

# The Indigenization of Methodology

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## I. Introduction

Questions have arisen concerning the utility of Western methodologies (including techniques, concepts, and theories) to Korean social scientists in their efforts to understand Korean personalities, groups, and culture. The universalism of Western science—i.e., the search for general laws of behavior which are verifiable in any and all contexts—is among the debatable issues which have made Korean social scientists wary and have prompted some to urge an indigenization, or particularization, of research. What is precisely meant by indigenization has not as yet been agreed upon,<sup>(1)</sup> and so it is perhaps wise, with Kim Jae-ün (1979), to regard it as a general outlook or commitment, i.e.,

...as meaning an attitude toward the national identity in the awareness of problems, pursuit of ideas for their solution, adoption of a right meth-

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(1) The 1981 volume of *Social Science Journal* will carry a special section on indigenization; cf. Lee (1979).

odology, and interpretation of research results in social sciences. (p.10)

Kim focuses his attention on developments in education and psychology, but his comments apply to other social sciences as well. He notes, for example, that the ideas inspiring research, including the theories and concepts employed, are overwhelmingly foreign; that instruments are often unrefined and statistical methods improperly applied; and that document-based, correlational, and survey studies are more prevalent than experimental inquiries. He also points to a number of problems associated with the adoption of foreign methodologies: He contrasts the experimental spirit, for example, with the intuitive and subjective attitude said to be common among Koreans, and which he says conflicts with hypothetical thinking and objective reasoning. He is also critical of the tendency, detected in the work of some Korean researchers, to imitate "the outer trappings" of Western social science while ignoring more essential matters.

As a partial solution, Kim recommends the indigenization of methodology, i.e., "rooting national identity" in the perspectives and procedures adopted for the conduct of inquiry. He begins with the assertion that social science "differs from natural science in object, theme, methodology, and premise," thereby rendering predictions and laws more problematic. He also asserts the cultural relativity of social science, which is directly linked with the destiny of society, and claims that research can be meaningful only when applicable to society with certainty—all of which supports the value and necessity of research which has been localized and particularized. General knowledge cannot be the only goal of science, Kim says: "In order to solve a particular problem facing an individual or a society, particular knowledge, too, should be held as another purpose of science" (p.18). He concludes with a call for large scale basic research which takes Koreans and Korean society as focal points.

Kim's observations are wide-ranging and thoughtful, and he is no doubt on the right trail in many respects. It is to the credit of a paper which

addresses so many fundamentals, however, that it is apt to generate as much opposition as applause. We might wonder at the outset, for example, just how universalistic Western science really is, especially with its twentieth century emphasis on relativity. (For an early application of relativity theory to human behavior, see Bentley, 1926.) And one might wonder further whether particularity isn't already a principle accepted by many forward thinking social scientists (e.g., Kantor, 1978). We could also point to the unpredictability inherent at the subatomic level (quantum theory) and ask whether it is possible to be absolutely certain about anything (Bronowski, 1973), indigenized or otherwise. Were we especially mischievous, we might ask in what ways experiments really differ from field research (Black, 1955; Martin & Sell, 1979), and we might even ask whether experiments aren't also culture-, or at least time-, bound (Gergen, 1973). Finally, we might call into question the rationality of Western men of science, especially as contrasted with the intuitionism and mysticism of the Oriental: We are apt to forget that Newton believed in alchemy and that his ongoing debates with the Cartesians and other Continental philosophers were as much influenced by religion and cosmology as by hard evidence (Iltis, 1973).

Different readers will, of course, agree or disagree with different aspects of Kim's paper, but we do not do justice to his initiatives if we offer nothing more than contentious argumentation, philosophical dispute, and other forms of Big Talk for which social scientists and other verbally gifted people are notorious. The real question is, what next? Right and wrong are difficult if not impossible to determine in a complicated situation such as this, but even if rightness is pertinent, an *a priori* issue involves the determination of the sides available to be taken and of the issues separating them, to which the following pages are devoted.

## II. Concourses, Correlations, and Operant Factors

The most thorough first step would be to survey all pertinent literature on research methodology and interview a large number of social science practitioners and future practitioners (e.g., graduate students in the social sciences) concerning the importance of contemporary research methods for the study of Korean social and political processes. Fortunately, an adequate (as opposed to thorough) beginning can be made with less effort, much of which has already been expended by Kim Jae-ün who apparently digested much of the literature and obviously devoted considerable thought to the issues involved. His paper is the result of this distillation, and in it is to be found comments on a variety of topics. At some points, for example, Kim addressed himself to technology and the nature of the scientific enterprise, as the following comment (paraphrased) indicates:

It is not practical to conduct strict and thorough experiments in the social sciences because it is impossible to control all relevant variables.

(p. 17)

At other points, he focused on the issue of cultural relativity:

We must consider the difficulty of applying to Korea a design that is good for a relatively well organized and open society, since our society is still disorganized and has many elements of seclusion. (p. 16)

More than any other single topic, Kim emphasized the skills and traits of Korean social scientists, e.g.:

Korean researchers often give exaggerated interpretations to their results and statistics, and seem to have contempt for precision. This has led to a retarding of scientific development. (p. 15)

Finally, the concept of indigenization itself:

If we are to explain Korea's people, society, bureaucracy, voters, consumers, and parents on a level with engineering (involving prediction and control), we will inevitably have to indigenize the theoretical frame, concepts, and consciousness of problems. (p.18)

Many statements of this kind are to be found in Kim's paper, the sum total of which is referred to as a *concourse* (Stephenson, 1978), i.e., as a "universe of subjective communicability" on the topic of Korean social science. A set of  $N=36$  such statements, referred to as a *Q sample*, was selected in such a way as to represent the breadth of Kim's concerns—including (a) science and technology, (b) cultural relativity, (c) Korean scientists, and (d) indigenization, as above.

