DOCUMENT RESUME

ED 029 902 24 TE 499 943

By-Child, Irvin L.; And Others
Art Preferences in Culturally Varying Groups. Final Report.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No-BR-8-A-002
Pub Date Aug 68
Grant-OEG-0-8-080002-0198-010
Note-35p.
EDRS Price MF-$0.25 HC-$1.85
Descriptors-American Culture, *Art, *Art Appreciation, Art Education, Cultural Awareness, Cultural Background, *Cultural Differences, Cultural Disadvantagement, Cultural Enrichment, Culture, *Culture Free Tests, Japanese American Culture, Latin American Culture, Puerto Rican Culture, *Visual Arts

This study undertaken by researchers at Yale University examined the similarities and differences among groups of people in their responses to works of art. Subjects were chosen from the United States, Japan, Puerto Rico, Ecuador, and Peru, and were grouped by age, art involvement, sex, and education. They were shown pairs of slides or prints of visual art, and were asked to indicate either which of the pair they preferred or which they considered the better work of art. Responses, compared with the aesthetic judgments of United States art experts, showed a higher agreement with the experts among art-involved and better-educated groups. Resemblance of responses was greater among groups within a cultural region than among groups of differing cultural regions. In addition, data was included and analyzed to determine the stimulus correlates of choice in Japanese and American groups. The results supported the view that a transcultural constancy in aesthetic orientation underlies the great diversity in art preferences. (JM)

FINAL REPORT

Project No. ~~7-8368~~ 8-A-002
Grant No. OEG-0-8-080002-0198-010

ART PREFERENCES IN CULTURALLY VARYING GROUPS

August 1968

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

Final Report

Project No. ~~7-8368~~ 8-A-002
Grant No. OEG-0-8-080002-0198-010

Art Preferences in Culturally Varying Groups

by

Irvin L. Child, Sumiko Iwao, Don Briddell,
Nicholas Fintzelberg, Miguel García, Fatema Hetata,
Steve Most, Li Ning, and Stephen Sewall

Yale University
New Haven, Connecticut
August 16, 1968

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

Contents

Preface

We prefer not to identify the four U. S. communities whose school children participated in part of this research. Without naming them, however, we wish here to express our profound gratitude for their invaluable aid, indispensable to the research.

The form of this report is the responsibility of the senior author alone, as time has not permitted consultation at this stage with all the collaborators.

Summary

The research reported here is concerned with similarities and differences among human groups in their response to works of art.

Pairs of reproductions of works of visual art were shown, as slides or prints, to subjects who were asked to indicate either which work they personally preferred or which they judged to be the better work of art (one work in each pair had been judged better by U. S. experts). Subjects consisted of groups in the United States, Japan, Puerto Rico, and several other countries, samples within most countries being divided by age, education, art involvement, or type of instructions. The pairs shown differed in part from one group to another.

One aspect of results pertains to the extent to which each group's choices agreed with the esthetic judgments by U. S. experts. Variation among groups on this measure was not associated primarily with what society the group belonged to. Agreement with U. S. experts showed some tendency to be elevated in art-involved groups and in better-educated groups within each society where comparisons could be made. No consistent sex difference appeared.

A second aspect of results pertains to the resemblance among groups in the way the direction and degree of consensus varies from item to item. This measure shows a decided tendency toward general resemblance of all groups, yet resemblance tends to be greater between groups within a cultural region than between groups in different cultural regions. Agreement with U. S. experts and presence of factors making for such agreement have a constant influence on this measure of resemblance, in different cultural settings. Sex, on the other hand, shows little evidence of constant influence in different cultural settings.

A third aspect of results pertains to the stimulus correlates of choice, i.e., of variation from item to item in the direction and degree of consensus. Data from the United States and Japan lend themselves to this analysis. Groups differing in tendency to agree with U. S. experts, or in instructions making for such a difference, differ in stimulus correlates of their choices, in the same way in these two cultural settings.

These results support the view that underlying great diversity in response to art are some transcultural consistencies suggesting a considerable constancy in the meaning of specifically esthetic orientation.

Introduction

In people's reaction to art, how much influence comes from the group of which they are a part--their national culture, social or economic group, sex and age group? How much, on the other hand, comes from sources relatively constant from one group to another? Of these latter we can distinguish two types. First, people's response to art may result in part from universalities of human nature--from general tendencies parallel to those that make some odors repulsive and some odors pleasant or at least tolerable to everyone. Second, people's response to art may come in part from purely individual sources--from peculiarities of temperament, interest, and understanding--that do not themselves vary systematically among groups and hence should average out so as not to be the major source of group differences.

Obviously the three kinds of influence cannot be sharply distinguished, and it is a reasonable presumption that all three play some role. How important a role, we can at present hardly do more than guess. This report represents a beginning attempt to gather systematic evidence.

Procedures

For several years the senior author has been interested in research aimed at comparing how different kinds of people respond to the same art. The first information about cultural differences was obtained from responses to certain pictures by art specialists in the United States and in several other cultures, with different sets of pictures being used in each comparison (Child & Siroto, 1965; Ford, Prothro, & Child, 1966). Each foreign cultural group was compared with U. S. art specialists, but they could not be compared with one another. A next step was to try to prepare in advance a standard set of pictures which could readily be used in any group, and to secure their use by several field workers, so that comparisons could be made among the various groups, such comparisons no longer being limited to the U. S. and each other group separately.

Part of the research program concerned response to art by American school children and college students, and the materials prepared and evaluated in it could be adapted to the new purpose of cross-group comparison. The materials consisted of over 1000 pairs of slides, each pair comprising two works of art similar in subject matter or nature, but differing in esthetic value according to the selector and to at least 12 out of 14 expert judges who independently judged which was the better work in each pair. These pairs were either source or inspiration for three groups of stimulus items used in transcultural comparisons, whichwill now be described in turn.

1. Slides. From the many slide pairs already described, 80

were selected especially as stimulus items for transcultural use. They consisted of pictures which seemed to require very little knowledge of their cultural matrix in order to be understood. Thus they offered more than did other pairs the possibility of producing relatively similar experiences in people of widely varying cultural background. Even with these pictures, we are well aware that experience differs greatly from one person to another, and that some of the differences must be determined by cultural background. But at least these items are pairs for which it seemed reasonable to believe that cultural differences in understanding would be very much smaller than for the rest of the pairs we had used in our U. S. studies. These 80 stimulus items were shown to undergraduate students at Yale College (all men), the students being asked to make a choice in response to each of the 80 pairs; duplicates were made of these slides and were shown to undergraduates at Keio University in Tokyo (mostly men). As the 80 items had been selected from a larger number previously shown to school children, we were able also to consider the responses of children of both sexes and of various school levels. Thus on these slide items we have information about the response of several groups in the United States and of university men in Japan.

2. Photographic prints. These items were pairs consisting of black-and-white prints about 4 by 5 inches. They were selected by the same criteria as were the 80 items already described, but only from black-and-white slide pairs (about half of the 1000 slide pairs were in color). A few items which seemed especially appropriate for transcultural use were introduced even though they had not been among the 1000 used in research in U. S. schools. Altogether, a total of 66 pairs of photographic prints were used. The number that a single field worker could use was obviously limited, however, and in reducing the number we employed an additional criterion for selection: The print pairs were shown to a new group of expert judges in New Haven, Connecticut, and we retained the items on which there continued to be a high degree of agreement despite the changed form of presentation and the fact that different judges were involved. A restricted set of 51 items was selected in this way, and they were the ones generally used in those groups who saw exactly 51 black-and-white items. Of these 51 pairs, 40 were also among the 80 slide pairs described in the previous paragraph, and some of the rest were shown as slides to U. S. school children. In this paper, we will treat identically response to the same item regardless of whether it was seen as photographic prints or as projected slides.

3. Abstract postcards. These pairs were assembled to supplement the black-and-white prints by providing some colored stimulus items for field work where slides could not be shown or were not available. Abstract paintings suggested themselves as a form of art for which good printed reproductions are available cheaply, and which do not require specific cultural information for appreciation. Pairs were assembled of paintings rather similar to a naive viewer (usually to an experienced

viewer as well) and different in esthetic merit according to the selector. They were judged by United States judges, but in some instances items were employed in field work before the U. S. judgments were made. Since close agreement of U. S. judges is not crucial for the main purposes of our present inquiry, data on such pairs are included. Some other items used in one or two projects were not used later because additional copies could not be had. In several projects, a constant 24 pairs were used which did meet the criterion of good agreement among U. S. judges and of which a number of copies were available.

