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Rorschach Content Elaboration: An Exploratory Study

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RORSCHACH CONTENT ELABORATION:

AN EXPLORATORY STUDY

by

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VITA

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CHAPTER I

INTRODUCTION

One of the more widely used and researched personality tests is, and has been the Rorschach test. Much of the research has centered around attempts to assess the reliability and validity of the test, with conflicting results. The fact that there exists, in the Rorschach literature, several methods for scoring and interpreting the Rorschach, and the fact that individual clinicians differ in the way they use these methods certainly contributes to the difficulty in researching the Rorschach (Exner, 1974; Howes, 1981). Despite the difficulty, however, the Rorschach remains a popular, widely-used test (Brown & McGuire, 1976; Wade, Baker, Morton & Baker, 1978).

Although Hermann Rorschach did not place much emphasis on the interpretation of content, modern research has focused, to some extent, on content and other qualitative aspects of Rorschach protocols (Howes, 1981). Potkay (1971) found that the majority of his sample of 36 clinicians found qualitative forms of information to be of value in Rorschach interpretation. The most accurate clinicians tended to be those who relied on both qualitative and quantitative factors. Some authors go so far as to say that qualitative Rorschach variables are superior to quantitative, structural variables. Zubin,

Eron and Schumer (1965), in their review of a number of Rorschach studies, found content factors to be more valuable than perceptual ones. Aronow and Reznikoff (1976) state that, in the future, the Rorschach may prove most valuable when content analysis is emphasized.

While content is generally seen as an important part of Rorschach interpretation, most of the normative standards that exist thus far are based on determinants of the response rather than content. There is evidence that while clinicians may begin their Rorschach interpretation by using normative standards, they tend to rely even more on art and skill in order to understand the individual (Schwartz & Lazar, 1979). In other words, the much-maligned "clinical judgement" seems to be a very important tool for clinicians.

The potential danger of course, is that Rorschach research may be ignored on the grounds that it is irrelevant to clinicians' needs. Should this happen, the clinician's interpretation may become overly-subjective, defeating the purpose of a standardized administration of a psychological test. For this reason, it would seem important to do research on the Rorschach that would be relevant to clinicians' needs. Such research would investigate qualitative variables, such as content, upon which clinicians presently place great interpretive value, but often in a highly subjective manner.

Locke (1983) in an attempt to do this, developed a reliable, detailed system for scoring content and context. Norms for the frequency of various types of content and context responses were gener-

ated, and differences between well-adjusted and poorly-adjusted subjects were investigated. For purposes of her study, Locke looked at overall content, and did not differentiate between the content of main responses and that which is used to embellish or elaborate on a main response.

Although a formal method of scoring elaboration does not presently exist, many clinicians do, directly or indirectly use this concept in interpreting Rorschach protocols. Many clinicians will spend more time interpreting a long, elaborate response that contains many different types of content than a brief response which consists of the unembellished main response. In fact, Draguns, Haley and Phillips (1968), in a discussion of some of the processes affecting the development of a response point out that the more elaborate the response, the more it reveals about the individual's inner psychological state.

In other words, an elaborate response is somehow more "telling" of a subject than a simple main response. This concept would imply that a well-adjusted subject would elaborate on different types of (content of) main responses than would a poorly-adjusted subject. This makes intuitive sense clinically, but the concept hasn't, thus far, been researched to any great extent.

The present study attempted to investigate whether it is indeed the case that subjects vary systematically in the degree to which they elaborate on different types of main responses. One of the goals was to generate norms on the degree to which subjects elaborate on differ-

ent content categories of main responses. Another was to investigate possible differences between groups of subjects of differing levels of personal adjustment as to the types of main responses they elaborate on most, and the types of content they use as elaboration. The content and context scoring system used was the very detailed one developed by Locke (1983).

CHAPTER II

REVIEW OF RELATED LITERATURE

Content and contextual variables on the Rorschach have been used in a variety of ways (Vassiliou, 1961). First of all, most Rorschach scoring systems include such traditional content categories as human, animal, object, anatomy, etc. Draguns, Haley and Phillips (1967), in their review of such categories conclude that they provide an indication of the person's relationship to external reality, social interaction, psychological and somatic self and impulse life.

The most often used and researched content categories are H (Human) and A (Animal). Human content is generally seen as being indicative of interest in other human beings and sensitivity towards them (Phillips & Smith, 1953). Ames, Metraux, Rodell and Walker (1974) find that H and Hd (human detail) responses increase steadily through childhood, but remain essentially stable after age 10. Lower percentages of human content are generally seen in schizophrenic populations (Exner, 1974) and in records of adult criminals (Walters, 1953). Draguns et al. (1967) suggest that H content varies directly with cognitive development and the potential for social relations.

Human detail responses, while still indicative of interest in

other human beings, may also indicate social anxiety, guardedness, apprehension (Phillips & Smith, 1953; Rapaport, Gill & Schafer, 1968) and inhibition and doubt (Beck, 1952; Klopfer, Ainsworth, Klopfer & Holt, 1956). (H) responses, which are often called human-like, or inhuman-human (e.g. witch, angel, etc.) may again be associated with doubt and self criticism (Phillips & Smith, 1953; Rapaport et al., 1968).

Aside from the possible exceptions of Hd and (H) responses, human content is generally seen as being indicative of maturity and adjustment.

The animal response is the most frequently occuring content category. Since animal content is so commonly found in Rorschach protocols, a certain percentage of animal responses indicates a healthy ability to react in a routine, predictable manner (Draguns et al., 1967). However, an overly high percentage of animal responses (A>50) may indicate low intelligence, narrow interests, or immaturity (Klopfer & Davidson, 1962; Phillips & Smith, 1953).

Anatomy responses, while fairly common, do not occur nearly as frequently as human or animal responses. A larger-than-usual percentage of these anatomy responses occur in records of people such as physicians, nurses, medical students, etc. (Draguns et al., 1967) or people with physical illnesses who might reasonably be expected to be self-preoccupied. There is also evidence to suggest that anatomy responses may indicate destructive impulses which are not directly

acted out because of fear of retaliation (Phillips & Smith, 1953).

Other types of content have not been researched as extensively as animal, human and anatomy. What literature does exist suggests that explosion and fire contents may indicate emotional turmoil and anxiety (Schafer,1954). Smoke is associated with depression and free-floating anxiety (Phillips & Smith, 1953). Blood is associated with aggression and anxiety (Beck & Molish, 1967; Rapaport et al., 1968). Religious content is often associated with superego conflict (Phillips & Smith, 1953). Sex responses may be interpreted in a variety of ways, from sexual preoccupation (Rapaport et al., 1968) to homosexual tendencies to nonconformity (Phillips & Smith, 1953).

Food content is associated with dependency (Klopfer & Davidson, 1962). Nature, landscape and botany responses may be associated with passivity and immaturity (Draguns et al., 1967) but may also be associated with normalcy and pleasantly-toned affect (Beck & Molish, 1967; Phillips & Smith, 1953). Architectural content is often associated with ambition or feelings of inadequacy (Rapaport et al., 1968). Geography content may also be associated with feelings of inadequacy (Klopfer & Davidson, 1962). Interpretations can be found for various infrequently-occuring types of content.

Draguns et al. (1967) caution that studies of traditional content categories tend to be based on rather small samples. Traditional interpretations of many types of content are not always convincingly supported by research. Also, traditional content categories do not

seem especially promising in terms of differential diagnosis, since many clinical groups can not be discriminated on this basis (Kaczala, 1971). They make the point that more progress needs to be made, bridging the gap between clinical use of the test and research findings.

In addition to the study of traditional content categories, investigators have studied content and contextual variables in several other ways. Haley, Draguns and Phillips (1967) identified four main strategies of research used by those investigators who go beyond the conventional content categories. The first is to investigate subdivisions of traditional content categories. For example, many studies of Rorschach content break down the general category of animal content into a variety of specific types of animal content. Booth (1946) introduced separate scores for the number of responses referring to warm-blooded or cold-blooded animals. The greater use of warm-blooded animals differentiated a hypertensive group of subjects from arthritic and Parkinsonian patients. Many authors subdivide animal content even further, and look at characteristics of subjects who use different specific types of animal content, such as dog, or tiger (Klopfer, & Davidson, 1962; Phillips & Smith, 1953; Schafer, 1948;).

With regards to human content, Zubin et al. (1965) developed three scales which accomodate differences within the category. The human-like scale rates (H) responses along a continuim from angelic or ennobled to monstrous. The human debasement scale rates H responses

along a continuim from beautiful and noble to repulsive and evil. A third, the ascendence-submission scale rates human percepts along a dimension of weak and submissive to markedly dominating and aggressive.

Anatomical responses have also been subdivided into bony and visceral anatomy (Haley et al, 1967). Sex responses have been differentiated along a continuim from sexual symbolism to primary sex organs or activity (Zubin et al., 1965). All of the above are examples of one way of going beyond traditional content categories to look for meaning in Rorschach content. Many are based on clinical experience and are still in need of empirical support.

