POLITICAL IMPLICATIONS OF POPULATION DYNAMICS: A CRITICAL ASSESSMENT

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INTRODUCTION

1. While it is generally recognized that excessive population growth places severe strains upon the environment, there is also some reason to believe that population levels and rates of increase may be important elements affecting national power, war and peace, and the nature of social and political organization. This paper will attempt to evaluate existing evidence concerning the political implications of population dynamics, note areas of ambiguity and suggest possible avenues for further research.

I. THE INTERDEPENDENCE OF POPULATION AND POLITICS

2. Many uncertainties remain concerning the precise nature of the population problem in the world today. However, it is clear that the world's population is continuing to grow at an alarming pace, imposing increasing burdens upon available resources. From the historical record, it may be inferred that, at each stage of man's population growth, the resulting reverberations on government have necessitated readjustments and reassessments of governmental procedures. 1/ Although the precise political implications of population dynamics are as yet far from clear, to the extent that the world population continues to grow as projected, further strains on political, social and economic institutions /at all levels/ may be expected. 2/

3. Concern for the political implications of population variables has been expressed by many classical political theorists, but the seeming ability of technology to invalidate the Malthusian dynamic accentuated a general inclination


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to overlook the political implications of demographic problems. Only recently have political analysts turned their attention once more to the effects of added numbers. But the general tendency to date has been either to over-react to the seemingly overwhelming problems associated with population growth, attributing to many of today's social, economic and political ills, or to under-react, by continuing to view politics as an autonomous phenomenon, divorced from its demographic and ecological context. As a result, few studies exist which are addressed specifically to the relationship between population and politics.

Much of the evidence regarding the political implications of population dynamics is still insufficient to provide any conclusive answers. The diversity of views on the population question (including the Malthusian, Marxist, radical and more recent social science perspectives upon the causes and consequences of rapid population growth) render it all the more imperative that the evidence relating population to politics be assessed critically. In the course of such assessments, the conventional bounds of demographic analysis should be broadened.


to take explicit cognizance of the resources and technology of a society, which
place population in a societal perspective, and to highlight important differences
between the implications of population variables in less developed States and
those in advanced industrial societies. In both cases, however, the effects of
population are mediated through a complex network of intervening processes, the
nature of which is not yet well understood. Indeed, population factors often
generate reverberating effects throughout the social system, which are generally
very complex. Furthermore, these effects are often characterized by long time
lags, rarely becoming apparent in the short range. Any analysis must therefore
acknowledge the importance of the time factor by seeking to identify the short
and long-range effects of population and the policies most appropriate to
different time frames.

5. The lack of reliable statistical data concerning demographic structure in
many parts of the world makes assessment of the implications of population
dynamics more difficult. There are also marked ambiguities and inconsistencies
concerning the definition of "optimum" population. The basic question is
"optimum" with respect to what? Since the economic optimum is not necessarily
congruent with the military or political optimum, and since at the level beyond
mere subsistence the optimum is culturally and sociologically defined, it is
especially difficult to employ this notion with any degree of precision for
analysis or for policy planning. 7/

6. The distinction between actual demographic conditions and their political
implications on the one hand, and the perception of these conditions by national
political leaders on the other, is always important. 8/ Identifying the
connexion between the subjective and the objective is a major challenge, but it
would be a mistake to assume a necessary congruence between the two, or that
one invariably leads to the other. 9/ Any relationship between population and
politics will almost surely be complex.

7/ See, for example, Sauvy, A., General Theory of Population (New York:
System", in volume IV of the Report of the Commission on Population Growth and
the American Future, 1972, pp. 25-58; Petersen, W., Population, second edition
(London: MacMillan 1970), pp. 159-162; Singer, S. F., ed., Is There an Optimum
Level of Population? (New York: McGraw-Hill, 1971); David, A. S. and
Chinc-Ju Fuan, "Population Theory and the Concept of Optimum Population",

8/ See Clinton, R. L. and Godwin, R. K., Research in the Politics of
Population (Lexington, Mass.: D. C. Heath and Co., 1972) and Clinton, R. L.,
Population and Politics: New Directions for Political Science Research (Lexington,
for an early statement on the political implications of population dynamics.