Questions can, of course, be raised about the comprehensiveness of these 36 statements which are, after all, taken from a single source. However, Kim himself endeavored to cover a wide range of issues and relied on a diversity of sources; moreover, many of the viewpoints which he reported were not his own, but those of persons whose works he reviewed. At least initially, therefore, the statements can be considered as suitably *representative* in a methodological sense (Brown & Unga, 1970), and at any rate are appended so that the reader can judge for himself the degree of depth and comprehensiveness which has been incorporated.

As stated at the outset, scholars examining Kim's paper will naturally agree or disagree with him in various degrees, and with respect to the different issues which he raises. The statements, after all, are subjective and matters of opinion, hence are neither right nor wrong. Such subjectivity can be examined systematically, however, by inviting representative individuals to express their own views in the form of *Q sorts* (Brown, 1980; Stephenson, 1953). Specifically, the 36 items in the *Q sample* were typed, one to a card, and presented to a subjects who were instructed to provide their individual viewpoints by ranking the statements from +4 (most agree) to -4 (most disagree), four statements being rec-

commended for each of the nine points along the scale continuum—i.e., the four statements with which the subject most agrees were to be placed beneath +4, the four next-most agreeable beneath +3, etc., with the four statements with which the person most disagrees falling under -4. Q sorts were obtained from only 30 individuals, 15 faculty members and 15 graduate students from the various departments in the College of Social Sciences, Seoul National University. A respondent sample such as this both small and unrepresentative by most social science standards, but something rather more subtle is involved than inductive enumeration, and we will have occasion subsequently to indicate why this group of 30 is quite adequate for our purposes.

Once gathered, the 30 Q sorts were intercorrelated and factor analyzed. Correlation coefficients can range from +1.00 (perfect positive relationship) to -1.00 (perfect negative), and in this instance they summarize the degree of similarity between pairs of respondents, i.e., the degree to which two individuals have ranked the 36 items in the same way. Factor analysis is an extension of correlational theory and serves to group together those persons who are highly correlated among themselves, i.e., who share the same attitude or outlook. Table 1 contains the factor matrix for this study and indicates the existence of five factors, A through E: Subjects 1-6, for example, ranked the statements similarly, and therefore emerged as a distinctive group of like-minded individuals (factor A): Subjects 9-11 also share a common outlook (factor B), but an outlook statistically unrelated to factor A; and so forth. Factor A is bipolar, with subjects 7 and 8 taking a view diametrically opposed to subjects 1 through 6. Some subjects have mixed views—e.g., individual 23, whose view shares something in common with both A and C; subject 30's view is relatively idiosyncratic and not highly associated with any of the main groups.

The statistical demonstration of distinct groupings leaves unspecified the nature of the outlooks professed by the persons composing these groupings. What, for example, is the nature of the factor A standpoint which subjects

Table 1. Loadings for Five Factors

Q Sorts	Factors <sup>a</sup>					Department
	A	B	C	D	E	
1	(76)	—07	09	—23	06	Sociology
2	(76)	12	04	06	33	Internat'l Rel
3	(74)	14	—04	20	20	Anthropology
4	(73)	26	—07	—24	—15	Political Science
5	(72)	00	22	08	—25	Sociology
6	(49)	27	00	19	—02	Social Welfare
7*	(—61)	22	00	—16	—03	Psychology
8*	(—43)	30	39	—12	14	Economics
9	23	(78)	—06	13	—10	Economics
10	—23	(63)	13	04	15	Political Science
11	10	(59)	06	04	—10	Anthropology
12*	21	—08	(70)	—04	29	Sociology
13*	20	—08	(70)	21	—30	Political Science
14*	—13	06	(61)	—04	12	Economics
15*	—17	39	(60)	19	—04	Sociology
16*	23	30	(60)	39	—08	Economics
17	22	—09	(45)	—37	20	Political Science
18*	09	—15	15	(68)	03	Anthropology
19*	08	27	—16	(53)	—07	Social Welfare
20*	18	21	21	(53)	33	Anthropology
21*	—12	02	01	20	(84)	Political Science
22*	01	—11	09	—12	(66)	Political Science
23	(57)	19	(40)	—21	14	Communication
24*	(42)	29	10	(—49)	—15	Psychology
25*	(—50)	22	31	(43)	—19	Communication
26	32	(45)	(41)	—12	08	Communication
27	27	(49)	05	05	(67)	Social Welfare
28	06	(59)	18	—12	(45)	Economics
29*	(—41)	33	(47)	—13	(—48)	Political Science
30	39	23	30	12	—07	Economics

\* Faculty

<sup>a</sup>Decimals to two places omitted. Loadings exceeding  $\pm 0.33$  are significant at the .05 level; those exceeding  $\pm 0.43$  are significant at the .01 level, using  $1/\sqrt{N}$  ( $N=36$  statements) as the standard error of a zero-order loading. For convenience, loadings in excess of  $\pm 0.40$  are in parentheses.

1-6 share, and how does it differ from standpoints B,C,D, and E? The response to this question requires the calculation of *factor scores* (Creaser,

1955), i.e., the scores from +4 to -4 associated with each of the 36 statements in each of the five factors. In the case of factor B, these scores are obtained by merging together those three Q sorts (9, 10, and 11) which serve to define the factor, producing one Q sort which then represents the factor as a kind of average. Table 2 displays the five factor Q sorts at issue and shows, for example, that the subjects composing factor B agreed most (+4) with statements 17, 24, 26, and 31 and disagreed most (-4) with statements 1, 5, 27, and 33. (See Appendix for statements.)