A second way that investigators have gone beyond traditional content categories is to trace the symbolic meaning behind certain specific contents. According to Haley et al.(1967) little organized efffort has gone into researching this concept. Goldfarb (1945) looked for the associative value of various types of animal content produced by children, and found that adults were associated with large animals and that the type of animal was symbolic of the child's perception of the adult (e.g., kind adults were associated with domestic animals). The Semantic Differential has also been used to study the connotations of different species of animals (Goldfried, 1963), but actual Rorschach protocols were not used.

A third approach taken by investigators who go beyond traditional content categories is to concentrate on a constellation of

pathognomonic signs. These signs "represent symbolically the drives or conflicts active in a specific, usually maladaptive behavioral state" (Haley et al., 1967, p.11). In particular, some of these maladaptive behaviors are homosexuality, suicide and alchoholism.

As Goldfried (1966) points out, the only real usefulness of a Rorschach scale which assesses male homosexuality is in cases where the sexual orientation presents a problem for the client, and the client is unwilling or unable to discuss this problem directly with the clinician. Most of the research on Rorschach indicators of male homosexuality has focused on Wheeler's (1949) signs.

Wheeler chose 20 content signs on the basis of previous studies and theoretical principles. Theoretically, the signs chosen are indicative of such characteristics as derogatory attitudes, especially towards women, feminine identification, seeing male figures as threatening, simultaneous avoidance of, preoccupation with, and confusion about sex, preoccupation with religious objects, guilt, and many others.

However, based on studies of these signs (Davids, Jaelson & McArthur, 1956; Fein, 1950; Nitsche, Robinson & Parsons, 1956), Goldfried (1966) categorizes six of Wheeler's signs as "unquestionably poor"(in terms of validity); eight as "ambiguous validity" and six as "probably good". Although the research on these signs is admittedly inconclusive, the signs classified as being valid indicators of possible male homosexual tendencies are: a contorted or threatening figure

on Card IV; human percept on Card V; depreciated female figures on Card VII; any human or animal details associated with anal content; humans or animals seen "back-to back"; and feminine clothing content.

The Rorschach has also been widely used to assess and predict suicidal ideation and behavior. Neuringer (1965) points out that the literature on suicide and the Rorschach is filled with contradictory results which are due, for the most part, to methodological problems in research designs, noncomparability of subjects used from study to study, and the limited availability of suicidal patients. There do not seem to be any outstanding (content) signs on the Rorschach which are indicative of any and all types of suicidal ideation. Rather, the signs that have been found, such as mutilation, abstraction, ice, weapons and fighting (Pratt, cited in Costello, 1975) and map (Card I) and whole plants (Card X) seem valid only when tied to the particular conditions under which they were gathered.

Using the Rorschach to idenfify and predict alchoholism has been just as difficult. Thus far, the Rorschach contents associated with alchoholism are positive oral imagery (Wiener, 1956) and sometimes "water" percepts (Kunkel, 1963, cited in Haley et al., 1967).

One problem in looking for a constellation of signs of some specific type of maladaptive behavior is that the clinical group in question is often compared to only one or more other specific clinical groups (e.g., alchoholics to depressives; suicidal patients with paranoid schizophrenics) or to a group of normals. In most cases, more

research needs to be done utilizing a wide variety of clinical and non-clinical groups in order to determine whether a particular type of content is truly characteristic of a group in comparison to other groups. For example, it has been found that alchoholics use more positive oral imagery than do neurotic depressives (Wiener, 1956). That does not mean that alchoholics use more of this type of imagery than all other groups.

A fourth research strategy used by investigators who choose to go beyond traditional content categories is similar to the above mentioned "sign" approach. This strategy leaves behind classifications of behavior, and looks instead at inferred psychological states, taking into account the intensity as well as frequency of a Rorschach content manifestation. Examples of this approach are scales for measuring hostility, anxiety and object relations. The most extensive investigation of the psychological states of anxiety and hostility was done by Elizur (1949). Elizur developed a method of scoring the intensity as well as frequency of indications of anxiety or hostility in Rorschach content, in that overt, explicit expressions of these were weighted more heavily than symbolic expressions of the conflict. Expressions of emotions such as fear, disgust, etc. and percepts such as snakes, witches, dragons, etc. were scored for anxiety. Expressions of emotions such as hatred and descriptions of percepts in a derogatory manner (e.g., "ugly" or "stupid") were scored for hostility. Responses that connoted combined anxiety and hostility (such as "cutoff fingers") were scored for both.

Elizur found generally positive correlations between his subjects' anxiety and hostility scores and self-ratings and interview results. Later research indicates that Elizur's anxiety measures generally correlate with anxiety ratings by self and others (Aronow & Reznikoff, 1976) and with a high level of stressful life events (Aron, 1982). Also, research suggests that Elizur' hostility scale correlates with past history of aggression (Aronow & Reznikoff, 1976). However, Aronow and Reznikoff point out that the absence of norms limits the clinical utility of Elizur's scale.

Psychoanalytic theorists have used Rorschach content, especially human content, to assess the level of the person's object relations. In 1976, Blatt, Brenneis, Schimek and Glick developed a scale to assess the level of object relations in Rorschach responses. The scale looked at human content and scored for differentiation; articulation; intentionality of motivation; degree of integration of object and action; content of the action; and nature of the interaction with another object. The scale seemed to be reliable and seemed to differentiate normal and psychiatrically hospitalized young adults (Blatt, Schimek & Brenneis, 1980). Differences in the level of object representations as assessed by the scale between patients with various psychological disorders were observed (Blatt & Lerner, 1983). These differences fit ego analytic theoretical formulations.

The assessment of object relations is one promising way in which the study of Rorschach content might prove useful. However, as is the

case with all possible ways of using and studying Rorschach content--both traditional and non-traditional--more research needs to be done in order to back up conclusions about Rorschach content and its meaningful relationship to subjects' behavior and inner psychological state.

Haley et al. (1967) suggest going a step beyond the pure content of a Rorschach response and its relationship to subjects' inner states and behaviors. The authors advocate turning attention from pure content to mediating variables such as the context in which the response is given and the qualities and perceptions of the subject. In a later review (Draguns et al., 1968) the authors note the applicability of many ideas from perceptual theory to the Rorschach.

Perception is an activity of the total organism, which serves two general purposes for the organism: 1) to construct a world in which survival and adjustment are possible and 2) to defend against that which is threatening (Bruner, 1948). These two processes maximize the person's sensitivity or vigilance towards some events and impede his or her sensitivity to others. In other words, people are "selective" to some extent in what they attend to. This process of selectivity is complex and can take place all along the cognitive continuim, from input of information to output (Erdelyi, 1974).

Perceptual theory then, includes the idea that the strength of a given preoccupation, inner expectation, prior experience, etc. increases the readiness for, facilitates detection of, and lowers the

threshhold for, percepts that fit with this inner state. The converse may also hold; the strength of inner motivation to avoid certain ideas or impulses will decrease the likelihood that stimuli fitting these ideas will be perceived. This is the concept of perceptual defense (Eriksen & Browne, 1956). Perception is, therefore, an interaction between the incoming stimuli and the subject's internal state.

Perceptual theory can be applied very nicely to the Rorschach test. The blots are equivocal stimuli--they can be perceived in many ways. Therefore, in the interaction between incoming stimuli and the subject's internal state, the role of the latter will be maximized. The subject's internal state increases the likelihood that certain images will be perceived by the subject. Depending on the acceptability/unacceptability of the percept, and the subject's degree of control, the recognized percept may or may not be articulated to the examiner. However, if a subject's inner state is such that a particular percept would be <u>too</u> threatening or anxiety-provoking, the likelihood that the percept will be <u>consciously</u> detected or acknowledged by the subject is decreased.

If one considers the relationship between a subject's internal state and incoming Rorschach stimuli as a type of equation, the balance of either side may shift from subject to subject. Some subjects will stay very true to the blot in their percepts. Some will be so overwhelmed by internal feelings and conflicts, that the blot characteristics will almost be ignored. Bruner (1948) advocates using the

concept of perceptual "vivification"-- how "vivid" or striking a response is to a subject--in evaluating Rorschach responses. He thinks it likely that the more vivid the response, the more relevant the percept as a reflection of the subject's inner state.

It seems likely that the more vivid a response, the more elaborate it will be. Some subjects will simply offer a main response, such as "two people", while others will describe the people, and what they are doing, in great detail. Draguns et al. (1968), in a discussion of some of the processes affecting the development of a response, point out the following:

> The more elaborate the percept, the greater the strength of the hypothesis that provoked it; "an atomic explosion over a large American city" tells us more about the individual's preoccupation than simply "an explosion". (p. 19)

The amount of elaboration on a main response is indicative of hypothesis strength. Other aspects of Rorschach content interpretation that relate to hypothesis strength are:

1. the rarer the type of content, the stronger the hypothesis that provoked it;
2. the more unusual the card area, the stronger the hypothesis that provoked it;
3. the more intense the affect, the stronger the hypothesis and
4. the greater the frequency with which a certain type of content is used, the stronger the hypothesis.

These points represent, according to Draguns et. al. (1968), "the recasting of the interpretive operations of the experienced clinician

into the concepts of Bruner's hypothesis theory" (p.19).

In other words, clinicians take these points into account, without necessarily relating them to perceptual theory. Rorschach researchers, however, have emphasized the frequency with which a particular type of content occurs, and have done little active research on other aspects of hypothesis strength, such as elaboration.

