



"MEANINGS" OF THE RORSCHACH
INKBLOTS FOR THREE NOSOLOGICAL
CATEGORIES AS MEASURED BY A
SEMANTIC DIFFERENTIAL TECHNIQUE

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ABSTRACT

"MEANINGS" OF THE RORSCHACH INKBLOTS FOR THREE NOSOLOGICAL CATEGORIES AS MEASURED BY A SEMANTIC DIFFERENTIAL TECHNIQUE

by James P. Mathie

The Rorschach Inkblots are used extensively in clinical settings for the study of psychiatric patients and often as an aid in classifying patients in terms of nosological categories. Many studies have been reported which have dealt with subjects' associations to the Inkblots obtained under the Standard Administration of the Rorschach, but few have been concerned with the "meanings" of the blots separate from their associations.

This study was an attempt to assess the similarities and differences in the "connotative meanings" of the Rorschach Inkblots, as measured by a "semantic differential" technique, for the three nosological categories, Normals, Organics, and Schizophrenics.

Twenty male subjects in each of the three groups were given the ten Rorschach Inkblots in the usual order. The subjects were all patients in Veteran's Administration hospitals, the Normals being tubercular patients in a

rehabilitation program. The subjects rated each card on a nine item semantic differential on which the semantic dimensions of Evaluation, Potency, and Activity were each represented by three items. The subjects' ratings were summed across the three items for each dimension and an analysis of variance was used to make comparisons between groups, cards, and dimensions.

The subjects rated the various cards in significantly different ways. Global distinctions between the cards (rating one card more toward one side of all the scales than another) were made as well as distinctions along the semantic dimensions of Evaluation, Potency, and Activity (rating one card high on one dimension while rating others low). No evidence was found to indicate that differences existed between the three groups in their ratings of the cards. Essentially the three groups made similar distinctions between the cards.

The Rorschach Inkblots can thus be reliably described along the three dimensions of Evaluation, Potency, and Activity. Ratings on these three dimensions, however, are not sensitive to differences between Normals, Organics, and Schizophrenics, if in fact such differences do exist. This study therefore lends no support to the validity of these nosological categories and gives no information about how

the Rorschach could be used to classify people in terms of them.

Examination of the data for the combined groups showed that Card IV had the least in common with the other cards. Cards VIII and X were rated as similar to each other on all three dimensions. Cards III, V, and VII differed from each other primarily on the Activity dimension.

Ratings on the Potency dimension were found to correlate with "objective" measurements of the blots' areas. Ratings on the Activity dimension correlated with reaction times to the blots, obtained under standard administration of the Rorschach as found in previous research.

The "semantic differential" technique therefore seems to be a useful tool for arriving at descriptions of the Rorschach blots. This study, however, found no support for its use as an aid to differentiating between nosological categories.

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Introduction

This study was an attempt to assess the similarities and differences in the "connotative meanings" of the Rorschach Inkblots, as measured by a "Semantic Differential" technique, for the three nosological categories, Normals, Organics and Schizophrenics. Baughman (1958) has pointed out that researchers in perception have focused on the stimulus rather than on the subject. He also pointed out that until recently, quite the opposite has been the case in research on diagnostic tests where the emphasis has been almost exclusively on individual differences.

Baughman then reviewed twenty-five studies which dealt primarily with the experimental manipulation of the stimulus properties of the Rorschach Cards. Most of the studies were concerned with the effect of color and shading on Rorschach responses and the results tended to support the interpretation that these determinants have little effect on the responses to the Rorschach. Baughman, however, defended the concepts of color and shading, by stating: ". . . summary scores are not sufficiently sensitive to reflect color and shading effects" (1958, p. 137). Recent research on the semantic meanings of the Rorschach Blots, however, has

provided a possible way of evaluating the impact of a Rorschach card on a subject without the use of the Rorschach psychogram.