Given the above information, therefore, it is possible to determine which persons share the same attitude (Table 1) as well as the substantive nature

**Table 2. Statement Arrays for Five Factors**

(Statements in Appendix)

Factor A								
-4	-3	-2	-1	0	+1	+2	+3	+4
10	7	12	3	8	4	11	6	1
20	31	16	9	15	5	28	13	2
21	33	17	25	18	22	30	14	24
35	36	32	27	23	26	34	19	29

Factor B								
-4	-3	-2	-1	0	+1	+2	+3	+4
1	2	7	15	4	8	6	3	17
5	9	20	22	10	19	16	13	24
27	12	34	32	11	28	21	14	26
33	23	36	35	18	29	25	30	31

Factor C								
-4	-3	-2	-1	0	+1	+2	+3	+4
1	20	12	11	2	8	3	6	5
22	24	28	17	7	9	4	19	13
31	26	32	21	25	15	10	27	14
35	33	36	23	34	16	30	29	18



Factor D

-4	-3	-2	-1	0	+1	+2	+3	+4
4	7	2	8	1	3	16	5	13
9	23	6	14	11	10	21	18	19
12	31	15	28	30	17	24	27	26
20	36	22	32	33	25	29	34	35

Factor E

-4	-3	-2	-1	0	+1	+2	+3	+4
1	15	2	7	3	5	8	9	18
17	16	4	14	11	10	13	12	26
21	19	6	23	22	27	20	24	29
30	31	33	36	34	28	25	35	32

of the attitudes in question (Table 2).

Before turning to a detailed consideration of the factors, two important features of the data are worth mentioning. First, the five factors represent *qualitatively* different audience segments, hence are relatively independent of the number of persons in the study. That is, we are interested primarily in the typology of intellectual structures pictured in Table 2 and not in the numbers of persons in the general population who may be associated with each segment. Second, the five factors are naturalistic categories, their nature and number being wholly determined by the character of the situation from which they have emerged and about which they give direct testimony. Such factors are referred to as *operant* (Stephenson, 1977), and a social scientist committed to indigenization would have to search far and wide to find a more substantial platform from which to launch his research program.

### III. Factor Interpretation

#### Factor A

This factor is bipolar (hence conflictual), with representatives at each

end of the factor advancing opposing views concerning the nature of Korean social science: Persons at the positive pole of the factor tend to idealize Korean society and traits, and downgrade the Western tradition of science and its technical implements, whereas those at the negative pole of the factor defend Western science and technology while registering complaints against Korean characteristics which are presumed to mediate against rationality. This dialectical situation is complicated by the fact (as shown in Table 1) that the two persons purely defining the negative end of the factor are United States trained faculty members representing two of the most technically advanced disciplines, no. 7 being a psychologist and no. 8 an economist; they are joined in part by no. 25. (a communication theorist) and no. 29 (a political scientist), both of whom are U.S. trained and highly skilled in the use of advanced methods of social science research. The positive end of the factor is purely defined by students representing various social sciences. As might be expected, several of these students are dead-set against continuing their graduate studies in the West. They are joined in part by another student (no. 23) and by a lone faculty member (no. 24), a psychologist, both of whom have "mixed views," i.e., viewpoints sharing commonality with more than one group.

A glimpse can be gotten of the student pole of factor A by examining those four statement with which this factor most agrees (taken from Table 2 and the Appendix). For comparison, the factor scores for the other four factors are also presented.

	Factor Scores				
	(A)	B	C	D	E
1. Many Western tools of analysis are utterly inadequate for throwing light on our social problems.	+4	-4	-4	0	-4
2. Theories of social science in particular are destined ultimately to be localized, i.e., they have their origin in the socio-historical consciousness rather than	+4	-3	0	-2	-2

in the universal spirit.

24. Truth must be understood by people who live in a society if it is to acquire human value. This is even more so for social science which is linked directly with the destiny of people who live in society. +4 +4 -3 +2 +3

29. Universal or general knowledge alone cannot become the purpose of science. In order to solve a particular problem facing an individual or society, particular knowledge should also be held as another purpose of science. +4 +1 +3 +2 +4

Statements 1 and 2 in particular serve to distinguish A from the other factors: The graduate students comprising this group are obviously suspicious of Western tools of analysis (statement 1) and advance the view that theories emerge somehow from "the socio-historical consciousness" (statement 2), which guarantees their pertinence to Koreans.<sup>(2)</sup> These subjects stand alone in asserting these views. However, they find some support among the other factors for the idea of "particular knowledge" (statement 29) and for the notion that truth, to have value, must be understood by the people who live in a society (statement 24).

The faculty members at the negative end of the factor (henceforth to as "factor -A") naturally tend to disagree with these statements, and we can examine the viewpoint which they represent by turning the factor A-Q sort (Table 2) upside down. What follows, therefore, are factor scores

(2) Space precludes barely more than superficial treatment of the factors. In the case of statement 1 (*supra*), for example, the students comprising factor A were anxious to disavow the diffusion, or evolutionary, theory of development whereby underdeveloped countries are said to become modern through the gradual acceptance of ideas and practices (including scientific practices) imported from developed countries. (For a criticism of this view, see Leite Lopes, 1977.) The Q sorting of statements at the individual level is therefore supported by elaborate theories and feelings about science and society, which are often expressed in interviews after the sorting has taken place.

from the standpoint of factor  $-A$ , with scores for other factors again presented for purposes of comparison.

	<u><math>(-A)</math></u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
10. Perhaps due to our lack of scholarly tradition, our research is small in scale and sporadic.	+4	0	+2	+1	+1
20. Our biggest problem is lack of modern research facilities.	+4	-2	-3	-4	+2
21. There is lack of tolerance for divergent opinions, a strong inclination to projection, and mental unrest (as evidenced in Shamanist faith, fortune telling, etc.)—all of which pose a serious obstacle to dealing with science and objective knowledge.	+4	+2	-1	+2	-4
35. Science is an intellectual property owned jointly by mankind. Common conclusions are reached, therefore, regardless of the hypothesis the scientist started with and regardless of nationality.	+4	-1	-4	+4	+3

These are the statements with which the students at the positive pole most disagree, and from them we can see the factor  $-A$  concern with absence of modern facilities (statement 20) as perhaps partially responsible for what is seen as meager research efforts in Korea (statement 10). Statement 35 indicates factor  $-A$ 's identification with other scientists on a universal and unified basis. With statement 21, however, a hint of cultural disdain or alienation begins to suggest itself, and this is reinforced by other statements gaining disproportionately higher or lower scores in factor  $-A$ :

	<u><math>(-A)</math></u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
7. The Korean attitude toward solving problems is not based on a scientification, adaption to the supernatural, reliance	+3	-2	0	-3	-1

on personal experiences, intuition, and blind obedience to authority.