Elizur, (1949) in some ways, took the concept of elaboration into account in his Rorschach Content Test scores for anxiety and hostility. The response was taken as a whole (i.e. main response and elaboration). Thus, "pretty clouds on a soft summer day" was scored differently from "thunder clouds crashing in the sky".

Closely tied to the concept of elaboration is that of fabulization (Phillips & Smith, 1953; Rapaport et al., 1968). The concept of fabulization is somewhat more narrow than that of elaboration; it connotes a negative type of response--a kind of overly-intense response, which has more to do with the subject's inner state than with the perceptual features of the card. The more fabulized the response, the more it strays from the features of the card. Rapaport et al. (1968) see small amounts of fabulization as acceptable, but anything more than that would indicate excessive fantasizing.

Phillips and Smith describe a fabulized response as being permeated with intense, personal material; this material is likely to be related to the subject's central conflicts (particularly depression,

tension and anxiety). Fabulization may be accomplished through adjectival elaboration (e.g. "hideous" something), action verbs and use of expressions that condense a basic noun with an elaboration (e.g. "nigger" or "bum").

Phillips and Smith do allow that not all rare responses are fabulizations; in fact superior elaborations are not considered fabulizations. However, the possible meaning of superior elaborations is not discussed. It seems likely, however, that if responses which are elaborate in terms of context and contextual variables indicative of negative feeling states are strong indications of subjects' conflicts, that elaborations of what are generally seen as more "healthy" responses may be a strong indicator of subjects' strengths.

The remaining question, of course, is what type of elaboration should be considered a positive sign of strength and what might be seen as a sign of loss of distance from, and being overwhelmed by, negative affect. One way might be to look at what people who are considered well- adjusted do differently from people who are considered to be poorly-adjusted.

Locke (1983) found differences between well-adjusted and poorly-adjusted college-age seminarians on a variety of content and contextual measures. For example, well-adjusted subjects used more human content, and humans engaged in positive, happy behaviors, and interactions. Poorly-adjusted subjects used more anatomy responses. Locke noted that outside of A or H, many types of contents were used as

elaboration on the main response. She noted that such things as movement, interaction, aggression and negative comments about the blot tended to be used as elaboration and advocated further research into "richness of response" or elaboration.

Hypotheses

The present investigation attempted to provide some initial data on this concept of elaboration. Well-adjusted, poorly-adjusted and intermediate subjects were compared on the types of main responses they elaborated on; some types of content and context variables used as elaboration, and some specific combinations of main response and elaboration.

The experimental hypotheses were:

1. Well-adjusted subjects will elaborate more on human content main responses;
2. Poorly-adjusted subjects will elaborate more on anatomy main responses;
3. Well-adjusted subjects will use more movement and interactions as a means of elaborating on main responses;
4. Poorly-adjusted subjects will use more aggression as a means of elaborating on main responses;
5. Well-adjusted subjects will produce more human + interaction combinations, and more human + specificity combinations and
6. Poorly-adjusted subjects will produce more human + aggression combinations.

CHAPTER III

METHOD

Subjects

The 90 Rorschach protocols used in this study were actually administered in the early 1960's. The subjects were Catholic seminarians, at least 19 years of age, and in their first or second year of college-level seminary work. Subjects were placed in one of three subgroups on the basis of faculty ratings and MMPI scores. The MMPI was routinely administered to all seminarians. The faculty ratings were made by seven faculty members, who, over a period of one year, got to know students well.

One group was comprised of those students who were rated as most outstanding in terms of personal adjustment, and, in addition had no MMPI scores above 70. Subjects in the third group were judged as having problems in personal adjustment. In addition, these subjects had two or more MMPI clinical scales above a score of 70. The second group was an intermediate group; subjects were not rated as being outstanding or as having problems in adjustment, and had no MMPI scales over a score of 70.

Procedure

The nature of the data in this study is archival. The data was coded by numbers and the identities of subjects were not known to the investigator.

The original administration of the Rorschach protocols took place in the early 1960's. The original testers were supervised clinical psychology interns. These examiners, as well as this investigator were blind as to which subjects belonged in each group.

These protocols were also scored for content and contextual factors according to the system developed by Locke (1983). The system is based on Klopfer, Ainsworth, Klopfer, and Holt (1954), Phillips and Smith (1953) and Singer (1977) as well as a variety of other sources. The system is quite detailed; it breaks down each broad content category into narrow, clearly defined subcategories. The scoring criteria also include a list of populars, categories for movement, categories for aggressive content, presence of interactions, and various categories which describe the quality of the response. The system is also quite specific with regard to contextual factors; those behaviors of the subject which reflect his response to the testing situation.

After development of this system by Locke, interjudge reliability was established by Locke and the present investigator. The two raters scored five protocols from a sample of Rorschachs given to college-age male and female students. Based on their comparisons of

these, the raters more precisely defined the categories and scored four more protocols from the separate college sample. In addition, the two raters scored six (two from each subgroup) protocols from the seminarian sample to be studied, in order to establish interjudge reliability within the sample. Interjudge reliability was calculated using Cohen's Kappa Coefficient of Agreement.

All but two of the 94 interjudge reliability scores were at the .80 level or higher overall. Eighty-five scores were higher than the .90 level overall. The two categories which did not reach the .80 level were Response Uncertainty (.78 overall) and Response Specificity (.75 overall). The categories were kept in the scoring system nevertheless. However, because of their low reliability, any results concerning these categories should be interpreted with caution. The content scoring system, in its final form is outlined in Appendix A.

Once reliability was established, the present investigator and Locke divided up the protocols and scored them for content and context according to Locke's system. Neither Locke nor the present investigator were aware of the group membership of the protocols they scored. The frequency of each content and context category was coded for each of the 90 protocols. Locke (1983) summarizes the findings from this aspect of the study.

For purposes of the present study, this investigator then recoded the data. The frequency with which each type of content was used as a main response was subtracted from the overall frequency with

which each type of content is used in the protocols. This was done separately for each protocol. The number that remained indicated how often each type of content was used to elaborate on the main response.

For example, suppose a subject gave the following two responses: (Card IV) "a gorilla", (Card VIII) "a coat of arms--it's very colorful, and includes two mountain lions climbing along each side". Both responses contain animal contents. However, in the first response, the animal is the main response and would have been coded as such. In the second, the animal content is used to embellish the main response of "coat of arms" and would not have been coded as a main response. It would therefore be considered as "elaboration".

The second and more important aspect of this study was an examination of the types of main responses that are most elaborated on by each type of subject. The number of responses offered as elaborations were counted for the following categories of main responses: overall human; human-like; whole human figures; human detail; overall animal; animal-like; whole animals; animal detail; religion; sex; anatomy; art; nature + plant + landscape (combiniation of three categories); object; clothing; blood; geography; architecture; food, and a category combining three categories: explosion + smoke + fire. Tallies were not taken for such infrequently occuring contents as paint, mask, burn, spot, etc. These tallies represent the extent to which subjects elaborate on different types of responses.

For example, suppose the response is: "Looks like two guys with their hands together. They have red masks on and are playing pattie cake. They have some sort of religious garb on--a capuch.". The main response is the human figures, but the subject elaborated using 1)clothing 2)masks 3)religion 4)color 5)interaction and 6)movement. These elaborations would be counted among the total number of elaborations upon human figure main responses for this particular subject.

The final aspect of the procedure for this study was the tallying of how often particular types of elaborative content and context factors were used with particular types of main responses. Tallies of the frequency with which the following combinations appeared were made for each protocol: human content + interaction; animal content + interaction; human content + aggression; animal content + aggression; human content + negative comments about the blot; animal content + negative comments about the blot; human content + specificity; animal content + specificity; and anatomical content + specificity. For example, a response such as the one mentioned above: "two men playing pattycake...etc." would be scored as human + interaction as well as for the amount of elaboration on human content. Some of these combinations were decided on the basis of Locke's (1983) findings which indicated that well-adjusted subjects use more human content than other subjects, and that poorly-adjusted subjects use more aggressive elaboration and anatomical content.

CHAPTER IV

RESULTS

To establish normative data on the relative amounts if elaboration on the various types of main responses, frequencies were tabulated across all groups. Also, frequencies were tabulated across groups for the particular combinations of main responses and elaborations described in the procedure section. Table 1 summarizes the frequency of elaborations on categories of main responses. Table 2 summarizes the frequency of particular combinations of main response and elaboration.

The types of main responses most elaborated on by subjects were, not surprisingly, the human and animal main responses. The mean amount of elaboration on overall human responses was 18.81 elaborations per protocol. Of the various subdivisions of human responses, whole human figures were most elaborated on, with a mean of 9.14 elaborations per protocol, followed by humanlike ($\underline{M}$=5.84) and human detail ($\underline{M}$=4.27).

