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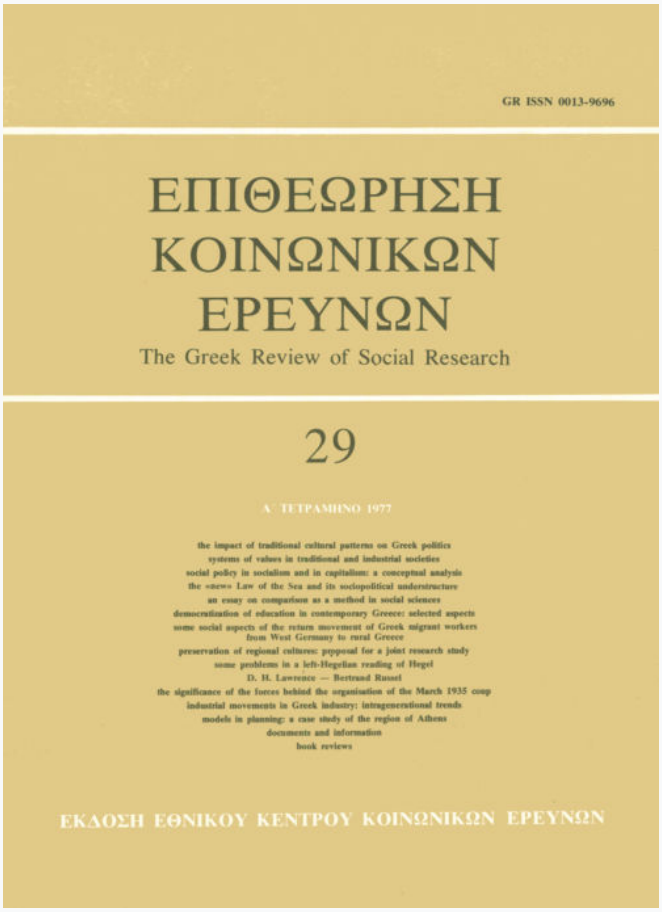

An essay on comparison as a method in social sciences

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an essay on comparison as a method in social sciences*

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I intend, in this paper, to discuss shortly the fundamentals of the concept «comparative research» within a crosscultural frame. I will use, where necessary, examples and paradigms from economics without claiming to deal with comparative research in economics itself.

I. comparison and scientific research

Let us pose the fundamental question at first: why do we compare? It could be argued that comparison is the fundamental function of scientific research. Logic in this sense can be deduced to comparison. But I will not discuss this point of philosophy or psychology here. Let us take the more superficial meaning of «comparison» with which we are concerned here, that is comparison as an element of scientific research. The question is closely related to the scope and consequently to the reason of scientific research. According to one definition, scientific research aims at revealing «laws», i.e. relations obeying some regularity as long as the same conditions are fulfilled, in order to explain phenomena and in order to be able to predict them. In this sense scientific research begins with observation of the surrounding world, of phenomena, and tries in a following step to classify them by applying different criteria. This process of classification implies actual comparison.

The next question one must pose should be why the need to reveal «laws». There are some who argue that scientific research is connected to natural curiosity of man as a finite being. This is the concept of an «ivory-tower science», which has existed, at times in history, which has become, however, marginal in modern times. A closer examination of scientific research through history reveals unequivocally, I think, a practical orientation of scientific research. Observing the world around us in order to detect regularities, i.e. laws, we see that it has been connected with some practical aim. The first scientist in this sense was the primitive cave man who «discovered» fire and how to make it. In this sense it is irrelevant to my view whether he connected fire to some supernatural power with magic, etc. The primitive man, thus, moved along the same steps as the modern scientist who observes phenomena in order to reveal «laws» for the sake of predicting phenomena which means that in this case one can either use the phenomena for some practical purpose or draw the respective conclusions thereof for practical action and attitude. I would argue, in any case, that in our times science is being carried through on the criterion of practicability, i.e. on the basis

of the applicability of scientific research for some definite practical purpose. This is more or less unequivocal, I think, in the case of natural science and also with social sciences. The criterion of practicability is evident even in the case of purely theoretical research in an indirect way, i.e. in the sense of the repercussions this abstract research has on the method with which more practically orientated research is being carried through.[1] In this sense scientific research has become political, using the term at first in its Aristotelian meaning. Through the increased socialization of scientific research science has acquired a polito-economic meaning as well.[2] It has developed to an instrument of perpetuating power structures and socio-economic relations. I would formulate my conclusion at this stage of my argument in the following two statements:

Statement one: the definition of science is a historical one, i.e. the scope and reason of scientific research are defined by the existing historical —read social and economic, political in general—conditions.

Statement two: every scientific research in our time is either useless or of political relevance (the term «political» being defined as above).

II. comparison in social research

Having discussed shortly «comparison» in respect to scientific research in general as well as the frame in which the latter functions, we should make, I think, the step towards specifying the subject we are concerned with in this paper: comparative social research. I think that «comparative science» as such creates more problems than it intends to solve. *It must become clear that comparative science is in this case a method and it has been used as such so far.* But a method is useless if it is not defined in regard to its scope, its value as a tool of scientific research.