31. Korean researchers often give exaggerated interpretations to their results and statistics, and seem to have contempt for precision. This has led to a retarding of scientific development. +3 +4 -4 -3 -3

33. We rely more on sentimental logic than on rational logic in defining and describing the questions with which we are faced. +3 -4 -3 0 -2

36. Koreans tend not to be hypothesis-oriented, and are also insufficient in terms of multivariate and continuous thinking—consequently, they tend to fall into dogmatic judgments. +3 -2 -2 -3 -1

Factor +A naturally disagrees with these statements, which is consistent with the idealization of things Korean characteristic of the positive end of factor. Factors B through E generally join +A in rejecting the above, leaving -A alone in singling out mysticism, deference toward authority, and other remnants of tradition as major impediments to rationality and a more productive research effort.

We will have occasion to refer back to factor A as we introduce and describe the remainder of the factors. For the moment, we merely make note of the fact that those subjects at the positive pole of the factor appear to support indigenization of a certain kind, whereas those at the negative pole do not appear to do so.

### Factor B

As was the case with factor A, factor B (which is unipolar) is purely defined solely by students: As shown in Table 1, subjects 9~11 purely define the factor, and are joined by students 26~28 who have mixed loadings on other factors as well; no faculty member has a significant

loading on factor B. Unlike the students comprising factor A, those associated with B (including a political scientist, anthropologist, social worker, communication theorist, and two economists) are anxious to learn new techniques of research and plan to continue their graduate studies in the United States. The following statements highlight the major differences between B and the other factors.

	A	(B)	C	D	E
17. Immaturity on the part of researchers and lack of consistent philosophy on the part of patrons of research is promoting imitation of research conducted in the United States and other foreign countries.	-2	+4	-1	+1	-4
31. Korean researchers often give exaggerated interpretations to their results and statistics, and seem to have contempt for precision. This has led to a retarding of scientific development.	-3	+4	-4	-3	-3
5. While science knows no national boundary, scientists do.	+1	-4	+4	+3	+1
27. Korean researchers prefer the qualitative to the quantitative.	-1	-4	+3	+3	+1

The factor B students, unlike factor A, are critical of certain features of the social scientific effort in Korea, regarding some researchers as immature (statement 17) and as impediments to genuine scientific development (statement 31); one perceived consequence is a mere imitation of research in the U.S. This does not lead B to reject Western methods, however, as was the case with A (compare scores for statement 1, Appendix and Table 2). On the contrary, B's strategy seems to be the mastery of Western social scientific technology as a way out from under scientific dependency—a strategy, incidentally, successfully adopted by the Japanese automobile industry—and for this reason B's response to statement 5 was.

probably based on a concrete as opposed to symbolic interpretation: Scientists *do not* have to be constrained by national boundaries, i.e., like Japanese car designers, they can travel to Western countries (as factor B students plan to do) and learn the skills now perceived as in short supply domestically. Factor B sees Korean researchers as fundamentally quantitative in orientation (statement 27), which is perhaps a projection of their own inclinations (cf. statements 23, 33).

Two additional features about factor B deserve mention in passing. (For details, see Table 2 and Appendix.) The first concerns the relationship between description and experimentation (statements 12, 26, 30), with these students preferring the former mode. Second, there are several points of confluence between A and B (statements 13, 14, 24), indicating that both groups are mindful of their Korean roots and have merely adopted different career strategies. By and large, both A and B are committed to the principle of indigenization.

One especially interesting consensual issue between A and B bears directly on the indigenization thesis advanced by Kim Jae-ün:

	A	B	C	D	E
18. If we are to explain Korea's people, society, bureaucracy, voters, consumers, and parents on a level with engineering (involving prediction and control), we will inevitably have to indigenize the theoretical frame, concepts, and consciousness of problems.	0	0	+4	+3	+4

At first this "neutral consensus" (as the zero scores might be called) appears to contradict A and B's acceptance of indigenization as a principle of social science research, but this neutrality may be more apparent than real. We would expect both groups to favor that part of the statement referring in a positive way to indigenization, but at the same time to disdain the odor of engineering with its accompanying scent of prediction and control. Such conflicts often cancel out, resulting in a zero score.

As is apparent, however, statement 18 evokes a positive response from the remaining three factors, to which we now turn.

### Factor C

Table 1 shows that only one student (subject 17, a political scientist) achieves a pure loading on factor C, with two others (23 and 26, both in communication) having mixed loadings. Otherwise, the remaining five defining Q sorts were all given by faculty members: Two sociologists, two economists, and a political scientist; a second political scientist (subject 29) is also significantly associated with this group, but with other factors as well. The factor therefore represents a faculty point of view for the most part.

As shown by statement 18 (*supra*), factor C accepts the challenge of engineering and agrees with the principle of indigenization. Among other statements with which C also agrees are the following:

	A	B	(C)	D	E
5. While science knows no national boundary, scientists do.	+1	-4	+4	+3	+1
13. Since any science of any age is a reflection of cultural processes, it is evident that social scientists in particular cannot be completely independent of the culture in which they were born.	+3	+3	+4	+4	+2
14. As almost every bibliography shows, the concepts, terms, and theories used in research are overwhelmingly foreign in origin.	+3	+3	+4	-1	-1

Factor B, it will be recalled, was interpreted as having reacted to statement 5 concretely—i.e., as believing that scientists are not physically limited by national boundaries, but can (as those students intended) travel to other countries for more training. On the other hand, statement 5 expresses factor C's view exactly: With years of graduate work in social



science already invested (in such demanding and competitive institutions, incidentally, as Harvard, Hawaii, Northwestern, Chicago, Princeton, and Illinois), and with much of it devoted to the mastery of scientific methods of research, these individuals have a commitment to the universally-applicable scientific method which they brought back with them to Korea. And for the same reason, factor C assigns a score of  $-4$  to the view that "Many Western tools of analysis are utterly inadequate for throwing light on our social problems" (statement 1). But factor C also accepts the idea that this universally-applicable science must be employed by concrete practitioners in particular locations—hence acceptance of the second part of statement 5 as well, that scientists (if not science itself) must take cognizance of national differences. This sentiment is echoed in statement 13, and in this context statement 14 reads like a lament, i.e., as an acknowledgement of a noxious fact which these generally-youthful social scientists would like to change, as most of them are in the process of doing through their own research programs.