The mean amount of elaboration on overall animal responses was 24.3 elaborations per protocol. Again, of animal responses, whole animals were most elaborated on ($\underline{M}$=18.80 elaborations per protocol),

TABLE 1

Frequencies of Elaborations on Categories of Main Responses

Variable	Mean	Median	SD	Range
All Human	18.81	14.83	16.33	99
(H)	5.84	3.64	7.37	33
Whole Human	9.14	7.50	11.06	66
Human Detail	4.27	2.50	6.27	39
All Animal	24.30	22.90	12.79	68
(A)	2.37	.42	3.61	17
Whole Animal	18.80	17.50	10.56	53
Animal Detail	3.03	1.36	4.31	18
Religion	.23	.02	1.71	16
Sex	.04	.02	.30	2
Anatomy	1.71	.44	2.62	14
Art	.90	.13	2.25	12
Nature (+Plant +Landscape)	5.53	4.00	6.25	29
Object	3.88	2.83	4.49	19
Clothing	1.04	.30	1.91	10
Blood	.27	.05	1.06	8
Geography	.97	.29	1.71	8
Architecture	.92	.21	1.77	8
Food	.53	.13	1.38	7
Explosion + Smoke + Fire	1.12	.19	2.26	10

TABLE 2

Frequencies of Particular Combinations

of Main Responses and Types of Elaboration

Variable	Mean	Median	SD	Range
Human + Interaction	.59	.42	.76	3
Animal + Interaction	.21	.13	.44	2
Human + Aggression	.59	.25	1.23	9
Animal + Aggression	1.32	.94	1.57	8
Human + Negative Comments about Blot	.64	.35	1.06	7
Animal + Negative Comments about Blot	1.01	.75	1.16	5
Human + Specificity	.67	.19	1.48	8
Animal + Specificity	1.07	.94	1.04	5
Anatomy + Specificity	.16	.05	.58	4
Anatomy + Aggression	.04	.02	.21	1

followed by animal detail (M=3.03) and animal-like (M=2.37).

Other than human and animal main responses, the responses which averaged more than one elaboration per protocol were: nature + plant + landscape (M=5.53), object (M=3.88), anatomy (M=1.71), explosion + smoke + fire (M=1.12), and clothing (M=1.04).

In terms of particular combinations of main responses and elaborations, only three occurred, on the average, more than once per protocol: animal content + specificity (M=1.07), animal content + negative comments about the blot (M=1.01) and animal content + aggression (M=1.32). Human content + interaction and human content + aggression occurred with equal frequency (M=.59). Human content + specificity averaged .67 occurrences per protocol. Since these combinations are fairly specific, it is to be expected that they would occur less frequently.

Experimental hypotheses were tested using the Mann-Whitney U test to compare the two extreme groups (See Tables 3 and 4). Group medians appear in Table 5. The hypothesis that well-adjusted subjects would elaborate more than poorly-adjusted subjects on human content main responses was supported. Well-adjusted subjects elaborated quite significantly more on the overall human main response category, which took into account all types of human content (median, well-adjusted=23.5; median, poorly-adjusted=7.5; $p<.01$).

The hypothesis that poorly adjusted subjects would elaborate

TABLE 3

Mann-Whitney U Analysis of

Group Differences in Elaboration

	GROUP	
	Poorly-Adjusted	Well-Adjusted
Variable	Mean Rank	Mean Rank
All Human	20.88	40.12 **
Anatomy	35.60	25.40 **
Blood	31.48	29.52
Sex	31.00	30.00
Explosion + Smoke + Fire	31.32	29.68
Human + Specificity	27.87	33.13
Human + Interaction	26.65	34.35 *
Human + Aggression	28.13	32.87
Animal + Aggression	29.82	31.18
Negative Tone	27.93	33.07

*$p<.05$.

**$p<.01$.

TABLE 4

Mann-Whitney U Analysis of

Contents Used in Elaboration

	GROUP	
	Poorly-Adjusted	Well-Adjusted
Variable	Mean Rank	Mean Rank
Aggression	31.12	29.88
Interaction	26.42	34.58 *
Movement	21.70	39.30 **

*$p<.05$.

**$p<.01$.

TABLE 5

Group Medians

Variable	GROUP: Poorly-Adjusted Median	GROUP: Intermediate Median	GROUP: Well-Adjusted Median
All Human	7.50	15.50	23.50
(H)	.44	3.50	5.50
Whole Human	3.17	6.50	10.50
Human Detail	.75	4.50	2.00
All Animal	19.50	24.50	21.00
(A)	.38	.33	2.00
Whole Animal	16.50	19.50	16.50
Animal Detail	.44	2.67	.83
Anatomy	1.50	.50	.18
Nature	1.50	4.50	5.00
Object	1.50	3.50	1.50
Clothing	.33	.38	.21
Religion	.28	.03	.04
Food	.15	.21	.07
Blood	.56	.77	.03
Sex	.03	.34	.00

TABLE 5 (con't)

Group Medians

	GROUP		
	Poorly-Adjusted	Inter-mediate	Well-Adjusted
Variable	Median	Median	Median
Geography	.21	.93	.13
Architecture	.18	.50	.08
Art	.06	.15	.21
Explosion + Smoke + Fire	.15	.33	.13
Human + Specificity	.18	.50	.72
Human + Interaction	.18	.65	.58
Human + Aggression	.15	.33	.29
Animal + Aggression	.75	1.00	.96
Negative Tone	2.50	3.67	2.41
Aggression	2.30	2.50	1.41
Interaction	.29	.83	.83
Movement	5.83	10.17	10.50

more than well-adjusted subjects on anatomical content was also strongly supported (median, poorly-adjusted=1.5; median, well-adjusted=.19; $p<.01$).

To test the hypothesis that well-adjusted subjects would use more movement and interactions as a means of elaborating on main responses, all types of movement, and both types of interaction were summed (See Table 4). When the two extreme groups were compared, it was found that well- adjusted subjects did indeed use significantly more interactions (median, well-adjusted=.83; median, poorly-adjusted=.29; $p<.05$) and movement (median well-adjusted=10.5; median, poorly- adjusted=5.83; $p<.01$) when elaborating on main responses.

To test the hypothesis that poorly-adjusted subjects would use more aggression to elaborate on main responses, the total of all four types of aggressive content was used to compare the two extreme groups. This hypothesis was not supported; no significant difference between the two groups was observed (See Table 4).

The hypothesis that well-adjusted subjects would produce significantly more of the particular combination, human content + interaction was supported (median, well-adjusted=.58; median, poorly-adjusted=.18; $p<.05$). Well-adjusted subjects more often described human figures as interacting in either a neutral or positive manner (See Table 3).

However, the hypothesis that well-adjusted subjects would be

more specific in their elaborations on human main responses (human + specificity) was not supported. Although the median for the well-adjusted subjects was higher, the results were not significant (See Table 3).

The hypothesis that poorly-adjusted subjects would use more aggressive elaboration on human content main responses (human + aggression) was also not supported (See Table 3). Surprisingly, the well-adjusted group produced slightly more of these combinations, but not to any significant degree.

In addition to testing experimental hypotheses, the two extreme groups were compared on five other categories: blood; sex; explosion + smoke + fire; animal content + aggression, and, finally, a category called negative tone, which combined subjects' use of aggressive elaboration with human and animal content, as well as the use of negative comments about the blot, with human and animal main responses. As can be seen from the results in Table 3, the two extreme groups did not differ significantly on any of these five categories.

Also, comparisons were made between all three groups of subjects on a variety of categories, using the Kruskall- Wallis 1-Way Anova. The results of these comparisons can be found in Table 6.

Subjects in the well-adjusted group still elaborated significantly more on most types of human responses: overall human (median, well- adjusted=23.5; median, poorly-adjusted=7.5; median, intermedi-

TABLE 6

Kruskall-Wallis Analysis of

Group Differences in Elaboration

	GROUP		
	Poorly-Adjusted	Inter-mediate	Well-Adjusted
Variable	Mean Rank	Mean Rank	Mean Rank
All Human	29.23	48.75	58.52 **
(H)	36.95	46.40	53.15 *
Whole Human	32.72	44.52	59.27 **
Human Detail	37.82	54.30	44.38 *
All Animal	39.90	52.17	44.43
(A)	42.82	42.80	50.88
Whole Animal	41.83	50.08	44.58
Animal Detail	42.38	52.20	41.92
Anatomy	51.98	47.67	36.85 *
Nature	36.32	51.63	48.55 *
Object	43.15	49.85	43.50
Clothing	45.51	48.83	42.10
Religion	45.05	45.00	46.45
Food	46.13	50.70	39.67

TABLE 6 (con't)

Kruskall-Wallis Analysis of

Group Differences in Elaboration

	GROUP		
	Poorly-Adjusted	Inter-mediate	Well-Adjusted
Variable	Mean Rank	Mean Rank	Mean Rank
Blood	45.82	47.72	42.97
Sex	36.00	46.00	44.50
Geography	42.25	55.58	38.67
Architecture	44.27	53.82	38.42 **
Art	40.30	46.67	49.53 *

*$p<.05$.

**$p<.01$.

ate= 15.5, $p<.01$), human-like (median, well-adjusted=5.5; median, poorly-adjusted=.44; median intermediate=3.5; $p<.05$), and whole human figures (median, well-adjusted=10.5; median poorly-adjusted =3.17; median, intermediate=6.5; $p<.01$). In all cases, the intermediate group of subjects showed the second-highest amount of elaboration on these main responses, and the poorly-adjusted group the least.

