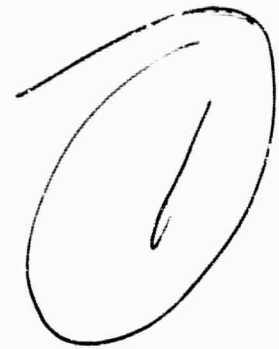


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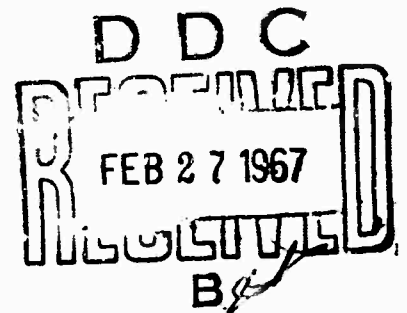
FREQUENCY OF CONTACT AND STEREOTYPING

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Frequency of Contact and Stereotyping

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ABSTRACT

Six samples of Ss were tested with an instrument which utilized a semantic differential format. The "concepts" were "Americans in general tend to be" and "Greeks in general tend to be." The scales were characteristics obtained from unstructured interviews of Americans and Greeks working together in jobs requiring face-to-face social relations. The six samples varied in the degree of contact. Maximum contact groups consisted of Americans and Greeks working together; medium contact groups consisted of Americans living in Athens taking a university course, and Greek university students studying in Illinois; minimum contact groups consisted of American students in Illinois and Greek students at the University of Athens. The autostereotypes and heterostereotypes of the six samples were investigated. It was found that the autostereotype of the American samples having contact with Greeks is more favorable than the autostereotype of the Americans having no contact; the autostereotypes of the three Greek samples show no differences. The heterostereotype of Americans concerning Greeks is less favorable for the maximum than the minimum contact groups; the heterostereotype of Greeks concerning Americans is more favorable for the maximum than for the minimum contact groups. A theoretical integration of these results is offered.

Frequency of Contact and Stereotyping¹

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Stereotypes are beliefs about the characteristics of groups of people. The present study explores the effects of intercultural contact on the (a) favorableness of stereotypes and (b) within sample agreement concerning the stereotypes. Two kinds of stereotypes are examined: autostereotypes (members of culture A thinking about members of culture A) and heterostereotypes (members of culture A thinking about members of culture B). Thus, favorableness is examined both with respect to autostereotypes and to heterostereotypes. Within sample agreement is considered as a measure of "clarity" of the stereotype, for when most members of a group agree, this indicates they have no doubts about the particular stereotype. Such agreement, however, can occur simply when adequate communication exists within a given group. Thus, agreement in itself is not necessarily an index of the "validity" of the stereotype. On the other hand, when a "clear" autostereotype agrees with a "clear" heterostereotype, and there is no substantial amount of communication between the two groups, this condition may be thought of as providing presumptive evidence that the particular stereotype has validity. The validation of such stereotypes, however, requires experiments in which Ss from the various cultures behave as predicted from the stereotypes. Such experiments were beyond the purpose of the present study.

¹Some of the data for this study were collected while Triandis was a Ford Foundation Faculty Fellow in 1964-65. Some of the data were collected under contract NR 177-472, Nonr 1834(36) with the Advanced Research Projects Agency and the Office of Naval Research to study "Communication, Cooperation and Negotiation in Culturally Heterogeneous Groups (Fred E. Fiedler, Lawrence M. Stolurow, and Harry C. Triandis, Principal Investigators). E. E. Davis, Uriel Foa, C. E. Osgood, and D. Summers made valuable comments on an earlier version of this paper.

A great deal of research has been completed about stereotypes since the early Katz and Braly (1933) study. This research suggests that stereotypes are learned primarily through interaction with family, friends, teachers, etc., so that they constitute "cognitive norms" for thinking about a group of people, but they may also develop through interaction with the persons being stereotyped. It appears reasonable to expect certain stereotypes to develop primarily as a result of interaction with members of one's in-group, and other stereotypes to develop as a result of interaction with the persons being stereotyped. For example, if an American hears about certain atrocities committed by members of group X, he might attribute the characteristic "cruel" to them without any interaction with this group. But, he may have no stereotype concerning the characteristic tendency "to pry into personal affairs" and might not acquire such a stereotype unless he has personal contact with members of group X.

The basic hypotheses of the study were based on the view that the greater the degree of contact between two groups the greater will be the amount of information that one group will have about the other, so that the heterostereotypes should be more differentiated or "clearer." At the same time, since each group would have a chance to compare its own self-image with that of another cultural group, greater contact should result in more differentiation in the autostereotypes as well as in the heterostereotypes.

On the matter of favorability of the stereotypes, the present view would suggest that the more group A succeeds in reaching goals that are admired by group B, the more will the heterostereotype of B concerning A be favorable. Conversely, the less group A reaches group goals admired by group B, the less favorable will be the heterostereotype of B concerning A. Finally, if group A reaches a desirable goal, which group B does not reach,

then group A will develop a positive autostereotype. Conversely, if group A fails to reach a desired goal which is reached by group B, then group A will develop an unfavorable autostereotype.

Our knowledge of American and Greek cultures suggests that in many important respects the two cultures have the same goals, i.e., material success, a high standard of living, progress, and at the same time being able to lead "the good life." Since there is a clear difference in the degree to which these goals have been reached by the two cultures, it follows that if we test Americans and Greeks we should be able to support the following specific hypotheses:

1. The greater the degree of contact, the clearer will be both the autostereotypes and the heterostereotypes.

2. The greater the degree of contact, the more will the Greek stereotype of Americans be favorable.

3. The greater the degree of contact, the more unfavorable will be the stereotype of Greeks held by Americans.

4. The greater the degree of contact, the more favorable will be the American autostereotype.

5. The greater the degree of contact, the less favorable will be the Greek autostereotype.

These hypotheses reflect our view that stereotypes develop, in part, as attempts by the organism to understand its social environment (e.g., "how come you are so rich and I am so poor") and in part reflect frequently occurring traits found in the particular groups. Thus, though stereotypes are "inferior judgmental processes" (Fishman, 1956), they are not necessarily contrary to fact. In fact they are thought-saving ways of analyzing the social environment and reflect some "kernel of truth" (Allport, 1954).

The "kernel of truth" hypothesis appears to find some support in a variety of studies. For example, Prothro and Melikian (1954) found considerable similarity in the stereotypes held by Arab and American students with reference to Germans, Negroes and Jews. Moreover, Prothro and Melikian (1955) found shifts in the stereotypes of Americans held by Arab students as a result of a visit of the Seventh Fleet in Lebanese waters. Sinha and Upadhyaya (1960) observed changes in the stereotypes of the Chinese among Indian students, as a result of the Sino-Indian dispute. Yet, agreement among Arabs and Americans may be simply due to exposure to the same kind of information (e.g., books written by the same authors, since the Arab students were attending an American institution), and the change in the stereotype of the Chinese may be due to Indian "propaganda" and may not reflect personal exposure to reality.

One way to investigate the "kernel of truth" hypothesis is to examine the extent to which the autostereotype of group A coincides with the heterostereotype of other groups with respect to group A. Fischer and Trier (1962) tested German- and French-speaking Swiss. With impressive consistency the autostereotype agreed with the heterostereotype. However, it is necessary to study such agreement among cultural groups where it is unlikely that one group learned the stereotypes of the other. In the case of the Swiss this condition was not met. In the present study our samples allowed a somewhat better test.

Method

Most studies of stereotypes provide lists of adjectives to the Ss who are asked to check the adjectives that apply to a particular group. With such an approach there is no reason to believe that the traits that are most relevant to the particular group will be represented in the adjective

lists and will thus appear in the results of the study. In the present study this difficulty was met by the use of open-ended interviews.