Factor C is most clearly distinguishable from the others in terms of the statements which are rejected, some of which merely reinforce conclusions already reached.

	A	B	(C)	D	E
22. The unfamiliarity of Western concepts among Korean researchers indicates that the influence of natural features on the birth of concepts cannot be ignored.	+1	-1	-4	-2	0
24. Truth must be understood by people who live in a society if it is to acquire human value. This is even more so for social science which is linked directly with the destiny of people who live in society.	+4	+4	-3	+2	+3
26. We need descriptive basic research on a large scale with "Koreans and	+1	+4	-3	+4	+4

Korean society" as the objects of study.  
This is essential in all sectors of social science.

35. Science is an intellectual property      -4   -1   -4   +4   +3  
owned jointly by mankind. Common  
conclusions are reached, therefore, regard-  
less of the hypothesis the scientist  
started with and regardless of nationality.

Item 35, for example, no doubt earns its -4 score because it states that common scientific conclusions are reached "regardless of nationality," a view with which factor C decidedly disagrees. But if factor C subjects disagree with statement 35, we might also, from a purely logical standpoint, expect them to agree with statement 22, which they do not. In the case of factor C, statement 22 has likely been self-referred (also statement 31, score -4, see Appendix), i.e., the factor C respondents have probably thought of themselves and others with whom they are associated as those Korean researchers to which reference is made, and have therefore disagreed that this group is unfamiliar with Western concepts.

Statements 24 and 26 in particular distinguish C from the other factors. The "truth" of statement 24 has likely been conceived of as scientific or other specialized truth which members of the ordinary public do not necessarily comprehend, and need not for it to be of value. How many even well-educated citizens (factor C might ask) understand the principles of biology and genetics which foreshadow revolutionary changes in life in the not-too-distant future? How many understand relativity theory, or even the laws of economic growth and decline, or sociological theories of group cohesion? And is public appreciation of these truths required prior to their having value? Factor C thinks not. As to statement 26: We know already that factor C does not oppose research, especially indigenized research on "Koreans and Korean society." The key word seems to be "descriptive," with which factor C probably associates the

voluminous anecdotal and speculative literature on Korea which barely exceeds the conversational and is of limited utility to a social science which takes its science seriously.

As to science itself, factor C adopts a two-world view which is acceptable to student factors A and B, but not to faculty factors -A, D, and E:

	A	B	C	D	E
6. Whereas natural science inquires into relatively stable phenomena, social science deals with man, who is far more complicated and less stable than natural phenomena. Hence, social science differs from natural science in object, theme, methodology, and premise.	+3	+2	+3	-2	-2

Rather than saying that a science of behavior necessitates taking into account certain phenomena (such as the viewpoint of the person being studied) which are of no concern to a science of things, factor C has in effect postulated the existence of two sciences: One for persons and for things, each with its own themes and premises. In a sense, therefore, factor C has indigenized social science, i.e., has particularized social science vis-à-vis science more generally. The science of factors D and E is somewhat different, as we will now see.

### Factor D

Factor D, like C, accepts the indigenization principle (statement 18, *supra*), and this should come as no surprise when we take note of the fact that the two faculty members from Anthropology plus one faculty member from Social Welfare serve to define this factor. Anthropologists are especially well situated to appreciate the specificity and uniqueness of culture and its impact on behavior, and this is usually accompanied (as in this case) by a belief in culture boundedness, as statement 5, 13, and 19 attest:

	A	B	C	(D)	E
5. While science knows no national boundary, scientists do.	+1	-4	+4	+3	+1
13. Since any science of any age is a reflection of cultural processes, it is evident that social scientists in particular cannot be completely independent of the culture in which they were born.	+3	+3	+4	+4	+2
19. Generally speaking, even scientific concepts are culture bound; and so it is apt that, when they are introduced to a different culture, they give birth to opposition and collision.	+3	+1	+3	+4	-3
35. Science is an intellectual property owned jointly by mankind. Common conclusions are reached, therefore, regardless of the hypothesis the scientist started with and regardless of nationality.	-4	-1	-4	+4	+3

Factor C is in general agreement with D concerning culture boundedness, but C, as pointed out previously, has concluded from this (whereas D has not) that social science is different in kind from natural science, and statement 35 presents a related issue about which C and D again part company. Anthropologists are, of course, accustomed to working in alien cultures and, on the basis of prolonged and careful observation, reaching common understandings, and it is probably this successful tradition which has enabled factor D to be so confident about statement 35. There is therefore no conflict for factor D between culture boundedness and common scientific conclusions: We are culture bound, says D, and so are our concepts and theories, but with proper care these limitations can be overcome in many instances.

A feature of anthropology and of similar disciplines, such as psychiatric social work, which typically carry out their observations at the microlevels of society, is reliance on description as the *modus operandi*, and in this

connection D's support of description (in statement 12 below) is easily understood, as is the denial that social science fails to "penetrate to the essence" (statement 4), for few social scientists are better trained than anthropologists to get to the heart and mind of a society. But penetrating to hearts and minds produces a different outlook on society (statements 9 and 34)—from the bottom up, one is tempted to say, rather than from the top down vantagepoint of the more macro approaches—and ultimately produces a different outlook on oneself as scientist (statement 33).