However, intermediate subjects elaborated more than well-adjusted subjects on human detail main responses (median, intermediate=4.5; median, well-adjusted=2.0; median poorly-adjusted=.75; $p<.05$). Poorly-adjusted subjects still showed the least amount of elaboration on this main response.

Intermediate subjects elaborated more than the other two groups on three other types of main responses: nature + plant + landscape (from here on referred to as nature) (median, intermediate=4.5; median, well-adjusted=3.0; median, poorly-adjusted=1.5; $p<.05$), geographical main responses (median, intermediate=.93; median, poorly-adjusted=.21; median well-adjusted=.13; $p<.01$), and architectural main responses (median, intermediate=.5; median, poorly-adjusted=.21; median, well-adjusted=.08; $p<.05$).

In most cases then, it seemed evident that well-adjusted subjects tended to elaborate most on human main responses, with the poorly-adjusted group doing the least amount of elaboration on this category. The well-adjusted group used more movement and interaction as a means of elaboration. Poorly-adjusted subjects tended to elaborate

more on anatomical content, with the well-adjusted subjects elaborating least on this category. The intermediate group of subjects elaborated most on such categories as nature, geography, architecture and human detail. In these cases, no clear pattern could be seen as to which group did the least amount of elaborating on these categories. In the case of nature and Hd main responses, the poorly-adjusted subjects elaborated the least, while well-adjusted subjects elaborated least on architecture and geography main responses.

CHAPTER V

DISCUSSION

It is important to bear in mind that the sample used in this investigation is a relatively restricted subgroup of the general population. Caution must be used in trying to apply the results of this study to the population at large. Further investigation, producing norms for other subject groups, is needed in order to determine whether the results from these subjects are typical and generalizable.

The first useful type of information supplied by the investigation was normative data on the amounts of elaboration on various main response content categories (Table 1 and Table 2). As expected, animal and human content main responses are most elaborated on, while less frequently occuring types of main response contents are less frequently elaborated on. Of course, this is partly due to the fact that these are the contents that occur most frequently. The normative data provided, tentative as it might be, can prove useful clinically, particularly when a client elaborates quite a bit on a type of main response that doesn't often get elaborated on. For example, it is fairly unusual for a subject to elaborate on sex or (even in a seminarian population) religion main responses. Therefore, when a subject does so, it is assumedly even more revealing. This fits with clinical

intuition.

In addition to this normative data, some interesting group differences in elaboration of responses were found. As expected, well-adjusted subjects elaborated more on most types of human main responses, and used more movement and interaction as means of elaboration over all categories of main responses. In particular, well-adjusted subjects were more likely to describe their human percepts as interacting in some way. In other words, well-adjusted subjects tended to be more "interpersonal" in the way they elaborated on main responses. The hypothesis that these subjects would be more specific in their elaborations on human percepts was not supported,however.

Poorly-adjusted subjects elaborated more than the other groups on anatomical content. In other words, they tended to elaborate more on main responses which are associated with preoccupation with one's own internal processes and repressed impulses.

Of course it is important to keep in mind that well-adjusted subjects use more human content than do poorly-adjusted subjects (Locke, 1983). Poorly-adjusted subjects use more anatomical content than do well- adjusted subjects. Therefore, when interpreting the results of the present study, it is important to remember that these groups, by virtue of the fact that they used more of certain types of main responses, had more opportunity to elaborate on these main responses.

Intermediate subjects seemed to elaborate most on responses that, while not as "internally-focused" as anatomy responses are also not as "interpersonally-focused" as the human content used by the well-adjusted subjects. Nature, geography and architecture responses may be interpreted in a variety of ways, but what they have in common is that they relate to "things" instead of people. Intermediate subjects also elaborate more than the other two groups on human detail responses, which to some extent is a sign of social anxiety and some avoidance of human contact (Beck & Molish, 1962; Phillips & Smith, 1953). This may represent, to some extent, a "distancing" from others.

Draguns et. al.'s (1968) hypothesis that the more elaborate the percept the more "telling" it is of the subject's inner state, seems to be somewhat supported by this investigation. The fact that well-adjusted subjects elaborated most on responses which are generally taken to indicate empathy, interest in others, and a good capacity for social relations (the H response) would indicate that this is a good indication of subjects' strengths. Therefore, in a clinical situation, when a client elaborates on human content, particularly when he or she uses movement or interaction to elaborate on the main response, it might well be interpreted as a particularly strong indication of internal strength and positive adjustment. Clinicians often do this intuitively anyway; this investigation merely provides some more justification for doing so.

Conversely, the fact that poorly-adjusted subjects elaborated most on responses which indicate repression of aggressive or hostile impulses, or absorption with internal processes (anatomy) would indicate that this is particularly telling of some difficulties they may have. Therefore, clinicians' tendency to view an elaborate anatomy response as a particularly strong sign of subjects' difficulties seems to be supported.

The fact that intermediate subjects elaborated most on such contents as nature, architecture, and geography might be a particularly strong indication that these subjects deal with certain negative feelings by distancing rather than by becoming overly-focused on internal processes (as do poorly-adjusted subjects). The fact that they elaborate most on human detail main responses might be seen as a particularly strong sign of social anxiety.

If one wishes to conceptualize these findings in terms of perceptual theory, one could say that well-adjusted subjects have a greater internal readiness, or lower threshhold for perceiving contents which appear more interpersonal--i.e. human beings interacting. Presumably, this matches their internal state. Poorly-adjusted subjects seem to have a lower threshhold for percepts which do not appear quite as healthy, i.e. anatomy responses. Again, this presumably reflects their internal state. Intermediate subjects seem to have a lower threshhold, or greater internal readiness for perceiving "things". Since these percepts are more "vivid" to them, they are

able to elaborate on them in some detail. While one should not over-interpret the limited results of this study, the field of perceptual theory seems to be an interesting way of approaching differing tendencies to elaborate on Rorschach responses.

It was not found, in this study, that poorly-adjusted subjects used more aggression to elaborate on human percepts. This may be a function of the particular subjects used in this study. Aggressive content is a fairly direct expression of aggressive or hostile impulses (Schafer, 1954). The poorly-adjusted subjects in this study tended to elaborate on anatomy main responses. Anatomical content is often taken as a contraindication of acting-out or assaultiveness.

One might reasonably expect that the same group of subjects who dwell on anatomical content would not be likely to use a great deal of open aggressive content as elaboration, since anatomical content often indicates repression of hostile impulses. Perhaps, in another sample, where the poorly-adjusted group was composed of acting-out subjects, one would find that the poorly- adjusted subjects used more aggression to elaborate on human main responses.

In most cases, the results from intermediate subjects were just that--they generally fell in between the well-adjusted and poorly-adjusted groups. With some types of content (HD, nature, geography and architecture) however, the intermediate subjects showed the most elaboration. Thus, one might tentatively say that intermediate subjects do not get caught up in as pathological types of content as

poorly-adjusted subjects, but they also do not show the same strengths as well-adjusted subjects. It may be that intermediate subjects deal with feelings of social anxiety and inhibition by distancing and withdrawing from social contact. However, these findings could be unique to the sample; further investigation is needed to find whether anything can be said about intermediate subjects.

For purposes of this investigation, all human content was treated the same; the level of integration shown, or its appropriateness to the blot area was not looked at. However, it is naive to interpret all human content as a positive, healthy sign. A very poorly-defined or bizzare figure could actually be interpreted as being more pathological than many anatomy responses. In many cases, avoidance of human percepts might be more adaptive than getting caught up in a poorly-integrated human response. Future investigations in this area might look at form quality and integration of the response, as well as content, when comparing groups on amount of elaboration.

Also, future investigators in the area of content elaboration may want to take the variable of intelligence into account. This did not seem directly relevant to the present investigation, since a population of college-level seminarians is probably fairly homogeneous with regard to intelligence. However, intellectual level might well contribute to the amount of content elaboration that subjects engage in (Phillips & Smith, 1953), a concept which should be kept in mind in future investigations.

In general, the contribution of this investigation can be seen as an initial, tentative piece of research dealing directly with content elaboration of Rorschach main responses. It serves mainly as additional support for hypotheses derived from interpretation of such Rorschach contents as human and anatomy, and possibly nature, geography, and architecture. The idea that well-adjusted and poorly-adjusted subjects differ in the types of content they elaborate on was supported for some content categories. Group differences were, for the most part, in harmony with clinical intuition.

Clinicians often take the concept of elaboration into account in their interpretations, without articulating it. Further research into the area of Rorschach content elaboration should, therefore, prove to be clinically relevant.

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APPENDIX A

RORSCHACH CONTENT SCORING SYSTEM

This appendix (from Locke, 1983) describes the content scoring system developed for this research. The major portion of this section lists and defines the 260 categories used. In many cases there is no other definition than the category name (i.e. the category AA1 is simply defined as "BAT"). In these cases, the examiner should simply use this category any time the subject labels a percept as the content in question.

Each response should be scored for all relevant content components. Thus, if a response is fairly complex, there may be a number of content scores (VIII: Two red bears, or rats, or mountain lions scaling a mountain: A1,AA2,-M2A E28, E27, N5, C1, P23. or VIII: Two squirrels hanging onto a multicolored tree; holding on with their claws with rocks below them: A1, AA44 -M1A,BAL1, E27, P12, C1, N8).