Each person taking part in this research was asked to say which of the two pictures, in each item shown to him, he liked better or judged to be the better work of art. (Where it is possible to indicate clearly which of these two questions was closely approximated in the translation used in the field, we will do so. With U. S. and Japanese university students, equivalent groups received each of these two instructions--to express a personal preference or to make an esthetic judgment--and the results will for certain purposes be reported separately.) For each stimulus item we could then count up the choices made by the members of the group, in order to compare their choices with those of another group. In what form should we do this? It would be possible to select arbitrarily one of the two pictures in an item, and count how many persons preferred it to its mate--e. g., we could take as reference point the picture by an artist whose name appears earlier in the alphabet, or the earlier of two paintings by a single artist. It seemed preferable to count responses in some way having more significance for the research. The way chosen was to take as reference point that picture which the U. S. judges considered to be the better work of art. We thus determined the percentage of individuals, in any given group, whose preference or judgment on a given item agreed with the U. S. experts' evaluation of esthetic merit. This percentage could vary all the way from 100% down to 0%, and in small groups studied both of these extremes occurred.

We have this information--the percentage of agreement with U. S. judges--about the choices of a group on a number of different items. What do we then want to do with the information? We will do two different things, and it is important to distinguish clearly between them.

1. We will determine the average of this proportion over the different items. This will tell us how strongly the particular group showed any definite tendency either to agree or to disagree with U. S. judges--to make choices which tended to be in the same direction as U. S. expert evaluation of esthetic merit or in the opposite direction.

2. Our second treatment of the data is based on how this proportion varies from item to item, and it is well to take the preliminary step of pointing out that it does indeed--for any of our groups--vary a great deal from item to item. This is to be expected from previous research in esthetics (cf. Pratt, 1956). In the various studies we have

done, for example, on response to art in different cultures and at different stages of the life cycle, we have never yet found a group which failed to show very decided variation in preference from item to item: The individuals of the group show substantial agreement with each other about which pictures appeal to them and which do not, and this agreement is reflected in variation from item to item of the proportion of choices meeting whatever scoring criterion is used. We have, then, used the way the particular items are spread out by the judgments of a group, from items on which they agree most closely with the expert standard to ones on which they disagree most thoroughly with it, to define the art choices of the particular group and to permit comparison with the choices of other groups.

Specifically, we have used the correlation coefficient to measure degree of agreement between any two groups. For each stimulus item which has been shown to the two groups, we use the proportion of agreement with U. S. experts, on the part of each group, as the basic datum, and calculate the correlation coefficient over whatever number of items were indeed shown to both groups--a number varying from 28 to 96.

It is important to note that this measure of similarity between groups is not a measure of the absolute frequency with which they make the same choice. It is a measure of the extent to which their choices vary from pair to pair in a similar way. Theoretically, for example, one group might vary from 0% agreement with the U. S. expert standard on some pairs up to a maximum of only 30%. Another group might vary from 70% up to 100%. The absolute amount of agreement between the two groups would be very little; the majority choice of one group would disagree with the majority choice of the other for every single pair. Yet if the proportion varied from pair to pair in the same manner for the two groups--the 0% items of the first group being the 70% items of the second, and so on--this measure of similarity would be very high. What is measured, then, is the extent to which the discrimination among pairs is similar.

Groups Studied, and Comparison with United States Expert Judgments

In this section we will describe the groups studied and the conditions of testing, and report the average extent to which their choices agree with U. S. expert judgments of esthetic value. Wherever we speak of "agreement" in this section, we are using the word in this one sense. While describing the groups in sets, we will number them consecutively for convenience in later use of Table 1, where they will be identified partly by number. We will also introduce each group here by an abbreviated name in capital letters; the name is used in Table 1, and the text here serves as a guide to the meaning of the name in the table.

A. United States school pupils

The school pupils were all in the public schools of the state of

Connecticut. Schools in three communities were sampled: (a) A city of about 150,000, largely industrial but also containing a major university; (b) A suburb of that city, fairly high in socio-economic status but varying widely; (c) A suburb of another Connecticut city, also high in socio-economic status but varying widely. Elementary schools were used only in the city; the ones we used varied greatly in the socio-economic status of their neighborhoods, representing the extremes of high and low status. At the time our data were collected, elementary schools in this city contained kindergarten and grades 1 through 6, but we have used the choices only of grades 2 through 6. In the suburb of this city, we studied children in junior-high school (grades 7, 8, and 9) and in high school (grades 10, 11, and 12). In the other suburb we studied only high-school pupils. We have treated separately the responses of the two sexes. In addition, we have selected for special study--separately for elementary and for secondary school--pupils who showed the greatest and pupils who showed the least agreement with expert standards, referring to them as high-scorers and low-scorers, respectively.

We thus have the following specific groups to report on:

1. INFELBOYS: Boys of an elementary school in an area of inferior socio-economic status, 138 in number. (The number of pupils, here and later, is an approximation; since the items were shown in schools over a series of sessions, the number of pupils actually varied for different items.) They expressed preferences on 96 of the items used in other cultures, and on these they averaged 40.4% agreement with the expert standards.

2. INFELGIRLS: Girls of the same inferior-area elementary school, 115 in number. They averaged 38.6% agreement with experts on the same items.

3. SUPELBOYS: Boys of an elementary school in an area of superior socio-economic status, 92 in number. On the same 96 items they averaged 41.7% agreement.

4. SUPELGIRLS: Girls in the same superior-area elementary school, 87 in number. They averaged 41.9% agreement.

5. ELHISCORE: High-scoring elementary-school pupils, 50 in number. These children were selected from groups 3 and 4 and from pupils of another school of high status. The children in this second school had not seen all the slide pairs and hence their data are used only for this special purpose. Groups 1 and 2 had very few high-scoring children. To get a sufficient number of high-scorers, therefore, we had to use this additional school. Group 5 consists of the 5 highest-scoring children in each grade (2 through 6), selected without regard to sex, in each of the two schools; for sessions from which one of these children was absent, another high-scorer was substituted. Data are available on 81 of the items we are studying, and on these the average agreement with

experts was 46.7%. Even though they were selected for their relatively high scores, these children still did not on the average agree with experts even as much as would be expected had they been responding at random. Some may have possibly been non-cooperators who were responding at random, but we believe that characteristically they were showing a mixture of childish preferences and of esthetically-oriented preferences. (For a discussion of this issue, see Child, 1964, pp. 19-23.)

6. ELLOSCORE: Low-scoring elementary-school pupils, 50 in number. These were low-scoring pupils matched one-for-one with the high-scoring pupils of Group 5, each from the same grade as one of the high-scorers. They averaged 37.0% agreement with experts on the 81 items for which data are available.

7. JUNHIBOYS: Junior-high boys, different samples from the same population but averaging about 105 in number, saw each of the 96 slide items and averaged 43.6% agreement with expert judgment.

8. JUNHIGIRLS: Junior-high girls, averaging about 109 in number, agreed with expert judgment 43.3% of the time.

9. SENHIBOYS: High-school boys, averaging about 162 in number, showed 45.7% agreement with experts.

10. SENHIGIRLS: High-school girls, averaging about 171 in number, showed 47.8% agreement.

11. SECHISCORE: High-scoring secondary-school pupils, 50 in number. These were necessarily selected separately from varying groups of pupils who had seen various sets of pairs. They were selected without regard to sex and with some attempt at equating representation of different grades (7 through 12). They averaged 59.1% agreement with expert choices.

12. SECLOSCORE: Low-scoring secondary-school pupils, 50 in number, selected by matching on sex and grade with the high-scoring pupils of Group 11. They averaged 36.4% agreement.

B. United States college men

Data on American college men were collected at Yale as part of a project in the elementary psychology course, using exactly the 80 slide pairs which have been described above (see also Child, 1965, pp. 502-503). Two types of instructions were used, each with one-half of the subjects.

13. YALEJUDG: Yale judgment subjects. These are 155 students who were instructed to judge which picture in a pair was the better work of art. Their judgments averaged 57.4% agreement with expert standards.

14. YALEPREF: Yale preference subjects. These are 155 students who were instructed to express a personal preference between the two pictures in a pair. Their preferences averaged 50.7% agreement with expert standards.

15. YALEHISCORE: Yale high-scorers. These are 25 students selected from groups 13 and 14 for their high degree of agreement with experts. They were selected for comparison with a Japanese group, and hence were chosen by pairing with each Japanese (group 26) a Yale student with as similar a score as possible. Group 15 averaged 62.2% agreement with the expert standards.

16. YALELOSCORE: Yale low-scorers, also selected from groups 13 and 14 by pairing individuals with Japanese students, in this instance group 27. Group 16 averaged 41.7% agreement with expert standards.

