to find regions on one composite criterion, Bruce Russett (1967a) pioneered with a multicriteria approach. He tried to delineate international regions on five different criteria, to compare their congruence, and to compare shifts over time in regions as defined by the same criterion. Five characteristics upon which he found regions were: (1) social

and cultural homogeneity, (2) similar political attitudes or external behaviors as appeared in UN voting (3) common institutional membership, (4) economic interdependence, and (5) geographical proximity (Russett, 1967a, p. 11). Russett used Q-factor analysis as well as a direct factor analysis technique. After a comprehensive discussion on each of his five criterion, he remarked on Asia:

> Aside from the boundary problem, there is not even any major Asian cluster that simply can meet the demand of inclusion in the same group over all five criteria. Seven states cluster together on at least four: socio-cultural similarity, trade, international organization membership, and proximity. They differ greatly, however, in their orientations in international politics (1967a, p. 179).

These seven countries are India, Malaysia, Thailand, Burma, Ceylon, Indonesia, and Pakistan. It is very interesting to note that these states all belong to Brecher's "south Asia" (1963) somehow supporting his notion that Southern Asia is the only region that can be considered a subsystem according to his six criteria.

The studies cited so far have revealed that Asia, as a whole, hardly constitutes a subsystem by any criterion other than the conventional geographic concept. Therefore, in order to make generalizations about the patterns of conflict and cooperation in Asia, it is necessary to uncover the clustering of Asian countries in terms of their collaboration. For this purpose it is both unnecessary and meaningless to delimit the boundary of Asia to any substantive

criterion such as socio-cultural homogeneity. In this regard, I selected 19 countries solely based upon geographic consideration. The nations and their codes to be used in the present study are presented in Table 2-1.[2]

TABLE 2-1. 19 ASIAN NATIONS AND THEIR CODES

	Nations	Codes
1.	Afghanistan	AFG
2.	Burma	BUR
3.	Cambodia	CAM
4.	Ceylon	CEY
5.	China (mainland)	CHN
6.	Taiwan	CHT
7.	India	IND
8.	Indonesia	INS
9.	Japan	JAP
10.	North Korea	KON
11.	South Korea	KOS
12.	Laos	LAO
13.	Nepal	NEP
14.	Outer Mongolia	OUT
15.	Pakistan	PAK
16.	Philippines	PHI
17.	Thailand	TAI
18.	North Vietnam	VTN
19.	South Vietnam	VTS

[2] Malaysia is excluded because she was not an independent state in 1955. The Federation of Malaya agreement was signed on August 5, 1957 and on August 31 she became independent.

CHAPTER III

FIELD THEORY IN INTERNATIONAL RELATIONS

The prime objective of the proposed study is to predict conflict and cooperative behavior of Asian dyads from various attribute distances. This is entirely within the framework of field theory which postulates that behavior is the consequence of a field consisting of social characteristics, or attributes at a given point of time.[1] Before locating field theory in the study of international relations, a brief review of analytic models currently employed in political science is provided.

Analytic Models

A scientific inquiry is a process of incessant interplay between analytic and synthetic systems. An analytic system is a system of undefined symbols, interrelations among symbols, axioms, and theorems, all interwoven by logical connections. Whether it be verbal or mathematical,

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[1] There is a strong opposition to this field theoretical analysis of the Asian behavioral system. Being in a transitional stage of socio-economic development, it is argued, Asian political system is more susceptible to the personality factors of their decision makers than their Western counterparts. In other words, the personality characteristics of political leaders are viewed as a stronger determinant of foreign policy than general social characteristics (Levi, 1968; Gordon, 1966). At this stage of knowledge, however, it is hard to say which of the two approaches is more useful. Furthermore, they are not mutually exclusive, but may be complementary. As long as logical consistency is maintained in theory building and empirical predictability is established, any theory may find its place in science.

an analytic system is content-free, absolutely true, and independent of any empirical interpretations. On the contrary, a synthetic system is a system of perceived empirical phenomena. Whether a researcher starts with explicit theories or some vague ideas, an ideal process of empirical science involves four stages: (1) observation of empirical facts; (2) pinning these facts to some symbols of an analytic system; (3) going through deductions in the system to produce generalizations; and (4) further testing the generalizations with empirical phenomena. What makes an analytic system so important in science is its power of generating true deductions given prior true premises.

Accepting the commonplace notion that the study of international relations has been undergoing a scientific revolution, we can divide the analytic systems so far employed in the field into two: logical and mathematical. Logical analyses within the traditional approach have prevailed for a long period in the study of international relations. The works of Liska (1957), Modelski (1962), Kaplan (1964), Burton (1965), and Haas (1964) belong to this group. Most of these can hardly be considered rigorously theoretical, however, because the validity cannot be established through empirical tests and the reliability of findings, if any, cannot be evaluated. Perhaps the only logical theoretical model explicitly organized with rigor and specification is the theory of rank disequilibrium

(Galtung, 1964; Heintz, 1968).

During the past decade constant effort has been made to replace verbal ideas by rigorous theories using numerical analytic systems. This trend toward quantification can be divided into two categories. The descriptive and inferential statistics form one branch, while model building based upon mathematics establishes another genre. This classification does not rule out the possibility that the model builders use statistical tools. In fact, almost all model builders resort to statistics for empirical tests.

The most typical use of descriptive statistics has been the single index approach. North, Holsti, and Brody (1967), Singer and Small (1967), Tanter and Midlarsky (1967), McClelland (1967), and numerous other scholars have attempted to represent a concept by a single variable and describe its distribution or its change over time. As far as inferential statistics are concerned, there are too many works to be cited here. Any work which tries to infer to some population using classical significance test falls into this category.

Among the various mathematical models applied, those which have had considerable impact and acknowledgement in the study of international relations are (1) classical calculus models, (2) probability models, and (3) linear algebraic models.

The calculus models have been employed by Richardson (1960a), Smoker (1965), McGuire (1965), etc. Based upon the

notion of traditional Cartesian space, rate of change was the main focus of the bivariate relationships.

Probability models have not been frequently used in international relations. Horvath (1963; 1967), Weiss (1963; 1966), and Richardson (1960b) are a few who studied probability distribution of violent conflicts. Though seldom applied to international relations per se, Riker's coalition model (1962) has a great potentiality for application in the field.

Among many possible uses of linear algebraic models,[2] the most widely employed is the factor analytic model. Considering the variables as vectors in a multidimensional space, this approach attempts to delineate the interrelationship between these vectors and to find a linearly independent set of vectors (basis) upon which all the vectors in the space are dependent. The works of Rummel (1963), Alker (1964), Russett (1967a), Tanter (1966), Cattell (1949), and Gregg and Banks (1965) belong to this class.

One of the recent developments in linear algebraic models is field theory, which relates vectors in a nation behavior space to distances between nations in an attribute space. Now let us turn to the discussion of its assumptions and deductions.

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[2] Some examples of the application of graph theory are Brams (1968) and Harary (1961).

Field Theory

Fourteen years ago Quincy Wright (1955) introduced the field concept as an organizing scheme in the study of international relations. Wright's formulation was largely based on the works of Kurt Lewin (1951), Talcott Parsons (1951), and L.L. Thurstone (1935). He viewed international relations as a composite of geographic and analytic fields, and further specified that the relations between social units in the field are determined and predicted by the internal characteristics of these units or entities.

Ten years after Wright's verbal formulation of the concept, R.J. Rummel mathematized "a social field theory" which in essence postulates that the behavior of social units towards each other is a result of their differences and similarities in attributes (1965a; 1965b; 1969). A social field is conceived as a magnetic field, force field, or gravitational field. The differences and similarities in attributes form social forces within this field of social reality. When social reality is defined as international relations and social units as nations, then international relations can be represented within the analytic structure of field theory and the linkage between nation behavior and attributes can be delineated.

Leaving the detailed discussion on concepts and mathematization of the theory to Rummel's own works (1965a; 1969), seven axioms of the theory are given here with a

brief review.

1. International relations is a field consisting of all the attributes and interactions of nations and their complex interrelationships. An attribute is any descriptive concept differentiating one nation from another such as energy consumption per capita, political orientation, and religious diversity. Interaction is assumed to be any behavioral act which couples two nations together, like threats from South to North Korea and exports from Taiwan to Japan. Consequently, dyadic behavior is not necessarily symmetrical. In other words, the dyadic behavior of Communist China to India is not necessarily equal to that of India to China. Pertinent to this notion is Galtung's (1964) conception of topdog and underdog phenomena prevalent in international relations.

2. The international field can be analytically divided into attribute, A, and behavior, B, spaces into which attributes and interactions are projected, respectively, as vectors. Since A and B are vector spaces of real numbers, a number of linear algebraic concepts (e.g., dimension, basis, linearity, dependence) can be drawn upon for theory construction. Furthermore, this axiom provides a range of analytic tools for the empirical validation of theory, since such multivariate techniques as factor analysis, multiple regression, and canonical analysis have developed through linear algebra.

3. The attribute and behavior spaces are generated by a finite set of linear independent dimensions. This axiom enables reduction of nation variation along potentially an infinite number of attributes and behavior to a smaller number of dimensions without losing important information.

4. Nations are located as vectors in attribute space and coupled into dyads in behavior space. Nations in A-space and dyads in B-space are portrayed as vectors emerging from the origins of the space. The variation in both spaces associated with each nation or dyad is measured by the direction and length of these vectors.

5. The distance vectors in A-space that connect nations are social forces determining the location of dyads in B-space. This axiom postulates the fundamental linkage equation between attributes and behavior:

$$w_{i\to j,k} = \sum_{\ell=1}^{p} \alpha_\ell d_{i-j,\ell} \qquad (3\text{-}1)$$

where w_k is the kth dimension of B-space, $i\to j$ is a particular dyad with nation i acting toward nation j, $d_{i-j,\ell}$ is the distance vector between nations i and j on ℓth dimension in A-space. Distance is measured on one dimension and is the difference in values. Thus international behavior is seen as a consequence of differences between nations on their attributes.

6. The direction and velocity of movement over time of a dyad in B-space is along the resolution vector of the

forces, d. While the fifth axiom defines a linkage between A and B at a point in time, this axiom stipulates the dynamics of the linkage.[3]

7. B-space is a subspace of A-space. This axiom provides a one-way linkage between the two spaces, since any dyadic behavior could become an attribute by aggregating for each actor but not all attribute dimensions represent interaction between two nations. Obviously G.N.P. per capita is hardly a behavior of one nation against another. This axiom links the two spaces, while axiom 5 links a dyadic behavior dimension to nation attributes.

The fundamental linkage equation (3-1) implies that the distances between nations are general forces similarly effecting the behavior of nations. In other words, all nations are equally effected by the configuration of forces. Unique cultures, structures, and capacities within each nation are assumed to be irrelevant. This equation was named "Model I" by Rummel. Rummel also developed an alternative model ("Model II") which states that differences in attributes are general forces, but their impact on the behavior of each nation is modified by forces inherent in each nation such as

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[3] There is some argument on the utility of this axiom. McCormick (1969) entirely revised this axiom: the rate of change in behavior of one nation to another is a linear function of the rates of changes of d for each attribute dimension. Since the present report is not concerned with the dynamics of linkage between behavior and attributes, axiom 6 need not be troublesome here.

their unique domestic policy environments. Model II could be represented in equation (3-2) in which the weights α vary by actor i.

$$\ddot{w}_{i\to j,k} = \sum_{\ell=1}^{p} \alpha_{i\ell} d_{i-j,\ell} \qquad (3\text{-}2)$$

Model II assumes that the forces within each nation are held consistent across all object nation. Model II appears to be intuitively pleasing, but there is one problem with it. Model II could be called a version of attribute theory (Nils Petter Gleditsch, 1969). This theory states that the behavior of a nation is linearly dependent upon the attributes of the object nation, which is,

$$w_{i\to j,k} = \sum_{\ell=1}^{p} \beta_{i\ell} S_{j\ell}, \qquad (3\text{-}3)$$

where S_j is the attribute of the object. It is obvious that equations (3-2) and (3-3) will yield the same results for any data on the variation in behavior of a specific nation. For research reported here, Model I is employed leaving Model II as a future possibility.

CHAPTER IV

MODELS TO BE TESTED

The present research is based on the field theory that behavior is a resultant of attribute distances. This postulation does not exclude non-distance type attributes as predictors of behavior, however. Any relation type attribute linking two nations can be treated the same way as distance type attributes, as long as it appears to be substantively important in predicting dyadic behavior. In this report, two relational attributes are included along with a number of distance type attributes. From geo-politics two concepts are introduced: the propensity of two nations to interact, and their capability of spanning the geographical distance between them. According to Boulding, "the strength of a nation diminishes with increasing distance from home base" (1962, p. 272). Furthermore, Wright suggested that "national boundaries produce two classes of obstacles toward a shrinking world: those operating within each of the states and those operating among states" (1955, p. 541).

Two models are designed for test: one is what I call an "Interaction Model" and the other is a "Net-Conflict Model." The former attempts to predict the total configuration of interaction between two nations, while the latter is particularly aimed at predicting dyadic conflict.

Interaction Model

Behavior between two nations appears to be some mixture of conflict and cooperation. Therefore, studying conflict

or cooperation separately doesn't seem to be intuitively pleasing. In overall relationships between two nations, dichotomous cases of pure conflict, with no cooperative aspects, are indeed rare.

Let us assume that conflict and cooperation occupy the major portion of dyadic interactions. Then, based upon classical geo-politics, we can establish a model of interactions:

$$(CF + CP)_{i \to j} = a + b_1 \, t \, \frac{P_i + P_j}{D_{i-j}} + b_2 \, t \, \frac{P_i}{P_i + P_j} \qquad (4\text{-}1)$$

where i is an actor nation, j is an object nation, CF is conflict behavior, CP is cooperative behavior, t is time since last change of systemic relationship between two nations, P is power capability of a nation, and D_{i-j} is geographic distance between two nation. This equation postulates that the total amount of conflict and cooperative action taken by nation i toward j is a function of

$t \, \frac{P_i + P_j}{D_{i-j}}$ and $t \, \frac{P_i}{P_i + P_j}$. $\frac{P_i + P_j}{D_{i-j}}$ measures the potentiality that two nations will interact. The greater the numerator (joint power of i and j), the more ability each nation has to contact the other. The denominator D_{i-j} is the geographic distance that two nations have to span for interaction.

$\frac{P_i}{P_i + P_j}$ is the power of nation i relative to joint power. If P_i is greater than P_j, then the amount of action to be

taken by i toward j is assumed to be greater than j toward i. This is concomitant with the notion that the behavior between two nations is, in general, asymmetric.

How is time, t, related to this model? Time is brought in as a probability measure of the likelihood of a trigger event occurring. This concept of time was originally developed by Rummel to test his foreign conflict models.[1] He argued that a conflict situation is a necessary condition for conflict behavior but not sufficient. In other words, not all conflict situations lead to some kind of overt conflict behavior. Only in those conflict situations involving power parity and experiencing some trigger event will conflict behavior be generated.

To operationalize this trigger function, Rummel analogized from the law of gases, $P = \frac{T}{V}$, where P denotes pressure, T temperature, and V volume. Imagine a sealed flask with hydrogen in it. When this flask is placed on an alcohol lamp with constant temperature, the hydrogen molecules will increase their random movement and their random hitting against the side of the container. As time goes on, the temperature within the container will go up and this movement of molecules will become more and more active. After reaching the point of maximum containability, the

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[1] For more discussion on conflict behavior, conflict situation, and latent conflict as developed by Rummel, see infra p. 27 ff.

flask will burst. Even though the molecular movement is random, the pressure in the container can be represented as some function of time and temperature. From this phenomenon of gas, the analogy is drawn for the role of time in conflict. Given constant distances on attributes (i.e., temperature of the lamp) and the random movement of infinitely many possible triggers (i.e., hydrogen molecules), the likelihood of occurrence of a trigger event (i.e., pressure generated by molecules hitting on the container) may be measured as a function of time. Once distances on attribute dimensions are given, a trigger event is more likely to occur, the more time that has elapsed. Rummel, therefore, measured the time since the last change of systemic relationship between two nations. The role of time in his model was multiplicative to the conflict situation.

In this study, however, the time since the last change of systemic relationship is treated as a probability measure of the likelihood of a trigger occurring for both conflict and cooperation. Depending upon the initial configuration of distances, time can be hypothesized to work toward either conflict or cooperation. If the last change of systemic relationship (say, a peace treaty) had narrowed major distances between two nations, then time can be considered a measure of likelihood of some cooperative event occurring. The relationship among the probability of a trigger for some international event, time, and attribute distances is

illustrated in Figure 4-1 and Figure 4-2. Figure 4-1 represents a probability surface, while Figure 4-2 shows a vertical slice of that surface. In other words, Figure 4-2 represents the relationship between the probability of a trigger and distance when a particular value is selected for time. As can be seen from this figure, a hypothetical probability curve would take a shape of a parabola: the shaded area on the left of the mid-point stands for the likelihood of cooperation, whereas the shaded area on the right-hand side represents the likelihood of conflict.

Net-Conflict Model

In his current development of the field theory of foreign conflict behavior Rummel established three stages; namely, latent conflict, conflict situation, and overt conflict behavior.[2]

Latent conflict is viewed as a function of value distances, political distance, and rank distance between two nations. "The existence of mutually incompatible or contradictory goals or values" (Rummel, 1965b) is hypothesized to measure the potentiality of conflict behavior. As far as rank disequilibrium is concerned, Rummel states:

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[2] This line of research is being undertaken by the Dimensionality of Nations Project (University of Hawaii). Some preliminary analyses revealed quite promising results.

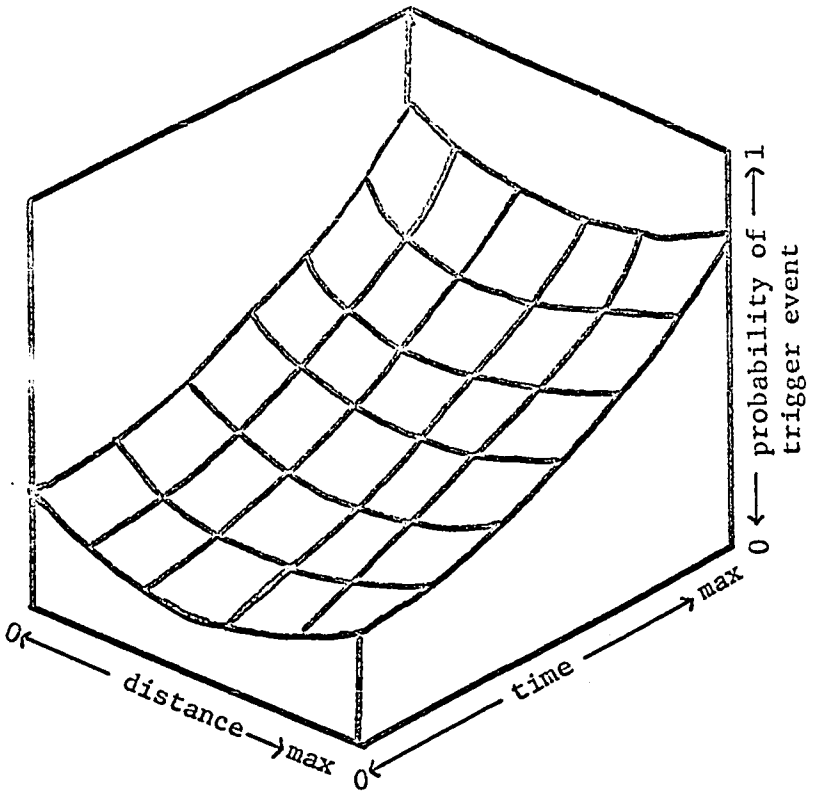


FIGURE 4-1 - PROBABILITY OF TRIGGER (1)

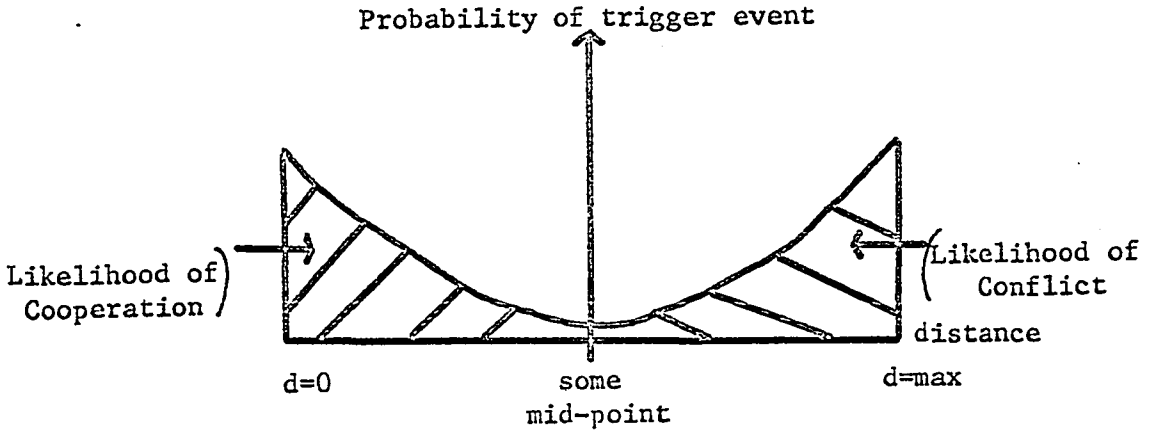


FIGURE 4-2 - PROBABILITY OF TRIGGER (2)

> Following Galtung (1964), with some revisions, it will be hypothesized that the difference in social rank between nations creates a strain, a disharmony, between them. Nations which have attained a high rank position on one or more of these attributes wish to maintain their position against those who have not. Moreover, there is a rank disequilibrium encouraging tension between those nations differentially high on the three attributes (economic development, power, and prestige). For the U.S., for example, to be high on economic development, power, and prestige while the U.S.S.R. is high only on power orients these two nations differentially towards the international order permitting and sanctioning this allocation of rank positions (1965, p. 134).

Thus the model of latent conflict is formulated as:

$$CL = a + b_1V + b_2Po + b_3R \qquad (4\text{-}2)$$

where CL = latent conflict
V = value distances
Po = political distances
R = rank distances.

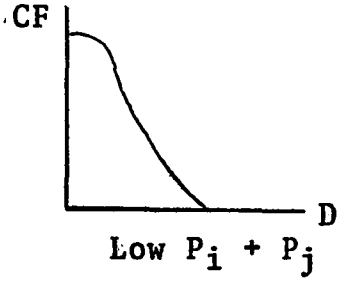
Conflict situations are a function of latent conflict plus the possibility of interaction between two nations. If two nations are not powerful enough to span geographic distance between them, there will be no contact. Chile and South Korea give a good example of little interaction due to geographic barriers, while the United States and South Korea have shown considerable interaction thanks to the capability of the United States to overcome the geographic distance. Thus conflict situation is hypothesized as:

$$CS = a + b_1 CL + b_2 G \qquad (4\text{-}3)$$

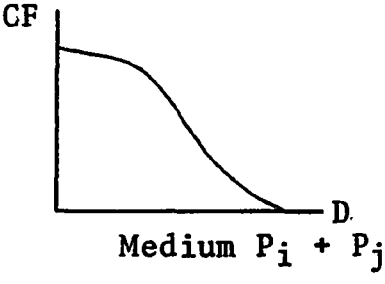
where CS = conflict situation
$G = a - b_1 D + b_2 D(P_i + P_j)$[3]
D = geographic distance
P = power capability.

---

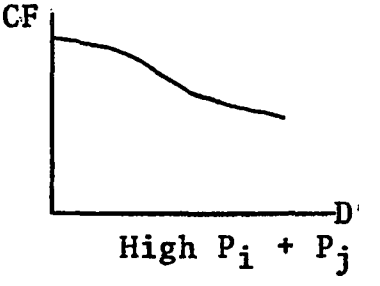
[3] The propensity of two nations to interact and, therefore, to get involved in conflict situation is shown as a function of geographic distance and joint power. To reach the specific formulation of $G = a - b_1D + b_2D (P_i + P_j)$, Rummel hypothesized several relationships among the propensity for conflict (CF), geographic distance (D), and joint power $(P_i + P_j)$. Three figures, given below, present the hypothesized relationships between CF and D for low level of $P_i + P_j$, medium, and high $P_i + P_j$.



Low $P_i + P_j$



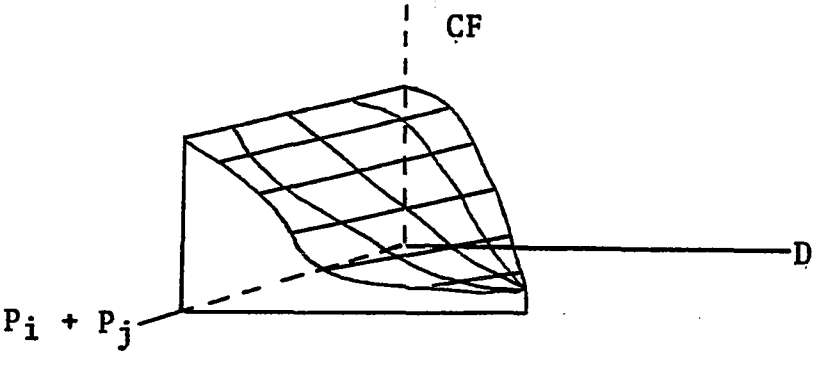
Medium $P_i + P_j$



High $P_i + P_j$

For low, $P_i + P_j$, the curve shows a markedly decreasing slope, and moderate decline for medium $P_i + P_j$. For high $P_i + P_j$, however the curve has a slow slope and does not meet D axis. This means that when two nations are high on $P_i + P_j$, D has virtually no effect on CF. In all three diagrams the curves start from some point on CF axis implying that geographical contiguity is associated with high propensity for conflict.

When these graphs are joined together in a three dimensional space, the propensity for conflict is seen to form a warped surface (shaded area in the diagram given below).



Finally, conflict behavior is seen as a function of the interaction between the conflict situation and time, plus power parity--absolute value of power distance. Power parity measures the deterrence relationship between two nations (this is, of course, a hypothesis to be tested). If nation i is considerably more powerful than j, j is less likely to initiate a conflict with i because of the deterrence capability of i. Nation i is also unlikely to resort to conflict with j, knowing that its demand may be achieved by means other than violence. There is a zone of near equality of power for two nations, however, in which conflict potential may become actual. This might occur when either nation calculates its power as being sufficient enough to overcome that of the other. Conflict behavior, CB, is hypothesized as,

$$CB = a + b_1 CS + b_2 t CS - b_3 ((Pi - Pj)^2)^{\frac{1}{2}} \qquad (4\text{-}3)$$

where t stands for the time since last change of systemic relationship. This is the equation that has been tested by Rummel for the global system. Dealing with samples of dyads,

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Then what is the mathematical function connecting CF, D, and $P_i + P_j$ holding other things constant? Based upon the logic that the slope of CF with regard to D changes as a function of $P_i + P_j$, the function is found as following:

$$\begin{aligned} CF &= f\,(\,(P_i + P_j\,),\, D) \\ &= a + D(b_1\,(P_i + P_j) - b_2) \text{ where } (b_1\,(P_i + P_j) - b_2) \\ &\quad \text{is the slope} \\ &= a + b_1\, D(P_i + P_j) - b_2\, D \end{aligned}$$

he found that about twenty per cent of variation in conflict behavior could be accounted for by this model.

In the present research, however, the primary goal is to predict the differential between conflict and cooperative behavior. In order to uncover the effect of attribute distances on hostile behavior between two nations, it seems appropriate to control for the element of cooperative behavior from the total interaction. This notion is based upon the given assumption that most interactions between two nations are some mixture of both conflict and cooperation. Selecting the differential between conflict and cooperation (CF - CP) as a dependent variable thus requires a departure from Rummel's three stage development. Two catalytic elements which theoretically convert latent conflict and a conflict situation into conflict behavior are the propensity of two nations to interact and time as a probability measure of trigger event occurring. Both elements are dropped since they are assumed to function similarly in both conflict and cooperation. Thus it is hypothesized that (CF - CP) between two nations is some function of distances on value (V), political (Po), and rank (R) variables, plus power parity. This formulation, therefore, is different from Rummel's conflict behavior model as the geographic distance, joint power, and time are not included. Thus, the Net-Conflict Model to be tested is:

$$(CF - CP)_{i \to j} = a + b_1 V + b_2 Po + b_3 R + b_4 ((P_i - P_j)^2)^{\frac{1}{2}} \quad (4\text{-}4)$$

Net-Cooperation Index

Just as the net-conflict behavior model has more theoretical import than a measure of gross conflict, the net-cooperative behavior of nation i directed toward nation j contains more useful information in delineating sub-regional groupings. This measure appears to indicate the degree of empathy that nation i bears toward j. Summing this measure across two dyads generated by the same members (dyad i→j and j→i) would yield an index of total empathy or magnetic force operating between two nations. This summed score is what I call "Net-Cooperation Index," which is:

$$(CP - CF)_{i-j} = (CP - CF)_{i \to j} + (CP - CF)_{j \to i} \qquad (4\text{-}5)$$

In this report, the clustering of Asian nations is delineated based upon this Net-Cooperation Index. Appendix III gives the matrices of this Index for 1955 and 1963.

CHAPTER V

DATA, OPERATIONALIZATION, AND ANALYSIS DESIGN

The Population

The unit of analysis is a directional dyad i→j, where the arrow means I am measuring the behavior of nation i to j. Each variable is measured for both i→j and j→i. Nineteen nations included in this study thus generate n(n-1) directional dyads totaling 342. Data were collected for these 342 dyads for 1955 and 1963, mostly from the data bank of the Dimensionality of Nations (DON) Project. The data matrices look like the ones given in Figure 5-1.

Variables

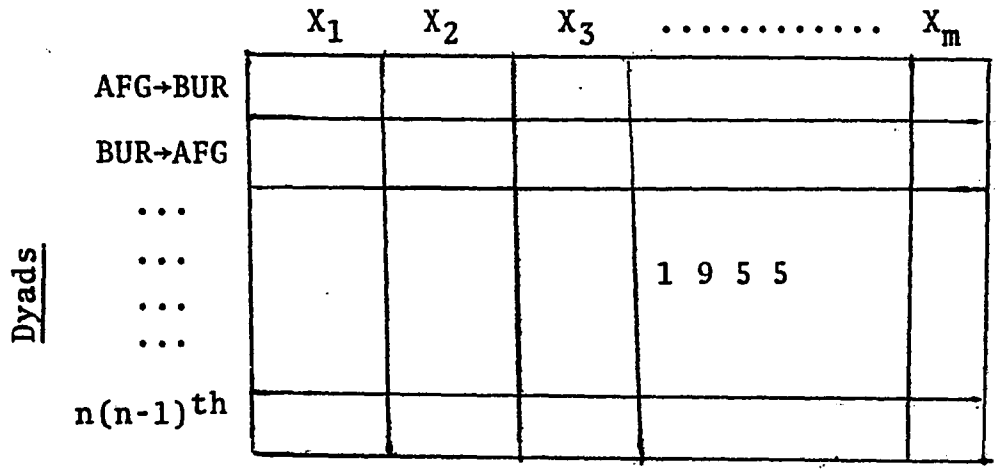

FIGURE 5-1 DATA MATRICES (a)

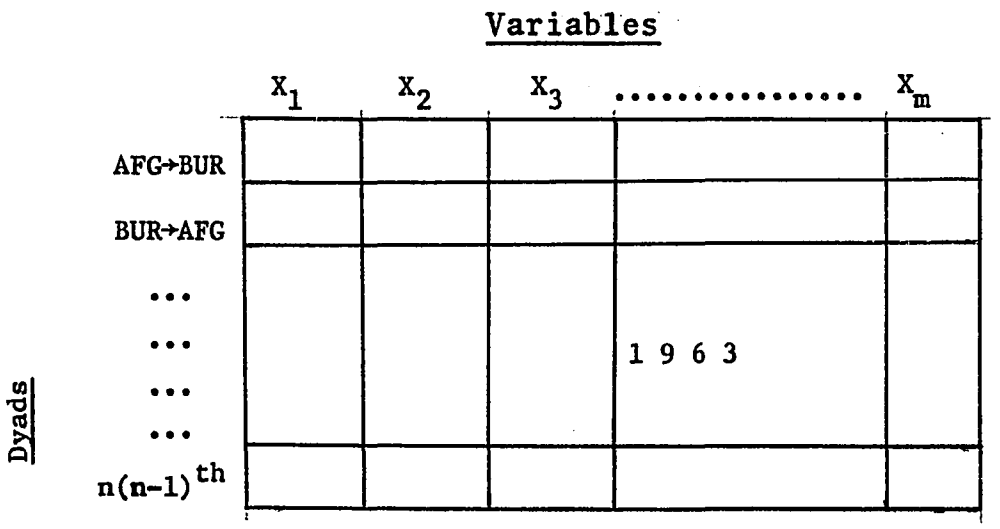

FIGURE 5-1. DATA MATRICES (b)

Operational Definitions

The most delicate portion of any empirical research is the operationalization of theoretical concepts. Since there are too many (or too little) available indicators and too many levels of aggregation, the researcher is often uncertain of what he is indexing and what he is not measuring. At this initial stage of rigorous theory building in international relations, there are two important criteria in selecting operational measures: relevance to theory building and existence of previous empirical work on similar concepts. In terms of the latter criterion, there has been an extensive effort to discover a set of uncorrelated indicators to span the major characteristics of nations (Rummel, 1970a). Factor analyses of several hundred variables and comparisons with similar analyses done by others have delineated seventeen independent dimensions in nation attributes and dyadic

behavior. In the present report, these dimensions and variables highly loaded on them are given a careful consideration in selecting indicators.

There are two points of consideration to be made clear before discussing operational measures. One is the difficulty with factor scores and the other is the rationale for standardizing variables.

Rather than use Rummel's factor scores on his dimensions, specific variables are selected to represent dimensions for two reasons. (1) My research interest is more in the Asian behavioral system per se than in the Asian system in relation to the entire global system. Rummel's factor scores were calculated from a global point of view and, therefore, his scores for Asian countries are "influenced" by those for the rest of the world. This does not mean, however, that Rummel's scores are not useful at all. Utility must be measured vis-à-vis purposes. All I am arguing is that Rummel's factor scores are less appropriate for the purpose of this report which is aimed at uncovering Asia as it is than the specific variables.[1] This is but one point of view. One can argue, of course, that Asia could be studied only in terms of its

---

[1] There is one problem, however. If the structure found in the global analysis is greatly different from that in the Asian system, Rummel's dimensions would not yield reliable guidelines in selecting indicators for Asian system. Preliminary analysis performed to check this problem fortunately reveals that the factor structure in Asia is similar to the global one, even though the specific factor scores are not similar.

relative position in the global system. There is no saying which of the two approaches has more predictive power. Consequently, the second approach will be tried in future research for the purpose of comparison. (2) The second point has to do with the substantive meaning attached to factor scores. Factor scores for any nation or dyad are a linear combination of several standardized variables. Therefore, the positive end of a dimension may represent a characteristic quite different from that reflected by the negative end, even though two characteristics have high negative correlations. Imagine a behavior dimension which has a high positive correlation with mail flow and a high negative correlation with tourists. If one dyad has a high positive score, then we would interpret it as high on mail flow. If the next dyad has a high negative score, then we may hastily assume low mail flow for it. But this negative score may in effect be due to the high tourists.

With regard to the standardization of variables, it follows from a philosophical tenet of field theory that "it is the relative and not absolute magnitudes of nations or dyads that are important for understanding the linkage between attribute and behavior" (Rummel, 1969, p. 12). This tenet requires standardization of variables to means of zero and variances of unity for the purpose of testing our models with field theoretical implications.

Independent Variables. There are three major concepts which need some elaboration--usually called "lower-level theories": rank distance, political distance, and value distance. Rank dimensions upon which nations view each other could be divided into three categories: wealth, power, and prestige (Lagos, 1963). Among these, prestige is subsumed under power, thus leaving wealth and power as two major components. Wealth is conceived as reflecting economic development, while power is viewed from the standpoint of capability.

Political distance is operationalized on two categories: function and structure. On the functional side, the freedom of group opposition is selected. To represent structural aspects, bloc politics and intranational governmental structure are chosen. In order to measure such governmental structure attributes which would affect conflict and cooperation between nations, three variables are introduced from Fred Riggs' tonic system (1967; 1968): whether the constituency has power or not; whether bureaucracy is compensatory or not; and whether the executive is accountable or not.

The most controversial concept is value, which has many different definitions. In this study the research goal is more on the mapping of attribute and behavior than the specific hypotheses with regard to the role of value. Therefore, value is very broadly conceived to represent anything

seemingly related to belief systems. For this purpose religious, ethnic, and linguistic differences and similarities are selected as well as measures of diversity and population density. The last two are included not only to cover major dimensions found in Rummel's analysis, but also to test the common sense notions that heterogeneity and density have a strong impact on personality formation (though the specific nature of impact is not quite well-known).

With the aforementioned considerations, nineteen operational measures of nation attribute distances are selected to form the independent (predictor) space. They are:

1. Economic development distance. Difference in energy consumption per capita which includes solid fuels, liquid fuels, natural and imported gas, and hydro and imported electricity. (Unit = kilograms of coal equivalents.) Source: World Energy Supplies.

2. Population/physician distance. This is a measure of economic development complementary to the energy consumption per capita distance, since fuel consumption may not properly represent the level of wealth in sub-tropical South and South-East Asia. Source: The Worldmark Encyclopedia of the Nations.

3. Power capability distance. Difference in the product of energy production times population. Energy production includes the primary sources of energy such as coal and lignite, crude petroleum, natural gas and hydroelectricity. Source: World Energy Supplies.

4. Freedom of group opposition distance. Difference in freedom of group opposition rated as: 0 = political opposition not permitted--groups not allowed to organize for political action (e.g., interest groups, political parties); 1 = restricted political opposition allowed--groups free to organize in politics, but oppositional role limited and they may not campaign for control of government; 2 = political opposition mostly unrestricted--groups can organize for political action and may campaign for control of government. Sources consulted: Statesman's Yearbook; The Worldmark

Encyclopedia; Political Handbook and Atlas of the World.

5. Bloc distance. Difference in bloc membership rated as: 0 = Communist bloc membership, 1 = neutral bloc, 2 = Western bloc. Communist and Western bloc membership is determined by military treaties or alliances with the Soviet Union or the United States. The neutral bloc is a residual category in which nations are categorized if they have no military treaties or alliances with either of the aforementioned bloc leaders. Source consulted: Statesman's Yearbook.

6. Constitutive system distance. Difference on a dichotomous scale with rating: 0 = constitutive system is not in operation; 1 = constitutive system is functioning. Riggs defined a constitutive system as "a poliarchy of offices including an elected assembly, electoral system, and one or more parties" (1968). Coding was done by Riggs and his students. Source: Riggs (1968).

7. Compensated bureaucracy distance. Difference on a dichotomous scale with rating: 0 = compensated bureaucracy is not in operation; 1 = compensated bureaucracy is in operation. Compensated bureaucracy is that in which first level positions (e.g., heads of ministries and cabinet members) are predominantly filled by outsiders, third level posts (e.g., heads of departments within a ministry) by insiders. Outsiders are bureaucrats whose appointment is based on influences generated within the constitutive system, being less than 10 years in the bureaucracy. Insiders are bureaucrats whose promotion has been on a career basis, including at least 10 years in the bureaucracy. Source: Riggs (1968).

8. Executive accountability distance. Difference on a dichotomous scale with rating: 0 = non-accountable executives mostly in the form of hereditary monarchs, or internal selection for proclaimed life time ruling, or 10 or more years of office holding; 1 = accountable executives. Source: Riggs (1968).

9. Buddhist distance. Difference in the percentage of Buddhists in the population of each nation. Source: The Worldmark Encyclopedia.

10. Protestant distance. Difference in the percentage of Protestants in the population of each nation. Source: The Worldmark Encyclopedia.

11. Mohammedan distance. Difference in the percentage of Mohammedans in the population of each nation. Source: The Worldmark Encyclopedia.

12. Catholic distance. Difference in the percentage of Catholics in the population of each nation. Source: The Worldmark Encyclopedia.

13. Religious group distance. Difference in the number of religious groups in each nation with membership of more than one percent of the population. Source: The Worldmark Encyclopedia.

14. Language group distance. Measured in the same way as variable No. 13 for language groups.

15. Ethnic group distance. Measured in the same way as variable No. 13 for ethnic groups.

16. Density distance. Difference in the population/national land area (in square kilometers).

17. Power parity. Absolute value of the power capability distance. (See variable No. 3) Source: UN Demographic Yearbook.

18. Time since last change of systemic relationship between two nations. The number of years since (a) last world war, (b) last political system change such as social revolution or coup, or (c) last dyadic war (large scale involving strategic maneuver), whichever comes last. These three are not exhaustive, but are selected for a heuristic purpose. Further development of theory is to be done.

19. Capital distance. Geographic distance is measured by air distance between the capitals of two nations.

The eighteenth (time) and nineteenth (capital distance) variables are not employed as independent variables by themselves. They are the components of two composite indices of equation (4-1): the interaction propensity ($t \frac{P_i + P_j}{D}$) and actor dominance ($t \frac{P_i}{P_i + P_j}$).

Dependent Variables. Essentially three sets of dependent variables are of concern: conflict behavior, cooperative behavior, and the differential between the two.

1. Conflict behavior. Data on the foreign conflict behavior between nations occurring in 1955 and 1963 and reported in daily issues of The New York Times have already been collected, using a foreign conflict code sheet (Rummel, 1966). Each hostile act was recorded as to actor, object, date, type of action involved, and descriptive information of the act. Data were collected according to six categories of foreign conflict behavior: warning and defensive acts, violent acts, negative behavior acts, negative communications, unofficial violence, and nonviolent demonstrations. These primary categories are further divided into approximately one hundred subcategories.

For 1955, 2,139 acts of foreign conflict involving 340 dyads in the world over 16 variables (those acts that occurred with sufficient frequency for analysis) were recorded. The year 1963 saw almost 3,000 conflict acts involving 275 dyads and 24 variables. To each data matrix (1955 and 1963) was added a "peace dyad" having all zero entries. Then each matrix was factor analyzed to a principal component solution with varimax rotation to generate five dimensions for each year (Rummel, 1967; Hall and Rummel, 1968). The five dimensions for 1955 are:

(1) military violence
(2) negative communications
(3) negative sanctions
(4) diplomatic conflict
(5) antiforeign demonstration.

The 1963 factors are labeled as:

(1) negative communications
(2) unofficial violence
(3) violence intensity
(4) warning and defensive acts
(5) negative sanctions.

For the present study, basic indicator variables of conflict were selected to best represent these dimensions based on two criteria: (1) high loading and (2) the frequency of conflict acts within Asia sufficient enough for analysis. For 1955 five variables were chosen:

(1) warning and defensive acts
(2) discrete military acts
(3) negative behavior acts
(4) negative communications
(5) attacks on embassy.

The 1963 data for Asia had no sufficient data (no variation) for warning and defensive acts and thus only four variables were selected:

(1) discrete military acts
(2) negative behavior acts
(3) negative communications
(4) unofficial violence.

2. Cooperative behavior. The DON data bank has recordings of numerous dyadic cooperative acts such as trade, legations, treaties, international organizations, etc. From these we can uncover factor structure in the same manner as we did on conflict behavior. Most unfortunately, however, not all this information is systematically organized and it would involve an enormous amount of time and effort to organize this data. Consequently, it is reasonable to put off this task for the future. For the purpose of present

study, a tentative solution is made by selecting six variables representing dimensions of several pilot analyses.

(1) Treaties
(2) Nongovernmental Organizations (NGO)
(3) Relative NGO's: the number of NGO's of which nation i and j are comembers divided by the total number of NGO's of which i is a member
(4) Exports
(5) Relative Exports: Export i→j/Total Export of i
(6) Diplomatic Representation: Embassy and Legation

These are the variables which were highly loaded on six dimensions out of twelve factors generated from a series of factor analyses of 1955 dyadic data on the global system.[2]

3. Differential between conflict and cooperation. As field theory dictates relativity, the following composite scores are calculated from the standardized indicators of conflict and cooperation. After all the variables are transformed to means of zero and variances of unity, these standard scores are summed within conflict and cooperation space separately to produce measures of CF and CP. Then (CF - CP), (CP - CF), and (CF + CP) are calculated based upon them.

The independent and dependent variables and their codes used in analysis are presented in Table 5-1. Attribute distances and dyadic behavior data are given in Appendix I, while Appendix II presents measures of attributes for each nation.

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[2] See DON 1955 Data Dyadic Summary Chart, #3, 1966 and Rummel (1969).

TABLE 5-1

VARIABLES AND THEIR CODES

Variables	Codes
Independent Space	
1. Economic development distance	ECONDD
2. Population/ physician distance	PHYSID
3. Power capability distance	POWERD
4. Freedom of group opposition distance	FMOP-D
5. Bloc distance	BLOC-D
6. Constitutive system distance	CONSTD
7. Compensated bureaucracy distance	BURCOD
8. Executive accountability distance	EXEACD
9. Buddhist distance	BUDD-D
10. Protestant distance	PROT-D
11. Mohammedan distance	MOHA-D
12. Catholic distance	CATH-D
13. Religious group distance	RELGRD
14. Language group distance	LANGRD
15. Ethnic group distance	ETHGRD
16. Density distance	DENSTD
17. Power parity	PARITY
18. Interaction propensity	INTACP
19. Actor dominance	ACTDOM
Dependent Space	
1. Warning and defensive acts	WARNDF
2. Discrete military acts	DISCMA
3. Negative behavior acts	NEGACT
4. Negative communications	NEGCOM
5. Attacks on embassy	ATKEMB
6. Unofficial violence	UNOFVL
7. Treaties	TREATY
8. Nongovernmental organizations	NGO
9. Relative NGO's	R-NGO
10. Exports	EXPORT
11. Relative exports	R-EXPO
12. Embassy and legations	EMBLEG

Analysis Design

Verification (or falsification) of theory must be based upon appropriate tests. In order to carry out empirical tests of the models, various multivariate techniques were employed. A flowchart of the analysis design is presented in Figure 5-2. Description of methods are given in the specific chapters where the results are presented. A brief note on the first two stages of design is in order.

Data Collection. Data on conflict, cooperation, time since last change of systemic relations, geographic distance and several dyadic distances on DON dimensions were collected and punched for 342 Asian dyads. There are two sets of data: one for 1955 and the other for 1963.

Transgeneration and Data Survey. After the data on the initial variables were prepared, transgeneration was performed to produce such complex variables as the propensity to interact modified by capability and geographic distance. As more than twenty variables were involved, a final check on the data was carried out through the data survey program which lists all the essential univariate statistics including outliers.