Rabin (1959) and Little (1959), using the semantic differential as developed by Osgood (1957), had college students rate the ten Rorschach Inkblots on a number of bipolar adjectival scales. They found that the cards had rather consistent meanings across subjects and that the meanings differed from card to card. Several more recent studies (Rosen, 1960; Sines, 1960; Zax and Loiselle, 1960a) along this same line have substantiated the findings of Rabin and Little concerning the variation of meaning from card to card and the consistency of meaning across subjects. These studies also confirmed some relationships between the meanings attributed to particular Rorschach cards and the meanings attributed to verbal concepts which have often been claimed by clinicians, e.g. Card IV was rated similarly to the concept "father," Card VII to the concept "feminine."

In terms of Baughman's distinction between studies that focus on the stimulus and those that focus on the subject, the foregoing studies can be considered to fall primarily in the former group. They have used relatively homogeneous groups and have concerned themselves with the changes in ratings as the stimulus is changed, i.e., the

changes in meanings from card to card.

This study falls into the group of studies that Baughman would consider as focusing on the subject while keeping the stimulus constant, since it was an attempt to explore the differences that might exist between three "different" groups of subjects (Normals, Schizophrenics and Organics). It was felt that if differences could be found between normals and clinical groups these differences would be most likely to be found between normals and the two nosological categories generally considered to exhibit the greatest degree of pathology. As all ten Rorschach cards were used in this study, it can also be considered as a study that focuses on changes in the stimulus when any one of the three groups is considered independently. This study attempted to make these comparisons along the three semantic dimensional factors of Evaluation, Potency and Activity which Osgood (1957) found to account for a great portion of the connotative meaning attributed to verbal concepts.

The data obtained from a standard administration of the Rorschach consists primarily of a subject's verbal associations to the blots. Conceivably the connotative meanings of the blots may be stable or variable for different groups independent of similarities or differences that may exist in their associations to the blots. Justification is

claimed for this study because it deals with the relatively unexplored area of the differential meanings the blots may have for three nosological groups as separate from the associations these groups might give to the blots under a standard administration. Furthermore, the wide use of the Rorschach in clinical settings for arriving at differential diagnoses seems to justify any study which attempts to extend or clarify the knowledge about this instrument.

Method

Subjects: Three groups of subjects with twenty subjects in each group were used. Hereafter they will be referred to as Organics, Normals and Schizophrenics. The two clinical groups (Schizophrenics and Organics) were male patients at a large Veterans Administration neuropsychiatric hospital. The Normals were male tubercular patients at a large Veterans Administration General Medical Hospital.

The clinical groups were selected from the records of all subjects present in the hospital who had been given at least a Wechsler Intelligence test at that Veterans Hospital at some time since 1946. A tentative I.Q. range of 85 to 115 and a tentative age range of 30 to 50 years old was set up.

The Organics were selected first because it seemed

likely that it would be most difficult to get a large number of these subjects. Only patients carrying a primary diagnosis of chronic brain syndrome were included in this group. Twenty-three patients representing a wide range of etiology were found who came close to the tentative I.Q. and age limits. The lower age limit was moved to 25 and the upper limit of the I.Q. range was moved to 116. Three of the subjects could not be tested; one subject refused to take the test, one subject with Huntington's Chorea was untestable and one subject had left the hospital before he could be tested. Twenty subjects were tested.

Forty-four patients in the hospital with a primary diagnosis of Schizophrenic reaction and with a type classification of "undifferentiated," "mixed" or "unclassified" fell within the age and I.Q. limits. These names were recorded on index cards and a group of twenty was selected randomly. Some subjects refused to take the test and some were not available for testing. In each case a replacement was drawn from the remaining cards. Ten such replacements were made.

The Normal subjects were drawn from a group of tubercular patients who were remaining in the hospital voluntarily to participate in a rehabilitation program that would allow them to go directly to work upon leaving the hospital.