9/ For an example, see Daly, H. E., "The Population Question in Northeast
Brazil: Its Economic and Ideological Dimensions", Economic Development and
Cultural Change (vol. 18, No. 4, part I, July 1970), pp. 536-574.

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II. POPULATION AND GOVERNANCE: SOME INSTITUTIONAL IMPLICATIONS

7. A recent survey 10/ of prevailing arguments and assumptions regarding the political implications of population dynamics concluded that:

(a) added population generates demands for increases in housing, education, health services, and so forth;

(b) resource constraints in less developed countries are such that those of the lowest socio-economic status will not be incorporated in governmental attempts to meet rising demands;

(c) governmental institutions may be influenced by population change;

(d) population policy will become an increasingly sensitive issue, particularly in multiethnic communities;

(e) effects upon the labour force of added population could provide a mass base upon which political organizers might draw;

(f) numbers affect a country's political culture and modes of political conduct;

(g) Governments might consciously exploit population as a political issue;

(h) the discourse concerning the development of population policies will invariably become more political than it has to date.

8. The burden of existing evidence suggests that the larger the population, the greater the number and nature of government services needed, but the precise relationship between size and government services is difficult to determine. 11/ All other factors being equal, however, public services are strained once population exceeds a certain threshold in terms of level and rate of changes, although again, the precise nature of this threshold has never been demonstrated persuasively. The most dislocating effects appear to be in cases where rapid changes in population (either through natural increase or migration) place added demands upon governmental services, particularly when the resources available to the polity are not commensurate with the demands generated.


9. Such demands often influence legislative institutions. As increased numbers place added loads on government, performance may be affected, potentially generating citizen alienation. Shifts in the distribution of population also affect the kinds of problems governments face. 12/ Inability to satisfy rising expectations is likely to lead to changes in governmental institutions. How this change comes about or what the new structures will be like, however, is a matter for speculation. A recent study argues that representative institutions may be bypassed altogether. 13/

10. The effects of population change on costs of governance are equally hard to discern. Although rapid and consistently high changes invariably place strains on governmental capabilities - both financial and administrative - it is not plausible to assume a direct proportionate relationship between population increase and increase in governmental costs. 14/ Often, the rate of increase in governmental cost, particularly at the local level, appears to be greater than the corresponding rate of increase in population. This relationship differs according to the types and extent of services provided to the community, the financial resources available to government and prevailing levels of knowledge and skills in the society.

11. Some efforts have been made to evaluate the financial costs of added population, 15/ the effects of population upon education, 16/ and the effects of added population upon economic performance and political development. 17/ Yet similar calculations do not yet exist for the implications of rapid increases in numbers - or changes in their composition or distribution - upon governmental services or upon economic sectors.


17/ Weiner, M., op. cit.
III. POPULATION SIZE AND NATIONAL POWER

12. Political analysts generally argue that population size is a relevant factor in a nation's over-all power calculus, but there is, again, little empirical evidence indicating precisely how the size of the population adds to or detracts from its over-all capabilities, economic or military. Those who argue for the simple number-power proposition do so on four grounds. The larger a society's human resources, the greater is the possibility of increasing its effective labour force, the larger the size of the military force, the greater are the probabilities that numbers will generate sentiments of nationalism and national cohesion, and the greater are development possibilities, particularly if economies of scale prevail. On face value all four arguments appear plausible, but they are fraught with logical and empirical inconsistencies. The fact that an increase in numbers may be channelled into the labour force, or the military, or result in economies of scale, or generate sentiments of national cohesion does not assure that this will occur. Other conditions must be present before such outcomes materialize. That international recognition is often accorded on a size principle simply adds to the complexities involved. There are also some obvious trade-offs between size as an asset and size as a liability, and between size as a constraint to economic development and size as a determinant of military capability. Since nations often increase their territory primarily through conquest, it may even be difficult to distinguish between size as a cause of power and size as its consequence.