Science claims in general to be universal in regard to method and in regard to conclusions. Social science has manifested in the afterwar period gradually a feeling of relativity not only in regard to its conclusions which are conditioned by historical factors. The methodology itself has been partly challenged in relation to its applicability in different polito-economic and cultural environments.[3]

Considering the genesis of social sciences it becomes apparent that every social science began as a «national» science; the concrete phenomena observed in the socio-cultural and political system in which they were living led the great founders of these sciences to some conclusions, which they tended to generalize. In the case of economics Adam Smith, Ricardo, John Stuart Mill, Friedrich List, Jean Baptiste Say—to name only a few—departed from the economic phenomena observed in their respective countries and detected the «eternal» laws governing economic activity.[4] Even Marx, in his analysis of the capitalist system, departed from the situation as it existed and developed in England. The appearance of the Historical School with Wagner, Sombart, Melgert and the other famous representatives of this school was a reaction to the method applied. In a sense this was a challenge of the universal validity of results acquired on the grounds of a special method of reasoning under special conditions.[5]

This initially «national» character of social sciences in regard to their genesis takes a particular meaning in respect to comparison as a process of analysing phenomena and its methodology. For comparison is actually bi-dimensional, one can compare in time (or through time) or in space. Does the same phenomenon, taken at different points in time, retain its character, remain the same? In a finite world, I think, we have to face here an apparent problem since the difference in time of a phenomenon is not a difference of time in itself but of different (or similar) conditions at two different points in time. In this case—let us

1. Take the example of the statistician who works on statistical methods on purely theoretical grounds. His results may be primarily of interest only for statisticians, but the results of his research are relevant for the methodology applied in empirical research. The case of the theoretical economist working on some model is most clear. He postulates the assumptions of his research implicitly or explicitly out of a real world with given political and social structures. Therefore, his results, which finally claim to be «purely» theoretical, are in reality politically and socially conditioned. A most eloquent example is the «pure theory of international trade» which finally ends in being a legitimization of the historically developed impact of rich over poor nations.

2. Compare in this context the foreword of Friedrich Edding in B. Dieckmann's book *Zur Strategie des systematischen internationalen Vergleichs*, Stuttgart 1970, also Dieckmann himself, *loc. cit.*, p. 19 f. Also D. Berstecher, *Zur Theorie und Technik des internationalen Vergleichs*, Stuttgart 1970, p.34.

3. See the discussion of the problems arising in connection with empirical survey research in F. W. Frey, «Cross-Cultural Survey Research in Political Science», in R. T. Holt – J. E. Turner (eds), *The Methodology of Comparative Research*, New York 1970, pp.173 ff, E. K. Scheuch, «The Cross-Cultural Use of Sample Surveys: Problems of Comparability», in S. Rokkan (ed), *Comparative Research across Cultures and Nations*, Paris – The Hague, 1968, pp.176 ff, also R. E. Mitchell, *Survey Materials Collected in the Developing Countries: Obstacles to Comparisons, op. cit.*, pp.210 ff, R. L. Merritt, *Systematic Approaches to Comparative Politics*, Chicago 1971, pp. 140 ff, finally, S. Rokkan,-S. Verba-J. Viet-E. Almasy, *Comparative Survey Analysis*, The Hague-Paris, 1969.

4. See Berstecher, *op. cit.*, pp.16-18.

5. Compare also the case of political science and sociology, in Berstecher, *op. cit.*, pp.18 ff, Merritt, *op. cit.*, pp.4 ff.

call it the *time* of *historical comparison*, time being the dimension of conditions conceived of in a historical process. In the case of comparison in space we have a phenomenon observable at the same time under different conditions. Let us call this case *space-historical*. In reality, in both cases we deal with the same situation, i.e. we consider different conditions irrespective of whether they are due to time or space. Time and space thus give the historical dimension of the phenomena but I doubt whether they have a direct influence on the substance of the phenomena. In other words similarity or difference of two phenomena is the same thing with similarity or difference of the respective conditions underlying the phenomena. Even the third case—let us call it *the mixed-historical* one—where we compare simultaneously through time at different points in space, does not differ from the first two cases. It is again a question of conditions, a question of the reproducibility of historical conditions.

Here, I am actually posing the question *of comparison as a method;* which is posing the question, why compare at all. But before dealing with this question it is fundamental to deal with the preliminary questions of, first, *what* is it *that one compares* and second *whether* one can compare or *how* one compares. The latter question is posed here not in the initial sense of logic mentioned at the beginning of this paper, but in the meaning of comparison as a method.

What do we compare actually in social research? Is it phenomena that we compare, i.e. processes understood as the interaction of causes and effects? Or, do we compare attitudes, where again we should specify whether we compare attitudes of individuals, groups, nations or cultures? Or do we compare situations, i.e. the end-effect of an interaction of causes? Perhaps one would argue that these questions are irrelevant as the process of comparison is to find out the similarity of two things by specifying their characteristics (in the case of people, or situations) or the conditions under which they have been developed and exist (in the case of situations or attitudes) or their form (in the case of phenomena). In comparing two things one tries as known to find out how far two things are equal. But the question is when are two things equal? And since history does not repeat itself at least in form but is characterised by phantasy even when it repeats itself, to what extent can two things be unequal and still be considered nevertheless as equal?