	A	B	C	(D)	E
4. In applying Western methodologies, Korean researchers generally fail to penetrate to the essence but merely imitate the outer trappings.	+1	0	+2	-4	-2
12. It is necessary to train students in research methodology, and to guide them to discard the descriptive method in favor of more experimental methods.	-2	-3	-2	-4	+3
9. We must consider the difficulty of applying to Korea a design that is good for a relatively well organized and open society, since our society is still disorganized and has many elements of seclusion.	-1	-3	+1	-4	+3
34. Intuition and the capacity for synthesizing are characteristics of Koreans, and if these could be further refined, it would greatly contribute to developing recognition of problems and conceiving ideas for their solution.	+2	-2	0	+3	0
33. We rely more on sentimental logic than on rational logic in defining and describing the questions with which we are faced.	-3	-4	-3	0	-2

Dealing with Koreans at the individual and group level, from urban neighborhood to fishing village and from family to work group, the anthropologist is repeatedly reminded of the degree to which social life is organized, even when disrupted and in transition—hence factor D's disagreement with statement 9. Moreover, this closeness to individual lives permits the anthropologist (no less than the social worker) not only to see the less rational aspects of human behavior, but to appreciate their positive potential. This, in part, may explain factor D's acceptance of statement 34 and reluctance to reject statement 33: The other four factors are quick to deny the greater influence of sentimentality, but anthropologists and social workers—who, more than any other disciplines, have been influenced by psychoanalysis and psychiatry—are more cautious.

In sum, we might provisionally say that the indigenizers of factors C and D are aware of the limitations that Korea's cultural boundaries place on their Western style training, and that the differences which they display are due in part to differences in disciplinary training and to the different slants on society provided by their social scientific experiences.

### Factor E

As has already been shown, factor E accepts the indigenization principle (statement 18, +4) and disagrees, along with factor D, with the two-world conception of science (statement 6, -2), i.e., with the idea that there is a science of society that is fundamentally different from a science of the physical world. In other respects, however, factor E's views about various aspects of the scientific enterprise in Korea are often at variance with the other factors, as the following statements indicate.

	A	B	C	D	(E)
32. If we are to reach an understanding of man and society, we must start from experience—specifically, from experience which has been localized.	-2	-1	-2	-1	+4

12. It is necessary to train students in reasarch methodology, and to guide them to discard the descriptive method in favor of more experimental methods. -2 -3 -2 -4 +3

9. We must consider the difficulty of applying to Korea a design that is good for a relatively well organized and open society, since our society is still disorganized and has many elements of seclusion. -1 -3 +1 -4 +3

20. Our biggest problem is lack of modern research facilities. -4 -2 -3 -4 +2

30. It is not practical to conduct strict and thorough experiments in the social sciences because it is impossible to control all relevant variables. +2 +3 +2 0 -4

19. Generally speaking, even scientific concepts are culture bound; and so it is apt that, when they are introduced to a different culture, they give birth to opposition and collision. +3 +1 +3 +4 -3

2. Theories of social science in particular are destined ultimately to be localized, i.e., they have their origin in the socio-historical consciousness rather than in the universal spirit. +4 -3 0 -2 -2

Factor E has a strong belief in experience (statement 32), which may at first appear to be in conflict with statement 2, but E distinguishes between *experience* (Which is inevitably localized in the observer) and *theories* (which may be highly general and abstract, and removed from experience): The former refers to observation, the latter to reasoning. In this same vein, scientific concepts are not seen as necessarily culture bound (statement 19), although they may be if proper care is not exercised (statement 1). Elsewhere, factor E regards lack of research facilities as a

major problem (statement 20) and advocates more emphasis on experimentation (statements 12, 30), but not, it is to be noted, at the expense of description, which E also values (see statement 26, +4)

There is also a tendency on the part of factor E to defend Korean researchers against criticisms of scientific immaturity and sloppy thinking. This is seen in statements 17 and 21 below, and also in statements 15, 16, and 31 (see Table 2 and Appendix).

	A	B	C	D	(E)
17. Immaturity on the part of researchers and lack of consistent philosophy on the part of patrons of research is promoting imitation of research conducted in the United States and other foreign countries.	-2	+4	-1	+1	-4
21. There is lack of tolerance for divergent opinions, a strong inclination to projection, and mental unrest (as evidenced in Shamanist faith, fortune telling, etc.)—all of which pose a serious obstacle to dealing with science and objective knowledge.	-4	+2	-1	+2	-4

Especially with regard to statement 21, factor E may have had in mind a potentially long list of prominent Western scientists—Galileo, Kepler, Newton, and Leibniz, for example, not to mention Mesmer, Freud, Watson, and Skinner in the human sciences—who were religious, superstitious, and/or dogmatic, none of which detracts from their status as scientists. Hence factor E sees no *necessary* incompatibility between science and mysticism, and, with factor D, views science as “an intellectual property owned jointly by mankind” (statement 35, +3) in which common conclusions can be reached and important contributions made regardless of one’s intellectual starting point.



#### IV. Summary and Conclusions

Our interpretation is that all of the factors—save, perhaps, for factor —A—accept the principle of indigenization in some form or another, although they might argue with each other about specifics. *Factor +A* (the students) wishes to augment indigenization in almost an ethnocentric way, abjuring Western methods in particular. *Factor B* (also students) is willing to earn new procedures from sources outside the country, partly due to perceived shortcomings in Korean social science practices, but these subjects anticipate modifying what they learn upon their return. The faculty members composing *factor C*, a conglomerate of several social sciences, are young and U.S. trained. They are committed to the canons of scientific method and are endeavoring to indigenize in the sense of modifying procedures to take into account the specificities of the Korean context. *Factor D* is composed of faculty members with a personality-and-culture slant to their training (anthropology and social work) and who emphasize culture boundedness but (unlike C) ultimately accept a unified view of science. *Factor E*'s indigenization refers to localized experience, but E also holds out for more generalized theories.