As part of a study examining interpersonal relations in international organizations, Triandis (1967) interviewed samples of Americans working in business, military, philanthropic or governmental institutions in Greece. In a completely open-ended interview, he elicited the "impressions" of these Americans concerning Greeks. He then interviewed the Greek counterparts of these Americans and asked them to characterize the Americans. A list of about 100 characteristics which were attributed to the "typical American" or "typical Greek" was thus obtained. After editing, this list was reduced to 41 characteristics that did not appear to overlap to a significant degree.

Questionnaire: The 41 characteristics were then organized in a questionnaire utilizing the following Semantic Differential (Osgood, et al., 1957) format:

In general Greeks tend to be
 efficient _____ ' _____ ' _____ ' _____ ' _____ ' _____ ' _____ inefficient

In general Americans tend to be
 efficient _____ ' _____ ' _____ ' _____ ' _____ ' _____ ' _____ inefficient

In addition, a number of other items forcing the S to compare the two groups directly were utilized. For example, one item was:

Greeks are more likely than Americans to tell you what
 you want to hear rather than the truth.

Agree _____

Do not know _____ (please check one)

Disagree _____

Translation: The questionnaire was first constructed in English. It was then translated into Greek. A sample of 12 bilinguals was asked to take the questionnaire in both languages about a week apart. The matched

responses of the bilinguals were examined for discrepancies. For almost all characteristics,² there were no significant differences in the responses to the two questionnaires.

Samples: The English version of the questionnaire was administered to three samples of Americans: 30 Americans having day-to-day contact with Greek counterparts; 45 Americans taking a University of Maryland course in Athens, Greece; 28 University of Illinois students who indicated in a questionnaire that they had no personal contact or knowledge of Greeks or acquaintances among Greeks. Thus, the first sample is a maximum contact sample.

The Greek version was administered to three samples of Greeks. As many as possible of the Greek counterparts of the 30 Americans in the maximum contact sample were asked to respond to the Greek version of the questionnaire. Sixteen agreed to do so. A medium contact sample was obtained by testing 12 Greek students studying at the University of Illinois who had spent no more than two years in the USA. Finally, a no contact Greek sample consisting of 52 Greeks at the University of Athens was also tested.

Thus, the study is based on the responses of 102 Americans and 80 Greeks. All Ss were male.

Analysis: The basic comparisons of the responses of any two samples were made by chi-square. In order to accomplish this, the responses of the Ss to the "high" (positive) or "low" (negative) side of each Semantic Differential scale were grouped. The neutral point of the scale was always

² In the case of the characteristics rude and naive, there was a tendency for the Greek and English responses of the bilinguals to differ by more than 2 scale units on a seven-point scale. It appears that rude has a more negative connotation in English than in Greek; Americans were judged as being naive on the Greek questionnaire, but neither naive nor sly on the English version of the questionnaire. There was also a tendency for the word efficient to produce different responses in the two languages. Greeks were seen as efficient in the Greek version and as inefficient in the English version of the questionnaire.

grouped with the "bad" (socially undesirable from the American point of view) end of the scale. Thus, the expected value in any cell of the chi-square table was greater than 5, even when the smallest sample was considered.

Since a large number of comparisons was made, it was decided to examine the data after a factor analysis of the characteristics. Thus, the statistical comparisons would not be considered to be made on "independent" characteristics, and the interpretation of the obtained results would be made by factor rather than by characteristic.

The factor analysis was based on the combined Greek and American samples, so that maximum stability could be obtained and a "common factor space" could be utilized. All items having the format "In general, Greeks tend to be..." were factored in one analysis, and all items with the format "In general, Americans tend to be..." were factored in a different analysis.

Results

Since there were two cultures in this study, there are two autostereotypes and two heterostereotypes which can assume either a "positive" or a "negative" value. Therefore, there are $2 \times 2 \times 2 \times 2$ possible combinations of outcomes. Of the 16 possible combinations, 12 were observed in the present study. These analyses are based on the total Greek and American samples, though the six samples were also examined analytically, and discrepancies between the analytic results and the total sample results will be mentioned when appropriate.

By examining the pattern of correlations of the traits, we were able to determine which characteristics are considered "good" (or high) in both cultures, which are considered "bad" (low) in both, and which characteristics produce disagreement. On 30 out of 37 characteristics, the two cultures agreed. Thus, they both considered systematic, modest, honest, sly, etc. to be desirable traits, while both agreed that unsystematic, arrogant,

dishonest, naive, etc. were undesirable traits. On the other hand, Greeks considered that being an empire builder was a "bad" trait, while Americans considered it rather "good." Similarly, Greeks indicated that considering one's individual career more than the public good was undesirable, while Americans considered it somewhat desirable. Conversely, the Greeks considered it "good" to be lackadaisical, to like to bargain, to be obliging and to follow procedures approximately, while Americans considered these characteristics as "bad."

A description of the 12 combinations of outcome now follows:

Type I: Positive Stereotypes. This is the situation where both autostereotypes and both heterostereotypes are positive. Four characteristics fell in this category. All samples agree that both Americans and Greeks are intelligent, proud, honest, and after fast money.

Type II: Negative Stereotypes. This is the situation where both the heterostereotypes and autostereotypes are negative. Four characteristics fell into this category. All samples agreed that both Americans and Greeks tend to blame others, to display passive resistance, to make snap judgments, and to be egotistic.

Type III: Mutual Contempt. This is the situation where the autostereotypes are positive and the heterostereotypes are negative. The Americans think of the Greeks and the Greeks think of the Americans as inflexible, haughty, and unhelpful to their neighbors, while they think of themselves as flexible, obliging, and helpful.

Type IV: Mutual Admiration. It is theoretically possible that the autostereotypes might be negative, while the heterostereotypes might be positive. There were no such cases in the present study.

Type V: Culture A Generally Accepted Superiority. This is the situation in which both cultures agree that Americans have the positive characteristic,

and both agree that Greeks have the negative characteristic. This was the most frequent type of stereotype patterning with 15 characteristics. Thus, both cultures agreed that

Greeks tend to be:

unsystematic
 lazy
 theoretical
 suspicious
 competitive
 emotionally uncontrolled
 rigid
 tend not to meet their contract obligations to the letter
 follow procedures approximately
 not concerned about the time to do a job

inaccurate in estimating delivery of a completed job
 pry into personal affairs
 give partially accurate information
 give partial answers to a question
 resist change in working conditions very stiffly

Americans tend to be:

systematic
 hardworking
 practical
 trusting
 cooperative
 emotionally controlled
 flexible
 tend to meet their contract obligations to the letter
 follow procedures exactly
 concerned with the time it takes to do a job

accurate in estimating delivery of a completed job
 do not pry into personal affairs
 give precise information
 give complete answers to a question
 accept change in working conditions very readily

Type VI: Culture B Generally Accepted Superiority. This is the same as Type V, but the "superior" culture is different. Being sly is better than being naive (which correlates highly with unintelligent). We find both Americans and Greeks indicating they consider Greeks sly and Americans naive, so that the "superior" culture for this trait is Greece.

Type VII: Culture A Auto-Stereotype Positive; the other Three Stereotypes Negative. This is the situation where the Americans see themselves as having a positive characteristic, while the Greeks have a negative characteristic; and the Greeks see both cultures as having the negative characteristic. Three characteristics manifested this pattern: rude-polite in their public manners, arrogant-modest, and dogmatic-open-minded.

