CHAPTER III

METHOD OF STUDY

Procedures Followed:

All the cases studied here have been examined individually and an average of five to six hours were spent on each case. The investigator had to move from place to place for collection of data. Hence the testing situation could not be kept ideally the same in all cases. But attempts were made to make them similar as far as practicable. In general, the cases were interviewed and tested in a medium-sized room free from superfluities of furniture, decorations and colourfulness. During testing session only the tester and the subject were present in the room. Instructions were issued to the people around that nobody should disturb the testing session in any way either by entering the room or by making any kind of noise around, anything that may distract the subject was avoided as far as possible. The sessions were concluded when the investigator wanted that.

The six hours testing session spent on each case was usually spread over to two successive days and in few cases, only more than two days. The session started with a brief period of casual talk for establishment of a workable rapport situation. The investigator adopted a flexible attitude while establishing rapport, to suit subject's attitude towards the tester and testing session and also their age, status, social position and emotional requirements, as revealed in the first interview. The main purpose was to win the subject's confidence on the investigator and also his desire for co-operation which was possible only when the subject could be
made interested in the testing situations. Adequate care was taken to make the subject feel at ease with the situation, as far as feasible.

Throughout the testing session an easy and informal atmosphere prevailed. The initial period, devoted for establishment of rapport was followed by a short period of interview, which was so oriented as to get relevant informations about the subject's family environment and inter-personal adjustments. In case of mentally ill subjects this interview period was extended, and a thorough mental examination was done systematically within the framework of a schedule given in the Appendix. The aim of such examination was mainly to assess mental condition of the subject during the testing session. When this has been done, tests were administered in a particular order. Though the same order of succession of tests could not be maintained in every case, as it was to suit the subject's mood, the time in hand and also to many other factors. Subject's behaviour and talk during testing session and his reactions towards it were noted in observational report, at the end of each session.

Materials Used:

In addition to the Rorschach test, an intelligence test to evaluate the level of intelligence of the subject, and a questionnaire to assess the subject's latent anxiety were also used.

Intelligence Test - The Raven's Matrices Test (1938) was used for assessment of the subject's intellectual level in preference to a verbal test. The test being non-verbal in its content, does not give undue privilege to educated subjects who have attained better hold on language and also to those who are more proficient in language and thus are apt to score
better in verbal tests. Moreover, the items of a verbal test, generally contain idioms, proverbs, problem situations, etc., which are largely dependent on cultural and social environment, and hence, to use them effectively in different culture and society requires a thorough standardization of the test, in that population. As Raven's Matrices Test contains just abstract designs with little or no influence of concrete things relating to one's day to day life, it can be taken as a culture-free test. Raven (130) points out and his view is supported by others as well, that the type of intellectual functioning required in this test situation (e.g., ability for abstract thinking) develop along with physical and mental developments of the individual child, and decline after certain age. So the raw scores of the subjects are to be taken into consideration, always in reference to their age levels. Raven (130) has given the norms for different ages, and with the help of these norms the raw score is converted into percentile ranks and thus placed to grades in a five point scale. The present investigator was handicapped to certain extent by not having norms for the population studied by her. So she had to make use of one supplied by Raven. However, as the standard was same in all the cases studied, it did not affect much in the treatment of results. Moreover, there is no other better substitute to it as no such test is fully standardised in Indian conditions.

