

DIFFERENTIATION OF STEREOTYPES: THE INFLUENCE OF KNOWLEDGE, AFFECT, AND NATIONAL GROUPING¹

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The ascription of traits to the inhabitants of other countries, more commonly known as stereotyping, has continued to be of interest to social scientists since the pioneering study by Katz and Braly (1933). While the attempt has been made to tap a variety of singular populations, relatively few attempts have been made to refine the measurement procedures. Thus the Katz and Braly technique of asking respondents to select from a given list of traits those which are appropriate for a particular country has been adopted by numerous authors (see, for example, Meenes, 1943; Gilbert, 1951; Prothro & Melikian, 1954; Rath & Das, 1958; Zaida, 1964; Chandra, 1967). Because statistical analysis is sharply limited with this type of data, however, its contribution to an understanding of comparative stereotypes is also limited. Use of a Likert scale by Perlmutter and Shapiro (1957) and by Gundlach (1944) provided more information than the measures of the Katz and Braly technique which ask only for a judgment of the presence or absence of a trait and consequently allowed for more precise comparison among stimulus countries, although the latter investigator did not take full statistical advantage of the data obtained.

The concept of cognitive complexity provides a means for further comparison of stereotypes within a group of stimulus countries. This approach has the additional advantage of emphasizing the nature of the stereotyping process rather than focussing solely on the end product. Cognitive complexity refers to the ability of an individual to differentiate an object in his conceptual environment; specifically, it is a function of the number of dimensions he can use independently in characterizing a particular object. While the measurement of this variable may differ (for an alternative approach, see Scott, 1962), the method developed by Bieri and his associates (Bieri, 1955; Tripodi & Bieri, 1963) appears most useful for obtaining information of stereotypes of individual countries as well as the homogeneity or diversity of stereotypes among countries. As conceived by these authors, the measurement technique calls for the rat-

¹ This research was supported in part by U. S. Public Health Service Pre-doctoral Fellowship (MH-30, 398).

ing of a series of stimulus objects on a series of trait dimensions, constituting a matrix of judgments by each subject. Two types of information can be derived from this matrix. First, the 6-point rating scales for bipolar trait dimensions indicate the degree of trait attribution for any single stimulus country, which can be used to compile a description of that single country as well as providing a basis for comparison across stimulus countries. Second, a measure of cognitive complexity can be derived from the composite ratings which will indicate the uniformity or diversity of an individual's judgments about a set of countries. Briefly, this measurement consists of matching each judgment of a particular country on a particular trait with the judgments made of all other countries on that same trait. A high number of matches, and hence a high score, indicates a minimum diversity in the characterization of countries, whereas a low score reflects considerable diversity or differentiation in judgments.

Study I uses the described complexity measure to obtain these two types of information and in particular focusses on the differences in stereotypes which students in the United States hold in regard to Western European nations as opposed to Latin American countries. The dearth of studies dealing with images of Latin American nations as viewed by citizens of the United States is probably paralleled by a general lack of information by people of the United States about these countries. Because Scott (1962) has found some evidence for a positive relationship between knowledge of a country and complexity of judgments of that country, it can be hypothesized that the lesser familiarity with Latin American countries will be manifested in less complexity of judgment of the Latin American countries as compared to Western European. In addition to the derived measure of complexity, the pattern of judgments themselves can furnish descriptive information on the nature of stereotypes held either of a single country or of a group of countries.

Study II poses a related question which goes beyond the stereotyping of any specific group of countries. While the assumption was made that knowledge of a country or group of countries is the primary determinant of complexity in the judgments of those countries, it is also possible that the affective dimension is an equally critical variable. In the realm of interpersonal judgments, Irwin, Tripodi and Bieri (1967) found evidence for greater differentiation in the judgment of negative persons as compared to positive persons. Whether this finding would generalize to the more abstract area of stereotypy is uncertain. Study II factorially varies the knowledge and affection dimensions of stimulus countries in order to determine

the separate and combined effects of these two variables on complexity of stereotyping behavior.

STUDY I

METHOD

Subjects. Forty undergraduate students at the University of Texas served as subjects. Each of these subjects had voluntarily agreed to participate in several psychological experiments, and the present study was one of several available alternatives.

Materials and Procedure. Subjects, tested in groups of four to six, were told that the experimenter was interested in the thoughts that people have about other countries.