The fact that the five factors are all orthogonal to one another (i.e., statistically independent) yet accept the same principle of methodological indigenization may be considered to be a questionable conclusion, but a useful analogy can be made with chemical compounds, as Barchak (1977: 165) points out. Sugar, for example, is a combination of carbon, hydrogen, and oxygen atoms, but there are different kinds of sugars with the same numbers of atoms: Sucrose and lactose, for example, are both formally represented by  $C_{12}H_{22}O_{11}$ . What distinguishes these molecules and enters into their explanations are their atomic *structures* (i.e., the way the atoms are patterned), and the same can be said for the above factors. They all adhere to a common principle (just as all sugars are sweet and soluble),

with differences among them being due to the structure of their Q statements.

Although factors A through E have given their nod of approval to the principle of indigenization, we would like to conclude on a somewhat different note—namely, that the necessary prerequisite for the proper study of Korean society (or any society for that matter) is not indigenization per se, but operationalization, and that with suitable operations indigenization will take care of itself. Indigenization, however, does not ensure suitable operations, which are therefore more fundamental.<sup>(3)</sup>

In support of this assertion, we would point to factors A through E themselves. Unlike these factors, which have been defined by concrete human operations, most social scientific categories are purely logical as opposed to empirical, and artificial as opposed to genuine: Hahn (1979), to provide an illustration, divided his sample of respondents according to political party identification, but party distinctions are more arbitrary and logico-categorical than operational, and more obviously political than social scientific. Factors A to E above also tended to correspond to logical groupings—e.g., students (factors A and B) and faculty (C, D, and E), with exceptions as noted—but there was no *a priori* guarantee that this would happen; moreover, the interpretations given the factors were in no essential way based on knowledge about the persons associated with them. The factors, in sum, are primarily operant categories (Stephenson, 1977) which represent distinctively different ways of thinking.

The important matter is that the methodological issue raised by Kim Jae-ün (1979) is of intrinsic interest to Korean social scientists, and it was

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(3) Operationism, in the sense of the operant factors reported above, is not to be confused with operational definitions as widely understood and employed in contemporary social science. The latter proceed by first elaborating the component properties of a concept (e.g., alienation) and then searching for corresponding behavior; the former begins with phenomena (such as factors A to E) whose operant nature manifests itself instrumentally. Bridgman's (1927) treatise remains the best discussion of operationism and its importance to modern science.

Korean social scientists who represented their own viewpoints in the form of Q sorts. The factors which emerged were therefore operant and of necessity had to be indigenous to Korea. With genuine operations, as stated previously, indigenization takes care of itself—or, as a Taoist philosopher once said, “If all is well at the grass roots, you won’t have to worry about the color of your meadow.” What is essential are the grass-roots operations.

In addition to the inherently indigenized factors which result, at least two benefits immediately accrue from the operational standpoint. The first refers to the size of the respondent sample and the cost of carrying out social scientific research, matters of particular concern in a country with scarce resources. This study employed only 30 subjects, and so one might ask how this can compare, say, to the more than 2000 persons surveyed by Lee Young-ho (1978) in his study of national consciousness. But Lee, like Hahn, relied on categorical distinctions—students vs. ordinary citizens in Lee’s case—and so had no choice but to examine differences in arithmetic averages and other summary statistics based on large numbers. In our case, however, we are interested in comparing viewpoints *qua* viewpoints based on the statements and factor scores in Table 2, and so all we require (in principle) is just a few subjects of each of the five types who can provide these viewpoints for our inspection—i.e., we are not interested at this point in knowing how many people represent this or that viewpoint, but in determining which viewpoints do in fact exist and what the similarities and differences among them are. This strategy is not only more defensible on scientific grounds, but is far less demanding in terms of time and both human and monetary resources.

Finally, there is a scientific and, ultimately, humanistic benefit to pursuing an operational course as opposed to one based solely on indigenization, which can easily slip from methodological particularism into a kind of nativistic exclusivity (Lee, 1979: 8n). We refer to the fact that operationism (properly conceived) has a valued position in twentieth century

science, and serves to bind all sciences—from physics and chemistry to psychology, economics, and political science—together in a common cause. The operant factors of this study, although specific to the concerns of Korean social scientists, are no more or less operational than any other factors emerging from any other study on any other topic performed on any other respondents anywhere else in the world. When these factors are induced to appear for our detailed inspection, they reveal the categories of actual thought at issue vis-à-vis the topic under consideration. A science of behavior could ask for nothing more, and under these conditions, the concept of indigenization is redundant, for what is essential to the culture under examination is contained in the operations.

### REFERENCES

- Barchak, L.J. (1977) *Knowledge or certainty? An investigation of the subjective structure of some communication scholars*. Doctoral dissertation, University of Iowa.
- Bentley, A.F. (1926) *Relativity in man and society*. New York: G.P. Putnam's Sons.
- Black, V. (1955) Laboratory versus field research in psychology and the social sciences. *British Journal for the Philosophy of Science*, 5:319-330.
- Bridgman, P.W. (1927) *The logic of modern physics*. New York: Macmillan.
- Bronowski, J. (1973) The principle of tolerance. *Atlantic Monthly*, 232(6):60-66.
- Brown, S.R. (1980) *Political subjectivity: Applications of Q methodology in political science*. New Haven, Conn.: Yale University Press.
- Brown, S.R. & T.D. Ungs (1970) Representativeness and the study of political behavior. *Social Science Quarterly*, 51:514-526.
- Creaser, J.W. (1955) An aid in calculating Q-sort factor arrays. *Journal of Clinical Psychology*, 11:195-196.
- Gergen, K.J. (1973) Social psychology as history. *Journal of Personality and Social Psychology*, 26:309-320.
- Hahn Bae-ho (1979) Political culture in Korea: Some central tendencies. *Journal of Asiatic Studies*, 22:1-28.
- Iltis, C. (1973) The Leibnizian-Newtonian debates: Natural philosophy and social psychology. *British Journal for the History of Science*, 6:343-377.
- Kantor, J.R. (1978) The principle of specificity in psychology and science in general. *Revista Mexicana de Análisis de la Conducta*, 4:117-132.