Questionnaire Test - To assess the subject's latent anxiety Cattell's personality questionnaire was used. The tool was used not for ascertaining the presence of this symptom in the experimental group or absence of it in mentally ill control group, as in those cases mental examinations usually proved adequate to elicit the symptom. Moreover, there were case history Psychiatrists report and at times nurse's observation to verify ....
verify and support the observations made through interviews. But in cases of so-called normal subjects, this type of probing into personality with the help of the inventory proved very useful, as the usual mental examination procedure could not be applied to them and interview did not yield much if the trend remained latent. The questionnaire though contains more or less direct questions as in case of interviews, is definitely creating a different situation, i.e., testing situation where the subject is apt to feel less self-conscious, as the tester is not in the focus of the situation (This also yields quantitative scores which help to compare performances of different subjects). The present investigator has chosen Cattle's personal questionnaire out of a number of such prevalent questionnaires for the following reasons. The form of questions of the Cattle's scale are simple and straightforward. These are in form of questions made during interview. However, it was easier to convert them in any language with which the subject was conversant during the testing period. The subject also finds them more convenient to follow than the more twisted type of questions used in other inventories. All the more, there is not a single question which is referred to any specific situation or which has reference to any specific culture and social pattern, as we find in cases of many other inventories. Lastly, the technique of giving answer to the questions adopted in this scale are very convenient. Instead of giving answer in form of 'Yes' or 'No', or 'True' or 'False', i.e., making choice between two extreme poles either accepting a thing or denying its existence totally, this introduction of a intermediate step of answering, e.g., 'occasionally', or 'slightly' provides the subject with a convenient clue to answer. Along with this scale the investigator also used Taylor's adaptation of Minnesota Multiphasic Test (known as Taylor's Manifest Anxiety Scale, or M.A.S.) in a number...
number of cases. But this had to be dropped due to some inconvenience (discussed in Chapter V). Both the inventories are given in the Appendix.

The Rorschach Test - The standard series of the Rorschach cards were used, which consists of ten printed plates reproducing in blots. Of these ten blots, five cards (e.g. Cards I, IV, V, VI, VII) are achromatic. They have different shades of black only. In two cards (e.g. Card Nos. II and III) there are black and red colours, while in the rest of the cards (e.g. Card Nos. VIII, IX and X) there are variations of different colours. Though the cards contain mere blots of ink, every blot fulfills certain special requirements as well as general ones, which made the blots suggestive and elicited responses. The figures are symmetrical with very little differences between the two halves and there are some accidental forms made out of these blots.

The experiments consists of giving associations to these blots.

Administration of the Test - The administration of the test is relatively simple and requires, apart from the test materials, a sheet of paper to note down the subject's responses and reactions to the test situation, and a stop-watch to note the timing.

The preparation of the subject is the first step in administration of the test. Rorschach (95) gave much stress on this aspect of the test, as the test was to obtain free association of the subject. Beck, Klopfer and others (9, 38, 48, 64, 77) also took extra care in this aspect. They made the subject sit very comfortably in a half reclining position in front of the tester with their back at him so that the tester could have a full view of the test while the subjects give association. Rapaport (92)
preferred a face to face position so as to study the subjects' facial expressions etc. during the test. In the current series of investigations, the subjects were comfortably seated either opposite or at the side of the tester as when taking other tests or during interview sessions. There was no special arrangements or extra perceptible care shown during the Rorschach test which might result in making the subject apprehensive, or cautious especially when the subject was suspicious and/or of paranoid type. Sufficient care was, of course, taken to have the test done during the subject's usual state of relaxation of body and mind.

Before the cards were handed to the subject, the following instructions were given:

"I am going to present you a series of ten cards, one after another. They are just like ink blots. There is nothing specific in them. People see all sorts of things in these ink blots. Look at each card and tell me what you see on them. Be sure to tell me everything you see on the cards. There is no time limit. However, you will return the cards when you finish with it."

Any provocative language, e.g. "this is a test of imagination" or "there are photos" etc. was avoided while giving instructions, as well as throughout the testing period. However, the subjects were reassured that this is not a test of intelligence and there is no right or wrong answer to it, to make the subject work at ease. Occasionally, suspicious and inhibited subjects were shown how the figure is prepared (by dropping a little ink on paper and folding it to get a figure). This helped in many cases to wipe away the inhibiting force and making the subject acquainted
with the nature of the material and its unstructured quality.

In the second phase of the administration, the test cards were presented one after the other as in the series. Care was taken that the subject did not catch a glimpse of the plate from a distance since this might alter condition of the test. After presentation of each card, the subjects were asked, "what might this be", "what do you see on them", "what they look like" and so on and so forth. The subjects held the plate in their hands and might turn them about as much as they liked. They were free to hold the plate near their eyes or at a distance of an arm's length. They were free to respond as they choose. They were, however, encouraged to give answer where they failed due to strong inhibition. Any leading question, e.g. "am I supposed to take the figure as a whole or in fragments?" asked by the subject during the testing period, were answered by saying "as you like it to be", or "that is up to you", and so on.