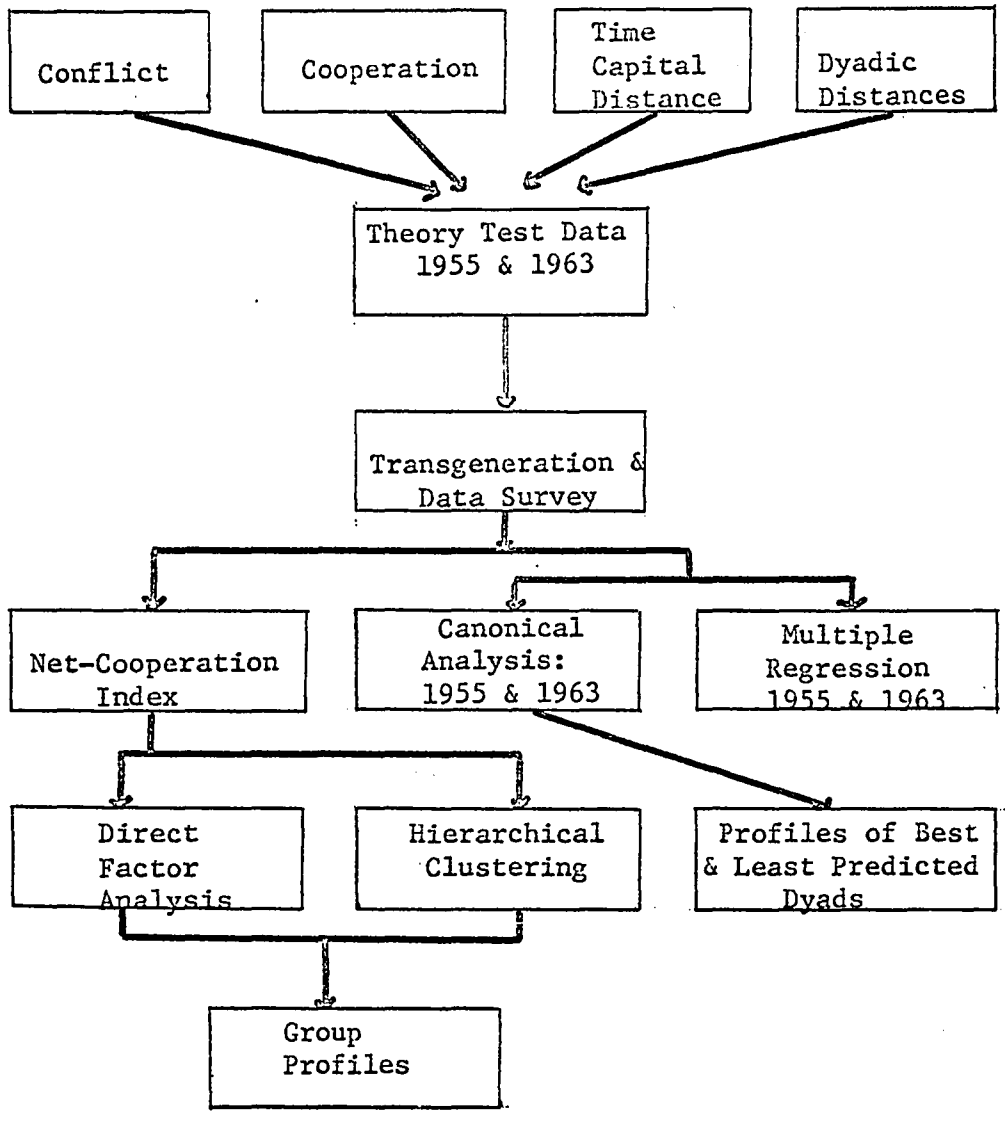

FIGURE 5-2 - ANALYSIS DESIGN FLOWCHART

CHAPTER VI

NATION GROUPS ON COLLABORATION

Most of the scholarly works cited in Chapter II were directed toward grouping nations on attribute types. Nations similar on attributes (e.g., power and economic development) were viewed as a group with such labels as developed countries or powerful nations. Then the behavior of such group was inferred based upon these attributes. In this study, however, the process is reversed. Nations are first grouped on closeness or similarity in behavior and then attributes of groups are examined to search for any systematic, recurring characteristics which appear to be meaningful in explaining behavior.

These two approaches to clustering of nations are not mutually exclusive, however. The difference is dictated by the location of theoretical interest. If one is interested in delineating groups based on attribute types, the first approach is appropriate; whereas if one has a research goal directed toward finding behavioral clusters, one would opt for the second approach. This latter stance is taken in the present research. Rather than search for nation types in Asia on attributes, my interest is in uncovering the clustering of nations in actual day-by-day interaction.

The Net-Cooperation Index can be seen as a measure of empathy between two nations. This Index serves the purpose of grouping Asian countries in terms of net-cooperation. I

first established a symmetric matrix of order 19x19 (the number of nations in this study) with the Net-Cooperation Index. Then two grouping methods were employed: hierarchical clustering scheme (Johnson, 1967), and direct factor analysis of similarities matrix (Rummel, 1970b, Chapter 22). The former gives a neat dendrogram (tree diagram), while the factor groups are based upon both magnitude and profile similarities.

Factor Groups

For the purpose of direct factor analysis the Net-Cooperation Indices were first scaled to range between 0.0 and 1.00 where 1.00 is the maximum similarity or empathy. This scaled matrix was then factor analyzed (principal components) as though it were a correlation matrix. The resulting factors define nations whose patterns of cooperative links to other nations are similar in profile. Nations highly loaded on the same factor are similarly located in the space of empathy among 19 Asian countries. These factors were rotated to an orthogonal simple structure to achieve a neat definition of groupings.

Two factor groups with eigenvalues greater than 1.00 were found for 1955 (see Table 6-1). The first cluster is centered around Taiwan and in general defines a group of Western-bloc countries. The second cluster is represented by Communist China. This configuration clearly depicts East-West confrontation in cooperative behavior. Moreover,

it is interesting to see that India, Ceylon, Indonesia, and Burma are loaded on both groups. The finding that these neutralist countries are affiliated with both groups is a supporting evidence that the two groups reveal importance of the Communist-Non-Communist dichotomy in Asian politics.

Table 6-2 shows three orthogonally rotated factor groups for 1963. The first group is headed by Japan, Philippines, and India; the second group has three high loading members--North Vietnam, Cambodia, and North Korea; while the last group is exclusively of Communist China. The implication of this factor structure is that the pattern of cooperative behavior of Communist China is uncorrelated with the rest of the Communist oriented countries. This makes a good contrast with the 1955 groupings in which Communist China's behavior was not independent of the other Communist countries. This statement is to be evaluated with some caution, however. The configuration of factor groupings might vary when we change the criterion of unit eigenvalue for rotation.

Hierarchical Clustering Scheme

The hierarchical clustering scheme (HCS) groups entities based upon the distances between all points in space taken one at a time rather than the patterns of variation across all entities as factor analysis does. HCS produces a taxonomic tree or dendrogram with nations that are closest in distance on the bottom of each branch (Sokal and Sneath, 1963). The most comprehensive of HCS techniques is the one

TABLE 6-1

FACTOR GROUPING (1955)

Groups[a]

I		II	
1.07	CHT	1.07	CHN
.79	JAP	.66	BUR
.71	PAK	.65	OUT
.69	IND	.65	AFG
.69	PHI	.64	KON
.68	TAI	.63	IND
.67	CEY	.63	INS
.63	INS	.63	CAM
.63	KOS	.63	LAO
.61	BUR	.62	VTS
		.61	NEP
		.61	VTN
		.60	CEY

[a] Coefficients measure the similarity of each nation with the group and range from 0 to 1.00. The coefficients for CHT and CHN are slightly inflated because the input matrix of net-cooperation is not completely gramian. Two groups are uncorrelated with each other. Only those nations with loadings greater than or equal to .60 are shown. The cutoff point .60 is chosen because at this level every nation is loaded on at least one dimension. Since the input is not a correlation matrix, this method of finding cutoff point seems more reasonable than any arbitrary selection based upon variance accounted.

TABLE 6-2

FACTOR GROUPING (1963)

Groups[a]		
I	II	III
.92 JAP	.83 VTN	.87 CHN
.82 PHI	.80 CAM	.50 PAK
.81 IND	.60 KON	
.79 TAI	.51 OUT	
.68 CHT	.49 LAO	
.67 VTS		
.66 KOS		
.63 CEY		
.63 INS		
.63 BUR		
.49 LAO		
.49 AFG		
.48 NEP		

[a] See footnote to Table 6-1. The cutoff point at which every nation is represented by at least one dimension is .48.

developed by S.C. Johnson (1967), which employs the process of replacing two or more entities (nations) with a single entity (cluster) that determines the distance between the newly formed cluster and all other nations. Naturally when two nations (i, j) form a group, there are two alternative distances between the group and other entities: one is the distance from i and the other from j. Johnson's algorithm allows the choice of either the maximum (the greater of the two distances) or the minimum distances. The former is called the diameter method, the latter the connectedness method. The diameter method forms groups by adding a nation to a cluster if the maximum distance between the nation and group members is smaller than that between the group and other nations not in the group. The connectedness method, on the other hand, adds a nation to a cluster if the minimum distance between a nation and any member of the group is smaller than that between the group and other nations not in the group.

In applying the hierarchical clustering scheme to the matrix of Net-Cooperation Index, a problem arises as to which of the two methods to employ: diameter method or connectedness method. Previous experimentation has revealed that the diameter method is better when clusters are clear and unambiguous (Phillips, 1968). The connectedness method tends to build chains of entities that are sausage shaped (in geometric sense), with the length of the sausage chain

minimized. It must be made clear, however, that either method is equally good in depicting highly dense areas.

Judging from the direct factor analysis, there appear to be distinctive behavioral clusters of nations in Asia. Moreover, comparison of results from diameter and connectedness method has showed that the latter presents one huge chain of nations, while the former gives a better picture of clustering. Therefore, the results from the diameter method are presented here.

The particular form chosen to present the dendrograms needs some clarification. The computer program output gives a dendrogram which has a level for each different similarity in the matrix. These levels in the original dendrogram are too numerous for interpretation and do not readily convey the tightness of clusters. Therefore, the dendrograms presented here were constructed by taking cross-sections of the dendrograms at the levels at which a new group larger than the largest previous group formed. These levels are designed as 2N, 3N, 10N, etc. to indicate the largest group at that level. At each N level additional groups (smaller than the largest group previously formed) that have emerged since the last level are identified regardless of size. This method of slicing across the original tree diagram to form a definite set of groups is devised only for the sake of convenience. Using a biological analogy, it is the burden of a scholar to distinguish between the groups separating

fish and animal, and those separating dogs and cats. Only the knowledge on substance could dictate meaningful slicing of the branches.

The dendrograms for both 1955 and 1963 are reported in Figure 6-1 and 6-2.

For 1955 Japan and India cluster at the 2N level. This is the tightest grouping of those shown in Figure 6-1. This is because of three factors: a high number (162) of international non-governmental organizations of which these two nations are co-members; a large amount of export (IND→JAP: 55.1 mil US$, JAP→IND: 84.7 mil US$); and no conflict. At the 3N level Pakistan joins this group. Again high NGO's and exports plus high dyadic treaties are the underlying forces of this cluster. As we move up in the FIGURE and other groups form, the distance between members of the same group gets larger. That is, the members are increasingly less cooperative among themselves. At the 12N level there are three distinctive groups. The first one is composed of South Korea, Taiwan, and Afghanistan. The second is a group of Communist countries: Communist China, North Korea, Outer Mongolia, and North Vietnam. The largest of all is the third group with twelve members which could be broken down into two sub-groups at the 8N level: Nepal, Burma, Ceylon, India, Japan, Pakistan, Indonesia, and Philippines form the first sub-group; while Laos, Thailand, Cambodia, and South Vietnam are members of second sub-group. This third group includes

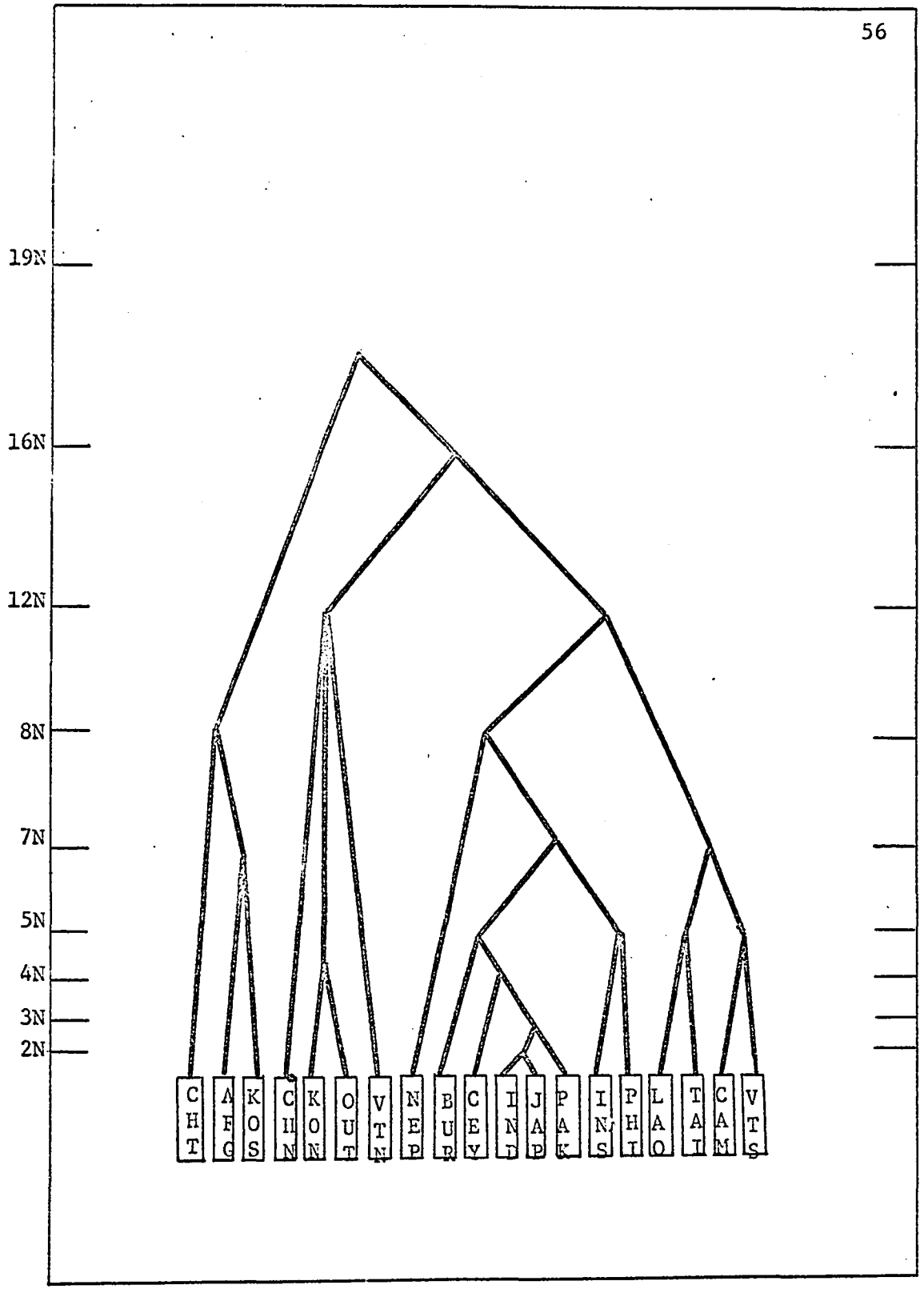

FIGURE 6-1 - DENDROGRAM FOR 1955

all the highly loaded nations on the first rotated factor presented in Table 6-1, except South Korea and Taiwan. These three groups and sub-groups are very distinctive clusters and subject to the profile analysis on attributes for a meaningful examination of clusters in relation to nation characteristics. For the purpose of identifications these groups are labelled as Group I(KOS) Group II(KON) Group III (JAP), where the nation refers to the one at the center of cluster. Sub-group names are: Sub-group IIIA (JAP); Sub-group IIIB (TAI).

For 1963 (Figure 6-2) the tightest group starts with Japan and Philippines at the 2N level and is immediately joined by Thailand. At this 3N level Ceylon and India form a group, as well as Cambodia and North Vietnam. Japan and Philippines were co-members of 222 NGO's, had several million US$ worth of exports to each other, and no overt conflict behavior occurring between them. Japan and Thailand had shared many NGO's in common as much as Thailand and Philippines did. Ceylon and India had relatively high exports and NGO's with no conflict, as well as Cambodia and North Vietnam. At the 19N level three distinctive clusters form. The Group I is composed of Afghanistan, China, Burma, and Pakistan. The Group II is a rather loose one emerging only at the 19N level: North Korea, Cambodia, and North Vietnam. These three nations represent Factor II of Table 6-2. The third is a big group consisting of Laos, Nepal,

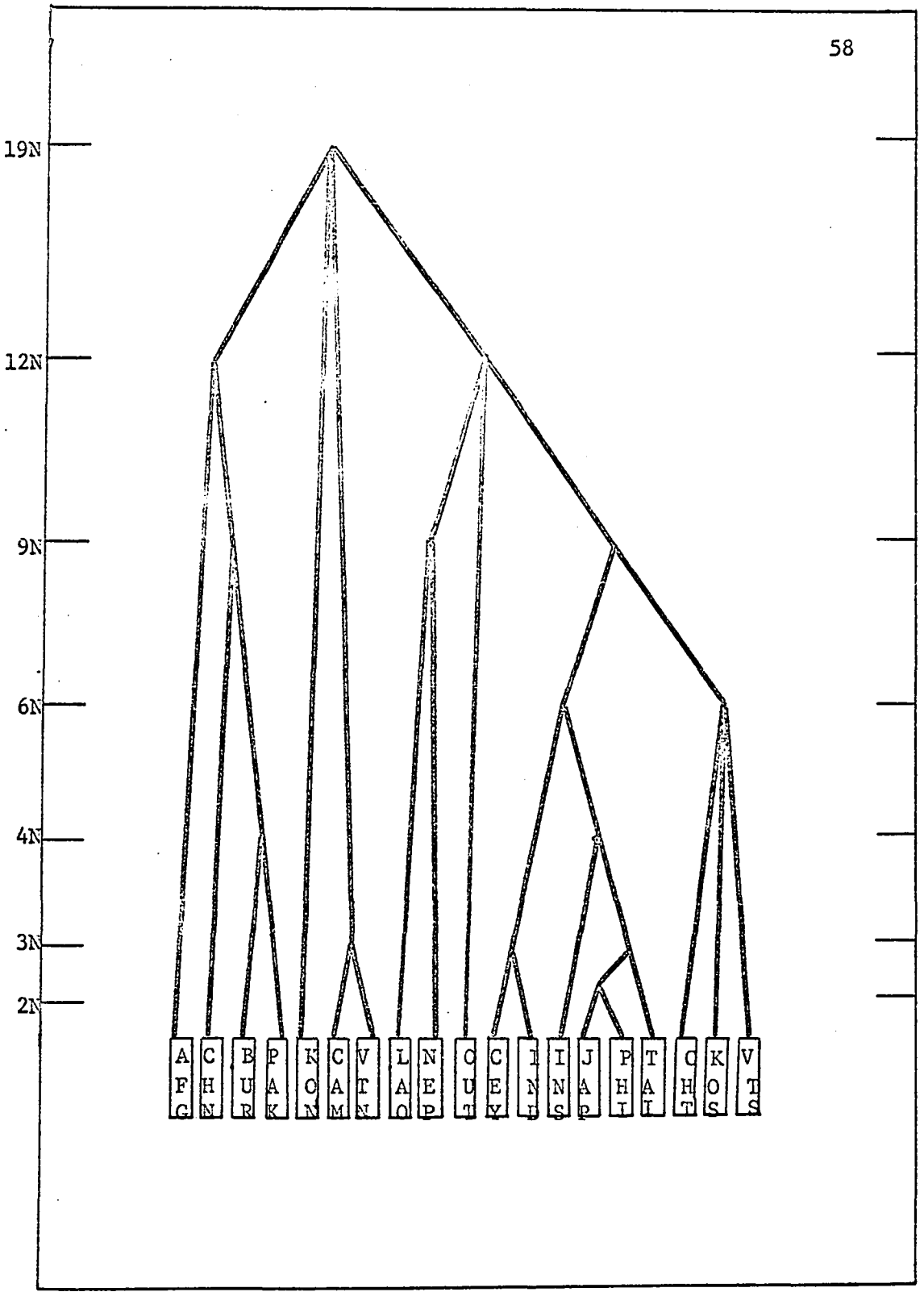

FIGURE 6-2 - DENDROGRAM FOR 1963

Outer Mongolia, Ceylon, India, Indonesia, Japan, Philippines, Thailand, Taiwan, South Korea and South Vietnam. This group can be clearly divided into three sub-groups: Subgroup IIIA with Laos, Nepal, and Outer Mongolia; Sub-group IIIB with Indonesia, Japan, Philippines, and Thailand; and Sub-group IIIC with Taiwan, South Korea, and South Vietnam. This third group is in effect Factor I of Table 6-2. These groups are also identified by a center member for profile analysis as following: Group I(PAK); Group II(VTN); Group III(JAP); Sub-group IIIA (LAO); Sub-group IIIB (JAP); Sub-group III(CHT).

Attribute Profiles

Slicing HCS dendrograms at the 12N or higher level has created a striking similarity between HCS groups and factor groups. In this report, HCS groups are chosen for the study of underlying profile similarity on attributes.

The profile program developed by Hall (1968) first standardizes the variable over all cases, and then computes the mean and one standard deviation interval for each group. This program enables us to pinpoint the characteristics of groups distinguishing them from the population and among themselves, and to search for some systematic factors existing in that particular group.

The raw data on 14 attribute variables were standardized and then group averages and standard deviations were computed. It must be emphasized that 14 variables are not

distance-type measures but indicators for each nation. When we drop the words "distance" from variables listed in Table 5-1, the 14 measures from independent space are: economic development; power capability; population/physician; bolc membership; freedom of group opposition; population density; constitutive system; percentage of Buddhist, Protestant, Mohammedan, and Catholic population; number of religious, language, and ethnic groups (power parity was excluded since it is a dyadic measure; compensated bureaucracy and executive accountability had very high correlations with constitutive system, and are thus redundant).

A plot of averages and standard deviations for each group is shown in Figure 6-3 (1955) and Figure 6-4 (1963). The vertical lines divide the plot in terms of the average (zero) and standard scores of the attribute indicators. If a group were not different from the population on all the indicators, then the shaded area defining the average and one standard deviation on each side of the average would be between the ±1.00 lines. By examining the shaded area, therefore, we can see those portions of the group profiles which distinguish it from all nations.

Another point to be made clear at this juncture is that a careful interpretation is required when the size of group is small, say three or four nations. For the smaller the group, the greater the effect of one extreme outlier nation in calculating mean and standard deviation. Sometimes what

we see may be statistics for one nation rather than the group as a whole.

Group I (KOS) for 1955 in Figure 6-3 is distinguished by being similarly just below average in power capability and population/physician, and just average in economic development, freedom of group opposition, constituency power, percentage of Protestant population, Catholic population, and the number of religious, language and ethnic groups. This group is very low in Buddhist population and very much Western bloc oriented. Since the low Buddhist population is caused by Afghanistan only, it appears that the strongest factor for this interaction group is the bloc membership.

For a better illustration of Figure 6-3, Table 6-3 has been constructed. This table verbalizes the plots in Figure 6-3 by employing appropriate adjectives. A group is distinguished on a variable if the group mean plus or minus the group standard deviation deviates from all nations by at least one absolute standard deviation for all nations. The average standard score for Group I on power capability, for example, ranges $-.325 \pm .002$, putting the shaded area below the zero line. This is more than one standard deviation from the +1.00 line and thus distinguishes Group I on power capability.

From Table 6-3 group profile similarities for 1955 can be read off. Group II (KON) is characterized by low population/physician, Communist bloc, little freedom of group

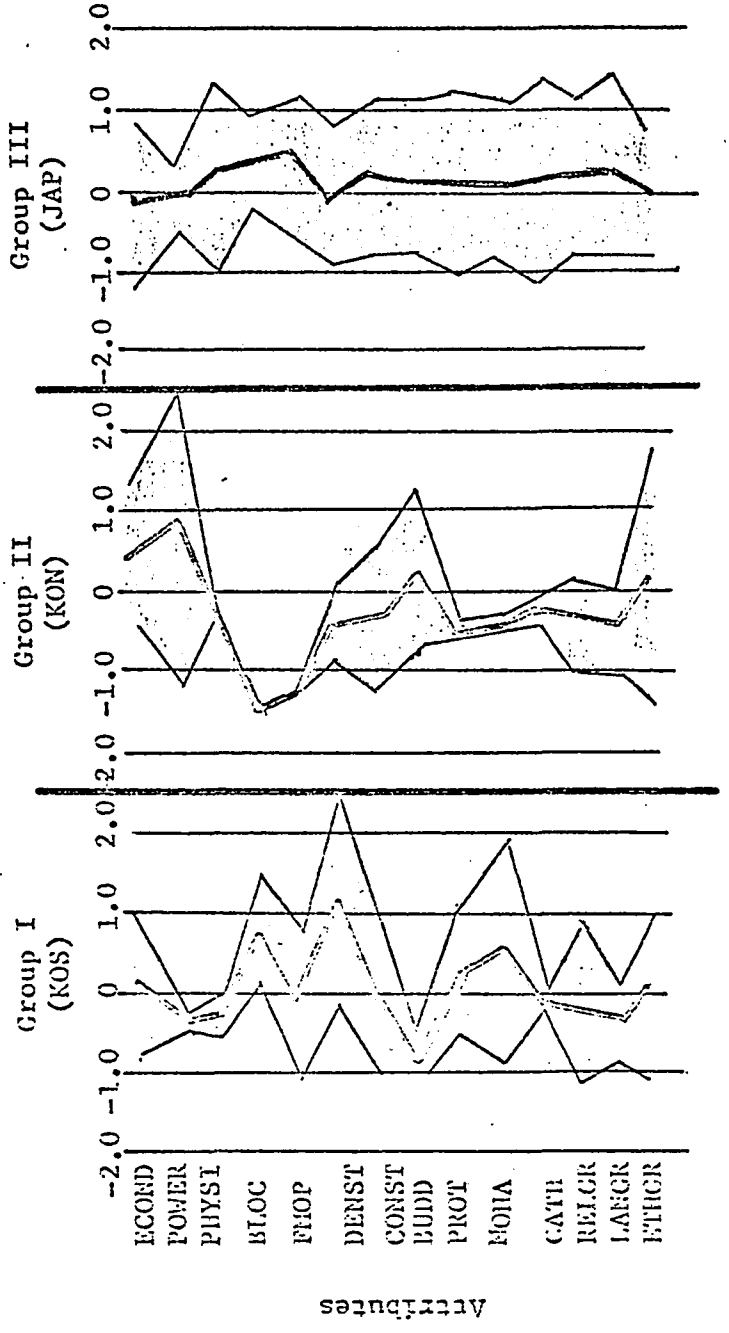

FIGURE 6-3 - PROFILE FOR 1955

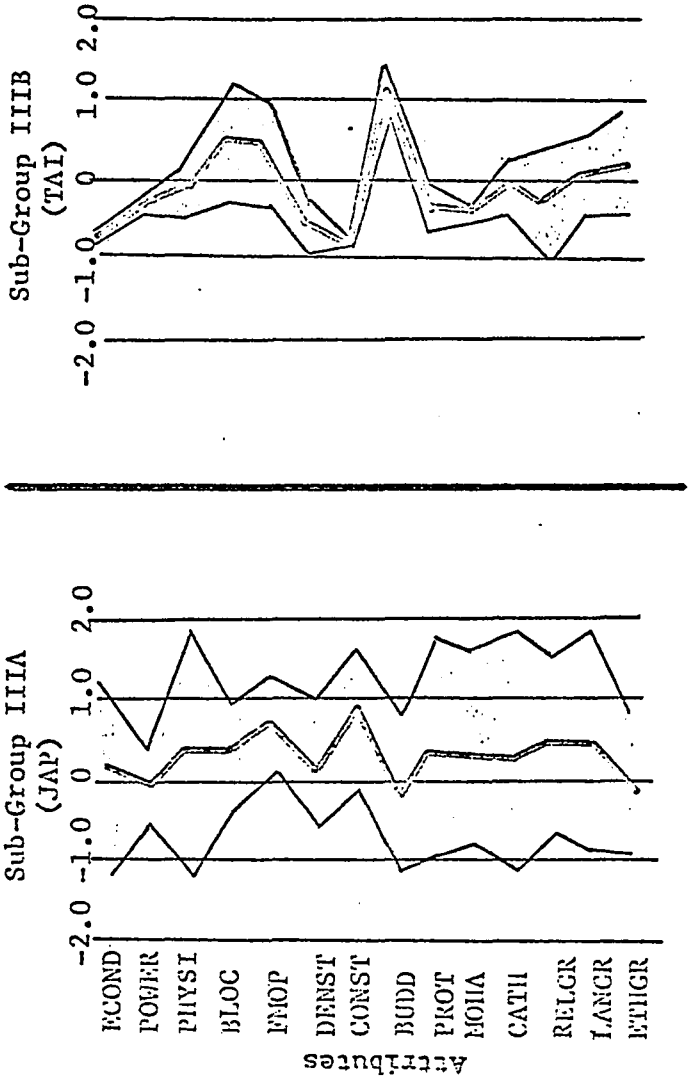

FIGURE 6-3 - PROFILE FOR 1955 (Continued)

TABLE 6-3. DISTINGUISHING GROUP CHARACTERISTICS OF NATIONS FOR 1955

Attributes	Group I (KOS)	Group II (KON)	Group III (JAP)	Sub-group IIIA (JAP)	Sub-group IIIB (TAI)
ECOND					low
POWER	low				low
PHYSI	low	low			
BLOC	Western	Communist			
FMOP		little		much	
DENST		low			low
CONST					none
BUDD	small				large
PROT		small			small
MOHA		small			small
CATH		small			
RELGR					
LANGR		small			
ETHGR					

opposition, low density, small Protestant, Mohammedan, and Catholic population, and small number of language groups. It is obvious that this cooperative interaction group is composed of core Communist bloc countries where religion is considered a taboo.

Group III (JAP) involving 12 countries centered around Japan is of great importance in understanding the role of Japan in the Asian behavioral system. This group has a marked similarity to the profile of all nations. The means of this group on 14 variables flow along the mean line for population. No single characteristic is peculiar to this group. This implies that this group of collaborating countries contains a wide variety of Asian nations. Since the main core of this group is Japan, we may infer that the cooperative behavior of Japan reaches all around Asia. This is a very significant finding which was made possible only through delineating behavioral (not attribute type) clusters. There has been a notion that Japan does not belong to Asia, even though she is located in Far East (Russett, 1967a). This notion is easily acceptable if one thinks only in terms of attribute types. Had I made an attempt to search for attribute types, I should have found one independent group with only Japan in it. Then it would have been extremely difficult (though not impossible) for me to make the aforementioned inference.

Sub-group IIIA (JAP) with 8 nations shares the

characteristics of Group III (JAP) except for the freedom of group opposition. This is very interesting in view of the fact that Japan group is distinguished by its freedom, not by its economic development as most commentators insist. This Sub-group IIIA represents a bloc of nations in Group III which share a common political orientation--considerable freedom of group opposition.

Sub-group IIIB (TAI) is dintinguished by low economic development, lower power capability, low population density, no constituency power, large Buddhist population, and small Protestant and Mohammedan population. This cluster represents Indo-Chinese peninsula.

For the analysis of 1963 attribute profiles of behavioral clusters, Table 6-4 has been constructed based upon Figure 6-4.

Group I (PAK) of 1963 is characterized by low economic development, low density, no constituency power, and small Protestant and Catholic population. For this group it is very difficult to make any meaningful linkage between cooperative behavior and attributes. We may find a possible cause of this clustering from geographic distance. Pakistan, Burma, Communist China, and Afghanistan are quite close together on a map. This point, however, needs further research for verification or falsification.

Group II (VTN) has only three Indo-Chinese countries: North Vietnam, Cambodia, and Laos. Particular characteristics for this group are low power capability, Communist bloc

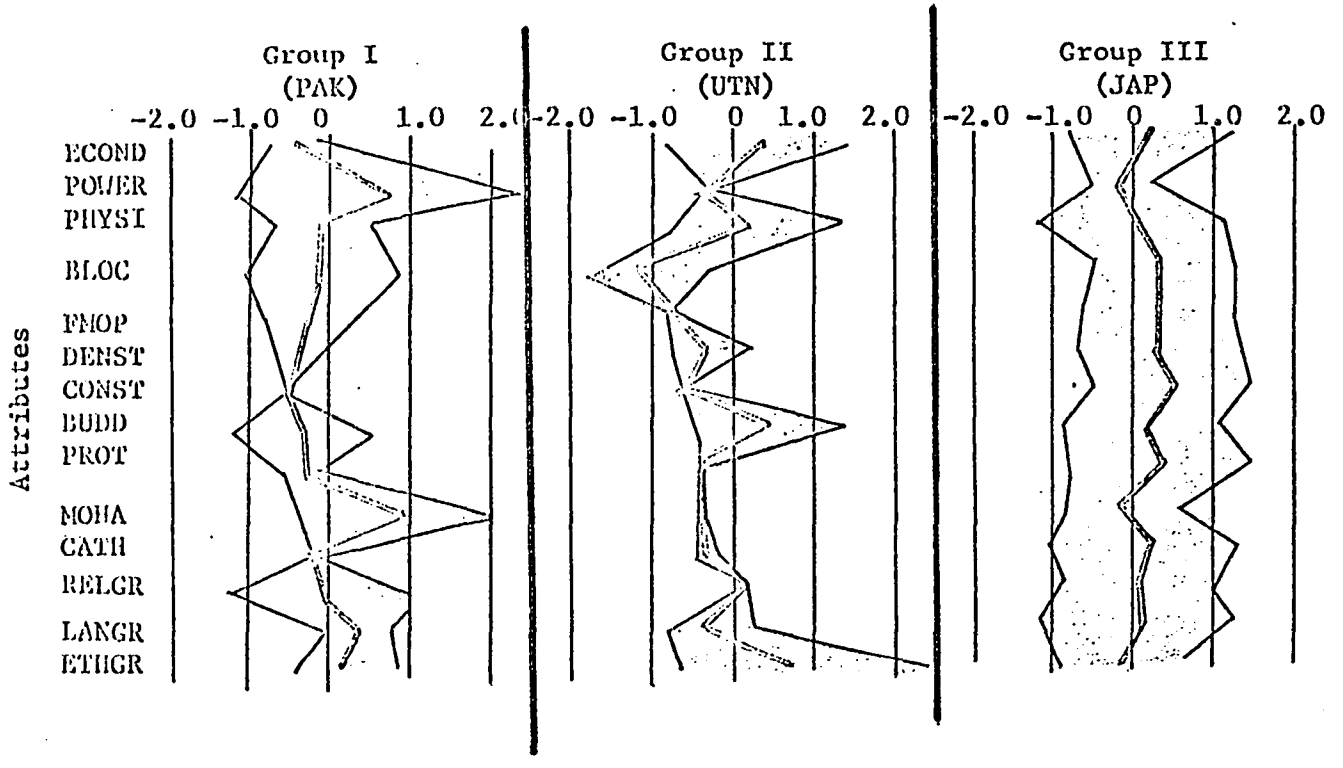

FIGURE 6-4 - PROFILE FOR 1963

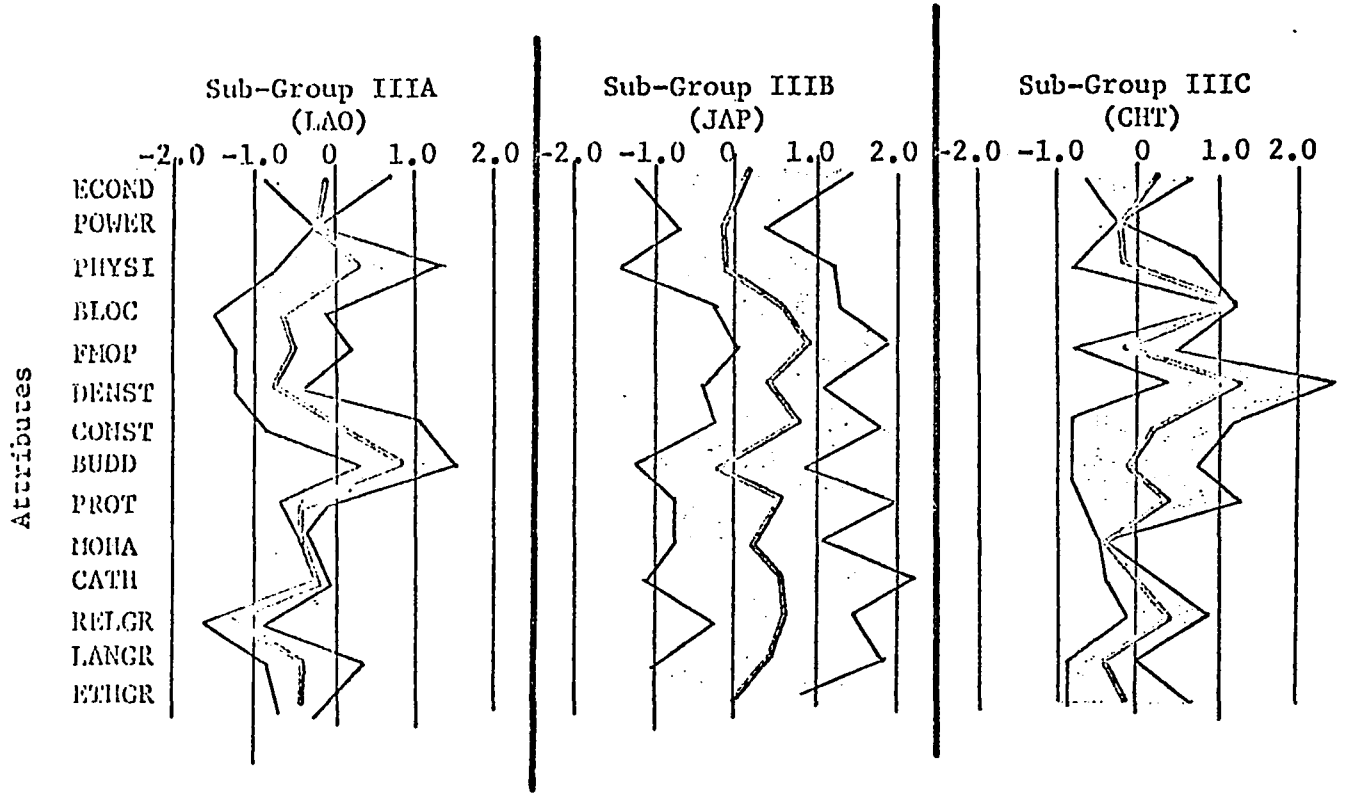

FIGURE 6-4 - PROFILE FOR 1963 (Continued)

TABLE 6-4. DISTINGUISHING GROUP CHARACTERISTICS OF NATIONS FOR 1963

Attributes	Group I (PAK)	Group II (VTN)	Group III (JAP)	Sub-group IIIA (LAO)	Sub-group IIIB (JAP)	Sub-group IIIC (CHT)
ECOND	low					
POWER		low		low		low
PHYSI						
BLOC		Communist		Communist		Western
FMOP		none			much	
DENST	low			low		high
CONST	none	none				
BUDD				large		
PROT	small	small		small		
MOHA		small		small		low
CATH	small	small		small		
RELGR		large		small		
LANGR						small
ETHGR				small		

orientation, no freedom of group opposition, no constituency power, small Protestant, Mohammedan, and Catholic population, and large number of religious groups.

Group III (JAP) of 1963 is very similar to Group III found in 1955. Out of 12 members, 9 nations appear in both groups. They are Japan, Philippines, Thailand, India, Indonesia, Ceylon, Laos, Nepal, and South Vietnam. Just as in 1955, this group has no distinguishing characteristic at all. As Japan forms the axis of this group, the same inference could be made as for 1955 that Japan's sphere of cooperative interaction is not limited to any particular bloc of Asian countries.

Sub-group IIIA (LAO) is noted by low power capability, Communist bloc orientation, low density, large Buddhist population, small Protestant, Mohammedan, and Catholic population, and small number of religious and ethnic groups.

Sub-group IIIB (JAP) has a striking similarity to Sub-group IIIA of 1955. In effect, out of 6 members, only Thailand was not included in 1955 group. Accordingly the profile is similar. Again the only characteristic distinguishing this group from all nations is the freedom of group opposition, <u>not</u> economic development.

Sub-group IIIC (CHT) has the following peculiarities: low power capability, Western bloc orientation, high density, low Mohammedan population, and small number of language groups. This group (CHT, KOS, and VTS) is also characterized

by similar fate after the World War II: division of country by civil war and heavy American influence have made these countries a barometer of Cold War situation.

The groupings so far found are not only intuitively pleasing but also substantively meaningful. This in turn establishes the meaningfulness and validity of the Net-Cooperation and Net-Conflict Indices. Now let us turn to the next question: can we account for this meaningful variation in behavior by field theory? Following chapters will deal with the empirical testing of the Interaction Model and the Net-Conflict Model.

CHAPTER VII

TOTAL INTERACTION TESTS

The Interaction Model--equation (4-1)--linking total interaction between a pair of nations to interaction propensity and actor dominance was tested employing canonical analysis and multiple regression. Before presenting the results of analyses, canonical and regression techniques will be explained with regard to their relationships to field theory.

When there is more than one dependent variable, canonical analysis yields such linear combinations of independent and dependent variables as to maximize the correlation between two sets of variables. There can be as many canonical relationships as the smaller rank of the two sets. The first canonical equation accounts for the maximum variation in the dependent set; whereas the second relationship accounts for the maximum variation independent of the first, and so forth. In other words, the second depicts the relationship in the residual space after excluding the first (Cooley and Lohnes, 1962). Let us denote independent variables as x's and dependent as y's. Then assuming that the rank of the dependent space is smaller than that of the independent space, we can write simultaneous equations such as:

$$a_{11}y_1 + a_{12}y_2 + \ldots + a_{1p}y_p = b_{11}x_1 + b_{12}x_2 + \ldots + b_{1q}x_q + e_1$$

$$a_{21}y_1 + a_{22}y_2 + \ldots + a_{2p}y_p = b_{21}x_1 + b_{22}x_2 + \ldots + b_{2q}x_q + e_2$$

$$\begin{array}{cc} \cdots & \cdots \\ \cdots & \cdots \end{array}$$

$$a_{p1}y_1 + a_{p2}y_2 + \ldots + a_{pp}y_p = b_{p1}x_1 + b_{p2}x_2 + \ldots + b_{pq}x_q + e_p$$

where e's stand for the residuals. What canonical analysis does is to find a's and b's (regression weights) such that linear combinations of x's and y's have maximum correlation within each equation, while each equation is independent of others.

Computationally, this analysis partitions the correlation matrix into four submatrices,

$$\left(\begin{array}{c|c} R_{11} & R_{12} \\ \hline R_{21} & R_{22} \end{array}\right)$$

where R_{11} is the submatrix of correlations among independent variables, R_{22} among dependent variables, R_{12} correlations between independent and dependent variables, and R_{21} the transpose of R_{12}. Then employing a characteristic equation, the canonical correlation coefficient and the regression weights are calculated as following:

$$(R_{22}^{-1} R_{21} R_{11}^{-1} R_{12} - \lambda_i I)\, b_i = 0$$

$$a_i = (R_{11}^{-1} R_{12} b_i) / \sqrt{\lambda i}$$

where a and b are vectors of canonical regression weights and λ is the squared canonical correlation measuring the

percentage of variation accounted for by the i^{th} relationship.

At this point it must be emphasized that the application of canonical analysis and multiple regression analysis is dictated by field theory. This can be made clear by representing the fundamental linkage equation in matrix language:

$$W_{mxq} = D_{mxp} P_{pxq} + U_{mxq} \qquad (7\text{-}1)$$

where W is the matrix of dyadic behavior dimensions, m is the number of dyads, q is the dimensionality of B-space, p is the dimensionality of A-space, P the matrix of parameters α, and D a matrix of attribute distance vectors with elements equal to $d_{\ell,i-j}$ -- that is, the distance vector between nation i and j on the ℓ^{th} attribute dimension. U represents the discrepancy between the theory and observation.

What the field theory is after is to select P such that U is minimized. According to Rummel (1969, p. 21ff) this could be achieved as following. Assuming deviations U are uncorrelated with D, we can solve for P:

$$W = DP + U$$
$$D'W = D'DP + D'U$$
$$(D'D)^{-1}D'W = P, \qquad (7\text{-}2)$$

where $(D'D)^{-1}$ can be assumed non singular in so far as m is greater than p. P then is a matrix of <u>regression coefficients</u>

and we can calculate the least squares estimate of W which is named W*,

$$W^* = WP \qquad (7\text{-}3)$$

Then the sum of the squared correlations between W_k and W_k^* becomes a measure of variance in W accounted for by D. The average of this is called a trace correlation:

$$\bar{r}^2 = \frac{1}{q} \sum_{k=1}^{q} \left(\frac{1}{m} W'_k \, W_k^*\right) \qquad (7\text{-}4)$$

Equation (7-1) shows us how each individual behavior dimension could be predicted by the attribute distances, but does not reveal what kind of combination of W_k's are linked to attribute distances. Since W is arbitrarily determined within B-space with no regard to A-space, it is essential that we rotate vectors of B-space in relation to A-space. The virtue of this rotation is that it allows one to clearly define the configuration of dependence such that one can differentiate the linkages between two spaces according to the strength of relationship. As mentioned above, the first canonical relationship accounts for the strongest possible relationship between B and A-spaces, while the second canonical attempts to delineate next strongest relationship independent (statistically) of the first one, and so forth.

In effect canonical analysis lets us search for a linear transformation of W that would contain maximum correlations

with D. In matrix language:

$$Y = WT \tag{7-5}$$

where T is a matrix of linear transformation. When we define DP of (7-1) as V, then canonical model could be represented as:

$$\begin{aligned} WT &= DP + U \\ Y &= V + U \end{aligned} \tag{7-6}$$

with the conditions that

$$\begin{aligned} &Y_k'V_g = \text{maximum correlation, when } k = g, \\ &Y_k'V_g = 0, \text{ when } k \neq g, \\ &Y_k'Y_k = V_g'V_g = 1, \text{ and} \\ &Y \text{ and } V \text{ are orthogonal matrices.} \end{aligned} \tag{7-7}$$

The solution to (7-6) with restrictions (7-7) will then give the parameters of P that are "best" in the sense of minimizing U and Y will give the behavior dimensions of B-space which have "best" correlations with D (attribute differences).