13. In addition, the importance of such variables as national cohesion, technological capability, military effectiveness, the capacity to absorb military casualties and the development of human resources all condition the extent to which sheer size is critical. Trade-off calculations are invariably complex, leading to alternative solutions: it is not possible to assign a simple numerical value to population size so as to quantify power in social, economic and political terms. No one has yet devised a way of measuring power or power relations empirically. From a purely statistical point of view, however, population size does feature prominently as an indicator of national power in two ways: first, the size variable loads strongly on the power dimension in factor analysis; secondly, size tends to correlate positively and significantly with other measures of capability.


14. Once technology is entered in the power calculus, any simple relation between population and power disappears. Technological advances have revolutionized the conduct of warfare and the expectations of the parties during the course of violence. The fact that technology can be imported and substantial changes in capability brought about in short order makes technology more critical than size in any power assessment, but also makes such calculations far more volatile. However, the advent of nuclear weapons has added a new dimension to the size factor; placing at risk population centres has become perhaps as valuable as placing at risk the opponent's men under arms. In these terms, population size again assumes military importance.

15. Differentials in population size and rate of change, in conjunction with differences in levels and growth rates of technology and resources, impose a particularly volatile element on international relations. In the margin, size is important, but it is primarily in cases where States have approximately equal resources and technological capabilities that absolute numbers make a critical difference.

IV. POPULATION DYNAMICS, POLITICAL INSTABILITY AND INTERNAL VIOLENCE

16. The sources of internal instability and violence are numerous and varied. Several attempts have been made to identify empirically the factors that increase propensities for internal conflict. Political scientists generally view a government's inability to meet demands as an important source of political unrest. However, there is as yet no empirical evidence of a direct, statistically significant relationship between population variables and internal political instability. The weight of the systematic and cross-national evidence is, in fact, contrary to any inference that population pressures, or density, or the rate of population growth have any direct bearing upon internal instability or domestic violence. Many areas of the world that have a high population density, and many areas that are conventionally thought of as high pressure regions, do not exhibit marked tendencies for political instability, while many areas with roughly


stable populations are quite unstable. Individual case studies where the relationship holds are not enough to prove a general law. However, population variables do tend to be part of the conflict-generating dynamics in societies which already exhibit high stress and strain 23/ and where population changes aggravate existing tendencies for internal conflict. Since much of this evidence, is based on a cross-national study of 84 contemporary nations for 1950-1960 and 1961-1965, the modest role of population variables in contributing to internal violence might be attributed to the time frame in question, to the aggregation of nations at such a high level, or to a focus upon cross-national analysis. 24/ Closer, more detailed, regional or national analyses might shed further light on these findings, particularly in cases where prima facie evidence suggests possible linkages from population to internal violence. The intervening linkages, however, are still to be determined.

17. On balance, therefore, the implications of population change for domestic instability and violence appear to be highly dependent upon the resources of a society and its ability to accommodate to new demands. It is also contingent upon the levels of knowledge and skills, the prevailing levels of technology and the nature of the political system. A politicized population makes greater demands upon its government than one that is less so, with possibly destabilizing consequences.