Type VIII: Culture A Heterostereotype Positive; the other Three Stereotypes Negative. This is a case of "unrealistic admiration" of one culture for the other, in the sense that one culture grants the other a

good characteristic reflected in neither autostereotype. One characteristic showed this property. The Greeks indicated that Americans tend to do as much as possible, while they (the Greeks) tend to do as little as possible. The Americans indicated that both Greeks and Americans tend to do as little as possible.

Type IX: Culture A Heterostereotype Negative; the other Three Stereotypes Positive. This is a condition where Greeks consider Americans as having the bad characteristic, while they consider themselves as having the good characteristic. On the other hand, Americans consider both Americans and Greeks as having the good characteristic. Two characteristics showed this pattern. They were dull-witty and regimented-individualistic.

Type X: Culture B Heterostereotype Negative; the other Three Positive. This is the condition where the Americans consider that the Greeks have a bad characteristic, but the Greeks see both cultures as having the good characteristic. Two characteristics fell into this pattern: inefficient-efficient, indecisive about making plans-decisive about making plans.

Type XI: Culture B considers both groups as having negative characteristic; Culture A considers both groups as having positive characteristic. This type arises because on one characteristic Greek and Americans disagree on what is the "good" end of the scale. Greeks consider it good for a person to consider the public good more than his individualized career. The maximum contact Americans agree with the Greeks, but the other Americans disagree and consider it good for a person to consider his individualized career more than the public good. Since the medium and minimum contact Americans are in the majority, we must assume that from the point of view of broad American culture there is disagreement with the point of view of Greek culture. Now, looking at the stereotypes, we find that both the heterostereotypes and the autostereotypes agree that both Greeks and Americans

consider their individualized careers more than the public good. Thus, from a Greek viewpoint, both cultural groups are "bad," and from an American point of view both are "good."

Type XII: Culture B considers both groups as having negative characteris-
tic; Culture A has a negative heterostereotype and a positive autostereotype.
This type involves the characteristic ; empire building which Americans consider slightly "good"; Greeks consider it "bad." Americans consider being in a hurry "good," Greeks consider it "bad." All stereotypes, except the American stereotype of the Greeks, are high on the empire builder and in a hurry dimensions. Therefore the Greeks consider both cultures as "bad," in the sense that both are empire builders, in a hurry, while the Americans consider themselves as "good" and the Greeks as "bad," since they see themselves as empire builders, in a hurry, and the Greeks as lackadaisical non-empire builders.

The Factor Analytic Results

Greek Characteristics: The factor analysis of the "In general, Greeks tend to..." items revealed a common factor space with nine factors. Table 1 shows the items that are grouped together by the factor analysis and the percentages of the responses from the six samples.

Factor I may be considered as reflecting Work Effectiveness. Greeks consider themselves as low on this factor and Americans agree with them. The only difference appears in the characteristic efficient where the Greeks tend to see themselves as efficient, while the Americans see them as inefficient. However, the translation of this word was poor. The bilingual Greeks saw the Greeks as efficient when responding to the Greek questionnaire and as inefficient when they responded to the English questionnaire. It is unclear if when they responded to the English questionnaire the

Table 1

Greek Characteristics Grouped by Factor Analysis
and the Percentages of Responses from the Six Samples

Characteristics Grouped by Factors	N =	Greeks			Americans		
		Minimum	Medium	Maximum	Minimum	Medium	Maximum
Factor I		52	12	16	30	45	28
Unsystematic	p <	96	83	94	87	75	68
Lazy	p <	67	33	56	70	55	39
Inefficient	p <	17	58	37	93	86	72
Dishonest	p <	27	50	25	50	53	25
Do not meet contract obligations to letter	p <	58	33	43	87	75	57
Inaccurate in estimated delivery time	p <	67	50	50	90	80	18

(Continued)

** at the p < .01

*** at the p < .001

Table 1 (Continued)

Characteristics	Greeks				Americans		
	Minimum	Medium	Maximum	Maximum	Medium	Minimum	Minimum
Factor II							
Rude in their public manners p <	65	75	69	80	73	36	
Suspicious p <	81	100	75	83	77	71	
Make snap judgments p <	81	92	94	67	79	68	
Helpful to their neighbors p <	85	100	88	43	50	64	
Like to bargain p <	96	100	94	97	87	57	
<hr/>							
Factor III							
Sly p <	94	92	100	69	58	32	
Intelligent p <	92	75	88	57	22	50	
Dogmatic p <	55	100	50	97	84	86	

(Continued)

Table 1 (Continued)

Characteristics	Greeks			Americans		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Factor IV						
Display passive resistance $p <$	42	42	81	80	77	86
Follow procedures approximately $p <$	89	92	81	77	96	68
Give partial answer to questions $p <$	73	50	94	86	84	85
<hr/>						
Factor V						
Inflexible $p <$	37	75	37	87	80	82
Pigid $p <$	54	75	37	83	80	75
<hr/>						
Factor VI						
Egotistic $p <$	59	75	88	93	62	75
After the fast money $p <$	63	50	50	83	74	59

(Continued)

Table I (Continued)

Characteristics	Greeks				Americans				
	Minimum	Medium	Maximum	Minimum	Maximum	Medium	Minimum	Maximum	
Factor VII									
Proud	92	100	83	93	87	64			
Haughty	15	06	13	53	60	64			
Indecisive in making plans	29	33	31	90	82	61			

Factor VIII									
Witty	84	92	94	67	29	33			
Consider individualized careers	78	83	88	81	70	43			

(Continued)

11.6.

Table 1 (Continued)

Characteristics	Greeks				Americans		
	Minimum	Medium	Maximum	Maximum	Medium	Minimum	Minimum
Factor IX							
Not empire builder	15	25	19	43	68	43	
p <	-	-	-	-	-	-	
Emotionally uncontrolled	85	83	88	87	83	75	
p <	-	-	-	-	-	-	
<u>Characteristics not loading on Factors</u>							
Theoretical	62	50	38	83	63	64	
p <	-	-	-	-	-	-	
Arrogant	65	75	44	80	62	36	
p <	-	-	-	-	-	-	
Not concerned about time to complete job	63	42	56	93	95	86	
p <	-	-	-	-	-	-	
Drive competitively	75	92	88	97	100	79	
p <	-	-	-	-	-	-	
Lackadaisical	39	75	25	93	69	82	
p <	-	-	-	-	-	-	
Give partially accurate information	54	42	44	97	84	68	
p <	-	-	-	-	-	-	

(continued)

He.

Table 1 (Continued)

Characteristics	Greeks			Americans		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Factor IX (continued)						
Resist changes in working conditions	51	67	56	87	81	71
Individualistic	83	83	56	80	32	54
Do as little as possible	75	33	75	93	89	79

p <

p <

p <

comparison with Americans became more salient and thus produced a contrast effect, or whether the translation of this term is in fact impossible.

We also note that the minimum contact Americans have a more positive stereotype of Greeks on this factor than the samples having first-hand knowledge of Greece. Qualitative observations suggest that American work effectiveness is superior to Greek work effectiveness, so that it is conceivable that the perceptions reflected in the judgments of the Americans with contact are veridical. The no contact Americans simply did not know about the work ineffectiveness of Greeks.

Factor II may be called Outgroup Competitiveness. Qualitative observations suggest that Greeks tend to be very competitive in outgroup situations (e.g., they push most rudely when getting into a bus) and very polite and cooperative in ingroup situations (e.g., they are likely to spend a tenth of their monthly salary entertaining a guest; they tend to help friends at great inconvenience to themselves). They are suspicious of outgroup members (Vassiliou³) and bargain hard with them. But there is no bargaining with an ingroup member (e.g., a guest who comments about something possessed by a host may find himself receiving it as a gift).