C. Puerto Rican subjects

These data were obtained in 1964 by Miguel García, then an undergraduate in Yale College, during a visit to his home city in Puerto Rico. The 75 items he used were the 51 print pairs and 24 pairs of abstract paintings which have been described above. He obtained expressions of personal preference from 40 men and 40 women, each equally divided between well educated (typically, college graduates) and less educated (members of the working class, typically, with no more than some elementary education). He thus interviewed 4 groups of 20 persons each.

17. PRCOLLMEN: Well-educated Puerto Rican men, averaging 53.1% agreement with the U. S. expert standard.

18. PRELMEN: Less-educated Puerto Rican men, averaging 44.6% agreement.

19. PRCOLLWOM: Well-educated Puerto Rican women, averaging 53.4% agreement.

20. PRELWOM: Less-educated Puerto Rican women, averaging 44.3% agreement.

D. Japanese subjects

These data were obtained by Sumiko Iwao, either in person or with the help of assistants who were also Japanese.

21. JAPANPOTTERS: Japanese potters, whose responses have already been reported by Iwao and Child (1966). They were 60 in number, mostly in remote villages but a few in the city of Kyoto. They were asked to make esthetic judgments, and were shown 51 print pairs (overlapping with, but not completely identical with the 51 pairs described

earlier) and 16 pairs of abstract paintings (again, including some of the 24 abstract pairs described earlier, but including some others). Their judgments averaged 58.7% agreement with those of the U. S. judges.

22. JAPANTCHRS: Japanese art teachers. This is a concise but somewhat unsatisfactory label for a group of 31 residents of Tokyo, 27 women and 4 men, who were all practitioners or teachers of flower arranging, tea ceremony, or other traditional arts. These subjects have also been previously reported on by Iwao, Child, and García (1967). They were shown the standard 51 black-and-white photographic-print items described earlier, and the standard 24 pairs of abstract paintings. They averaged 56.2% agreement with U. S. experts.

23. KEIOPRINT: Keio print subjects. We use this label to refer to 35 undergraduate men at Keio University in Tokyo, who were obtained through social-science courses and shown most of the items which had been shown to the Japanese potters. They averaged 60.7% agreement with the U. S. experts.

24. KEIOJUDG: Keio judgment subjects. These were 66 undergraduate men at Keio University, obtained through various clubs and organizations, who were shown the 80 slide items which were seen also by Yale students, and who made judgments of esthetic merit. They averaged 52.4% agreement with the U. S. experts.

25. KEIOPREF: Keio preference subjects. These were 65 students selected like those of group 24, but asked to express personal preference within each pair. Agreement with U. S. experts averaged 51.2%.

26. KEIOHISCORE: Keio high-scorers. These students were the 25 members of groups 24 and 25 who showed the highest proportion of agreement with U. S. experts, averaging 61.1%.

27. KEIOLOSCORE: Keio low-scorers. These students, also selected from groups 24 and 25, averaged 41.8% agreement with U. S. expert standards.

D. South American subjects

There are six small groups of South American subjects, obtained in three communities, two in Ecuador and one in Peru. In each community two samples were obtained: one of people more involved in art (usually craftsmen supplementing their other economic activity) or more educated generally, and one of people less or not at all involved in art, or less educated. All were asked to make a judgment (if possible, and if not, then to express a personal preference) on the standard 51 print items and 24 abstract-painting items. For groups 28 and 29, defective labeling prevented use of results on one of the print pairs.

28. MOCHEART: Moche artists, 10 in number, all men. These are

residents of the Peruvian town of Moche who are in some way involved in art--most as part-time painters or sculptors, two as teachers, two as recreational painters. Some have studied outside the community, including at an art school in the capital city, Lima. They were interviewed in 1964 by Steve Most, then an undergraduate in Harvard College, and a Peruvian collaborator, Li Ning, and asked to judge the standard 51 print pairs and 24 abstract-painting pairs. They averaged 53.1% agreement with U. S. expert standards.

29. MOCHENONART: Moche non-artists, 12 in number, all men. These are Moche residents who are not involved in art, also interviewed by Steve Most and Li Ning in 1964 as a non-artist group to compare with group 28. They averaged 45.4% agreement with U. S. expert standards.

30. ZULETAART: Zuleta craftsmen, 15 in number, 12 women and 3 men. These are residents of the town of Zuleta in the northern highlands of Ecuador, selected for their participation in craftwork as a secondary economic activity. They were interviewed in 1967 by Don Briddell, who was in the community as a Peace Corps volunteer. They averaged 42.7% agreement.

31. ZULETANON: Zuleta non-craftsmen, 10 in number--3 women and 7 men. These are residents of the same town, also interviewed by Don Briddell in 1967 to permit comparison with group 30. They averaged 40.7% agreement.

32. SALINASED: Salinas, more-educated group, 19 in number (10 men and 9 women). These were residents of the Ecuadorean coastal town of Salinas, interviewed by Nicholas Fintzelberg during anthropological field work there in 1967. All were graduates of the colegio (approximately equivalent to high school), and averaged 52.4% agreement.

33. SALNON: Salinas, less-educated group, 14 in number (4 men and 10 women). These were residents of the same town, but with little formal education, also interviewed in 1967 by Nicholas Fintzelberg for comparison with group 32. They averaged 50.1% agreement.

E. Samples from other cultural groups

34. UAR: Arab amateur artists. This is a small group of 11 men from whom judgments were obtained by Fatema Hetata during a visit to the United Arab Republic. They were located in an industrial plant where these individuals could be identified as amateur artists through their participating in a show of their own work. Almost all of them were by profession or training draftsmen in the plant. They saw 62 pairs of photographic prints and abstract postcards, all but 4 of which were identical with pairs shown to the Japanese potters. They averaged 53.0% agreement with the U. S. experts.

35. IND: Indians interested in the arts. This is another small group--7 men--whom Stephen Sewall was able to interview in 1965 in India, mostly in Bombay. They have in common only some definite interest in visual art, varying in whether it is traditional Indian art, European art, or applied art. Each was shown the standard 51 print items and 24 abstract-painting items, and they averaged 58.5% agreement with the U. S. experts.

Summary of Comparison with United States Expert Judgments

For 35 different groups we have reported the percentage of agreement with judgments of esthetic value made by U. S. specialists in art. Some of the variation among the groups must be ascribed to variations in the particular sample of items for which their judgments or preferences are available. Because of the wide variation we are not able to take account of this very precisely. For present purposes we will disregard this undoubted influence in order to arrive at tentative generalizations, but will rely so far as possible on comparisons which cannot be affected by differences in items used.

Any group may, of course, be compared with any other. But some more general comparisons can also be made, and four of these seem especially valuable: comparison of groups of differing cultural origin but otherwise similar, comparison of experts vs. non-experts, comparison of groups differing in amount of general education, and comparison of the two sexes. We will consider each of these in turn.

A. Cultural differences

Many group comparisons can be made where gross cultural differences may well be the main source of variation. We would especially call attention here, however, to the instances where the people compared are likely to be especially similar except for their differing cultural origin.

Pertinent here is a comparison between the students of Yale and Keio Universities. These universities hold some promise of being similar in the sample they represent of their societies. While a university's sampling of a society varies so much through the years that we would not press the point, we think it can be made with enough plausibility to give some special interest to this comparison. The groups being compared, moreover, saw exactly the same pictures. We observe, then, that when students are instructed to judge which work of art is better, the Yale students agree with U. S. experts considerably more than do the Keio students (57.4% against 52.4%). It is as though they were being asked to guess the opinion of U. S. experts, and the American students have more knowledge of the specific culture that might be relevant in making correct guesses. But when asked to express their personal preferences, there is no appreciable difference between the extent to

which the two national samples make choices agreeing with the U. S. expert standards (50.7% against 51.2%).

Perhaps a case could be made for comparability from one society to another of the samples specially selected to represent non-experts, people evidently not personally involved with art. If the argument is admitted, then we find so far no impressive evidence of wide variation from one society to another. Only the three South American communities provide pertinent samples, and their proportion of agreement does not vary widely (40.7%, 45.4%, and 50.1%), particularly in view of the small number of people making up each sample.