V. POPULATION DISTRIBUTION: SOME CONSEQUENCES OF DENSITY AND PRESSURE

18. Aside from simplistic inferences regarding the connexion between concentration (internal density or pressure) on the one hand and violence on the other, the existing evidence, again, points more to inconsistencies of inference than to many sound conclusions. Studies of animal behaviour suggest that drastic shifts within the social hierarchy in social habits and in patterns of interaction may result from increased density and/or pressure, and that conflict, aggression and overt violence are more prevalent under conditions of increased crowding. Further, these show that the greater the density the more likely it is that outward expansion will take place. 25/ However, evidence from the study of human societies

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is, although suggestive, as yet inconclusive. A recent analysis of Chicago
neighbourhoods indicates that rates of social pathologies (such as mental
illness, mortality and delinquency) appear to be associated with population
density, 26/ but severe problems in measurement require that any inferences be
made with caution. There are some arguments that high density with low resources
and low technology is invariably destabilizing, but this has been challenged.
Similar doubts exist concerning any direct link between population density and
international violence. 27/ None the less, in areas where populations place demands
on their environments and where resources and technology are relatively unavailable,
the propensities for conflict are certainly enhanced.

19. The elusive consideration of "felt" pressure has been raised by some scholars
to explain the link between density (in spatial terms) or pressure (in terms of
resources) and conflict behaviour. The arguments run as follows. In situations
where the leadership or the politicized public perceives that pressures may be
reduced through political action, this perception becomes critical in its own
right, and empirical realities pale. Indeed, the social science literature abounds
with debates regarding the importance of absolute deprivations, relative
deprivations, rising expectations, lowered expectations and so forth, in terms
of political implications and propensities for conflict and violence. 28/ The
relation of perceptions to realities is particularly elusive and there is no clear
indication of the conditions under which felt pressures propel States toward
conflictual behaviour in contrast to those situations in which actual pressures
of numbers in relation to resources constitute the major determinants.

20. There is, however, some cross-national evidence which indicates that actual
pressures are consistently related to both internal turmoil and measures of
domestic rebellion and that pressure upon resources is positively related to
internal conflict. Societies with high dependency ratios - large numbers of
unproductive youth - are also the most unstable, but this may in large part be a
spurious relationship, both factors being positively correlated with economic
development. 29/

Pathology: What are the Relations for Man?" Science (vol. 176, 7 April 1972),
pp. 23-30, and Freedman, J. L., Klevansky, S. and Ehrlich, P. R., "The Effect of
Crowding on Human Task Performance", Journal of Applied Social Psychology
(vol. 1, No. 1, 1971), pp. 7-25.

27/ Bremer, S., Singer, J. D. and Luterbacher, U., "Crowding and Combat in
Animal and Human Societies: The European Nations, 1816-1965" (The University

28/ See, for example, Gurr, T. R., "Urban Disorder: Perspectives from the
Comparative Study of Civil Strife", American Behavioural Scientist (vol. II, No. 4,
March-April 1966).

21. In sum, although population density and population pressure do not appear to be direct contributors to violence at the international level, population pressure does emerge as an important determinant of internal violence. The evidence is still too general to allow for inferences with respect to any specific nation, but broad patterns are discernible. 30/

VI. POPULATION MOVEMENT: SOME CONSEQUENCES OF MIGRATION

22. The political implications of population movement have been given comparatively little attention to date. Historically, conflict between populations has generally been over land resources and the redistribution of territorial rights. Hence, when the movement of population across national boundaries violates established views on rights and territoriality, migration becomes a variable of significant political importance. There are also political implications of movements from rural to urban areas, interurban migration and nomadic movements or migrations to the proverbial frontier, 31/ but these have not been systematically examined.

23. The search for universally valid generalizations concerning the conditions and consequences of population movements has to date produced only marginal returns, as much of the data is situation specific and time bound, and there has been no effort systematically to compare the findings of diverse migration studies. However, this partial evidence does suggest that it is by changing the demographic profile of both host and source community that migration assumes political importance. 32/ A lack of systematic data on who migrates, why, and with what effect further hinders the clarification of these issues. The absence of a comprehensive theory of migration which takes into account the conditions of both the host community and the community of origin, the characteristics of the migrants and the alternative potential consequences, makes it difficult to evaluate the disparate evidence in more than general terms. In addition, the consequences of migration for the receiving community have been given greater attention than the consequences for the community of origin.