Consider, for example, phenomenon A defined as A (a_1,b_1, c_1, d_1), in which case the letters a,b,c and d denote its characteristics or conditions and the suffix 1 the definition of the phenomenon in time. Suppose that we compare phenomenon A with phenomenon B at a different point in time (denoted by suffix 2) defined as B (a_2, b_2, c_2). Condition d is missing. How far can A and B be considered as equal? Consider furthermore that from a quantitative point of view *the similarity between A and B is greater, the greater the number of the characteristics or conditions defining both phenomena and the less the difference in characteristics or conditions between A and B are*. But how far is this relation influenced by qualitative aspects? How unimportant is condition d in the above example that one can say A and B are equal? Is this a problem to be decided upon according to the specific case every time? And if it is so, how far we accept, a priori, a bias in defining two phenomena and bringing them together depending on the subjective judgement of the scientist? I would proceed further and argue that if case d is valued by two scientists observing the same situation quite differently, you arrive at two contradictory statements; one for which d is unimportant saying that A and B are equal, and the other for which d is important, saying that A and B are not equal. I do not need to underline the doubtfulness as regards the validity of both statements, furthermore their political implications as defined above.

But there is a more fundamental problem in regard to comparison. When one compares, one does not compare at random. One compares two things which by observation have some similarity; in other words two things which are comparable, otherwise comparison as a method is devoid of any meaning. When Przeworski and Teune argue that the answer to the question of comparability between «apples and oranges» is that «they are fruits»,[1] they miss the point, if we understand «comparison» as we do in this context, as a scientific method and not as a means for detecting criteria for reasons of classification from the point of view of formal logic. From this point of view of thè question such an approach is nonsensical, as everything is then comparable. But comparison as a method implies implicitly that one aims at finding similarities and equality between two things. This is the fundamental logic of comparison as a method. *I would argue that comparison as a method implies the comparability of two things, and that it aims at testifying equality between them or proving their inequality*. In terms of the example used above plain observation testifies that a number of characteristics a, b, c, etc., are common in both phenomena A and B. What

1. See A. Przeworski-H. Teune, *The Logic of Comparative Social Inquiry*, N. York-London-Toronto-Sydney 1970, p.10, also p.86 f.

is unknown is to what extent they exist in both definitions so that no statement can be expressed a priori as to A and B being equal or unequal. But there exist some grounds pointing to the equality of A and B and, therefore, to their comparability.

We have come by this to a very crucial question regarding comparison as a method. Does the comparability of two objects arise out of factual characteristics or is it simply a definitional question? There is a vicious circle here. If one accepts the first theory then one faces the problems of how one detects the factual characteristics as the process of testifying them implies aforehead their definition as the logically preceding step. If one accepts the second theory then the danger of bias is inherent as the existence of characteristics becomes relative, it becomes a matter of definition. Przeworski and Teune argue that «social phenomena do not have a property of 'being comparable' or 'not comparable'» and that «'comparability' depends upon the level of generality of the language that is applied to express observations». In other words, it is a matter of «measuring» phenomena.[1] To take a similar example to the «apples and oranges» from economics. The investment-quota to social product in an economy and money-circulation have one property in common, that they are both economic concepts as apples and oranges are both fruits. But it does not make any sense to compare both of them directly. It makes sense to compare them each in itself at different points in time or at least in different countries.

The question raised here goes of course beyond the scope of this paper as it refers to the general problem of conceptualizing reality. I do not intend to discuss this problem here to a great extent. *I would like only* to emphasize the magnitude of the problems we are faced with in discussing the question of comparison as a method. It *must also be pointed out here how far* the *object* of comparison *itself affects comparability*. In the field of social sciences phenomena have been conceptualized in general. Concepts like elite, state, power, peace, freedom express more or less notions, subjects, that do not exist in the sense that they are open to physical observation. They are definitions of attitudes, situations, relations, of different contents at points of time. In this aspect I claim that there can not be an objective basis of comparison in factual terms. This is possible only so far as unconscious processes of perceiving reality are concerned, that is so far as plain everyday observation is concerned. Scientific research and scientific comparison begin with defining reality by conceptualizing reality, in which case a bias is involved despite the fact that it gets objectified through the measures scientists develop. But actually the problem arises from the fact that objectification is a matter of *scientists* (in the plural), there exist accordingly many «measures», many «languages» of conceptualizing reality. *To conclude therefore: comparability is a function of the concept used to define a phenomenon, and in this sense relative by definition.*

It should be remarked that in comparing two phenomena[2] there are two aspects which should be kept apart the one referring to the *identification*[3] of the phenomenon; one looks in this case to find out the properties defining the phenomenon and apply them in time and in space so that one is sure that it is the same phenomenon one is comparing. The second aspect refers to the fact of finding out the *degree* of similarity, of equality at two or more different points in time and/or in space. Both aspects are important but different, although they usually get mixed in the relevant discussion. Take the example used above. We considered the case where A and B differ only in one element, d, and asked ourselves how far we can speak in this case of «equal», and therefore comparable phenomena. This is the aspect of the identification of the phenomenon observed which we have been dealing with so far. We have just concluded that comparability of two phenomena is a function of the concept used to define them. In this sense comparability, i.e. the identification of two situations, two phenomena, or whatever we are comparing, is usually solved by definition in the process of conceptualizing reality; this is the initial step of comparison as a method, and in a sense preliminary to it. The main concern of comparative research is, however, to find out the *degree of similarity* (or of equality) between two or more points in time and/or in space. I would claim, therefore, *that comparison in a narrow sense as a method in social sciences, which is the object of my concern in this paper, is nothing else but measuring*[4] *the*

1. Przeworski-Teune, *op. cit.*, p.10 f, 93.

2. It must be clear by now that I use the terms «thing», «phenomenon», «object» as equal, to mean in general the «object» of scientific research—and in our case, of comparative research.