We may also conclude from these findings that degree of acquaintance with U. S. culture is not a single overwhelming influence on agreement with U. S. experts, as many people suppose. None of our samples chosen to represent groups widely scattered over the world agree with U. S. experts so little as do U. S. elementary-school pupils of a low-status neighborhood, and few of our samples agree with U. S. experts as little as do U. S. elementary-school pupils of a high-status neighborhood. Even the lowest-scoring fraction of Japanese university students, especially selected for their low scores, averaged higher agreement with U. S. experts than did unselected samples from some U. S. elementary schools. Even if we consider the more mature pupils in a senior high school in the U. S., we find that their choices agree with those of U. S. experts less than do those of most groups of higher education or greater expertise we have sampled elsewhere in the world. They agree with art experts in their own metropolitan community, for example, much less than do potters in Japanese villages, Arab amateurs in art, or Indians interested in art, among the samples we have studied.

B. Expert response, and its relation to response of non-experts

In a series of four papers by Child and Siroto (1965), Ford, Prothro, and Child (1966), Iwao and Child (1966), and Iwao, Child, and Garcia (1967), evidence has been presented that esthetic judgments by art-involved people in very different cultures may tend to show some transcultural agreement. Only the data used by Iwao and Child are based on stimulus items also used in other investigations, and hence only those data (Japanese potters) are included in the present study. (In the paper by Iwao and Child were reported, however, only judgments of pairs on which U. S. experts subsequently were found to show excellent agreement; in the present paper we also include the judgments of potters on other pairs where the agreement of U. S. experts was not so close.) The present study includes choices made by art-involved people in several additional communities. Does the finding of some tendency toward transcultural consistency hold up?

For three other groups of subjects reported here, the proportion of agreement with the judgments of U. S. experts remains above the 50% level that might be expected of random responses: group 28, Moche

artists (53.1%); group 34, Arab amateur artists (53.0%); group 35, Indians interested in the arts (58.5%). These values are, however, not very far above 50%, and when they are considered as averages of scores of a small number of persons, the deviation from 50% is not quite significant even for the Indian group ($t = 2.24$, where 2.45 would be required for two-tailed significance at the 5% level). If we take for granted the particular sample of people and ask how we may generalize to their responses to a larger population of similar stimuli, the deviation of the Indian results becomes highly significant ($t = 3.62$), but the other two results still do not differ significantly from 50%.

For one additional group, the Zuleta craftsmen of group 30, the mean agreement with U. S. experts is only 42.7%, decidedly below the chance value of 50%. Here, as for the Moche group, we have "non-artists" with whom we can compare "artists." In both instances, the "artists" show more agreement with U. S. experts--by a margin of 2% in Zuleta, 8% in Moche. Other groups representative of the general population--for example, the several American school groups, which are the best approximation we have to a representative sample of an entire community--show a decided tendency to agree with U. S. experts less than 50% of the time. This indicates that if we wish to determine whether a group interested in art shows any tendency to agree with U. S. experts, the appropriate comparison figure is not the 50% of an imaginary random response but the value obtained from culturally similar people not interested in art, a figure which seems likely to be far below 50%. Though some of the group differences are small and not at all statistically significant, we have by this criterion no instance thus far of a clear negative finding on the question of transcultural consistency. That is, in no instance do the choices of a group selected for involvement with art show lower average agreement with U. S. experts than the choices of a group from the same community selected for non-involvement with art. But the findings do not lead one to expect any large average tendency for the art-involved to show higher agreement.

C. Relation to education

Interest in and knowledge of art seem likely to be to some degree correlated with amount of general education. Therefore it is interesting to see whether agreement with expert judgment will vary with general education in the same way that it varies with involvement with art.

Our data provide several relevant comparisons. In a Puerto Rican community, separate comparisons are available for each sex, between a highly educated and a relatively little-educated group, and each comparison shows the more educated group agreeing much more with the judgment of U. S. experts. In the Ecuadorean community of Salinas a similar comparison, with a smaller difference in education between the two groups, shows a difference in the same direction; but the difference is hardly appreciable. In the United States, we can compare the responses of school children at various grade levels, and we see a regular

increase in agreement with U. S. experts as we go up the grades. This comparison is less conclusive than the others in that the groups differ in age as well as in amount of education, so that their differences may have more to do with the level of development attained at a given age than with the amount of education. These differences are, however, more dependable in that they are based on much larger numbers of subjects constituting almost 100% samples of their age groups in their communities.

D. Sex differences

The sexes may be compared for several different groups: highly educated Puerto Ricans (groups 17 and 19), less-educated Puerto Ricans (groups 18 and 20), children in a U. S. grade school in a low-status neighborhood (groups 1 and 2), and a higher-status neighborhood (groups 3 and 4), junior high school (groups 5 and 6), and senior high school (groups 7 and 8). The differences between the sexes are small (never more than 2.1% and usually much smaller), and they are not consistent in direction. Some theoretical basis could have been found in advance for predicting either sex to agree more with expert opinion. Neither prediction is borne out.

Resemblance of Choices from Group to Group

A. Over-all resemblance

As indicated earlier, we have measured the similarity of choices from group to group by calculating for each pair of groups a correlation coefficient. Each pair of groups had responded to a number of items in common, varying from 28 up to 96. For all such items, the choice proportion (measured arbitrarily as proportion agreeing with the U. S. experts' choice) was available for each group, and this was the information from which the correlation coefficient was calculated. The coefficient thus measures the extent to which the choices of the two groups are similar in the way they order the various items, from the one on which a group is closest to unanimous agreement with U. S. experts to the one on which it is closest to unanimous disagreement with them. Table 1 presents all the possible correlations between pairs of groups.

A glance at Table 1 will give immediately a strong impression of its salient characteristic: these correlations are overwhelmingly positive. The stimulus items tend to be ordered in somewhat the same way by all our groups. Detailed analysis shows that there are in fact only 44 negative correlations out of the 595 which appear in this table; 7.4% of the coefficients are negative, while 92.6% are positive. The few negative correlations tend, moreover, to be much smaller than the positive ones; the negative correlations average -.13, and the positive, .41.

When we look to see where the negative coefficients appear, we find that 40 out of the 44 appear in the relationships between certain

Table 1

Intergroup Resemblance in Preferences

Each entry is a correlation coefficient (decimal point omitted) measuring for one pairing out of the 35 groups the similarity of their item-to-item variation in preference.

INFELBOYS 1																																
90	INFELGIRLS 2																															
80	79	SUPELBOYS 3																														
70	79	83	SUPELGIRLS 4																													
69	71	75	81	ELHISCORE 5																												
80	87	84	84	73	ELLOSCORE 6																											
72	65	81	74	74	76	JUNHIBOYS 7																										
64	66	73	82	77	73	89	JUNHIGIRLS 8																									
59	53	58	50	60	50	60	61	SENHIBOYS 9																								
56	60	62	70	68	57	67	78	72	SENHIGIRLS 10																							
20	21	34	40	46	17	49	56	53	76	SECHISCORE 11																						
81	85	83	84	71	82	87	91	70	82	44	SECLOSCORE 12																					
24	19	39	43	53	28	52	58	50	70	75	47	YALEJUDG 13																				
45	47	57	65	69	50	67	74	54	80	66	67	81	YALEPREF 14																			
15	13	30	39	49	22	41	52	39	64	70	39	90	82	YALEHISCORE 15																		
60	56	63	69	72	62	72	74	63	74	49	71	69	85	63	YALELOSCORE 16																	
20	24	37	36	42	31	39	39	58	61	65	45	54	68	58	51	PRCOLLMEN 17																
60	54	65	44	58	55	51	41	36	39	31	56	38	53	35	60	45	PRELMEN 18															
39	45	45	45	50	47	48	49	53	68	61	64	71	82	70	72	76	56	PRCOLLWOM 19														
55	59	61	51	58	49	48	44	54	48	30	54	38	58	36	64	56	71	64	PRELWOM 20													
-35	-29	-14	-14	-16	-13	-04	-10	02	-00	14	-19	35	20	32	-04	20	-30	26	-10	JAPANPOTTERS 21												
-08	-05	11	21	16	12	32	38	22	49	55	31	61	44	55	28	41	12	41	11	52	JAPANTCHRS 22											
-39	-33	-10	-04	-11	-18	01	09	08	21	53	-04	50	30	44	-00	34	-04	26	03	52	66	KEIOPRINT 23										
06	10	22	29	11	07	29	42	24	46	52	31	47	39	42	24	34	07	40	07	18	42	52	KEIOJUDG 24									
20	23	30	38	23	24	42	51	40	51	45	43	45	57	39	45	53	15	58	23	36	45	52	65	KEIOPREF 25								
-18	-10	-03	06	-13	-08	09	18	07	29	50	08	38	36	35	16	50	-01	49	06	55	66	72	59	65	KEIOHISCORE 26							
32	37	40	50	29	40	43	54	28	47	34	55	41	54	38	45	48	30	62	34	05	29	37	68	84	48	KEIOLOSCORE 27						
12	13	43	35	40	34	37	39	31	44	41	38	43	41	41	32	49	24	43	21	31	36	33	29	32	40	31	MOCHEART 28					
42	33	50	38	32	36	31	31	22	11	-04	39	14	23	14	22	26	28	27	22	-03	08	08	30	15	02	38	41	MOCHENONART 29				
43	39	45	32	40	36	35	26	11	10	00	31	12	26	10	42	20	47	08	37	-45	-16	-17	05	00	-14	14	10	29	ZULETAART 30			
57	50	66	48	55	49	48	42	26	22	07	45	23	33	18	43	23	63	24	52	-44	-04	-12	12	08	-08	18	26	36	60	ZULETANON 31		
13	14	30	25	17	23	29	35	33	40	26	34	46	52	49	42	40	24	30	27	08	22	20	47	40	36	30	28	35	26	38	SALINASED 32	
10	07	26	41	23	11	26	32	31	36	33	27	42	46	45	35	38	12	32	24	02	08	14	43	37	33	24	27	24	21	25	63	SALNON 33
55	61	62	56	48	54	43	48	35	55	37	58	25	26	16	26	25	12	29	16	-01	27	27	40	25	26	41	35	50	26	24	29	42	UAR 34
-07	01	21	20	06	04	29	32	37	49	49	31	33	37	34	18	40	01	36	13	49	33	27	29	42	42	26	38	07	-11	-11	23	30	10	IND35
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	