30/ There are many studies examining the economic implications of population pressures, but rarely are the political consequences rendered explicit. One study in Africa is particularly worthy of note: Dow, Jr., T. E., "Population Pressure in Tropical Africa", Current History (vol. 60, March 1971) pp. 136-141. The author indicates the ways in which an area that has not commonly been viewed as having a population problem appears to have a very serious one indeed.


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24. As the general tendency is for population movements to occur from less developed to more developed regions, an influx of less skilled, less affluent migrants into a community clearly can act to intensify demands for governmental services. This migration may occur both within a country and across national boundaries, and may be either temporary or permanent.

25. Rapid urban growth is a characteristic which distinguishes among nations experiencing turmoil and, specifically, between nations experiencing rebellion in Latin America, and between nations with turmoil in Afro-Asia. A quantitative cross-national study indicates that it appears to have a moderately positive, although not statistically significant correlation with measures of internal turmoil and rebellion. These relationships are consistent, but they are not strong: nor is a causal relation established. The sheer number of newly-urbanized individuals does not in itself contribute to the propensity for domestic violence. It is therefore important to look more closely at the evidence concerning the processes by which the movement of population to cities (as the major form of increased urbanization) results in political conflict.

26. Political scientists who are concerned with urbanization have long believed that rapid movement to the cities results in economic frustration among the migrant population, that difficulties in adjusting to urban conditions lead to an increased awareness of the role of government and to radical politicization among the migrants, and that in the case of the urban poor this politicization results in an opposition to the political system. Urbanization theorists argue that such non-supportive attitudes tend to be translated into behaviour that results in political instability, but the validity of these theories is being increasingly questioned. 34/

27. Recent studies of population movement among the urban poor in Latin America suggest that the city is not necessarily a radicalizing influence, that there appear to be no differences among migrants and non-migrants on indices of social conditions, political attitudes or behaviour patterns and that there is no evidence that migrants in Latin America provide an invariable radical base from which political instability results. 35/


28. It also appears that the demands made upon governments by the migrants tend to be for primary services and that these are not translated into broader social and economic demands for such things as education or employment opportunities. Political support for the régime by the migrants is thus best predicted by their access to these basic services. Delivering such services amounts to an important pre-condition for their absorption into the urban community. In addition, when migrants succeed economically relative to the local population, an indigenous reaction may set in and the local population may employ political methods for opposing the migrants.

29. Urbanization as such tends to reinforce ethnic divisions and such divisions hinder the development of political participation and orderly political process. These divisions also result in the "fragmentation" of the social order by strengthening the differences between migrant and native. It has also been suggested, however, that in the short run the growth of cities dampens propensities for violence rather than increasing them. But this evidence is sketchy and time bound.

30. The political implications of international migration are more readily discernible, in that great cultural and political clashes have resulted from the large-scale movement of populations across national boundaries. Often, however, international migration results in violent conflict. Countless examples of this phenomenon - most notably in the Middle East, South-East Asia, and the South Asian subcontinent - point to the inherently destabilizing consequences of large-scale population movements. This situation is accentuated when political boundaries do not coincide with ethnic boundaries - as is often the case in many areas of the world.


31. So, too, many local conflicts can be attributed to gradual (but sometimes also drastic) changes in the composition and size of the population due to movements. One study indicates a positive correlation exists between political violence and the percentage of refugees. \(^40\) Although there are no statistical analyses of these relationships, a series of case studies of small conflict indicates that migration (forced or otherwise) appears to be an important determinant of overt violence. \(^41\)

VII. POLITICAL IMPLICATIONS OF POPULATION COMPOSITION

32. Population composition (age structure, socio-economic status, racial, ethnic and religious differences) often generates consequences with highly political implications but, again, few attempts have been made to identify their separate effects. Although some scholars maintain that a youthful population provides some advantages in military terms which are not accorded to an older population, the composition of population by itself, as is the case for size, bears little upon over-all national power.