Factor III may be called Dogmatic Intelligence. Greeks tend to be sophisticated in interpersonal relations (some people would call this sly; Odysseus is a modern culture-hero just as much as he was the culture hero of Homeric Greece).

However, they are also dogmatic. Their way of doing things is "obviously" the best way, and they will defend this proposition with great intellectual vigor. While the Greek samples admit to the slyness, they do

³George Vassiliou, Athens psychiatrist, personal communication, 1966.

not admit to the dogmatism, except for the medium contact group who are college students living in the USA. On this factor, as in Factors I and II, the minimum contact Americans show that they are uninformed about Greece by deviating from the judgments of the other five samples.

Factor IV may be called Traditional Agrarian Work Habits. In most traditional agricultural work environments it is unnecessary to be very careful and precise. A farmer may throw some seed here or there and it will make a small difference on his yield, since most of the variance in yield is controlled by factors over which he has no control. Greeks tend to have traditional work habits which Americans find objectionable and the Greeks themselves tend to deplore.

Factor V is Flexibility. Here the Americans see Greeks as inflexible and rigid and the Greeks see themselves as flexible. Certainly, from the perspective of a culture in which social change is an established way of life, such as the USA, Greece may appear inflexible; but in the context of most other cultures in the world, it is a relatively flexible culture. Thus, both points of view may be justified.

Factor VI is Selfishness. There is much agreement that Greeks are selfish, but the autostereotypes of both cultures are the same.

Factor VII, Pride, suggests major disagreements among the samples. All agree that Greeks are proud, but the Americans also consider them haughty, while the Greeks see themselves as obliging. Furthermore, the Americans see the Greeks as indecisive while the Greeks see themselves as decisive.

Factor VIII, Witty Self-Centeredness, shows an interesting effect of contact. The more the contact between Americans and Greeks, the more likely it is that the Americans will see the Greeks as witty and concerned with their individualized careers rather than the public good.

Factor IX suggests Well-Organized Planning. An empire builder might unemotionally plan his empire. The Greeks are seen as emotional empire builders, hence poorly organized planners.

All samples agree, in Table 1, that Greeks are theoretical rather than practical with the exception of the maximum contact Greeks. It is likely that the maximum contact Greeks, because of their jobs, receive many American suggestions for improvements in their own operations which may appear "wild" to them; as a result, they obtain the impression that, in contrast to Americans, Greeks are rather practical. There is also general agreement that Greeks are arrogant, but the maximum contact Greeks again disagree. Finally, there is good agreement that Greeks do not care about the time it takes to complete a job.

American Characteristics: Table 2 presents the American characteristics. The first factor may be called Openness. Both cultural groups agree that Americans are honest, meet their contract obligations to the letter and do not like bargaining. A few deviations from the general pattern may be noted. The minimum contact Greeks turned out to be rather hostile to Americans. In open-ended items, which they completed when they responded to the questionnaire, they indicated a good deal of a "Yankee, go home" pattern of attitudes. Thus, their statistically significant deviation from the other Greek samples should be viewed as reflecting this general hostility toward Americans. Nevertheless, on the other two items of the factor they agree with the Greek samples. The other deviation is shown by the no contact Americans. Their responses appear to break about evenly; in other words, they do not have the clearly formed view of themselves that is suggested by the autostereotype of the maximum contact Americans. Undoubtedly, contact with another culture sharpens the autostereotype.

Table II

American Characteristics Grouped by the Factor Analysis
and the Percentages of Responses from the Six Samples¹

Characteristics	Greeks						Americans			
	Minimum	Medium	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Maximum	
Factor I										
Honest	54	92	94	83	62	83	64	-	-	-
Meet contract obligation to the letter	67	82	88	77	82	83	54	-	-	-
Do not like to bargain	88	83	50	83	40	83	36	-	-	-
								**		
Factor II										
Witty	12	58	38	40	67	64	-	-	-	-
Efficient	92	92	94	90	80	75	-	-	-	-
Accurate in estimating delivery time	88	83	100	93	95	82	-	-	-	-
In a hurry	71	83	56	83	73	79	-	-	-	-

(continued)

1. ** is p < .01
*** is p < .001

Table II (Continued)

Characteristics	Greeks			Americans		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Factor III						
Polite in their public manners p <	31	89	56	70	64	61
Empire builders p <	83	100	94	83	94	86
Emotionally controlled p <	63	67	56	73	64	50
Factor IV						
Systematic p <	92	92	94	93	59	68
Modest p <	29	67	13	37	43	15
Arrogant p <	85	08	81	43	90	59
Trusting p <	63	92	44	77	53	29

(continued)

Table II (Continued)

Characteristics	Greeks			Americans		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Factor V						
Accept changes in working conditions	53	75	94	53	52	39
		***			-	-
Americans treat Greeks generally honestly	23	100	63	83	71	54
	***	**			-	-
Factor VI						
Competitive	46	75	56	33	66	86

Concerned with the time to finish job	77	92	88	83	91	82
					-	-
Decisive about making plans	74	67	94	77	80	79
					-	-
Factor VII						
Egotistic	65	75	100	77	58	66
					-	-
Individualistic	37	50	44	43	58	46
					-	-
Flexible	39	83	50	70	64	87
					-	-
					-	(continued)

Table II (Continued)

Characteristics	Greeks				Americans			
	Minimum	Medium	Maximum	Maximum	Medium	Maximum	Medium	Minimum
Factor VII (continued)								
Give complete answers to questions	56	57	58	73	50	50	50	46
Factor VIII								
Intelligent	35	58	50	70	76	76	76	75
Do not pry into personal affairs	59	67	69	63	12	12	12	11
Drive carefully	15	92	56	67	66	66	66	32
Alter the fast money	68	58	63	53	66	66	66	64
Factor IX								
Follow procedures exactly	77	83	81	73	59	59	59	43
Practical	79	58	94	83	60	60	60	64
Openminded	28	58	31	70	64	64	64	36

Table II (Continued)

Characteristics	Greeks				Americans			
	Minimum	Medium	Maximum	Maximum	Medium	Medium	Maximum	Minimum
Factor X								
Proud	71	33	88	63	93	93	85	85
Haughty	59	58	69	37	40	40	40	40
Naive	85	100	94	97	64	64	64	64
Give precise information	63	83	88	17	57	57	79	79
Tend to do as much as possible	59	50	31	63	39	39	25	25
Consider individual careers	58	67	81	50	50	50	79	79

Factor II appears to be a version of the Work Effectiveness factor found also in the Greek stereotypes. There is general agreement that Americans are high on this factor. However, the item witty-dull appears on this factor and there is much disagreement among the American samples on this item. The Greeks see the Americans as "well-oiled work horses" (as put by one of the interviewees), i.e., rather dull, but most efficient. The maximum contact Americans disagree with the other samples.

Factor III may reflect well-organized planning. Americans are seen as emotionally controlled, empire builders, and going about their empire building, while being polite in their public manners. There is general agreement among all samples.

Factor IV, Modest-Arrogant, emphasizes the characteristics systematic, modest, trusting. The opposite is unsystematic, arrogant and suspicious. The Modest-Arrogant axis seems to be most descriptive, since a person who is arrogant feels he can do everything without working very systematically at it, but may also be suspicious concerning the extent to which other people will recognize his superiority. The modest type accomplishes his job by working at it systematically. There is general agreement that Americans are systematic and trusting, though the no contact Americans tend to see themselves as modest, and Greeks see them as arrogant. The only Greek sample that deviates from this pattern is the sample of Greek foreign students in the USA.

Factor V, Honest Flexibility, consists of two apparently unrelated items on which the frequencies of responses by the various samples are similar across items. Thus, the Americans generally agree that Americans accept changes in working conditions and the maximum and medium contact Greeks agree with them, but the minimum contact Greeks disagree. Similarly,

Americans feel that they treat Greeks generally honestly, the maximum and medium contact Greeks agree, and the minimum contact Greeks disagree.