3. I would like to point out that my concept of «identification» is somewhat different to that used by Dieckmann (*op. cit.*, pp.34-36) and Berstecher (*op. cit.*, pp. 29-34). For them identification is the process of finding out similarity which corresponds to my concept «degree» of similarity. I am using «identification» in the sense of defining the phenomenon to be compared.

4. I would like to point out as well, that I use the term «measure» here in a different sense to that given to it by Przeworski and Teune as cited above (in text). These authors

degree of similarity between two or more objects in time and/or space. The comparative method, in a narrow sense, is thus the techniques and procedures of research aiming at measuring the degree of similarity between two or more phenomena.

It must be warned, however, against reducing and confining the comparative method only to a matter of technique detached from its epistemological grounds.[1] Measuring has developed in the postwar period to some kind of «science» in itself, measuring has been substantialized for its own sake and the contact with the object measured and the problems connected with it tends often to be broken, so that neither the limits, nor the implications of the «measuring system» developed so far have been of concern to many scientists involved in empirical research. *In reality every technique of measuring phenomena in the process of comparing needs to be justified in its scope, in its implications, finally in relation to the object of measurement*. Otherwise, we are dealing with a science that has developed perfect methods of measurement but arriving at a point where the object of measurement is no longer in sight. Mathematical economics and econometry are a good example in this respect. Economists have been able to measure many things but they do not know anymore what they are measuring, and consequently, they are not able either to explain phenomena or to propose adequate measures of policy for solving existing problems.

It must be emphasized in this context finally that the operation of identification of phenomena in the comparative method is common to all social sciences as it refers to the fundamentals of social and generally scientific research. Comparison as an operation aiming at detecting the degree of similarity or equality between two or more phenomena is not identical in all social sciences. The techniques of measurement for each discipline differ according to the phenomena to be observed and compared as well as according to the general scope of comparing.

III. crosscultural comparative research

We can now discuss the question of *why* we compare which is important in respect to the usefulness and justification of comparison as a method in crosscultural research. It must be pointed out that we have been discussing so far the fundamentals of the comparative method under the implicit assumption that cultural or national factors were absent. In other words we have examined comparison as a method in a one-dimensional space meaning by that a compound national or cultural space.

In reality, however, the comparative method has been proposed and developed—if at all—as a method of comparing phenomena in different cultures or nations or «across cultures and nations». Comparative research becomes thus multidimensional, it is of the «space-historical» or the «mixed-historical» type described in the second part of this paper. If we come back to the discussion of the previous section under this aspect, comparative research as a method becomes more complicated and more ambiguous as regards the validity of the results achieved. It is in this sense that we must pose the question of the reasons for which the comparative method is propagated and used.

In the preceding analysis we have dealt with three aspects of comparing: In the context about the scope of scientific research, we concluded that scientific research aims at revealing «laws». In this context «comparison» finds its justification as a scientific method. Furthermore, we argued that comparison as a method of scientific research must have some meaning, i.e. it must refer to «comparable» things and not to phenomena taken at random. Finally, we defined comparative research as a method in a narrow sense as a measuring operation.

The causes given for the appearance of crosscultural research vary in the relevant literature. The interdisciplinary approach that has gained ground in the last years, some «need» «felt» by «specialists in a given geographic area» to look beyond the limited confines of their region, [2] the «emergence of competent social scientists throughout the world», [3] practical policy-aims on the micro-level, [4] are among these causes.

I would count three main plausible reasons for the comparative method, one of a historical the other two of a methodological-political nature:

Firstly, the comparative method on a crosscultural basis has been developed—to some extent systematically—within the scope of the economic development of the nations that emerged as political units after the end of World War Two. Many disciplines, like economics, political science,

use the term as equal to «language», actually in respect to the process of identification of comparability. I use the term «measure» in regard to the second process involved in comparison as a method, i.e. in regard to the «degree of similarity or equality».

1. Compare Przeworski-Teune, *op. cit.*, Preface p.x.

2. Robert T. Holt and John E. Turner in the preface to the book of Przeworski and Teune.

3. Przeworski-Teune, *op. cit.*, p.xi.

4. Dieckmann, *op. cit.*, pp.141 ff.

sociology, have dealt with the problem of development of these societies on a macro-level. International comparisons became thus a part of the research object.

Secondly, many scientists have found on these grounds the possibility of developing and testing new (or old) theories aiming at revealing «laws» of general validity. The steady internationalization of the problems mankind has been facing since the end of the Second World War has given the opportunity to search beyond the national boundaries for the verification or falsification of theories. In this aspect the crosscultural comparative method has substituted—at least from the point of view of the scientists' intentions—the lack of experiment in social sciences.[1] Comparison across cultures and nations has been thus looked upon as the method that would render results supporting or denying the general validity of hypotheses and theories.