33. Age structure is also conventionally regarded as a factor in generating internal conflict. With due qualifications, the direct link is indeed substantiated. The higher the proportion of youthful population, and the greater its unemployment, the greater are the probabilities of dissatisfaction, instability and violence. A youthful population also places added strains upon the social services, while not contributing substantially to national production. There is circumstantial evidence which indicates that a youthful population amounts to a contributing factor in many political and revolutionary movements.

34. A high proportion of youths in a population may tend to strain the mechanisms for socialization in societies, particularly when resources are inadequate to cope with large numbers being inducted into the social order, resulting in alienation which may become transformed into active opposition to the political system. There are some long time delays involved, but strains may accumulate in society which contribute to eventual systemic change or over-all institutional transformations (again, the intervening sequence is difficult to establish).

35. It is commonly asserted that the more homogeneous a society is, the more stable it is likely to be, and the greater its capacities are for collective action. Political analysts tend to agree that political instability and violence are more likely to occur in situations where the cleavages in a society are reinforcing rather than cross-cutting; for example, where religious differences coincide with ethnic divisions, the propensities for political instability and violence are greater than when these characteristics are more randomly distributed. \(^42\) The studies on migration noted above tend to reinforce these


inferences and there are numerous illustrations of such situations. For example, students of Indian politics have long argued that one of the reasons for the seeming stability of the democratic process in India is that the lines of cleavage in society are cross-cutting. In Pakistan, by contrast, socio-economic and political cleavages were mutually reinforcing, thus contributing to the intensification of hostilities and eventually to violence.

36. Population composition may also provide important constraints upon which the political order is shaped. 43/ The act of census-taking assumes political proportions where the political order is based upon recognized cleavages in the society and where any significant changes in relative populations might result in demands for similar adjustment in the political process. The case of Lebanon, where the census amounts to a major political issue, is illustrative of such considerations.

37. A recent study of the political implications of population composition in South Asia notes that the complex and asymmetrical character of the area's ethnic map holds important consequences for war and peace. Each State in South Asia contains a number of ethnic groups which generally have a high cultural and political consciousness. Often, these ethnic divisions do not coincide with the political boundaries and the resulting strategic considerations become important parameters for conflict in the area. 44/ The manipulation of ethnic groups for political purposes is not uncommon in this area - or in other parts of the world - but there exists as yet no comprehensive study of the alternative political implications of ethnic divisions in conflict situations. Beyond these generalizations, however, there is little evidence concerning the precise political implications of population composition. To date the overwhelming focus has been on the implications of numbers - their composition or their distribution still remains relatively unexamined.

VIII. FROM POPULATION TO WAR: TOWARD SOME CAUSAL LINKAGES 45/

38. Although it is frequently argued that rapid population growth is a major cause of international instability and violence, the simple proposition that increased population results in international violence cannot be seriously entertained. From the available evidence it must be inferred that population dynamics do not appear to be direct causes of violent conflict either within or

43/ For one illustration of the political implications of a heterogeneous population in terms of "in group-out group" propositions, see Gutkind, P. C. W., "Accommodation and Conflict in an African Pre-Urban Area", *Anthropologica* (vol. IV, No. 1, 1962), pp. 164-173. There are many such studies.

44/ Conor, W., "Ethnology and the Peace of South Asia", *World Politics* (vol. 22, Spring 1969), pp. 51-86.

45/ This section is adapted from the author's previous research.
between nations. 46/ The critical elements in any population/violence calculus might involve less population variables per se than the ways in which population combines with other factors to produce conflict. What those factors are, and how they interrelate, is an area of inquiry which remains to be clarified.

39. In this context, the population variable must be viewed in three ways: as a parameter of a conflict situation, in the sense that it amounts to one of the characteristics which defines the antagonists; as a variable, in that changes in population produce commensurate (or disproportionate - as the case may be) changes in the situation at hand; or as a multiplier, in the sense that population characteristics may intensify existing cleavages and problems and render a situation less tolerable than might otherwise be the case. For purposes of analytical clarity, it is important to distinguish among these roles which population variables may assume.