The instrument used to measure these responses was a modified form of the cognitive complexity grid, similar to that used by Irwin et al. (1967) with names of countries replacing the names of people. Subjects were given a list of 18 countries and were asked to judge each country on each of eight bipolar adjective dimensions. The dimensions selected for the study were derived from the list of traits prepared by Katz and Braly (1933), and were chosen to represent non-overlapping characteristics which could readily be applied to individuals within a country. The eight dimensions were as follows: honest-deceitful, peaceful-aggressive, alert-dull, outgoing-reserved, temperamental-calm, hard working-lazy, arrogant-humble, revolutionary-traditional. Judgments were made on a scale from +3 to -3, with no zero point allowed, and were made in a predetermined random order, such that neither the same trait nor the same country appeared on successive judgments.

Countries selected for the study included eight Latin American nations (Argentina, Brazil, Chile, Guatemala, Mexico, Panama, Peru, Venezuela) and eight Western European countries (Belgium, England, France, Italy, Portugal, Spain, Switzerland, West Germany), plus Canada and the United States, which were included for comparison purposes. Rating 18 countries on each of eight traits yielded a total of 144 judgments by each subject.

After completing the rating procedure, subjects were requested to make two separate rankings of the 16 countries (excluding the U. S. and Canada) in the order of (a) their liking for the countries, and (b) their presumed knowledge about the culture of the countries.

RESULTS

Using a series of bipolar scales with no zero point forces subjects to choose one of two alternatives in each judgment; subsequently, he may indicate the degree to which he feels that trait is appropriate within a range of 1 to 3. Analyzing the data on each of

Revista Interamericana de Psicología

these bases, it is possible first to determine whether consistent choices of one pole within a particular dimension were made by subjects with respect to any of the countries. Such an analysis will indicate whether, within the limits imposed by the experimenter-supplied traits, subjects do ascribe traits with a frequency greater than chance. Table 1 represents the results of such an analysis, showing

Table 1
Traits attributed to 18 countries

	Honest- deceitful	Peaceful aggressive	Alert- dull	Outgoing- reserved	Temperamen- tal-Calm	Hard-work- ing-Lazy	Arrogant- Humble	Revolution- ary-Tradition- al
Argentina	h	p			T			
Brazil	h	p		o	T		a	
Chile	h				T			
Guatemala	h		d		T			
Mexico		P	D		T	L		
Panama		A		o	T	l	a	r
Peru		P					h	
Venezuela				o	T			r
Belgium	H	P	a	R	C	H	H	T
England	H	P	A		C	H	A	T
France		A	A	O	T		A	
Italy				O	T			
Portugal	H	P		r				T
Spain					T		a	r
Switzerland	H	P	A	r	C	H	h	T
W. Germany	H		A			H	a	
Canada	H	P	A		C	H		T
United States	H		A	O	T	H	A	r

Note: Lower-case letters represent .05 level of significance; capital letters represent .01 level of significance (2-tailed test).

the traits for which the frequency of choice differed from the hypothetical probability of .50 to a significant degree. Altogether, 82 traits of a possible 144 were ascribed with significant frequency, including 28 to Latin American countries and 41 to Western European nations, which indicates a considerable degree of consensus in stereotyping. The lesser certainty in characterization of Latin American countries is further evidenced by the difference in mean absolute judgments of the two sets of countries: whereas the average rating of a Latin American country for all traits combined was 1.43, that same score was 1.74 for the European nations.

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It should be noted that certain traits, such as honesty, are assigned with very high frequency, while the polar opposite receives infrequent mention. Such traits do not distinguish well between countries and may be considered to be quasi-universal labels for the present subject population.

While a homogeneity of stereotypy is most apparent in the Latin American judgments, a few exceptions are noteworthy. Mexico, undoubtedly the most familiar to the present subjects, elicits a greater uniformity of judgment across subjects than do any of the other countries. Of further interest is the rather negative characterization of Panama. It is the only Latin American country characterized as aggressive, for example, a fact which may be most directly attributed to the political difficulties which developed between Panama and the United States in 1964.

While certain distinctions are present among the Latin American nations, their degree of similarity is more pronounced than any differences. An index of this homogeneity is given in the measure of cognitive complexity, based, as described earlier, on the number of matching or non-differentiated judgments which a subject makes in the rating task. A high score on this measure indicates a high degree of overlap or homogeneity in judgments, i.e. low complexity in judgment. In comparing the Latin American group with the Western European group on this measure, complexity scores of 89.95 and 60.95 are found for the two groups, respectively, a difference which is highly significant ($t = 4.63$, $df = 39$, $p < .001$). Thus as predicted, subjects show much less variation in the attribution of traits to Latin American nations as compared to Western European countries.