Thirdly, comparative research across cultures and nations has been connected with policy implications. This is an issue directly inherent in the bulk of such research within many of the Agencies of the United Nations like FAO, ILO, UNCTAD, etc., or other such organizations like the OECD, the GATT, etc. But it is at the same time indirectly connected to the second, «purely» theoretical reason of individual scientists for crosscultural research in their effort to reveal «laws» valid beyond specific historical conditions.

How far is then the analysis of the previous part of this paper modified through the variable «nation» or «culture» in the aspect of the last two reasons of crosscultural comparative research?

We must make first clear in what sense «culture» and «nation» are used here. «Nation» as a concept has actually a narrower content than «culture». Anyhow there prevails a lot of ambiguity as regards the definition of culture. It is sometimes defined in anthropological terms, in which case it is applied to any social unit, like family, community, nation, society. It is also mostly used in a broader sense covering common ways of life, in which case culture embraces many nations and is applied more or less on the basis of race, in the biological-anthropological meaning of the term.[2] But even on the level of «nation»—which corresponds more or less to the existing political formation of states—differences between people are enormous. It seems that national characteristics of racial or biological nature prevail in a society built up on a national basis and influence the way of life, the «culture» of a people. In this sense existing differences between social groups seem to lie in the organization and the historical development of the specific «way of life» of a society. Since our world is organized in societies on the basis of the «nation», I think that the latter becomes the unit which is of interest in discussing the problems connected with the comparative method in social sciences. Although running the danger of being accused of ignorance by anthropologists or sociologists, I would think that «culture» as a concept with a broader content is not of any relevance in our present discussion. I use, therefore, the term «crosscultural» as equal to «cross-national» and discuss hereafter on these lines. The concept of «culture» in the anthropological meaning of the term, if used in this context, might create more problems in relation to the applicability of the comparative method, which more or less take the form of special methodological problems of the relevant disciplines applying this concept. On the level of social sciences as a whole «national» differences as defined above are sufficient for showing the limits of the applicability of the comparative method.[3]

In this frame it is important to raise the problem of *diffusion* between «cultures» and «nations». There has always been some degree of openness of every society in history, although each one has kept its main characteristics. There have always been relations and phenomena common in each society—like power exercise, class struggles, family as a social unit, work as dependent or independent social relation, community organization, etc.—the form in which they have appeared, however, or still appear, has been more or less different. The mode of production has been in any case a decisive factor in shaping each societal formation. I do not intend to indulge at this point in a historical analysis of the development of our societal system as we have it now. What I would like to point out is that the process of diffusion between «cultures» and «nations» is a matter of history. The conquest of the biggest part of the known world at that time by Alexander the Great, later on by the Romans led to a diffusion of the «Greek» and the «Roman» way of life within the societies of Asia, Africa and Europe north of the Alps. As regards our time, I think that some process of diffusion began with the emergence of the capitalist system as a mode of production and has been going on together with the spread of capitalism. The increasing in-

1. A similar approach is to be found in R. T. Holt – J. E. Turner (eds), *op. cit.*, p.6. See further Berstecher, *op. cit.*, pp.29 ff.

2. It is in this sense that Toynbee conceived of history as an alternation of «civilizations» through time.

3. See further about the concepts «nation» and «culture» Frey, *op. cit.*, p.178 f., Dieckmann, *op. cit.*, p.21 f.

ternationalization of life since the end of the Second World War has led to an increasing homogeneity all over the world. This homogeneity refers to the forms of societal organization (state, local government), of economic organization and behaviour (appearance of the firm and of dependent labor,consumption orientation, advertisement, planning), of the role played by leading social groups and their position in society (elites, bourgeois classes, army), of social or family organization and behaviour (role of the head of the family, number of children, education) and other relevant factors, on which a society is based. There is some tendency towards more or less similar behaviour of the individual in every society, of similar governmental organization, of similar behaviour in regard to family, to religion, etc. What I am interested in here is not so much the explanation of this diffusion process but rather the fact that «nations» have become in this way less different (or more similar), which is an observation in favour of the comparative method.

(It is interesting to notice that in elaborating on the diffusion process above I have myself begun comparing, which raises the question of the validity of my observations. It must be pointed out, however, that in making these observations, which are undoubtedly of a comparative nature, I am not using any method. The tendencies I observe on an international level have more or less the character of simple, primary observations not made on any scientific method, but on the grounds of common sense. They may be concidered as hypotheses which require investigation and falsification.)