Within each response, one part will be underlined and thus identified as the primary response segment. The primary segment will consist of the most emphasized noun content; relevant subcategories of that area; and movement, aggression, balance and interaction scores associated with the primary content. If no noun content is clearly emphasized, the first mentioned content will be defined as primary content (VIII:Two Squirrels hanging to a multicolored tree, holding on with their claws with rocks below them; A1, AA44 -M1A- BAL1 N8, P12, E27, C1: VII: Two indian girls staring at each other, feathers in

hair; H1, H2, HA-M1H-IN1, P19, E27, AOBJ2).

CONTEXTUAL FACTORS AND ELABORATIVE COMMENTS.

E0 RESPONSE UNCERTAINTY, OR EVASIVENESS IN RESPONSE PROPER. Examples: "almost looks like," "could be a ," "looks like a x, I think," "might be an x," "perhaps a x," "I don't know, but it looks like a x." E0 may also be scored if the subject uses an evasive, delaying statement before producing a response. An example of this would be "looks like something, I'm not sure what" or similar statements delaying the response.

E28 INDECISIVENESS IN RESPONSE PROPER. Score when subject offers two precision alternatives in response proper; "A dog or a squirrel." Also score if subject offers one response in the response proper, but offers a precision alternative in the inquiry. To score this the alternative must be part of one scored response. For content scoring, use the most emphasized alternative or if that is unclear use first offered choice. Use this only for the main content. Do not use for context, color, movement or other elaborations of the basic percept. If a response is scored for E28, do not score it as E0.

E29 CARD REJECTION-RESPONSE PROPER. In response proper, subject cannot generate a response.

E30 REJECTION OF A SPECIFIC SECTION OF THE CARD. On a specific response, Subject indicates he is unable to generate a response for a specific section of the card; "I can't make anything out of that." Subject may use that part of the blot in a percept in another

response.

E13 TENDENCY TO REJECTION. 1. On inquiry, subject has trouble recalling response or says it is difficult to remember the response or appears surprised that he made that response; 2. Initial rejection of blot followed by a response; "I don't see anything on this one,..... well, maybe it is a x." 3. after one or more resposes, subject indicates that there is some other percept, but he can't see it; "There's something else there, but I can't think what." This will be scored as E13 whether or not subject eventually offers an additional percept.

E1 NEGATIVE SELF STATEMENTS. "I have no imagination." I haven't got my thinking cap on." "I hate to say it, but it's a x again."

E2 SELF REFERENCE. Subject refers percept to own experiences or beliefs. "I don't like them." "....like when I was a kid."

G13 SYMBOLISM. All symbolism other than that covered by GC or GR.

GC COLOR SYMBOLISM.

GR RELIGIOUS SYMBOLISM.

E7 NEGATIVE PERCEPT COMMENTS: 1. Comments that are demeaning or derisory, or indicate that subject is making fun of or minimizing percept: eg., describing percept as "icky, ludicrous, or silly." or 2. negative comment or elaboration of percept, especially in ways indicating percept has poor fit with reality: e.g., describing percept as "ugly, malformed, distorted, or out of proportion."

E9 PHOBIC RESPONSE. Response suggesting fear or painful emotional involvement: e.g. describing percept as "eerie, wierd, spooky, horrible, scarey, or nasty."

E8 POSITIVE COMMENT ABOUT PERCEPT. Subject describes percept either accroding to positive attributes ("pretty flowers; looks happy; seems gay; I like this one ") or indicates that he finds the percept to be a good fit to the blot ("This is a perfect butterfly shape").

E36 EXCLAMATION WHEN SEES CARD. "Wow look at this one."

E37 NEUTRAL CARD COMMENTS. Subject refers to previous cards or responses, noting similarities etc.

E34 SPECIFIC REFERENCES TO COLOR, INDICATING REACTION TO COLOR. Generally this may appear separately from the description of the percept: e.g., "This is colorful." "Look at the different shades of blue." However, if the response clearly indicates reaction to color, it may be scored E34 in addition to C1 or C2. This would be in situations in which the subject specifically indicates the importance of color within the context of a response using color : e.g., "Wow a technicolor scene." "The colors are important here."

E23 SPECIFIC REFERENCE TO COLOR: DENYING ITS IMPORTANCE OR INDICATING DISCOMFORT WITH IT: "I didn't do anything with the color." "These don't seem to fit in." I had trouble making that fit in." If subject is also rejecting a specific section of the card, score E30.

Can also score C1 or C2 if the subject uses color in addition to showing discomfort with it.

C1 SPECIFIC USE OF COLOR IN PERCEPT: (i.e. content scored FC, CF, or C).

C2 SPECIFIC USE OF ACHROMATIC COLOR IN PERCEPT: (i.e. content scored FC', CF', or C').

E17 SEES EXAMINER AS AUTHORITY FIGURE. Subject calls examiner "Sir" or behaves in ways which indicate that he sees examiner as authority figure.

E16 POSITIVE STATEMENT ABOUT TEST: "This was fun." "I like these blots."

E19 SOLICITOUS, HELPFUL TO EXAMINER: "Am I talking too fast?" "Can you get this all down." "Gee it must be hard doing this all day." "You should have a secretary."

E18 EXPRESSED HOSTILITY OR ANGER TOWARDS EXAMINER.

E3 UNIQUE SELF REFERENCE: Subject describes percept as if it is actually present and interacting in some way with the subject. If percept is seen as looking, staring, or pointing at subject, however, score E4 instead of E3. "Someone coming at me." "An ape walking toward me."

E4 SURVEILLANCE: finger pointing; eyes seen alone in the percept,

person staring (possibly at subject); something peeking through a curtain or other concealment.

E32 PERCEPT IS HIDDEN, OBSCURED; there is obstruction with the connotation of concealment. The percept can be hidden behind another animal, content, object, or simply behind a curtain.

G20 REFLECTION. Percept is described as reflected in water, a mirror or on another surface: e.g. "a bird reflected in water."

G6 DENIAL, UNDOING: denial of movement, life, potency to a percept: e.g. "dead bisected dog, a cartoon," alligator, but it's not hungry; it won't bite."

G10 SPECIFICITY. Subject describes percept as a specific instance of the content category: "head of Kennedy," "mask of Orpheus;" a specific type of animal or other content. Thus, if subject sees a dog it would not be scored for G10, but if he identifies it as a Scotch Terrier, the response would be scored for G10. The same would be true if the subject identified a tree as an oak or a pine tree, or a map specifically as a map of Africa.

E27 PLURAL. If subject sees more than one of any content in a response, the response is scored for E27. A response can only be scored for E27 once.

G7 WORN, RAGGED, OLD. If subject describes percept in way that indicates that it is worn down, old or damaged, score for G7.

G8 FOSSILS, ANCIENT CONTENT. H, A, and other content associated with ancient or prehistoric times: e.g. Greek temple, dinosaur.

G17 YOUNG OF A OR H: e.g. children, puppies, baby rabbits.

E10 CARD TURNING: any instance of turning, either by change in arrow (<,> etc) or by spiral on protocol indicating card turning. Also, if the first response to a card indicates that the card is not upright, score E10. If a response based on a rotated card is followed by a response with no orientation indicated (suggesting card is upright again), score E10. If after the response, but before the following response is listed on the protocol turning is indicated, record E10 for the earlier response. If a series of orientations are shown with arrows or a combination of arrows and a spiral culminating with a final orientation leading to a response or ending use of the card, count the series as one E10. For two spirals or one spiral and four or more arrows, score as two E10s.

E35 PART NOT WHOLE: score only when incompleteness has not been indicated by other scoring such as Ad or Hd: "tree limb," "petal of a flower."

E14 REFERENCE TO SOMETHING MISSING. Subject refers to the fact that some part is missing in the percept; it must be clear that the part has been lost. Human and Animal percepts will also always be scored for Hd and Ad: e.g. "It looks like it lost its head;" "a rug with something missing;" "a x with bits chipped off it."

E15 PERSEVERATIVE TENDENCY. Subject produces two or more in a row of a specific category, or is unable to think of a new response because his previous response stays on the subject's mind. Score E15 for each instance of repetition of a category; if the subject produces three bats in a row, score E15 on each of the second and third bats. However, do not score for E15 in additional responses.

G14 SYMMETRY. The subject verbally notes symmetry: e.g. "It's the same on both sides;" "The crease in the middle divides it;" "the mirror effect" (if referring to symmetry, rather than a reflection. If subject is referring to a reflection, score G20).

G9 ENTRANCE TO SOMETHING. This can include an entrance to a cave, a room or anything else.

E33 SUBJECT LAUGHS. Score once for each time that this is noted. Thus E33 can be scored more than once per response.

G19 EXTRATERRESTRIAL. Subject identifies any content as from another planet, another world, outer space or similar concepts.

ADD ADDITIONAL RESPONSE: response given during inquiry and scored by examiner as an additional response. Except for scoring these responses with ADD, score in the same way as main responses are scored.

G1 HANDS, PINCERS, CLAWS, HOOKS, FINGERS: Score G1 if subject sees these or similar contents and they are not connected to the body.