40. A dynamic process linking population to war can be abstracted from the classical works on war and from recent empirical analyses. 47/ First, there are internal consequences of added population: pressures on resources, dissatisfactions, unrest, lowered standards of living, relative deprivations and so forth. Secondly, there are the factors which allow internal dissatisfactions to be translated into behavioural terms. These can be thought of as facilitators in terms of technological capability, military effectiveness, manpower, labour and so forth. Thirdly, there are those processes that relate States to each other and initiate dynamics that assume international characteristics. Such processes would be commercial rivalries, expansions, conquests and the like. Fourthly, there are factors which involve a comparative calculus on the part of at least one of the parties: i.e., differentials in capabilities, differentials in standards of living, differentials in population size and so forth. Fifthly, there are those international structural effects which are occasioned by international dynamics in conjunction with external relations: changes in power relations, redistributions of capabilities, changes in international alignments, and the like. Sixthly, there are the explicit implications for conflict of these factors, in terms of provocation of one party by another, overt conflict and then armed violence.

41. In sum, population effects are mediated through a series of intervening linkages and the initial conditions embedding population in the internal demographic, economic and political profile of a nation become an important set of variables in this complex process. 48/


47/ These observations are based on Choucri, N., op. cit., (1973), pp. 135-140.

48/ A quantitative study of the origins of the First World War provides some support and illustration for these observations. See Choucri, N. and North, F. C., Nations in Conflict. Population, Lateral Pressure and War.
42. To these empirical realities must be added the perceptual factors which place a great element of uncertainty in this calculus. Perceptions of pressures, of differentials, of competitions, of change in the balance of power and so forth might not be congruent with actual situations. Feelings may assume a reality of their own. Unfortunately, little evidence exists concerning the ways in which population variables are perceived in different conflict situations, or how demographic considerations enter the military and strategic calculus of nations.

43. Reversing the causal sequence, some studies have been concerned with the effects of population upon the termination of war. An analysis of several wars indicated no evidence to support the general hypothesis of a fixed relationship between average casualties lost in battle and total population losses in wars; however, nations tend to try to surrender before they suffer population losses from about 3 to 6 per cent. 49/ Population thus amounts to an ultimate constraint upon national behaviour and the conduct of war. 50/ Population variables are therefore important in defining the parameters of permissible behaviour - what can and cannot be done under different circumstances - and these parameters are shaped as much by demographic conditions as by resource and technological ones. 51/ The greatest instabilities and propensities for war are to be found in situations where population pressures (or density, or overpopulation in relation to some particular referent) upon resource needs converge with the availability of military and other technologies to transform needs, demands and dissatisfactions into overt conflict and violence.

IX. CONCLUSION: SOME POLITICAL CONSEQUENCES OF POPULATION DYNAMICS

44. The foregoing observations have pointed to some evidence - sometimes contradictory and always partial - concerning the relationship between population and politics. Several conclusions emerge:


50/ See also Three Studies on War in Peace Reviews; and Rosen, S., "War Power and Willingness to Suffer", in Russett, op. cit., pp. 167-184.

(a) The political implications of population variables in any situation depend upon the resources of a society and its level of technology, knowledge and skills. Different populations made different demands upon their environment with differing consequences. 52/

(b) Rapid population growth invariably places added loads on governmental capabilities and upon services performed and increases the cost of governance.

(c) Population pressures tend to intensify existing strains and stresses in society. Although there appears to be some direct relationship between population change and political instability, neither urbanization alone, nor crowding in cities, necessarily increases propensities for violence.

(d) Population composition often shapes the nature of the political process if the distribution of political privileges, rights and obligations is done according to attributable criteria, such as religion, race, or ethnic group.