Japanese groups and groups elsewhere in the world. These are Japanese groups which tend to have high scores for agreement with U. S. experts: the potters and art teachers interviewed as Japanese experts, the high-scorers especially selected from Keio University students because of their agreement with U. S. experts, and the Keio University print subjects, who for reasons we do not know showed decidedly more agreement with U. S. experts than did the Keio University students shown slides. (The items seen both by the print subjects and by the slide subjects, who were likewise asked to make an esthetic judgment, yielded 62.0% and 51.6% agreement, respectively, with U. S. experts. We doubt that the difference resulted from conditions of administration, and consider it more likely to have resulted from selection of subjects. Perhaps, for example, students in the social-science courses from which the print subjects were obtained are likely to average higher in esthetic orientation than students in the extra-curricular activities from which the slide subjects were recruited.) The Keio slide subjects, both those with judgment instructions and those with preference instructions, and the Keio low-scoring subjects selected for lack of agreement with U. S. experts, show no negative correlations with any group.

The groups outside Japan with whose choices the choices of esthetically oriented Japanese groups are negatively correlated are, for the most part, groups with little tendency to agree with U. S. experts. The only exceptions are negative correlations with the Zuleta craftsmen (Group 30), the Arab amateur artists (Group 35), and the high-scoring elementary-school pupils (Group 5). These three negative correlations may result from cultural differences despite some sharing of an esthetic orientation. In general, however, the negative correlations seem to occur only with both a great cultural difference and a contrast between esthetic orientation and its absence.

There remain four negative correlations which do not involve Japanese groups. Three of these are small correlations (-.07, -.11, and -.11) involving the Indians interested in the arts (Group 35), and we are inclined to dismiss them as having no special meaning, on the ground that they probably result from sampling error associated with the very small size of this group. The one other negative correlation (-.04, between Groups 11 and 29) is in itself so small as to be of little meaning.

We conclude, then, that there is a very strong general tendency for the various groups to resemble one another in the pattern of their choices. Works of art chosen over their mates by one group will tend to be chocen by most other groups as well.

B. Cultural influence on degree of resemblance

Resemblance between groups in their choices is to some extent, then, independent of cultural variation, but the fact that negative correlations were most frequent for groups outside the general area of

Western European civilization suggests strongly that the resemblance is not altogether independent of cultural variation. It is possible to organize some pertinent information drawn from the wealth of correlations reported in Table 1.

We may distinguish four world areas in each of which we have data on several groups: (1) Continental United States, with a number of school groups from a single state and two groups of college males studying in that same state but from homes widely scattered over the country; (2) Puerto Rico, with four groups drawn from a single region; (3) Ecuador and Peru, with a total of six groups drawn from three widely scattered communities; (4) Japan, five groups, all but one of them drawing on at least several communities. We exclude from consideration here the groups formed after the fact on the basis of their tendency to agree with experts, both because of their being composed of parts of groups already considered and because they are not representative of any social grouping in the community.

For each of these four areas, we have determined the average correlation between all pairs of groups within the area, and the average correlation between a group in this area and groups in each of the other three areas. The resulting average correlations are presented in Table 2.

The intergroup resemblance clearly tends to be higher within an area than between areas. One area constitutes an exception--Ecuador and Peru. Comparison of the three communities must be made to determine whether they resemble each other in general culture no more than they resemble communities in Puerto Rico or continental United States. The low average intergroup correlation within Ecuador and Peru cannot be ascribed to lack of consistency within a single community. In each of the three communities, two groups were obtained; despite the intention of sampling two groups decidedly different in educational attainment or involvement with art, the two groups in a single community were always more highly correlated with each other than either was with any group in the other two communities. The within-community correlation was .41 for Moche, .60 for Zuleta, and .63 for Salinas.

For each of the other three areas in Table 2, then, resemblance of choices within the area averages decidedly higher than does resemblance of choices to those of groups in other areas. To a considerable extent, too, the degree to which the average correlation falls away from this intra-area maximum appears related to the degree of difference in general culture. This conclusion can be reached, however, only if the similarity of religion, art, and language such as is found among all the Western Hemisphere groups is given greater weight than the similarity of industrial development, such as that between the United States and Japan, as a basis for characterizing the amount of general cultural similarity between groups.

Table 2

Intergroup Resemblance in Choices, Comparing Groups within and between Regions

(Each region is represented by a row and a column. Each cell gives the average correlation between groups in the region represented by its row and groups in the region represented by its column, followed in parenthesis by the number of such correlations available.)

	United States	Puerto Rico	Ecuador and Peru	Japan
United States	.64 (45)	.49 (40)	.32 (60)	.19 (50)
Puerto Rico	.49 (40)	.61 (6)	.31 (24)	.20 (20)
Ecuador and Peru	.32 (60)	.31 (24)	.33 (15)	.12 (30)
Japan	.19 (50)	.20 (20)	.12 (30)	.48 (10)

C. Degree of agreement with U. S. expert standards: Does it have a constant effect on choice resemblances?

From four different kinds of subject , we formed groups after the fact to represent extremes of tendency to agree with U. S. expert standards. High-scoring and low-scoring groups were formed, as described earlier, for Yale students, for Keio students, for secondary-school pupils, and for elementary-school pupils. In each case, a large number of the subjects were omitted and only two extreme groups were formed.

If these extreme groups represent always a difference between people who are responsive to relatively constant features of art appealing to people with an esthetic orientation, and people who are not responsive to these features, then we might expect high-scorers in one population to resemble high-scorers in another population, and low-scorers to resemble low-scorers. If, on the other hand, the degree of agreement with U. S. expert standards is determined by some other factor, not by an "esthetic sensitivity" of relatively constant meaning, there seems in general no reason to anticipate any special resemblance between various groups of high-scorers and between various groups of low-scorers--except of course the kind of similarity that is the basis for establishing the groups.

The relevant facts are available from Table 1, and they have been extracted and arranged in simple form as Table 3. There are four sets of high- and low-scorers. Each line of Table 3 deals with one of the six pairings of those four sets. The first line, for example, considers (1) Keio and (2) Yale subjects. The first entry gives the correlation coefficient which measures the item-by-item resemblance of the choices of the Keio high-scorers and the Yale high-scorers. The second entry gives the coefficient which measures the resemblance of the two low-scoring groups. The last two entries do the same for the two cross-pairings between a high-scoring group from one population and a low-scoring group from the other population. From the hypothesis of esthetic appeal somewhat constant across population boundaries, the prediction is that the first two coefficients will be higher than the second two. Confirmation is only partial in the first line of the table; the second coefficient exceeds the third and the fourth, but the first coefficient exceeds only the third. When we consider all such comparisons in the table, we find that 18 of the 24 comparisons are in the predicted direction. Save for the one exception in the first line, the non-confirmations all occur in comparisons involving elementary-school pupils. There is perfect confirmation when either Keio or Yale students are compared with secondary-school groups.

We conclude that degree of agreement with U. S. experts has some consistency of meaning for the pattern of choice as it varies from one item to another. This consistency is maintained, so far as our evidence goes, across cultural boundaries and between groups differing in age and education, except that it may not extend to the elementary-school pupils.