Factor VI may be called Work Involvement. Americans appear competitive, concerned with the time it takes to finish a job, and decisive about making plans. The only deviation from this pattern appears in the responses of the maximum contact Americans who see themselves as cooperative rather than competitive, probably because they contrast themselves with the Greeks who are generally highly competitive.

Factor VII may be Selfishness. There is general agreement that Americans are egotistic, though it must be recalled that Greeks were also considered egotistic.

Factor VIII may be Intelligent Purposefulness. Concern w' th making money and minding their own business seems central to this factor. The maximum contact Americans disagree with the other two American samples, probably because of the contrast with the Greeks who do in fact pry into personal affairs; this behavior is a culturally acceptable way of showing interest in another person.

Factor IX may be Nontraditional Work Habits involving following procedures exactly and being openminded about ways to complete work. It is generally agreed that Americans have such nontraditional work habits. On the characteristic dogmatic-openminded, the two cultural groups disagree. The Greeks see Americans as dogmatic, while the Americans see themselves as openminded. The no contact Americans agree with the Greeks.

Factor X may be called Pride. There is general agreement that Americans are proud. The Greeks go further and characterize them as haughty.

There is also general agreement that Americans are naive rather than sly, give precise information rather than partially accurate information, and consider their individualized careers rather than the public good. However,

Table III

Frequency of Responses to
Other Questionnaire Format Items
and Items with Comparative Characteristics¹.

Item	Minimum	Greeks		Samples		Americans		Minimum
		Medium	Maximum	Maximum	Maximum	Medium	Maximum	
When something goes wrong a Greek is likely to blame	8	4	0	0	0	13	10	
	41	8	16	30	31	17	17	
	3	0	0	0	0	0	1	
	p <	-	-	-	**	***		
When something goes wrong an American is likely to blame	4	2	2	10	3	5	5	
	47	10	14	20	42	22	22	
	1	0	0	0	0	1	1	
	p <	-	-	-	**			
Greeks, in contrast to Americans, tend to work out problems informally rather than through channels	50	10	14	13	39	4	4	
	2	2	2	17	8	24	24	
		-	-	**	***	***		

1. ** is p < .01
*** is p < .001

Table 3 (Continued)

Item	Samples			
	Greeks Minimum	Greeks Medium	Americans Maximum	Americans Minimum
Americans in Athens tend to live in a world of their own; they have little contact with Greeks.	45	1	15	21
	7	11	7	7
	p <			
The frequency of important crimes is higher in the U.S.A than in Greece.	48	10	10	13
	4	2	6	15
	p <			
The frequency of minor crimes is higher in the U.S.A. than in Greece.	47	6	14	25
	5	6	2	3
	p <			

16 b.

(continued)

Table 3 (Continued)

Item	Samples					
	Minimum	Greeks Medium	Maximum	Maximum	Americans Medium	Minimum
Greeks accept change in social conditions more easily than do Americans.	26	2	8	6	16	19
agree						
do not know;						
disagree	26	10	8	24	28	9
p <	-	-	-	-	-	-
Greeks are more likely than Americans to tell you what you want to hear, rather than the truth.	30	8	11	21	19	5
agree						
do not know;						
disagree	22	4	5	9	24	23
p <	-	-	-	-	-	-

(continued)

Table 3 (Continued)

Item	Samples					
	Minimum	Greeks Medium	Maximum	Maximum	Americans Medium	Minimum
Americans are more likely than Greeks to say they understand something, which in fact they do not.						
	agree; do not know	29	10	9	24	25
	disagree	23	2	7	21	3
	p <	-	-	-	-	-
Greeks are more likely than Americans to restate an agreement in their own words, rather than let it stand as previously stated.						
	agree; do not know	38	1	9	24	9
	disagree	14	11	7	21	19
	p <	-	-	-	-	-
Americans are likely to trust most Greeks.						
	completely and somewhat	17	5	9	23	24
	very little and not at all	34	7	7	22	4
	p <	-	-	-	-	-

Table 3 (Continued)

Item	Samples			
	Greeks Minimum	Greeks Medium	Americans Maximum	Americans Medium
Americans are more likely than Greeks to use delaying tactics to avoid doing what they dislike doing.				
agree; do not know	29	10	8	7
disagree	22	2	8	26
p <	-	-	23	18
				3
				24
				3
Greeks resent criticism				
more than Americans	31	3	10	16
equally and less	21	9	6	29
p <	-	-	-	23
When a Greek accomplishes something, he is				
likely to be rewarded	25	6	0	17
unlikely to be rewarded	26	4	16	27
p <	-	-	-	7

substantial deviations from these general agreements are observed among the maximum contact Americans who appear more evenly divided about these judgments than the other samples. The maximum contact Americans also appear to indicate that Americans give partially accurate information, which may be a function of their jobs. Such jobs often require nondisclosure of information that is likely to aggravate the relationship between Greece and the United States.

Comparative Characteristics: As described in the method section above, the questionnaire included a number of comparative questions shown in Table 3. In this table we note that the more contact there is between Americans and Greeks, the more likely it is that the Americans will see the Greeks as extrapunitive. The Greeks generally agree with this view of themselves. However, they see Americans also as being extrapunitive (projection?). Americans also see themselves as extrapunitive, but the maximum contact Americans include a substantial group who see themselves as intrapunitive.

Greeks see themselves as working out problems informally rather than through channels, but the maximum contact Americans disagree. The no contact Americans simply do not know how to answer this item. There is general agreement that Americans tend to live in Athens in a world of their own. The only deviation occurs with the medium contact Greeks. It could be that these Ss, who are foreign students in the USA, compare the way foreign college students live in a world of their own on American campuses to the way Americans live in Athens. There is general agreement that there are more crimes in the USA than in Greece. There is also agreement that Greeks do not accept changes in social conditions as easily as do Americans. In most of the items of Table 3 the no contact Americans are different from the other samples, showing that the stereotypes are strongly influenced by contact.

The Open-Ended Question: The Ss were asked to agree or disagree with the statement that "Americans in Athens tend to live in a world of their own; they have little contact with Greeks." (Table 3.) Those Ss who agreed with this statement were then asked an open-ended question: "What do you think is the reason?"

The reasons given were classified by themes. The most frequent themes given by both cultural groups were the "different mores" and way of thinking, and the "language barrier" theme. The next most frequent theme given by the Greeks, suggested that Americans feel superior to them, and, therefore, do not wish to interact with them. Another theme given with high frequency suggested that the Greeks think that Americans are suspicious of them. About 18% of the themes emitted by the Greeks were clearly hostile (American imperialism, colonialism, etc.) and 12% referred to the American standard of living as being too high, causing embarrassment in friendship interaction with Greeks. Among the Americans, the next most frequent theme dealt with the language barrier, but 15% of the themes suggested that they felt superior to the Greeks, and so attached to the American way of life that they did not feel like interacting with them. Illustrative on this point is the comment obtained from one American respondent: "The Greeks should change their alphabet so we can understand it."

Tests of the Hypotheses

Hypothesis I was that the greater the degree of contact, the clearer will be both the autostereotypes and the heterostereotypes. The operational definition of clarity is to obtain an unequal distribution of responses on a given characteristic from the Ss of a given culture. Thus, a 50%-50% distribution would not be clear, but a 100%-0% distribution would be extremely clear.