Only eighteen subjects were found who fulfilled the age and I.Q. requirements. Two more subjects were taken from among those who were about to enter the rehabilitation program but who at present had no choice as to whether they could leave or remain in the hospital. Since all the tubercular subjects were selected by the clinical psychologist on the Ward they do not represent a random sample of the patients in the rehabilitation program. The Ward clinical psychologist eliminated the names of the patients whom he did not want to be involved in the research because he felt they were doing poorly in the rehabilitation program. He felt they might interpret the testing as an evaluation that might bear on their disposition in the rehabilitation program. The two men outside the rehabilitation program were added when I.Q. scores and the discovery of a previous head injury in one patient eliminated four subjects from the original of twenty-two subjects.

Twenty subjects thus remained in each of the three groups. Table 1 lists the data concerning age and I.Q. for the three groups. The I.Q. limits were set up primarily to keep any one group from containing an unusually high number of subjects who were either intellectually deficient or very superior. The conclusion that the groups are of comparable intellectual endowment must be made with caution.

Table 1. Age and I.Q. of Subjects by Groups

	ORGANICS		NORMALS		SCHIZOPHRENICS	
	AGE	I.Q.	AGE	I.Q.	AGE	I.Q.
Range	27 - 49	85 - 116	25 - 50	85 - 115	30 - 50	85 - 116
Median	39	96	39	101.1	38.5	96
Mean	38.85	96.95	37.45	98.25	38.55	97.25
SB	6.95	9.64	6.65	9.63	6.01	7.85

An inspection of the means and medians in Table 1 would tend to indicate that the groups are quite similar but the assessments of intellectual level were made at different times and under different conditions.

The tubercular patients were picked as Normals, because they had no obvious psychopathology, they were presently patients in a hospital, and they had been hospitalized for more than a few months. An attempt at controlling length of stay in the hospital was abandoned because the Organic and Normal groups would have become so small that no conclusions could be drawn from the results. The clinical groups had likewise spent at least a few months in the hospital.

The Normal group differed from the clinical groups in that they were free to leave the hospital if they wished. They were also involved in a rehabilitation program that involved regular work hours. Although both of these conditions made the tubercular patients less like the clinical groups, this would seem to make them more like Normals in

the general population and make generalizations of the conclusions to normals in the general population more tenable.

The stimuli: The ten standard Rorschach Inkblots were presented individually in the usual order.

The rating scale: Three sets of bipolar adjectival scales were used to represent each of the three factors (Evaluation, Potency and Activity) which Osgood, Suci and Tannebaum (1957) found to account for most of the connotative "meaning" of verbal concepts. The three scales used in each case were the bipolar adjectival scales which were found to be most factor pure for the factors in question (table page 45, Osgood 1957). These scales were used in accordance with the recommendation of Osgood (1957 p. 78).

<u>Evaluation</u>		<u>Potency</u>		<u>Activity</u>
Good	- Bad	Strong	- Weak	Fast - Slow
Nice	- Awful	Large	- Small	Active - Passive
Beautiful	- Ugly	Heavy	- Light	Sharp - Dull

The nine bipolar adjectival scales were mimeographed on sheets of paper approximately 3 3/4 inches by 8 1/2 inches. The order of the concepts on all sheets was made constant to reduce the complexity of their reproduction. This order was arrived at by giving each scale a number and then using a table of random numbers to determine the order. Ten such mimeographed sheets were stapled together to form a pack for

each subject, one sheet for each of the ten Rorschach cards.

Procedure: A pack of mimeographed sheets was presented to each of the subjects with the following instructions.

I am going to show you a series of inkblots. I want you to look at each blot and then decide whether it is more closely related to the word on this side (pointing to the word "beautiful") or to the word on this side (pointing to the word "ugly"). If it is very closely related to the word on this side put a check here (pointing to the space closest to "ugly") or if it is very closely related to the word on this side (pointing to the space closest to "beautiful") put your check here. If the blot is quite closely related to the word on this side but not very closely related put your check here (pointing to the space second closest to the word "ugly"). Similarly if the blot is quite closely related to the word on this side but not very closely related put your check here (pointing to the corresponding space). If the blot is only slightly related to the word on this side put your check here (pointing to the space just to the left of the middle space: i.e. toward "beautiful") or if the blot is only slightly related to the word on this side put your check here (pointing to the space just to the right of the middle space: i.e. toward "ugly"). If the blot is related to both words equally or not related to either word place your check in the center space (pointing to the center space). Use this center space only if you can't decide to which word the blot is more closely related.