Subject's reactions were noted in verbatim. During recording the usual procedure is to note the time of first response on each card (reaction time), the length of time during any long pauses between responses, and the total time each card is held. The present worker did not give much stress on the time factor since a major part of her samples were drawn from mentally ill subjects who are handicapped usually so far as time element is concerned due to their preoccupation, or blocking or psychomotor retardation.

Apart from the timing, the positions of cards while giving association were noted as suggested by Loosli-Usteri (127), e.g. $\wedge < >$ the peak of angle suggesting the top of the card and a spiral (©) suggesting
moving the card in all directions. Other behaviours of the subjects, e.g. a smile, exclamation or any other expressive behaviour, embarrassment, etc., while undergoing the test, were also noted.

The third phase of the administration of the test is the enquiry part. This commenced immediately after the subject gave his final association in Card X. Each card was then returned to him one after another as in the series and he was asked further on the associations he had already given. The task of the enquiry is to ascertain what the subject selected for his response and the inherent characteristic of the blots that determined his percepts. Hertz, Rapaport, and others (49, 92) raised question of making enquiry after each card is finished on the ground that some of the subjects, e.g. mentally ill and children, cannot retain in mind the association they have given previously. But the present worker did not find much difference in retention of the association till presentations of all the cards were concerned, between the normal and mentally ill subjects. However, this depended to a great extent on the interest the subject took over the test. If he could be made adequately motivated to undergo the test, he could remember the association given on the card I even after he finished giving association to Card X; it did not matter much whether a subject was mentally ill or normal, as the type of cases studied here were not expected to have disorder of memory. (The subjects who are going to show such disorders, e.g. cases with organic brain lesion, or senility, were not included). Hence, the original method of enquiry was followed by the present investigator with little variation, after Baughman (118, 119). However, Baughman's method was not followed totally, only the original method was made a bit flexible.
After the enquiry period comes the fourth phase of the test, suggested by Klopfer (64) and developed by Hutt and Shore (53) as routine administration, e.g. testing the limit. This is however, the optional phase of administration. This phase yields informations which are not utilised in scoring, but are of much importance to the interpretative evaluation of the record. In this phase, direct questioning is permitted for the purpose of measuring the subject's reaction under pressure. The aim of it is to explore the capacity of the subject to utilise blots elements that he has not spontaneously reacted to during the performance proper. However, this procedure spoils the ground for readministration of the test by making the subject oriented in certain way by leading questions and thus is unethical. Moreover, the subjects who are rather suggestive by nature, will bring forth forced percepts under this testing the limit situation, and thus will complicate the picture. The procedure itself is lengthy and this testing the limit makes the test unnecessarily prolonged. Considering all these disadvantages, the present investigator dropped the idea of testing the limit of the shading scores.

Scoring - The most difficult part of the test is scoring of the responses. Rorschach's original method of scoring has undergone modifications and refinements to some extent, as mentioned before, in the hands of different authors like, Beck (9), Hertz (48), Binder (49), Klopfer (65) and others. The present investigator has followed the method outlined by Klopfer, differing in few items only.

The initial responses to the blots are analysed into four different scoring categories. These are:
1. The area of the blot chosen which is technically called dimension.
2. The inherent qualities of the blot that determines a specific response, technically known as determinant.
3. The degree of conformity of the perceived object with the real one, known as the evaluation of form level.
4. The types of things perceived, known as content.

To these four categories, a fifth is added, that is, whether the percept is seen as unique one or is popularly seen.

**Dimension or area chosen** - The subject may choose the whole of the blot area, or the obvious and conspicuous parts of the blots, or the other parts as dimensions, and they are scored as W, usual details as D and rare details as Dd responses.

**W or the whole response** - Klopfer (64) makes further classification of the W response in the following way -

1) Where entire blot is used, the response is scored as W.
2) Where major part of the blot areas are chosen, and a very small area is left off, the response is scored as cut off W, e.g. W
3) Where the subject's concept is first formed based on a part of the blot, and then its meaning is generalised to the whole of the blot without justification in terms of matching the concept according to the blot material, the response is scored as D'W.
4) Where the entire blot plus the white space of the blots are used, the W5 score is given. The S is scored as additional.