The Interaction Model was also tested with multiple regression after generating CF+CP with equal weights. The reason why the multiple regression technique was employed in addition to the canonical analysis is that regression analysis gives stepwise presentation according to the contribution of independent variables. (Canonical analysis with one

dependent variable gives the same result as multiple regression in terms of the trace correlation).

Two different assumptions were involved with these techniques. For regression analysis, it was assumed that individual measures of conflict and cooperation bear equal importance in generating an indicator of total interaction. Thus, each behavior variable was equally weighted for (CF + CP). Having been skeptical about this assumption of equal contribution, it was desired to abandon any arbitrary assumption in weighting and let the analysis yield differential weights for a maximum fit between two spaces. This implies that canonical analysis be used.

Table 7-1 gives the multiple regression results for 1955, where the dependent variable is $(CF + CP)_{i \to j}$--summed standard score of dyad i→j on six cooperation variables and five conflict behavior measures. From the Table we could immediately draw two conclusions. First, the multiple correlation squared reveals that only twelve per cent of the variation of (CF + CP) in B-space is dependent upon interaction propensity and actor dominance. This is not an impressive dependence. Were I after relationships only--no matter how small as long as they are statistically significant--the correlation of .346 might be satisfactory. For the eventual goal of prediction, however, 88 per cent of unaccounted variation makes any forecast practically impossible. Secondly, the positive regression coefficients

TABLE 7-1. MULTIPLE REGRESSION RESULTS FOR INTERACTION MODEL (1955)

Independent Variables	Regression Coefficients [b]	t-test[a]	Multiple[b] R (squared)	F-ratio
INTACP	.237	6.077*	.330 (.109)	41.5 (p<.001)
ACTDOM	.214	2.058*	.346 (.120)	4.3 (p<.05)
Correlation between INTACP and ACTDOM = .141				

[a] One-tailed t-test; * means p<.05.

[b] This is the stepwise multiple regression. Therefore, the proportion of variance added by ACTDOM is 1.1 per cent (.120 - .109 = .011).

and significant F-ratio are somewhat supporting evidence of Interaction Model, however. From these two points we can state that even though the forces from independent variables are in the theoretical direction of the Interaction Model for (CF + CP) generated with equal weights, the dependence is too weak to support the theory.

Results from canonical analysis for 1955 are presented in Tables 7-2 and 7-3. The presentation of findings from canonical analysis needs some clarification. It has been a convention that a researcher handles less number of dependent variables than independent ones. Therefore, all computer programs for canonical analysis have been set up such that the rank of Y is smaller than that of V in equation (7-6). This was done solely for convenience in computation. This particular set-up could, however, easily mislead one to think that the rank of Y must be smaller than that of V. This is not true. Canonical analysis in effect delineates linearly independent variates upon which both y's and v's are dependent. It does not matter whichever set of variables are theoretically dependent. There is but one difference in trace correlation when the rank of independent variables are smaller than that of dependent ones. Suppose the ranks of independent (V) and dependent spaces (Y) are p and q where p is smaller than q. Then we treat V space as dependent and run the canonical analysis. The trace correlation thus found is $\bar{r}_{vy}$--v's as explained by y's. But what we really

want to know is $\bar{r}_{yv}$--y's as explained by v's. Hooper (1959) has established a mathematical function between $\bar{r}_{vy}$ and $\bar{r}_{yv}$ as following:

$$q\ \bar{r}^2_{yv} = p\ \bar{r}^2_{vy}.$$

Therefore,

$$\bar{r}^2_{yv} = \frac{p}{q}\ \bar{r}^2_{vy}. \qquad (7\text{-}8)$$

Table 7-2 tells us first that trace correlation squared is .032 meaning that only 3.2 per cent of variation in B-space is dependent upon INTACP and ACTDOM ($\bar{r}^2_{yv} = \frac{2}{11}\ \bar{r}^2_{vy}$, where $\bar{r}^2_{vy} = .17$). This is a significantly low relationship consonant with findings from regression analysis. This overall low linkage does not invalidate the relative contribution of each variable to the canonical variates, however. The low trace correlation may be affected by the smaller number of independent variables compared with dependent variables.

Two canonical relationships have correlations of .49 and .319 which are not so high but statistically significant. The significance test cannot be taken as it is, however, since we are dealing with a population and not a sample of nations. In Table 7-3 the components of these two relationships are presented. In this Table the canonical structure loadings are given rather than the canonical coefficients.

TABLE 7-2. CANONICAL ANALYSIS RESULTS[a]

FOR INTERACTION MODEL (1955)

V_k[b]	Canonical Correlation with Y_g (k=g)[c]	Chi-square[d]	D.F.[e]	Z-transformation[f] for D.F. 30
V_1	.490 (.241)	128.2	22	9.46
V_2	.319 (.102)	36.1	10	4.13
Trace Correlation[g] = .180 (.032)				

[a] Minimization of U in Equation (7-6) under restrictions (7-7), where V and Y are switched around.

[b] V_k is a column vector from V(=WT), where W is a matrix of independent (theoretically) variables.

[c] Y_g is a column vector from Y (=DP), where D is a matrix of behavior variables. Canonical correlations squared are given in parenthesis.

[d] The Chi-square equals $-[n-0.5(p+q+1)] \log_e \Lambda$, where n=number of dyads, p=the number of columns of D, q=the number of columns of W, and

$$\Lambda = \prod_{k=1}^{q} (1-r_k^2)$$

where r_k^2 is the kth canonical correlation squared.

[e] The degrees of freedom = [p-(k-1)] [q-(k-1)]

[f] The Z-transformation is for reference to corresponding areas under the normal curve.

[g] This trace correlation is $\bar{r}_{yv}$--behaviors as explained by attributes.

$$\bar{r}_{yv} = (\bar{r}_{yv}^2)^{\frac{1}{2}}, \text{ where } \bar{r}_{yv}^2 = \overline{II}^2 \bar{r}_{vy}^2.$$

TABLE 7-3.

CANONICAL STRUCTURE MATRIX[a] FOR 1955

Variables	H-Sqr[b]	Canonical Variates 1	2
TREATY	219	(365)	293
NGO	533	132	(718)
R-NGO	002	- 041	014
EXPORT	304	(392)	(387)
R-EXPO	116	071	(- 333)
EMBLEG	410	(400)	(500)
WARNDF	291	(537)	042
DISCMA	431	(638)	- 155
NEGACT	365	(603)	- 043
NEGCOM	543	(707)	- 208
ATKEMB	001	- 034	014
INTACP	1.000	(995)	- .099
ACTDOM	1.000	239	(.971)

[a] Canonical structure is the correlation between the original variables and transformed canonical variates. The coefficients in the last two columns are product moment correlation coefficients. Decimals omitted. Parentheses are for $r \geq |.300|$.

[b] H-square measures the communality of each variable. The contribution of individual variable is assessed by it.

The latter are regression coefficients (generating canonical variates) which are difficult to interpret when the original variables are not orthogonal as they measure both the interaction effects of several variables taken together and their direct effects. On the contrary, the canonical structure loadings give correlations between original variables and canonical variates and thus the importance of each variable to variates. When these loadings are squared and summed across all canonical variates, they represent a communality estimate (H-square)--the per cent of variance of each variable that is accounted for by the variates.

The first canonical variate in Table 7-3 shows the linkage between interaction propensity on the one hand and treaty, export, embassy and legation, and four conflict measures on the other. This supports the Interaction Model stating that INTACP is a force toward both conflict and cooperation. The second variate relates actor dominance with cooperative behavior indicators such as NGO, export, relative export, and embassy and legation. Relative export has a negative loading, as would be expected, since export from a bigger nation to a smaller one occupies only a minor proportion of the big nation's total export. It is interesting to see that no conflict measures are loaded higher than $|.30|$.

Examination of regression and canonical analysis findings leads to a conclusion that for 1955 the Interation Model

has some empirical backing in terms of direction of forces, even though the overall relationship is not high.

For 1963 the results from multiple regression analysis are given in Table 7-4. Multiple correlation squared is minimal: only 1.7 per cent of the variation in (CF + CP) is accounted for. This lack of relationship implies that equal weighting for (CF + CP) is no good for 1963 data. It is worth noting that the regression coefficients are in the positive direction favorable to theory, even though very small in magnitude.

Moving into canonical analysis (Table 7-5 and 7-6) we find that the trace correlation squared is .031. It is almost the same as the trace of 1955 analysis implying that the lack of linkage is rather stable over two periods of time. The first canonical relationship with a correlation of .475 is composed of interaction propensity on one side, and treaty, discrete military action, and negative communication on the other. It is surprising to find that treaty has a negative correlation with this variate, which calls for some deeper investigation. The second canonical variate links actor dominance with export, and negative behavior acts. The direction of these loadings is consonant with the theory.

Comparison of 1963 results with 1955 findings leads to a query on why the overall relationship is so low, while the directions of relationship support the Interaction Model.

TABLE 7-4. MULTIPLE REGRESSION RESULTS FOR INTERACTION MODEL (1963)[a]

Independent Variables	Regression Coefficients b	t-test	Multiple R (squared)	F-ratio
INTACP	.012	1.952	.113(.013)	4.425 ($p \leq .05$)
ACTDOM	.052	1.178	.130(.017)	1.385
Correlation between INTACP and ACTDOM = .127				

[a] See the footnotes to Table 7-1.

TABLE 7-5. CANONICAL ANALYSIS RESULTS[a] FOR INTERACTION MODEL (1963)

V_k	Canonical Correlation with V_g (k=g)	Chi-square	D.F.	Z-transformation for D.F. 30
V_1	.475(.225)	114.6	20	8.91
V_2	.287(.083)	28.9	9	3.48
Trace Correlation[b] = .176 (.031)				

[a] See footnotes to Table 7-2.

[b] This is $\bar{r}_{yv}$, where $\bar{r}^2_{yv} = \frac{2}{10} \bar{r}^2_{vy}$.

TABLE 7-6.

CANONICAL STRUCTURE MATRIX [a] FOR 1963

Variables	H-Sqr	Canonical Variates 1	2
TREATY	307	(- 500)	240
NGO	127	195	298
R-NGO	018	034	128
EXPORT	108	105	(312)
R-EXPO	205	022	(- 453)
EMBLEG	124	247	251
DISCMA	393	(619)	- 098
NEGACT	106	111	(306)
NEGCOM	154	(385)	076
ATKEMB	046	- 028	- 213
INTACP	1.000	(997)	- 081
ACTDOM	1.000	207	(978)

[a] See footnotes to Table 7-3.

This is not an easy question to answer. It may be that the actor specific variations compound the overall linkage in the general model. Future analysis with actor specific model might provide us with some solutions.

CHAPTER VIII

PREDICTION OF CONFLICT: NET-CONFLICT MODEL TESTED

The Net-Conflict Model has postulated that differences in such attributes as wealth, power capability, political orientation, and values are general forces toward conflict behavior between two nations after controlling for the cooperative portion of total interaction. The equation (4-4) was tested using the same multivariate analysis techniques as the ones used for the Interaction Model. For multiple regression technique, each behavior measure was given equal weight in generating (CF - CP). Canonical analysis, however, generates the weights maximizing the fit between attribute and behavior spaces.

Table 8-1 gives the results from multiple regression analysis for 1955. The dependent variable is, of course, $(CF - CP)_{i \to j}$ calculated with equal weights for individual behavior variables. The squared multiple correlation coefficient shows that only 2.6 per cent of variation in (CF - CP) is dependent upon fifteen independent variables. This is a surprisingly insignificant finding. In other words, the lack of relationship is so great that there must be, we would suspect, some systematic disturbances. The first disturbance we can think of is the equal weighting. The second possible cause of non-relationship may be attributed to the assumption of field theory that the behavior of nation i to j is the exact opposite of behavior

TABLE 8-1.

MULTIPLE REGRESSION RESULTS[a]
FOR NET-CONFLICT MODEL (1955)

Variables	Regression Coefficients b	Multiple R	Multiple R-Squared	F-ratio
PARITY	.0005	.147	.022	7.54(p<.01)
POWERD	.0003	.150	.022	0.26
BUDD-D	- .0258	.151	.023	0.15
CONSTD	.6690	.153	.023	0.16
DENSTD	- .0159	.154	.024	0.09
MOHA-D	- .0268	.155	.024	0.11
PHYSID	.0001	.155	.024	0.07
ETHGRD	.4502	.156	.024	0.04
ECONDD	.0024	.156	.024	0.03
PROT-D	.1695	.156	.024	0.03
LANGRD	- .1990	.156	.024	0.01
BLOC-D	1.0472	.157	.025	0.09
CATH-D	- .0034	.160	.026	0.34
FMOP-D	.0409	.160	.026	0.01
RELGRD	- .0031	.160	.026	0.00

[a] Two variables on governmental structure (BURCOD & EXEACD) are deleted from the Net-Conflict Model analysis due to high correlations with constituency power distance (CONSTD).

of j to i. Considering the real world situation, this assumption contradicts common sense. International behavior appears to be more symmetric than not. When nation i sends a threat or friendship mission to j, j would respond with similar kind of behavior. This situation becomes more apparent when we examine the contribution of each individual predictor. The strongest and only significant independent variable is power parity, which is different from other distance measures. Parity is a symmetric measure where parity i→j is equal to parity j→i; whereas for the distance measures, $d_{i-j} = -d_{j-i}$. The third bias may be the theoretical position which preferred the general behavior model to the actor specific model. It may be that at this stage of poor knowledge on Asian behavioral system it is rather premature to attempt a complex general behavior model. Canonical analysis is somewhat supportive of this speculation.

Table 8-2 presents the findings from canonical analysis for 1955. Remember that the dependent space is composed of conflict and cooperation measures as they are, with no arbitrary attempt to generate any composite score for (CF - CP).

The first thing Table 8-2 shows is a minimal trace correlation squared. Only 4.5 per cent of variation in B-space is accounted for by predictors in A-space: not a big improvement from multiple regression. Departure from equal weighting has increased the variation by only 1.9 per cent.

TABLE 8-2.

CANONICAL ANALYSIS RESULTS[a]
FOR NET-CONFLICT MODEL (1955)

Transformed Behavior Dimension Y_k[b]	Canonical Correlation with V_g (k=g)[c]	Chi-square	D.F.	Z-transformation for D.F. 30
Y_1	.432 (.187)	158.3	165	- .3
Y_2	.320 (.102)	90.3	140	-3.3
Y_3	.234 (.055)	54.9	117	-4.8
Y_4	.216 (.046)	36.4	96	-5.3
Y_5	.177 (.031)	20.8	77	-5.9
Y_6	.152 (.023)	10.3	60	-6.4
Y_7	.075 (.006)			
Y_8	.041 (.002)			
Y_9	.028 (.0008)			
Y_{10}	.0002 (.0000)			
Y_{11}	.00002(.0000)			

Trace Correlation[d] = .213 (.045)

[a] Minimization of U in Equation (7-6) under restrictions (7-7).

[b] Y_k is a linear transformation of behavior variables.

[c] V_g is a column vector of linearly transformed attribute matrix. [c]Canonical correlation squared is given in parenthesis.

[d] This trace correlation is $\bar{r}_{yv}$--behaviors as explained by attributes.

Two strongest canonical relationships account for 18.7 and 10.2 per cent of variation in B-space separately. Though they are not significant relationships, a look at the canonical structure matrix (not shown) yields some substantively meaningful linkages between A and B-spaces.

Taking the high loading variables, the first canonical relationship could be represented in the following equation:

$$\left.\begin{array}{l} -\ \text{med.(POWERD)} + \text{med.(BLOC-D)} \\ +\ \text{med.(FMOP-D)} + \text{med.(DENSTD)} \\ +\ \text{med.(CONSTD)} + \text{high(PARITY)} \end{array}\right\} \rightarrow \left\{\begin{array}{l} \text{med.(EMBLEG)} + \text{med.(DISCMA)} \\ +\ \text{med.(NEGACT)} + \text{high(NEGCOM)}, \end{array}\right. \quad (8\text{-}1)$$

[1]

where the symbol "→" is used rather than "=" since we are interpreting the canonical loading matrix and not the canonical regression matrix. In verbal language, equation (8-1) can be read as follows: If actor nation i is an underdog in power capability, more Western bloc oriented, allows more freedom of group opposition, has higher population density and constituency power than object nation j, and the greater the power parity between i and j, then i is more likely to take discrete military actions, negative actions and make negative communication even though official diplomatic relationships may exist. The behavior of small countries under heavy American influence falls into this category.

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[1] The loadings are classified into high, medium, and low categories due to the near singularity of R_{12} matrix leading into inflation and instability of loadings.

The second canonical relationship has a following combination of variables:

$$\left.\begin{array}{l}-\ \text{med.(ECONDD)}\ -\ \text{med.(POWERD)} \\ +\ \text{med.(PROT-D)}\end{array}\right\} \rightarrow \left\{\begin{array}{l}-\ \text{med.(EXPORT)}\ +\ \text{high(R-EXPO)} \\ -\ \text{high(EMBLEG)}\ -\ \text{high(WARNDF)} \\ -\ \text{med.(DISCMA)}\ -\ \text{high(NEGACT)} \\ +\ \text{high(NEGCOM).}\end{array}\right. \qquad (8\text{-}2)$$

The implication of this linkage equation is that if nation i is an underdog in wealth and power capability, and has more Protestant population than j, then i is more likely to refrain from taking overt conflict behavior but more inclined to resort to the negative communication. The equation (8-2) also shows that the proportion of export i→j occupies a big portion in i's total export. The behavior of South Korea toward Japan in 1955 is typical of this relationship.

Turning to the analysis of 1963 data, the results from multiple regression are presented in Table 8-3. As expected from the 1955 analysis, multiple correlation squared is markedly low. Only 2.3 per cent of variation in B-space is accounted for by predictors. Again the strongest contributor is power parity.

Table 8-4 gives findings from canonical analysis for 1963. Trace correlation squared is .077 meaning that it is only 7.7 per cent of variation in B-space which is dependent upon attribute distances. Two quite strong canonical correlations were found, however, The first canonical

TABLE 8-3.

MULTIPLE REGRESSION RESULTS
FOR NET-CONFLICT MODEL (1963)

Variables	Regression Coefficients b	Multiple R	Multiple R-Squared	F-ratio
PARITY	.0001	.112	.013	4.32(p<.05)
LANGRD	.0434	.121	.015	0.72
ETHGRD	.2766	.126	.016	0.39
CONSTD	.7114	.133	.018	0.70
PHYSID	.0006	.139	.019	0.52
FMOP-D	- .2127	.143	.020	0.35
CATH-D	- .0271	.145	.021	0.26
ECONDD	.0007	.146	.021	0.10
PROT-D	.1471	.147	.021	0.07
BUDD-D	- .0106	.147	.022	0.09
MOHA-D	- .0127	.148	.022	0.01
DENSTD	- .0065	.148	.022	0.01
BLOC-D	.5645	.150	.022	0.23
POWERD	.0000	.151	.023	0.11
RELGRD	.0408	.152	.023	0.05

TABLE 8-4.

CANONICAL ANALYSIS RESULTS[a]
FOR NET-CONFLICT MODEL (1963)

Transformed Behavior Dimension Y_k	Canonical Correlation with V_g(k=g)	Chi-square	D.F.	Z-transformation for D.F. 30
Y_1	.572 (.327)	293.2	150	6.9
Y_2	.525 (.275)	167.9	126	2.2
Y_3	.233 (.054)	57.0	104	-3.7
Y_4	.204 (.042)	38.7	84	-4.1
Y_5	.183 (.033)	24.7	66	-4.4
Y_6	.149 (.022)	13.5	50	-4.7
Y_7	.106 (.011)			
Y_8	.086 (.007)			
Y_9	.002 (.000)			
Y_{10}	.0002(.000)			
Trace Correlation = .278 (.077)				

[a] See the footnotes to Table 8-2.

relationship accounts for 32.7 per cent of variation in behavior. The combination of high loading variables on this relationship are as following:

$$\left.\begin{matrix} .65(\text{ECONDD}) + .41(\text{FMOP-D}) \\ + .34(\text{CONSTD}) \end{matrix}\right\} \rightarrow \{- .64(\text{R-EXPO}) - .40(\text{UNOFVL}). \quad (8\text{-}3)$$

What this equation implies is that when nation i is a topdog in economic development, and enjoys more freedom of group opposition and constituency power, then the export from i to j is less important to i and i is less likely to engage in any unofficial violence (e.g., attacks on embassy and foreign personnel) against j.

The second canonical relationship accounts for 27.5 per cent of variation in B-space. The configuration of variables highly loaded on this is:

$$.96(\text{PARITY})\} \rightarrow \left\{\begin{matrix} - .62(\text{TREATY}) + .34(\text{EMBLEG}) + .40(\text{DISCMA}) \\ + .27(\text{NEGCOM}). \end{matrix}\right. \quad (8\text{-}4)$$

When verbalized, this equation implies that high power parity leads to less treaties even though two nations may have official diplomatic ties. Moreover, if the absolute difference in power capability grows bigger, there exists higher probability of discrete military action and negative communications occurring. This latter point represents what Rummel called a deterrence type relationship (Rummel, 1967, p. 202). By applying both military actions and negative communication nation i could deter j from taking any hostile action against

i or its allies. This latter point is consonant with the former, that despite the existence of formal ties two nations are less likely to get involved in treaty-making.

Some discussion on the lack of an overall relationship is in order. Dropping the assumption of equal weighting to generate (CF - CP) did not increase the variance accounted for. This is found consistent for 1955 and 1963. Earlier I have pointed two more possible systematic biases. One is the weakness of general behavior model in contrast to the actor specific model, while the assumption of opposite behavior is the other.

One way of checking the role of environment, decision-making mechanisms, and leadership variables specific to each nation (not included in the analysis) is to study the attribute profiles of best and least predicted groups for the canonical relationships. By so doing, we may be able to discover some peculiar characteristics for best and least predicted groups of dyads which would improve the prediction. This is a reasonable expectation since previous application of actor specific model to the global system has enabled Rummel to group dyads by actors in terms of the relationships found between A and B-spaces (Rummel, 1969).

Therefore, residuals from first two canonical relations of Tables 8-2 and 8-4 are classified as best predicted or least predicted if they are smaller than |0.12| standard error of estimate or greater than |2.00| standard error. The

profile of these groups plotted for 1955 and 1963 have not yielded promising results. The averages and standard deviations of these groups are very similar to those of all dyads. In other words, there is no characteristic distinguishing one group from another. This lack of differentiation between groups is caused by the fact that the independent variables account for so little variance in dyadic behavior.

The last possibility of increasing the fit between attributes and behavior is to drop the assumption that the behavior $i \rightarrow j$ is the opposite of $j \rightarrow i$. It is the task of future research to test the models with the distance magnitudes of attributes rather than the distance vectors. Distance magnitude is the same for dyad $i \rightarrow j$ and $j \rightarrow i$.

CHAPTER IX

CONCLUSIONS AND DISCUSSION: WHAT NEXT?

It is commonplace in most intellectual dialogues that the writer tries to avoid making any far-reaching generalizations. On the other hand, the readers are inclined to skim the detail and to assume that the conclusions are quite solid, no matter how tentatively expressed. To reiterate, this study is just the beginning of research looking towards meaningful prediction of Asian international behavior. It is a start of a long and complicated process directed to the unfolding of the Asian behavioral system. From the present study it is impossible to make any definite statement on the linkage between attributes and behavior of Asian countries. It does show, however, a first step toward scientific approach in Asian study which would hopefully be a groundwork for a cumulative science.

What then are some tentative conclusions? First of all, the general fit between two theoretical models and observations appeared to be weak, even though the configurations of variables have yielded some substantively meaningful results. Test of the Interaction Model has demonstrated that interaction propensity and actor dominance somewhat predicted both conflict and cooperative behavior between two nations.

As far as the Net-Conflict Model is concerned, some specific results are worth mentioning. Though the general attribute distances did not account for much of the variation

in conflict behavior, power parity plus distance on bloc membership and constituency power did account for one-fifth of variation in negative communication, negative act, and discrete military acts. Also found for 1955 was that distances on economic development, power, capability and Protestant population accounted for about ten per cent of variation in conflict behavior. The implication of this finding is that the more a nation is an underdog in wealth and power and the more Protestant population it has, it is more likely to refrain from any overt violent action but more inclined to employ tactics of negative communication.

Turning to the 1963 analysis with the Net-Conflict Model, there were two significant relationships. (1) About one-third of variation in unofficial violence and relative export was dependent upon distances on such attributes as economic development, freedom of group opposition, and constituency power. (2) Approximately, the same predictability (28 per cent of variation) was found in the relationship where power parity alone predicted discrete military action, negative communication, and embassy and legation on the positive direction, and treaty on the negative direction. Thus, this linkage was interpreted as representing a deterrence relationship between two nations.

The most significant of all the findings is the clustering of Asian countries. Despite a poor dependence of the Net-Cooperation Index on attribute distances, this measure

has helped clarify the configuration of behavioral clusters in Asia. Both factor analysis and hierarchical clustering scheme have generated very similar groups. The HCS groups were favored for two reasons: factor groups were merely reflecting bipolar structure of Asian politics; HCS presented a better picture of sub-groups within a big cooperative cluster. For both 1955 and 1963, Japan was at the core of the largest group encompassing countries with diverse characteristics. A striking result was found after examining attribute profiles of each group. That is, the group led by Japan had no characteristics distinguishing it from all nations for 1955 and 1963. This means that Japan's arena of peaceful interaction is the whole of Asia, while the rest of the nations tend to be interested in small groups.

With these results where do I go from now? First, analysis will be redone employing actor specific models. If the political culture specific to each nation is a really powerful determinant of foreign policy, then this is the direction to take.

Second, the assumption of opposite behavior for a dyad will be dropped and the predictors will be measured by distance magnitude on attributes rather than distance vectors themselves. My previous analysis of dyadic conflict behavior using attribute distance magnitudes as independent variables yielded quite promising results (Park, 1967). This line of research will be resumed. Both the actor specific model

and distance magnitude model will be tested with log transformations of the independent variables. This transformation is geared to the "law of diminishing returns" so that the effect of extreme values on results would be reduced.[1]

Third, the comparison of the Asian system with the global system of interaction will be performed. This would help us understand how different Asia is from the entire world. For this end, behavior and attribute spaces of Asia will be factor analyzed to find the underlying structures and, then, these factor structures will be compared with the results of global analysis.

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[1] I would like to thank Professor R.J. Rummel for initiating this line of development.

REFERENCES

Alker, Hayward, 1964, "Dimensions of Conflict in the United Nations," American Political Science Review, 56, pp. 642-57.

Banks, Arthur S., and Robert Textor, 1963, A Cross Polity Survey, Cambridge, Mass.: M.I.T. Press.

_____, and Phillip M. Gregg, 1965, "Grouping Political Systems: Q-Factor Analysis of 'A Cross-Polity Survey,'" American Behavioral Scientist, 9, 3, pp. 3-5.

Berry, Brian J.L., 1966, Essays on Commodity Flows and the Spatial Structure of the Indian Economy, Univ. of Chicago Press.

Bobrow, Davis B., 1965, "Chinese Communist Response to Alternative U.S. Active and Passive Defense Postures," Paper presented at the Second Conference of the Strategic Interaction Panel, Oak Ridge National Laboratory, Oak Ridge, Tennessee, December 9-10.

_____, 1967, "Old Dragons in New Models," World Politics, Vol. XIX, Jan. 1967, 306-319.

Boulding, Kenneth, 1962, Conflict and Defense: A General Theory, New York: Harper & Row.

Brecher, Michael, 1963, "International Relations and Asian Studies: The Subordinate State System of Southern Asia," World Politics, 15, 2, pp. 212-35.

Brody, Richard, 1963, "Some Systemic Effects of the Spread of Nuclear Weapons Technology: A Study through Simulation of a Multi-Nuclear Future," Journal of Conflict Resolution, Vol. VII, No. 4, pp. 663-753.

Brams, Steven, 1968, "Measuring the Concentration of Power in Political Systems," American Political Science Review, LXII, pp. 461-75.

Burton, John W., 1965, International Relations: A General Theory, Cambridge: Cambridge University Press.

Bwy, Douglas P., 1968, "Dimensions of Social Conflict in Latin America," American Behavioral Scientist, II, pp. 39-80.

Carr, E.H., 1945, Nationalism and After, London: Macmillan.

Cattell, Raymond B., 1949, "The Dimensions of Culture Patterns of Factorization of National Characters," Journal of Abnormal and Social Psychology, XLIV, 4, pp. 443-69.

_____, 1950, "The Principal Culture Patterns Discoverable in the Syntal Dimensions of Existing Nations," Journal of Social Psychology, 32, 2, pp. 215-53.

_____, 1966, "The Scree Test for the Number of Factors," Multivariate Behavioral Research, 1, pp. 245-76.

Cooley, William W. and Paul R. Lohnes, 1962, Multivariate Procedures for the Behavioral Sciences, New York: John Wiley and Sons, Inc.

Cronbach, L.J. and Gleser, G.C., 1963, "Assessing Similarity between Profiles," Psychological Bulletin, 50, pp. 456-473.

Denton, Frank and Warren R. Phillips, 1968, "Patterns in the History of Violence, Journal of Conflict Resolution, XII, June,1968, #2, pp. 182-195.

Deutsch, Karl, 1963, The Nerves of Government, New York: Free Press.

_____, and J. David Singer, 1964, "Multi-polar Power Systems and International Stability," World Politics, XVI, pp. 390-406.

Galtung, Johan, 1964, "A Structural Theory of Aggression," Journal of Peace Research, 2, pp. 15-38.

George, Alexander L., 1967, The Chinese Communist Army in Action (The Korean War and its Aftermath), New York: Columbia Univ. Press.

Gleditsch, Nils Petter, 1969, "Rank Theory, Field Theory, and Attribute Theory," Presented to the Conference on Secondary Data Analysis, Institut für Vergleichende Sozialforshung, Cologne, May 26-31, 1969.

Gordon, Bernard K., 1966, The Dimensions of Conflict in Southeast Asia, Englewood Cliffs, N.J.: Prentice Hall.

Grace, H.A. and J.O. Neuhaus, 1952, "Information and Social Distance as Predictors of Hostility towards Nations," Journal of Abnormal and Social Psychology, 47, pp. 540-45.

Greaser, Connie U., 1966, "Quantitative Analysis of the Sino-Indian Border Conflict, 1954-1962," unpublished Master's thesis, University of Southern California.

Gregg, Philip M. and Arthur S. Banks, 1965, "Dimensions of Political Systems: Factor Analysis of a Cross-Polity Survey," American Political Science Review, LIX, No. 3, pp. 602-614.

Guetzkow, Harold, 1950, "Long Range Research in International Relations," American Prospectus, pp. 421-40.

Haas, Ernst B., 1964, Beyond the Nation State: Functionalism and International Organization, Stanford: Stanford University Press.

Haas, Michael, 1965, "Societal Approaches to the Study of War," Journal of Peace Research, No. 4, pp. 307-23.

Hall, A.D. and R.E. Fagen, 1956, "Definition of System," General Systems Yearbook, 1, pp. 18-28.

Hall, Dennis, 1968, "Computer Program Profile," Research Report No. 14, Dimensionality of Nations Project, mimeo.

_____, and R.J. Rummel, 1968, "The Patterns of Dyadic Foreign Conflict Behavior for 1963," Research Report No. 12, Dimensionality of Nations Project, mimeo.

Harary, Frank, 1961, "A Structural Analysis of the Situation in the Middle East in 1956," Journal of Conflict Resolution, Vol. V, No. 2, pp. 167-178.

Harman, Harry H., 1967, Modern Factor Analysis (2nd ed.), Chicago: The University of Chicago Press.

Heintz, Peter, 1968, "Two Simple Prestige-Power Models for Individual Mobility and System Change," Bulletin, #71, pp. 1-23.

Horvath, William J., 1967, "A Statistical Model for the Duration of Wars and Strikes, Mental Health Research Institute Preprint No. 203.

_____ and Claxton C. Foster, 1963, "Stochastic Models of War Alliances," Journal of Conflict Resolution, Vol. VII, No. 2, pp. 110-116.

Hooper, J.W., 1959, "Simultaneous Equation and Canonical Correlation Theory," Econometrika, Vol. 27, pp. 245-56.

Johnson, S.C., 1967, "Hierarchical Clustering Schemes," Psychometrika, Vol. 32, No. 3, pp. 241-254.

Kaplan, Morton A., 1964, System and Process in International Politics, New York: John Wiley and Sons, Inc.

Lagos, Gustavo, 1963, International Stratification and Underdeveloped Countries, Univ. of North Carolina Press.

Lee, J.S., "The Periodic Recurrence of Internecine Wars in China," China Journal of Science and Arts, XIV (March and April, 1931), pp. 111-15.

Levi, Werner, 1968, The Challenge of World Politics in South and Southeast Asia, Prentice Hall.

Lewin, Kurt, 1951, Field Theory in Social Science, (ed., Dorwin Cartwright) New York: Harper & Row.

Liska, George, 1957, International Equilibrium, Cambridge: Harvard University Press.

McClelland, Charles A., 1966, Theory and the International System, New York: The MacMillan Company.

_____, 1967, "Access to Berlin: The Quantity and Variety of Events," in Singer (ed) Quantitative International Politics: Insights and Evidence. New York: Free Press.

_____, "The Beginning, Duration, and Abatement of International Crises: Comparisons in Two Conflict Arenas," in Hermann (ed.) International Crises, forthcoming.

_____, Dannial Harrison, Wayne Martin, Warren R. Phillips, and Robert A. Young, 1965, "Performance in Crisis and Non Crisis: Quantitative Studies of the Taiwan Straits Confrontation, 1950-64," Report to the Behavioral Sciences Group Naval Ordnance Test Station, China Lake, California, Contract #N60-530-11207.

McCormick, David, 1969, "A Field Theory of Dynamic International Process," Dimensionality of Nations Project, Research Report No. 30.

McGuire, Martin C., 1965, Security and the Arms Race, A Theory of the Accumulation of Strategic Weapons and how Secrecy Affects it, Cambridge: Harvard University Press.

MacRae, John and Paul Smoker, 1967, "A Vietnam Simulation: A Report on the Canadian/English Joint Project," Journal of Peace Research, 1967, No. 1, pp. 1-25.

Mack, Raymond and Richard C. Snyder, 1957, "The Analysis of Social Conflict--toward an Overview and Synthesis," Journal of Conflict Resolution, Vol. 1, pp. 212-248.

Modelski, George, 1962, A Theory of Foreign Policy, New York: Praeger.

_____, 1961, International Relations and Area Studies: The Case of South-East Asia," International Relations, 2, pp. 143-55.

Morgenthau, Hans J., 1954, Politics Among Nations: The Struggle for Power and Peace, 2nd ed. New York: Alfred A. Knopf.

North, Robert, Ole Holsti, and Richard Brody, 1967, "Perception and Action in the Study of International Relations: the 1914 Case," in Singer (ed.) Quantitative International Politics, New York: Free Press.

Nunnaly, J., 1962, "The Analysis of Profile Data," Psychological Bulletin, Vol. 59, No. 4, pp. 311-319.

Odum, and Harry Estill Moore, 1938, American Regionalism: A Cultural-Historical Approach to National Integration, New York: Henry Holt.

Organski, A.F.K., 1958, World Politics, New York, Alfred A. Knopf.

Park, Tong-Whan, 1967, "Some Modification of Field Theory and Test with Empirical and Simulation Data," Northwestern University (unpublished manuscript).

Parsons, Talcott, and Shils, E.A., eds., 1951, Toward a General Theory of Action, Cambridge: Harvard University Press.

Peffer, Nathaniel, "Regional Security in Southeast Asia," International Organization (August 1954), pp. 311-15.

Phillips, Warren, R., 1968, "Investigations into Alternative Techniques for Developing Empirical Taxonomies: The Results of Two Plasmodes," Dimensionality of Nations Project, Research Report No. 15 (mimeo).

Richardson, Lewis Fry, 1960a, Arms and Insecurity, Pittsburgh: Boxwood Press.

_____, 1960b, Statistics of Deadly Quarrels, Pittsburgh: Boxwood Press.

Riggs, Fred W., 1967, "The Structure of Government and Administrative Reform," Prepared for the International Conference on Theoretical Problems of Administrative Reform in Developing Countries, Lake Como, Italy, July 16-22, 1967.

_____, 1968. "The Dialectics of Development," Department of Political Science, mimeo.

Riker, William C., 1962, Theory of Political Coalition, New Haven: Yale University Press.

Rosecrance, Richard, 1963, Action and Reaction in World Politics: International Systems in Perspective, Boston: Little Brown & Co.

Rosenau, James, 1963, "Calculated Control as a Unifying Concept in the Study of International Politics and Foreign Policy," Center of International Studies, Research Report #15, Princeton, N.J.

Rummel, R.J., 1963, "Dimensions of Conflict Behavior Within and Between Nations," General Systems Yearbook, Vol. VIII, pp. 1-50.

_____, 1965a, "A Field Theory of Social Action with Application to Conflict Within Nations," General Systems Yearbook, Vol. 10, pp. 183-211.

_____, 1965b, "A Social Field Theory of Foreign Conflict Behavior," Peace Research Society: Papers IV, Cracow Conference.

_____, 1966, "A Foreign Conflict Code Sheet," in World Politics, Vol. XVIII, No. 2, pp. 283-96.

_____, 1967, "Some Attributes and Behavioral Patterns of Nations," Journal of Peace Research, No. 2, pp. 196-206.

_____, 1968, "The DON Project: A Five Year Research Program," Dimensionality of Nations Project, Research Report No. 9, mimeo.

_____, 1969, "Field Theory and Indicators of International Behavior," Dimensionality of Nations Project, Rearch Report No. 29.

Rummel, R.J., 1970a, The Dimensions of Nations, forthcoming.

_____, 1970b, "Applied Factor Analysis," forthcoming, Evanston: Northwestern University Press.

Russell, Bertrand and Alfred North Whitehead, 1910-1913, Principia Mathematica, Cambridge, England.

Russett, Bruce, 1963, "The Calculus of Deterrence," Journal of Conflict Resolution, Vol. VII, No. 2, pp. 97-109.

_____, 1967a, International Regions and the International System: A Study in Political Ecology, Chicago: Rand McNally.

_____, 1967b, "Pearl Harbor: Deterrence Theory and Decision Theory," Journal of Peace Research, 2, pp. 89-106.

Schelling, Thomas, 1960, The Strategy of Conflict, Cambridge, Mass.: Harvard University Press.

Simon, Sheldon, 1969, Broken Triangle: Djakarta, Peking and PKI.

Singer, J. David, 1961, "The Level of Analysis Problem in International Relations," World Politics, Vol. 14, pp. 77-92.

_____ and Melvin Small, 1966, "National Alliance Commitments and War Involvement," Papers of the Peace Research Society, Vol. 5, pp. 110-140.

_____ and _____, 1967, "Alliance Aggregation and the Onset of War, 1815-1945," in Singer (ed.) Quantitative International Politics.

Smoker, Paul, 1964a, "Sino-Indian Relations: A Study of Trade, Communication and Defense," Journal of Peace Research, No. 2, pp. 65-76.

_____, 1964b, "Fear in the Arms Race: a Mathematical Study," Journal of Peace Research, No. 1, pp. 55-61.

_____, 1965, "Trade, Defense, and the Richardson Theory of Arms Race: A 7-Nation Study," Journal of Peace Research, Vol. VII, pp. 161-178.

Smoker, Paul, "A Time Series Analysis of the Sino Indian Relations," Paper presented to the Second International Peace Research Association Conference, Tullberg, Sweden, June 17-19, 1967.

Snyder, Richard C., 1954, Decision-Making as an Approach to the Study of International Relations, Princeton, N.J.: Foreign Policy Analysis Project.

_____, and Glenn Paige, 1958, "The United States Decision to Resist Aggression in Korea," Administrative Science Quarterly, Vol. III, pp. 341-378.

Sokal, Robert R. and Peter H.H. Sneath, 1963, Principles of Numerical Taxonomy, San Francisco: W.H. Freeman and Company.

Sprout, Harold and Margret, 1962, Foundations of International Politics, Princeton: D. Van Norstrand Company.

Sullivan, John D., 1964, "Quemoy & Matsu: A Systematic Analysis," unpublished manuscript.

Tanter, Raymond, 1966, "Dimensions of Conflict Behavior Within and Between Nations, 1958-60," Journal of Conflict Resolution, Vol. X, No. 1, pp. 41-64.

_____ and Manus Midlarsky, 1967, "Towards a Theory of Political Instability in Latin America," Journal of Peace Research, No. 3, pp. 209-227.

Thurstone, L.L., 1935, The Vectors of Mind, Chicago: University of Chicago Press.

Tucker, Ledyard, 1962, "Implications of Factor Analysis of Three Way Matrices for Measurement of Change," in Harris, Problems in Measuring Change, pp. 122-137, Madison: University of Wisconsin Press.

Vance, Rupert B., 1951, "The Regional Concept as a Tool for Social Research," in Merrill Jensen (ed.), Regionalism in America, Madison, Wis.: Univ. of Wisconsin Press.

Wall, Charles and R.J. Rummel, 1968, "Missing Data Estimation," Dimensionality of Nations Project, Research Report No. 20 (mimeo).

Ward, J.H. Jr., 1963, "Hierarchical Grouping to Optimize an Objective Function," Journal of the American Statistical Association, No. 58, pp. 236-44.

Weiss, Herbert, 1963, "Stochastic Models for the Duration and Magnitude of a Deadly Quarrel," Operations Research, No. 11, pp. 101-21.

_____, 1966, "Trends in World Involvement in War," Palos Verdes, mimeo.

Whiting, Allan S., 1960, China Crosses the Yalu, New York: MacMillan Company.

Wirth, Louis, 1951, "Limitations of Regionalism" in Merrill Jensen (ed.) Regionalism in America, Madison, Wisc.: University of Wisconsin Press.

Wright, Quincy, 1942, The Study of War, Vol. 1-2, Chicago: University of Chicago Press.

_____, 1955, The Study of International Relations, New York: Appleton-Century-Crofts, Inc.

Zaninovich, Martin George, 1964, "An Empirical Theory of State Response: The Sino-Soviet Case," Ph.D. Dissertation, Stanford University, mimeo.

Zinnes, Dina, 1965, "A Markovian Analysis of Hostile Communications Between Nations," A Research Proposal Submitted to the Division of Social Sciences, National Science Foundation.

_____, 1968, "The Expression and Perception of Hostility in Pre-War Crisis: 1914," in Singer (ed.) Quantitative International Politics.

APPENDIX I

DATA:

ATTRIBUTE DISTANCES AND DYADIC BEHAVIOR

VARIABLE FORMAT

Columns	Variables	Codes
	SET I (1955 & 1963)	
1- 3	Actor Nation Identification *	AID
4- 6	Object Nation Identification *	OID
7- 8	Set Identification	SID
9-14	Economic development distance	ECONDD
15-24	Power capability distance	POWERD
25-30	Population/physician distanve	PHYSID
31-33	Bloc distance	BLOC-D
34-36	Freedom of group opposition distance	FMOP-D
37-41	Density distance	DENSTD
42-44	Constitutive system distance	CONSTD
45-47	Compensated bureaucracy distance	BURCOD
48-50	Executive accountability distance	EXEACD
51-55	Buddhist distance	BUDD-D
56-60	Protestant distance	PROT-D
	SET 2 (1955 & 1963)	
1- 3	Actor Nation Identification	AID
4- 6	Object Nation Identification	OID
7- 8	Set Identification	SID
9-13	Mohammedan distance	MOHA-D
14-18	Catholic distance	CATH-D
19-21	Religious group distance	RELGRD
22-25	Language group distance	LANGRD
26-28	Ethnic group distance	ETHGRD
29-31	Time since last change of systemic relationship	TIME
32-36	Geographic distance between capitals	CAPT-D
37-46	Interaction propensity	INTACP
47-56	Actor dominance	ACTDOM
	SET 3 (1955 & 1963)	
1- 3	Actor nation identification	AID
4- 6	Object nation identification	OID
7- 8	Set identification	SID
9-18	Power parity	PARITY

* See TABLE 2-1 for ID numbers of nations.