Remember to consider both words when you make your decision. Do the same thing with each of these pairs of words. Here is the first blot.

Any part or all of the instructions were repeated at any time if the subject said he did not understand some part of the task. The emphasis was placed on the understanding of the task rather than on rigidly controlled instructions. Deviations from the wording of the instructions

were made freely by the examiner when the subject did not seem to understand the task. The words "very," "quite," and "slightly" were however always used to describe the meanings of the spaces between the adjectives.

When the nine items had been filled in by the subject for card I this sheet was folded over and he was given the second blot. This procedure continued for all the blots. If a subject skipped one of the items, the examiner stated: "You have skipped this item."

With the Normal subjects, when they completed rating the blots the examiner said: "I have a few other questions to ask you." The Information and Similarities subtests of the Wechsler Adult Intelligence Scale were then administered. This procedure was followed because there were no intelligence measures available on these subjects. The prorated scores on these subtests were used as an estimate of intellectual ability.

The seven positions between the polar adjectives were numbered one through seven. The value of one was assigned to the position closest to the left side and seven to the position closest to the right side. The subjects' ratings on the three items of each of the Evaluation, Potency and Activity dimensions were combined to give each subject a combined score for each of these dimensions for each of the

ten cards.

Results

An analysis of variance of the type described in Lindquist (1953, p. 254) was used to analyze the data. A summary of the results is presented in Table 2.

Table 2. Overall Analysis of Variance

<u>Source of Variation</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Groups	2	114.181	.639
Subjects in Normals	19	107.376	
Subjects in Organics	19	205.458	
Subjects in Schizophrenics	19	223.075	
Subjects in Groups	57	178.636	
Cards	9	175.249	7.912***
Cards x Groups	18	34.306	1.549
Cards x Subjects in Normals	171	15.762	
Cards x Subjects in Organics	171	23.414	
Cards x Subjects in Schizophrenics	171	27.278	
Cards x Subjects in Groups	513	22.151	
Dimensions	2	33.496	.436
Dimensions x Groups	4	52.985	.689
Dimensions x Subjects in Normals	38	75.918	
Dimensions x Subjects in Organics	38	71.651	
Dimensions x Subjects in Schizophrenics	38	83.064	
Dimensions x Subjects in Groups	114	76.878	
Cards x Dimensions	18	161.137	11.244***
Cards x Dimensions x Groups	36	6.106	.426
Cards x Dimensions x Subjects in Normals	342	15.672	
Cards x Dimensions x Subjects in Organics	342	15.371	
Cards x Dimensions x Subjects in Schizophrenics	342	14.948	
Cards x Dimensions x Subjects in Groups	1026	14.330	

*** significant <.001

There was no evidence that the groups differed in their mean overall ratings of the cards. The differences between the ratings of the ten cards, when summed over the three dimensions and over the three groups was statistically significant ($p < .001$). Although this suggests that some cards were rated as closer to the extreme on all three dimensions, it is of minor importance in this study which deals with differences along the three dimensions. In like manner, the Cards by Groups interaction, which was a little larger than expected by chance, but not significantly so, is of minor importance because it also disregards the dimensions. There was no evidence that the three dimensions of Evaluation, Potency and Activity were rated differently on the average, thus suggesting that the scores on the three scales are comparable. The Dimensions by Groups interaction showed no evidence that the three groups gave different mean ratings for the three dimensions, suggesting that the scores on the three dimensions are comparable for the three groups.