Rorschach, Beck and others only made qualitative differences of the W as also was done by Klopfer, but they did not use different symbols except in general. DM. The Rorschach workers do not differ much in scoring W responses/However,
one marked difference is in scoring it in the Card III, e.g., "two men are doing something or other", excluding the red area. It is scored as W by Rorschach. Beck scored it as D, while Klopfer gave A. The present investigator preferred to give W score to this on the ground that the construction of this blot is such that organising the whole blot area to give a W response is rather a far-fetched achievement of the subject. However, when a subject excluded the lower middle roundish area of the blot from his association, a H was scored.

D or obvious detail responses - The responses which covered the large obvious parts of the blot areas marked off by their gestalt qualities inherent in them are categorised as D. These are most commonly used responses. The Rorschach workers differ somewhat in scoring their D responses. Beck (9) forwarded a list of D based on statistical frequency. Hertz (50) also did the same based on protocols from normal adolescent subjects. Klopfer & Rickers (64) also developed a list of D responses based on qualitative evaluation of the strikingness of the details in the blot. Klopfer (64,65), however, subdivided the usual details of responses into large usual detail or D, and small usual details or d, based on volume of the area chosen and also that his d's are usually insular and peninsular in nature. Rapaport's (92) Dd score is same as this d concept. The present investigator was guided by the list of D of Klopfer when scoring D and d responses. The list is added in the Appendix (178-73).

Rare details or Dd responses - In scoring dimension, Rorschach workers differ most with this unusual or rare detail responses. Rorschach (95) included space or the response which makes reversal of figure and ground, e.g., using white background as figure and vice versa in his rare detail or Dd responses. The other such (rare detail) responses according to him is Do or oligophrenic detail, i.e., in which only the part of the body is seen by a
subject, though others see the whole body clearly in the same part of the figure in question. Beck (9) recognised this Do type of responses in his content category by giving Hdx and Adx scores for parts of human and animal concept where others see the whole. Beck did not further subdivide his Dd score and he included in it all that cannot be scored as D. He gave a separate scoring to space or S responses. Klopfer (64, 65) has made further finer differentiations in his Dd scores which run as follows:

1. The responses which are like d responses by nature but the areas are very small and not chosen frequently, are scored as dd.

2. The responses which use the edge of the blot area are known as de. During enquiry it must be determined that it is the contour of the edge itself that was the location for the responses and the fact that none of the shaded portions are used.

3. When inside the shaded portion of the blot is used, di is scored. The essential factor is that di's are seen inside of a blot area which to the overwhelming majority of the subjects is an unbroken surface.

4. Rare detail or dr score is given when an unusual location is used. These dr responses can be large or small. They may be loosely structured or vague, or unusual combinations of D and d areas.

Rapaport (92) also used these subcategories of Dd except dd in his rare detail or Dr score (as he names it). Klopfer has scored S along with D and d as the case may be, giving such S as additional score. The use of space areas purely have been scored as S. The present investigator has followed the scoring of Dd and S responses based on Klopfer's method.

Determinants - The next essential step in scoring is that of determinant, that is, the component factor which determines the concepts perceived
by the subjects. A concept may be determined by the shape of the blot, or its colour, or the surface use of differences of shading nuances. Here the subject is responding to those aspects of external reality that happen to be implicit in the blot material. The perception of the subject may also be influenced by 'inner determinants' (opposed to outer determinants as in previous cases). He may thus, enrich his perception of the blot with his own imaginal processes, attributing to it some thing that is not there. Whereas the blots are static and two dimensional, he makes them more life by projecting a kinesthetic element into them or attributing depth (third dimensions) to them. These different determinants may be classified into four main types with subcategories. These are form, colour, movement and shading responses. Of these four different types only the colour scores have been universally accepted as originally defined by Borschach. The scorings of the other three, e.g., form, movement and shading have been debated at length and have led to elaborations and refinements, which have been variously accepted or rejected.