Columns	Variables	Codes
	SET 4 (1955)	
1- 3	Actor nation identification	AID
5- 7	Object nation identification	OID
9	Set identification	SID
12-18	Treaties	TREATY
19-25	Nongovernmental Organizations	NGO
26-32	Relative NGO's	R-NGO
33-39	Exports	EXPORT
40-46	Relative exports	R-EXPO
47-53	Embassy and legations	EMBLEG
54-60	Warning and defensive acts	WARNDF
	SET 4 (1963)	
1- 3	Actor nation identification	AID
5- 7	Object nation identification	OID
9	Set identification	SID
12-18	Treaties	TREATY
19-25	Nongovernmental organizations	NGO
26-32	Relative NGO's	R-NGO
33-39	Exports	EXPORT
40-46	Relative exports	R-EXPO
47-53	Enbassy and legations	EMBLEG
54-60	Discrete military acts	DISCMA
	SET 5 (1955)	
1- 3	Actor nation identification	AID
5- 7	Object nation identification	OID
9	Set identification	SID
12-18	Discrete military acts	DISCMA
19-25	Negative behavior acts	NEGACT
26-32	Negative communations	NEGCOM
33-39	Attacks on embassy	ATKEMB
40-46	Cooperation minus conflict (Net-Cooperation Index)	CP-CF
47-53	Conflict minus cooperation (Net-Conflict)	CF-CP
54-60	Cooperation plus conflict (Total Interaction)	CP+CF

Columns	Variables	Codes
	SET 5 (1963)	
1- 3	Actor nation identification	AID
5- 7	Object nation identification	OID
9	Set identification	SID
12-18	Negative behavior acts	NEGACT
19-25	Negative communations	NEGCOM
26-32	Unofficial violence	UNOFVL
33-39	Cooperative minus conflict (Net-Cooperation Index)	CP-CF
40-46	Conflict minus cooperation (Net-Conflict)	CF-CP
47-53	Cooperation plus conflict (Total Interaction)	CP+CF

1955 ATTRIBUTE DISTANCES SET 1

1.	2.1.	-28.	-1.228	616.	0.	-2.	-11.	-1.	-1.	-1.	-85.0	-1.2
1.	3.1.	-15.	0.039	-200.	0.	-1.	-7.	0.	0.	0.	-90.0	0.0
1.	4.1.	-82.	-0.589	647.	0.	-2.	-113.	-1.	-1.	-1.	-64.0	-1.9
1.	5.1.	-152.	-5811.102	613.	1.	0.	-42.	0.	0.	0.	-25.6	-0.1
1.	6.1.	-378.	-2.972	685.	-1.	-1.	-230.	0.	0.	-1.	-22.0	-1.8
1.	7.1.	-109.	-1727.539	643.	0.	-2.	-98.	-1.	-1.	-1.	0.0	0.0
1.	8.1.	-111.	-77.216	-290.	0.	-1.	-37.	0.	0.	0.	-2.5	-2.6
1.	9.1.	-735.	-586.171	690.	-1.	-2.	-223.	-1.	-1.	-1.	-44.8	-0.5
1.	10.1.	-296.	-2.589	683.	1.	0.	-61.	0.	0.	0.	-13.0	0.0
1.	11.1.	-133.	-6.335	633.	-1.	-2.	-212.	-1.	-1.	-1.	-13.0	-4.4
1.	12.1.	-2.	0.070	460.	0.	-2.	11.	0.	0.	0.	-70.0	-1.3
1.	13.1.	2.	0.050	-7700.	0.	-1.	-42.	0.	0.	0.	-50.0	0.0
1.	14.1.	-456.	0.041	680.	1.	0.	17.	-1.	0.	-1.	-99.0	0.0
1.	15.1.	-37.	-29.433	570.	-1.	-2.	-69.	-1.	-1.	-1.	-0.4	-0.4
1.	16.1.	-121.	-6.497	580.	-1.	-2.	-56.	-1.	-1.	-1.	-0.2	-10.3
1.	17.1.	-45.	-2.019	632.	-1.	-1.	-21.	0.	0.	-1.	-94.1	-0.4
1.	18.1.	-60.	-1.125	590.	1.	0.	-64.	0.	0.	0.	-70.0	0.0
1.	19.1.	-32.	-0.480	90.	-1.	-2.	-46.	0.	0.	0.	-70.0	0.0
2.	1.1.	28.	1.228	-616.	0.	2.	11.	1.	1.	1.	85.0	1.2
2.	3.1.	13.	1.267	-816.	0.	1.	4.	1.	1.	1.	-5.0	1.2
2.	4.1.	-54.	0.639	31.	0.	0.	-102.	0.	0.	0.	21.0	-0.7
2.	5.1.	-124.	-5809.879	-3.	1.	2.	-31.	1.	1.	1.	59.4	1.1
2.	6.1.	-350.	-1.744	69.	-1.	1.	-219.	1.	1.	0.	63.0	-0.6
2.	7.1.	-81.	-1726.311	27.	0.	0.	-87.	0.	0.	0.	85.0	1.2
2.	8.1.	-83.	-75.988	-906.	0.	1.	-26.	1.	1.	1.	82.5	-1.4
2.	9.1.	-707.	-584.943	74.	-1.	0.	-212.	0.	0.	0.	40.2	0.7
2.	10.1.	-268.	-1.361	67.	1.	2.	-50.	1.	1.	1.	72.0	1.2
2.	11.1.	-105.	-5.107	17.	-1.	0.	-201.	0.	0.	0.	72.0	-3.2
2.	12.1.	26.	1.298	-156.	0.	0.	22.	1.	1.	1.	15.0	-0.1
2.	13.1.	30.	1.278	-8316.	0.	1.	-31.	1.	1.	1.	35.0	1.2
2.	14.1.	-428.	1.269	64.	1.	2.	28.	0.	1.	0.	-14.0	1.2
2.	15.1.	-9.	-28.205	-46.	-1.	0.	-58.	0.	0.	0.	84.6	0.8
2.	16.1.	-93.	-5.269	-36.	-1.	0.	-45.	0.	0.	0.	84.8	-9.1
2.	17.1.	-17.	-0.791	16.	-1.	1.	-10.	1.	1.	0.	-9.1	0.8
2.	18.1.	-32.	0.103	-26.	1.	2.	-53.	1.	1.	1.	15.0	1.2
2.	19.1.	-4.	0.748	-526.	-1.	0.	-35.	1.	1.	1.	15.0	1.2
3.	1.1.	15.	-0.039	200.	0.	1.	7.	0.	0.	0.	90.0	0.0
3.	2.1.	-13.	-1.267	816.	0.	-1.	-4.	-1.	-1.	-1.	5.0	-1.2
3.	4.1.	-67.	-0.628	847.	0.	-1.	-106.	-1.	-1.	-1.	26.0	-1.9
3.	5.1.	-137.	-5811.145	813.	1.	1.	-35.	0.	0.	0.	64.4	-0.1
3.	6.1.	-363.	-3.011	885.	-1.	0.	-223.	0.	0.	-1.	68.0	-1.8
3.	7.1.	-94.	-1727.578	843.	0.	-1.	-91.	-1.	-1.	-1.	90.0	0.0
3.	8.1.	-96.	-77.255	-90.	0.	0.	-30.	0.	0.	0.	87.5	-2.6
3.	9.1.	-720.	-586.210	890.	-1.	-1.	-216.	-1.	-1.	-1.	45.2	-0.5
3.	10.1.	-281.	-2.628	883.	1.	1.	-54.	0.	0.	0.	77.0	0.0
3.	11.1.	-118.	-6.374	833.	-1.	-1.	-205.	-1.	-1.	-1.	77.0	-4.4
3.	12.1.	13.	0.031	660.	0.	-1.	18.	0.	0.	0.	20.0	-1.3
3.	13.1.	17.	0.011	-7500.	0.	0.	-35.	0.	0.	0.	40.0	0.0
3.	14.1.	-441.	0.002	880.	1.	1.	24.	-1.	0.	-1.	-9.0	0.0

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3.15.1.  -22.   -29.472  770.-1.-1. -62.-1.-1.-1. 89.6 -0.4
3.16.1. -106.    -6.536  780.-1.-1. -49.-1.-1.-1. 89.8-10.3
3.17.1.  -30.    -2.058  832.-1. 0. -14. 0. 0.-1. -4.1 -0.4
3.18.1.  -45.    -1.164  790. 1. 1. -57. 0. 0. 0. 20.0  0.0
3.19.1.  -17.    -0.519  290.-1.-1. -39. 0. 0. 0. 20.0  0.0
4. 1.1.   82.     0.589 -647. 0. 2. 113. 1. 1. 1. 64.0  1.9
4. 2.1.   54.    -0.639  -31. 0. 0. 102. 0. 0. 0.-21.0  0.7
4. 3.1.   67.     0.628 -847. 0. 1. 106. 1. 1. 1.-26.0  1.9
4. 5.1.  -70. -5810.516  -34. 1. 2.  71. 1. 1. 1. 38.4  1.8
4. 6.1. -296.    -2.383   38.-1. 1.-117. 1. 1. 0. 42.0  0.1
4. 7.1.  -27. -1726.950   -4. 0. 0.  15. 0. 0. 0. 64.0  1.9
4. 8.1.  -29.   -76.627 -937. 0. 1.  76. 1. 1. 1. 61.5 -0.7
4. 9.1. -653.  -585.582   43.-1. 0.-110. 0. 0. 0. 19.2  1.4
4.10.1. -214.    -2.000   36. 1. 2.  52. 1. 1. 1. 51.0  1.9
4.11.1.  -51.    -5.746  -14.-1. 0. -99. 0. 0. 0. 51.0 -2.5
4.12.1.   80.     0.659 -187. 0. 0. 124. 1. 1. 1. -6.0  0.6
4.13.1.   84.     0.639-8347. 0. 1.  71. 1. 1. 1. 14.0  1.9
4.14.1. -374.     0.630   33. 1. 2. 130. 0. 1. 0.-35.0  1.9
4.15.1.   45.   -28.844  -77.-1. 0.  44. 0. 0. 0. 63.6  1.5
4.16.1.  -39.    -5.908  -67.-1. 0.  57. 0. 0. 0. 63.8 -8.4
4.17.1.   37.    -1.430  -15.-1. 1.  92. 1. 1. 0.-30.1  1.5
4.18.1.   22.    -0.536  -57. 1. 2.  49. 1. 1. 1. -6.0  1.9
4.19.1.   50.     0.109 -557.-1. 0.  67. 1. 1. 1. -6.0  1.9
5. 1.1.  152.  5811.102 -613.-1. 0.  42. 0. 0. 0. 25.6  0.1
5. 2.1.  124.  5809.879    3.-1.-2.  31.-1.-1.-1.-59.4 -1.1
5. 3.1.  137.  5811.145 -813.-1.-1.  35. 0. 0. 0.-64.4  0.1
5. 4.1.   70.  5810.516   34.-1.-2. -71.-1.-1.-1.-38.4 -1.8
5. 6.1. -226.  5808.133   72.-2.-1.-188. 0. 0.-1.  3.6 -1.7
5. 7.1.   43.  4083.569   30.-1.-2. -56.-1.-1.-1. 25.6  0.1
5. 8.1.   41.  5733.891 -903.-1.-1.   5. 0. 0. 0. 23.1 -2.5
5. 9.1. -583.  5224.934   77.-2.-2.-181.-1.-1.-1.-19.2 -0.4
5.10.1. -144.  5808.516   70. 0. 0. -19. 0. 0. 0. 12.6  0.1
5.11.1.   19.  5804.770   20.-2.-2.-170.-1.-1.-1. 12.6 -4.3
5.12.1.  150.  5811.176 -153.-1.-2.  53. 0. 0. 0.-44.4 -1.2
5.13.1.  154.  5811.152-8313.-1.-1.   0. 0. 0. 0.-24.4  0.1
5.14.1. -304.  5811.145   67. 0. 0.  59.-1. 0.-1.-73.4  0.1
5.15.1.  115.  5781.672  -43.-2.-2. -27.-1.-1.-1. 25.2 -0.3
5.16.1.   31.  5804.605  -33.-2.-2. -14.-1.-1.-1. 25.4-10.2
5.17.1.  107.  5809.086   19.-2.-1.  21. 0. 0.-1.-68.5 -0.3
5.18.1.   92.  5809.977  -23. 0. 0. -22. 0. 0. 0.-44.4  0.1
5.19.1.  120.  5810.625 -523.-2.-2.  -4. 0. 0. 0.-44.4  0.1
6. 1.1.  378.     2.972 -685. 1. 1. 230. 0. 0. 1. 22.0  1.8
6. 2.1.  350.     1.744  -69. 1.-1. 219.-1.-1. 0.-63.0  0.6
6. 3.1.  363.     3.011 -885. 1. 0. 223. 0. 0. 1.-68.0  1.8
6. 4.1.  296.     2.383  -38. 1.-1. 117.-1.-1. 0.-42.0 -0.1
6. 5.1.  226. -5808.133  -72. 2. 1. 188. 0. 0. 1. -3.6  1.7
6. 7.1.  269. -1724.567  -42. 1.-1. 132.-1.-1. 0. 22.0  1.8
6. 8.1.  267.   -74.244 -975. 1. 0. 193. 0. 0. 1. 19.5 -0.8
6. 9.1. -357.  -583.199    5. 0.-1.   7.-1.-1. 0.-22.8  1.3
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6.10.1.	82.	0.383	-2.	2.	1.	169.	0.	0.	1.	9.0	1.8
6.11.1.	245.	-3.363	-52.	0.	-1.	18.	-1.	-1.	0.	9.0	-2.6
6.12.1.	376.	3.042	-225.	1.	-1.	241.	0.	0.	1.	-48.0	0.5
6.13.1.	380.	3.022	-8385.	1.	0.	188.	0.	0.	1.	-28.0	1.8
6.14.1.	-78.	3.013	-5.	2.	1.	247.	-1.	0.	0.	-77.0	1.8
6.15.1.	341.	-26.461	-115.	0.	-1.	161.	-1.	-1.	0.	21.6	1.4
6.16.1.	257.	-3.525	-105.	0.	-1.	174.	-1.	-1.	0.	21.8	-8.5
6.17.1.	333.	0.953	-53.	0.	0.	209.	0.	0.	0.	-72.1	1.4
6.18.1.	318.	1.847	-95.	2.	1.	166.	0.	0.	1.	-48.0	1.8
6.19.1.	346.	2.492	-595.	0.	-1.	184.	0.	0.	1.	-48.0	1.8
7. 1.1.	109.	1727.539	-643.	0.	2.	98.	1.	1.	1.	0.0	0.0
7. 2.1.	81.	1726.311	-27.	0.	0.	87.	0.	0.	0.	-85.0	-1.2
7. 3.1.	94.	1727.578	-843.	0.	1.	91.	1.	1.	1.	-90.0	0.0
7. 4.1.	27.	1726.950	4.	0.	0.	-15.	0.	0.	0.	-64.0	-1.9
7. 5.1.	-43.	-4083.569	-30.	1.	2.	56.	1.	1.	1.	-25.6	-0.1
7. 6.1.	-269.	1724.567	42.	-1.	1.	-132.	1.	1.	0.	-22.0	-1.8
7. 8.1.	-2.	1650.323	-933.	0.	1.	61.	1.	1.	1.	-2.5	-2.6
7. 9.1.	-626.	1141.368	47.	-1.	0.	-125.	0.	0.	0.	-44.8	-0.5
7.10.1.	-187.	1724.950	40.	1.	2.	37.	1.	1.	1.	-13.0	0.0
7.11.1.	-24.	1721.204	-10.	-1.	0.	-114.	0.	0.	0.	-13.0	-4.4
7.12.1.	107.	1727.609	-183.	0.	0.	109.	1.	1.	1.	-70.0	-1.3
7.13.1.	111.	1727.589	-8343.	0.	1.	55.	1.	1.	1.	-50.0	0.0
7.14.1.	-347.	1727.580	37.	1.	2.	115.	0.	1.	0.	-99.0	0.0
7.15.1.	72.	1698.106	-73.	-1.	0.	29.	0.	0.	0.	-0.4	-0.4
7.16.1.	-12.	1721.042	-63.	-1.	0.	42.	0.	0.	0.	-0.2	-10.3
7.17.1.	64.	1725.520	-11.	-1.	1.	77.	1.	1.	0.	-94.1	-0.4
7.18.1.	49.	1726.414	-53.	1.	2.	34.	1.	1.	1.	-70.0	0.0
7.19.1.	77.	1727.059	-553.	-1.	0.	52.	1.	1.	1.	-70.0	0.0
8. 1.1.	111.	77.216	290.	0.	1.	37.	0.	0.	0.	2.5	2.6
8. 2.1.	83.	75.988	906.	0.	-1.	26.	-1.	-1.	-1.	-82.5	1.4
8. 3.1.	96.	77.255	90.	0.	0.	30.	0.	0.	0.	-87.5	2.6
8. 4.1.	29.	76.627	937.	0.	-1.	-76.	-1.	-1.	-1.	-61.5	0.7
8. 5.1.	-41.	-5733.891	903.	1.	1.	-5.	0.	0.	0.	-23.1	2.5
8. 6.1.	-267.	74.244	975.	-1.	0.	-193.	0.	0.	-1.	-19.5	0.8
8. 7.1.	2.	-1650.323	933.	0.	-1.	-61.	-1.	-1.	-1.	2.5	2.6
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8.12.1.	109.	77.286	750.	0.	-1.	48.	0.	0.	0.	-67.5	1.3
8.13.1.	113.	77.266	-7410.	0.	0.	-5.	0.	0.	0.	-47.5	2.6
8.14.1.	-345.	77.257	970.	1.	1.	54.	-1.	0.	-1.	-96.5	2.6
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8.16.1.	-10.	70.719	870.	-1.	-1.	-19.	-1.	-1.	-1.	2.3	-7.7
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8.18.1.	51.	76.091	880.	1.	1.	-27.	0.	0.	0.	-67.5	2.6
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9. 1.1.	735.	586.171	-690.	1.	2.	223.	1.	1.	1.	44.8	0.5
9. 2.1.	707.	584.943	-74.	1.	0.	212.	0.	0.	0.	-40.2	-0.7
9. 3.1.	720.	586.210	-890.	1.	1.	216.	1.	1.	1.	-45.2	0.5

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 9. 4.1.   653.    585.582  -43. 1. 0. 110. 0. 0. 0.-19.2 -1.4
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14. 2.1.  428.    -1.269  -64.-1.-2. -28. 0.-1. 0. 14.0  -1.2
14. 3.1.  441.    -0.002 -880.-1.-1. -24. 1. 0. 1.  9.0   0.0
14. 4.1.  374.    -0.630  -33.-1.-2.-130. 0.-1. 0. 35.0  -1.9
14. 5.1.  304. -5811.145  -67. 0. 0. -59. 1. 0. 1. 73.4  -0.1
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14. 7.1.  347. -1727.580  -37.-1.-2.-115. 0.-1. 0. 99.0   0.0
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14. 9.1. -279.  -586.212   10.-2.-2.-240. 0.-1. 0. 54.2  -0.5
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14.18.1.	396.	-1.166	-90.	0.	0.	-81.	1.	0.	1.	29.0	0.0	
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15. 3.1.	22.	29.472	-770.	1.	1.	62.	1.	1.	1.	-89.6	0.4	
15. 4.1.	-45.	28.844	77.	1.	0.	-44.	0.	0.	0.	-63.6	-1.5	
15. 5.1.	-115.	-5781.672	43.	2.	2.	27.	1.	1.	1.	-25.2	0.3	
15. 6.1.	-341.	26.461	115.	0.	1.	-161.	1.	1.	0.	-21.6	-1.4	
15. 7.1.	-72.	-1698.106	73.	1.	0.	-29.	0.	0.	0.	0.4	0.4	
15. 8.1.	-74.	-47.783	-860.	1.	1.	32.	1.	1.	1.	-2.1	-2.2	
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16. 1.1.	121.	6.497	-580.	1.	2.	56.	1.	1.	1.	0.2	10.3	
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16. 3.1.	106.	6.536	-780.	1.	1.	49.	1.	1.	1.	-89.8	10.3	
16. 4.1.	39.	5.908	67.	1.	0.	-57.	0.	0.	0.	-63.8	8.4	
16. 5.1.	-31.	-5804.605	33.	2.	2.	14.	1.	1.	1.	-25.4	10.2	
16. 6.1.	-257.	3.525	105.	0.	1.	-174.	1.	1.	0.	-21.8	8.5	
16. 7.1.	12.	-1721.042	63.	1.	0.	-42.	0.	0.	0.	0.2	10.3	
16. 8.1.	10.	-70.719	-870.	1.	1.	19.	1.	1.	1.	-2.3	7.7	
16. 9.1.	-614.	-579.674	110.	0.	0.	-167.	0.	0.	0.	-44.6	9.8	
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17. 3.1.	30.	2.058	-832.	1.	0.	14.	0.	0.	1.	4.1	0.4	
17. 4.1.	-37.	1.430	15.	1.	-1.	-92.	-1.	-1.	0.	30.1	-1.5	
17. 5.1.	-107.	-5809.086	-19.	2.	1.	-21.	0.	0.	1.	68.5	0.3	
17. 6.1.	-333.	-0.953	53.	0.	0.	-209.	0.	0.	0.	72.1	-1.4	

17. 7.1.	-64.	-1725.520	11.	1.	-1.	-77.	-1.	-1.	0.	94.1	0.4
17. 8.1.	-66.	-75.197	-922.	1.	0.	-16.	0.	0.	1.	91.6	-2.2
17. 9.1.	-690.	-584.152	58.	0.	-1.	-202.	-1.	-1.	0.	49.3	-0.1
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17.12.1.	43.	2.089	-172.	1.	-1.	32.	0.	0.	1.	24.1	-0.9
17.13.1.	47.	2.069	-8332.	1.	0.	-21.	0.	0.	1.	44.1	0.4
17.14.1.	-411.	2.060	48.	2.	1.	38.	-1.	0.	0.	-4.9	0.4
17.15.1.	8.	-27.414	-62.	0.	-1.	-48.	-1.	-1.	0.	93.7	0.0
17.16.1.	-76.	-4.478	-52.	0.	-1.	-35.	-1.	-1.	0.	93.9	-9.9
17.18.1.	-15.	0.894	-42.	2.	1.	-43.	0.	0.	1.	24.1	0.4
17.19.1.	13.	1.539	-542.	0.	-1.	-25.	0.	0.	1.	24.1	0.4
18. 1.1.	60.	1.125	-590.	-1.	0.	64.	0.	0.	0.	70.0	0.0
18. 2.1.	32.	-0.103	26.	-1.	-2.	53.	-1.	-1.	-1.	-15.0	-1.2
18. 3.1.	45.	1.164	-790.	-1.	-1.	57.	0.	0.	0.	-20.0	0.0
18. 4.1.	-22.	0.536	57.	-1.	-2.	-49.	-1.	-1.	-1.	6.0	-1.9
18. 5.1.	-92.	-5809.977	23.	0.	0.	22.	0.	0.	0.	44.4	-0.1
18. 6.1.	-318.	-1.847	95.	-2.	-1.	-166.	0.	0.	-1.	48.0	-1.8
18. 7.1.	-49.	-1726.414	53.	-1.	-2.	-34.	-1.	-1.	-1.	70.0	0.0
18. 8.1.	-51.	-76.091	-880.	-1.	-1.	27.	0.	0.	0.	67.5	-2.6
18. 9.1.	-675.	-585.046	100.	-2.	-2.	-159.	-1.	-1.	-1.	25.2	-0.5
18.10.1.	-236.	-1.464	93.	0.	0.	3.	0.	0.	0.	57.0	0.0
18.11.1.	-73.	-5.210	43.	-2.	-2.	-148.	-1.	-1.	-1.	57.0	-4.4
18.12.1.	58.	1.195	-130.	-1.	-2.	75.	0.	0.	0.	0.0	-1.3
18.13.1.	62.	1.175	-8290.	-1.	-1.	22.	0.	0.	0.	20.0	0.0
18.14.1.	-396.	1.166	90.	0.	0.	81.	-1.	0.	-1.	-29.0	0.0
18.15.1.	23.	-28.308	-20.	-2.	-2.	-5.	-1.	-1.	-1.	69.6	-0.4
18.16.1.	-61.	-5.372	-10.	-2.	-2.	8.	-1.	-1.	-1.	69.8	-10.3
18.17.1.	15.	-0.894	42.	-2.	-1.	43.	0.	0.	-1.	-24.1	-0.4
18.19.1.	28.	0.645	-500.	-2.	-2.	18.	0.	0.	0.	0.0	0.0
19. 1.1.	32.	0.480	-90.	1.	2.	46.	0.	0.	0.	70.0	0.0
19. 2.1.	4.	-0.748	526.	1.	0.	35.	-1.	-1.	-1.	-15.0	-1.2
19. 3.1.	17.	0.519	-290.	1.	1.	39.	0.	0.	0.	-20.0	0.0
19. 4.1.	-50.	-0.109	557.	1.	0.	-67.	-1.	-1.	-1.	6.0	-1.9
19. 5.1.	-120.	-5810.625	523.	2.	2.	4.	0.	0.	0.	44.4	-0.1
19. 6.1.	-346.	-2.492	595.	0.	1.	-184.	0.	0.	-1.	48.0	-1.8
19. 7.1.	-77.	-1727.059	553.	1.	0.	-52.	-1.	-1.	-1.	70.0	0.0
19. 8.1.	-79.	-76.736	-380.	1.	1.	9.	0.	0.	0.	67.5	-2.6
19. 9.1.	-703.	-585.691	600.	0.	0.	-177.	-1.	-1.	-1.	25.2	-0.5
19.10.1.	-264.	-2.109	593.	2.	2.	-15.	0.	0.	0.	57.0	0.0
19.11.1.	-101.	-5.855	543.	0.	0.	-166.	-1.	-1.	-1.	57.0	-4.4
19.12.1.	30.	0.550	370.	1.	0.	57.	0.	0.	0.	0.0	-1.3
19.13.1.	34.	0.530	-7790.	1.	1.	4.	0.	0.	0.	20.0	0.0
19.14.1.	-424.	0.521	590.	2.	2.	53.	-1.	0.	-1.	-29.0	0.0
19.15.1.	-5.	-28.953	480.	0.	0.	-23.	-1.	-1.	-1.	69.6	-0.4
19.16.1.	-89.	-6.017	490.	0.	0.	-10.	-1.	-1.	-1.	69.8	-10.3
19.17.1.	-13.	-1.539	542.	0.	1.	25.	0.	0.	-1.	-24.1	-0.4
19.18.1.	-28.	-0.645	500.	2.	2.	-18.	0.	0.	0.	0.0	0.0

1963 ATTRIBUTE DISTANCES SET 1

1.	2.1.	-28.	-2.295	350.	0.	-1.	-12.	0.	0.	-1.	-85.0	-1.2	
1.	3.1.	-27.	0.292	-225.	0.	0.	-10.	0.	0.	0.	-90.0	0.0	
1.	4.1.	-94.	-0.842	385.	0.	-2.	-139.	-1.	-1.	-1.	-64.0	-1.9	
1.	5.1.	-398.	-12541.266	345.	1.	0.	-49.	0.	0.	0.	-25.6	-0.1	
1.	6.1.	-553.	-7.399	411.	-1.	0.	-302.	0.	0.	0.	-22.0	-1.8	
1.	7.1.	-148.	-3611.302	395.	0.	-2.	-128.	-1.	-1.	-1.	0.0	0.0	
1.	8.1.	-91.	-111.043	-475.	0.	-1.	-44.	0.	0.	0.	-2.5	-2.6	
1.	9.1.	-1511.	-1408.065	417.	-1.	-2.	-236.	-1.	-1.	-1.	-44.8	-0.5	
1.	10.1.	-1201.	-15.699	416.	1.	0.	-66.	0.	0.	0.	-13.0	0.0	
1.	11.1.	-370.	-27.812	397.	-1.	-1.	-250.	-1.	0.	-1.	-13.0	-4.4	
1.	12.1.	-19.	0.433	235.	0.	-1.	15.	0.	0.	0.	-70.0	-1.3	
1.	13.1.	15.	0.399	-275.	0.	0.	-46.	0.	0.	0.	-50.0	0.0	
1.	14.1.	-724.	0.371	416.	1.	0.	22.	-1.	0.	-1.	-99.0	0.0	
1.	15.1.	-59.	-76.657	343.	-1.	-1.	-81.	0.	0.	-1.	-0.4	-0.4	
1.	16.1.	-170.	-16.988	365.	-1.	-2.	-78.	-1.	-1.	-1.	-0.2	-10.3	
1.	17.1.	-64.	-6.577	375.	-1.	0.	-33.	0.	0.	-1.	-94.1	-0.4	
1.	18.1.	-173.	-5.676	326.	1.	0.	-89.	0.	0.	0.	-70.0	0.0	
1.	19.1.	-41.	-0.988	-75.	-1.	-1.	-67.	0.	0.	0.	-70.0	0.0	
2.	1.1.	28.	2.295	-350.	0.	1.	12.	0.	0.	1.	85.0	1.2	
2.	3.1.	1.	2.587	-575.	0.	1.	2.	0.	0.	1.	-5.0	1.2	
2.	4.1.	-66.	1.453	35.	0.	-1.	-127.	-1.	-1.	0.	21.0	-0.7	
2.	5.1.	-370.	-12538.973	-5.	1.	1.	-37.	0.	0.	1.	59.4	1.1	
2.	6.1.	-525.	-5.104	61.	-1.	1.	-290.	0.	0.	1.	63.0	-0.6	
2.	7.1.	-120.	-3609.007	45.	0.	-1.	-116.	-1.	-1.	0.	85.0	1.2	
2.	8.1.	-63.	-108.748	-825.	0.	0.	-32.	0.	0.	1.	82.5	-1.4	
2.	9.1.	-1483.	-1405.770	67.	-1.	-1.	-224.	-1.	-1.	0.	40.2	0.7	
2.	10.1.	-1173.	-13.404	66.	1.	1.	-54.	0.	0.	1.	72.0	1.2	
2.	11.1.	-342.	-25.517	47.	-1.	0.	-238.	-1.	0.	0.	72.0	-3.2	
2.	12.1.	9.	2.728	-115.	0.	0.	27.	0.	0.	1.	15.0	-0.1	
2.	13.1.	43.	2.694	-625.	0.	1.	-34.	0.	0.	1.	35.0	1.2	
2.	14.1.	-696.	2.666	66.	1.	1.	34.	-1.	0.	0.	-14.0	1.2	
2.	15.1.	-31.	-74.362	-7.	-1.	0.	-69.	0.	0.	0.	84.6	0.8	
2.	16.1.	-142.	-14.693	15.	-1.	-1.	-66.	-1.	-1.	0.	84.8	-9.1	
2.	17.1.	-36.	-4.282	25.	-1.	1.	-21.	0.	0.	0.	-9.1	0.8	
2.	18.1.	-145.	-3.381	-24.	1.	1.	-77.	0.	0.	1.	15.0	1.2	
2.	19.1.	-13.	1.307	-425.	-1.	0.	-55.	0.	0.	1.	15.0	1.2	
3.	1.1.	27.	-0.292	225.	0.	0.	10.	0.	0.	0.	90.0	0.0	
3.	2.1.	-1.	-2.587	575.	0.	-1.	-2.	0.	0.	-1.	5.0	-1.2	
3.	4.1.	-67.	-1.134	610.	0.	-2.	-129.	-1.	-1.	-1.	26.0	-1.9	
3.	5.1.	-371.	-12541.559	570.	1.	0.	-39.	0.	0.	0.	64.4	-0.1	
3.	6.1.	-526.	-7.691	636.	-1.	0.	-292.	0.	0.	0.	68.0	-1.8	
3.	7.1.	-121.	-3611.594	620.	0.	-2.	-118.	-1.	-1.	-1.	90.0	0.0	
3.	8.1.	-64.	-111.335	-250.	0.	-1.	-34.	0.	0.	0.	87.5	-2.6	
3.	9.1.	-1484.	-1408.357	642.	-1.	-2.	-226.	-1.	-1.	-1.	45.2	-0.5	
3.	10.1.	-1174.	-15.991	641.	1.	0.	-56.	0.	0.	0.	77.0	0.0	
3.	11.1.	-343.	-28.104	622.	-1.	-1.	-240.	-1.	0.	-1.	77.0	-4.4	
3.	12.1.	8.	0.141	460.	0.	-1.	25.	0.	0.	0.	20.0	-1.3	
3.	13.1.	42.	0.107	-50.	0.	0.	-36.	0.	0.	0.	40.0	0.0	
3.	14.1.	-697.	0.079	641.	1.	0.	32.	-1.	0.	-1.	-9.0	0.0	

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3.15.1.   -32.    -76.949  568.-1.-1. -71. 0. 0.-1. 89.6 -0.4
3.16.1.  -143.    -17.280  590.-1.-2. -58.-1.-1.-1. 89.8-10.3
3.17.1.   -37.     -6.869  600.-1. 0. -23. 0. 0.-1. -4.1 -0.4
3.18.1.  -146.     -5.968  551. 1. 0. -79. 0. 0. 0. 20.0  0.0
3.19.1.   -14.     -1.280  150.-1.-1. -57. 0. 0. 0. 20.0  0.0
4. 1.1.    94.      0.842 -385. 0. 2. 139. 1. 1. 1. 64.0  1.9
4. 2.1.    66.     -1.453  -35. 0. 1. 127. 1. 1. 0.-21.0  0.7
4. 3.1.    67.      1.134 -610. 0. 2. 129. 1. 1. 1.-26.0  1.9
4. 5.1.  -304.-12540.426  -40. 1. 2.  90. 1. 1. 1. 38.4  1.8
4. 6.1.  -459.     -6.557   26.-1. 2.-163. 1. 1. 1. 42.0  0.1
4. 7.1.   -54. -3610.460   10. 0. 0.  11. 0. 0. 0. 64.0  1.9
4. 8.1.     3.   -110.201 -860. 0. 1.  95. 1. 1. 1. 61.5 -0.7
4. 9.1.-1417. -1407.223   32.-1. 0. -97. 0. 0. 0. 19.2  1.4
4.10.1.-1107.    -14.857   31. 1. 2.  73. 1. 1. 1. 51.0  1.9
4.11.1.  -276.    -26.970   12.-1. 1.-111. 0. 1. 0. 51.0 -2.5
4.12.1.    75.      1.275 -150. 0. 1. 154. 1. 1. 1. -6.0  0.6
4.13.1.   109.      1.241 -660. 0. 2.  93. 1. 1. 1. 14.0  1.9
4.14.1.  -630.      1.213   31. 1. 2. 161. 0. 1. 0.-35.0  1.9
4.15.1.    35.    -75.815  -42.-1. 1.  58. 1. 1. 0. 63.6  1.5
4.16.1.   -76.    -16.146  -20.-1. 0.  61. 0. 0. 0. 63.8 -8.4
4.17.1.    30.     -5.735  -10.-1. 2. 106. 1. 1. 0.-30.1  1.5
4.18.1.   -79.     -4.834  -59. 1. 2.  50. 1. 1. 1. -6.0  1.9
4.19.1.    53.     -0.146 -460.-1. 1.  72. 1. 1. 1. -6.0  1.9
5. 1.1.   398. 12541.266 -345.-1. 0.  49. 0. 0. 0. 25.6  0.1
5. 2.1.   370. 12538.973    5.-1.-1.  37. 0. 0.-1.-59.4 -1.1
5. 3.1.   371. 12541.559 -570.-1. 0.  39. 0. 0. 0.-64.4  0.1
5. 4.1.   304. 12540.426   40.-1.-2. -90.-1.-1.-1.-38.4 -1.8
5. 6.1.  -155. 12533.863   66.-2. 0.-253. 0. 0. 0.  3.6 -1.7
5. 7.1.   250.  8929.965   50.-1.-2. -79.-1.-1.-1. 25.6  0.1
5. 8.1.   307. 12430.223 -820.-1.-1.   5. 0. 0. 0. 23.1 -2.5
5. 9.1.-1113. 11133.195   72.-2.-2.-187.-1.-1.-1.-19.2 -0.4
5.10.1.  -803. 12525.563   71. 0. 0. -17. 0. 0. 0. 12.6  0.1
5.11.1.    28. 12513.449   52.-2.-1.-201.-1. 0.-1. 12.6 -4.3
5.12.1.   379. 12541.695 -110.-1.-1.  64. 0. 0. 0.-44.4 -1.2
5.13.1.   413. 12541.660 -620.-1. 0.   3. 0. 0. 0.-24.4  0.1
5.14.1.  -326. 12541.637   71. 0. 0.  71.-1. 0.-1.-73.4  0.1
5.15.1.   339. 12464.605   -2.-2.-1. -32. 0. 0.-1. 25.2 -0.3
5.16.1.   228. 12524.273   20.-2.-2. -29.-1.-1.-1. 25.4-10.2
5.17.1.   334. 12534.684   30.-2. 0.  16. 0. 0.-1.-68.5 -0.3
5.18.1.   225. 12535.590  -19. 0. 0. -40. 0. 0. 0.-44.4  0.1
5.19.1.   357. 12540.273 -420.-2.-1. -18. 0. 0. 0.-44.4  0.1
6. 1.1.   553.      7.399 -411. 1. 0. 302. 0. 0. 0. 22.0  1.8
6. 2.1.   525.      5.104  -61. 1.-1. 290. 0. 0.-1.-63.0  0.6
6. 3.1.   526.      7.691 -636. 1. 0. 292. 0. 0. 0.-68.0  1.8
6. 4.1.   459.      6.557  -26. 1.-2. 163.-1.-1.-1.-42.0 -0.1
6. 5.1.   155.-12533.863  -66. 2. 0. 253. 0. 0. 0. -3.6  1.7
6. 7.1.   405. -3603.903  -16. 1.-2. 174.-1.-1.-1. 22.0  1.8
6. 8.1.   462.  -103.644 -886. 1.-1. 258. 0. 0. 0. 19.5 -0.8
6. 9.1.  -958. -1400.666    6. 0.-2.  66.-1.-1.-1.-22.8  1.3
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6.10.1.	-648.	-8.300	5.	2.	0.	236.	0.	0.	0.	9.0	1.8
6.11.1.	183.	-20.413	-14.	0.	-1.	52.	-1.	0.	-1.	9.0	-2.6
6.12.1.	534.	7.832	-176.	1.	-1.	317.	0.	0.	0.	-48.0	0.5
6.13.1.	568.	7.798	-686.	1.	0.	256.	0.	0.	0.	-28.0	1.8
6.14.1.	-171.	7.770	5.	2.	0.	324.	-1.	0.	-1.	-77.0	1.8
6.15.1.	494.	-69.258	-68.	0.	-1.	221.	0.	0.	-1.	21.6	1.4
6.16.1.	383.	-9.589	-46.	0.	-2.	224.	-1.	-1.	-1.	21.8	-8.5
6.17.1.	489.	0.822	-36.	0.	0.	269.	0.	0.	-1.	-72.1	1.4
6.18.1.	380.	1.723	-85.	2.	0.	213.	0.	0.	0.	-48.0	1.8
6.19.1.	512.	6.411	-486.	0.	-1.	235.	0.	0.	0.	-48.0	1.8
7. 1.1.	148.	3611.302	-395.	0.	2.	128.	1.	1.	1.	0.0	0.0
7. 2.1.	120.	3609.007	-45.	0.	1.	116.	1.	1.	0.	-85.0	-1.2
7. 3.1.	121.	3611.594	-620.	0.	2.	118.	1.	1.	1.	-90.0	0.0
7. 4.1.	54.	3610.460	-10.	0.	0.	-11.	0.	0.	0.	-64.0	-1.9
7. 5.1.	-250.	-8929.965	-50.	1.	2.	79.	1.	1.	1.	-25.6	-0.1
7. 6.1.	-405.	3603.903	16.	-1.	2.	-174.	1.	1.	1.	-22.0	-1.8
7. 8.1.	57.	3500.259	-870.	0.	1.	84.	1.	1.	1.	-2.5	-2.6
7. 9.1.	-1363.	2203.237	22.	-1.	0.	-108.	0.	0.	0.	-44.8	-0.5
7.10.1.	-1053.	3595.603	21.	1.	2.	62.	1.	1.	1.	-13.0	0.0
7.11.1.	-222.	3583.490	2.	-1.	1.	-122.	0.	1.	0.	-13.0	-4.4
7.12.1.	129.	3611.735	-160.	0.	1.	143.	1.	1.	1.	-70.0	-1.3
7.13.1.	163.	3611.701	-670.	0.	2.	82.	1.	1.	1.	-50.0	0.0
7.14.1.	-576.	3611.673	21.	1.	2.	150.	0.	1.	0.	-99.0	0.0
7.15.1.	89.	3534.645	-52.	-1.	1.	47.	1.	1.	0.	-0.4	-0.4
7.16.1.	-22.	3594.314	-30.	-1.	0.	50.	0.	0.	0.	-0.2	-10.3
7.17.1.	84.	3604.725	-20.	-1.	2.	95.	1.	1.	0.	-94.1	-0.4
7.18.1.	-25.	3605.626	-69.	1.	2.	39.	1.	1.	1.	-70.0	0.0
7.19.1.	107.	3610.314	-470.	-1.	1.	61.	1.	1.	1.	-70.0	0.0
8. 1.1.	91.	111.043	475.	0.	1.	44.	0.	0.	0.	2.5	2.6
8. 2.1.	63.	108.748	825.	0.	0.	32.	0.	0.	-1.	-82.5	1.4
8. 3.1.	64.	111.335	250.	0.	1.	34.	0.	0.	0.	-87.5	2.6
8. 4.1.	-3.	110.201	860.	0.	-1.	-95.	-1.	-1.	-1.	-61.5	0.7
8. 5.1.	-307.	-12430.223	820.	1.	1.	-5.	0.	0.	0.	-23.1	2.5
8. 6.1.	-462.	103.644	886.	-1.	1.	-258.	0.	0.	0.	-19.5	0.8
8. 7.1.	-57.	-3500.259	870.	0.	-1.	-84.	-1.	-1.	-1.	2.5	2.6
8. 9.1.	-1420.	-1297.022	892.	-1.	-1.	-192.	-1.	-1.	-1.	-42.3	2.1
8.10.1.	-1110.	95.344	891.	1.	1.	-22.	0.	0.	0.	-10.5	2.6
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8.13.1.	106.	111.442	200.	0.	1.	-2.	0.	0.	0.	-47.5	2.6
8.14.1.	-633.	111.414	891.	1.	1.	66.	-1.	0.	-1.	-96.5	2.6
8.15.1.	32.	34.386	818.	-1.	0.	-37.	0.	0.	-1.	2.1	2.2
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8.18.1.	-82.	105.367	801.	1.	1.	-45.	0.	0.	0.	-67.5	2.6
8.19.1.	50.	110.055	400.	-1.	0.	-23.	0.	0.	0.	-67.5	2.6
9. 1.1.	1511.	1408.065	-417.	1.	2.	236.	1.	1.	1.	44.8	0.5
9. 2.1.	1483.	1405.770	-67.	1.	1.	224.	1.	1.	0.	-40.2	-0.7
9. 3.1.	1484.	1408.357	-642.	1.	2.	226.	1.	1.	1.	-45.2	0.5