G21 NOT STIMULUS BOUND. Subject begins with a response then free associates; develops concept or concepts tangentially related, or sees color on an achromatic card, or develops a complex story or scenario connected with the percept.

POPULARS

P1 Butterfly, bat, bird, or beetle on Card I.

P2 Human figure (middle detail) on Card I.

P3 Insignia, emblem, or coat of arms on Card I.

P4 Two animals (black or black and red) on Card II.

P5 Two people on Card II (black or black and red).

P6 Rocket in white space on Card II.

P7 Two people on Card III (with card upright, black area).

P8 Face, using the whole or cut off whole on Card III.

P9 Insect for whole or cut off whole on Card III.

P10 Butterfly or bow tie for red on Card III.

P11 Man or giant for whole on Card IV.

P12 Monster, man-like creature, gorilla for whole on Card IV.

P13 Tree, nature, bushes on Card IV.

P14 Bat or butterfly for whole or cut off whole on Card IV.

P15 Fur skin for whole or cut off whole on Card IV.

P16 Bat, butterfly, or bird for whole or cut off whole on Card V.

P17 Animal skin for whole or cut off whole on Card VI.

P18 Totem pole for Card VI.

P19 Two people on Card VII with card upright.

P21 Bay, inlets, island, or map for Card VII

P22 Poodles for Card VII with card upright.

P23 Two animals for red details on Card VIII (can also be one animal reflected).

P24 Anatomy on Card VIII.

P25 Witches or people in orange detail of Card IX.

P26 Fountain or waterfall on Card IX.

P27 Human heads or Teddy Roosevelt's head in pink on Card IX.

P28 Eyes alone on Card IX.

P29 Two crabs, spiders, scorpions, lobsters or similar percepts for blue detail on Card X. Subject may still be scored for P29 if he or she only identifies one of the blue details as a popular percept.

P30 Rabbit head for green detail on Card X.

P31 Worms for green detail on Card X

HUMAN RESPONSES

H1 ALL HUMAN RESPONSES: including all H, Hd, (H), and (Hd). Use this score for any kind of human content.

H2 FEMALE HUMAN RESPONSES: use only when percept is explicitly identified as female.

H3 MALE HUMAN RESPONSES: use only when percept is explicitly identified as male.

H4 HUMANS ENGAGED IN POSITIVE, HAPPY BEHAVIORS: human percepts engaged in positive behaviors (e.g. dancing, singing, playing music) or who represent these things (e.g. dancer, musician, singer). If there are negative overtones to the percept, don't score.

SPECIFIC HUMAN RESPONSES

HA INDIANS

HB CLERGY: monk, priest, nun, etc.

HC BLACK, OR NATIVES, OR AFRICANS.

HD POPE

HUMAN DETAIL RESPONSES

Hd1 RESIDUAL Hd: All human detail responses not covered by the following specific subcategories of human detail responses.

Hd2 FACES, HEADS: can include body down to neck, but no further.

Hd3 ARMS, LEGS, FEET.

Hd4 HANDS, FINGERS.

Hd5 MOUTH.

Hd6 EYES.

HUMAN LIKE RESPONSES

(H)1 RESIDUAL HUMAN LIKE RESPONSES: all (H) responses not covered by the following specific (H) subcategories.

(H)2 POTENTIALLY THREATENING OR SCAREY (H): e.g., monster, abominable snowman.

(H)3 PLEASANT OR BENIGN (H): e.g., fairies or elves.

(H)4 STATUES.

(H)5 HYBRID: (H) percept which is a mixture of human with some other category of content, e.g. man with wings, or a being which is half man and half animal.

SPECIFIC HUMAN LIKE RESPONSES

(H)A WITCH.

(H)B ANGEL.

(H)C DEVIL.

(H)D GOD.

(H)E CHRIST.

(H)G SAINT.

(H)H CHERUB.

(H)I THE HOLY SPIRIT.

(H)J GHOST.

(H)K BIBLICAL FIGURE: e.g. Moses, Jacob, Cain.

ANIMAL RESPONSES

A1 ALL ANIMAL RESPONSES: Score for any animal percept. This should be used in addition to any scores for A, Ad, and (A).

A2 ANIMALS ASSOCIATED WITH POSITIVE, BENIGN ACTIVITIES: e.g. playing.

ANIMAL DETAIL RESPONSES.

Ad1 RESIDUAL ANIMAL DETAIL RESPONSES: score for all animal detail percepts not covered by the following specific subcategories.

Ad2 CLAWS.

Ad3 HEAD: to be scored for Ad3, percept may include head and neck, but no more.

Ad4 ARMS OR LEGS.

Ad5 MOUTH.

ANIMAL LIKE RESPONSES

(A)1 RESIDUAL ANIMAL LIKE RESPONSES: All (A) percepts not covered by the following specific subcategories. This includes mythical fig-

ures.

(A)2 UNPLEASANT, FRIGHTENING PERCEPTS: e.g. King Kong, gargoyle.

(A)3 STATUES, STUFFED ANIMALS, ENGRAVINGS.

(A)4 DISTORTED, HYBRID: animal percepts which are part one species and part a second species, e.g. a creature that is part lion, part dog.

(A)5 FUNNY, SILLY , OR PLEASANT ANIMAL LIKE PERCEPTS.

SPECIFIC ANIMAL CATEGORIES.

AA1 BAT.

AA2 BEAR.

AA3 BIRD.

AA4 BUFFALO, ELK, BISON, MOOSE.

AA5 BULL, STEER.

AA6 BUTTERFLY, MOTH.

AA7 CAT.

AA8 CHICKEN.

AA9 CLAM.

AA10 COW.

AA11 CRAB, CRAYFISH, LOBSTER, CRUSTACEANS.

AA12 CROCODILE, ALLIGATOR.

AA13 DEER, ANTELOPE.

AA14 DINOSAUR.

AA15 DOG

AA16 DUCK.

AA17 ELEPHANT.

AA18 FISH, SHRIMP.

AA19 FOX.

AA20 FROG.

AA21 GERM, AMOEBA, CELL.

AA22 GORILLA, APE.

AA23 HORNET, WASP, BEE.

AA24 HORSE.

AA25 INSECT, BUG, FLY.

AA26 JELLY FISH.

AA27 LION, MOUNTAIN LION, PANTHER, TIGER.

AA28 LIZARD.

AA29 MONKEY.

AA30 OCTOPUS.

AA31 PARASITE, LEECH, TAPEWORM.

AA32 PIG.

AA33 POSSUM, BEAVER, RACCOON, WEASEL, MUSKRAT, BADGER, OTTER,

WOLVERINE, SKUNK.

AA34 RABBIT.

AA35 RAT.

AA36 RHINO.

AA37 RODENT, MOUSE.

AA38 ROOSTER.

AA39 SEA HORSE.

AA40 SHEEP, RAM.

AA41 SNAKE.

AA42 SNAIL.

AA43 SPIDER, TATANTULA, SCORPION.

AA44 SQUIRREL.

AA45 STING RAY, RAY FISH.

AA46 TURTLE.

AA47 WALRUS, SEA LION, SEAL.

AA48 WOLF, COYOTE.

AA49 WORM, CATERPILLAR.

ANIMAL OBJECT RESPONSES

AOBJ1 FUR SKIN: score for animal skin percept, or skinned animal if subject is referring only to the skin. Also score for specificity (G10) if subject identifies skin as from a specific kind of animal, e.g. a bear skin, skin of a cat. Also score as object of aggression (Ag1) only if percept is explicitly described as having been aggressed on, e.g. skin of a bear that was killed by a hunter; skin of a cat that was hit by a car.

AOBJ2 ALL OTHER ANIMAL OBJECTS: e.g. feathers in hair, wish bones.

MOVEMENT AND BALANCE

PASSIVE MOVEMENT OR POTENTIAL MOVEMENT:

In general, an unelaborated posture or stance that implies life, but has no explicit active movement component; it is often indicated by a sense of tension without actual movement, e.g., sitting, standing, lying; also includes movement that is simply a response to gravity or other forces and involves no clear action on the part of the percept, e.g., water dripping, leaf falling; also includes potential movement-percept is about to, has just completed, or has the capacity for active movement (a dog about to leap; a panther poised to spring; a man who has just sat down; a bird that flies). For fire content, score for passive movement if there is no elaboration of the concept and no reference to movement, burning, etc.; score for active movement if subject refers to flames, burning, etc. To score for passive movement, follow this basic definition, but specify type of content by using M1, M1A, or M1H.

M1 PASSIVE INANIMATE MOVEMENT: movement conforming to the passive movement definition for inanimate objects.

M1A PASSIVE ANIMAL MOVEMENT: movement conforming to the passive movement definition for animal content.

M1H PASSIVE HUMAN MOVEMENT: movement conforming to the passive movement definition for human content.

ACTIVE MOVEMENT

Active movement reflecting effort or energy of the percept: running, jumping, frowning, sneering, erupting, spouting.

M2 ACTIVE INANIMATE MOVEMENT: movement conforming to the definition of active movement for inanimate objects. For explosion content, score M2 if the explosion is in process.

M2A ACTIVE ANIMAL MOVEMENT: movement conforming to the definition of active movement for animal content.