(e) A youthful population tends to strain the socialization mechanisms in society, particularly when resources are inadequate to cope with large numbers being inducted into the social order, often resulting in domestic conflict.

(f) Despite changing technology (and the importance of knowledge and skills), population size remains an important element in military calculations and therefore an ultimate factor in the ability to wage war.

(g) Internal migration does not necessarily lead to overt violence. By contrast, many international conflicts can be attributed to population movements across national boundaries.

(h) In some cases, population variables provide the roots of conflict, in others they provide the context within which ongoing conflicts become routinized or take on new dimensions. Without explicit recognition of the demographic basis of a political conflict, imposed solutions may be of short duration.

V. POLICY QUESTIONS AND RECOMMENDATIONS FOR RESEARCH

45. In view of the inadequacies of the work undertaken to date, future research on population, politics and public policy should try to meet the following criteria: first, such research should be cross national; secondly, it ought to be conducted

over time, adopting a longitudinal perspective; thirdly, it must be scientific, that is, capable of falsification, replication and meeting acknowledged tenets of social science inquiry: fourthly, such research must be policy relevant, by identifying the manipulables in the social order, the costs of manipulation and the tools for implementing public policies; fifthly, it must be data based, drawing upon existing files and developing novel observations when the required data are not available; and sixthly, the results must be communicable and amenable to evaluation and critical assessment.

46. Among the substantive issues to be examined in concerted and systematic fashion are the following:

(a) an assessment of cost of added population in terms of actual loads upon governmental capabilities and social services;

(b) an identification or the intervening factors, processes or sequences between population variables and negative social and political consequences, such as crime, conflict, violence and social disruption;

(c) a systematic monitoring of migratory trends in terms of who migrates, why, where, and with what consequences upon the place of origin and the place of destination;

(d) a clarification of the process by which population movement takes place, in terms of opportunities, pressures or restrictions;

(e) an evaluation in cross-national context of how societies at different levels of socio-economic development are affected by added population;

(f) an identification of the different social policies which (implicitly or explicitly) affect population characteristics in different societies and an evaluation of potential inconsistencies among such policies;

(g) an assessment of the political and administrative requirements for the development of effective means of influencing the population characteristics in different societies. 53/

(h) an evaluation of the effects of population variables upon political development;

(i) an identification of the effects of alternative population policies upon different sectors of society;

(j) a clarification of the types of systematic data and information needed to determine the extent to which different societies would be receptive to governmental policies designed explicitly to effect population characteristics.

47. Some critical imperatives for research purposes include long- and short-range studies and studies that reveal the long run implications of decisions made in the short run. Simple projective techniques are no longer adequate for the analysis of complex social systems.

48. Some of these questions can best be undertaken by the United Nations, and others by governmental or private institutions. In terms of the criteria cited above, the United Nations is best suited to engage in investigations which assume a global perspective, draw upon United Nations data files, and are policy relevant by having direct bearing upon international policies toward population. Co-operation among national and international institutions is essential in the area of data collection and compilation and in the assessment of the results of research.

49. Another set of important data, which international organizations may provide, pertains to the ways in which governments and national leaders perceive the demographic situation in their countries, their assessment of their own problems and their perspectives upon alternative approaches. A similarly critical consideration involves determining the degree of congruence between perceptions of the situation and the actual situation - as reflected in population trends and population structure. A third imperative involves an assessment of the extent to which existing national institutions and international agencies are appropriate for responding to problems generated by population trends.

50. The most important role for international organizations in this regard pertains to their clearing-house function. Translating scientific research results into an operational context amounts to a major challenge, a task that research groups in international organizations can serve better than any national or trans-national institution.

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54/ There are, to date, almost no systematic attempts to evaluate the adaptive and problem-solving capabilities of political systems. This is an area in which research is needed over and above the orthodox literature in Comparative Politics as exemplified by Almond and Powell, Comparative Politics: an developmental approach (Boston: Little, Brown, 1966).