**Form responses** - This is the most commonly chosen determinant, where concepts are determined by the contour of the blot area. This score is specified with the symbol F. In many cases, however, the concepts are determined by outline or contour of the blot as well as their colour, shading and other components. Such combinations are not given pure F score. They are treated only with respective determinants with which they are combined. Ascertainment of levels of accuracy of the form responses are another big problem of scoring. The standard of this accuracy vary enormously among examiners. There is, however, a general agreement that form accuracy of the responses are probably distributed normally. Concepts of
mediocre form accuracy are given most frequently. The more accurate or the more inaccurate a response is, the less frequently it is given. Horschach (95) gave score F+ and F- for accurate and inaccurate form responses based on responses of 100 normal subjects. Even though the normal range is statistically fixed in this way, judgement of what is better or worse than the good normal responses remain a matter for subjective evaluation to a certain extent. Horschach, therefore, concluded that the form answers having been evaluated, 5 per cent more or less F+ should not be considered significant in calculating F+ percentage since the evaluation is purely empirical and not absolutely objective. Beck (9) forwarded a list of F+ responses based on statistical frequency. Another list of F+ responses on the basis of frequency and on the basis of subjective evaluation in the case of frequent responses has been prepared by Hertz (48). She has maintained a check over the latter judgement by securing ratings from 5 judges to reduce the "halo" present when an individual examinee emphasises too readily with a subject's response. Klopfer (54) also set up norms based on frequency and qualitative determinations of the form accuracy to definite criteria. He scored as F+ only a few responses distinguished by unusual keenness of form perception, as F- only the grossly abnormal responses and the remainder as F. Later he tried to start the problems involved in scoring F+ or F- by substituting an F% scoring for F%, although maintaining evaluation of quality of the form in the interpretation of the record. Recently, however, he (65) introduced rating the form quality on a scale from +5 to -2. Goldfarb (65) proposed a modification of this method of form rating. The present author follows Oberholzer (79, 80) and Rapaport (92) in scoring form level, thus using F+ and F- to specify remarkably accurate and inaccurate form percepts and also uses ± scores for
averagely good form concepts.

**Colour responses** - When coloured aspect of the card is stressed in forming concepts the C score is given. Where the subject forms a concept based on colour purely, e.g. giving associations like fire or blood to the red areas, the C is scored. Here the perception of the colour of the blot area or areas alone, bring forth such association. There may be different variations of C as clearly differentiated by Klopfer. These are pure C, CN (colour naming), C des (colour description) and C symb (colour symbolism). Pure C is the type specified here. One of the most interesting variations of colour responses is naming or listing of colours intended by the subject as an answer to the question, "what can you see in the cards?" This is given CN score. It must be differentiated from casual remarks or descriptions of cards or colours (C des) which is not given the value of a scorable response but is treated qualitatively during interpretations. C symb is scored for the concepts where colour is used in symbolic sense, e.g. green means essence of life. Majority of the colour responses, however, are accompanied by forms as well. A concept is formed both on the basis of the colour of the blot and its contour. When the colour predominates CF is given, and when form predominates FC is scored. Thus there are three variations of colour responses, FC, CF and C with some subtypes of C, CN, Cdes, C symb. Klopfer (64) adds a fourth variation of colour responses with subtypes, e.g. F/C and C/F for concepts in which colour, while used, is actually used in a colourless sense, in that it merely marks off or designates certain areas but has no colour value. The present author uses colour score in its usual three varieties.

**Movement responses** - These are the interpretations which are determined by form perceptions and kinesthetic factors. The subject imagines
the object interpreted to be in motion. According to Rorschach, answers may be considered as kinesthetically determined, practically only when human beings or animals capable of motion similar to that of human beings (monkey, bears) are seen in the figures. Oberholzer and Beck adhered closely to Rorschach's original method of scoring movement responses and used symbol N (like Rorschach) for such answers. Klopfer and Piotrowski (64, 65, 83, 87) introduced refinements in scoring of N by singling out three main varieties of movements, e.g., human movements scored as N, animal movements scored as FN and movements of inanimate object scored as n. Only responses are conceived to be formless or form playing a subordinate role and thus we have its subtypes as m, mf and Fn. m is scored for responses like 'spiritual psyche' or abstract forces. Hertz (48) further subdivides movement scoring into 5 categories, e.g., N for human or human like movements, (M) for impending such movements, e.g., strain or tension, M for animal movements, (H) for impending such movements, and m with its usual combinations with F for inanimate movements. The present investigator has followed Klopfer's method of scoring movement responses.