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12. 3.1.   -8.     -0.141 -460. 0. 1. -25. 0. 0. 0.-20.0  1.3
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18.16.1.    3.   -11.312   39.-2.-2.  11.-1.-1.-1. 69.8-10.3
18.17.1.  109.    -0.901   49.-2. 0.  56. 0. 0.-1.-24.1 -0.4
18.19.1.  132.     4.688 -401.-2.-1.  22. 0. 0. 0.  0.0  0.0
19. 1.1.   41.     0.988   75. 1. 1.  67. 0. 0. 0. 70.0  0.0
19. 2.1.   13.    -1.307  425. 1. 0.  55. 0. 0.-1.-15.0 -1.2
19. 3.1.   14.     1.280 -150. 1. 1.  57. 0. 0. 0.-20.0  0.0
19. 4.1.  -53.     0.146  460. 1.-1. -72.-1.-1.-1.  6.0 -1.9
19. 5.1. -357.-12540.273  420. 2. 1.  18. 0. 0. 0. 44.4 -0.1
19. 6.1. -512.    -6.411  486. 0. 1.-235. 0. 0. 0. 48.0 -1.8
19. 7.1. -107. -3610.314  470. 1.-1. -61.-1.-1.-1. 70.0  0.0
19. 8.1.  -50.  -110.055 -400. 1. 0.  23. 0. 0. 0. 67.5 -2.6
19. 9.1.-1470. -1407.077  492. 0.-1.-169.-1.-1.-1. 25.2 -0.5
19.10.1.-1160.   -14.711  491. 2. 1.   1. 0. 0. 0. 57.0  0.0
19.11.1. -329.   -26.824  472. 0. 0.-183.-1. 0.-1. 57.0 -4.4
19.12.1.   22.     1.421  310. 1. 0.  82. 0. 0. 0.  0.0 -1.3
19.13.1.   56.     1.387 -200. 1. 1.  21. 0. 0. 0. 20.0  0.0
19.14.1. -683.     1.359  491. 2. 1.  89.-1. 0.-1.-29.0  0.0
19.15.1.  -18.   -75.669  418. 0. 0. -14. 0. 0.-1. 69.6 -0.4
19.16.1. -129.   -16.000  440. 0.-1. -11.-1.-1.-1. 69.8-10.3
19.17.1.  -23.    -5.589  450. 0. 1.  34. 0. 0.-1.-24.1 -0.4
19.18.1. -132.    -4.688  401. 2. 1. -22. 0. 0. 0.  0.0  0.0
```

1955 ATTRIBUTE DISTANCES SET 2

1.	2.2.	87.0	-0.9	-4.	1.	2.	7.2065.	0.005	0.367
1.	3.2.	93.2	-0.4	-2.	0.	0.	1.2716.	0.0	0.686
1.	4.2.	88.3	-7.1	-3.	2.	0.	7.1974.	0.003	0.688
1.	5.2.	93.3	-0.4	-2.	0.	3.	6.2552.	13.663	0.0
1.	6.2.	94.6	-1.8	-2.	1.	1.	6.3075.	0.006	0.139
1.	7.2.	85.0	-1.5	-3.	-7.	1.	8. 629.	21.974	0.0
1.	8.2.	5.0	-1.4	-4.	2.	1.	6.3544.	0.131	0.006
1.	9.2.	95.0	-0.3	-1.	3.	4.	10.3747.	1.565	0.001
1.	10.2.	95.0	-0.5	-2.	3.	4.	2.3006.	0.002	0.053
1.	11.2.	95.0	-2.1	-3.	3.	4.	2.3133.	0.004	0.022
1.	12.2.	95.0	-1.3	0.	-1.	2.	1.2283.	0.0	0.973
1.	13.2.	95.0	0.0	-1.	1.	3.	10.1064.	0.001	7.660
1.	14.2.	95.0	0.0	0.	3.	2.	9.2151.	0.0	6.291
1.	15.2.	6.9	-0.3	-1.	-2.	1.	8. 241.	0.982	0.019
1.	16.2.	90.9	-82.9	-2.	-4.	4.	9.3406.	0.018	0.098
1.	17.2.	91.2	-0.4	-2.	2.	3.	10.2389.	0.009	0.333
1.	18.2.	95.0	-3.7	-2.	1.	-3.	1.2387.	0.001	0.057
1.	19.2.	95.0	-15.6	-2.	1.	1.	1.2807.	0.0	0.115
2.	1.2.	-87.0	0.9	4.	-1.	-2.	7.2065.	0.005	6.633
2.	3.2.	6.2	0.5	2.	-1.	-2.	1. 696.	0.002	0.975
2.	4.2.	1.3	-6.2	1.	1.	-2.	7.1244.	0.011	4.640
2.	5.2.	6.3	0.5	2.	-1.	1.	6.2027.	17.205	0.001
2.	6.2.	7.6	-0.9	2.	0.	-1.	6.1717.	0.015	1.796
2.	7.2.	-2.0	-0.6	1.	-8.	-1.	7.1462.	8.278	0.005
2.	8.2.	-82.0	-0.5	0.	1.	-1.	6.1656.	0.285	0.099
2.	9.2.	8.0	0.6	3.	2.	2.	7.2890.	1.423	0.015
2.	10.2.	8.0	0.4	2.	2.	2.	2.2332.	0.003	0.656
2.	11.2.	8.0	-1.2	1.	2.	2.	2.2351.	0.007	0.337
2.	12.2.	8.0	-0.4	4.	-2.	0.	1. 420.	0.003	0.998
2.	13.2.	8.0	0.9	3.	0.	1.	7.1035.	0.009	6.884
2.	14.2.	8.0	0.9	4.	2.	0.	7.2268.	0.004	6.837
2.	15.2.	-80.1	0.6	3.	-3.	-1.	7.1840.	0.117	0.295
2.	16.2.	3.9	-82.0	2.	-5.	2.	7.1662.	0.033	1.156
2.	17.2.	4.2	0.5	2.	1.	1.	7. 339.	0.070	2.684
2.	18.2.	8.0	-2.8	2.	0.	-5.	1. 740.	0.003	0.521
2.	19.2.	8.0	-14.7	2.	0.	-1.	1. 790.	0.002	0.702
3.	1.2.	-93.2	0.4	2.	0.	0.	1.2716.	0.0	0.314
3.	2.2.	-6.2	-0.5	-2.	1.	2.	1. 696.	0.002	0.025
3.	4.2.	-4.9	-6.7	-1.	2.	0.	1.1715.	0.0	0.048
3.	5.2.	0.1	0.0	0.	0.	3.	1.2091.	2.779	0.0
3.	6.2.	1.4	-1.4	0.	1.	1.	1.1419.	0.002	0.011
3.	7.2.	-8.2	-1.1	-1.	-7.	1.	1.2135.	0.809	0.0
3.	8.2.	-88.2	-1.0	-2.	2.	1.	1.1173.	0.066	0.0
3.	9.2.	1.8	0.1	1.	3.	4.	1.2652.	0.221	0.0
3.	10.2.	1.8	-0.1	0.	3.	4.	1.2263.	0.001	0.012
3.	11.2.	1.8	-1.7	-1.	3.	4.	1.2229.	0.003	0.005
3.	12.2.	1.8	-0.9	2.	-1.	2.	1. 524.	0.0	0.943
3.	13.2.	1.8	0.4	1.	1.	3.	1.1695.	0.0	0.600
3.	14.2.	1.8	0.4	2.	3.	2.	1.2517.	0.0	0.516

3.	15.	2.	-86.3	0.1	1.	-2.	1.	1.2493.	0.012	0.001
3.	16.	2.	-2.3	-82.5	0.	-4.	4.	1.1096.	0.006	0.005
3.	17.	2.	-2.0	0.0	0.	2.	3.	1. 365.	0.006	0.016
3.	18.	2.	1.8	-3.3	0.	1.	-3.	1. 694.	0.002	0.027
3.	19.	2.	1.8	-15.2	0.	1.	1.	1. 97.	0.006	0.056
4.	1.	2.	-88.3	7.1	3.	-2.	0.	7.1974.	0.003	6.312
4.	2.	2.	-1.3	6.2	-1.	-1.	2.	7.1244.	0.011	2.360
4.	3.	2.	4.9	6.7	1.	-2.	0.	1.1715.	0.0	0.952
4.	5.	2.	5.0	6.7	1.	-2.	3.	6.3103.	11.238	0.001
4.	6.	2.	6.3	5.3	1.	-1.	1.	6.2910.	0.008	1.070
4.	7.	2.	-3.3	5.6	0.	-9.	1.	7.1457.	8.303	0.003
4.	8.	2.	-83.3	5.7	-1.	0.	1.	6.1985.	0.236	0.051
4.	9.	2.	6.7	6.8	2.	1.	4.	7.4007.	1.025	0.008
4.	10.	2.	6.7	6.6	1.	1.	4.	2.3445.	0.002	0.398
4.	11.	2.	6.7	5.0	0.	1.	4.	2.3482.	0.004	0.187
4.	12.	2.	6.7	5.8	3.	-3.	2.	1.1654.	0.0	0.997
4.	13.	2.	6.7	7.1	2.	-1.	3.	7.1414.	0.003	6.775
4.	14.	2.	6.7	7.1	3.	1.	2.	7.3158.	0.002	6.686
4.	15.	2.	-81.4	6.8	2.	-4.	1.	7.1836.	0.115	0.153
4.	16.	2.	2.6	-75.8	1.	-6.	4.	7.2766.	0.018	0.640
4.	17.	2.	2.9	6.7	1.	0.	3.	7.1415.	0.014	1.681
4.	18.	2.	6.7	3.4	1.	-1.	-3.	1.1969.	0.001	0.356
4.	19.	2.	6.7	-8.5	1.	-1.	1.	1.1775.	0.001	0.545
5.	1.	2.	-93.3	0.4	2.	0.	-3.	6.2552.	13.663	6.000
5.	2.	2.	-6.3	-0.5	-2.	1.	-1.	6.2027.	17.205	5.999
5.	3.	2.	-0.1	0.0	0.	0.	-3.	1.2091.	2.779	1.000
5.	4.	2.	-5.0	-6.7	-1.	2.	-3.	6.3103.	11.238	5.999
5.	6.	2.	1.3	-1.4	0.	1.	-2.	6.1074.	32.482	5.997
5.	7.	2.	-8.3	-1.1	-1.	-7.	-2.	6.2328.	19.430	4.625
5.	8.	2.	-88.3	-1.0	-2.	2.	-2.	6.3155.	11.198	5.921
5.	9.	2.	1.7	0.1	1.	3.	1.	6.1298.	29.572	5.450
5.	10.	2.	1.7	-0.1	0.	3.	1.	2. 485.	23.975	1.999
5.	11.	2.	1.7	-1.7	-1.	3.	1.	2. 629.	18.498	1.998
5.	12.	2.	1.7	-0.9	2.	-1.	-1.	1.1722.	3.375	1.000
5.	13.	2.	1.7	0.4	1.	1.	0.	6.1966.	17.735	6.000
5.	14.	2.	1.7	0.4	2.	3.	-1.	6. 710.	49.109	6.000
5.	15.	2.	-86.4	0.1	1.	-2.	-2.	6.2378.	14.737	5.970
5.	16.	2.	-2.4	-82.5	0.	-4.	1.	6.1807.	19.317	5.993
5.	17.	2.	-2.1	0.0	0.	2.	0.	6.2081.	16.761	5.998
5.	18.	2.	1.7	-3.3	0.	1.	-6.	1.1432.	4.059	1.000
5.	19.	2.	1.7	-15.2	0.	1.	-2.	1.2137.	2.720	1.000
6.	1.	2.	-94.6	1.8	2.	-1.	-1.	6.3075.	0.006	5.861
6.	2.	2.	-7.6	0.9	-2.	0.	1.	6.1717.	0.015	4.204
6.	3.	2.	-1.4	1.4	0.	-1.	-1.	1.1419.	0.002	0.989
6.	4.	2.	-6.3	-5.3	-1.	1.	-1.	6.2910.	0.008	4.930
6.	5.	2.	-1.3	1.4	0.	-1.	2.	6.1074.	32.482	0.003
6.	7.	2.	-9.6	0.3	-1.	-8.	0.	6.2664.	3.898	0.011
6.	8.	2.	-89.6	0.4	-2.	1.	0.	6.2334.	0.207	0.227
6.	9.	2.	0.4	1.5	1.	2.	3.	6.1272.	2.780	0.031

6.	10.	2.	0.4	1.3	0.	2.	3.	2. 993.	0.011	1.067
6.	11.	2.	0.4	-0.3	-1.	2.	3.	2. 900.	0.021	0.644
6.	12.	2.	0.4	0.5	2.	-2.	1.	1.1307.	0.002	0.999
6.	13.	2.	0.4	1.8	1.	0.	2.	6.2205.	0.008	5.957
6.	14.	2.	0.4	1.8	2.	2.	1.	6.1750.	0.011	5.940
6.	15.	2.	-87.7	1.5	1.	-3.	0.	6.2864.	0.068	0.561
6.	16.	2.	-3.7	-81.1	0.	-5.	3.	6. 760.	0.076	1.900
6.	17.	2.	-3.4	1.4	0.	1.	2.	6.1590.	0.019	3.557
6.	18.	2.	0.4	-1.9	0.	0.	-4.	1. 991.	0.004	0.718
6.	19.	2.	0.4	-13.8	0.	0.	0.	1.1423.	0.003	0.846
7.	1.	2.	-85.0	1.5	3.	7.	-1.	8. 629.	21.974	8.000
7.	2.	2.	2.0	0.6	-1.	8.	1.	7.1462.	8.278	6.995
7.	3.	2.	8.2	1.1	1.	7.	-1.	1.2135.	0.809	1.000
7.	4.	2.	3.3	-5.6	0.	9.	-1.	7.1457.	8.303	6.997
7.	5.	2.	8.3	1.1	1.	7.	2.	6.2328.	19.430	1.375
7.	6.	2.	9.6	-0.3	1.	8.	0.	6.2664.	3.898	5.989
7.	8.	2.	-80.0	0.1	-1.	9.	0.	6.2971.	3.645	5.743
7.	9.	2.	10.0	1.2	2.	10.	3.	8.3505.	5.281	5.973
7.	10.	2.	10.0	1.0	1.	10.	3.	2.2776.	1.247	1.997
7.	11.	2.	10.0	-0.6	0.	10.	3.	2.2880.	1.204	1.993
7.	12.	2.	10.0	0.2	3.	6.	1.	1.1717.	1.006	1.000
7.	13.	2.	10.0	1.5	2.	8.	2.	8. 495.	27.921	8.000
7.	14.	2.	10.0	1.5	3.	10.	1.	8.2093.	6.604	8.000
7.	15.	2.	-78.1	1.2	2.	5.	0.	8. 420.	33.469	7.866
7.	16.	2.	5.9	-81.4	1.	3.	3.	8.2913.	4.763	7.970
7.	17.	2.	6.2	1.1	1.	9.	2.	8.1794.	7.713	7.990
7.	18.	2.	10.0	-2.2	1.	8.	-4.	1.1865.	0.927	0.999
7.	19.	2.	10.0	-14.1	1.	8.	0.	1.2227.	0.776	1.000
8.	1.	2.	-5.0	1.4	4.	-2.	-1.	6.3544.	0.131	5.994
8.	2.	2.	82.0	0.5	0.	-1.	1.	6.1656.	0.285	5.901
8.	3.	2.	88.2	1.0	2.	-2.	-1.	1.1173.	0.066	1.000
8.	4.	2.	83.3	-5.7	1.	0.	-1.	6.1985.	0.236	5.949
8.	5.	2.	88.3	1.0	2.	-2.	2.	6.3155.	11.198	0.079
8.	6.	2.	89.6	-0.4	2.	-1.	0.	6.2334.	0.207	5.773
8.	7.	2.	80.0	-0.1	1.	-9.	0.	6.2971.	3.645	0.257
8.	9.	2.	90.0	1.1	3.	1.	3.	6.3439.	1.158	0.699
8.	10.	2.	90.0	0.9	2.	1.	3.	2.3243.	0.049	1.933
8.	11.	2.	90.0	-0.7	1.	1.	3.	2.3177.	0.053	1.847
8.	12.	2.	90.0	0.1	4.	-3.	1.	1.1669.	0.046	1.000
8.	13.	2.	90.0	1.4	3.	-1.	2.	6.2629.	0.176	5.998
8.	14.	2.	90.0	1.4	4.	1.	1.	6.3598.	0.129	5.998
8.	15.	2.	1.9	1.1	3.	-4.	0.	6.3350.	0.191	4.342
8.	16.	2.	85.9	-81.5	2.	-6.	3.	6.1711.	0.294	5.530
8.	17.	2.	86.2	1.0	2.	0.	2.	6.1370.	0.348	5.842
8.	18.	2.	90.0	-2.3	2.	-1.	-4.	1.1850.	0.042	0.985
8.	19.	2.	90.0	-14.2	2.	-1.	0.	1.1103.	0.071	0.993
9.	1.	2.	-95.0	0.3	1.	-3.	-4.	10.3747.	1.565	9.999
9.	2.	2.	-8.0	-0.6	-3.	-2.	-2.	7.2890.	1.423	6.985
9.	3.	2.	-1.8	-0.1	-1.	-3.	-4.	1.2652.	0.221	1.000

9.	4.2.	-6.7	-6.8	-2.	-1.	-4.	7.4007.	1.025	6.992
9.	5.2.	-1.7	-0.1	-1.	-3.	-1.	6.1298.	29.572	0.550
9.	6.2.	-0.4	-1.5	-1.	-2.	-3.	6.1272.	2.780	5.969
9.	7.2.	-10.0	-1.2	-2.	-10.	-3.	8.3505.	5.281	2.027
9.	8.2.	-90.0	-1.1	-3.	-1.	-3.	6.3439.	1.158	5.301
9.	10.2.	0.0	-0.2	-1.	0.	0.	2. 819.	1.438	1.991
9.	11.2.	0.0	-1.8	-2.	0.	0.	2. 684.	1.733	1.978
9.	12.2.	0.0	-1.0	1.	-4.	-2.	1.2510.	0.234	1.000
9.	13.2.	0.0	0.3	0.	-2.	-1.	10.3123.	1.877	10.000
9.	14.2.	0.0	0.3	1.	0.	-2.	9.1849.	2.854	9.000
9.	15.2.	-88.1	0.0	0.	-5.	-3.	8.3580.	1.376	7.617
9.	16.2.	-4.1	-82.6	-1.	-7.	0.	9.1819.	2.933	8.900
9.	17.2.	-3.8	-0.1	-1.	-1.	-1.	10.2806.	2.097	9.964
9.	18.2.	0.0	-3.4	-1.	-2.	-7.	1.2192.	0.268	0.998
9.	19.2.	0.0	-15.3	-1.	-2.	-3.	1.2651.	0.221	0.999
10.	1.2.	-95.0	0.5	2.	-3.	-4.	2.3006.	0.002	1.947
10.	2.2.	-8.0	-0.4	-2.	-2.	-2.	2.2332.	0.003	1.344
10.	3.2.	-1.8	0.1	0.	-3.	-4.	1.2263.	0.001	0.988
10.	4.2.	-6.7	-6.6	-1.	-1.	-4.	2.3445.	0.002	1.602
10.	5.2.	-1.7	0.1	0.	-3.	-1.	2. 485.	23.975	0.001
10.	6.2.	-0.4	-1.3	0.	-2.	-3.	2. 993.	0.011	0.933
10.	7.2.	-10.0	-1.0	-1.	-10.	-3.	2.2776.	1.247	0.003
10.	8.2.	-90.0	-0.9	-2.	-1.	-3.	2.3243.	0.049	0.067
10.	9.2.	0.0	0.2	1.	0.	0.	2. 819.	1.438	0.009
10.	11.2.	0.0	-1.6	-1.	0.	0.	2. 176.	0.103	0.587
10.	12.2.	0.0	-0.8	2.	-4.	-2.	1.1983.	0.001	0.999
10.	13.2.	0.0	0.5	1.	-2.	-1.	2.2403.	0.002	1.984
10.	14.2.	0.0	0.5	2.	0.	-2.	2.1089.	0.005	1.977
10.	15.2.	-88.1	0.2	1.	-5.	-3.	2.2835.	0.023	0.165
10.	16.2.	-4.1	-82.4	0.	-7.	0.	2.1732.	0.011	0.577
10.	17.2.	-3.8	0.1	0.	-1.	-1.	2.2325.	0.004	1.120
10.	18.2.	0.0	-3.2	0.	-2.	-7.	1.1667.	0.002	0.690
10.	19.2.	0.0	-15.1	0.	-2.	-3.	1.2290.	0.001	0.828
11.	1.2.	-95.0	2.1	3.	-3.	-4.	2.3133.	0.004	1.978
11.	2.2.	-8.0	1.2	-1.	-2.	-2.	2.2351.	0.007	1.663
11.	3.2.	-1.8	1.7	1.	-3.	-4.	1.2229.	0.003	0.995
11.	4.2.	-6.7	-5.0	0.	-1.	-4.	2.3482.	0.004	1.813
11.	5.2.	-1.7	1.7	1.	-3.	-1.	2. 629.	18.498	0.002
11.	6.2.	-0.4	0.3	1.	-2.	-3.	2. 900.	0.021	1.356
11.	7.2.	-10.0	0.6	0.	-10.	-3.	2.2880.	1.204	0.007
11.	8.2.	-90.0	0.7	-1.	-1.	-3.	2.3177.	0.053	0.153
11.	9.2.	0.0	1.8	2.	0.	0.	2. 684.	1.733	0.022
11.	10.2.	0.0	1.6	1.	0.	0.	2. 176.	0.103	1.413
11.	12.2.	0.0	0.8	3.	-4.	-2.	1.1986.	0.003	1.000
11.	13.2.	0.0	2.1	2.	-2.	-1.	2.2493.	0.005	1.993
11.	14.2.	0.0	2.1	3.	0.	-2.	2.1261.	0.010	1.990
11.	15.2.	-88.1	1.8	2.	-5.	-3.	2.2958.	0.024	0.357
11.	16.2.	-4.1	-80.8	1.	-7.	0.	2.1622.	0.016	0.988
11.	17.2.	-3.8	1.7	1.	-1.	-1.	2.2319.	0.007	1.508

11.	18.	2.	0.0	-1.6	1.	-2.	-7.	1.1665.	0.005	0.843
11.	19.	2.	0.0	-13.5	1.	-2.	-3.	1.2250.	0.003	0.921
12.	1.	2.	-95.0	1.3	0.	1.	-2.	1.2283.	0.0	0.027
12.	2.	2.	-8.0	0.4	-4.	2.	0.	1. 420.	0.003	0.002
12.	3.	2.	-1.8	0.9	-2.	1.	-2.	1. 524.	0.0	0.057
12.	4.	2.	-6.7	-5.8	-3.	3.	-2.	1.1654.	0.0	0.003
12.	5.	2.	-1.7	0.9	-2.	1.	1.	1.1722.	3.375	0.0
12.	6.	2.	-0.4	-0.5	-2.	2.	-1.	1.1307.	0.002	0.001
12.	7.	2.	-10.0	-0.2	-3.	-6.	-1.	1.1717.	1.006	0.0
12.	8.	2.	-90.0	-0.1	-4.	3.	-1.	1.1669.	0.046	0.0
12.	9.	2.	0.0	1.0	-1.	4.	2.	1.2510.	0.234	0.0
12.	10.	2.	0.0	0.8	-2.	4.	2.	1.1983.	0.001	0.001
12.	11.	2.	0.0	-0.8	-3.	4.	2.	1.1986.	0.003	0.0
12.	13.	2.	0.0	1.3	-1.	2.	1.	1.1245.	0.0	0.083
12.	14.	2.	0.0	1.3	0.	4.	0.	1.2069.	0.0	0.061
12.	15.	2.	-88.1	1.0	-1.	-1.	-1.	1.2052.	0.014	0.0
12.	16.	2.	-4.1	-81.6	-2.	-3.	2.	1.1287.	0.005	0.0
12.	17.	2.	-3.8	0.9	-2.	3.	1.	1. 370.	0.006	0.001
12.	18.	2.	0.0	-2.4	-2.	2.	-5.	1. 333.	0.004	0.002
12.	19.	2.	0.0	-14.3	-2.	2.	-1.	1. 614.	0.001	0.004
13.	1.	2.	-95.0	0.0	1.	-1.	-3.	10.1064.	0.001	2.340
13.	2.	2.	-8.0	-0.9	-3.	0.	-1.	7.1035.	0.009	0.116
13.	3.	2.	-1.8	-0.4	-1.	-1.	-3.	1.1695.	0.0	0.400
13.	4.	2.	-6.7	-7.1	-2.	1.	-3.	7.1414.	0.003	0.225
13.	5.	2.	-1.7	-0.4	-1.	-1.	0.	6.1966.	17.735	0.0
13.	6.	2.	-0.4	-1.8	-1.	0.	-2.	6.2205.	0.008	0.043
13.	7.	2.	-10.0	-1.5	-2.	-8.	-2.	8. 495.	27.921	0.0
13.	8.	2.	-90.0	-1.4	-3.	1.	-2.	6.2629.	0.176	0.002
13.	9.	2.	0.0	-0.3	0.	2.	1.	10.3123.	1.877	0.0
13.	10.	2.	0.0	-0.5	-1.	2.	1.	2.2403.	0.002	0.016
13.	11.	2.	0.0	-2.1	-2.	2.	1.	2.2493.	0.005	0.007
13.	12.	2.	0.0	-1.3	1.	-2.	-1.	1.1245.	0.0	0.917
13.	14.	2.	0.0	0.0	1.	2.	-1.	9.1857.	0.0	3.736
13.	15.	2.	-88.1	-0.3	0.	-3.	-2.	8. 828.	0.285	0.006
13.	16.	2.	-4.1	-82.9	-1.	-5.	1.	9.2447.	0.024	0.030
13.	17.	2.	-3.8	-0.4	-1.	1.	0.	10.1364.	0.015	0.104
13.	18.	2.	0.0	-3.7	-1.	0.	-6.	1.1381.	0.001	0.018
13.	19.	2.	0.0	-15.6	-1.	0.	-2.	1.1789.	0.0	0.038
14.	1.	2.	-95.0	0.0	0.	-3.	-2.	9.2151.	0.0	2.709
14.	2.	2.	-8.0	-0.9	-4.	-2.	0.	7.2268.	0.004	0.163
14.	3.	2.	-1.8	-0.4	-2.	-3.	-2.	1.2517.	0.0	0.484
14.	4.	2.	-6.7	-7.1	-3.	-1.	-2.	7.3158.	0.002	0.314
14.	5.	2.	-1.7	-0.4	-2.	-3.	1.	6. 710.	49.109	0.0
14.	6.	2.	-0.4	-1.8	-2.	-2.	-1.	6.1750.	0.011	0.060
14.	7.	2.	-10.0	-1.5	-3.	-10.	-1.	8.2093.	6.604	0.0
14.	8.	2.	-90.0	-1.4	-4.	-1.	-1.	6.3598.	0.129	0.002
14.	9.	2.	0.0	-0.3	-1.	0.	2.	9.1849.	2.854	0.0
14.	10.	2.	0.0	-0.5	-2.	0.	2.	2.1089.	0.005	0.023
14.	11.	2.	0.0	-2.1	-3.	0.	2.	2.1261.	0.010	0.010

14.	12.	2.	0.0	-1.3	0.	-4.	0.	1.2069.	0.0	0.939
14.	13.	2.	0.0	0.0	-1.	-2.	1.	9.1857.	0.0	5.264
14.	15.	2.	-88.1	-0.3	-1.	-5.	-1.	8.2021.	0.117	0.008
14.	16.	2.	-4.1	-82.9	-2.	-7.	2.	9.2444.	0.024	0.042
14.	17.	2.	-3.8	-0.4	-2.	-1.	1.	9.2415.	0.008	0.131
14.	18.	2.	0.0	-3.7	-2.	-2.	-5.	1.1851.	0.001	0.025
14.	19.	2.	0.0	-15.6	-2.	-2.	-1.	1.2581.	0.0	0.053
15.	1.	2.	-6.9	0.3	1.	2.	-1.	8. 241.	0.982	7.981
15.	2.	2.	80.1	-0.6	-3.	3.	1.	7.1840.	0.117	6.705
15.	3.	2.	86.3	-0.1	-1.	2.	-1.	1.2493.	0.012	0.999
15.	4.	2.	81.4	-6.8	-2.	4.	-1.	7.1836.	0.115	6.847
15.	5.	2.	86.4	-0.1	-1.	2.	2.	6.2378.	14.737	0.030
15.	6.	2.	87.7	-1.5	-1.	3.	0.	6.2864.	0.068	5.439
15.	7.	2.	78.1	-1.2	-2.	-5.	0.	8. 420.	33.469	0.134
15.	8.	2.	-1.9	-1.1	-3.	4.	0.	6.3350.	0.191	1.658
15.	9.	2.	88.1	0.0	0.	5.	3.	8.3580.	1.376	0.383
15.	10.	2.	88.1	-0.2	-1.	5.	3.	2.2835.	0.023	1.835
15.	11.	2.	88.1	-1.8	-2.	5.	3.	2.2958.	0.024	1.643
15.	12.	2.	88.1	-1.0	1.	1.	1.	1.2052.	0.014	1.000
15.	13.	2.	38.1	0.3	0.	3.	2.	8. 828.	0.285	7.994
15.	14.	2.	88.1	0.3	1.	5.	1.	8.2021.	0.117	7.992
15.	16.	2.	84.0	-82.6	-1.	-2.	3.	8.3188.	0.091	6.543
15.	17.	2.	84.3	-0.1	-1.	4.	2.	8.2166.	0.117	7.471
15.	18.	2.	88.1	-3.4	-1.	3.	-4.	1.2157.	0.014	0.961
15.	19.	2.	88.1	-15.3	-1.	3.	0.	1.2585.	0.012	0.982
16.	1.	2.	-90.9	82.9	2.	4.	-4.	9.3406.	0.018	8.902
16.	2.	2.	-3.9	82.0	-2.	5.	-2.	7.1662.	0.033	5.844
16.	3.	2.	2.3	82.5	0.	4.	-4.	1.1096.	0.006	0.995
16.	4.	2.	-2.6	75.8	-1.	6.	-4.	7.2766.	0.018	6.360
16.	5.	2.	2.4	82.5	0.	4.	-1.	6.1807.	19.317	0.007
16.	6.	2.	3.7	81.1	0.	5.	-3.	6. 760.	0.076	4.100
16.	7.	2.	-5.9	81.4	-1.	-3.	-3.	8.2913.	4.763	0.030
16.	8.	2.	-85.9	81.5	-2.	6.	-3.	6.1711.	0.294	0.470
16.	9.	2.	4.1	82.6	1.	7.	0.	9.1819.	2.933	0.100
16.	10.	2.	4.1	82.4	0.	7.	0.	2.1732.	0.011	1.423
16.	11.	2.	4.1	80.8	-1.	7.	0.	2.1622.	0.016	1.012
16.	12.	2.	4.1	81.6	2.	3.	-2.	1.1287.	0.005	1.000
16.	13.	2.	4.1	82.9	1.	5.	-1.	9.2447.	0.024	8.970
16.	14.	2.	4.1	82.9	2.	7.	-2.	9.2444.	0.024	8.958
16.	15.	2.	-84.0	82.6	1.	2.	-3.	8.3188.	0.091	1.457
16.	17.	2.	0.3	82.5	0.	6.	-1.	9.1406.	0.055	6.827
16.	18.	2.	4.1	79.2	0.	5.	-7.	1.1097.	0.007	0.846
16.	19.	2.	4.1	67.3	0.	5.	-3.	1.1048.	0.007	0.922
17.	1.	2.	-91.2	0.4	2.	-2.	-3.	10.2389.	0.009	9.667
17.	2.	2.	-4.2	-0.5	-2.	-1.	-1.	7. 339.	0.070	4.316
17.	3.	2.	2.0	0.0	0.	-2.	-3.	1. 365.	0.006	0.984
17.	4.	2.	-2.9	-6.7	-1.	0.	-3.	7.1415.	0.014	5.319
17.	5.	2.	2.1	0.0	0.	-2.	0.	6.2081.	16.761	0.002
17.	6.	2.	3.4	-1.4	0.	-1.	-2.	6.1590.	0.019	2.443

17.	7.2.	-6.2	-1.1	-1.	-9.	-2.	8.1794.	7.713	0.010
17.	8.2.	-86.2	-1.0	-2.	0.	-2.	6.1370.	0.348	0.158
17.	9.2.	3.8	0.1	1.	1.	1.	10.2806.	2.097	0.036
17.	10.2.	3.8	-0.1	0.	1.	1.	2.2325.	0.004	0.880
17.	11.2.	3.8	-1.7	-1.	1.	1.	2.2319.	0.007	0.492
17.	12.2.	3.8	-0.9	2.	-3.	-1.	1. 370.	0.006	0.999
17.	13.2.	3.8	0.4	1.	-1.	0.	10.1364.	0.015	9.896
17.	14.2.	3.8	0.4	2.	1.	-1.	9.2415.	0.008	8.869
17.	15.2.	-84.3	0.1	1.	-4.	-2.	8.2166.	0.117	0.529
17.	16.2.	-0.3	-82.5	0.	-6.	1.	9.1406.	0.055	2.173
17.	18.2.	3.8	-3.3	0.	-1.	-6.	1. 680.	0.005	0.636
17.	19.2.	3.8	-15.2	0.	-1.	-2.	1. 456.	0.006	0.791
18.	1.2.	-95.0	3.7	2.	-1.	3.	1.2387.	0.001	0.943
18.	2.2.	-8.0	2.8	-2.	0.	5.	1. 740.	0.003	0.479
18.	3.2.	-1.8	3.3	0.	-1.	3.	1. 694.	0.002	0.973
18.	4.2.	-6.7	-3.4	-1.	1.	3.	1.1969.	0.001	0.644
18.	5.2.	-1.7	3.3	0.	-1.	6.	1.1432.	4.059	0.0
18.	6.2.	-0.4	1.9	0.	0.	4.	1. 991.	0.004	0.282
18.	7.2.	-10.0	2.2	-1.	-8.	4.	1.1865.	0.927	0.001
18.	8.2.	-90.0	2.3	-2.	1.	4.	1.1850.	0.042	0.015
18.	9.2.	0.0	3.4	1.	2.	7.	1.2192.	0.268	0.002
18.	10.2.	0.0	3.2	0.	2.	7.	1.1667.	0.002	0.310
18.	11.2.	0.0	1.6	-1.	2.	7.	1.1665.	0.005	0.157
18.	12.2.	0.0	2.4	2.	-2.	5.	1. 333.	0.004	0.998
18.	13.2.	0.0	3.7	1.	0.	6.	1.1381.	0.001	0.982
18.	14.2.	0.0	3.7	2.	2.	5.	1.1851.	0.001	0.975
18.	15.2.	-88.1	3.4	1.	-3.	4.	1.2157.	0.014	0.039
18.	16.2.	-4.1	-79.2	0.	-5.	7.	1.1097.	0.007	0.154
18.	17.2.	-3.8	3.3	0.	1.	6.	1. 680.	0.005	0.364
18.	19.2.	0.0	-11.9	0.	0.	4.	1. 760.	0.002	0.684
19.	1.2.	-95.0	15.6	2.	-1.	-1.	1.2807.	0.0	0.885
19.	2.2.	-8.0	14.7	-2.	0.	1.	1. 790.	0.002	0.298
19.	3.2.	-1.8	15.2	0.	-1.	-1.	1. 97.	0.006	0.944
19.	4.2.	-6.7	8.5	-1.	1.	-1.	1.1775.	0.001	0.455
19.	5.2.	-1.7	15.2	0.	-1.	2.	1.2137.	2.720	0.0
19.	6.2.	-0.4	13.8	0.	0.	0.	1.1423.	0.003	0.154
19.	7.2.	-10.0	14.1	-1.	-8.	0.	1.2227.	0.776	0.0
19.	8.2.	-90.0	14.2	-2.	1.	0.	1.1103.	0.071	0.007
19.	9.2.	0.0	15.3	1.	2.	3.	1.2651.	0.221	0.001
19.	10.2.	0.0	15.1	0.	2.	3.	1.2290.	0.001	0.172
19.	11.2.	0.0	13.5	-1.	2.	3.	1.2250.	0.003	0.079
19.	12.2.	0.0	14.3	2.	-2.	1.	1. 614.	0.001	0.996
19.	13.2.	0.0	15.6	1.	0.	2.	1.1789.	0.0	0.962
19.	14.2.	0.0	15.6	2.	2.	1.	1.2581.	0.0	0.947
19.	15.2.	-88.1	15.3	1.	-3.	0.	1.2585.	0.012	0.018
19.	16.2.	-4.1	-67.3	0.	-5.	3.	1.1048.	0.007	0.078
19.	17.2.	-3.8	15.2	0.	1.	2.	1. 456.	0.006	0.209
19.	18.2.	0.0	11.9	0.	0.	-4.	1. 760.	0.002	0.316

1963 ATTRIBUTE DISTANCES SET 2

1.	2.2.	87.0	-0.9	-4.	1.	2.	1.2065.	0.002	0.140
1.	3.2.	93.2	-0.4	-2.	0.	0.	9.2716.	0.002	6.683
1.	4.2.	88.3	-7.1	-3.	2.	0.	15.1974.	0.013	3.862
1.	5.2.	93.3	-0.4	-2.	0.	3.	14.2552.	68.805	0.0
1.	6.2.	94.6	-1.8	-2.	1.	1.	14.3075.	0.038	0.755
1.	7.2.	85.0	-1.5	-3.	-7.	1.	16. 629.	91.884	0.002
1.	8.2.	5.0	-1.4	-4.	2.	1.	14.3544.	0.442	0.056
1.	9.2.	95.0	-0.3	-1.	3.	4.	18.3747.	6.768	0.006
1.	10.2.	95.0	-0.5	-2.	3.	4.	10.3006.	0.055	0.269
1.	11.2.	95.0	-2.1	-3.	3.	4.	2.3133.	0.018	0.031
1.	12.2.	95.0	-1.3	0.	-1.	2.	1.2283.	0.0	0.970
1.	13.2.	95.0	0.0	-1.	1.	3.	18.1064.	0.008	16.255
1.	14.2.	95.0	0.0	0.	3.	2.	17.2151.	0.004	14.530
1.	15.2.	6.9	-0.3	-1.	-2.	1.	16. 241.	5.149	0.092
1.	16.2.	90.9	-82.9	-2.	-4.	4.	17.3406.	0.089	0.425
1.	17.2.	91.2	-0.4	-2.	2.	3.	18.2389.	0.056	1.077
1.	18.2.	95.0	-3.7	-2.	1.	-3.	9.2387.	0.025	0.612
1.	19.2.	95.0	-15.6	-2.	1.	1.	9.2807.	0.006	2.138
2.	1.2.	-87.0	0.9	4.	-1.	-2.	1.2065.	0.002	0.860
2.	3.2.	6.2	0.5	2.	-1.	-2.	9. 696.	0.037	8.518
2.	4.2.	1.3	-6.2	1.	1.	-2.	1.1244.	0.003	0.680
2.	5.2.	6.3	0.5	2.	-1.	1.	1.2027.	6.189	0.0
2.	6.2.	7.6	-0.9	2.	0.	-1.	1.1717.	0.006	0.259
2.	7.2.	-2.0	-0.6	1.	-8.	-1.	1.1462.	2.472	0.001
2.	8.2.	-82.0	-0.5	0.	1.	-1.	1.1656.	0.069	0.024
2.	9.2.	8.0	0.6	3.	2.	2.	1.2890.	0.488	0.002
2.	10.2.	8.0	0.4	2.	2.	2.	1.2332.	0.008	0.145
2.	11.2.	8.0	-1.2	1.	2.	2.	1.2351.	0.013	0.088
2.	12.2.	8.0	-0.4	4.	-2.	0.	1. 420.	0.007	0.995
2.	13.2.	8.0	0.9	3.	0.	1.	1.1035.	0.003	0.983
2.	14.2.	8.0	0.9	-4.	2.	0.	1.2268.	0.001	0.973
2.	15.2.	-80.1	0.6	3.	-3.	-1.	1.1840.	0.043	0.034
2.	16.2.	3.9	-82.0	2.	-5.	2.	1.1662.	0.012	0.136
2.	17.2.	4.2	0.5	2.	1.	1.	1. 339.	0.029	0.281
2.	18.2.	8.0	-2.8	2.	0.	-5.	1. 740.	0.012	0.309
2.	19.2.	8.0	-14.7	2.	0.	-1.	1. 790.	0.005	0.656
3.	1.2.	-93.2	0.4	2.	0.	0.	9.2716.	0.002	2.317
3.	2.2.	-6.2	-0.5	-2.	1.	2.	9. 696.	0.037	0.482
3.	4.2.	-4.9	-6.7	-1.	2.	0.	9.1715.	0.008	0.966
3.	5.2.	0.1	0.0	0.	0.	3.	9.2091.	53.982	0.0
3.	6.2.	1.4	-1.4	0.	1.	1.	9.1419.	0.051	0.174
3.	7.2.	-8.2	-1.1	-1.	-7.	1.	9.2135.	15.226	0.0
3.	8.2.	-88.2	-1.0	-2.	2.	1.	9.1173.	0.857	0.012
3.	9.2.	1.8	0.1	1.	3.	4.	9.2652.	4.781	0.001
3.	10.2.	1.8	-0.1	0.	3.	4.	9.2263.	0.065	0.086
3.	11.2.	1.8	-1.7	-1.	3.	4.	2.2229.	0.025	0.011
3.	12.2.	1.8	-0.9	2.	-1.	2.	1. 524.	0.0	0.917
3.	13.2.	1.8	0.4	1.	1.	3.	9.1695.	0.001	6.872
3.	14.2.	1.8	0.4	2.	3.	2.	9.2517.	0.001	6.039

3.	15.	2.	-86.3	0.1	1.	-2.	1.	9.	2493.	0.279	0.018
3.	16.	2.	-2.3	-82.5	0.	-4.	4.	9.	1096.	0.144	0.079
3.	17.	2.	-2.0	0.0	0.	2.	3.	9.	365.	0.177	0.194
3.	18.	2.	1.8	-3.3	0.	1.	-3.	9.	694.	0.081	0.222
3.	19.	2.	1.8	-15.2	0.	1.	1.	9.	97.	0.148	0.877
4.	1.	2.	-88.3	7.1	3.	-2.	0.	15.	1974.	0.013	11.138
4.	2.	2.	-1.3	6.2	-1.	-1.	2.	1.	1244.	0.003	0.320
4.	3.	2.	4.9	6.7	1.	-2.	0.	9.	1715.	0.008	8.034
4.	5.	2.	5.0	6.7	1.	-2.	3.	14.	3103.	56.591	0.001
4.	6.	2.	6.3	5.3	1.	-1.	1.	14.	2910.	0.044	1.975
4.	7.	2.	-3.3	5.6	0.	-9.	1.	15.	1457.	37.197	0.005
4.	8.	2.	-83.3	5.7	-1.	0.	1.	14.	1985.	0.795	0.160
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4.	10.	2.	6.7	6.6	1.	1.	4.	10.	3445.	0.051	0.739
4.	11.	2.	6.7	5.0	0.	1.	4.	2.	3482.	0.017	0.087
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4.	14.	2.	6.7	7.1	3.	1.	3.	15.	3158.	0.006	14.165
4.	15.	2.	-81.4	6.8	2.	-4.	1.	15.	1836.	0.640	0.247
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4.	17.	2.	2.9	6.7	1.	0.	3.	15.	1415.	0.088	2.326
4.	18.	2.	6.7	3.4	1.	-1.	-3.	9.	1969.	0.034	1.565
4.	19.	2.	6.7	-8.5	1.	-1.	1.	9.	1775.	0.014	4.259
5.	1.	2.	-93.3	0.4	2.	0.	-3.	14.	2552.	68.805	14.000
5.	2.	2.	-6.3	-0.5	-2.	1.	-1.	1.	2027.	6.189	1.000
5.	3.	2.	-0.1	0.0	0.	0.	-3.	9.	2091.	53.982	9.000
5.	4.	2.	-5.0	-6.7	-1.	2.	-3.	14.	3103.	56.591	13.999
5.	6.	2.	1.3	-1.4	0.	1.	-2.	14.	1074.	163.588	13.991
5.	7.	2.	-8.3	-1.1	-1.	-7.	-2.	14.	2328.	97.143	10.870
5.	8.	2.	-88.3	-1.0	-2.	2.	-2.	14.	3155.	56.147	13.877
5.	9.	2.	1.7	0.1	1.	3.	1.	14.	1298.	150.465	12.586
5.	10.	2.	1.7	-0.1	0.	3.	1.	10.	485.	258.925	9.987
5.	11.	2.	1.7	-1.7	-1.	3.	1.	2.	629.	39.968	1.996
5.	12.	2.	1.7	-0.9	2.	-1.	-1.	1.	1722.	7.283	1.000
5.	13.	2.	1.7	0.4	1.	1.	0.	14.	1966.	89.311	14.000
5.	14.	2.	1.7	0.4	2.	3.	-1.	14.	710.	247.303	14.000
5.	15.	2.	-86.4	0.1	1.	-2.	-2.	14.	2378.	74.291	13.914
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5.	17.	2.	-2.1	0.0	0.	2.	0.	14.	2081.	84.422	13.992
5.	18.	2.	1.7	-3.3	0.	1.	-6.	9.	1432.	78.862	8.996
5.	19.	2.	1.7	-15.2	0.	1.	-2.	9.	2137.	52.826	8.999
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6.	2.	2.	-7.6	0.9	-2.	0.	1.	1.	1717.	0.006	0.741
6.	3.	2.	-1.4	1.4	0.	-1.	-1.	9.	1419.	0.051	8.826
6.	4.	2.	-6.3	-5.3	-1.	1.	-1.	14.	2910.	0.044	12.025
6.	5.	2.	-1.3	1.4	0.	-1.	2.	14.	1074.	163.588	0.009
6.	7.	2.	-9.6	0.3	-1.	-8.	0.	14.	2664.	19.022	0.030
6.	8.	2.	-89.6	0.4	-2.	1.	0.	14.	2334.	0.716	0.920
6.	9.	2.	0.4	1.5	1.	2.	3.	14.	1272.	15.589	0.078

6.	10.	2.	0.4	1.3	0.	2.	3.	10.	993.	0.242	3.270
6.	11.	2.	0.4	-0.3	-1.	2.	3.	2.	900.	0.080	0.435
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6.	13.	2.	0.4	1.8	1.	0.	2.	14.	2205.	0.050	13.915
6.	14.	2.	0.4	1.8	2.	2.	1.	14.	1750.	0.063	13.866
6.	15.	2.	-87.7	1.5	1.	-3.	0.	14.	2864.	0.415	1.293
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6.	17.	2.	-3.4	1.4	0.	1.	2.	14.	1590.	0.131	7.387
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6.	19.	2.	0.4	-13.8	0.	0.	0.	9.	1423.	0.059	7.608
7.	1.	2.	-85.0	1.5	3.	7.	-1.	16.	629.	91.884	15.998
7.	2.	2.	2.0	0.6	-1.	8.	1.	1.	1462.	2.472	0.999
7.	3.	2.	8.2	1.1	1.	7.	-1.	9.	2135.	15.226	9.000
7.	4.	2.	3.3	-5.6	0.	9.	-1.	15.	1457.	37.197	14.995
7.	5.	2.	8.3	1.1	1.	7.	2.	14.	2328.	97.143	3.130
7.	6.	2.	9.6	-0.3	1.	8.	0.	14.	2664.	19.022	13.970
7.	8.	2.	-80.0	0.1	-1.	9.	0.	14.	2971.	17.545	13.581
7.	9.	2.	10.0	1.2	2.	10.	3.	16.	3505.	22.917	11.511
7.	10.	2.	10.0	1.0	1.	10.	3.	10.	2776.	13.069	9.955
7.	11.	2.	10.0	-0.6	0.	10.	3.	2.	2880.	2.528	1.984
7.	12.	2.	10.0	0.2	3.	6.	1.	1.	1717.	2.104	1.000
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7.	16.	2.	5.9	-81.4	1.	3.	3.	16.	2913.	19.934	15.923
7.	17.	2.	6.2	1.1	1.	9.	2.	16.	1794.	32.274	15.969
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7.	19.	2.	10.0	-14.1	1.	8.	0.	9.	2227.	14.602	8.996
8.	1.	2.	-5.0	1.4	4.	-2.	-1.	14.	3544.	0.442	13.944
8.	2.	2.	82.0	0.5	0.	-1.	1.	1.	1656.	0.069	0.976
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8.	4.	2.	83.3	-5.7	1.	0.	-1.	14.	1985.	0.795	13.840
8.	5.	2.	88.3	1.0	2.	-2.	2.	14.	3155.	56.147	0.123
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8.	7.	2.	80.0	-0.1	1.	-9.	0.	14.	2971.	17.545	0.419
8.	9.	2.	90.0	1.1	3.	1.	3.	14.	3439.	6.188	1.027
8.	10.	2.	90.0	0.9	2.	1.	3.	10.	3243.	0.394	8.735
8.	11.	2.	90.0	-0.7	1.	1.	3.	2.	3177.	0.088	1.596
8.	12.	2.	90.0	0.1	4.	-3.	1.	1.	1669.	0.067	1.000
8.	13.	2.	90.0	1.4	3.	-1.	2.	14.	2629.	0.594	13.994
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8.	17.	2.	86.2	1.0	2.	0.	2.	14.	1370.	1.211	13.170
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9.	1.	2.	-95.0	0.3	1.	-3.	-4.	18.	3747.	6.768	17.994
9.	2.	2.	-8.0	-0.6	-3.	-2.	-2.	1.	2890.	0.488	0.998
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12.	8.	2.	-90.0	-0.1	-4.	3.	-1.	1.1669.	0.067	0.0
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12.	16.	2.	-4.1	-81.6	-2.	-3.	2.	1.1287.	0.014	0.001
12.	17.	2.	-3.8	0.9	-2.	3.	1.	1. 370.	0.019	0.002
12.	18.	2.	0.0	-2.4	-2.	2.	-5.	1. 333.	0.018	0.002
12.	19.	2.	0.0	-14.3	-2.	2.	-1.	1. 614.	0.002	0.010
13.	1.	2.	-95.0	0.0	1.	-1.	-3.	18.1064.	0.008	1.745
13.	2.	2.	-8.0	-0.9	-3.	0.	-1.	1.1035.	0.003	0.017
13.	3.	2.	-1.8	-0.4	-1.	-1.	-3.	9.1695.	0.001	2.128
13.	4.	2.	-6.7	-7.1	-2.	1.	-3.	15.1414.	0.014	0.539
13.	5.	2.	-1.7	-0.4	-1.	-1.	0.	14.1966.	89.311	0.0
13.	6.	2.	-0.4	-1.8	-1.	0.	-2.	14.2205.	0.050	0.085
13.	7.	2.	-10.0	-1.5	-2.	-8.	-2.	16. 495.	116.745	0.0
13.	8.	2.	-90.0	-1.4	-3.	1.	-2.	14.2629.	0.594	0.006
13.	9.	2.	0.0	-0.3	0.	2.	1.	18.3123.	8.118	0.001
13.	10.	2.	0.0	-0.5	-1.	2.	1.	10.2403.	0.067	0.030
13.	11.	2.	0.0	-2.1	-2.	2.	1.	2.2493.	0.023	0.003
13.	12.	2.	0.0	-1.3	1.	-2.	-1.	1.1245.	0.0	0.774
13.	14.	2.	0.0	0.0	1.	2.	-1.	17.1857.	0.001	6.581
13.	15.	2.	-88.1	-0.3	0.	-3.	-2.	16. 828.	1.491	0.010
13.	16.	2.	-4.1	-82.9	-1.	-5.	1.	17.2447.	0.121	0.047
13.	17.	2.	-3.8	-0.4	-1.	1.	0.	18.1364.	0.093	0.122
13.	18.	2.	0.0	-3.7	-1.	0.	-6.	9.1381.	0.040	0.070
13.	19.	2.	0.0	-15.6	-1.	0.	-2.	9.1789.	0.007	0.291
14.	1.	2.	-95.0	0.0	0.	-3.	-2.	17.2151.	0.004	2.470
14.	2.	2.	-8.0	-0.9	-4.	-2.	0.	1.2268.	0.001	0.027
14.	3.	2.	-1.8	-0.4	-2.	-3.	-2.	9.2517.	0.001	2.961
14.	4.	2.	-6.7	-7.1	-3.	-1.	-2.	15.3158.	0.006	0.835
14.	5.	2.	-1.7	-0.4	-2.	-3.	1.	14. 710.	247.303	0.0
14.	6.	2.	-0.4	-1.8	-2.	-2.	-1.	14.1750.	0.063	0.134
14.	7.	2.	-10.0	-1.5	-3.	-10.	-1.	16.2093.	27.611	0.0
14.	8.	2.	-90.0	-1.4	-4.	-1.	-1.	14.3598.	0.434	0.010
14.	9.	2.	0.0	-0.3	-1.	0.	2.	17.1849.	12.951	0.001
14.	10.	2.	0.0	-0.5	-2.	0.	2.	10.1089.	0.149	0.047
14.	11.	2.	0.0	-2.1	-3.	0.	2.	2.1261.	0.045	0.005

14.12.2.	0.0	-1.3	0.	-4.	0.	1.2069.	0.0	0.844
14.13.2.	0.0	0.0	-1.	-2.	1.17.1857.		0.001	10.419
14.15.2.	-88.1	-0.3	-1.	-5.	-1.16.2021.		0.611	0.016
14.16.2.	-4.1	-82.9	-2.	-7.	2.17.2444.		0.122	0.074
14.17.2.	-3.8	-0.4	-2.	-1.	1.17.2415.		0.050	0.182
14.18.2.	0.0	-3.7	-2.	-2.	-5. 9.1851.		0.030	0.110
14.19.2.	0.0	-15.6	-2.	-2.	-1. 9.2581.		0.005	0.453
15. 1.2.	-6.9	0.3	1.	2.	-1.16. 241.		5.149	15.908
15. 2.2.	80.1	-0.6	-3.	3.	1. 1.1840.		0.043	0.966
15. 3.2.	86.3	-0.1	-1.	2.	-1. 9.2493.		0.279	8.982
15. 4.2.	81.4	-6.8	-2.	4.	-1.15.1836.		0.640	14.753
15. 5.2.	86.4	-0.1	-1.	2.	2.14.2378.		74.291	0.086
15. 6.2.	87.7	-1.5	-1.	3.	0.14.2864.		0.415	12.707
15. 7.2.	78.1	-1.2	-2.	-5.	0.16. 420.		140.528	0.334
15. 8.2.	-1.9	-1.1	-3.	4.	0.14.3350.		0.788	5.724
15. 9.2.	88.1	0.0	0.	5.	3.16.3580.		6.640	0.830
15.10.2.	88.1	-0.2	-1.	5.	3.10.2835.		0.329	8.269
15.11.2.	88.1	-1.8	-2.	5.	3. 2.2958.		0.071	1.464
15.12.2.	88.1	-1.0	1.	1.	1. 1.2052.		0.038	1.000
15.13.2.	88.1	0.3	0.	3.	2.16. 828.		1.491	15.990
15.14.2.	88.1	0.3	1.	5.	1.16.2021.		0.611	15.984
15.16.2.	84.0	-82.6	-1.	-2.	3.16.3188.		0.474	13.049
15.17.2.	84.3	-0.1	-1.	4.	2.16.2166.		0.621	14.664
15.18.2.	88.1	-3.4	-1.	3.	-4. 9.2157.		0.347	8.338
15.19.2.	88.1	-15.3	-1.	3.	0. 9.2585.		0.273	8.836
16. 1.2.	-90.9	82.9	2.	4.	-4.17.3406.		0.089	16.575
16. 2.2.	-3.9	82.0	-2.	5.	-2. 1.1662.		0.012	0.864
16. 3.2.	2.3	82.5	0.	4.	-4. 9.1096.		0.144	8.921
16. 4.2.	-2.6	75.8	-1.	6.	-4.15.2766.		0.102	13.967
16. 5.2.	2.4	82.5	0.	4.	-1.14.1807.		97.304	0.019
16. 6.2.	3.7	81.1	0.	5.	-3.14. 760.		0.466	9.655
16. 7.2.	-5.9	81.4	-1.	-3.	-3.16.2913.		19.934	0.077
16. 8.2.	-85.9	81.5	-2.	6.	-3.14.1711.		1.055	1.893
16. 9.2.	4.1	82.6	1.	7.	0.17.1819.		13.327	0.208
16.10.2.	4.1	82.4	0.	7.	0.10.1732.		0.194	5.192
16.11.2.	4.1	80.8	-1.	7.	0. 2.1622.		0.056	0.763
16.12.2.	4.1	81.6	2.	3.	-2. 1.1287.		0.014	0.999
16.13.2.	4.1	82.9	1.	5.	-1.17.2447.		0.121	16.953
16.14.2.	4.1	82.9	2.	7.	-2.17.2444.		0.122	16.926
16.15.2.	-84.0	82.6	1.	2.	-3.16.3188.		0.474	2.951
16.17.2.	0.3	82.5	0.	6.	-1.17.1406.		0.296	12.118
16.18.2.	4.1	79.2	0.	5.	-7. 9.1097.		0.193	6.661
16.19.2.	4.1	67.3	0.	5.	-3. 9.1048.		0.162	8.316
17. 1.2.	-91.2	0.4	2.	-2.	-3.18.2389.		0.056	16.923
17. 2.2.	-4.2	-0.5	-2.	-1.	-1. 1. 339.		0.029	0.719
17. 3.2.	2.0	0.0	0.	-2.	-3. 9. 365.		0.177	8.806
17. 4.2.	-2.9	-6.7	-1.	0.	-3.15.1415.		0.088	12.674
17. 5.2.	2.1	0.0	0.	-2.	0.14.2081.		84.422	0.008
17. 6.2.	3.4	-1.4	0.	-1.	-2.14.1590.		0.131	6.613

17.	7.2.	-6.2	-1.1	-1.	-9.	-2.	16.1794.	32.274	0.031
17.	8.2.	-86.2	-1.0	-2.	0.	-2.	14.1370.	1.211	0.830
17.	9.2.	3.8	0.1	1.	1.	1.	18.2806.	9.080	0.089
17.	10.2.	3.8	-0.1	0.	1.	1.	10.2325.	0.100	3.032
17.	11.2.	3.8	-1.7	-1.	1.	1.	2.2319.	0.030	0.398
17.	12.2.	3.8	-0.9	2.	-3.	-1.	1. 370.	0.019	0.998
17.	13.2.	3.8	0.4	1.	-1.	0.	18.1364.	0.093	17.878
17.	14.2.	3.8	0.4	2.	1.	-1.	17.2415.	0.050	16.818
17.	15.2.	-84.3	0.1	1.	-4.	-2.	16.2166.	0.621	1.336
17.	16.2.	-0.3	-82.5	0.	-6.	1.	17.1406.	0.296	4.882
17.	18.2.	3.8	-3.3	0.	-1.	-6.	9. 680.	0.174	4.808
17.	19.2.	3.8	-15.2	0.	-1.	-2.	9. 456.	0.167	7.473
18.	1.2.	-95.0	3.7	2.	-1.	3.	9.2387.	0.025	8.388
18.	2.2.	-8.0	2.8	-2.	0.	5.	1. 740.	0.012	0.691
18.	3.2.	-1.8	3.3	0.	-1.	3.	9. 694.	0.081	8.778
18.	4.2.	-6.7	-3.4	-1.	1.	3.	9.1969.	0.034	7.435
18.	5.2.	-1.7	3.3	0.	-1.	6.	9.1432.	78.862	0.004
18.	6.2.	-0.4	1.9	0.	0.	4.	9. 991.	0.127	3.945
18.	7.2.	-10.0	2.2	-1.	-8.	4.	9.1865.	17.459	0.015
18.	8.2.	-90.0	2.3	-2.	1.	4.	9.1850.	0.572	0.469
18.	9.2.	0.0	3.4	1.	2.	7.	9.2192.	5.808	0.039
18.	10.2.	0.0	3.2	0.	2.	7.	9.1667.	0.120	2.475
18.	11.2.	0.0	1.6	-1.	2.	7.	2.1665.	0.041	0.356
18.	12.2.	0.0	2.4	2.	-2.	5.	1. 333.	0.018	0.998
18.	13.2.	0.0	3.7	1.	0.	6.	9.1381.	0.040	8.930
18.	14.2.	0.0	3.7	2.	2.	5.	9.1851.	0.030	8.890
18.	15.2.	-88.1	3.4	1.	-3.	4.	9.2157.	0.347	0.662
18.	16.2.	-4.1	-79.2	0.	-5.	7.	9.1097.	0.193	2.339
18.	17.2.	-3.8	3.3	0.	1.	6.	9. 680.	0.174	4.192
18.	19.2.	0.0	-11.9	0.	0.	4.	9. 760.	0.090	7.291
19.	1.2.	-95.0	15.6	2.	-1.	-1.	9.2807.	0.006	6.862
19.	2.2.	-8.0	14.7	-2.	0.	1.	1. 790.	0.005	0.344
19.	3.2.	-1.8	15.2	0.	-1.	-1.	9. 97.	0.148	8.123
19.	4.2.	-6.7	8.5	-1.	1.	-1.	9.1775.	0.014	4.741
19.	5.2.	-1.7	15.2	0.	-1.	2.	9.2137.	52.826	0.001
19.	6.2.	-0.4	13.8	0.	0.	0.	9.1423.	0.059	1.392
19.	7.2.	-10.0	14.1	-1.	-8.	0.	9.2227.	14.602	0.004
19.	8.2.	-90.0	14.2	-2.	1.	0.	9.1103.	0.921	0.114
19.	9.2.	0.0	15.3	1.	2.	3.	9.2651.	4.787	0.009
19.	10.2.	0.0	15.1	0.	2.	3.	9.2290.	0.069	0.735
19.	11.2.	0.0	13.5	-1.	2.	3.	2.2250.	0.026	0.097