With these remarks we have arrived at the core of our problem, because the process of diffusion raises the question of comparability between two phenomena in two different nations.We have discussed in the previous part how reality gets conceptualized. Concepts like freedom, power, justice, democracy—to name only a few of them —are supposed to have a concrete content beyond any national or cultural boundaries. Used thus such concepts denote values that have been crystalized through mankind's history and are considered to be timeless and spaceless. But this is not what concerns us here. For social research[1] it is important to define the content of such concepts concretely, in time and in space. To what extent is, for example, freedom, as defined in our highly industrialized societies under the historically given parliamentary system and standard of living, equal to the freedom as defined in any developing country under the conditions of low standards of living and of the inexistence of the bourgeois revolution which has characterized the political and socio-economic development of our western societies. I would go so far as to argue that the concept of «freedom of the individual», say in Western Germany of today, has little in common with the concept of «freedom of the individual», say in China (or Tansania). If we had to compare then «freedom of the individual» between these two countries, I would say that it would be impossible; these «freedoms» are incomparable. To put it in formal terms: suppose you have the concept A which is defined in country Y through the elements a, b, c, d. The same concept is defined in country X through the elements b, e, g, h. Expressed as a function you have then $A_x = f(a, b, c, d)$ and $A_y = f(b, e, g, h)$, the only common element in both cases being b and the definition of the object as A. I argue that one may keep the name in both cases denoting the object as A, but it must be clear that $A_x \neq A_y$. It may be that the diffusion between systems, as developed above, may bring the two different A's increasingly closer and make them more similar, but I do not think that the process of internationalization has yet gone so far. I would even claim that there are limits to this process so that differences of national character—«national» as defined in this paper —can not be eliminated.

One could extend the above argument by bringing other examples. Take, for example, the notion of «savings» in economics. Applied in macroeconomics as a variable connected with capital accumulation and irrespective of the mechanism through which it takes place, «savings» does not create problems from the point of view of comparison as a method, although there emerge problems in regard to the data. But let us not consider them. If one uses the notion «savings», however, under capitalist conditions, which means that one is interested in knowing the «propensity to save» of different groups and one applies it in a developing country, the concept loses any meaning, since the income level is very low in such a country and wages are a small part of national income; consequently «savings» as a behavioural variable of social groups does not exist. I refer here actually to the general problem of the relevance of economic theory as developed in western capitalist societies for developing countries in

1. Although I cannot discuss this problem at greater length here I would like to remark that I cannot accept the statement made by Holt and Richardson that «concepts are judged not by their truth or falsity, but by their theoretical utility» (see Holt-Turner, *op. cit.*, p.24) as this raises the problem of the relation between the real world and theory; it «alienates» theory from reality and implies some attitude of making theory for the sake of theory!

which completely different conditions prevail.[1]

The problem of identification becomes in this respect crucial. My argument has gone so far beyond the conclusion drawn in the previous part of this paper according to which comparability is a function of the concept used to define a phenomenon. In a crosscultural frame I have challenged this conclusion in the sense that it does not have general validity. I would specify this restriction in the following way: *We can observe tendencies across cultures and nations, we can detect developments but it is questionable whether we can compare them in a strict sense.* The following three reasons support this statement:

Firstly, the question of identification; i.e. it is not always possible to identify phenomena across cultures and nations. *Every time we want to compare we must prove in advance that we compare «comparable» things because according to strict logic, even if there existed only one case where identification were not possible, we would have to prove the comparability of all other existing cases —the number of which is indefinite—in order to find out this case.*

Secondly, the reliability of data. I will not ponder on this point since many others have pointed it out.[2]

Thirdly, the question of measurement, that is of comparison as a method in a narrow sense. Assuming that both previous conditions are fulfilled, i.e. that we have an identified phenomenon and reliable data, I would like to point out that our techniques themselves restrict the applicability of our method, as measuring (as already said) is not justifiable in itself but needs to be justified in its scope, in its implications and in relation to the object of measurement. I would mention as examples the concept of «income» or of «per capita income» as a measure of economic development[3] or the «social indicators» that are proposed as a better method.[4]

It is now time, however, to discuss at this point concretely the further problem of the reason of crosscultural comparative research that is closely connected to the scope and the implications of measurement and which I posed at the beginning of this section. I consider it as crucial for evaluating the comparative method itself. I have not done anything else in this section but clear the way to this question dealing with all complementary problems connected to it and defining in this way the limits within which a positive answer can be expected.

In asking for the causes that have led to the emergence of the comparative method in the postwar period I named three among which the testing of theories aimed at revealing «laws» and policy relevance. If a theory «explains and predicts social phenomena»[5] crosscultural comparison aiming at testing such theories must find in at least two systems the causes leading to the same effect in both of them—this is the «explanation»-part of a theory—furthermore to fix the conditions that are sufficient and necessary for a reproduction of the same phenomenon at a later point in time and probably at a different point in space—this is the «prediction»-part of a theory. Take for example a very interesting case both for political science and economics. In studying the case of the People's Republic of China one comes to the conclusion: «China has been able to develop economically and socially avoiding at the same time the vicissitudes of the majority of developing countries through a socialist revolution». In this statement «revolution» is the necessary condition for initiating an autonomous independent development process. If I decided then on theoretical grounds to initiate such a process in another country, I should see to it that a «revolution» takes place, which means that I should be able to reproduce in this country the similar conditions that led to a revolution in China! I know that I am making some epistemological bias here, but I think that the case is useful in order to show the irreproducibility of historical conditions in time and

1. As an example of the ridiculousness of traditional theory I would like to cite the paper of H. R. Hemmer, «Zur Vereinbarkeit des Wachstums und Beschäftigungszieles in Entwicklungsländern» in H. Priebe (ed), *Beiträge zur Beurteilung von Entwicklungsstrategien*, Berlin 1974, pp.61, ff, in which he develops a neo-classical model for developing countries. His final result is that the extent to which employment and growth are compatible depends among others also on the partial savings-quotas of capitalists and workers! In many developing countries there do not exist either capitalists or workers, at least in an important amount and at wages high above the existence minimum. See also my comments in M. Nikolinakos, «Kritische Anmerkungen zur traditionellen Entwicklungstheorie», in Priebe, *op. cit.*, pp.87 ff.