Table 3

Intergroup Resemblance in Choices, Comparing High-Scoring and Low-Scoring Groups from Different Populations

Populations compared	Correlation between: High-scorers(1) and High-scorers(2)	Low-scorers(1) and Low-scorers(2)	High-scorers(1) and Low-scorers(2)	Low-scorers(1) and High-scorers(2)
(1)Keio; (2)Yale	.35	.45	.16	.38
(1)Keio; (2)Secondary pupils	.50	.55	.08	.34
(1)Keio; (2)Elementary pupils	-.13	.40	-.08	.29
(1)Yale; (2)Secondary pupils	.70	.71	.39	.49
(1)Yale; (2)Elementary pupils	.49	.62	.22	.72
(1)Secondary pupils; (2)Elementary pupils	.46	.82	.17	.71

Though we have argued from other evidence (Child, 1964) that elementary-school children who are high-scorers are to some extent responding to esthetically relevant aspects of art, such an interpretation gains no further support from the present findings, which may be viewed as casting some doubt on it.

D. Factors influencing degree of agreement with U. S. expert standards: Do they have a constant effect on choice resemblances?

In the previous section we considered groups formed after the fact, based on actual measurement for each individual of degree of agreement with U. S. expert standards. Here we will discuss instead some of the a priori groupings which, though established in advance of obtaining data, turned out to be related to degree of agreement. Four distinguishable factors are involved, each represented in at least two sets of data: (a) Type of instructions, where instructions to make an esthetic judgment resulted in more agreement with expert standards than did instructions to express personal preference. This factor distinguished otherwise similar groups among Yale students (Groups 13 and 14) and among Keio students (Groups 24 and 25). (b) Involvement vs. non-involvement in artistic activity, a factor distinguishing otherwise fairly similar groups in Moche (Groups 28 and 29) and Zuleta (Groups 30 and 31); the artists or craftsmen in both communities did show slightly higher agreement with U. S. experts, though the difference was very small in Zuleta. (c) Amount of general education, a factor which--inevitably associated with many other correlates of social status--distinguished groups of Puerto Rican men, of Puerto Rican women, and of people in Salinas; again, the factor was found related to degree of agreement with experts, though not significantly in Salinas. (d) Amount of general education confounded with age and developmental status, a factor distinguishing school groups in the Connecticut population sampled. To have more than one comparison per sex on factor (d) and yet use each group only once, we have chosen to compare high-school pupils with pupils in a high-status elementary school, and junior-high pupils with pupils in a lower-status elementary school. These two comparisons are each made separately for boys and for girls.

We have altogether, then, 11 comparisons between two groups which differ in one of these factors associated with esthetic orientation. If the meaning of variations in esthetic orientation is relatively constant throughout, we can make predictions parallel to those made in the preceding section for high-scorers vs. low-scorers. That is, there should be a special tendency toward resemblance among the groups whose status on any of these factors makes for high scoring, and another special tendency toward resemblance among the groups whose status on any of these factors makes for low scoring. A large number of comparisons are available here, and it therefore seems worthwhile to introduce a further complication not mentioned in the previous section because so few comparisons could be made there. This complication arises when we consider that we are looking at the resemblances among four groups which may all

differ from one another in tendency to agree with expert opinion. Suppose we always place at the left (as we shall in presenting results) the groups which average higher in agreement with expert opinion. We then have a situation which may be diagrammed as follows, with vertical position representing degree of agreement with expert judgment:

Population (1)	Population (2)
High-scorers	
	High-scorers
Low-scorers	
	Low-scorers

What is to be regarded as fixed in this diagram is that the two entries in the left-hand column average higher than the two entries in the right-hand column. Nearly always, too, the highest single entry will be in the left-hand column and the lowest single entry will be in the right-hand column. But the exact position of the intermediate entries--the low-scorers of Population (1) and the high-scorers of Population (2)--will vary a good deal. We will discuss shortly the implications of this diagram for the predictions to be made about the comparisons we are considering here.

In Table 4 we present the relevant correlations extracted from Table 1. Each line considers one combination of two out of the 11 comparisons we have described. On the left is always placed that one of the two comparisons for which the subjects had the higher average agreement with U. S. experts. (The comparisons were selected on an a priori basis, but their left or right placement here is determined by the average-agreement aspect of the results obtained.) The four successive columns then show, for this particular pair of comparisons: (1) The similarity of choices (as measured by a correlation coefficient) of the high-scoring group from population (1) and the high-scoring group from population (2)--in the first line of the table, for instance, the Yale judgment group and the Keio judgment group, respectively. (2) The similarity of the two low-scoring groups--in this instance, the Yale preference group and the Keio preference group. (3) The similarity of the high-scoring group from population (1) and the low-scoring group from population (2)--in this instance, Yale judgment subjects and Keio preference subjects. (4) The similarity of the low-scoring group from population (1) and the high-scoring group from population (2)--Yale preference subjects and Keio judgment subjects. The table contains 55 lines altogether, representing all possible combinations of 11 comparisons taken two at a time.

Table 4

Intergroup Resemblance in Choices, Comparing Groups which Differ on Factors Influencing Degree of Agreement with U. S. Expert Standards

Populations Compared		Correlation between Hi(1) and Hi(2)	Lo(1) and Lo(2)	Hi(1) and Lo(2)	Lo(1) and Hi(2)
(1)YALE, JUDG vs. PREF;	(2)KEIO, JUDG vs. PREF	.47	.57	.45	.39
(1) "	(2)SALINAS, ED vs. NON	.46	.46	.42	.52
(1) "	(2)MOCHE, ART vs. NON	.43	.23	.14	.41
(1) "	(2)PRMEN, COLL vs. EL	.54	.53	.38	.68
(1) "	(2)PRWOM, COLL vs. EL	.71	.58	.38	.82
(1) "	(2)GIRLS, SENHI vs. SUPEL	.70	.65	.43	.80
(1) "	(2)BOYS, SENHI vs. SUPEL	.50	.57	.39	.54
(1) "	(2)BOYS, JUNHI vs. INFEL	.52	.45	.24	.67
(1) "	(2)ZULETA, ART vs. NON	.12	.33	.23	.26
(1) "	(2)GIRLS, JUNHI vs. INFEL	.58	.47	.19	.74
(1)KEIO, JUDG vs. PREF;	(2)SALINAS, ED vs. NON	.47	.37	.43	.40
(1) "	(2)MOCHE, ART vs. NON	.29	.15	.30	.32
(1) "	(2)PRMEN, COLL vs. EL	.34	.15	.07	.53
(1) "	(2)PRWOM, COLL vs. EL	.40	.23	.07	.58
(1) "	(2)GIRLS, SENHI vs. SUPEL	.46	.38	.29	.51
(1) "	(2)BOYS, SENHI vs. SUPEL	.24	.30	.22	.40
(1) "	(2)BOYS, JUNHI vs. INFEL	.29	.20	.06	.42
(1) "	(2)ZULETA, ART vs. NON	.05	.08	.12	.00
(1) "	(2)GIRLS, JUNHI vs. INFEL	.42	.23	.10	.51
(1)SALINAS, ED vs. NON;	(2)MOCHE, ART vs. NON	.28	.24	.35	.27
(1) "	(2)PRMEN, COLL vs. EL	.40	.12	.24	.38
(1) "	(2)PRWOM, COLL vs. EL	.30	.24	.27	.32
(1) "	(2)GIRLS, SENHI vs. SUPEL	.40	.41	.25	.36
(1) "	(2)BOYS, SENHI vs. SUPEL	.33	.26	.30	.31
(1) "	(2)BOYS, JUNHI vs. INFEL	.29	.10	.13	.26
(1) "	(2)ZULETA, ART vs. NON	.26	.25	.38	.21
(1) "	(2)GIRLS, JUNHI vs. INFEL	.35	.07	.14	.32
(1)MOCHE, ART vs. NON;	(2)PRMEN, COLL vs. EL	.49	.28	.24	.26
(1) "	(2)PRWOM, COLL vs. EL	.43	.22	.21	.27
(1) "	(2)GIRLS, SENHI vs. SUPEL	.44	.38	.35	.11
(1) "	(2)BOYS, SENHI vs. SUPEL	.31	.50	.43	.22
(1) "	(2)BOYS, JUNHI vs. INFEL	.37	.42	.12	.31
(1) "	(2)ZULETA, ART vs. NON	.10	.36	.26	.29
(1) "	(2)GIRLS, JUNHI vs. INFEL	.39	.33	.13	.31

Table 4, cont.