19.	12.2.	0.0	14.3	2.	-2.	1.	1. 614.	0.002	0.990
19.	13.2.	0.0	15.6	1.	0.	2.	9.1789.	0.007	8.709
19.	14.2.	0.0	15.6	2.	2.	1.	9.2581.	0.005	8.547
19.	15.2.	-88.1	15.3	1.	-3.	0.	9.2585.	0.273	0.164
19.	16.2.	-4.1	-67.3	0.	-5.	3.	9.1048.	0.162	0.684
19.	17.2.	-3.8	15.2	0.	1.	2.	9. 456.	0.167	1.527
19.	18.2.	0.0	11.9	0.	0.	-4.	9. 760.	0.090	1.709

1955 ATTRIBUTE DISTANCES SET 3

1. 2.3.	1.228
1. 3.3.	0.039
1. 4.3.	0.589
1. 5.3.	5811.098
1. 6.3.	2.972
1. 7.3.	1727.539
1. 8.3.	77.216
1. 9.3.	586.171
1.10.3.	2.589
1.11.3.	6.335
1.12.3.	0.070
1.13.3.	0.050
1.14.3.	0.041
1.15.3.	29.433
1.16.3.	6.497
1.17.3.	2.019
1.18.3.	1.125
1.19.3.	0.480
2. 1.3.	1.228
2. 3.3.	1.267
2. 4.3.	0.639
2. 5.3.	5809.875
2. 6.3.	1.744
2. 7.3.	1726.310
2. 8.3.	75.988
2. 9.3.	584.943
2.10.3.	1.361
2.11.3.	5.107
2.12.3.	1.298
2.13.3.	1.278
2.14.3.	1.269
2.15.3.	28.205
2.16.3.	5.269
2.17.3.	0.791
2.18.3.	0.103
2.19.3.	0.748
3. 1.3.	0.039
3. 2.3.	1.267
3. 4.3.	0.628
3. 5.3.	5811.141
3. 6.3.	3.011
3. 7.3.	1727.578
3. 8.3.	77.255
3. 9.3.	586.210
3.10.3.	2.628
3.11.3.	6.374
3.12.3.	0.031
3.13.3.	0.011
3.14.3.	0.002

3.15.3.	29.472
3.16.3.	6.536
3.17.3.	2.058
3.18.3.	1.164
3.19.3.	0.519
4. 1.3.	0.589
4. 2.3.	0.639
4. 3.3.	0.628
4. 5.3.	5810.512
4. 6.3.	2.383
4. 7.3.	1726.950
4. 8.3.	76.627
4. 9.3.	585.582
4.10.3.	2.000
4.11.3.	5.746
4.12.3.	0.659
4.13.3.	0.639
4.14.3.	0.630
4.15.3.	28.844
4.16.3.	5.908
4.17.3.	1.430
4.18.3.	0.536
4.19.3.	0.109
5. 1.3.	5811.098
5. 2.3.	5809.875
5. 3.3.	5811.141
5. 4.3.	5810.512
5. 6.3.	5808.129
5. 7.3.	4083.569
5. 8.3.	5733.887
5. 9.3.	5224.930
5.10.3.	5808.512
5.11.3.	5804.766
5.12.3.	5811.172
5.13.3.	5811.145
5.14.3.	5811.141
5.15.3.	5781.668
5.16.3.	5804.602
5.17.3.	5809.078
5.18.3.	5809.973
5.19.3.	5810.617
6. 1.3.	2.972
6. 2.3.	1.744
6. 3.3.	3.011
6. 4.3.	2.383
6. 5.3.	5808.129
6. 7.3.	1724.566
6. 8.3.	74.244
6. 9.3.	583.199

6.10.3.	0.383
6.11.3.	3.363
6.12.3.	3.042
6.13.3.	3.022
6.14.3.	3.013
6.15.3.	26.461
6.16.3.	3.525
6.17.3.	0.953
6.18.3.	1.847
6.19.3.	2.492
7. 1.3.	1727.539
7. 2.3.	1726.310
7. 3.3.	1727.578
7. 4.3.	1726.950
7. 5.3.	4083.569
7. 6.3.	1724.566
7. 8.3.	1650.323
7. 9.3.	1141.367
7.10.3.	1724.950
7.11.3.	1721.204
7.12.3.	1727.609
7.13.3.	1727.589
7.14.3.	1727.580
7.15.3.	1698.106
7.16.3.	1721.042
7.17.3.	1725.520
7.18.3.	1726.414
7.19.3.	1727.059
8. 1.3.	77.216
8. 2.3.	75.988
8. 3.3.	77.255
8. 4.3.	76.627
8. 5.3.	5733.887
8. 6.3.	74.244
8. 7.3.	1650.323
8. 9.3.	508.955
8.10.3.	74.627
8.11.3.	70.881
8.12.3.	77.286
8.13.3.	77.266
8.14.3.	77.257
8.15.3.	47.783
8.16.3.	70.719
8.17.3.	75.197
8.18.3.	76.091
8.19.3.	76.736
9. 1.3.	586.171
9. 2.3.	584.943
9. 3.3.	586.210

9. 4.3.	585.582
9. 5.3.	5224.930
9. 6.3.	583.199
9. 7.3.	1141.367
9. 8.3.	508.955
9.10.3.	583.582
9.11.3.	579.836
9.12.3.	586.241
9.13.3.	586.221
9.14.3.	586.212
9.15.3.	556.738
9.16.3.	579.674
9.17.3.	584.152
9.18.3.	585.046
9.19.3.	585.691
10. 1.3.	2.589
10. 2.3.	1.361
10. 3.3.	2.628
10. 4.3.	2.000
10. 5.3.	5808.512
10. 6.3.	0.383
10. 7.3.	1724.950
10. 8.3.	74.627
10. 9.3.	583.582
10.11.3.	3.746
10.12.3.	2.659
10.13.3.	2.639
10.14.3.	2.630
10.15.3.	26.844
10.16.3.	3.908
10.17.3.	0.570
10.18.3.	1.464
10.19.3.	2.109
11. 1.3.	6.335
11. 2.3.	5.107
11. 3.3.	6.374
11. 4.3.	5.746
11. 5.3.	5804.766
11. 6.3.	3.363
11. 7.3.	1721.204
11. 8.3.	70.881
11. 9.3.	579.836
11.10.3.	3.746
11.12.3.	6.405
11.13.3.	6.385
11.14.3.	6.376
11.15.3.	23.098
11.16.3.	0.162
11.17.3.	4.316

11.18.3.	5.210
11.19.3.	5.855
12. 1.3.	0.070
12. 2.3.	1.298
12. 3.3.	0.031
12. 4.3.	0.659
12. 5.3.	5811.172
12. 6.3.	3.042
12. 7.3.	1727.609
12. 8.3.	77.286
12. 9.3.	586.241
12.10.3.	2.659
12.11.3.	6.405
12.13.3.	0.020
12.14.3.	0.029
12.15.3.	29.503
12.16.3.	6.567
12.17.3.	2.089
12.18.3.	1.195
12.19.3.	0.550
13. 1.3.	0.050
13. 2.3.	1.278
13. 3.3.	0.011
13. 4.3.	0.639
13. 5.3.	5811.145
13. 6.3.	3.022
13. 7.3.	1727.589
13. 8.3.	77.266
13. 9.3.	586.221
13.10.3.	2.639
13.11.3.	6.385
13.12.3.	0.020
13.14.3.	0.009
13.15.3.	29.483
13.16.3.	6.547
13.17.3.	2.069
13.18.3.	1.175
13.19.3.	0.530
14. 1.3.	0.041
14. 2.3.	1.269
14. 3.3.	0.002
14. 4.3.	0.630
14. 5.3.	5811.141
14. 6.3.	3.013
14. 7.3.	1727.580
14. 8.3.	77.257
14. 9.3.	586.212
14.10.3.	2.630
14.11.3.	6.376

14.12.3.	0.029
14.13.3.	0.009
14.15.3.	29.474
14.16.3.	6.538
14.17.3.	2.060
14.18.3.	1.166
14.19.3.	0.521
15. 1.3.	29.433
15. 2.3.	28.205
15. 3.3.	29.472
15. 4.3.	28.844
15. 5.3.	5781.668
15. 6.3.	26.461
15. 7.3.	1698.106
15. 8.3.	47.783
15. 9.3.	556.738
15.10.3.	26.844
15.11.3.	23.098
15.12.3.	29.503
15.13.3.	29.483
15.14.3.	29.474
15.16.3.	22.936
15.17.3.	27.414
15.18.3.	28.308
15.19.3.	28.953
16. 1.3.	6.497
16. 2.3.	5.269
16. 3.3.	6.536
16. 4.3.	5.908
16. 5.3.	5804.602
16. 6.3.	3.525
16. 7.3.	1721.042
16. 8.3.	70.719
16. 9.3.	579.674
16.10.3.	3.908
16.11.3.	0.162
16.12.3.	6.567
16.13.3.	6.547
16.14.3.	6.538
16.15.3.	22.936
16.17.3.	4.478
16.18.3.	5.372
16.19.3.	6.017
17. 1.3.	2.019
17. 2.3.	0.791
17. 3.3.	2.058
17. 4.3.	1.430
17. 5.3.	5809.078
17. 6.3.	0.953

17. 7.3.	1725.520
17. 8.3.	75.197
17. 9.3.	584.152
17.10.3.	0.570
17.11.3.	4.316
17.12.3.	2.089
17.13.3.	2.069
17.14.3.	2.060
17.15.3.	27.414
17.16.3.	4.478
17.18.3.	0.894
17.19.3.	1.539
18. 1.3.	1.125
18. 2.3.	0.103
18. 3.3.	1.164
18. 4.3.	0.536
18. 5.3.	5809.973
18. 6.3.	1.847
18. 7.3.	1726.414
18. 8.3.	76.091
18. 9.3.	585.046
18.10.3.	1.464
18.11.3.	5.210
18.12.3.	1.195
18.13.3.	1.175
18.14.3.	1.166
18.15.3.	28.308
18.16.3.	5.372
18.17.3.	0.894
18.19.3.	0.645
19. 1.3.	0.480
19. 2.3.	0.748
19. 3.3.	0.519
19. 4.3.	0.109
19. 5.3.	5810.617
19. 6.3.	2.492
19. 7.3.	1727.059
19. 8.3.	76.736
19. 9.3.	585.691
19.10.3.	2.109
19.11.3.	5.855
19.12.3.	0.550
19.13.3.	0.530
19.14.3.	0.521
19.15.3.	28.953
19.16.3.	6.017
19.17.3.	1.539
19.18.3.	0.645

1963 ATTRIBUTE DISTANCES SET 3

1. 2.3.	2.295
1. 3.3.	0.292
1. 4.3.	0.842
1. 5.3.	12541.262
1. 6.3.	7.399
1. 7.3.	3611.302
1. 8.3.	111.043
1. 9.3.	1408.064
1.10.3.	15.699
1.11.3.	27.812
1.12.3.	0.433
1.13.3.	0.399
1.14.3.	0.371
1.15.3.	76.657
1.16.3.	16.988
1.17.3.	6.577
1.18.3.	5.676
1.19.3.	0.988
2. 1.3.	2.295
2. 3.3.	2.587
2. 4.3.	1.453
2. 5.3.	12538.969
2. 6.3.	5.104
2. 7.3.	3609.007
2. 8.3.	108.748
2. 9.3.	1405.770
2.10.3.	13.404
2.11.3.	25.517
2.12.3.	2.728
2.13.3.	2.694
2.14.3.	2.666
2.15.3.	74.362
2.16.3.	14.693
2.17.3.	4.282
2.18.3.	3.381
2.19.3.	1.307
3. 1.3.	0.292
3. 2.3.	2.587
3. 4.3.	1.134
3. 5.3.	12541.555
3. 6.3.	7.691
3. 7.3.	3611.594
3. 8.3.	111.335
3. 9.3.	1408.357
3.10.3.	15.991
3.11.3.	28.104
3.12.3.	0.141
3.13.3.	0.107
3.14.3.	0.079

3.15.3.	76.949
3.16.3.	17.280
3.17.3.	6.869
3.18.3.	5.968
3.19.3.	1.280
4. 1.3.	0.842
4. 2.3.	1.453
4. 3.3.	1.134
4. 5.3.	12540.422
4. 6.3.	6.557
4. 7.3.	3610.460
4. 8.3.	110.201
4. 9.3.	1407.223
4.10.3.	14.857
4.11.3.	26.970
4.12.3.	1.275
4.13.3.	1.241
4.14.3.	1.213
4.15.3.	75.815
4.16.3.	16.146
4.17.3.	5.735
4.18.3.	4.834
4.19.3.	0.146
5. 1.3.	12541.262
5. 2.3.	12538.969
5. 3.3.	12541.555
5. 4.3.	12540.422
5. 6.3.	12533.859
5. 7.3.	8929.961
5. 8.3.	12430.219
5. 9.3.	11133.188
5.10.3.	12525.559
5.11.3.	12513.441
5.12.3.	12541.688
5.13.3.	12541.652
5.14.3.	12541.633
5.15.3.	12464.602
5.16.3.	12524.270
5.17.3.	12534.680
5.18.3.	12535.586
5.19.3.	12540.270
6. 1.3.	7.399
6. 2.3.	5.104
6. 3.3.	7.691
6. 4.3.	6.557
6. 5.3.	12533.859
6. 7.3.	3603.903
6. 8.3.	103.644
6. 9.3.	1400.666

6.10.3.	8.300
6.11.3.	20.413
6.12.3.	7.832
6.13.3.	7.798
6.14.3.	7.770
6.15.3.	69.258
6.16.3.	9.589
6.17.3.	0.822
6.18.3.	1.723
6.19.3.	6.411
7. 1.3.	3611.302
7. 2.3.	3609.007
7. 3.3.	3611.594
7. 4.3.	3610.460
7. 5.3.	8929.961
7. 6.3.	3603.903
7. 8.3.	3500.259
7. 9.3.	2203.237
7.10.3.	3595.603
7.11.3.	3583.490
7.12.3.	3611.735
7.13.3.	3611.701
7.14.3.	3611.673
7.15.3.	3534.645
7.16.3.	3594.314
7.17.3.	3604.725
7.18.3.	3605.626
7.19.3.	3610.314
8. 1.3.	111.043
8. 2.3.	108.748
8. 3.3.	111.335
8. 4.3.	110.201
8. 5.3.	12430.219
8. 6.3.	103.644
8. 7.3.	3500.259
8. 9.3.	1297.021
8.10.3.	95.344
8.11.3.	83.231
8.12.3.	111.476
8.13.3.	111.442
8.14.3.	111.414
8.15.3.	34.386
8.16.3.	94.055
8.17.3.	104.466
8.18.3.	105.367
8.19.3.	110.055
9. 1.3.	1408.064
9. 2.3.	1405.770
9. 3.3.	1408.357

9. 4.3.	1407.223
9. 5.3.	11133.188
9. 6.3.	1400.666
9. 7.3.	2203.237
9. 8.3.	1297.021
9.10.3.	1392.365
9.11.3.	1380.253
9.12.3.	1408.498
9.13.3.	1408.464
9.14.3.	1408.436
9.15.3.	1331.408
9.16.3.	1391.076
9.17.3.	1401.488
9.18.3.	1402.389
9.19.3.	1407.077
10. 1.3.	15.699
10. 2.3.	13.404
10. 3.3.	15.991
10. 4.3.	14.857
10. 5.3.	12525.559
10. 6.3.	8.300
10. 7.3.	3595.603
10. 8.3.	95.344
10. 9.3.	1392.365
10.11.3.	12.113
10.12.3.	16.132
10.13.3.	16.098
10.14.3.	16.070
10.15.3.	60.958
10.16.3.	1.289
10.17.3.	9.122
10.18.3.	10.023
10.19.3.	14.711
11. 1.3.	27.812
11. 2.3.	25.517
11. 3.3.	28.104
11. 4.3.	26.970
11. 5.3.	12513.441
11. 6.3.	20.413
11. 7.3.	3583.490
11. 8.3.	83.231
11. 9.3.	1380.253
11.10.3.	12.113
11.12.3.	28.245
11.13.3.	28.211
11.14.3.	28.183
11.15.3.	48.845
11.16.3.	10.824
11.17.3.	21.235

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11.18.3.     22.136
11.19.3.     26.824
12. 1.3.      0.433
12. 2.3.      2.728
12. 3.3.      0.141
12. 4.3.      1.275
12. 5.3. 12541.688
12. 6.3.      7.832
12. 7.3.  3611.735
12. 8.3.   111.476
12. 9.3.  1408.498
12.10.3.     16.132
12.11.3.     28.245
12.13.3.      0.034
12.14.3.      0.062
12.15.3.     77.090
12.16.3.     17.421
12.17.3.      7.010
12.18.3.      6.109
12.19.3.      1.421
13. 1.3.      0.399
13. 2.3.      2.694
13. 3.3.      0.107
13. 4.3.      1.241
13. 5.3. 12541.652
13. 6.3.      7.798
13. 7.3.  3611.701
13. 8.3.   111.442
13. 9.3.  1408.464
13.10.3.     16.098
13.11.3.     28.211
13.12.3.      0.034
13.14.3.      0.028
13.15.3.     77.056
13.16.3.     17.387
13.17.3.      6.976
13.18.3.      6.075
13.19.3.      1.387
14. 1.3.      0.371
14. 2.3.      2.666
14. 3.3.      0.079
14. 4.3.      1.213
14. 5.3. 12541.633
14. 6.3.      7.770
14. 7.3.  3611.673
14. 8.3.   111.414
14. 9.3.  1408.436
14.10.3.     16.070
14.11.3.     28.183
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14.12.3.	0.062
14.13.3.	0.028
14.15.3.	77.028
14.16.3.	17.359
14.17.3.	6.948
14.18.3.	6.047
14.19.3.	1.359
15. 1.3.	76.657
15. 2.3.	74.362
15. 3.3.	76.949
15. 4.3.	75.815
15. 5.3.	12464.602
15. 6.3.	69.258
15. 7.3.	3534.645
15. 8.3.	34.386
15. 9.3.	1331.408
15.10.3.	60.958
15.11.3.	48.845
15.12.3.	77.090
15.13.3.	77.056
15.14.3.	77.028
15.16.3.	59.669
15.17.3.	70.080
15.18.3.	70.981
15.19.3.	75.669
16. 1.3.	16.988
16. 2.3.	14.693
16. 3.3.	17.280
16. 4.3.	16.146
16. 5.3.	12524.270
16. 6.3.	9.589
16. 7.3.	3594.314
16. 8.3.	94.055
16. 9.3.	1391.076
16.10.3.	1.289
16.11.3.	10.824
16.12.3.	17.421
16.13.3.	17.387
16.14.3.	17.359
16.15.3.	59.669
16.17.3.	10.411
16.18.3.	11.312
16.19.3.	16.000
17. 1.3.	6.577
17. 2.3.	4.282
17. 3.3.	6.869
17. 4.3.	5.735
17. 5.3.	12534.680
17. 6.3.	0.822

17. 7.3.	3604.725
17. 8.3.	104.466
17. 9.3.	1401.488
17.10.3.	9.122
17.11.3.	21.235
17.12.3.	7.010
17.13.3.	6.976
17.14.3.	6.948
17.15.3.	70.080
17.16.3.	10.411
17.18.3.	0.901
17.19.3.	5.589
18. 1.3.	5.676
18. 2.3.	3.381
18. 3.3.	5.968
18. 4.3.	4.834
18. 5.3.	12535.586
18. 6.3.	1.723
18. 7.3.	3605.626
18. 8.3.	105.367
18. 9.3.	1402.389
18.10.3.	10.023
18.11.3.	22.136
18.12.3.	6.109
18.13.3.	6.075
18.14.3.	6.047
18.15.3.	70.981
18.16.3.	11.312
18.17.3.	0.901
18.19.3.	4.688
19. 1.3.	0.988
19. 2.3.	1.307
19. 3.3.	1.280
19. 4.3.	0.146
19. 5.3.	12540.270
19. 6.3.	6.411
19. 7.3.	3610.314
19. 8.3.	110.055
19. 9.3.	1407.077
19.10.3.	14.711
19.11.3.	26.824
19.12.3.	1.421
19.13.3.	1.387
19.14.3.	1.359
19.15.3.	75.669
19.16.3.	16.000
19.17.3.	5.589
19.18.3.	4.688

1955 DYADIC BEHAVIOR SET 4

10002	4	-0.349	-0.452	-0.054	-0.307	-0.229	-0.466	-0.112
10003	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
10004	4	-0.349	-0.452	-0.054	-0.307	-0.229	-0.466	-0.112
10005	4	-0.349	-0.648	-0.055	-0.307	-0.229	2.146	-0.112
10006	4	-0.349	-0.413	-0.053	-0.307	-0.229	-0.466	-0.112
10007	4	-0.349	-0.413	-0.053	0.363	2.494	2.146	-0.112
10008	4	-0.349	-0.413	-0.053	-0.307	-0.229	-0.466	-0.112
10009	4	-0.349	-0.413	-0.053	-0.278	-0.112	-0.466	-0.112
10010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
10011	4	2.245	-0.452	-0.054	-0.307	-0.229	-0.466	-0.112
10012	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
10013	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
10014	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
10015	4	-0.349	-0.413	-0.053	0.035	1.166	2.146	2.444
10016	4	-0.349	-0.413	-0.053	-0.307	-0.229	-0.466	-0.112
10017	4	-0.349	-0.452	-0.054	-0.307	-0.229	-0.466	-0.112
10018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
10019	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
20001	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
20003	4	0.948	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
20004	4	0.948	0.957	-0.053	0.997	1.099	2.146	-0.112
20005	4	0.948	-0.530	-0.055	0.967	1.065	2.146	-0.112
20006	4	-0.349	0.761	-0.054	-0.307	-0.229	-0.466	-0.112
20007	4	0.948	1.583	-0.053	2.723	2.847	2.146	-0.112
20008	4	-0.349	0.683	-0.054	0.567	0.662	2.146	-0.112
20009	4	3.543	1.191	-0.053	2.650	2.780	-0.466	-0.112
20010	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
20011	4	2.245	0.291	-0.054	-0.307	-0.229	-0.466	-0.112
20012	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
20013	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
20014	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
20015	4	0.948	0.839	-0.054	-0.256	-0.179	-0.466	-0.112
20016	4	-0.349	0.800	-0.054	-0.234	-0.162	-0.466	-0.112
20017	4	-0.349	0.565	-0.054	-0.300	-0.213	2.146	-0.112
20018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
20019	4	-0.349	-0.100	-0.054	-0.307	-0.229	-0.466	-0.112
30001	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
30002	4	0.948	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
30004	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
30005	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
30006	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
30007	4	-0.349	-0.296	-0.053	-0.307	-0.229	-0.466	-0.112
30008	4	-0.349	-0.452	-0.054	-0.307	-0.229	-0.466	-0.112
30009	4	0.948	-0.335	-0.053	-0.285	-0.112	-0.466	-0.112
30010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
30011	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
30012	4	0.948	-0.530	-0.054	-0.285	-0.112	-0.466	-0.112
30013	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
30014	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112

30015	4	-0.349	-0.374	-0.054	-0.307	-0.229	-0.466	-0.112
30016	4	-0.349	-0.413	-0.054	-0.307	-0.229	-0.466	-0.112
30017	4	-0.349	-0.491	-0.054	-0.300	-0.229	-0.466	-0.112
30018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
30019	4	0.948	-0.413	-0.054	0.487	4.344	-0.466	-0.112
40001	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
40002	4	0.948	0.957	-0.054	-0.278	-0.061	2.146	-0.112
40003	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
40005	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
40006	4	-0.349	1.113	-0.054	-0.307	-0.229	-0.466	-0.112
40007	4	3.543	2.718	-0.053	0.938	0.477	2.146	-0.112
40008	4	0.948	1.231	-0.054	-0.300	-0.229	2.146	-0.112
40009	4	0.948	2.209	-0.053	-0.125	-0.129	2.146	-0.112
40010	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
40011	4	-0.349	0.448	-0.054	-0.307	-0.229	-0.466	-0.112
40012	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
40013	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
40014	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
40015	4	4.840	1.700	-0.054	-0.074	-0.095	2.146	-0.112
40016	4	0.948	1.387	-0.054	-0.227	-0.179	-0.466	-0.112
40017	4	-0.349	0.878	-0.054	-0.293	-0.213	-0.466	-0.112
40018	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
40019	4	-0.349	-0.061	-0.054	-0.307	-0.229	-0.466	-0.112
50001	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
50002	4	0.948	-0.530	-0.054	-0.140	-0.196	-0.466	-0.112
50003	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
50004	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
50006	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	15.225
50007	4	-0.349	-0.374	-0.053	-0.307	-0.229	-0.466	-0.112
50008	4	-0.349	-0.491	-0.054	0.429	-0.095	-0.466	-0.112
50009	4	-0.349	-0.530	-0.054	5.578	0.830	-0.466	-0.112
50010	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
50011	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
50012	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
50013	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
50014	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
50015	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
50016	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
50017	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
50018	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
50019	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
60001	4	-0.349	-0.413	-0.055	-0.307	-0.229	-0.466	-0.112
60002	4	-0.349	0.761	-0.054	-0.307	-0.229	-0.466	2.444
60003	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
60004	4	-0.349	1.113	-0.054	-0.307	-0.229	-0.466	-0.112
60005	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	7.556
60007	4	-0.349	2.444	-0.053	-0.307	-0.229	-0.466	-0.112
60008	4	-0.349	0.639	-0.054	-0.307	-0.229	-0.466	-0.112
60009	4	-0.349	2.287	-0.053	5.031	9.758	-0.466	-0.112

60010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
60011	4	-0.349	0.487	-0.054	-0.052	0.241	-0.466	-0.112
60012	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
60013	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
60014	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
60015	4	0.948	1.035	-0.054	-0.307	-0.229	-0.466	-0.112
60016	4	-0.349	1.035	-0.054	-0.293	-0.196	-0.466	-0.112
60017	4	-0.349	0.683	-0.054	0.021	0.376	-0.466	-0.112
60018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
60019	4	-0.349	-0.100	-0.054	-0.307	-0.229	-0.466	-0.112
70001	4	-0.349	-0.413	-0.055	-0.307	-0.229	2.146	-0.112
70002	4	0.948	1.583	-0.054	1.769	0.141	2.146	-0.112
70003	4	-0.349	-0.296	-0.055	-0.307	-0.229	-0.466	-0.112
70004	4	3.543	2.718	-0.054	2.766	0.325	2.146	-0.112
70005	4	-0.349	-0.374	-0.055	0.734	-0.044	2.146	-0.112
70006	4	-0.349	2.444	-0.054	-0.285	-0.229	-0.466	-0.112
70008	4	0.948	2.600	-0.054	1.419	0.090	2.146	-0.112
70009	4	3.543	5.692	-0.053	3.706	0.494	2.146	-0.112
70010	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
70011	4	-0.349	0.839	-0.054	-0.300	-0.229	-0.466	-0.112
70012	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
70013	4	-0.349	-0.413	-0.055	-0.307	-0.229	2.146	-0.112
70014	4	-0.349	-0.374	-0.055	-0.307	-0.229	-0.466	-0.112
70015	4	7.434	3.500	-0.054	1.018	0.006	2.146	-0.112
70016	4	0.948	2.953	-0.054	-0.016	-0.179	2.146	-0.112
70017	4	-0.349	1.622	-0.054	0.210	-0.129	2.146	-0.112
70018	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
70019	4	-0.349	0.448	-0.055	-0.307	-0.229	-0.466	-0.112
80001	4	-0.349	-0.413	-0.055	-0.307	-0.229	-0.466	-0.112
80002	4	-0.349	0.683	-0.054	-0.125	-0.179	2.146	-0.112
80003	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
80004	4	0.948	1.231	-0.054	-0.307	-0.229	2.146	-0.112
80005	4	-0.349	-0.491	-0.055	0.166	-0.112	2.146	-0.112
80006	4	-0.349	0.839	-0.054	-0.307	-0.229	-0.466	-0.112
80007	4	0.948	2.600	-0.053	-0.103	-0.179	2.146	-0.112
80009	4	-0.349	1.896	-0.053	5.024	1.065	-0.466	-0.112
80010	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
80011	4	-0.349	0.330	-0.054	-0.307	-0.229	-0.466	-0.112
80012	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
80013	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
80014	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
80015	4	0.948	1.270	-0.054	-0.271	-0.213	-0.466	-0.112
80016	4	0.948	1.035	-0.054	0.676	0.006	-0.466	-0.112
80017	4	-0.349	0.839	-0.054	0.261	-0.095	2.146	-0.112
80018	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
80019	4	-0.349	0.096	-0.054	-0.307	-0.229	-0.466	-0.112
90001	4	-0.349	-0.413	-0.055	-0.307	-0.229	-0.466	-0.112
90002	4	3.543	1.191	-0.054	2.482	0.090	2.146	-0.112
90003	4	0.948	-0.335	-0.055	-0.307	-0.229	2.146	-0.112

90004	4	0.948	2.209	-0.054	1.179	-0.061	2.146	-0.112
90005	4	-0.349	-0.530	-0.055	1.776	0.006	-0.466	-0.112
90006	4	-0.349	2.287	-0.054	4.340	0.309	-0.466	-0.112
90007	4	3.543	5.692	-0.053	5.862	0.477	2.146	-0.112
90008	4	-0.349	1.896	-0.054	4.405	0.309	-0.466	-0.112
90010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
90011	4	-0.349	0.839	-0.054	2.570	0.107	2.146	-0.112
90012	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
90013	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
90014	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
90015	4	2.245	2.835	-0.054	2.898	0.141	2.146	-0.112
90016	4	-0.349	2.639	-0.054	3.466	0.208	-0.466	-0.112
90017	4	2.245	1.348	-0.054	4.281	0.292	2.146	-0.112
90018	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
90019	4	-0.349	0.213	-0.055	-0.307	-0.229	2.146	-0.112
100001	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100002	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
100003	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100004	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
100005	4	-0.349	-0.530	-0.053	-0.307	-0.229	-0.466	-0.112
100006	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100007	4	-0.349	-0.530	-0.053	-0.307	-0.229	-0.466	-0.112
100008	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
100009	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100011	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	2.444
100012	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100013	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100014	4	-0.349	-0.530	18.466	-0.307	-0.229	-0.466	-0.112
100015	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100016	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100017	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
100018	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
100019	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
110001	4	2.245	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
110002	4	2.245	0.291	-0.054	-0.307	-0.229	-0.466	-0.112
110003	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
110004	4	-0.349	0.448	-0.053	-0.307	-0.229	-0.466	-0.112
110005	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
110006	4	-0.349	0.487	-0.053	-0.300	-0.129	-0.466	-0.112
110007	4	-0.349	0.839	-0.053	-0.307	-0.229	-0.466	-0.112
110008	4	-0.349	0.330	-0.054	-0.307	-0.229	-0.466	-0.112
110009	4	-0.349	0.839	-0.053	0.225	6.597	-0.466	-0.112
110010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
110012	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
110013	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
110014	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
110015	4	-0.349	0.330	-0.054	-0.307	-0.229	-0.466	-0.112
110016	4	-0.349	0.487	-0.053	-0.307	-0.229	-0.466	-0.112
110017	4	-0.349	0.291	-0.054	-0.307	-0.229	-0.466	-0.112

110018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
110019	4	-0.349	-0.178	-0.054	-0.307	-0.229	-0.466	-0.112
120001	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
120002	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
120003	4	0.948	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
120004	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
120005	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
120006	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
120007	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
120008	4	-0.349	-0.491	-0.053	-0.307	-0.229	-0.466	-0.112
120009	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
120010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
120011	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
120013	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
120014	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
120015	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
120016	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
120017	4	0.948	-0.530	-0.054	-0.256	8.177	-0.466	-0.112
120018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
120019	4	0.948	-0.491	-0.053	-0.263	6.984	-0.466	-0.112
130001	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
130002	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
130003	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
130004	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
130005	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
130006	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
130007	4	-0.349	-0.413	-0.053	-0.307	-0.229	2.146	-0.112
130008	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
130009	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
130010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
130011	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
130012	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
130014	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
130015	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
130016	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
130017	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
130018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
130019	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
140001	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
140002	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
140003	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
140004	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
140005	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
140006	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
140007	4	-0.349	-0.374	-0.053	-0.307	-0.229	-0.466	-0.112
140008	4	-0.349	-0.452	-0.053	-0.307	-0.229	-0.466	-0.112
140009	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
140010	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
140011	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112

140012	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
140013	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
140015	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
140016	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
140017	4	-0.349	-0.530	-0.054	-0.307	-0.229	-0.466	-0.112
140018	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
140019	4	-0.349	-0.491	-0.054	-0.307	-0.229	-0.466	-0.112
150001	4	-0.349	-0.413	-0.055	-0.307	-0.229	2.146	5.000
150002	4	0.948	0.839	-0.054	-0.249	-0.196	2.146	-0.112
150003	4	-0.349	-0.374	-0.055	-0.307	-0.229	-0.466	-0.112
150004	4	4.840	1.700	-0.054	-0.001	-0.061	2.146	-0.112
150005	4	-0.349	-0.570	-0.055	-0.307	-0.229	2.146	-0.112
150006	4	0.948	1.035	-0.054	-0.307	-0.229	-0.466	-0.112
150007	4	7.434	3.500	-0.053	3.538	1.990	2.146	-0.112
150008	4	0.948	1.270	-0.054	-0.307	-0.229	2.146	-0.112
150009	4	2.245	2.835	-0.053	3.087	1.721	2.146	-0.112
150010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
150011	4	-0.349	0.330	-0.054	-0.285	-0.213	-0.466	-0.112
150012	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
150013	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
150014	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
150016	4	0.948	1.465	-0.054	-0.249	-0.196	2.146	-0.112
150017	4	-0.349	0.839	-0.054	-0.307	-0.229	2.146	-0.112
150018	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
150019	4	-0.349	-0.022	-0.054	-0.307	-0.229	-0.466	-0.112
160001	4	-0.349	-0.413	-0.055	-0.307	-0.229	-0.466	-0.112
160002	4	-0.349	0.800	-0.054	-0.307	-0.229	-0.466	-0.112
160003	4	-0.349	-0.413	-0.055	-0.307	-0.229	-0.466	-0.112
160004	4	0.948	1.387	-0.054	-0.307	-0.229	-0.466	-0.112
160005	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
160006	4	-0.349	1.035	-0.054	-0.307	-0.229	2.146	-0.112
160007	4	0.948	2.953	-0.053	-0.271	-0.213	2.146	-0.112
160008	4	0.948	1.035	-0.054	-0.300	-0.229	2.146	-0.112
160009	4	-0.349	2.639	-0.053	4.128	2.326	2.146	-0.112
160010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
160011	4	-0.349	0.487	-0.054	-0.154	-0.145	-0.466	-0.112
160012	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
160013	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
160014	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
160015	4	0.948	1.465	-0.054	-0.307	-0.229	2.146	-0.112
160017	4	-0.349	1.035	-0.054	-0.271	-0.213	2.146	-0.112
160018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
160019	4	-0.349	-0.061	-0.054	-0.307	-0.229	-0.466	-0.112
170001	4	-0.349	-0.452	-0.055	-0.307	-0.229	-0.466	-0.112
170002	4	-0.349	0.565	-0.054	-0.278	-0.213	2.146	-0.112
170003	4	-0.349	-0.491	-0.055	-0.307	-0.229	2.146	-0.112
170004	4	-0.349	0.878	-0.054	-0.110	-0.112	-0.466	-0.112
170005	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
170006	4	-0.349	0.683	-0.054	-0.293	-0.213	-0.466	-0.112

170007	4	-0.349	1.622	-0.053	-0.205	-0.162	2.146	-0.112
170008	4	-0.349	0.839	-0.054	0.356	0.191	2.146	-0.112
170009	4	2.245	1.348	-0.053	4.310	2.713	2.146	-0.112
170010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
170011	4	-0.349	0.291	-0.054	-0.300	-0.229	-0.466	-0.112
170012	4	0.948	-0.530	-0.055	0.159	0.073	2.146	-0.112
170013	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
170014	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
170015	4	-0.349	0.839	-0.054	-0.307	-0.229	2.146	-0.112
170016	4	-0.349	1.035	-0.053	0.385	0.208	2.146	-0.112
170018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
170019	4	-0.349	-0.139	-0.054	-0.307	-0.229	2.146	-0.112
180001	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180002	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180003	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180004	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
180005	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
180006	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180007	4	-0.349	-0.530	-0.053	-0.307	-0.229	-0.466	-0.112
180008	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
180009	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
180010	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
180011	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180012	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180013	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180014	4	-0.349	-0.570	-0.054	-0.307	-0.229	-0.466	-0.112
180015	4	-0.349	-0.609	-0.054	-0.307	-0.229	-0.466	-0.112
180016	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180017	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
180019	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	2.444
190001	4	-0.349	-0.530	-0.055	-0.307	-0.229	-0.466	-0.112
190002	4	-0.349	-0.100	-0.054	-0.307	-0.229	-0.466	-0.112
190003	4	0.948	-0.413	-0.054	0.392	2.108	-0.466	-0.112
190004	4	-0.349	-0.061	-0.054	-0.307	-0.229	-0.466	-0.112
190005	4	-0.349	-0.609	-0.055	-0.307	-0.229	-0.466	-0.112
190006	4	-0.349	-0.100	-0.054	-0.307	-0.229	-0.466	-0.112
190007	4	-0.349	0.448	-0.053	-0.307	-0.229	-0.466	-0.112
190008	4	-0.349	0.096	-0.054	-0.285	-0.162	-0.466	-0.112
190009	4	-0.349	0.213	-0.053	-0.176	0.208	-0.466	-0.112
190010	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112
190011	4	-0.349	-0.178	-0.054	-0.307	-0.229	-0.466	-0.112
190012	4	0.948	-0.491	-0.055	-0.081	0.527	-0.466	-0.112
190013	4	-0.349	-0.570	-0.055	-0.307	-0.229	-0.466	-0.112
190014	4	-0.349	-0.491	-0.055	-0.307	-0.229	-0.466	-0.112
190015	4	-0.349	-0.022	-0.054	-0.307	-0.229	-0.466	-0.112
190016	4	-0.349	-0.061	-0.054	-0.307	-0.229	-0.466	-0.112
190017	4	-0.349	-0.139	-0.054	-0.307	-0.229	-0.466	-0.112
190018	4	-0.349	-0.648	-0.055	-0.307	-0.229	-0.466	-0.112

1963 DYADIC BEHAVIOR SET 4

10002	4	0.423	-0.707	-0.041	-0.278	-0.284	1.024	-0.078
10003	4	-1.117	-0.743	-0.049	-0.278	-0.284	1.024	-0.078
10004	4	0.423	-0.672	-0.032	-0.278	-0.284	1.024	-0.078
10005	4	-1.117	-0.725	-0.045	-0.278	-0.284	1.024	-0.078
10006	4	0.423	-0.760	-0.053	-0.278	-0.284	-0.977	-0.078