Table 4

Number of Characteristics On Which the Minimum, Medium, and Maximum Contact Groups Show Differences in the Favorable or Unfavorable Directions

Greek Autostereotype			
	Min. to Med.	Med. to Max.	(Min. to Max.)
More Favorable	12	13	15
Same	0	5	6
Less Favorable	18	12	9
American Autostereotype			
	Min. to Med.	Med. to Max.	(Min. to Max.)
More Favorable	20	15	21
Same	5	6	6
Less Favorable	5	9	3
American Stereotype of Greeks			
	Min. to Med.	Med. to Max.	(Min. to Max.)
More Favorable	4	7	2
Same	0	0	12
Less Favorable	26	23	16
Greek Stereotype of Americans			
	Min. to Med.	Med. to Max.	(Min. to Max.)
More Favorable	22	9	19
Same	2	8	3
Less Favorable	6	13	8

Note: The analysis was done for the 30 characteristics on which the cultures agreed on whether or not a characteristic is favorable.

Looking at Tables 1 and 2, the data show that neither the Greek autostereotype nor the Greek stereotype of Americans confirm the hypothesis. Of the 37 characteristics studied, 18 confirmed and 19 do not confirm the hypothesis, as far as the autostereotype is concerned; on the heterostereotype, 23 confirm and 14 do not confirm the hypothesis. Both results could be obtained by chance.

On the other hand, the American autostereotype is sharper in the maximum contact than in the minimum contact groups ($p < .01$). Thus, the hypothesis is confirmed for Americans and not confirmed for Greeks. One difference between the American and Greek samples is that the maximum contact Americans had traveled to the other culture, while the maximum contact Greeks lived in their own culture. If living in one's own culture inhibits the differentiation of heterostereotypes and autostereotypes, we should find that the medium contact Greeks, who are students in the USA, have a more differentiated set of stereotypes than the maximum contact Greeks. This was checked, but again there was no evidence of greater differentiation. Thus, the hypothesis is confirmed only for Americans.

Hypothesis II was that the greater the contact, the more the Greek stereotype of Americans will be favorable. Table 4 shows the results of this analysis. It shows that as a result of contact, the stereotype of Americans became more favorable ($p < .001$); however, the relationship is not completely clear because the medium contact Greeks were more favorable than the maximum contact Greeks. The hypothesis is supported for the minimum and maximum contact Greeks.

Hypothesis III is that the greater the contact, the more unfavorable will be the stereotype of Greeks held by Americans. This hypothesis was also supported, as can be seen by the data of Table 4 ($p < .0001$).

Hypothesis IV was that the greater the degree of contact, the more favorable will be the autostereotype of Americans. This hypothesis was supported ($p < .001$). (Table 4.).

Hypothesis V was that the greater the contact, the less favorable will be the Greek autostereotype. This hypothesis was not supported. In fact, the results are exactly the reverse of those expected when the maximum contact group is compared with the minimum contact group. In that case the autostereotype of the Greeks became more positive as a result of contact ($p < .001$). Only the comparison of the medium and minimum contact groups is slightly in the direction of the hypothesis.

Discussion

Most of the standard discussions of stereotypes found in classic social psychology texts take the view that stereotypes are untrue, frequently unfavorable ways for one cultural group to view another. This view appears to be too simple. The present data suggest that there is more than a "kernel of truth" in most stereotypes when they are elicited from people who have firsthand knowledge of the group being stereotyped. We note that on 14 out of 37 characteristics the five samples that had knowledge of Greeks agreed. On any one characteristic, there is a chance of 1/2 for two samples to agree, 1/4 for three samples to agree, 1/8 for four and 1/16 for five samples to agree. Thus, given that the comparisons were made on 37 characteristics, there should have been no more than 37/16 or two to three characteristics on which all five "knowledgeable" samples would agree by chance. Since they did in fact agree on 14 characteristics, there is some factor other than chance controlling the behavior of the "knowledgeable" samples. It is difficult to see how so much agreement between autostereotype and heterostereotype can arise without a "kernel of truth." These two cultures, unlike the case of American Negroes and whites, are not in frequent contact. Hence, there is little opportunity for one culture to acquire the "cognitive norms" of the other. To explain the agreement with

the argument of norm diffusion, it would be necessary to argue either that Greeks learn the American stereotype of Greeks or that Americans learn the Greek autostereotype. Both of these processes are extremely unlikely when they involve the minimum contact Greeks and medium contact Americans of this study. Therefore, it must be concluded that experience with the other culture is a factor in stereotype development for those Ss who are in contact with the other culture.

There is, however, the problem of explaining the agreement of the no contact Americans with the other samples. Examination of Table 1 shows that on nine out of the 37 characteristics listed in this table the six samples were unanimous. If the judgments of the no contact sample were determined by chance, there would be agreement between the no contact Americans and the other samples on seven characteristics. Thus, the observed nine do not deviate substantially from chance.

While there is much agreement between the auto- and heterostereotypes of Greeks, it must be noted that the maximum contact Greeks and Americans differed in their perceptions of Greeks on 13 out of 37 occasions. The maximum contact Americans considered the Greeks as inefficient, not meeting their contract obligations to the letter, inaccurate in estimating job delivery times, unhelpful to their neighbors, sometimes naive, inflexible, rigid, after the fact money, haughty, indecisive, theoretical, arrogant, not concerned with the time to complete a job, lackadaisical, inaccurate in giving information, and resistant to change. The maximum contact Greeks disagreed. We noted (in footnote 2) that the words efficient-inefficient were translated unsatisfactorily, so that the disagreement between the maximum contact groups on this characteristic may not be real. We must also note that the minimum contact Greeks disagreed with the maximum contact Greeks and agreed with the maximum contact Americans, on some

characteristics. Thus, the maximum contact Greeks might have been defensive on the characteristics not meeting contract obligations to the letter, inaccurate in estimating delivery time, rigid, after the fact money, theoretical, arrogant, not concerned with the time to complete a job, inaccurate in giving information, and resistant to change. On these ten characteristics the minimum contact Greeks, who were most pro-Greek and most anti-American, did agree with the maximum contact Americans, a fact that is quite notable. Furthermore, informal observations by the present authors, who have observed both cultures in the course of several years, suggest that the maximum contact Americans are indeed correct in these characterizations of the Greeks. The defensiveness of the maximum contact Greeks, on the above ten characteristics, is particularly notable, since these characteristics are so relevant to the work behavior of the Greeks. These may have been issues which the maximum contact Americans must have discussed with their Greek counterparts and subordinates, and they must have complained to them. Naturalistic observation of the response of Greeks to criticism suggests that they tend to deny its validity, to a greater extent than Americans, hence the development of the defenses shown above.

To summarize: Greek national character, as it appears to both the maximum contact Americans and to the present authors, as observers of the Greek scene, is characterized by intense competition, anti-authoritarianism, and poor work habits.

The intense competition is reflected in major shifts in behavior when dealing with members of the outgroup as opposed to when dealing with members of the ingroup. Ingroup behaviors are characterized by extreme nurturance, prying into personal affairs and intimacy, overprotection, as well as extreme anxiety, and concern about the welfare and well-being of members of the ingroup.

Guests are treated as members of the ingroup, which also includes the friends of members of one's family and the friends of these friends. The outgroup includes all others, as well as cats and dogs which are often treated with cruelty. Any hostility (rudeness, pushing, injury) that is not explicitly punished by law may be undertaken toward outgroup members, while the behavior shifts dramatically as soon as a person is reclassified from outgroup to ingroup. Until a person is "properly classified" in the ingroup-outgroup categories, the behavior toward him is characterized by extreme suspicion. It is worth noting that competitiveness appears to be a basic characteristic also in ancient Greece. Gouldner (1965) considers it a basic cultural pattern of ancient Greece, in his sociological analysis of that culture. Gouldner's analysis of important Greek themes includes (a) the emphasis on individual fame and honor, (b) the acquisition of fame in contests, through one's own efforts, (c) the notion that fame brings about envy and the mechanism of reducing a person's honor by ostracism (an anti-authoritarian theme), (d) the emphasis on fate, including the notion of extreme vulnerability to sudden disaster of those who are successful, etc. Anthropological analyses of Greek village culture (e.g., Friedl, 1962) also emphasize the competitive character of Greeks. Thus, there is consensus from many sources, as well as from the naturalistic observations of the present authors, that extreme competition is a basic theme which molds Greek national character.