2. See Scheuch, *op. cit.*, Mitchell, *op. cit.*, Merritt, *op. cit.*, pp.24 ff. Berstecher, *op. cit.*, pp.72 ff. Dieckmann *op. cit.*, pp.92 ff. P. Deane, «Aggregate Comparisons: The Validity and Reliability of Economic Data», in Rokkan, *op. cit.*, pp.171 ff.

3. See on this point G. Ohlin, «Aggregate Comparisons: Problems and Prospects of Quantitative Analysis Based on National Accounts», in Rokkan, *op. cit.*, pp.163 ff. See further on the question of measurement S. L. Thrupp, «Diachronic Methods in Comparative Politics», in Holt-Turner, *op. cit.*, pp.343 ff. Przeworski-Teune, *op. cit.*, pp.91 ff, 113 ff. Berstecher, *op. cit.*, pp.43 ff. Dieckmann, *op. cit.*, pp.47 ff, 60 ff and R. E. Mitchell, «Survey Materials Collected in the Developing Countries: Obstacles to Comparisons», in Rokkan, *op. cit.*, pp.219-226.

4. Compare R. Werner, *Soziale Indikatoren und politische Planung*, Reinbek bei Hamburg, 1975.

5. See Przeworski-Teune, *op. cit.*, p.74.

space. Revolutions do take place—not all revolutions are, however, of the same type—but each one is unique and unrepeatable. Another example in this context is the theory of the stages of economic growth of Rostow where economic development has been put within definite theoretical molds implying some regularity subject to general causal laws. This theory has been amply criticized and shown as invalid.[1]

It is not necessary to develop at this point further the problem of «laws» in social sciences. I would only like to empasize how difficult it is within the discussion of development of undeveloped societies, which is the field on which nowadays the leading social sciences—economics, politics and sociology—meet to detect causal relations in a strict sense and even to define situations. In my doctoral thesis about *Income Distribution and Development Process* I have investigated the conclusion drawn initially by Kuznets, that income distribution in a country becomes more equital the higher the stage of development it has reached. I found that this conclusion was dependent on the method used and that furthermore the application of different criteria for defining the «stage of development» and «equity» as well as of different measures for measuring inequity leads to extremely contradictory results. One interesting result is that the more concretely some stage of development is defined the less the existing statistical data support Kuznet's conclusion.[2]

In regard to policy relevance it should be asked how far the comparative method renders useful results. I would think that policy implications arising out of a study in other nations are only of a conditional relevance for some other. Some relations found to be similar in countries A, B and C and leading to some conclusions can not necessarily be relevant also for country D. I would claim that one has to prove the similarity of the conditions existing in country D with those existing in country A, B and C if one wants to translate the results of the research in countries A, B and C into policy measures in country D. Even assuming this similarity it can not be expected that the development of the phenomenon in country D will be the same as observed in countries A, B and C at some previous point or period in time.

1. See W. W. Rostow, *The Stages of Economic Growth*, Cambridge 1960, also the *Economics of Take-off*, Paris: International Economic Association, 1973.

2. See M. Nikolinakos, *Einkommensverteilung und Entwicklungsprozess*, Diss. Köln 1967, in particular pp.206 ff. See further on the problem of comparative analysis in development theory. D. Lerner, «Comparative Analysis of Processes of Modernization», in Rokkan, *op. cit.*, pp.82 ff.

I would like to refer in this context to the essay in «Comparative Analysis» of Morris Janowitz on *The Military in the Political Development of New Nations*,[3] because it is an illuminating example in this respect. «Even though comparison at the nation-stake level is an illusive task» Janowitz undertakes the study of «military institutions and military elites in their common characteristics and in their national differences in order to throw light on the various patterns of civil-military relations found in new nations.»[4] I have not been able to find out the method used by Janowitz in studying the internal organization of the military in a number of nations or the relations between army and society. The measurement of the degree of similarity as the core of the comparative method in a narrow sense is missing. One is faced with general interpretations out of general observations not bound to any epistemological background. The reader is surprised to begin the reading of the last chapter with the statement devoid of any meaning: «it appears to be a universal political conception that a new state requires an army. In the course of this study, it was hoped that at least some new nations would make it national policy not to create an army, or at least de facto to rely on a mobile police force».[5] Asking, finally, for the meaning of such a comparative study, I can not feel satisfied on theoretical grounds with the final conclusion that from the point of view of «political assistance» «it implies imparting on an intellectual basis the successful experiences of military oligarchies that have been able to limit their political involvement. Mutual assistance among new nations will be as important as the influence of the superpowers. It requires, in turn, the training of political organizers—to middle-level, and grass-roots agents—just as economic assistance requires the training of industrial and agricultural personnel».[6] This conclusion corresponds to the idea of «civil action», i.e. «the idea that the military is an agent of development», which «has not become a pervasive outlook in these military assistance programmes, except recently in the case of South Vietnam»![7] The political implications from such a comparative study are in my opinion clear at least from the point of view of American foreign policy.