10007	4	0.423	-0.619	-0.020	0.082	3.648	1.024	-0.078
10008	4	0.423	-0.655	-0.028	-0.278	-0.284	1.024	-0.078
10009	4	0.423	-0.602	-0.016	-0.278	-0.284	1.024	-0.078
10010	4	-1.117	-0.813	-0.066	-0.278	-0.284	-0.977	-0.078
10011	4	0.423	-0.672	-0.032	-0.278	-0.284	-0.977	-0.078
10012	4	0.423	-0.778	-0.057	-0.278	-0.284	-0.977	-0.078
10013	4	0.423	-0.760	-0.053	-0.278	-0.284	-0.977	-0.078
10014	4	0.423	-0.795	-0.061	-0.278	-0.284	-0.977	-0.078
10015	4	0.423	-0.655	-0.028	-0.278	-0.284	-0.977	-0.078
10016	4	0.423	-0.655	-0.028	-0.278	-0.284	-0.977	-0.078
10017	4	0.423	-0.707	-0.041	-0.278	-0.284	1.024	-0.078
10018	4	-1.117	-0.831	-0.070	-0.278	-0.284	-0.977	-0.078
10019	4	0.423	-0.672	-0.032	-0.278	-0.284	-0.977	-0.078
20001	4	0.423	-0.707	-0.076	-0.278	-0.284	1.024	-0.078
20003	4	-1.117	-0.532	-0.070	-0.278	-0.284	1.024	-0.078
20004	4	0.423	0.664	-0.029	0.940	3.008	1.024	-0.078
20005	4	-1.117	-0.250	-0.060	0.239	1.114	1.024	-0.078
20006	4	0.423	0.418	-0.037	-0.278	-0.284	-0.977	-0.078
20007	4	0.423	0.946	-0.019	0.535	1.901	1.024	-0.078
20008	4	0.423	0.401	-0.038	0.988	3.124	1.024	-0.078
20009	4	1.964	0.875	-0.022	0.355	1.435	1.024	-0.078
20010	4	-1.117	-0.619	-0.073	-0.278	-0.284	-0.977	-0.078
20011	4	0.423	0.401	-0.038	-0.278	-0.284	-0.977	-0.078
20012	4	0.423	-0.637	-0.074	-0.278	-0.284	1.024	-0.078
20013	4	0.423	-0.549	-0.071	-0.278	-0.284	-0.977	-0.078
20014	4	0.423	-0.637	-0.074	-0.278	-0.284	1.024	-0.078
20015	4	0.423	0.788	-0.025	0.724	2.425	1.024	-0.078
20016	4	0.423	0.752	-0.026	0.219	1.056	1.024	-0.078
20017	4	1.964	0.506	-0.034	-0.278	-0.284	1.024	-0.078
20018	4	-1.117	-0.707	-0.076	-0.278	-0.284	1.024	-0.078
20019	4	0.423	0.154	-0.047	-0.278	-0.284	-0.977	-0.078
30001	4	-1.117	-0.743	-0.065	-0.278	-0.284	-0.977	-0.078
30002	4	-1.117	-0.532	-0.039	-0.278	-0.284	1.024	-0.078
30004	4	-1.117	-0.461	-0.031	-0.278	-0.284	-0.977	-0.078
30005	4	-1.117	-0.672	-0.056	-0.218	0.211	-0.977	-0.078
30006	4	-1.117	-0.672	-0.056	-0.278	-0.284	-0.977	-0.078
30007	4	-1.117	-0.391	-0.022	-0.278	-0.284	1.024	-0.078
30008	4	-1.117	-0.549	-0.041	-0.254	-0.080	1.024	-0.078
30009	4	-1.117	-0.373	-0.020	-0.202	0.328	1.024	-0.078
30010	4	-1.117	-0.743	-0.065	-0.278	-0.284	-0.977	-0.078
30011	4	-1.117	-0.567	-0.044	-0.278	-0.284	-0.977	-0.078
30012	4	0.423	-0.743	-0.065	-0.278	-0.284	1.024	-0.078
30013	4	-1.117	-0.707	-0.061	-0.278	-0.284	-0.977	-0.078
30014	4	-1.117	-0.743	-0.065	-0.278	-0.284	-0.977	-0.078

30015	4	-1.117	-0.444	-0.029	-0.278	-0.284	-0.977	-0.078
30016	4	-1.117	-0.479	-0.033	-0.278	-0.284	-0.977	-0.078
30017	4	0.423	-0.461	-0.031	-0.278	-0.284	-0.977	-0.078
30018	4	-1.117	-0.795	-0.072	-0.254	-0.080	1.024	-0.078
30019	4	0.423	-0.479	-0.033	-0.234	0.066	-0.977	-0.078
40001	4	0.423	-0.672	-0.078	-0.278	-0.284	1.024	-0.078
40002	4	0.423	0.664	-0.053	-0.226	-0.168	1.024	-0.078
40003	4	-1.117	-0.461	-0.074	-0.278	-0.284	-0.977	-0.078
40005	4	-1.117	0.260	-0.061	0.567	1.435	1.024	-0.078
40006	4	0.423	-0.180	-0.069	-0.278	-0.284	-0.977	-0.078
40007	4	0.423	2.283	-0.023	0.147	0.590	1.024	-0.078
40008	4	0.423	0.840	-0.050	-0.278	-0.284	1.024	-0.078
40009	4	1.964	1.984	-0.028	0.046	0.386	1.024	-0.078
40010	4	-1.117	-0.584	-0.077	-0.278	-0.284	-0.977	-0.078
40011	4	0.423	0.770	-0.051	-0.278	-0.284	-0.977	-0.078
40012	4	0.423	-0.567	-0.076	-0.278	-0.284	-0.977	-0.078
40013	4	0.423	-0.461	-0.074	-0.278	-0.284	1.024	-0.078
40014	4	0.423	-0.584	-0.077	-0.278	-0.284	1.024	-0.078
40015	4	0.423	1.755	-0.033	-0.102	0.066	1.024	-0.078
40016	4	0.423	1.473	-0.038	-0.278	-0.284	1.024	-0.078
40017	4	0.423	1.069	-0.045	-0.278	-0.284	1.024	-0.078
40018	4	-1.117	-0.655	-0.078	-0.278	-0.284	-0.977	-0.078
40019	4	0.423	0.664	-0.053	-0.278	-0.284	-0.977	-0.078
50001	4	-1.117	-0.725	-0.078	-0.278	-0.284	1.024	-0.078
50002	4	-1.117	-0.250	-0.064	-0.278	-0.284	1.024	-0.078
50003	4	-1.117	-0.672	-0.076	-0.278	-0.284	1.024	-0.078
50004	4	-1.117	0.260	-0.048	-0.278	-0.284	1.024	-0.078
50006	4	-1.117	-0.619	-0.074	-0.278	-0.284	-0.977	13.034
50007	4	-1.117	1.051	-0.025	-0.278	-0.284	1.024	-0.078
50008	4	-1.117	0.084	-0.053	-0.278	-0.284	1.024	-0.078
50009	4	-1.117	1.139	-0.022	-0.278	-0.284	-0.977	-0.078
50010	4	-1.117	-0.444	-0.069	-0.278	-0.284	1.024	-0.078
50011	4	-1.117	0.154	-0.051	-0.278	-0.284	-0.977	-0.078
50012	4	-1.117	-0.707	-0.077	-0.278	-0.284	1.024	-0.078
50013	4	-1.117	-0.637	-0.075	-0.278	-0.284	1.024	-0.078
50014	4	-1.117	-0.549	-0.072	-0.278	-0.284	1.024	-0.078
50015	4	-1.117	0.330	-0.046	-0.278	-0.284	1.024	-0.078
50016	4	-1.117	0.277	-0.048	-0.278	-0.284	-0.977	-0.078
50017	4	-1.117	-0.004	-0.056	-0.278	-0.284	-0.977	-0.078
50018	4	-1.117	-0.619	-0.074	-0.278	-0.284	1.024	-0.078
50019	4	-1.117	0.119	-0.052	-0.278	-0.284	-0.977	-0.078
60001	4	0.423	-0.760	-0.076	-0.278	-0.284	-0.977	-0.078
60002	4	0.423	0.418	-0.020	-0.278	-0.284	-0.977	-0.078
60003	4	-1.117	-0.672	-0.072	-0.278	-0.284	-0.977	-0.078
60004	4	0.423	-0.180	-0.049	-0.278	-0.284	-0.977	-0.078
60005	4	-1.117	-0.619	-0.070	-0.278	-0.284	-0.977	13.034
60007	4	0.423	0.383	-0.022	-0.254	-0.226	-0.977	-0.078
60008	4	0.423	-0.092	-0.044	-0.278	-0.284	-0.977	-0.078
60009	4	0.423	0.436	-0.019	3.937	8.950	1.024	-0.078

60010	4	-1.117	-0.760	-0.076	-0.278	-0.284	-0.977	-0.078
60011	4	0.423	-0.074	-0.043	0.351	1.085	1.024	-0.078
60012	4	0.423	-0.778	-0.077	-0.278	-0.284	1.024	-0.078
60013	4	0.423	-0.707	-0.074	-0.278	-0.284	-0.977	-0.078
60014	4	0.423	-0.795	-0.078	-0.278	-0.284	-0.977	-0.078
60015	4	0.423	-0.021	-0.041	-0.262	-0.255	-0.977	-0.078
60016	4	0.423	0.154	-0.032	-0.018	0.299	1.024	-0.078
60017	4	0.423	-0.021	-0.041	0.175	0.706	1.024	-0.078
60018	4	-1.117	-0.813	-0.079	-0.278	-0.284	-0.977	-0.078
60019	4	0.423	-0.268	-0.053	0.992	2.483	1.024	-0.078
70001	4	0.423	-0.619	-0.080	0.359	0.007	1.024	-0.078
70002	4	0.423	0.946	-0.067	0.255	-0.051	1.024	-0.078
70003	4	-1.117	-0.391	-0.078	-0.278	-0.284	1.024	-0.078
70004	4	0.423	2.283	-0.056	1.333	0.415	1.024	-0.078
70005	4	-1.117	1.051	-0.066	-0.278	-0.284	1.024	-0.078
70006	4	0.423	0.383	-0.072	-0.278	-0.284	-0.977	-0.078
70008	4	0.423	1.790	-0.060	-0.078	-0.197	1.024	-0.078
70009	4	0.423	5.536	-0.030	4.651	1.872	1.024	-0.078
70010	4	-1.117	-0.391	-0.078	-0.278	-0.284	-0.977	-0.078
70011	4	0.423	1.649	-0.062	-0.278	-0.284	-0.977	-0.078
70012	4	0.423	-0.496	-0.079	-0.278	-0.284	1.024	-0.078
70013	4	0.423	-0.461	-0.079	0.699	0.153	1.024	-0.078
70014	4	0.423	-0.426	-0.079	-0.278	-0.284	1.024	-0.078
70015	4	0.423	3.004	-0.051	0.327	-0.022	1.024	-0.078
70016	4	1.964	2.863	-0.052	-0.278	-0.284	1.024	-0.078
70017	4	0.423	1.772	-0.061	-0.182	-0.255	1.024	-0.078
70018	4	-1.117	-0.584	-0.080	-0.278	-0.284	1.024	-0.078
70019	4	0.423	1.315	-0.064	-0.066	-0.197	-0.977	-0.078
80001	4	0.423	-0.655	-0.077	-0.278	-0.284	1.024	-0.078
80002	4	0.423	0.401	-0.055	-0.278	-0.284	1.024	-0.078
80003	4	-1.117	-0.549	-0.075	-0.278	-0.284	1.024	-0.078
80004	4	0.423	0.840	-0.046	-0.278	-0.284	1.024	-0.078
80005	4	-1.117	0.084	-0.062	1.100	1.202	1.024	-0.078
80006	4	0.423	-0.092	-0.065	-0.278	-0.284	-0.977	-0.078
80007	4	0.423	1.790	-0.025	-0.218	-0.226	1.024	-0.078
80009	4	0.423	1.825	-0.025	1.365	1.464	1.024	-0.078
80010	4	-1.117	-0.461	-0.073	-0.278	-0.284	-0.977	-0.078
80011	4	0.423	0.647	-0.050	-0.278	-0.284	-0.977	-0.078
80012	4	0.423	-0.584	-0.076	-0.278	-0.284	-0.977	-0.078
80013	4	0.423	-0.532	-0.075	-0.278	-0.284	-0.977	-0.078
80014	4	0.423	-0.532	-0.075	-0.278	-0.284	-0.977	-0.078
80015	4	0.423	1.069	-0.041	-0.278	-0.284	1.024	-0.078
80016	4	1.964	1.315	-0.035	0.143	0.153	1.024	-0.078
80017	4	0.423	0.858	-0.045	0.102	0.124	1.024	-0.078
80018	4	-1.117	-0.619	-0.077	-0.278	-0.284	1.024	-0.078
80019	4	0.423	0.647	-0.050	-0.062	-0.051	1.024	-0.078
90001	4	0.423	-0.602	-0.080	-0.278	-0.284	1.024	-0.078
90002	4	1.964	0.875	-0.070	2.779	0.124	1.024	-0.078
90003	4	-1.117	-0.373	-0.079	0.303	-0.197	1.024	-0.078

90004	4	1.964	1.984	-0.062	0.603	-0.168	1.024	-0.078
90005	4	-1.117	1.139	-0.068	2.222	0.036	-0.977	-0.078
90006	4	0.423	0.436	-0.073	4.017	0.299	1.024	-0.078
90007	4	0.423	5.536	-0.038	5.881	0.532	1.024	-0.078
90008	4	0.423	1.825	-0.063	3.677	0.240	1.024	-0.078
90010	4	-1.117	-0.408	-0.079	-0.278	-0.284	-0.977	-0.078
90011	4	0.423	1.896	-0.063	6.121	0.561	-0.977	-0.078
90012	4	0.423	-0.532	-0.080	-0.278	-0.284	1.024	-0.078
90013	4	0.423	-0.444	-0.079	-0.278	-0.284	1.024	-0.078
90014	4	0.423	-0.444	-0.079	-0.278	-0.284	-0.977	-0.078
90015	4	5.044	2.617	-0.058	1.637	-0.022	1.024	-0.078
90016	4	0.423	3.021	-0.055	5.744	0.532	1.024	-0.078
90017	4	1.964	1.860	-0.063	6.975	0.677	1.024	-0.078
90018	4	-1.117	-0.655	-0.081	-0.106	-0.255	-0.977	-0.078
90019	4	0.423	1.333	-0.067	1.056	-0.109	1.024	-0.078
100001	4	-1.117	-0.813	-0.075	-0.278	-0.284	-0.977	-0.078
100002	4	-1.117	-0.619	-0.054	-0.278	-0.284	-0.977	-0.078
100003	4	-1.117	-0.743	-0.067	-0.278	-0.284	1.024	-0.078
100004	4	-1.117	-0.584	-0.050	-0.278	-0.284	-0.977	-0.078
100005	4	-1.117	-0.444	-0.035	-0.278	-0.284	1.024	-0.078
100006	4	-1.117	-0.760	-0.069	-0.278	-0.284	-0.977	-0.078
100007	4	-1.117	-0.391	-0.029	-0.278	-0.284	-0.977	-0.078
100008	4	-1.117	-0.461	-0.037	-0.278	-0.284	1.024	-0.078
100009	4	-1.117	-0.408	-0.031	-0.278	-0.284	-0.977	-0.078
100011	4	-1.117	-0.496	-0.040	-0.278	-0.284	-0.977	-0.078
100012	4	-1.117	-0.760	-0.069	-0.278	-0.284	-0.977	-0.078
100013	4	-1.117	-0.795	-0.073	-0.278	-0.284	-0.977	-0.078
100014	4	-1.117	-0.567	-0.048	-0.278	-0.284	1.024	-0.078
100015	4	-1.117	-0.532	-0.044	-0.278	-0.284	-0.977	-0.078
100016	4	-1.117	-0.602	-0.052	-0.278	-0.284	-0.977	-0.078
100017	4	-1.117	-0.690	-0.061	-0.278	-0.284	-0.977	-0.078
100018	4	-1.117	-0.602	-0.052	-0.278	-0.284	1.024	-0.078
100019	4	-1.117	-0.567	-0.048	-0.278	-0.284	-0.977	-0.078
110001	4	0.423	-0.672	-0.078	-0.278	-0.284	-0.977	-0.078
110002	4	0.423	0.401	-0.054	-0.274	-0.255	-0.977	-0.078
110003	4	-1.117	-0.567	-0.075	-0.278	-0.284	-0.977	-0.078
110004	4	0.423	0.770	-0.046	-0.278	-0.284	-0.977	-0.078
110005	4	-1.117	0.154	-0.060	-0.278	-0.284	-0.977	-0.078
110006	4	0.423	-0.074	-0.065	-0.250	-0.051	1.024	-0.078
110007	4	0.423	1.649	-0.027	-0.278	-0.284	-0.977	-0.078
110008	4	0.423	0.647	-0.049	-0.278	-0.284	-0.977	-0.078
110009	4	0.423	1.896	-0.022	0.683	7.785	1.024	-0.078
110010	4	-1.117	-0.496	-0.074	-0.278	-0.284	-0.977	-0.078
110012	4	0.423	-0.637	-0.077	-0.278	-0.284	-0.977	-0.078
110013	4	0.423	-0.532	-0.075	-0.278	-0.284	-0.977	-0.078
110014	4	0.423	-0.532	-0.075	-0.278	-0.284	-0.977	-0.078
110015	4	0.423	1.192	-0.037	-0.278	-0.284	-0.977	-0.078
110016	4	1.964	1.298	-0.035	-0.174	0.590	1.024	-0.078
110017	4	1.964	0.788	-0.046	-0.214	0.240	1.024	-0.078

110018	4	-1.117	-0.743	-0.079	-0.278	-0.284	-0.977	-0.078
110019	4	0.423	0.471	-0.053	0.207	3.765	1.024	-0.078
120001	4	0.423	-0.778	-0.066	-0.278	-0.284	-0.977	-0.078
120002	4	0.423	-0.637	-0.045	-0.278	-0.284	1.024	-0.078
120003	4	0.423	-0.743	-0.061	-0.278	-0.284	1.024	-0.078
120004	4	0.423	-0.567	-0.034	-0.278	-0.284	-0.977	-0.078
120005	4	-1.117	-0.707	-0.056	-0.278	-0.284	1.024	-0.078
120006	4	0.423	-0.778	-0.066	-0.278	-0.284	-0.977	-0.078
120007	4	0.423	-0.496	-0.024	-0.278	-0.284	1.024	-0.078
120008	4	0.423	-0.584	-0.037	-0.278	-0.284	-0.977	-0.078
120009	4	0.423	-0.532	-0.029	-0.278	-0.284	1.024	-0.078
120010	4	-1.117	-0.760	-0.064	-0.278	-0.284	-0.977	-0.078
120011	4	0.423	-0.637	-0.045	-0.278	-0.284	-0.977	-0.078
120013	4	1.964	-0.760	-0.064	-0.278	-0.284	-0.977	-0.078
120014	4	0.423	-0.743	-0.061	-0.278	-0.284	-0.977	-0.078
120015	4	0.423	-0.549	-0.032	-0.278	-0.284	1.024	-0.078
120016	4	0.423	-0.549	-0.032	-0.278	-0.284	1.024	-0.078
120017	4	1.964	-0.619	-0.042	-0.278	-0.284	1.024	-0.078
120018	4	-1.117	-0.760	-0.064	-0.278	-0.284	1.024	-0.078
120019	4	1.964	-0.567	-0.034	-0.278	-0.284	-0.977	-0.078
130001	4	0.423	-0.760	-0.065	-0.278	-0.284	1.024	-0.078
130002	4	0.423	-0.549	-0.035	-0.278	-0.284	1.024	-0.078
130003	4	-1.117	-0.707	-0.058	-0.278	-0.284	-0.977	-0.078
130004	4	0.423	-0.461	-0.023	-0.278	-0.284	1.024	-0.078
130005	4	-1.117	-0.637	-0.048	-0.278	-0.284	1.024	-0.078
130006	4	0.423	-0.707	-0.058	-0.278	-0.284	-0.977	-0.078
130007	4	0.423	-0.461	-0.023	-0.278	-0.284	1.024	-0.078
130008	4	0.423	-0.532	-0.033	-0.278	-0.284	1.024	-0.078
130009	4	0.423	-0.444	-0.021	-0.278	-0.284	1.024	-0.078
130010	4	-1.117	-0.795	-0.070	-0.278	-0.284	-0.977	-0.078
130011	4	0.423	-0.532	-0.033	-0.278	-0.284	-0.977	-0.078
130012	4	1.964	-0.760	-0.065	-0.278	-0.284	1.024	-0.078
130014	4	0.423	-0.778	-0.067	-0.278	-0.284	1.024	-0.078
130015	4	0.423	-0.444	-0.021	-0.278	-0.284	1.024	-0.078
130016	4	0.423	-0.532	-0.033	-0.278	-0.284	1.024	-0.078
130017	4	0.423	-0.532	-0.033	-0.278	-0.284	-0.977	-0.078
130018	4	-1.117	-0.795	-0.070	-0.278	-0.284	-0.977	-0.078
130019	4	0.423	-0.549	-0.035	-0.278	-0.284	-0.977	-0.078
140001	4	0.423	-0.795	-0.072	-0.278	-0.284	-0.977	-0.078
140002	4	0.423	-0.637	-0.053	-0.278	-0.284	-0.977	-0.078
140003	4	-1.117	-0.743	-0.066	-0.278	-0.284	-0.977	-0.078
140004	4	0.423	-0.584	-0.047	-0.278	-0.284	-0.977	-0.078
140005	4	-1.117	-0.549	-0.043	-0.278	-0.284	-0.977	-0.078
140006	4	0.423	-0.795	-0.072	-0.278	-0.284	-0.977	-0.078
140007	4	0.423	-0.426	-0.028	-0.278	-0.284	-0.977	-0.078
140008	4	0.423	-0.532	-0.041	-0.278	-0.284	-0.977	-0.078
140009	4	0.423	-0.444	-0.030	-0.278	-0.284	-0.977	-0.078
140010	4	-1.117	-0.567	-0.045	-0.278	-0.284	-0.977	-0.078
140011	4	0.423	-0.532	-0.041	-0.278	-0.284	-0.977	-0.078

140012	4	0.423	-0.743	-0.066	-0.278	-0.284	-0.977	-0.078
140013	4	0.423	-0.778	-0.070	-0.278	-0.284	-0.977	-0.078
140015	4	0.423	-0.602	-0.049	-0.278	-0.284	-0.977	-0.078
140016	4	0.423	-0.619	-0.051	-0.278	-0.284	-0.977	-0.078
140017	4	0.423	-0.672	-0.057	-0.278	-0.284	-0.977	-0.078
140018	4	-1.117	-0.690	-0.059	-0.278	-0.284	-0.977	-0.078
140019	4	0.423	-0.549	-0.043	-0.278	-0.284	-0.977	-0.078
150001	4	0.423	-0.655	-0.079	-0.078	0.007	-0.977	-0.078
150002	4	0.423	0.788	-0.056	0.126	0.328	1.024	-0.078
150003	4	-1.117	-0.444	-0.075	-0.278	-0.284	1.024	-0.078
150004	4	0.423	1.755	-0.041	-0.042	0.066	1.024	-0.078
150005	4	-1.117	0.330	-0.063	1.124	1.842	1.024	-0.078
150006	4	0.423	-0.021	-0.069	-0.278	-0.284	-0.977	-0.078
150007	4	0.423	3.004	-0.022	0.659	1.114	1.024	-0.078
150008	4	0.423	1.069	-0.052	-0.278	-0.284	1.024	-0.078
150009	4	5.044	2.617	-0.028	0.820	1.376	1.024	-0.078
150010	4	-1.117	-0.532	-0.077	-0.278	-0.284	-0.977	-0.078
150011	4	0.423	1.192	-0.050	-0.278	-0.284	-0.977	-0.078
150012	4	0.423	-0.549	-0.077	-0.278	-0.284	1.024	-0.078
150013	4	0.423	-0.444	-0.075	-0.278	-0.284	1.024	-0.078
150014	4	0.423	-0.602	-0.078	-0.278	-0.284	-0.977	-0.078
150016	4	0.423	1.860	-0.040	-0.202	-0.168	1.024	-0.078
150017	4	0.423	1.245	-0.049	-0.250	-0.255	1.024	-0.078
150018	4	-1.117	-0.690	-0.079	-0.278	-0.284	-0.977	-0.078
150019	4	0.423	0.717	-0.058	-0.278	-0.284	-0.977	-0.078
160001	4	0.423	-0.655	-0.079	-0.278	-0.284	-0.977	-0.078
160002	4	0.423	0.752	-0.059	-0.278	-0.284	1.024	-0.078
160003	4	-1.117	-0.479	-0.076	-0.278	-0.284	1.024	-0.078
160004	4	0.423	1.473	-0.048	-0.278	-0.284	1.024	-0.078
160005	4	-1.117	0.277	-0.066	-0.278	-0.284	-0.977	-0.078
160006	4	0.423	0.154	-0.067	0.155	0.153	1.024	-0.078
160007	4	1.964	2.863	-0.028	-0.250	-0.255	-0.977	-0.078
160008	4	1.964	1.315	-0.051	-0.278	-0.284	1.024	-0.078
160009	4	0.423	3.021	-0.026	7.668	7.668	1.024	-0.078
160010	4	-1.117	-0.602	-0.078	-0.278	-0.284	-0.977	-0.078
160011	4	1.964	1.298	-0.051	-0.022	-0.022	1.024	-0.078
160012	4	0.423	-0.549	-0.077	-0.278	-0.284	1.024	-0.078
160013	4	0.423	-0.532	-0.077	-0.278	-0.284	-0.977	-0.078
160014	4	0.423	-0.619	-0.079	-0.278	-0.284	-0.977	-0.078
160015	4	0.423	1.860	-0.043	-0.278	-0.284	1.024	-0.078
160017	4	1.964	1.544	-0.047	-0.254	-0.255	1.024	-0.078
160018	4	-1.117	-0.725	-0.080	-0.278	-0.284	-0.977	-0.078
160019	4	0.423	0.875	-0.057	-0.278	-0.284	1.024	-0.078
170001	4	0.423	-0.707	-0.079	-0.278	-0.284	1.024	-0.078
170002	4	1.964	0.506	-0.052	-0.258	-0.255	1.024	-0.078
170003	4	0.423	-0.461	-0.073	-0.278	-0.284	-0.977	-0.078
170004	4	0.423	1.069	-0.040	-0.110	-0.022	1.024	-0.078
170005	4	-1.117	-0.004	-0.063	-0.278	-0.284	-0.977	-0.078
170006	4	0.423	-0.021	-0.063	-0.170	-0.109	1.024	-0.078

170007	4	0.423	1.772	-0.024	-0.226	-0.197	1.024	-0.078
170008	4	0.423	0.858	-0.044	1.084	1.901	1.024	-0.078
170009	4	1.964	1.860	-0.022	3.212	5.309	1.024	-0.078
170010	4	-1.117	-0.690	-0.078	-0.278	-0.284	-0.977	-0.078
170011	4	1.964	0.768	-0.046	0.307	0.648	1.024	-0.078
170012	4	1.964	-0.619	-0.077	0.058	0.269	1.024	-0.078
170013	4	0.423	-0.532	-0.075	-0.278	-0.284	-0.977	-0.078
170014	4	0.423	-0.672	-0.078	-0.278	-0.284	-0.977	-0.078
170015	4	0.423	1.245	-0.036	-0.266	-0.255	1.024	-0.078
170016	4	1.964	1.544	-0.029	0.050	0.240	1.024	-0.078
170018	4	-1.117	-0.743	-0.079	-0.278	-0.284	-0.977	-0.078
170019	4	1.964	0.559	-0.051	-0.206	-0.168	1.024	-0.078
180001	4	-1.117	-0.831	-0.071	-0.278	-0.284	-0.977	-0.078
180002	4	-1.117	-0.707	-0.045	-0.278	-0.284	-0.977	-0.078
180003	4	-1.117	-0.795	18.463	-0.278	-0.284	1.024	-0.078
180004	4	-1.117	-0.655	-0.034	-0.278	-0.284	-0.977	-0.078
180005	4	-1.117	-0.619	-0.027	-0.278	-0.284	1.024	-0.078
180006	4	-1.117	-0.813	-0.067	-0.278	-0.284	-0.977	-0.078
180007	4	-1.117	-0.584	-0.019	-0.278	-0.284	-0.977	-0.078
180008	4	-1.117	-0.619	-0.027	-0.278	-0.284	-0.977	-0.078
180009	4	-1.117	-0.655	-0.034	-0.278	-0.284	-0.977	-0.078
180010	4	-1.117	-0.602	-0.023	-0.278	-0.284	-0.977	-0.078
180011	4	-1.117	-0.743	-0.053	-0.278	-0.284	-0.977	-0.078
180012	4	-1.117	-0.760	-0.056	-0.278	-0.284	1.024	-0.078
180013	4	-1.117	-0.795	-0.064	-0.278	-0.284	-0.977	-0.078
180014	4	-1.117	-0.690	-0.042	-0.278	-0.284	-0.977	-0.078
180015	4	-1.117	-0.690	-0.042	-0.278	-0.284	-0.977	-0.078
180016	4	-1.117	-0.725	-0.049	-0.278	-0.284	-0.977	-0.078
180017	4	-1.117	-0.743	-0.053	-0.278	-0.284	-0.977	-0.078
180019	4	-1.117	-0.637	-0.030	-0.278	-0.284	-0.977	-0.078
190001	4	0.423	-0.672	-0.077	-0.278	-0.284	-0.977	-0.078
190002	4	0.423	0.154	-0.057	-0.278	-0.284	-0.977	-0.078
190003	4	0.423	-0.479	-0.072	-0.254	-0.051	-0.977	0.436
190004	4	0.423	0.664	-0.044	-0.238	0.095	-0.977	-0.078
190005	4	-1.117	0.119	-0.058	-0.278	-0.284	-0.977	-0.078
190006	4	0.423	-0.268	-0.067	-0.270	-0.197	1.024	-0.078
190007	4	0.423	1.315	-0.029	-0.278	-0.284	-0.977	-0.078
190008	4	0.423	0.647	-0.045	-0.278	-0.284	-0.977	-0.078
190009	4	0.423	1.333	-0.028	-0.106	1.347	1.024	-0.078
190010	4	-1.117	-0.567	-0.075	-0.278	-0.284	-0.977	-0.078
190011	4	0.423	0.471	-0.049	-0.278	-0.284	1.024	-0.078
190012	4	1.964	-0.567	-0.075	-0.274	-0.255	-0.977	-0.078
190013	4	0.423	-0.549	-0.074	-0.278	-0.284	-0.977	-0.078
190014	4	0.423	-0.549	-0.074	-0.278	-0.284	-0.977	-0.078
190015	4	0.423	0.717	-0.043	-0.278	-0.284	-0.977	-0.078
190016	4	0.423	0.875	-0.039	-0.278	-0.284	1.024	-0.078
190017	4	1.964	0.559	-0.047	-0.274	-0.255	1.024	-0.078
190018	4	-1.117	-0.637	-0.076	-0.278	-0.284	-0.977	-0.078

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10002	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
10003	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
10004	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
10005	5	-0.088	-0.207	-0.173	-0.069	1.207	-1.207	-0.090
10006	5	-0.088	-0.207	-0.173	-0.069	-1.169	1.169	-2.467
10007	5	-0.088	-0.207	-0.173	-0.069	4.837	-4.837	3.540
10008	5	-0.088	-0.207	-0.173	-0.069	-1.169	1.169	-2.467
10009	5	-0.088	-0.207	-0.173	-0.069	-1.022	1.022	-2.320
10010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
10011	5	-0.088	-0.207	-0.173	-0.069	1.386	-1.386	0.088
10012	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
10013	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
10014	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
10015	5	-0.088	2.519	1.099	17.517	-20.959	20.959	26.023
10016	5	-0.088	-0.207	-0.173	-0.069	-1.169	1.169	-2.467
10017	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
10018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
10019	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
20001	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
20003	5	-0.088	-0.207	-0.173	-0.069	0.049	-0.049	-1.249
20004	5	-0.088	-0.207	-0.173	-0.069	6.742	-6.742	5.444
20005	5	-0.088	-0.207	-0.173	-0.069	5.191	-5.191	3.893
20006	5	-0.088	-0.207	-0.173	-0.069	0.005	-0.005	-1.293
20007	5	-0.088	-0.207	-0.173	-0.069	10.843	-10.843	9.546
20008	5	-0.088	-0.207	-0.173	-0.069	4.304	-4.304	3.006
20009	5	-0.088	-0.207	-0.173	-0.069	10.294	-10.294	8.996
20010	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
20011	5	-0.088	-0.207	-0.173	-0.069	2.129	-2.129	0.832
20012	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
20013	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
20014	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
20015	5	-0.088	-0.207	-0.173	-0.069	1.482	-1.482	0.184
20016	5	-0.088	-0.207	-0.173	-0.069	0.184	-0.184	-1.114
20017	5	0.303	-0.207	-0.173	-0.069	2.055	-2.055	1.538
20018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
20019	5	-0.088	-0.207	-0.173	-0.069	-0.857	0.857	-2.154
30001	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
30002	5	-0.088	-0.207	-0.173	-0.069	0.049	-0.049	-1.248
30004	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.546
30005	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
30006	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
30007	5	-0.088	-0.207	-0.173	-0.069	-1.052	1.052	-2.349
30008	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.506
30009	5	-0.088	-0.207	-0.173	-0.069	0.346	-0.346	-0.952
30010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
30011	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.546
30012	5	-0.088	-0.207	-0.173	-0.069	0.149	-0.149	-1.148
30013	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
30014	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703

30015	5	-0.088	-0.207	-0.173	-0.069	-1.130	1.130	-2.428
30016	5	-0.088	-0.207	-0.173	-0.069	-1.169	1.169	-2.467
30017	5	-0.088	-0.207	-0.173	-0.069	-1.241	1.241	-2.538
30018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
30019	5	-0.088	-0.207	-0.173	-0.069	5.495	-5.495	4.197
40001	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
40002	5	-0.088	-0.207	-0.173	-0.069	4.307	-4.307	3.009
40003	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
40005	5	-0.088	-0.207	0.463	-0.069	-1.924	1.924	-1.949
40006	5	-0.088	-0.207	-0.173	-0.069	0.357	-0.357	-0.941
40007	5	-0.088	-0.207	-0.173	-0.069	10.417	-10.417	9.120
40008	5	-0.088	-0.207	-0.173	-0.069	4.391	-4.391	3.093
40009	5	-0.088	-0.207	-0.173	-0.069	5.645	-5.645	4.348
40010	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
40011	5	-0.088	-0.207	-0.173	-0.069	-0.309	0.309	-1.606
40012	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
40013	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
40014	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
40015	5	-0.088	-0.207	-0.173	-0.069	9.113	-9.113	7.815
40016	5	-0.088	-0.207	-0.173	-0.069	2.059	-2.059	0.761
40017	5	-0.088	-0.207	-0.173	-0.069	0.153	-0.153	-1.144
40018	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
40019	5	-0.088	-0.207	-0.173	-0.069	-0.818	0.818	-2.115
50001	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
50002	5	-0.088	-0.207	-0.173	-0.069	0.211	-0.211	-1.086
50003	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
50004	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
50006	5	12.993	10.697	8.730	-0.069	-49.631	49.631	45.523
50007	5	-0.088	-0.207	-0.173	-0.069	-1.130	1.130	-2.427
50008	5	-0.088	-0.207	-0.173	-0.069	-0.378	0.378	-1.675
50009	5	-0.088	-0.207	0.463	-0.069	5.021	-5.021	4.995
50010	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
50011	5	0.107	-0.207	1.099	-0.069	-2.833	2.833	-1.196
50012	5	-0.088	-0.207	0.463	-0.069	-2.041	2.041	-2.067
50013	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
50014	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
50015	5	-0.088	-0.207	0.463	-0.069	-1.962	1.962	-1.988
50016	5	-0.088	2.519	-0.173	-0.069	-4.053	4.053	0.102
50017	5	-0.088	-0.207	0.463	-0.069	-2.002	2.002	-2.027
50018	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
50019	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.663
60001	5	-0.088	-0.207	-0.173	-0.069	-1.170	1.170	-2.468
60002	5	-0.088	-0.207	-0.173	-0.069	-2.552	2.552	1.263
60003	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
60004	5	-0.088	-0.207	-0.173	-0.069	0.357	-0.357	-0.941
60005	5	12.993	5.245	13.818	-0.069	-41.598	41.598	37.490
60007	5	-0.088	-0.207	1.099	-0.069	0.416	-0.416	1.662
60008	5	-0.088	-0.207	0.463	-0.069	-0.553	0.553	-0.579
60009	5	-0.088	2.519	0.463	-0.069	13.495	-13.495	18.922

60010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
60011	5	-0.088	-0.207	-0.173	-0.069	0.456	-0.456	-0.842
60012	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
60013	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
60014	5	-0.088	2.519	-0.173	-0.069	-3.975	3.975	0.180
60015	5	-0.088	-0.207	-0.173	-0.069	1.576	-1.576	0.278
60016	5	-0.088	-0.207	-0.173	-0.069	0.327	-0.327	-0.971
60017	5	-0.088	-0.207	-0.173	-0.069	0.859	-0.859	-0.438
60018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
60019	5	-0.088	-0.207	-0.173	-0.069	-0.857	0.857	-2.155
70001	5	-0.088	-0.207	-0.173	-0.069	1.442	-1.442	0.144
70002	5	-0.088	-0.207	-0.173	-0.069	7.181	-7.181	5.883
70003	5	-0.088	-0.207	-0.173	-0.069	-1.053	1.053	-2.350
70004	5	-0.088	-0.207	-0.173	-0.069	12.093	-12.093	10.796
70005	5	-0.088	-0.207	-0.173	-0.069	2.707	-2.707	1.410
70006	5	-0.088	2.519	0.463	-0.069	-1.653	1.653	3.773
70008	5	-0.088	-0.207	-0.173	-0.069	7.799	-7.799	6.501
70009	5	-0.088	2.519	0.463	-0.069	12.814	-12.814	18.240
70010	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
70011	5	-0.088	-0.207	-0.173	-0.069	0.089	-0.089	-1.208
70012	5	-0.088	-0.207	-0.173	-0.069	-1.210	1.210	-2.507
70013	5	-0.088	-0.207	-0.173	-0.069	1.442	-1.442	0.144
70014	5	-0.088	-0.207	-0.173	-0.069	-1.131	1.131	-2.429
70015	5	0.107	-0.207	1.099	-0.069	13.233	-13.233	14.870
70016	5	-0.088	-0.207	-0.173	-0.069	6.447	-6.447	5.150
70017	5	-0.088	-0.207	-0.173	-0.069	4.095	-4.095	2.798
70018	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
70019	5	-0.088	-0.207	0.463	-0.069	-0.945	0.945	-0.971
80001	5	-0.088	-0.207	-0.173	-0.069	-1.170	1.170	-2.468
80002	5	-0.088	-0.207	-0.173	-0.069	2.771	-2.771	1.473
80003	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
80004	5	-0.088	-0.207	-0.173	-0.069	4.384	-4.384	3.086
80005	5	-0.088	-0.207	-0.173	-0.069	1.955	-1.955	0.657
80006	5	-0.088	-0.207	-0.173	-0.069	0.083	-0.083	-1.215
80007	5	-0.088	-0.207	-0.173	-0.069	6.008	-6.008	4.711
80009	5	-0.088	-0.207	-0.173	-0.069	7.766	-7.766	6.468
80010	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
80011	5	-0.088	-0.207	-0.173	-0.069	-0.426	0.426	-1.724
80012	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
80013	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
80014	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
80015	5	-0.088	-0.207	-0.173	-0.069	1.864	-1.864	0.566
80016	5	-0.088	-0.207	-0.173	-0.069	2.794	-2.794	1.497
80017	5	-0.088	-0.207	-0.173	-0.069	3.398	-3.398	2.100
80018	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
80019	5	-0.088	-0.207	-0.173	-0.069	-0.661	0.661	-1.959
90001	5	-0.088	-0.207	-0.173	-0.069	-1.170	1.170	-2.468
90002	5	-0.088	-0.207	-0.173	-0.069	10.047	-10.047	8.750
90003	5	-0.088	-0.207	-0.173	-0.069	2.817	-2.817	1.520

90004	5	-0.088	-0.207	-0.173	-0.069	7.016	-7.016	5.718
90005	5	-0.088	5.245	0.463	-0.069	-5.058	5.058	5.821
90006	5	-0.088	-0.207	0.463	-0.069	6.079	-6.079	6.054
90007	5	-0.088	-0.207	-0.173	-0.069	18.315	-18.315	17.017
90008	5	-0.088	-0.207	-0.173	-0.069	6.389	-6.389	5.092
90010	5	-0.088	2.519	-0.173	-0.069	-4.131	4.131	0.023
90011	5	-0.088	-0.207	0.463	-0.069	5.272	-5.272	5.246
90012	5	-0.088	-0.207	-0.173	-0.069	-1.210	1.210	-2.507
90013	5	-0.088	-0.207	-0.173	-0.069	-1.210	1.210	-2.507
90014	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
90015	5	-0.088	-0.207	-0.173	-0.069	10.860	-10.860	9.562
90016	5	-0.088	-0.207	-0.173	-0.069	6.093	-6.093	4.795
90017	5	-0.088	-0.207	-0.173	-0.069	10.907	-10.907	9.610
90018	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
90019	5	-0.088	-0.207	-0.173	-0.069	2.068	-2.068	0.771
100001	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100002	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
100003	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100004	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
100005	5	-0.088	-0.207	-0.173	-0.069	-1.286	1.286	-2.584
100006	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100007	5	-0.088	-0.207	-0.173	-0.069	-1.286	1.286	-2.584
100008	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
100009	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100011	5	0.107	2.519	-0.173	-0.069	-6.883	6.883	2.775
100012	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100013	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100014	5	-0.088	-0.207	-0.173	-0.069	17.233	-17.233	15.936
100015	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100016	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100017	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
100018	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.623
100019	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
110001	5	-0.088	-0.207	-0.173	-0.069	1.385	-1.385	0.087
110002	5	-0.088	-0.207	-0.173	-0.069	2.129	-2.129	0.832
110003	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
110004	5	-0.088	-0.207	-0.173	-0.069	-0.308	0.308	-1.606
110005	5	0.107	-0.207	1.735	-0.069	-3.469	3.469	-0.561
110006	5	-0.088	-0.207	-0.173	-0.069	-0.161	0.161	-1.458
110007	5	-0.088	-0.207	0.463	-0.069	-0.552	0.552	-0.578
110008	5	-0.088	-0.207	-0.173	-0.069	-0.426	0.426	-1.723
110009	5	-0.088	5.245	4.279	-0.069	-2.462	2.462	16.048
110010	5	0.107	5.245	1.735	-0.069	-8.960	8.960	4.852
110012	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
110013	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
110014	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
110015	5	-0.088	-0.207	-0.173	-0.069	-0.426	0.426	-1.723
110016	5	-0.088	-0.207	-0.173	-0.069	-0.269	0.269	-1.567
110017	5	-0.088	-0.207	-0.173	-0.069	-0.465	0.465	-1.762

110018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
110019	5	-0.088	-0.207	-0.173	-0.069	-0.935	0.935	-2.233
120001	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
120002	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
120003	5	-0.088	-0.207	-0.173	-0.069	0.010	-0.010	-1.287
120004	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.584
120005	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
120006	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
120007	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.505
120008	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
120009	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.505
120010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
120011	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
120013	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.663
120014	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
120015	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.584
120016	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.584
120017	5	-0.088	2.519	-0.173	-0.069	5.742	-5.742	9.897
120018	5	0.388	-0.207	1.735	-0.069	-4.289	4.289	0.181
120019	5	-0.088	-0.207	-0.173	-0.069	7.307	-7.307	6.009
130001	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.584
130002	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
130003	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
130004	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
130005	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
130006	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