The reasons for the difference in complexity of stereotyping are not entirely clear, however, as there are at least three possible factors which may be influential. First, it was assumed that relative lack of knowledge about Latin American countries would result in greater homogeneity in the judgments of these countries. To determine whether such an assumption of differential knowledge is justified, it is necessary to inspect the rankings which subjects made of their knowledge about the 16 Latin American and European countries. Analysis of the frequency of occurrence of Latin American versus European countries in the upper or lower half of the rankings yields a χ^2 of 4.0 ($p < .05$), indicating that Latin American nations are significantly less known to the present subject population.

A second possibility is that the obtained judgmental differences are attributable to a difference in affective response toward the two groups of countries, rather than any knowledge differential. Stud-

ies of interpersonal judgments point to a negative relationship between affect and judgmental complexity (Irwin et al., 1967), although the direction of this relationship is not undisputed. Analysis of such an affect difference in the present data again depends on the subject's own rankings, in this case on the degree of liking for the countries, and again yields a $\chi^2 = 4.0$. Subjects show a more positive regard for the European nations than they do for the Latin Americans, and the relative dislike of the latter is associated with less complexity of judgment. The coincidence of results for analysis of the knowledge and affection rankings is readily explained by performing an additional test on the degree of association between "like" and "know" judgments. Such an analysis yields a z of 6.36, significant well beyond the .001 level, suggesting that these two dimensions are inextricably confounded in the present study.

Finally, it is conceivable that neither differences in knowledge nor affection are the principal cause of the complexity differential, but that such a differential reflects basic differences in the countries themselves. The dominant Spanish influence through Central and South America may be much more pervasive than any Western European commonalities, and thus the greater similarity among judgments of Latin countries would be due to the actual characteristics of the countries rather than any form of judgmental bias.

STUDY II

METHOD

Subjects. Thirty-one students from the introductory psychology classes at the University of Texas served as subjects in Study II. Of this number, 16 were female and 15 were male, and all were obtained in the manner described in Study I.

Procedure. Subjects appeared individually for the experiment, and were seated at a table on which a world map was placed. The experimenter explained to the subject that the study concerned how people think about foreign countries. The subject was then asked to name four countries in each of the four categories using the map for assistance if needed. These four categories were described as follows: a) "countries which you know quite a lot about and which you like"; b) "countries which you know quite a bit about but do not like what you know"; c) "countries which you don't know much about but which you think you would like if you did know more"; d) "countries which you don't know much about and don't think you would like even if you knew more." Thus for each subject, a total of 16 names were generated which represented two levels of affect (positive or negative) and two levels of knowledge (high and low).

As the subjects stated the names the experimenter listed them

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on a sheet of paper, arranged so that two members of the same class were never consecutive. This sheet, together with the cognitive complexity form described above, was given to the subject, who rated each country on each of the eight traits for a total of 128 judgments.

RESULTS

Four complexity sub-grids were formed from the subjects' total judgments, wherein each subgroup constituted an 8 x 4 matrix with eight trait judgments made for each of four countries. The possible range of complexity scores obtainable with this truncated grid is 0 to 48; the obtained range was 4 to 36 and the mean was 14.18.

An analysis of variance was performed on the complexity scores and is summarized in Table 2. As indicated, only the variable

TABLE 2

Summary of Analysis of Variance of Complexity Scores

A (Sex)	1	2.83	< 1
Error (between)	29	51.47	
B (Knowledge)	1	124.0	4.78 *
C (Affect)	1	39.52	1.52
B x C	1	37.29	1.44
A x B	1	56.95	2.19
A x C	1	.14	< 1
A x B x C	1	1.55	< 1
Error (within)	87	25.97	

* $p < .05$

of knowledgeableability was significant, in that those countries better known were judged with greater diversity ($X = 13.18$) than those countries which were less well known ($X = 15.80$). Neither the positive or negative feeling which an individual felt toward the countries nor the interaction between affect and knowledge showed a significant effect on the diversity of individual's judgments toward foreign countries.