- Kim Jae-ün (1979) Problems concerning indigenization of methodology for education and psychology. *Korea Journal*, 19(11):10-19.
- Lee Chong-bum (1979) A prolegomenon to the indigenization of public administration. *Social Science Journal*, 6:7-26.
- Lee Young-ho (1978) The Korean people's national consciousness: An analysis of survey data. *Korea Journal*, 18(1):42-68.
- Leite Lopes, J. (1977) Developing countries and dependent science. *Impact of Science on Society*, 27:259-265.
- Martin, M.W. & J. Sell (1979) The role of the experiment in the social sciences. *Sociological Quarterly*, 20:581-590.
- Stephenson, W. (1953) *The study of behavior: Q-technique and its methodology*. Chicago: University of Chicago Press.
- Stephenson, W. (1977) Factors as operant subjectivity. *Operant Subjectivity*, 1:3-16.
- Stephenson, W. (1978) Concourse theory of communication. *Communication*, 3:21-40.

## APPENDIX

### The Korean Research Q Sample (KRQS)

1. Many Western tools of analysis are utterly inadequate for throwing light on our social problems.
2. Theories of social science in particular are destined ultimately to be localized, i.e., they have their origin in the socio-historical consciousness rather than in the universal spirit.
3. Since we do not have a sufficient quantity of experimental tools, we are forced to spend most of our time reading research reports produced by others.
4. In applying Western methodologies, Korean researchers generally fail to penetrate to the essence but merely imitate the outer trappings.
5. While science knows no national boundary, scientists do
6. Whereas natural science inquires into relatively stable phenomena, social science deals with man, who is far more complicated and less stable than natural phenomena. Hence, social science differs from natural science in object, theme, methodology, and premise.
7. The Korean attitude toward solving problems is not based on a scientific methodology, but on personification, adaptation to the supernatural, reliance on personal experiences, intuition, and blind obedience to authority.
8. We are confronted with the task of resolving problems which arise as an aftermath of cultural collision in the process of digesting scientific methodology.
9. We must consider the difficulty of applying to Korea a design that is good for a relatively well organized and open society, since our society is still disorgan-

ized and has many elements of seclusion.

10. Perhaps due to our lack of scholarly tradition, our research is small in scale and sporadic.
11. Social scientists find concrete problems in the real society in which they live, and their research can have meaning only when their answers to the problems are applicable to society with certainty.
12. It is necessary to train students in research methodology, and to guide them to discard the descriptive method in favor of more experimental methods.
13. Since any science of any age is a reflection of cultural processes, it is evident that social scientists in particular cannot be completely independent of the culture in which they were born.
14. As almost every bibliography shows, the concepts, terms, and theories used in research are overwhelmingly foreign in origin.
15. There is more of a reliance on intuition or a single experience than on sustained observation in becoming aware of problems or conceiving ideas for their solution.
16. The organization and syntax of research papers are often illogical, indicating insufficient professional training on the part of the researchers. It is necessary for them to train themselves in the art of writing in a concise style.
17. Immaturity on the part of researchers and lack of consistent philosophy on the part of patrons of research is promoting imitation of research conducted in the United States and other foreign countries.
18. If we are to explain Korea's people, society, bureaucracy, voters, consumers, and parents on a level with engineering (involving prediction and control), we will inevitably have to indigenize the theoretical frame, concepts, and consciousness of problems.
19. Generally speaking, even scientific concepts are culture bound; and so it is apt that, when they are introduced to a different culture, they give birth to opposition and collision.
20. Our biggest problem is lack of modern research facilities.
21. There is lack of tolerance for divergent opinions, a strong inclination to projection, and mental unrest (as evidenced in Shamanist faith, fortune telling, etc.)—all of which pose a serious obstacle to dealing with science and objective knowledge.
22. The unfamiliarity of Western concepts among Korean researchers indicates that the influence of natural features on the birth of concepts cannot be ignored.
23. Greater importance is attached to a subjective attitude than to an objective one.

24. Truth must be understood by people who live in a society if it is to acquire human value. This is even more so for social science which is linked directly with the destiny of people who live in society.
25. What we have to take into consideration when we introduce concepts that are foreign is how to translate, redefine, and adapt them.
26. We need descriptive basic research on a large scale with "Koreans and Korean society" as the objects of study. This is essential in all sectors of social science.
27. Korean researchers prefer the qualitative to the quantitative.
28. Ideas which inspire our social scientists to conduct research are generally Western in nature, whereas research projects dealing with urgent problems facing Korea are sporadic.
29. Universal or general knowledge alone cannot become the purpose of science. In order to solve a particular problem facing an individual or society, particular knowledge should also be held as another purpose of science.
30. It is not practical to conduct strict and thorough experiments in the social sciences because it is impossible to control all relevant variables.
31. Korean researchers often give exaggerated interpretations to their results and statistics, and seem to have contempt for precision. This has led to a retarding of scientific development.
32. If we are to reach an understanding of man and society, we must start from experience —specifically, from experience which has been localized.
33. We rely more on sentimental logic than on rational logic in defining and describing the questions with which we are faced.
34. Intuition and the capacity for synthesizing are characteristics of Koreans, and if these could be further refined, it would greatly contribute to developing recognition of problems and conceiving ideas for their solution.
35. Science is an intellectual property owned jointly by mankind. Common conclusions are reached, therefore, regardless of the hypothesis the scientist started with and regardless of nationality.
36. Koreans tend not to be hypothesis-oriented, and are also insufficient in terms of multivariate and continuous thinking—consequently, they tend to fall into dogmatic judgments.