The Cards by Dimensions interaction was highly significant ($p < .001$), thus indicating that when considering the pooled responses of the three groups some cards were rated high on certain dimensions while others were rated low. Therefore the meanings of the Rorschach cards as measured by the semantic differential along the three dimensions of

Evaluation, Potency and Activity were reliably different.

The first three rows of Table 3 present the mean ratings of the ten cards on the three dimensions, summed across groups.

Table 3. Mean Rating Position for Combined Groups

	I	II	III	IV	V	VI	VII	VIII	IX	X
Evaluative	4.66	4.58	4.07	5.09	3.85	4.69	4.22	3.04	3.06	2.94
Potency	3.80	4.16	4.67	3.34	4.74	4.20	4.70	4.29	4.02	4.03
Activity	3.93	4.00	3.92	4.76	3.27	4.56	4.46	3.77	4.17	3.56
Dimensions										
Disregarded	4.13	4.28	4.22	4.40	3.96	4.49	4.46	3.70	3.93	3.51

Finally the Cards by Dimensions by Groups interaction, which is the crucial effect for this study, was not significant. Differences between the three groups, Normals, Organics and Schizophrenics on their mean ratings for the ten cards, along the three dimensions were thus within chance fluctuations. Since no differences were found between the groups, consideration of the individual analyses of variance for each group seems unnecessary.

In all cases the main effects as well as the interaction effects were tested by combined error terms from the three groups. Burtlett's test as described in Edwards (1950, p. 238) for homogeneity of variance was run in the instances where error terms were combined. The variances of the cards

by subjects interactions for the three groups was heterogeneous. The other three combined error terms appear to be homogeneous, using the .05 level of significance as a cut-off point for the Bartlett's test. The Bartlett's tests are summarized in Table 4.

Table 4. Bartlett's Test on Combined Error Terms
from Three Groups (Normals, Organics,
Schizophrenics)

<u>Source of Variance</u>	<u>df</u>	<u>MS</u>	<u>χ^2*</u>
Subjects in Normals	19	107.37	2.791
Subjects in Organics	19	205.46	
Subjects in Schizophrenics	19	223.08	<.30
Cards x Subjects in Normals	171	15.76	13.115
Cards x Subjects in Organics	171	23.41	
Cards x Subjects in Schizophrenics	171	27.27	< .001
Dimensions x Subjects in Normals	38	75.92	.211
Dimensions x Subjects in Organics	38	71.65	
Dimensions x Subjects in Schizophrenics	38	83.06	< .90
Cards x Dimensions x Subjects in Normals	342	15.67	5.227
Cards x Dimensions x Subjects in Organics	342	12.37	
Cards x Dimensions x Subjects in Schizophrenics	342	14.95	< .10

* χ^2 .05 level df = 2 = 5.991 χ^2 .10 level df = 2 = 4.605

The main effect of cards and the interaction of cards by groups were tested by a combined error term with heterogeneous variance. However, with equal sample sized of twenty subjects in each group, the effect of such heterogeneity of variance is quite small. Furthermore, since the F ratios

which were significant were all far beyond the .01 level, the violation of the assumption of homogeneity of variance is unimportant.

The general conclusion drawn from these findings is that the subjects involved in this research made distinctions between the Rorschach cards on their semantic differential ratings of the cards. Furthermore, that the subjects, in addition to making global distinctions between the cards (i.e. rating one card more toward one side of the scales than another card) also made distinctions between the cards along lines corresponding to the Evaluation, Potency, and Activity dimensions represented in the scales. The findings indicate that these distinctions between the cards were similar for the three groups involved. That is to say that the Normals, Organics and Schizophrenics described the Rorschach cards similarly.

Discussion

The highly significant F for the interaction effect of Cards by Dimensions found in this study supports the earlier work done on the Rorschach using the semantic differential (Little, 1959; Rabin, 1959, etc.) and confirms that the semantic differential is capable of reliably detecting differences in meaning from card to card. The semantic

differential therefore promises to be a fruitful research instrument in studies that focus on the properties of the stimulus. The lack of differences between the groups, however, raises the question as to its usefulness in studies that focus their attention primarily on differences between types of subjects.