DISCUSSION

The two studies reported here provide additional information about the process of cultural stereotyping. It is clear that individuals will, when the situation requires, form stereotypes of other countries with considerable consistency, as illustrated by the statistically significant agreement in a trait attribution found for 28 of the possible 64 judgments in the Latin American group and 41 out of 64 for the European sample. Nevertheless, such a group of national stereotypes may show very little diversity among them-

selves, a fact which is most strikingly reflected in the complexity measure. Judgments of Latin American countries made by the present sample show far greater homogeneity than do those of the better known and better liked European countries. While either knowledge or affect could provide a tenable explanation of judgmental differences on the basis of the first study, Study II clearly indicates that knowledge of a particular country plays the major role in an individual's ability to make differentiations among his stereotypes.

To the less known Latin American nations, then, subjects ascribed a general pattern of temperamental but peaceful, a pattern which differs little from that obtained more than 25 years ago, as reported by Klineberg (1950). The two countries which stand out among the Latin American group are Mexico and Panama. Mexico, being geographically close to the present subjects, is ranked highest of the Latin countries in terms of knowledgeability and is consequently rated more definitely on adjective dimensions than are the other countries. Panama, who ranks second to Mexico in knowledge, also engenders a greater range of trait ascriptions, several of which are somewhat negative in character and presumably attributable to Panama's well-publicized political dispute with the United States.

Impressions of the Western European countries, in contrast to the modal Latin nation, showed greater extremity in trait ascription and a much greater heterogeneity among the various countries. Because the first study may have artifactually created an intrinsically more heterogeneous group in the European nations, a conclusion relating the similarity of Latin American stereotypes to their unfamiliarity can only be tentative. That lack of knowledge as judged by the subject himself is, however, a critical determinant of stereotype complexity, can less readily be challenged as a result of Study II. The relationship between knowledge and complexity, previously indicated by Scott (1962), is thus re-confirmed, despite considerable methodological differences between Scott's study and the present one, and is stripped of any possible confounding by covariance with an affective dimension.

The cognitive complexity grid, as utilized in the present study, has demonstrated its applicability in measuring the ability of individuals to differentiate among foreign countries. Both in the case of experimenter-provided stimulus countries and subject-generated countries, the measure serves as a useful index of the individual's stereotyping behavior and offers an additional tool to the cultural psychologist's repertoire.

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ABSTRACT

Stereotypes of foreign countries were elicited from a sample of U. S. students in a form which provided (a) descriptive information for each country, and (b) a measure of cognitive complexity, or degree of trait differentiation among a group of countries. Fewer instances of consensus in stereotyping were found within countries of Latin America, as compared to nations of Western Europe; judgments of all Latin countries combined, however, showed much greater homogeneity, i.e. less trait differentiation between countries, than for the European group. Further, in a comparison of the influence of knowledge about a country versus positive or negative regard for a country, the former factor was found to be of primary importance in determining the diversity of judgments made in a stereotyping task.

RESUMEN

De un grupo de estudiantes estadounidenses se obtuvieron sus ideas estereotipadas de países extranjeros de manera que dieron (a) información descriptiva para cada país, y (b) una medida de complejidad cognitiva, o grado de diferenciación de rasgos, entre un grupo de países. Se hallaron menos casos de estereotipación entre los países latinoamericanos, en comparación con las naciones de

Europa occidental; el criterio dado sobre todos los países latinos combinados, sin embargo, demostró tener más homogeneidad; es decir, menos características de diferenciación entre países, que para el grupo europeo. Además, en una comparación de la influencia del conocimiento acerca de un país contra un miramiento positivo o negativo para el país, se encontró que el primer factor fue de importancia primaria para determinar la diversidad de opiniones efectuadas en la tarea de estereotipación.

RESUMO

Estereótipos de países estrangeiros foram elicitados de uma amostra de estudantes norte-americanos em um formulário que continha (a) informação descritiva para cada país, e (b) uma medida de complexidade cognocitiva, ou grau de diferenciação de traços gerais entre um grupo de países. Um número menor de casos de concenso, relativamente a estereótipos, foi encontrado dentre países de América Latina, quando da comparação a países da Europa Ocidental. Entretanto, quando combinados os julgamentos de todos os países Latino-americanos, maior homogeneidade foi encontrada, ou seja, uma menor diferenciação de traços gerais entre os países, relativamente aos países europeus. Os dados indicaram também que o grau de conhecimento de um país é de importância determinante na diversidade de julgamentos feitos quanto a estereótipos.