Populations Compared		Correlation between Hi(1) and Hi(2)	Lo(1) and Lo(2)	Hi(1) and Lo(2)	Lo(1) and Hi(2)
(1)PRMEN, COLL vs. EL;	(2)PRWOM, COLL vs. EL	.76	.71	.56	.56
(1) "	(2)GIRLS, SENHI vs. SUPEL	.61	.44	.36	.39
(1) "	(2)BOYS, SENHI vs. SUPEL	.58	.65	.37	.36
(1) "	(2)BOYS, JUNHI vs. INFEL	.39	.60	.20	.51
(1) "	(2)ZULETA, ART vs. NON	.20	.63	.23	.47
(1) "	(2)GIRLS, JUNHI vs. INFEL	.39	.54	.24	.41
(1)PRWOM, COLL vs. EL;	(2)GIRLS, SENHI vs. SUPEL	.68	.51	.45	.48
(1) "	(2)BOYS, SENHI vs. SUPEL	.53	.61	.45	.54
(1) "	(2)BOYS, JUNHI vs. INFEL	.48	.55	.39	.48
(1) "	(2)ZULETA, ART vs. NON	.08	.52	.24	.37
(1) "	(2)GIRLS, JUNHI vs. INFEL	.49	.59	.45	.44
(1)GIRLS,SENHIvs.SUPEL;	(2)BOYS, SENHI vs. SUPEL	.72	.83	.62	.50
(1) "	(2)BOYS, JUNHI vs. INFEL	.67	.70	.56	.74
(1) "	(2)ZULETA, ART vs. NON	.10	.48	.22	.32
(1) "	(2)GIRLS, JUNHI vs. INFEL	.78	.79	.60	.82
(1)BOYS, SENHIvs.SUPEL;	(2)BOYS, JUNHI vs. INFEL	.60	.80	.59	.81
(1) "	(2)ZULETA, ART vs. NON	.11	.66	.26	.45
(1) "	(2)GIRLS, JUNHI vs. INFEL	.61	.79	.53	.73
(1)BOYS, JUNHIvs.INFEL;	(2)ZULETA, ART vs. NON	.35	.57	.48	.43
(1) "	(2)GIRLS, JUNHI vs. INFEL	.8?	.90	.65	.64
(1)ZULETA, ART vs. NON;	(2)GIRLS, JUNHI vs. INFEL	.26	.50	.39	.42

The considerations diagrammed above permit us to refine the two predictions which parallel the predictions of the previous section, and also permit us to add a third prediction:

(a) The high-scorers of the first population should resemble the high-scorers of the second population more than they resemble the low-scorers of the second. A glance at the diagram will show that this is the relationship among these three groups in amount of agreement with the expert standards. What we are predicting, however, is not mathematically determined by the facts represented in the diagram, and is to be expected only to the extent that the factors making for agreement with expert standards will have the same differential effect on particular items from one group to another. Our prediction is that the coefficient in the first column of the table will be higher than the corresponding prediction in the third column. This prediction is confirmed in 42 instances out of the 55 available.

(b) The low-scorers of the second population should resemble the low-scorers of the first population more than they resemble the high-scorers of the first population. The reasoning parallels that for prediction (a). This second prediction is confirmed in 45 instances out of the 55.

(c) The low-scorers of the first population should resemble the high-scorers of the second more than the low-scorers of the second resemble the high-scorers of the first. The pair first named are closer together in agreement with experts than are the pair second named, and if agreement with experts has a similar significance in the two populations, the pair first named should then also show more item-to-item resemblance in preferences than should the pair second named. This prediction, too, is well borne out; it is confirmed in 43 of the 55 instances.

The confirmation of these predictions is even more impressive if we note that for two of them the exceptions are largely concentrated in a set of data based on a relatively small number of subjects and therefore especially subject to sampling error. Of the 13 exceptions to confirmation of the first prediction, 9 involve the Zuleta comparison between craftsmen and non-craftsmen. Of the 10 exceptions to confirmation of the second prediction, 8 involve the Salinas comparison between more-educated and less-educated. There is no such concentration of exceptions to the third prediction.

In contrast to the findings of the previous section, there is no concentration of exceptions in comparisons involving elementary-school children. This fact in no way argues against the conclusion reached in the previous section, that the finding there casts doubt on whether agreement with experts has a meaning among elementary-school children similar to its meaning in various older groups. In the previous section, we were concerned with comparisons made entirely within the elementary-school population. In the present section, elementary-school children

enter only as the lower end of a comparison with secondary-school children, and the constancy of meaning of agreement with experts may reside only in the latter.

Comparison of groups differing a priori on factors which influence degree of agreement with U. S. experts, then, provides strong evidence that an esthetic orientation has a considerable constancy of meaning through the various populations considered here, especially the U. S., Japanese, and Puerto Rican populations. Exceptions are more frequent in the South American data, and the small size of the samples on which they are based prevents us from being certain whether the exceptions are genuine phenomena or result from sampling error.

E. Comparison between sexes

For six different populations we had separate samples of each sex large enough to warrant treating the sexes as separate groups. Four were from the U. S.: senior-high-school students, junior-high-school students, elementary-school pupils in a neighborhood of relatively high socio-economic status, and elementary-school pupils in a neighborhood of low socio-economic status. The other two populations were the Puerto Ricans of two levels of education.

Inspection of the correlations among the 12 single-sex groups shows that sex is not so important a factor as are the other distinctions among these groups. Every one of the 12 makes choices which resemble the choices of the other sex of the same population more closely than they do the choices of any of the 10 groups distinguished from them on other bases. Sex thus appears to be less determinative of choice than is age, socio-economic status, or the sum of the cultural characteristics distinguishing Puerto Rico from New England.

Sex has some demonstrable influence, small though it is. Among the school groups, girls' choices are more closely related to those of other girls than to those of boys, and vice versa. But the difference is surprisingly small. Within the school data, the 12 cross-sex correlations average .64 and the 12 same-sex correlations average .70. (Correlations between boys and girls of the same school level were omitted in calculating these means, to avoid biasing the comparison between the means. The same-sex correlations cannot include any within-level correlations, since only one group of each sex is available at a single level; hence cross-sex correlations must also not include any within-level ones.) In the Puerto Rican data this difference is actually slightly reversed, the two cross-sex correlations averaging .56 and the same-sex ones .54. When Puerto Rican and U. S. groups are compared, the 20 cross-sex correlations average .46 and the 20 same-sex correlations average .48; the difference is thus in the expected direction, but it is very small.

The finding that sex is relatively unimportant as a source of group differences in esthetic choices is surprising in relation to the

importance of sex as a determiner of many other aspects of personality. It is consistent in tenor, however, with another finding we have reported from data obtained by interviewing portions of the present school samples. We find (Child & Schwartz, 1967) that sex is also surprisingly unimportant as a source of differences in the reasons children give in explaining their art preferences.

Stimulus Correlates of Choice, in Relation to Agreement with Expert Judgment

For most of those items which consist of pairs of slides, we have available ratings of the direction and extent of differentiation of the two pictures on each of a number of dimensions. These ratings, made by research assistants acquainted with visual art, were used in an earlier report (Child, 1967) in considering the stimulus correlates of the preferences of children of various ages. Here we use them to consider whether there is constancy in the stimulus correlates of choices which agree or do not agree with expert judgment. We have decided to apply this method only to the pertinent groups who have seen the slides, as groups shown the prints have responded to rather few items for which these ratings of stimulus characteristics are available.

Accordingly, we have considered here the low-scoring and the high-scoring groups from each of four populations: Keio University students, Yale University students, U. S. secondary-school pupils, and U. S. elementary-school pupils. In addition, we have considered the preference and judgment subjects from the Keio and Yale populations. As in the previous section, the pertinence of these groups which differ in instructions arises from the fact that the proportion of choices agreeing with U. S. expert judgment was higher under judgment instructions than under preference instructions, so that we have clear evidence that the instructions achieved their intent of producing greater orientation toward taking an esthetic point of view. The preference-judgment comparisons are not entirely independent of the others; the low-high comparisons are partly confounded with them, since at Keio and Yale (but especially Yale) the high-scorers included more judgment subjects than preference subjects. The four low-high comparisons are, however, completely independent of one another.

In Table 5 we present the correlation between the choice proportion, as it varies from item to item, of each of these 12 groups, and the ratings of stimulus characteristics which might differentiate the two pictures in an item. What is of principal interest is not the value of the separate coefficients, but the difference between the corresponding coefficients for each pair of groups, that is, the low-scorers and high-scorers, or the preference and judgment subjects, from the same population.