Two interpretations for the lack of significant differences between the Groups seem possible. One interpretation is that differences do exist between the Groups in the connotative meaning they would apply to the Cards, but the particular scales and dimensions used in this study are not sensitive to these differences.

The second interpretation would be that the Groups do not differ in the connotative meanings they attribute to the Cards. Here one could speculate that the different groups all perceive the cards similarly and that any differences that might appear between the groups under a standard administration of the Rorschach are due to something other than differences in the connotative meaning they attribute to the cards.

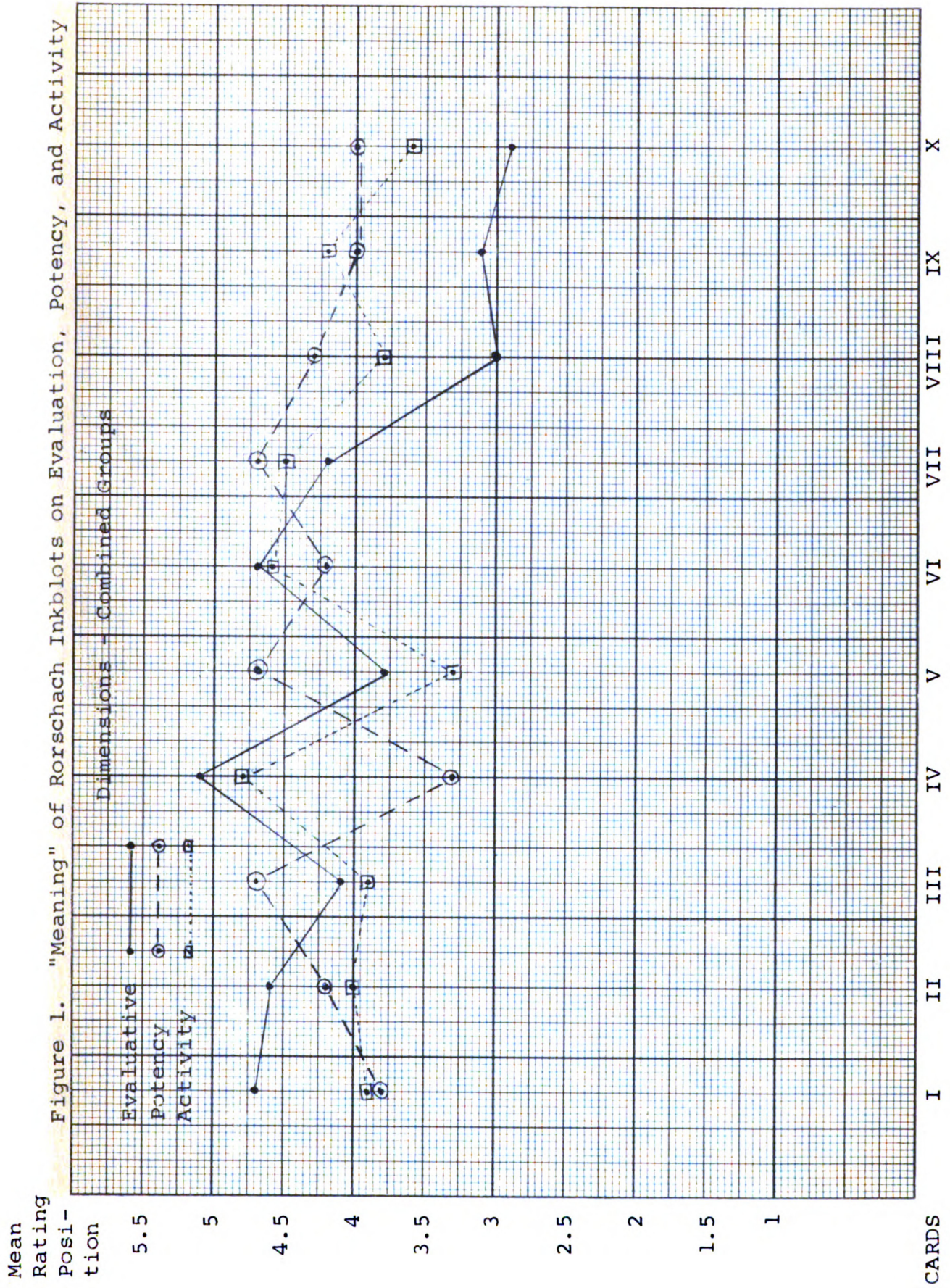
Still remaining is the problem of the meaningfulness of nosological categories and the question of whether the Rorschach cards can be used to reliably classify people according to these categories. Certainly the results of