M2H ACTIVE HUMAN MOVEMENT: movement conforming to the definition of active movement for human content. If Hd inanimate movement (for example, hair blowing) is used to elaborate a human movement percept (this will usually be active human movement), do not score additionally for the inanimate movement (two girls dancing, their hair whipping around them, would be scored M2H for active movement, but would not be scored for the movement of their hair --H1,H2-M2H). If there is human movement (in this case, it will usually be passive human movement) and inanimate Hd movement which is not simply an elaboration of the human movement, then score for human movement, but also add a score on for the inanimate movement immediately following the human movement score (girls sitting with their hair blowing in the wind would be scored for passive human movement and for passive inanimate movement --H1, H2-M1H, M1.

Ma DANCING: score this in addition to an active movement score.

BAL1 PERCEPT DESCRIBED AS HANGING, CLINGING, OR PRECARIOUSLY

BALANCED. Do not score for passive movement when scoring for BAL1.

AGGRESSION

AG1 OBJECT OF AGGRESSION: e.g. wounded or squashed; bleeding if unelaborated or clearly the result of being the object of aggression (mountain lion turned into a rug).

AG2 AGGRESSOR: percept attacking, stalking prey, colliding, kicking. If the percept is also wounded, score for object of aggression in addition to the aggressor score.

AG3 DEAD: Score if percept is explicitly identified as dead, or if from the description, the percept clearly must be dead.

AG4 SYMBOL OF AGGRESSION: e.g. knife, submarine, hideous monster floating, aggressive look, holding out hand in imitation of a gun, growling, teeth clenched, aggressive behavior with no focus or actual aggressive consequences.

OTHER CONTENT CATEGORIES.

CLOTHING

CLO1 ALL CLOTHING EXCEPT THOSE COVERED BY THE FOLLOWING SUBCATEGORIES.

CLOA BOOTS.

CLOB SHOES.

PR1 PERSONAL ADORNMENT: personal decorative apparel, e.g. bracelet, bow, necklace.

INTERACTION

IN1 NEUTRAL INTERACTION: content in which percepts are described as interacting, but with no implication of positive or negative involvement e.g. looking at each other (but not simply facing each other or other concepts which indicate physical orientation, but not necessarily any interaction between percepts).

IN2 POSITIVE INTERACTION: percepts are described as interacting with each other with a definite positive affect, or in a way that clearly reflects positive relationship; e.g. smiling at each other, playing with each other.

MISCELLANEOUS

EMB EMBLEM: insignia, coat of arms, and other objects which serve as symbols for something (crown, shield, boy scout badge)

MASK MASK: any kind of mask.

TE TEETH: score whenever it appears in response, even if it is part of a larger percept.

FI FIRE, FLAMES: if the percept is described as fire with no elaboration, score for passive movement (M1); if percept is described in terms of flames, burning, etc score for active movement (M2).

SM SMOKE: if smoke is described as rising, drifting, etc, use passive movement score (M1).

CL CLOUD: If cloud formation, do not score for plural (E27); however, if it is a cloud formation, and subject refers to clouds, score for E27.

EXPL EXPLOSION: this is any kind of explosion or eruption, including a jet stream, volcanic eruption, or exhaust of a rocket taking off (if exhaust of a rocket taking off is described only in terms of fire, score for fire (FI), not explosion). If the explosion is in process, score for active movement (M2). Use symbol of aggression score (AG4) for explosion of a bomb or weapon.

BL BLOOD: if flowing or dripping, use passive movement score (M1);

if spurting or bleeding, use active movement score (M2).

BU BURN.

ST STAIN.

PA PAINT: not as part of art, abstract art or a painting, but simply the substance, paint; e.g. paint spattered on the wall; somebody dropped a can of paint. If paint is dripping or was just spilled, use passive movement score (M1).

XRAY XRAY

X CROSSECTION: when subject describes percept as a crossection of a specific type of content.

FO FOOD

ARCHITECTURE

ARCH1 RESIDUAL ARCHITECTURE: all architecture not covered by the following subcategories.

ARCH2 BRIDGES OR ARCHWAYS.

ARCH3 DOMES.

ARCH4 TOWER: including windmills.

ART

ART1 PERCEPT SEEN AS EXAMPLE OF A TYPE OF ART FORM: but not as a specific work of art; e.g. a painting, a model of something, a statue, like in a movie, or like in a play. If subject identifies the percept as a painting or model of a specific person, but the percept is still not a specific work of art, score for ART1, and also score for G10 for specificity; e.g. a bust of president Kennedy would be scored for ART1 and G10.

ART2 CHARICATURE OR CARTOON: e.g. a cartoon of Beetle Bailey (this would also be scored G10 for specificity), a cartoon head.

ART3 ABSTRACT: a painting with no form, modern art, abstract painting. Do not score "an abstract picture of two men sitting," as ART3. Because this has form, it would be scored as ART1.

ART4 PHOTOGRAPH: a picture, snapshot, or photograph. This category is only used when the percept is clearly identified as a photograph.

ART5 SPECIFIC WORK OF ART: this can be a painting, statue, or other work of art, identified as a specific item, in general it must be identified by name (i.e. the Mona Lisa, Rodin's Thinker). In addition to ART5 also score for specificity (G10).

ART6 MYTH, FABLE, FAIRY TALE, ETC: percept is identified as a character from a myth, fairy tale, book, fable, play, folk tale, etc., e.g., the witch from Hansel and Gretel, Oedipus.

PAT GEOMETRICAL OR OTHER PATTERN.

GEOGRAPHY: If there is a conflict, use most emphasized concept.

GEO1 A GENERAL MAP.

GEO2 ISLAND OR ISLANDS.

GEO3 INLET, BAY AND/OR COASTLINE.

GEO4 TOPOGRAPHICAL MAP.

NATURE, LANDSCAPE AND PLANTS.

N1 RESIDUAL NATURE: all nature not covered by the following subcategories.

N2 WATER

N3 VOLCANO.

N4 SAND, SAND DUNES.

N5 HILL, MOUNTAIN.

N6 CRAG, CLIFF.

N7 FOREST.

N8 ROCK.

N9 CAVE.

N10 SUN, SUN RISE, SUNSET.

N11 STORM.

N12 ICE.

N13 CHASM, CANYON, CRATERS.

N14 DIRT, DUST, MUD

N15 SKY.

LS1 LANDSCAPE: percept is described as a view, scene, panorama, etc. If subject clearly indicates that he views the percept as a

scene, score for LS1, if scoring is unclear, score for LS1, if there are four or more kinds of content within the percept.

LS2 AERIAL VIEW: e.g., view from plane.

PL1 RESIDUAL PLANTS: all plants not covered by the following specific subcategories.

PL2 TREE, BUSH.

PL3 FLOWER.

PL4 LEAF.

PL5 PLANT, CORAL, GRASS (no need to score for plural when subject uses grass percept).

PL6 SEED, BUD.

RELIGION

REL1 RESIDUAL RELIGION: all religious content not covered by specific subcategories.

REL2 EXOTIC, EASTERN RELIGIOUS FIGURES

REL3 EXOTIC, EASTERN RELIGIOUS OBJECTS, ARCHITECTURE, STATUES, ICONS, ETC.

REL4 JUDEO-CHRISTIAN RELIGIOUS FIGURES.

REL5 JUDEO CHRISTIAN RELIGIOUS OBJECTS, ARCHITECTURE, STATUES, ICONS, ETC.

ANATOMY

AT1 GENERAL ANATOMY: score for each anatomy.

AT2 VISCERAL ANATOMY: score in addition to AT1 for visceral anatomy.

AT3 BONY ANATOMY: score in addition to AT1 for bony anatomy.

SEXUAL CONTENT

SEX1 RESIDUAL SEX: all sex content other than that included by the other specific subcategories. Examples of this include pelvis, if gender is not specified, and describing a percept as naked.

SEX2 FEMALE SEXUAL CONTENT: e.g., female genitalia, breast, rump, private parts, vagina, buttocks, hips, feminine shape, female curves.

SEX3 MALE SEXUAL CONTENT: e.g., male genitalia, penis, balls, testicles, rump (when male gender is specified).

SEX4 PERSONAL REFERENCE: refers to own fantasy or experience in describing sexual quality of percept.

SEX5 ANDROGENOUS: confusion about sex of figures or giving them both masculine and feminine sexual characteristics.

OBJECT CONTENT

OBJ1 RESIDUAL OBJECT: all objects not covered by specific object subcategories.

OBJ2 DOMESTIC, DECORATIVE OBJECTS: e.g. furniture, vase, teapot plate, cooking pot, chair.

OBJ4 LIGHT, LAMP, CANDLE.

OBJ5 ROCKET, SPACESHIP, PLANE.

OBJ6 TOTEM POLE.

OBJ7 PARCHMENT, SCROLL.

OBJ9 WEAPON.

RESP TOTAL RESPONSES: the number of main and additional responses in the protocol.

APPROVAL SHEET

The thesis submitted by Mary Yerkes has been read and approved by the following Committee:

Dr. Al DeWolfe, Director
Professor, Psychology, Loyola University

Dr. Frank Kobler
Professor, Psychology, Loyola University

The final copies have been examined by the Director of this thesis and the signature which appears below verifies the fact that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

10/3/83
Date

Allen S. DeWolfe
Director's Signature