130007	5	-0.088	-0.207	-0.173	-0.069	1.444	-1.444	0.146
130008	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
130009	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
130010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
130011	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.584
130012	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.663
130014	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.663
130015	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
130016	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
130017	5	-0.088	-0.207	-0.173	-0.069	-1.247	1.247	-2.545
130018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
130019	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
140001	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
140002	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
140003	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
140004	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.545
140005	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
140006	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.545
140007	5	-0.088	-0.207	-0.173	-0.069	-1.129	1.129	-2.427
140008	5	-0.088	-0.207	-0.173	-0.069	-1.208	1.208	-2.506
140009	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.545
140010	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
140011	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.545

140012	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
140013	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.663
140015	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
140016	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
140017	5	-0.088	-0.207	-0.173	-0.069	-1.287	1.287	-2.585
140018	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.624
140019	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.545
150001	5	-0.088	5.245	4.279	5.793	-19.436	19.436	21.022
150002	5	-0.088	-0.207	-0.173	-0.069	4.084	-4.084	2.786
150003	5	-0.088	-0.207	-0.173	-0.069	-1.131	1.131	-2.429
150004	5	-0.088	-0.207	-0.173	-0.069	9.219	-9.219	7.921
150005	5	-0.088	2.519	-0.173	-0.069	-1.441	1.441	2.714
150006	5	-0.088	-0.207	0.463	-0.069	0.940	-0.940	0.914
150007	5	0.107	2.519	1.735	-0.069	14.376	-14.376	22.737
150008	5	-0.088	-0.207	-0.173	-0.069	4.423	-4.423	3.125
150009	5	-0.088	-0.207	-0.173	-0.069	12.630	-12.630	11.333
150010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
150011	5	-0.088	-0.207	-0.173	-0.069	-0.388	0.388	-1.685
150012	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
150013	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
150014	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
150016	5	-0.088	-0.207	-0.173	-0.069	4.710	-4.710	3.413
150017	5	-0.088	-0.207	-0.173	-0.069	2.695	-2.695	1.397
150018	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
150019	5	-0.088	-0.207	-0.173	-0.069	-0.779	0.779	-2.076
160001	5	-0.088	-0.207	-0.173	-0.069	-1.170	1.170	-2.468
160002	5	-0.088	-0.207	-0.173	-0.069	0.043	-0.043	-1.254
160003	5	-0.088	-0.207	-0.173	-0.069	-1.170	1.170	-2.468
160004	5	-0.088	-0.207	-0.173	-0.069	1.928	-1.928	0.630
160005	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
160006	5	-0.088	-0.207	-0.173	-0.069	2.891	-2.891	1.593
160007	5	-0.088	-0.207	-0.173	-0.069	6.159	-6.159	4.862
160008	5	-0.088	-0.207	-0.173	-0.069	4.195	-4.195	2.898
160009	5	-0.088	-0.207	-0.173	-0.069	11.487	-11.487	10.189
160010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
160011	5	-0.088	-0.207	-0.173	-0.069	-0.033	0.033	-1.330
160012	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
160013	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
160014	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
160015	5	-0.088	-0.207	-0.173	-0.069	4.618	-4.618	3.321
160017	5	-0.088	-0.207	-0.173	-0.069	2.944	-2.944	1.646
160018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
160019	5	-0.088	-0.207	-0.173	-0.069	-0.818	0.818	-2.115
170001	5	-0.088	-0.207	-0.173	-0.069	-1.209	1.209	-2.507
170002	5	0.303	-0.207	-0.173	-0.069	2.077	-2.077	1.560
170003	5	-0.088	-0.207	-0.173	-0.069	1.364	-1.364	0.066
170004	5	-0.088	-0.207	-0.173	-0.069	0.437	-0.437	-0.861
170005	5	-0.088	-0.207	1.735	-0.069	-3.274	3.274	-0.756
170006	5	-0.088	-0.207	-0.173	-0.069	-0.042	0.042	-1.340

170007	5	-0.088	-0.207	-0.173	-0.069	3.648	-3.648	2.350
170008	5	-0.088	-0.207	-0.173	-0.069	3.778	-3.778	2.481
170009	5	-0.088	-0.207	-0.173	-0.069	13.359	-13.359	12.061
170010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
170011	5	-0.088	-0.207	-0.173	-0.069	-0.458	0.458	-1.756
170012	5	-0.088	-0.207	-0.173	-0.069	3.390	-3.390	2.093
170013	5	-0.088	-0.207	-0.173	-0.069	-1.249	1.249	-2.546
170014	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
170015	5	-0.088	-0.207	-0.173	-0.069	2.695	-2.695	1.398
170016	5	-0.088	-0.207	-0.173	-0.069	4.020	-4.020	2.723
170018	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
170019	5	-0.088	-0.207	-0.173	-0.069	1.716	-1.716	0.419
180001	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180002	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180003	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180004	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
180005	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.623
180006	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180007	5	-0.088	-0.207	-0.173	-0.069	-1.286	1.286	-2.584
180008	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.623
180009	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
180010	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.623
180011	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180012	5	0.868	-0.207	-0.173	-0.069	-2.381	2.381	-1.727
180013	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180014	5	-0.088	-0.207	-0.173	-0.069	-1.326	1.326	-2.623
180015	5	-0.088	-0.207	-0.173	-0.069	-1.365	1.365	-2.663
180016	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180017	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
180019	5	-0.088	2.519	0.463	-0.069	-7.323	7.323	3.215
190001	5	-0.088	-0.207	-0.173	-0.069	-1.288	1.288	-2.585
190002	5	-0.088	-0.207	-0.173	-0.069	-0.856	0.856	-2.154
190003	5	-0.088	-0.207	-0.173	-0.069	3.163	-3.163	1.866
190004	5	-0.088	-0.207	-0.173	-0.069	-0.817	0.817	-2.115
190005	5	-0.088	-0.207	-0.173	-0.069	-1.366	1.366	-2.664
190006	5	-0.088	-0.207	-0.173	-0.069	-0.856	0.856	-2.154
190007	5	-0.088	-0.207	-0.173	-0.069	-0.308	0.308	-1.605
190008	5	-0.088	-0.207	-0.173	-0.069	-0.571	0.571	-1.869
190009	5	-0.088	-0.207	-0.173	-0.069	0.025	-0.025	-1.272
190010	5	-0.088	-0.207	-0.173	-0.069	-1.405	1.405	-2.703
190011	5	-0.088	-0.207	-0.173	-0.069	-0.935	0.935	-2.232
190012	5	-0.088	-0.207	-0.173	-0.069	1.031	-1.031	-0.266
190013	5	-0.088	-0.207	-0.173	-0.069	-1.327	1.327	-2.624
190014	5	-0.088	-0.207	-0.173	-0.069	-1.248	1.248	-2.546
190015	5	-0.088	-0.207	-0.173	-0.069	-0.778	0.778	-2.076
190016	5	-0.088	-0.207	-0.173	-0.069	-0.817	0.817	-2.115
190017	5	-0.088	-0.207	-0.173	-0.069	-0.896	0.896	-2.193
190018	5	-0.088	-0.207	2.371	-0.069	-3.949	3.949	-0.159

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10002	5	-0.136	-0.112	-0.077	0.540	-0.540	-0.267
10003	5	-0.136	-0.112	-0.077	-1.044	1.044	-1.851
10004	5	-0.136	-0.112	-0.077	0.584	-0.584	-0.223
10005	5	-0.136	-0.112	-0.077	-1.022	1.022	-1.829
10006	5	-0.136	-0.112	-0.077	-1.526	1.526	-2.333
10007	5	-0.136	-0.112	-0.077	4.942	-4.942	4.135
10008	5	-0.136	-0.112	-0.077	0.606	-0.606	-0.202
10009	5	-0.136	-0.112	-0.077	0.671	-0.671	-0.136
10010	5	-0.136	-0.112	-0.077	-3.131	3.131	-3.938
10011	5	-0.136	-0.112	-0.077	-1.417	1.417	-2.224
10012	5	-0.136	-0.112	-0.077	-1.547	1.547	-2.354
10013	5	-0.136	-0.112	-0.077	-1.526	1.526	-2.333
10014	5	-0.136	-0.112	-0.077	-1.569	1.569	-2.376
10015	5	-0.136	-0.112	-0.077	-1.395	1.395	-2.202
10016	5	-0.136	-0.112	-0.077	-1.395	1.395	-2.202
10017	5	-0.136	-0.112	-0.077	0.540	-0.540	-0.267
10018	5	-0.136	-0.112	-0.077	-3.153	3.153	-3.960
10019	5	-0.136	-0.112	-0.077	-1.417	1.417	-2.224
20001	5	-0.136	-0.112	-0.077	0.505	-0.505	-0.303
20003	5	-0.136	-0.112	-0.077	-0.854	0.854	-1.661
20004	5	-0.136	-0.112	-0.077	6.434	-6.434	5.626
20005	5	-0.136	-0.112	-0.077	1.353	-1.353	0.545
20006	5	-0.136	-0.112	-0.077	-0.331	0.331	-1.139
20007	5	-0.136	-0.112	-0.077	5.213	-5.213	4.406
20008	5	-0.136	-0.112	-0.077	6.325	-6.325	5.518
20009	5	-0.136	-0.112	-0.077	6.034	-6.034	5.227
20010	5	-0.136	-0.112	-0.077	-2.945	2.945	-3.752
20011	5	-0.136	-0.112	-0.077	-0.350	0.350	-1.157
20012	5	-0.136	-0.112	-0.077	0.577	-0.577	-0.230
20013	5	-0.136	-0.112	-0.077	-1.332	1.332	-2.139
20014	5	-0.136	-0.112	-0.077	0.577	-0.577	-0.230
20015	5	-0.136	-0.112	-0.077	5.762	-5.762	4.955
20016	5	-0.136	-0.112	-0.077	3.852	-3.852	3.044
20017	5	-0.136	-0.112	-0.077	3.300	-3.300	2.493
20018	5	-0.136	-0.112	-0.077	-1.036	1.036	-1.843
20019	5	-0.136	-0.112	-0.077	-0.604	0.604	-1.412
30001	5	-0.136	-0.112	-0.077	-3.060	3.060	-3.867
30002	5	-0.136	-0.112	-0.077	-0.823	0.823	-1.630
30004	5	-0.136	-0.112	-0.077	-2.744	2.744	-3.552
30005	5	-0.136	-0.112	-0.077	-2.426	2.426	-3.233
30006	5	-0.136	-0.112	-0.077	-2.981	2.981	-3.788
30007	5	-0.136	-0.112	-0.077	-0.665	0.665	-1.472
30008	5	-0.136	-0.112	-0.077	-0.615	0.615	-1.422
30009	5	-0.136	-0.112	-0.077	0.043	-0.043	-0.764
30010	5	-0.136	-0.112	-0.077	-3.060	3.060	-3.867
30011	5	-0.136	-0.112	-0.077	-2.863	2.863	-3.670
30012	5	-0.136	-0.112	-0.077	0.481	-0.481	-0.327
30013	5	-0.136	-0.112	-0.077	-3.021	3.021	-3.828
30014	5	-0.136	-0.112	-0.077	-3.060	3.060	-3.867

30015	5	-0.136	-0.112	-0.077	-2.725	2.725	-3.532
30016	5	-0.136	-0.112	-0.077	-2.764	2.764	-3.571
30017	5	-0.136	0.847	-0.077	-2.164	2.164	-1.052
30018	5	-0.136	-0.112	-0.077	-0.891	0.891	-1.698
30019	5	4.530	-0.112	-0.077	-5.496	5.496	3.029
40001	5	-0.136	-0.112	-0.077	0.538	-0.538	-0.269
40002	5	-0.136	-0.112	-0.077	2.068	-2.068	1.261
40003	5	-0.136	-0.112	-0.077	-2.788	2.788	-3.595
40005	5	-0.136	-0.112	-0.077	2.511	-2.511	1.704
40006	5	-0.136	-0.112	-0.077	-0.961	0.961	-1.768
40007	5	-0.136	-0.112	-0.077	4.847	-4.847	4.040
40008	5	-0.136	-0.112	-0.077	2.079	-2.079	1.272
40009	5	-0.136	-0.112	-0.077	5.778	-5.778	4.971
40010	5	-0.136	-0.112	-0.077	-2.913	2.913	-3.721
40011	5	-0.136	-0.112	-0.077	0.007	-0.007	-0.801
40012	5	-0.136	-0.112	-0.077	-1.355	1.355	-2.162
40013	5	-0.136	-0.112	-0.077	0.753	-0.753	-0.054
40014	5	-0.136	-0.112	-0.077	0.627	-0.627	-0.180
40015	5	-0.136	-0.112	-0.077	3.537	-3.537	2.729
40016	5	-0.136	-0.112	-0.077	2.724	-2.724	1.917
40017	5	-0.136	-0.112	-0.077	2.312	-2.312	1.505
40018	5	-0.136	-0.112	-0.077	-2.985	2.985	-3.792
40019	5	-0.136	-0.112	-0.077	-0.101	0.101	-0.908
50001	5	-0.136	-0.112	-0.077	-1.055	1.055	-1.862
50002	5	-0.136	-0.112	-0.077	-0.566	0.566	-1.373
50003	5	-0.136	-0.112	-0.077	-1.000	1.000	-1.807
50004	5	-0.136	-0.112	-0.077	-0.040	0.040	-0.847
50006	5	-0.136	-0.112	-0.077	-16.059	16.059	9.359
50007	5	-0.136	4.686	-0.077	-4.024	4.024	4.766
50008	5	-0.136	0.847	-0.077	-1.181	1.181	-0.069
50009	5	-0.136	-0.112	-0.077	-1.135	1.135	-1.942
50010	5	-0.136	-0.112	-0.077	-0.765	0.765	-1.572
50011	5	-0.136	-0.112	-0.077	-2.149	2.149	-2.957
50012	5	-0.136	-0.112	-0.077	-1.036	1.036	-1.844
50013	5	-0.136	-0.112	-0.077	-0.964	0.964	-1.771
50014	5	-0.136	-0.112	-0.077	-0.873	0.873	-1.681
50015	5	-0.136	-0.112	-0.077	0.032	-0.032	-0.775
50016	5	-0.136	-0.112	-0.077	-2.023	2.023	-2.830
50017	5	-0.136	-0.112	-0.077	-2.312	2.312	-3.120
50018	5	-0.136	-0.112	-0.077	-0.946	0.946	-1.753
50019	5	-0.136	0.847	-0.077	-3.145	3.145	-2.033
60001	5	-0.136	-0.112	-0.077	-1.549	1.549	-2.356
60002	5	-0.136	-0.112	-0.077	-0.314	0.314	-1.121
60003	5	-0.136	-0.112	-0.077	-2.997	2.997	-3.804
60004	5	-0.136	-0.112	-0.077	-0.941	0.941	-1.748
60005	5	-0.136	-0.112	-0.077	-16.054	16.054	9.364
60007	5	-0.136	-0.112	-0.077	-0.268	0.268	-1.076
60008	5	-0.136	-0.112	-0.077	-0.848	0.848	-1.656
60009	5	4.530	0.847	13.039	-3.587	3.587	33.089

60010	5	-0.136	-0.112	-0.077	-3.089	3.089	-3.896
60011	5	-0.136	-0.112	-0.077	3.169	-3.169	2.362
60012	5	-0.136	-0.112	-0.077	0.433	-0.433	-0.374
60013	5	-0.136	-0.112	-0.077	-1.494	1.494	-2.301
60014	5	-0.136	-0.112	-0.077	-1.586	1.586	-2.393
60015	5	-0.136	-0.112	-0.077	-0.730	0.730	-1.537
60016	5	-0.136	-0.112	-0.077	2.253	-2.253	1.446
60017	5	-0.136	-0.112	-0.077	2.669	-2.669	1.862
60018	5	-0.136	-0.112	-0.077	-3.144	3.144	-3.952
60019	5	-0.136	-0.112	-0.077	5.005	-5.005	4.198
70001	5	-0.136	-0.112	-0.077	1.517	-1.517	0.710
70002	5	-0.136	-0.112	-0.077	2.933	-2.933	2.126
70003	5	-0.136	-0.112	-0.077	-0.721	0.721	-1.528
70004	5	-0.136	-0.112	-0.077	5.824	-5.824	5.017
70005	5	4.530	16.203	-0.077	-20.248	20.248	20.907
70006	5	-0.136	-0.112	-0.077	-0.401	0.401	-1.208
70008	5	-0.136	-0.112	-0.077	3.306	-3.306	2.499
70009	5	-0.136	-0.112	-0.077	13.879	-13.879	13.072
70010	5	-0.136	-0.112	-0.077	-2.722	2.722	-3.529
70011	5	-0.136	-0.112	-0.077	0.875	-0.875	0.068
70012	5	-0.136	-0.112	-0.077	0.713	-0.713	-0.094
70013	5	-0.136	-0.112	-0.077	2.163	-2.163	1.356
70014	5	-0.136	-0.112	-0.077	0.784	-0.734	-0.023
70015	5	4.530	4.686	-0.077	-4.356	4.356	13.766
70016	5	-0.136	-0.112	-0.077	5.640	-5.640	4.833
70017	5	-0.136	-0.112	-0.077	3.125	-3.125	2.318
70018	5	-0.136	-0.112	-0.077	-0.916	0.916	-1.723
70019	5	-0.136	-0.112	-0.077	0.838	-0.838	0.031
80001	5	-0.136	-0.112	-0.077	0.556	-0.556	-0.251
80002	5	-0.136	-0.112	-0.077	1.634	-1.634	0.827
80003	5	-0.136	-0.112	-0.077	-0.876	0.876	-1.683
80004	5	-0.136	-0.112	-0.077	2.083	-2.083	1.276
80005	5	-0.136	-0.112	-0.077	2.634	-2.634	1.827
80006	5	-0.136	-0.112	-0.077	-0.870	0.870	-1.677
80007	5	-0.136	-0.112	-0.077	3.171	-3.171	2.364
80009	5	-0.136	-0.112	-0.077	6.480	-6.480	5.672
80010	5	-0.136	-0.112	-0.077	-2.787	2.737	-3.594
80011	5	-0.136	-0.112	-0.077	-0.115	0.115	-0.922
80012	5	-0.136	-0.112	-0.077	-1.372	1.372	-2.180
80013	5	-0.136	-0.112	-0.077	-1.319	1.319	-2.126
80014	5	-0.136	-0.112	-0.077	-1.319	1.319	-2.126
80015	5	-0.136	-0.112	-0.077	2.317	-2.317	1.509
80016	5	-0.136	-0.112	-0.077	4.966	-4.966	4.159
80017	5	-0.136	-0.112	-0.077	2.889	-2.889	2.082
80018	5	-0.136	-0.112	-0.077	-0.948	0.948	-1.755
80019	5	-0.136	-0.112	-0.077	2.335	-2.335	1.528
90001	5	-0.136	-0.112	-0.077	0.606	-0.606	-0.201
90002	5	-0.136	-0.112	-0.077	7.099	-7.099	6.292
90003	5	-0.136	-0.112	-0.077	-0.036	0.036	-0.843

90004	5	-0.136	-0.112	-0.077	5.748	-5.748	4.941
90005	5	-0.136	-0.112	-0.077	1.639	-1.639	0.832
90006	5	4.530	-0.112	-0.077	1.863	-1.863	10.388
90007	5	-0.136	-0.112	-0.077	13.762	-13.762	12.955
90008	5	-0.136	-0.112	-0.077	7.529	-7.529	6.722
90010	5	-0.136	-0.112	-0.077	-2.740	2.740	-3.547
90011	5	-0.136	-0.112	-0.077	8.365	-8.365	7.557
90012	5	-0.136	-0.112	-0.077	0.677	-0.677	-0.130
90013	5	-0.136	-0.112	-0.077	0.765	-0.765	-0.042
90014	5	-0.136	-0.112	-0.077	-1.235	1.235	-2.042
90015	5	-0.136	-0.112	-0.077	10.645	-10.645	9.838
90016	5	-0.136	-0.112	-0.077	11.093	-11.093	10.286
90017	5	-0.136	-0.112	-0.077	12.840	-12.840	12.033
90018	5	-0.136	-0.112	-0.077	-2.786	2.786	-3.594
90019	5	-0.136	-0.112	-0.077	4.063	-4.063	3.256
100001	5	-0.136	-0.112	-0.077	-3.140	3.140	-3.947
100002	5	-0.136	-0.112	-0.077	-2.926	2.926	-3.733
100003	5	-0.136	-0.112	-0.077	-1.062	1.062	-1.869
100004	5	-0.136	-0.112	-0.077	-2.887	2.887	-3.694
100005	5	-0.136	-0.112	-0.077	-0.730	0.730	-1.537
100006	5	-0.136	-0.112	-0.077	-3.082	3.082	-3.889
100007	5	-0.136	-0.112	-0.077	-2.672	2.672	-3.479
100008	5	-0.136	-0.112	-0.077	-0.750	0.750	-1.557
100009	5	-0.136	-0.112	-0.077	-2.692	2.692	-3.499
100011	5	-0.136	-0.112	-0.077	-2.789	2.789	-3.596
100012	5	-0.136	-0.112	-0.077	-3.082	3.082	-3.889
100013	5	-0.136	-0.112	-0.077	-3.121	3.121	-3.928
100014	5	-0.136	-0.112	-0.077	-0.867	0.867	-1.674
100015	5	-0.136	-0.112	-0.077	-2.828	2.828	-3.635
100016	5	-0.136	-0.112	-0.077	-2.906	2.906	-3.713
100017	5	-0.136	-0.112	-0.077	-3.004	3.004	-3.811
100018	5	-0.136	-0.112	-0.077	-0.906	0.906	-1.713
100019	5	-0.136	-0.112	-0.077	-2.867	2.867	-3.674
110001	5	-0.136	-0.112	-0.077	-1.462	1.462	-2.269
110002	5	-0.136	-0.112	-0.077	-0.333	0.333	-1.140
110003	5	-0.136	-0.112	-0.077	-2.895	2.895	-3.702
110004	5	-0.136	-0.112	-0.077	0.011	-0.011	-0.796
110005	5	-0.136	-0.112	-0.077	-2.158	2.158	-2.965
110006	5	-0.136	-0.112	-0.077	1.410	-1.410	0.603
110007	5	-0.136	-0.112	-0.077	0.910	-0.910	0.103
110008	5	-0.136	-0.112	-0.077	-0.115	0.115	-0.922
110009	5	-0.136	-0.112	13.039	-0.923	0.923	24.501
110010	5	-0.136	-0.112	-0.077	-2.823	2.823	-3.630
110012	5	-0.136	-0.112	-0.077	-1.426	1.426	-2.233
110013	5	-0.136	-0.112	-0.077	-1.319	1.319	-2.126
110014	5	-0.136	-0.112	-0.077	-1.319	1.319	-2.126
110015	5	-0.136	-0.112	-0.077	0.442	-0.442	-0.365
110016	5	-0.136	-0.112	-0.077	5.069	-5.069	4.262
110017	5	-0.136	-0.112	-0.077	4.158	-4.158	3.351

110018	5	-0.136	-0.112	-0.077	-3.074	3.074	-3.881
110019	5	-0.136	-0.112	-0.077	6.240	-6.240	5.433
120001	5	-0.136	-0.112	-0.077	-1.556	1.556	-2.363
120002	5	-0.136	-0.112	-0.077	0.606	-0.606	-0.201
120003	5	-0.136	-0.112	-0.077	0.485	-0.485	-0.322
120004	5	-0.136	-0.112	-0.077	-1.313	1.313	-2.120
120005	5	-0.136	-0.112	-0.077	-1.015	1.015	-1.822
120006	5	-0.136	-0.112	-0.077	-1.556	1.556	-2.363
120007	5	-0.136	-0.112	-0.077	0.768	-0.768	-0.039
120008	5	-0.136	-0.112	-0.077	-1.334	1.334	-2.141
120009	5	-0.136	-0.112	-0.077	0.728	-0.728	-0.079
120010	5	-0.136	-0.112	-0.077	-3.076	3.076	-3.883
120011	5	-0.136	-0.112	-0.077	-1.394	1.394	-2.201
120013	5	-0.136	-0.112	-0.077	0.004	-0.004	-0.803
120014	5	-0.136	-0.112	-0.077	-1.516	1.516	-2.323
120015	5	-0.136	-0.112	-0.077	0.708	-0.708	-0.100
120016	5	-0.136	-0.112	-0.077	0.708	-0.708	-0.100
120017	5	-0.136	-0.112	-0.077	2.167	-2.167	1.360
120018	5	-0.136	-0.112	-0.077	-1.076	1.076	-1.883
120019	5	-0.136	-0.112	-0.077	0.227	-0.227	-0.580
130001	5	-0.136	-0.112	-0.077	0.463	-0.463	-0.344
130002	5	-0.136	-0.112	-0.077	0.704	-0.704	-0.103
130003	5	-0.136	-0.112	-0.077	-3.018	3.018	-3.825
130004	5	-0.136	-0.112	-0.077	0.804	-0.804	-0.003
130005	5	-0.136	0.847	-0.077	-1.896	1.896	-0.784
130006	5	-0.136	-0.112	-0.077	-1.477	1.477	-2.284
130007	5	-0.136	-0.112	-0.077	0.804	-0.804	-0.003
130008	5	-0.136	-0.112	-0.077	0.724	-0.724	-0.083
130009	5	-0.136	-0.112	-0.077	0.824	-0.824	0.017
130010	5	-0.136	-0.112	-0.077	-3.118	3.118	-3.925
130011	5	-0.136	-0.112	-0.077	-1.277	1.277	-2.084
130012	5	-0.136	-0.112	-0.077	2.003	-2.003	1.196
130014	5	-0.136	-0.112	-0.077	0.443	-0.443	-0.364
130015	5	-0.136	-0.112	-0.077	0.824	-0.824	0.017
130016	5	-0.136	-0.112	-0.077	0.724	-0.724	-0.083
130017	5	-0.136	-0.112	-0.077	-1.277	1.277	-2.084
130018	5	-0.136	-0.112	-0.077	-3.118	3.118	-3.925
130019	5	-0.136	-0.112	-0.077	-1.297	1.297	-2.104
140001	5	-0.136	-0.112	-0.077	-1.580	1.580	-2.387
140002	5	-0.136	-0.112	-0.077	-1.402	1.402	-2.210
140003	5	-0.136	-0.112	-0.077	-3.061	3.061	-3.868
140004	5	-0.136	-0.112	-0.077	-1.343	1.343	-2.151
140005	5	-0.136	-0.112	-0.077	-2.844	2.844	-3.651
140006	5	-0.136	-0.112	-0.077	-1.580	1.580	-2.387
140007	5	-0.136	-0.112	-0.077	-1.166	1.166	-1.974
140008	5	-0.136	-0.112	-0.077	-1.284	1.284	-2.092
140009	5	-0.136	-0.112	-0.077	-1.186	1.186	-1.993
140010	5	-0.136	-0.112	-0.077	-2.864	2.864	-3.671
140011	5	-0.136	-0.112	-0.077	-1.284	1.284	-2.092

140012	5	-0.136	-0.112	-0.077	-1.521	1.521	-2.328
140013	5	-0.136	-0.112	-0.077	-1.560	1.560	-2.367
140015	5	-0.136	-0.112	-0.077	-1.363	1.363	-2.170
140016	5	-0.136	-0.112	-0.077	-1.383	1.383	-2.190
140017	5	-0.136	-0.112	-0.077	-1.442	1.442	-2.249
140018	5	-0.136	-0.112	-0.077	-3.002	3.002	-3.809
140019	5	-0.136	-0.112	-0.077	-1.304	1.304	-2.111
150001	5	-0.136	-0.112	-0.077	-0.954	0.954	-1.761
150002	5	-0.136	-0.112	-0.077	3.036	-3.036	2.229
150003	5	-0.136	-0.112	-0.077	-0.771	0.771	-1.578
150004	5	-0.136	-0.112	-0.077	3.588	-3.588	2.781
150005	5	-0.136	-0.112	-0.077	3.544	-3.544	2.737
150006	5	-0.136	-0.112	-0.077	-0.803	0.803	-1.610
150007	5	-0.136	-0.112	-0.077	6.606	-6.606	5.799
150008	5	-0.136	-0.112	-0.077	2.305	-2.305	1.498
150009	5	-0.136	-0.112	-0.077	11.256	-11.256	10.449
150010	5	-0.136	-0.112	-0.077	-2.861	2.861	-3.668
150011	5	-0.136	-0.112	-0.077	0.430	-0.430	-0.377
150012	5	-0.136	-0.112	-0.077	0.662	-0.662	-0.145
150013	5	-0.136	-0.112	-0.077	0.769	-0.769	-0.038
150014	5	-0.136	-0.112	-0.077	-1.392	1.392	-2.199
150016	5	-0.136	-0.112	-0.077	3.302	-3.302	2.494
150017	5	13.862	3.727	-0.077	-15.296	15.296	19.571
150018	5	-0.136	-0.112	-0.077	-3.022	3.022	-3.829
150019	5	-0.136	-0.112	-0.077	-0.053	0.053	-0.860
160001	5	-0.136	-0.112	-0.077	-1.446	1.446	-2.253
160002	5	-0.136	-0.112	-0.077	1.982	-1.982	1.175
160003	5	-0.136	-0.112	-0.077	-0.807	0.807	-1.614
160004	5	-0.136	-0.112	-0.077	2.713	-2.713	1.906
160005	5	-0.136	-0.112	-0.077	-2.041	2.041	-2.848
160006	5	-0.136	-0.112	-0.077	2.245	-2.245	1.438
160007	5	-0.136	-0.112	-0.077	3.720	-3.720	2.913
160008	5	-0.136	-0.112	-0.077	4.093	-4.093	3.286
160009	5	-0.136	-0.112	-0.077	20.182	-20.182	19.375
160010	5	-0.136	-0.112	-0.077	-2.933	2.933	-3.740
160011	5	-0.136	-0.112	-0.077	4.594	-4.594	3.787
160012	5	-0.136	-0.112	-0.077	0.662	-0.662	-0.145
160013	5	-0.136	-0.112	-0.077	-1.321	1.321	-2.128
160014	5	-0.136	-0.112	-0.077	-1.410	1.410	-2.217
160015	5	-0.136	-0.112	-0.077	3.106	-3.106	2.299
160017	5	-0.136	-0.112	-0.077	4.378	-4.378	3.571
160018	5	-0.136	-0.112	-0.077	-3.058	3.058	-3.865
160019	5	-0.136	-0.112	-0.077	2.107	-2.107	1.300
170001	5	-0.136	-0.112	-0.077	0.502	-0.502	-0.305
170002	5	-0.136	-0.112	-0.077	3.332	-3.332	2.525
170003	5	-0.136	3.727	-0.077	-5.085	5.085	1.785
170004	5	-0.136	-0.112	-0.077	2.748	-2.748	1.941
170005	5	-0.136	-0.112	-0.077	-2.320	2.320	-3.127
170006	5	-0.136	-0.112	-0.077	1.486	-1.486	0.679

170007	5	-0.136	-0.112	-0.077	3.176	-3.176	2.369
170008	5	-0.136	-0.112	-0.077	5.649	-5.649	4.842
170009	5	-0.136	-0.112	-0.077	13.750	-13.750	12.942
170010	5	-0.136	-0.112	-0.077	-3.020	3.020	-3.828
170011	5	-0.136	-0.112	-0.077	5.087	-5.087	4.280
170012	5	-0.136	-0.112	-0.077	3.023	-3.023	2.215
170013	5	-0.136	-0.112	-0.077	-1.318	1.318	-2.126
170014	5	-0.136	-0.112	-0.077	-1.462	1.462	-2.269
170015	5	-0.136	-0.112	-0.077	2.538	-2.538	1.731
170016	5	-0.136	-0.112	-0.077	5.196	-5.196	4.389
170018	5	-0.136	-0.112	-0.077	-3.074	3.074	-3.881
170019	5	-0.136	-0.112	-0.077	3.525	-3.525	2.718
180001	5	-0.136	-0.112	-0.077	-3.154	3.154	-3.961
180002	5	-0.136	-0.112	-0.077	-3.005	3.005	-3.812
180003	5	-0.136	-0.112	-0.077	17.416	-17.416	16.609
180004	5	-0.136	-0.112	-0.077	-2.941	2.941	-3.748
180005	5	-0.136	-0.112	-0.077	-0.898	0.898	-1.705
180006	5	-0.136	-0.112	-0.077	-3.133	3.133	-3.940
180007	5	-0.136	-0.112	-0.077	-2.856	2.856	-3.663
180008	5	-0.136	-0.112	-0.077	-2.899	2.899	-3.706
180009	5	-0.136	-0.112	-0.077	-2.941	2.941	-3.748
180010	5	-0.136	-0.112	-0.077	-2.877	2.877	-3.685
180011	5	-0.136	-0.112	-0.077	-3.048	3.048	-3.855
180012	5	4.530	-0.112	-0.077	-5.735	5.735	2.791
180013	5	-0.136	-0.112	-0.077	-3.112	3.112	-3.919
180014	5	-0.136	-0.112	-0.077	-2.984	2.984	-3.791
180015	5	-0.136	-0.112	-0.077	-2.984	2.984	-3.791
180016	5	-0.136	-0.112	-0.077	-3.026	3.026	-3.834
180017	5	-0.136	-0.112	-0.077	-3.048	3.048	-3.855
180019	5	4.530	-0.112	-0.077	-7.586	7.586	0.939
190001	5	-0.136	-0.112	-0.077	-1.462	1.462	-2.269
190002	5	-0.136	-0.112	-0.077	-0.615	0.615	-1.422
190003	5	-0.136	-0.112	-0.077	-1.521	1.521	-1.299
190004	5	-0.136	-0.112	-0.077	0.326	-0.326	-0.481
190005	5	-0.136	-0.112	-0.077	-2.191	2.191	-2.998
190006	5	-0.136	-0.112	-0.077	1.049	-1.049	0.242
190007	5	-0.136	-0.112	-0.077	0.574	-0.574	-0.233
190008	5	-0.136	-0.112	-0.077	-0.110	0.110	-0.917
190009	5	-0.136	-0.112	-0.077	4.397	-4.397	3.589
190010	5	-0.136	-0.112	-0.077	-2.894	2.894	-3.701
190011	5	-0.136	-0.112	-0.077	1.710	-1.710	0.903
190012	5	-0.136	-0.112	-0.077	0.220	-0.220	-0.587
190013	5	-0.136	-0.112	-0.077	-1.336	1.336	-2.143
190014	5	-0.136	-0.112	-0.077	-1.336	1.336	-2.143
190015	5	-0.136	-0.112	-0.077	-0.038	0.038	-0.845
190016	5	-0.136	-0.112	-0.077	2.125	-2.125	1.317
190017	5	-0.136	-0.112	-0.077	3.374	-3.374	2.566
190018	5	-0.136	-0.112	-0.077	-2.966	2.966	-3.773

APPENDIX II

ATTRIBUTES OF NATION

VARIABLE FORMAT
(1955 & 1963)

Columns	Variables	Codes
1- 3	Nation codes (See TABLE 2-1)	
4- 5	Nation identification numbers (See TABLE 2-1)	
7-11	Economic development (Energy consumption per capita)	ECOND
12-19	Power capability	POWER
20-23	Defense expenditure in Mil. US$ *	DEFEX
24-27	Population/physician	PHYSI
28	Bloc membership	BLOC
29	Freedom of group opposition	FMOP
30-32	Density	DENST
33	Constitutive system	CONST
34	Compensated bureaucracy	BURCO
35	Executive accountability	EXEAC
36-38	Percentage of Buddhist population	BUDD
39-41	Percentage of Protestant population	PROT
42-44	Percentage of Mohammedan population	MOHA
45-47	Percentage of Catholic population	CATH
48	Religious groups	RELGR
49-50	Language groups	LANGR
51	Ethnic groups	ETHGR

* Defense expenditure was not included in the analysis due to the high correlation (.97) with power capability measure.

1955 ATTRIBUTES BY NATION

AFG	1	5	72	15	70C10	18CC0	C	0950	01	45
BUR	2	33	1300	74	8412	29111850	12	80	95	33
CAM	3	20	33	19	90C11	25CC09C0	0	18	43	45
CEY	4	87	661	6	5312131111640		19	67	714	25
CHN	5	157	58111833054		87C0	6CCC0256	1	17	43	42
CHT	6	383	3044	105	1521248001220		18	4	183	34
IND	7	114	1727611	401	5712116111		0	01C0	154	14
INS	8	116	77288	352	99C11	55CC0	25	26900	145	24
JAP	9	740	586243	410	1C222411111448		5	C	32	11
KON	10	301	2661	240	1700	79CC0130	0	C	53	11
KOS	11	138	6407	120	672223C111130		44	C	214	11
LAO	12	7	2	1	24012	7CC07C0	13	0	131	53
NEP	13	3	22		2840C11	60CC05C0	0	C	02	32
OUT	14	461	31	16	20C0	11C199C	0	C	01	13
PAK	15	42	29505	172	13022	87111	4	4881	32	64
PHI	16	126	6569	76	12022	74111	2103		418293	81
TAI	17	50	2C91	41	6821	39001941	4	38	43	22
VTN	18	65	1197	44	11000	82C007C0	0	0	373	38
VTS	19	37	552	182	61022	64C007C0	0	01563		34

1963 ATTRIBUTES BY NATION

AFG	1	20	447	13	42510	23CC0	0	0950	01	45
BUR	2	48	2742	102	7511	35001850	12	80	95	33
CAM	3	47	155	45	65010	33CC09C0	0	18	43	45
CEY	4	114	1289	15	40121621111640		19	67	714	25
CHN	5	418125417165500			8CC0	72CC0256	1	17	43	42
CHT	6	573	7846	218	1420325CC0220		18	4	183	34
IND	7	168	3611749	990	3C12151111		0	01C0	154	14
INS	8	111	1114901200		90C11	67CCC	25	26900	145	24
JAP	9	1531	1408512	599	822259111448		5	C	32	11
KON	10	1221	16146	200	9C0	89000130	0	0	53	11
KOS	11	390	28259	158	2821273101130		44	C	214	11
LAO	12	39	14	17	19011	80C07CC	13	0	131	53
NEP	13	5	48	5	70C10	69CC05C0	0	C	02	32
OUT	14	744	76	25	9C0	11C199C	0	0	01	13
PAK	15	79	77104	189	8221104001		4	4881	32	64
PHI	16	190	17435	70	6022101111		2103		418293	81
TAI	17	84	7C24	77	5C20	56001941	4	38	43	22
VTN	18	193	6123	300	99C0112CC07C0		0	0	373	38
VTS	19	61	1435	267	50021	9C0C07C0	0	01563		34

APPENDIX III

MATRICES OF NET-COOPERATION INDEX

The particular form of presentation for these matrices of Net-Cooperation Index needs some clarification. Columns 1-2 show the identification of an actor nation. (This is a symmetric matrix and, therefore, actors and objects are interchangeable.) Columns 4-9 give the range of object nations vis-à-vis a given actor. For example, the value 0.73 in columns 16-19 of the first row for 1955 represents the Net-Cooperation Index between nation #1 (AFG) and nation #2 (BUR). Since this is a symmetric matrix, columns 11-14 of the third row should also have 0.73.

MATRIX OF NET-COOPERATION INDEX (SCALED)-1955

1	1T010	1.00	0.73	0.72	0.73	0.74	0.73	0.80	0.73	0.73	0.72
1	11T019	0.77	0.72	0.72	0.72	0.42	0.73	0.73	0.72	0.72	
2	1T010	0.73	1.00	0.75	0.84	0.79	0.72	0.89	0.80	0.91	0.72
2	11T019	0.78	0.72	0.73	0.73	0.79	0.75	0.78	0.72	0.73	
3	1T010	0.72	0.75	1.00	0.73	0.72	0.72	0.73	0.73	0.77	0.72
3	11T019	0.73	0.75	0.72	0.72	0.73	0.73	0.75	0.72	0.82	
4	1T010	0.73	0.84	0.73	1.00	0.72	0.75	0.93	0.82	0.85	0.72
4	11T019	0.74	0.72	0.73	0.73	0.90	0.78	0.75	0.72	0.73	
5	1T010	0.74	0.79	0.72	0.72	1.00	0.0	0.76	0.76	0.75	0.72
5	11T019	0.69	0.72	0.72	0.72	0.72	0.70	0.70	0.72	0.72	
6	1T010	0.73	0.72	0.72	0.75	0.0	1.00	0.74	0.74	0.91	0.72
6	11T019	0.75	0.72	0.73	0.70	0.77	0.77	0.75	0.72	0.73	
7	1T010	0.80	0.89	0.73	0.93	0.76	0.74	1.00	0.86	1.00	0.72
7	11T019	0.74	0.73	0.77	0.73	0.97	0.85	0.81	0.72	0.74	
8	1T010	0.73	0.80	0.73	0.82	0.76	0.74	0.86	1.00	0.86	0.72
8	11T019	0.74	0.73	0.73	0.73	0.80	0.80	0.80	0.72	0.74	
9	1T010	0.73	0.91	0.77	0.85	0.75	0.91	1.00	0.86	1.00	0.70
9	11T019	0.77	0.73	0.73	0.73	0.94	0.89	0.94	0.72	0.76	
10	1T010	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.70	1.00
10	11T019	0.62	0.72	0.72	0.88	0.72	0.72	0.72	0.72	0.72	
11	1T010	0.77	0.78	0.73	0.74	0.69	0.75	0.74	0.74	0.77	0.62
11	11T019	1.00	0.72	0.72	0.73	0.74	0.74	0.74	0.72	0.73	
12	1T010	0.72	0.72	0.75	0.72	0.72	0.72	0.73	0.73	0.73	0.72
12	11T019	0.72	1.00	0.72	0.72	0.72	0.72	0.82	0.69	0.81	
13	1T010	0.72	0.73	0.72	0.73	0.72	0.73	0.77	0.73	0.73	0.72
13	11T019	0.72	0.72	1.00	0.72	0.73	0.73	0.73	0.72	0.72	
14	1T010	0.72	0.73	0.72	0.73	0.72	0.70	0.73	0.73	0.73	0.88
14	11T019	0.73	0.72	0.72	1.00	0.72	0.72	0.72	0.72	0.73	
15	1T010	0.42	0.79	0.73	0.90	0.72	0.77	0.97	0.80	0.94	0.72
15	11T019	0.74	0.72	0.73	0.72	1.00	0.82	0.79	0.72	0.73	
16	1T010	0.73	0.75	0.73	0.78	0.70	0.77	0.85	0.80	0.89	0.72
16	11T019	0.74	0.72	0.73	0.72	0.82	1.00	0.80	0.72	0.73	
17	1T010	0.73	0.78	0.75	0.75	0.70	0.75	0.81	0.80	0.94	0.72
17	11T019	0.74	0.82	0.73	0.72	0.79	0.80	1.00	0.72	0.75	
18	1T010	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
18	11T019	0.72	0.69	0.72	0.72	0.72	0.72	0.72	1.00	0.65	
19	1T010	0.72	0.73	0.82	0.73	0.72	0.73	0.74	0.74	0.76	0.72
19	11T019	0.73	0.81	0.72	0.73	0.73	0.73	0.75	0.65	1.00	

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MATRIX OF NET-COOPERATION INDEX (SCALED)-1963

1	1T010	1.00	0.52	0.44	0.52	0.47	0.46	0.61	0.52	0.53	0.41
1	11T019	0.46	0.46	0.49	0.46	0.47	0.46	0.52	0.41	0.46	
2	1T010	0.52	1.00	0.48	0.64	0.52	0.50	0.64	0.63	0.71	0.41
2	11T019	0.50	0.53	0.50	0.49	0.65	0.60	0.61	0.44	0.49	
3	1T010	0.44	0.48	1.00	0.42	0.45	0.41	0.48	0.48	0.51	0.44
3	11T019	0.42	0.52	0.41	0.41	0.45	0.45	0.39	0.77	0.40	
4	1T010	0.52	0.64	0.42	1.00	0.55	0.48	0.67	0.57	0.69	0.42
4	11T019	0.51	0.46	0.53	0.50	0.62	0.59	0.59	0.41	0.51	
5	1T010	0.47	0.52	0.45	0.55	1.00	0.0	0.12	0.53	0.51	0.48
5	11T019	0.44	0.47	0.46	0.45	0.56	0.44	0.43	0.48	0.42	
6	1T010	0.46	0.50	0.41	0.48	0.0	1.00	0.50	0.48	0.48	0.41
6	11T019	0.58	0.49	0.46	0.46	0.48	0.58	0.57	0.41	0.60	
7	1T010	0.61	0.64	0.48	0.67	0.12	0.50	1.00	0.61	0.94	0.42
7	11T019	0.53	0.53	0.55	0.50	0.54	0.65	0.61	0.45	0.53	
8	1T010	0.52	0.63	0.48	0.57	0.53	0.48	0.61	1.00	0.73	0.45
8	11T019	0.50	0.46	0.50	0.47	0.58	0.65	0.64	0.45	0.54	
9	1T010	0.53	0.71	0.51	0.69	0.51	0.48	0.94	0.73	1.00	0.42
9	11T019	0.62	0.53	0.53	0.47	0.85	1.00	0.93	0.42	0.64	
10	1T010	0.41	0.41	0.44	0.42	0.48	0.41	0.42	0.45	0.42	1.00
10	11T019	0.42	0.41	0.41	0.45	0.42	0.41	0.41	0.45	0.42	
11	1T010	0.46	0.50	0.42	0.51	0.44	0.58	0.53	0.50	0.62	0.42
11	11T019	1.00	0.46	0.47	0.47	0.52	0.66	0.65	0.41	0.63	
12	1T010	0.46	0.53	0.52	0.46	0.47	0.49	0.53	0.46	0.53	0.41
12	11T019	0.46	1.00	0.54	0.46	0.53	0.53	0.59	0.40	0.51	
13	1T010	0.49	0.50	0.41	0.53	0.46	0.46	0.55	0.50	0.53	0.41
13	11T019	0.47	0.54	1.00	0.49	0.53	0.50	0.47	0.41	0.47	
14	1T010	0.46	0.49	0.41	0.50	0.45	0.46	0.50	0.47	0.47	0.45
14	11T019	0.47	0.46	0.49	1.00	0.46	0.46	0.46	0.41	0.46	
15	1T010	0.47	0.65	0.45	0.62	0.56	0.48	0.54	0.58	0.85	0.42
15	11T019	0.52	0.53	0.53	0.46	1.00	0.61	0.31	0.41	0.51	
16	1T010	0.46	0.60	0.45	0.59	0.44	0.58	0.65	0.65	1.00	0.41
16	11T019	0.66	0.53	0.50	0.46	0.61	1.00	0.66	0.41	0.57	
17	1T010	0.52	0.61	0.39	0.59	0.43	0.57	0.61	0.64	0.93	0.41
17	11T019	0.65	0.59	0.47	0.46	0.31	0.66	1.00	0.41	0.62	
18	1T010	0.41	0.44	0.77	0.41	0.48	0.41	0.45	0.45	0.42	0.45
18	11T019	0.41	0.40	0.41	0.41	0.41	0.41	0.41	1.00	0.34	
19	1T010	0.46	0.49	0.40	0.51	0.42	0.60	0.53	0.54	0.64	0.42
19	11T019	0.63	0.51	0.47	0.46	0.51	0.57	0.62	0.34	1.00	