this study give no support to the validity of the nosological categories used in this study. If, however, it is assumed that these categories are valid, the results shed no light on how the Rorschach could be used to categorize people in terms of them. Furthermore, this study neither supports nor contradicts differences or the lack of differences found under the standard administration of the Rorschach.

As mentioned earlier, this study can also be considered as focusing on the stimulus when each of the three groups is considered independently. Since no differences were found between the Groups, they have been combined for the purpose of discussing the connotative meanings of the cards as found in this study and the relation of the obtained meanings to earlier Rorschach research.

The results obtained in this study indicate that the Rorschach blots can be described psychologically along at least the three dimensions of Evaluation, Potency and Activity. Figure 1 is a graphic presentation of the meanings the cards have along these three dimensions as found in this study.

Card IV is the only card rated closest to an extreme on all three dimensions. It is rated as closest to the negative side of the Evaluation dimension (bad, awful, ugly), the "slow" end of the Activity dimension (slow, dull, passive)



and the "potent" end of the Potency dimension (large, strong, heavy). It might thus be thought of as the most distinctive blot among the ten. Rabin (1959) found significant agreement among his subjects on seventeen of twenty bipolar adjectives when rating Card IV, more than on any of the other cards.

Cards VIII and X seem to be seen as very similar to each other along all three dimensions. Little (1959) in his study with the semantic differential and the Rorschach found significant differences between all the cards with the exception of Cards VIII and X. These two cards are also picked by psychoneurotics in Mitchell's (1952) study as liked best with VIII being picked less often but it was in the four best liked cards for both groups.

Cards VIII and X, then, seem to be perceived quite similarly by subjects. If we make an inferential jump from a semantic differential rating of the blots to the standard Rorschach administration, we might expect that subjects would respond to these two blots similarly. When an individual would respond to these two cards with different affectively toned responses, it would seem to be legitimate to consider one of the responses to be rather idiosyncratic and possibly of importance.

Likewise Cards I and II are rated quite similarly.

IV and VI are also rated as rather similar to each other but not as clearly so as the other two pairs. III, V, and VII appear to be quite close in meaning on the Evaluation and Potency dimension while differing on the Activity dimension. Card IX stands somewhat alone. Meer (1955) found that Card IX had the longest reaction times, the form level was poorest (based only on first response) and it was judged as the most difficult card by fifty undergraduates. Mensch and Matarazzo (1954) found that Card IX was rejected more than any of the other cards in their groups (100 psychoneurotics, 74 psychotics, 27 brain damaged).

A relationship also seems to exist between the pattern of meanings across the ten cards and the findings of studies on reaction times. The mean rating positions for the Activity dimension seem to correlate slightly with the reaction times found by Matarazzo and Mensch (1952) (Spearman $Rho = .597$ $p < .05$) for their clinical (neurotic, psychotic, organic) and normal groups combined, as well as with the reaction times found by Meer (1955) using 50 undergraduates (Spearman $Rho = .527$ $p < .10$) and Beck (1950) using 157 Spiegel mail-order employees (Spearman $Rho = .512$ $p < .10$). Cards with short reaction times were rated as more Active (active, sharp, fast).