We have arranged the item characteristics in this table in an order making for easy reading. First are placed the 7 characteristics

Table 5. Stimulus Correlates of Choice in Japanese and American Groups.

(Entries, with decimal points omitted, are coefficients of correlation, in a sample of 60-89 items, between judged item characteristics--i.e., magnitude and direction of difference between the two pictures making up an item--and proportion of group choosing in agreement with U. S. expert evaluation. Where comparison between two related coefficients is opposite to consistent tendency on a line, the comparison is underlined.)

Item characteristic	Group											
	Keio		Yale		US Sec		US El		Keio		Yale	
	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Pref	Judg	Pref	Judg
1. Judged esthetic merit	-20	17	-35	-05	-42	-02	-45	-35	-11	07	-25	-03
2. Emotionality	01	08	-06	07	04	10	-09	-09	03	05	-06	14
3. Darkness	-07	13	26	32	00	26	-16	09	-00	10	26	31
4. Unconventionality	-31	05	-51	-34	-50	-22	-46	-43	-23	-04	-45	-37
5. Ambiguity	-27	04	-20	-12	-34	-01	-35	-13	-16	-02	-16	-19
6. Difficulty of making	13	12	34	41	32	37	17	31	12	29	30	43
7. Curvature	11	07	16	24	14	19	09	19	04	17	19	25
8. Representational realism	29	-00	44	23	47	24	41	38	34	-04	45	30
9. Happiness	28	-11	11	-12	34	-06	45	21	07	-01	07	-17
10. Sentimentality	11	04	16	03	12	-03	16	09	07	02	17	-01
11. Completeness	21	-18	36	06	47	10	44	38	11	-00	20	14
12. Clarity	16	-26	24	-02	44	-07	48	24	04	-06	06	08
13. Sharpness	03	-30	12	-29	28	-20	38	09	-03	-25	-07	-17
14. Shininess	26	-06	38	02	38	27	34	43	30	05	28	11
15. Strength	08	01	10	07	16	03	13	25	11	-08	16	10
16. Close-upness	12	-04	17	11	26	01	18	20	08	-05	15	10
17. Amount in the picture	-12	-16	04	-11	20	-05	29	24	-20	03	-04	-06
18. Contrast	-00	08	-06	-24	12	-08	07	-01	-04	-00	-10	-14
19. Asymmetry	12	-02	-05	08	-09	-00	-00	05	08	05	03	09
20. Activity	-02	-09	00	14	13	00	10	07	-12	-06	-01	09
21. Masculinity	-04	04	10	03	-05	05	-08	07	04	-06	10	04

which tend to be more positively related to choice in the high-scoring groups than in the low-scoring groups. Next come 10 characteristics which have an opposite relation. In order to place a characteristic in one of these two sets, we have required that the outcome be in a single direction for at least 5 of the 6 comparisons made. Applying this criterion left only four characteristics unclassified, and these four which show no satisfactory consistency are presented last in the table as variables 18-21.

There are only 8 instances of any comparison's being opposite in direction to the consistent tendency which has led to a characteristic's being placed among the first 17 in Table 5. Four of these exceptions occur in the elementary-school low-high comparison; this finding reinforces earlier-presented evidence that tendency to agree with experts has a more distinctive meaning in elementary-school pupils than in the other groups we have studied. We note here, however, that these four are truly exceptions even for the elementary-school comparison; for the other 13 variables, this comparison is consistent with the general tendency. The stimulus correlates of the choices of low- vs. high-scorers are in considerable part the same for elementary-school pupils as for other groups. Of the other four exceptions, two are in the Yale preference-judgment comparison, one in the Keio preference-judgment comparison, and one in the Keio low-high comparison. There is no special tendency for the Japanese data to provide exceptions to tendencies consistent within the U. S. data. As far as our data enable us to judge, stimulus characteristics relevant to esthetic orientation seem at least as consistent across cultural boundaries as through different educational and developmental levels.

How should we characterize the correlates that emerge? For the most part, the findings are consistent with what common notions about esthetic value would obviously predict; some small portion of the findings remains more obscure and uncertain in meaning. First of all, of course, these is no surprise in finding that ratings by qualified people of the amount of difference in esthetic merit between the two pictures making up an item are more positively correlated with the choices of high-scorers and of judgment-subjects than with the choices of low-scorers and of preference-subjects. Findings in the same direction for Emotionality, Unconventionality, and Ambiguity are almost as good a fit to general expectation, if we grant that esthetic value is likely to be positively associated with these three characteristics. That Darkness shows similar results is not so clearly to be expected, though its emotionally expressive use certainly prevents surprise at the fact. Parallel results for Difficulty of Making and for Curvature are more puzzling. Difficulty of Making seems a superficial criterion of esthetic value. Curvature may have relevance through the fact that all the subjects are male; esthetic response may be associated with freedom to enjoy the delicacy and femininity of curvature rather than being able only to enjoy elements more associated with masculinity. (This interpretation is consistent with the results to be mentioned below on Strength, but

would have led us to expect parallel findings for ratings of Masculinity, which instead appear at the end of Table 5 as one of the variables showing no consistent results.)

When we turn to the characteristics more positively related to choices by the low-scorers and the preference-subjects, we find the characteristics to fit together well. All are aspects of art which may make an appeal independent of esthetic value, an appeal perhaps especially likely to be effective in people young and inexperienced with art. Lacking an esthetic orientation, a viewer may like a picture to be accurately representational, to express happiness, to be sentimental, to be complete and strong, to show important elements close up, to include a great deal in the picture, to be clear and sharp, to shine. These are all isolable aspects which may appeal regardless of the status of other variables or of the total meaning of the work.

We may conclude, then, that the stimulus correlates of high-scorer and judgment-subject choices are on the whole the presence of greater esthetic value (as judged by U. S. experts) and of some of the features likely to be related positively to esthetic value (Emotionality, Unconventionality, and Ambiguity), and the absence of many features likely to have separate appeals independent of esthetic value. The evidence presented in this section indicates that these correlates hold true not only for U. S. college and secondary-school subjects but also for U. S. elementary-school subjects and, even more consistently, for college students in Japan.

Conclusions

Comparing art choices of a variety of groups in several countries, we confirm the common assumption that art choices show great diversity. More important because less commonly assumed, is our finding that underneath this great diversity there are trends toward uniformity, and in particular that esthetic orientation is manifested in some similar ways in diverse cultural settings. Groups of art-involved people generally show some agreement with U. S. experts, and more than do people who are not art-involved, though the differences are in some instances so small and unreliable as to indicate that exceptions will surely be found in future studies. When resemblances among groups, in item-to-item variation of group consensus, are looked at, clear evidence is found that presence or absence of esthetic orientation is an important element in producing these resemblances and that it has some constancy of meaning in very different cultural settings and developmental levels.

This study adds, therefore, to the evidence that an esthetic orientation to art, as it appears in our society, is not entirely a convention of our culture; that such an orientation has to some degree a transcultural and possibly universal meaning. This outcome is pertinent to the role that esthetic value should play in art education because the

way that esthetic value enters into the selection and interpretation of teaching materials, and into teachers' response to work produced by children, must depend in part on whether value judgments and the orientation from which they issue are entirely culture-dependent or have some degree of transcultural constancy.

References

Child, I. L. Development of sensitivity to esthetic values. Mimeographed report, Yale University, 1964 (U. S. Office of Education, Cooperative Research Project No. 1748).

Child, I. L. Personality correlates of esthetic judgment in college students. Journal of Personality, 1965, 33, 476-511.

Child, I. L., et al. Bases of school children's esthetic judgment and esthetic preference. Mimeographed report, Yale University, 1967 (U. S. Office of Education, Project No. 2840).

Child, I. L., & Schwartz, Rosaline S. Reasons children give for their art preferences. In Child et al., 1967, pp. 11-53.

Child, I. L., & Siroto, L. BaKwele and American esthetic evaluations compared. Ethnology, 1965, 4, 349-360.

Ford, C. S., Prothro, E. T., & Child, I. L. Some trans-cultural comparisons of esthetic judgment. Journal of social Psychology, 1966, 68, 19-26.

Iwao, Sumiko, & Child, I. L. Comparison of esthetic judgments by American experts and by Japanese potters. Journal of social Psychology, 1966, 68, 27-33.

Iwao, Sumiko, Child, I. L., & Garcia, M. Further evidence of agreement between Japanese and American esthetic evaluations. In Child et al., 1967, pp. 144-150.

Pratt, C. C. The stability of aesthetic judgments. Journal of Aesthetics and Art Criticism, 1956, 15, 1-11.