Gouldner points out that intensive competition is dysfunctional. It means that struggles for leadership will be conceived within the contest system, rather than within the ideological system. Both ancient and modern Greece provide numerous historical examples of shifts of allegiance from polis to polis (e.g., Alciviades) or from party to party (e.g., recent political crises). Such shifts are due to struggles for leadership which are often unrelated to ideological issues.

One consequence of extreme competition for leadership positions is anti-authoritarianism. In studies of random samples conducted by Vassiliou, approximately seven times as many Greeks as Americans indicated that they considered themselves as the most qualified for the top administrative jobs in the country (Premier, President). The basic anti-authoritarian response is to see the self as completely competent, and all others as incompetents who are trying to usurp one's power. Thus, there is a tendency to award leadership to those who are mediocre, so that they will be unable to "rise too high" and leave "most men behind." When someone "gets to the top" most people are likely to turn against him and find fault with him on every opportunity. The ancient Greek concept of hybris, which was punishable by law, was designed to prevent "famous" men from taking themselves seriously. The instability of successful modern Greek governments (e.g., that of E. Venizelos) is another example of the anti-authoritarian tendency to reduce the stature of those who are successful. Gouldner (1965, p. 76, note 24) finds numerous additional similarities between ancient and modern Greek cultural elements.

Intense competition is also bound to make most people with ordinary abilities highly defensive. Such defensiveness is likely to take the form of unrealistic feelings of omniscience and omnipotence, extra-punitiveness and oversensitivity to criticism, so that failures can be seen as minor events, or not be admitted to consciousness. For an omnipotent person arrogance is natural, and so is his inclination not to bother with minor matters, such as meeting his contract obligations, planning, estimating delivery times, completing jobs, giving precise information, etc. Such characteristics must be viewed as leading to poor work habits.

Turning now to the perception of Americans, we find 15 characteristics on which there is complete unanimity among the six samples, and four

additional ones on which only the minimum contact Greeks deviate from the five "knowledgeable" sample. Thus, on more than half the characteristics the "knowledgeable" samples are unanimous. The two maximum contact samples disagreed on only five characteristics.

Conclusion 1: There is a high degree of agreement among the autostereotypes and heterostereotypes.

Conclusion 2: The no contact samples agreed with the other samples approximately at chance levels.

Conclusion 3: The disagreements between the two cultures showed specific characteristics: The Americans saw the Greeks as "bad co-workers" to a larger extent than the Greeks saw themselves as having this characteristic; the Greeks saw the Americans as "haughty" and "dogmatic" to a larger extent than the Americans saw themselves as having these characteristics.

Discussion of the Characteristics of the Two Groups: Both Americans and Greeks perceive that the Greeks have poor work habits. Part of this pattern consists of a lack of planning and an unsystematic approach to work. We suggested above that this may be, in part, a defense to the highly competitive system which dominates Greek values. Another cause may be found in the events of recent Greek history (the last 500 years) which is dotted with wars and much physical destruction. A Greek's success or failure in life was often the consequence of events beyond his control. Consequently, there was little opportunity to learn the connection between careful and systematic planning and success.

Our data suggest that Greeks perceive that Americans feel superior to them. This is highly objectionable to them. In view of their basic competitive system, it might be said that this American characteristic is "intolerable" to them. There is evidence that the American attitude of

superiority is not simply imagined by the Greeks, but is in fact present in the American perception of Greeks, in at least half the American respondents.

Types of Stereotypes: There is a strong tendency for the stereotype of the Americans to be favorable, except for the haughty-modest variable, and that of the Greeks to be unfavorable. The fact that on 15 characteristics both cultural groups agreed to give the Americans a "good" and the Greeks a "bad" characterization (we called this "the culture A Generally Accepted Superiority" type of stereotype) is notable. This result may be due to the fact that both cultures consider material wealth, a high standard of living, and work success as extremely important goals, and one cultural group attained a greater realization of these goals than the other group. It is also notable that there were no characteristics on which the autostereotypes of both cultures were unfavorable, while the heterostereotypes favorable. Thus, the "mutual admiration" pattern of stereotypes did not appear.

The Effect of Contact (General): The no contact groups are characterized by large deviations from the responses of the "knowledgeable groups." Often the no contact groups responded randomly, or chose the "no answer" option. However, the Greek minimum contact group was hostile toward Americans as shown by its open-ended question responses, and it tended to employ an unfavorable stereotype concerning Americans rather than a neutral position.

Nevertheless, even this group had a positive stereotype of American work effectiveness. Thus, there is considerable differentiation within the stereotype; only some characteristics are susceptible to large influences of the general hostility of one group toward the other. In the present case, the characteristics modest-arrogant and modest-haughty seemed particularly sensitive to influences by the hostility of one group toward the other.

The Effect on Contact on the Clarity of Stereotypes: Hypothesis I was confirmed by the American Ss, but was not supported by the Greeks. The American stereotypes became clearer with contact, but the Greek did not. Apparently, this is not due to the fact that the Americans lived in a foreign country, while most of the Greeks lived in their own country, because the medium contact Greeks did not show any more differentiation than did the other Greek samples. One possible explanation of these results is that most of the variance of the Greek stereotype of Americans is controlled by what they read in the papers and see in the movies, so that there is little change of the stereotype of Americans that can be traced to contact. Another explanation may be motivational: The Greeks did not pay as much attention to the task and hence gave distributions more closely approximately the 50%-50% distribution. However, this is not really likely, because on many characteristics the Greeks deviated markedly from the 50-50 distribution. It seems more likely that the mass media formed the heterostereotypes.

Does this explanation hold also for the autostereotype? It probably does. In a small country most of the mass media (particularly movies) are foreign, so that one has a constant occasion to compare one's own culture with some other culture. Hence, contact has little effect on changes of either the auto- or the heterostereotype. On the other hand, American stereotypes do become clearer with contact, as predicted.

The Effect of Contact on the Favorableness of Stereotypes: Hypotheses II and III were supported. It appears that when (a) two cultures have similar goals, and (b) one is more successful in reaching these goals than the other, and (c) members of the two cultures meet, then the successful culture's members become less favorable and the unsuccessful culture's members become more favorable.

On the other hand, these changes were not monolithic. Though the Americans generally become less favorable toward Greeks on dimensions reflecting efficiency, they became more favorable on the dimension Dull-Witty. Conversely, though the Greeks become more favorable toward Americans on dimensions reflecting efficiency, they become less favorable on dimensions reflecting human warmth.

Hypotheses IV and V, that the autostereotype of the successful culture will become more favorable as a result of contact, while the autostereotype of the unsuccessful culture will become less favorable, were not supported because the autostereotypes of both cultures became more favorable as a result of contact. Binomial analysis shows this to be a highly reliable phenomenon ($p < .001$).

Apparently, the mechanism of seeing another group as more successful and as a result devaluating one's own group does not operate in the case of the Greeks, with the exception of the Greek college students living in the USA who did show this effect. However, this is a highly select group which chose to study abroad, presumably because it considered the facilities offered in Greece as inadequate. Thus, this group, almost by definition, must have an unfavorable autostereotype.