No reason seems evident for such a relationship between

the reaction times under a standard administration of the Rorschach and the ratings on the activity dimension. This relationship does seem to raise the question of just what subjects are rating on the activity dimension.

A relationship that seems to make a little more sense is that between the Potency dimension and the "objective" size of the blots. The "objective" size of the blots was arrived at by cutting out pieces of paper of varying sizes, the areas of which were known. They were arranged on the figure parts of the blots (enclosed white areas were included) and the areas of the pieces of paper used for each blot were summed. This investigator and another rater made these measurements independently. The rank order correlation between their measurements was .755 (significant $p < .01$). The two sets of ranks were combined to arrive at a relative size ranking for the blots. The ranking from the smallest to largest was as follows: V, III, VII, VIII, II, VI, IV, I, IX, X. This ranking correlated .885 (Spearman Rank correlation sig. $p < .01$) with the ranks on the Potency dimension for the subjects in this study and .612 (sig. $p < .05$) with the ranks on the Potency dimension in Rabin's study (1959).

If the Potency dimension is descriptive of the objective size of the blot then its importance in arriving at the

meaning of the blots would seem to be reduced. Likewise the Activity dimension may be of more use in studying the perceptual complexity of the blots than in studying the "meaning" the blots have in the sense used by Osgood for verbal concepts.

A factor study similar to the studies on verbal concepts made by Osgood (1957) seems warranted if the differences between the cards is to be clearly evaluated. Although the cards are describable along the dimensions of Evaluation, Potency, and Activity there is no evidence to show whether these factors are the only or most important psychologically descriptive dimensions attributable to the cards. The factors most relevant for describing verbal concepts may be of minor importance when describing ink blots.

The relationships found in this study between semantic differential ratings of the Rorschach Inkblots and data from previous research (reaction time, card rejection, card preference) points encouragingly toward the continued use of the semantic differential as a research tool for studying the Rorschach. Notwithstanding the semantic differential's failure to differentiate between nosological categories, the interpretation of Rorschach protocols would seem to be facilitated by the more precise definition of the blots obtained by this technique.

Summary

This study was an attempt to assess the similarities and differences in the "connotative meanings" of the Rorschach Inkblots, as measured by a "semantic differential" technique for the three nosological categories, Normals, Organics, and Schizophrenics.

Three groups of twenty subjects (Schizophrenics, Normals, and Organics), equated for age and I.Q., rated the ten Rorschach Inkblots on a nine item semantic differential type scale. The semantic dimensions of Evaluation, Potency, and Activity were each represented by three items. The subjects' ratings were summed across the three items for each dimension and an analysis of variance was used to make comparisons between groups, cards, and dimensions.

The subjects rated the various cards in significantly different ways. Global distinctions between the cards (rating one card more toward one side of all the scales than another) were made as well as distinctions along the semantic dimensions of Evaluation, Potency, and Activity (rating one card high on one dimension while rating others low). No evidence was found to indicate that differences existed between the three groups in their ratings of the cards. Essentially the three groups made similar distinctions between the cards.

The Rorschach Inkblots can thus be reliably described along the three dimensions of Evaluation, Potency, and Activity. Ratings on these three dimensions, however, are not sensitive to differences between Normals, Organics, and Schizophrenics, if in fact such differences do exist. This study therefore lends no support to the validity of these nosological categories and gives no information about how the Rorschach could be used to classify people in terms of them.

Examination of the data for the combined groups showed that Card IV had the least in common with the other cards. Cards VIII and X were rated as similar to each other on all three dimensions. Cards III, V, and VII differed from each other primarily on the Activity dimension.

Ratings on the Potency dimension were found to correlate with "objective" measurements of the blots' areas. Ratings on the Activity dimension correlated with reaction times to the blots, obtained under standard administration of the Rorschach as found in previous research.

The "semantic differential" technique, therefore, seems to be a useful tool for arriving at descriptions of the Rorschach blots. This study, however, found no support for its use as an aid to differentiating between nosological categories.

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