In regard to policy implications of the comparative method it becomes thus apparent that in a polito-economic sense the question gets more

3. Chicago and London, 1964.
4. Janowitz, *op. cit.*, p.vi.
5. Janowitz, *op. cit.*, p.100.
6. Janowitz, *op. cit.*, p. 105 f.
7. Janowitz, *op. cit.*, p.97.

complicated if the agent of policy implementation is considered on the grounds of the results of crosscultural research. I would say that so far as crosscultural investigations are initiated for the sake of some political aims connected with the expected results, the margin of bias is great enough to influence the method itself and in this sense the results attained are more or less conditioned by the initial aim. One might speak in this case of an indirect manipulation in the sense that a method is biased to give conditioned results.

To apply my second criterion mentioned in the first section of the paper the comparative method is useless or it has some political relevance. If the conclusion drawn above is correct that the results of crosscultural research are of a conditional relevance in terms of policy implications the evaluation of the comparative method tends to declare it «useless», otherwise the notion «political relevance» must be understood in terms of politics and not in terms of policy implementation.

It must be made clear that the above statement refers to a strictly defined comparative method as a measure of the degree of similarity between more than two objects of observation. It does not imply the compilation of data on a comparative basis, as is the case in the kind of empirical research done by international organisations mentioned above which aim at observing trends and developments of a general character. In the case, for example, of changes in Europe's trade [1] imports and exports of countries are examined for the sake of detecting the general trends, not for the sake of detecting the differences between countries, as the development of imports and exports of a country depends on the internal economic development and the development on the international market, and not on the movement of imports and exports themselves of other countries. By comparing the imports of country A and of country B I want perhaps to find out the causes of their specific development, but I can hardly imagine that the conclusions I draw have any practical relevance for country A or B respectively. Whether they serve to verify a theory is a matter of constructing the theory. The theory can be constructed to apply only for country A or B. If it is constructed with a more ambitious aim, then it has to face the problems I have alluded to above.

IV. summary of conclusions

I would summarize the argument of this paper in the following points:

a) Every scientific research is of political relevance in the Aristotelian as well as in a politoeconomic sense, or it is useless.
b) Time and space as the two definitional elements of comparison give the historical dimension of the phenomena. Difference or similarity of phenomena is thus reduced to difference of similarity of conditions at two or more points in time and in space, which is a question of the reproducibility of historical conditions.
c) Comparison as a method implies the comparability of two things and aims at showing equality between them or proving their inequality.
d) Comparability is a function of the concept used to define a phenomenon and in this sense relative by definition.
e) There are two distinct aspects in the process of comparison: the one referring to the identification of a phenomenon—which means defining its properties—the other to the degree of similarity (or equality) of two or more phenomena at two or more different points in time and/or in space.
f) Comparison in a narrow sense as a method in social sciences aims at measuring the degree of similarity between two or more objects in time and/or in space. The comparative method in a narrow sense is thus the techniques and procedures of research in the service of the above aim.
g) Every technique of measuring phenomena in the process of comparing needs to be justified in its scope, in its implications, finally in relation to the object of measurement.
h) The operation of identification of phenomena in the comparative method is common to all social sciences. Comparison as an operation of measuring the degree of similarity between two or more phenomena is not identical in all social sciences. The techniques of measurement for each discipline differ according to the phenomena to be observed and compared as well as according to the general scope of comparing.
i) The comparative method in a narrow sense has been proposed and developed in the postwar period primarily as a method of comparing phenomena across cultures and nations.
j) The main three plausible reasons for crosscultural comparative research are: 1) the concern with the economic development of developing countries in the postwar period (historical reason); 2) the testing of hypotheses and theories beyond national boundaries aiming at revealing «laws» (comparison as a substitute for experiment) (methodological reason); 3) practical policy aims (political reason).
k) The concept of «nation» is to be preferred to the concept of «culture» in discussing comparison as a method of social research; crosscultur-

1. See *Economic Bulletin for Europe*, Vol. 22/No. 1, N. York 1971, pp.1 ff.

al is taken, therefore, to mean crossnational.
l) Diffusion leads to a homogenisation of phenomena across cultures and nations which has been increasing in the postwar period although this has not yet led to an elimination of national differences.
m) It is possible to observe tendencies across cultures and nations, furthermore to detect developments, but it is questionable whether it is possible to compare them in a strict sense for three main reasons referring to the problem of identification, the reliability of data and measurement itself.
n) Crosscultural comparison aiming at testing theories or general hypotheses must find in at least two systems the causes leading to the same effect in both of them (explanation part of a theory), furthermore to fix the conditions that are sufficient and necessary for a reproduction of the same phenomenon at a later point in time or at a different point in space (prediction part of a theory). Such a task has been so far unsuccessful.
o) Policy implications arising out of a study in other nations are only of conditional relevance for some other. Even assuming the similarity of conditions it is uncertain if the development of a phenomenon will follow the same track in a new country that it had followed in one or more other countries previously.
p) Also the comparative method is either useless or is of political relevance (point a). On the grounds of conclusion under o, the comparative method must be declared either as «useless» or political in terms of politics, and not in terms of policy implementation.