Why should contact improve the autostereotypes in both cultures? There appear to be at least three kinds of explanations: (a) Contact is frustrating, because there are misunderstandings, miscommunications, unexpected behaviors, etc. Such frustrations lead to partially negative images of the other group. In contrast to a group that has undesirable characteristics, one's own group may be seen to have good characteristics (Helson, 1948); (b) Contact involves constant comparisons of the two groups. If the other group has a good characteristic which is lacking in one's own group, there is cognitive dissonance. The dissonance is reduced by improving

the perception of one's own group on some "other" dimension. At the individual level this mechanism is exemplified by A's reaction to B: Says A to himself, "It is true that B is richer than I am, but I am more honest than he is." Wealth can be measured more objectively than honesty and such distortions in perception can occur more easily on the non-objective characteristic than on the objective characteristic. Thus, the Greeks see the Americans as most efficient "well-oiled work horses," but "people who do not know how to have a good time", while they see themselves as capable of having an excellent time; (c) The maximum contact Americans have selectively forgotten the unfavorable elements of U. S. life and selectively retained the favorable elements.

It is conceivable that mechanisms (a) and (c) operate most strongly with the Americans, while mechanism (b) operates mostly with the Greeks. The net effect, however, is that both autostereotypes improve with contact.

Limitation of this Study

It is desirable to interpret these results with caution. It is possible that the effects noted in this study are due to the sampling of the Ss rather than to the degree of contact. The maximum contact Greeks were individuals who had learned English and had "excellent jobs" (by Greek standards) because of the fact that they were working with Americans. The minimum contact Greeks were college students, most of whom would know English (about 89% of Greek college students can read English), but who derived no particular advantages from this linguistic ability. It is well known that people who have positive attitudes toward a culture learn its language more easily than people who do not have such positive attitudes (Lambert and Gardner, 1961). Thus, it is possible that the maximum contact Greeks had a positive attitude toward Americans before the contact.

The unfavorable attitudes of the maximum contact Americans, as compared to the Greeks may be due to a number of factors. None of the American samples spoke Greek with ease. Among the maximum contact Americans only 1/3 knew some Greek and they tended to have the most favorable stereotypes of Greece. Furthermore, working in another culture is likely to be a frustrating experience (Triandis, 1967), and deviations from the ideal are likely to be attributed to faults in the host culture. Finally, it should be noted that the no contact Americans had a relatively positive stereotype of Greeks, probably because it is no longer "appropriate" to be prejudiced toward other groups at universities in the Northern U. S. A. Thus, compared to this group, the maximum contact Americans appear most disappointed with their Greek hosts. Thus, the shifts in the heterostereotypes may not be the result of contact, as such, but rather can be attributed to the characteristics of people who seek contact.

Another possible limitation of this study is that we were unable to differentiate the stereotypes of Greeks, given to us by Americans, according to whether they represent responses to Greeks as people, or to the Greek social system, which is highly bureaucratic. Bureaucracies often create inefficiency, laziness and indecisiveness as well as rigidity.

Finally, in Table 4 we presented comparisons between the minimum and medium as well as between the medium and maximum contact groups. We noted no major change in the Greek autostereotype in this analysis, but a clear change of the American autostereotype in the favorable direction. The changes in the Greek autostereotype reflected in Table 4 are due to the fact that the medium contact Greeks had a relatively unfavorable autostereotype, but this was a small group. On the other hand, the American autostereotypes improved steadily with contact.

Concerning the heterostereotypes, Table 4 showed that the American stereotype of Greeks may become more unfavorable with contact, but the Greek stereotypes of Americans do not change systematically with contact. The Greek college students studying in America are systematically more favorable than the Greek college students studying in Athens, but the Greeks working with Americans in Athens are less favorable than the Greek college students in America. It is probable that special factors related to the selection of college students for overseas study are responsible for these results, so that they must be interpreted with great caution.

A number of traits showed systematic changes with contact. For example, the greater the contact, the more the Americans saw themselves as efficient; the greater the contact the more they saw the Greeks as obliging (not haughty) and the less they saw them as decisive. Thus, stereotypes have a dynamic quality, while our methods of analysis were static.

Suggestion for Further Research: The present study suffers from many of the major limitations of any cross-sectional design. We cannot be sure that the results obtained are in fact the result of contact and not of the selection of the samples. However, longitudinal samples are much more difficult to obtain, the effects of testing would have to be controlled, and such a study would require much more time. Nevertheless, the present results are sufficiently suggestive, particularly the results on the changes of the autostereotypes, that a longitudinal study would appear to be worth the effort.

References

- Allport, G. W. The nature of prejudice. Cambridge: Addison-Wesley, 1954.
- Fisher, H. and Trier, U. P. Das Verhaeltnis Zwischen Deutschweizer und Westschweizer: Eine Sozialpsychologische Untersuchung. Bern: Hans Huber, 1962
- Fishman, J. A. An examination of the process and function of social stereotyping. Journal of Social Psychology, 1956, 43, 27-64.
- Friedl, Ernestine. Vasilika: A village in modern Greece. New York: Holt, Rinehart, Winston, 1962.
- Gouldner, A. W. Enter Plato: Classical Greece and the origins of social theory. New York: Basic Books, 1965.
- Helson, H. Adaptation level as a basis for a quantitative theory of frames of reference. Psychological Review, 1948, 55, 297-313.
- Katz, Daniel & Braly, K. W. Racial stereotypes of 100 college students. Journal of Abnormal and Social Psychology, 1933, 28, 280-290.
- Lambert, W. E. & Gardner, R. C. A study of the roles of attitudes and motivation in second language learning. U. S. Office of Education, 1961 (mimeo).
- Osgood, C. E., Suci, G. J. & Tannenbaum, P. H. The measurement of meaning. Urbana: University of Illinois Press, 1957.
- Prothro, E. T. & Melikian, L. Studies in stereotypes III: Arab students in the Near East. Journal of Social Psychology, 1954, 40, 237-243.
- Prothro, E. T. & Melikian, L. Studies of stereotypes V: Familiarity and the kernel of truth hypothesis. Journal of Social Psychology, 1955, 41, 3-10.
- Sinha, A. K. P. & Upadhyaya, O. P. Change and persistence in the stereotypes of University students towards different ethnic groups during Sino-Indian border dispute. Journal of Social Psychology, 1960, 52, 31-39.
- Triandis, H. C. Interpersonal relations in international organizations. Organizational Behavior and Human Performance (in print), 1967.

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13. ABSTRACT
Six samples of Ss were tested with an instrument which utilized a semantic differential format. The "concepts" were "Americans in general tend to be" and "Greeks in general tend to be." The scales were charac-

ABSTRACT, continued.

teristics obtained from unstructured interviews of Americans and Greeks working together in jobs requiring face-to-face social relations. The six samples varied in the degree of contact. Maximum contact groups consisted of Americans and Greeks working together; medium contact groups consisted of Americans living in Athens taking a university course, and Greek university students studying in Illinois; minimum contact groups consisted of American students in Illinois and Greek students at the University of Athens. The autostereotypes and heterostereotypes of the six samples were investigated. It was found that the autostereotype of the American samples having contact with Greeks is more favorable than the autostereotype of the Americans having no contact; the autostereotypes of the three Greek samples show no differences. The heterostereotype of Americans concerning Greeks is less favorable for the maximum than the minimum contact groups; the heterostereotype of Greeks concerning Americans is more favorable for the maximum than for the minimum contact groups. A theoretical integration of these results is offered.

14. KEY WORDS

Stereotyping
autostereotype
heterostereotype
semantic differential format
unstructured interviews
maximum contact group
minimum contact group