Shading or chiaroscuro responses - These are the responses where the subject uses the darker and lighter variations of the gray areas and occasionally also that of the chromatic areas as determining factor of his responses. The Rorschach workers disagree most in scoring this determinant, most probably because Rorschach could not duly elaborate the concept due to his untimely death, but only suggested it. He did not introduce a category for these responses in his original monograph, but made use of the symbol (c) for them in his posthumous papers published with Oberholzer and Schneider (80). He suggested three variations of this score, e.g., F(c),
(c)F, and (c) based on involvement of form in the concepts. He did not use a separate scoring symbol for the concepts using dark and light variation as colour, though he recognised its existence. Binder (49) was first to make elaborations on the scoring of shading responses. He distinguished two main types of shading responses those characterised by a diffuse total impression of light and dark value, which may be of three different subtypes based on combination with form element, (Pbd, hdP and hd) and those responses which include all the individual shadings in the interpretations, that is, within the section selected from the blot leaves no single bit of shading uneaccentuated for, but interprets each separately. Beck (9) introduced a different method of scoring of this shading responses. He distinguished two forms of shading responses, one giving three dimensional concepts, i.e. Vista responses, specified by the symbol V and the other flat light determined responses specified by the symbol Y. Among the latter, also cited the texture dictated associations which is given the symbol T. Beck, of course, did not recognise the conceptions of texture in his previous works. These Y and V responses have three subtypes based on involvement of form elements in them. Klopfer (63) achieved greater specificity in scoring of shading responses. He differentiated three main classes of shading responses with subcategories. These are, shading giving impressions of surface texture scored as c, the second type is shading giving impression of the three dimension or scored as K and third is, shading giving the impression of three dimensional experience projected on a two dimensional plane scored as k. Cutting across these three-fold classifications is the important distinction between differentiated and undifferentiated use of shading. These three types, each having usual variations of three subtypes according to form involvement run as follows :-
Fo: Where the surface or texture effect is either itself highly differentiated or more usually, where the object possessing surface or texture qualities has definite form.

cF: Where the subject has a vague or indefinite form, and the attention of the subject is focussed on the surface.

c: Where the subject demonstrates that he quite disregards any form element, and focuses interest only on the surface or texture effect. This demonstration can only be assumed if the subject uses the shading in this way mechanically, repeating this type of response more than twice in the series of blots.

FK: Where the three dimensional or depth impression is combined with definite form perception giving Vista or perspective to a landscape for example.

KF: Where some form enters into the depth or diffusion impression but with formlessness and flux implicit in the concept, e.g. clouds, smoke.

K: Where the response implies depth or diffusion with no form.

Fk: Where shading gives the impression of a three dimensional expanse projected on a two dimensional plane involving definite shape. Although the shading is used within the context of a definite object (for instance, an X ray of the chest with ribs showing, or the topographical map of a definite country), it is characteristic of the Fk response that the shading effect itself is used in a relatively indifferent way.

KF: Where the three dimensional expanse is projected in a two dimensional plane on an object of indefinite shape.
k: Where the three dimensional expanse is projected on a two dimensional plane in a way that implies no form at all. This is extremely rare.

Klopfer's KF and K responses are similar to hd and hF responses introduced by Binder. However, Binder's Fhd score does not correspond to Klopfer's FK score. Klopfer's Fc responses, i.e. responses based on shading as texture in addition to and in refinement of the use of form, coincide with Binder's F(Fb) with the exception that Binder includes the Vista responses in this category. Klopfer's Vista or FK responses coincide with Beck's Vista or V responses. Klopfer recognized the subject's reaction to gray, and black portion or to white spaces by using these gray, black and white in its colour value, e.g. snow, black crow, etc. He gave C\textsuperscript{c} score to such responses. This C\textsuperscript{c} score appears in the usual variation of Fc\textsuperscript{c}, C\textsuperscript{c}F and C\textsuperscript{c}. He specified them as achromatic colour responses. These responses partly resembled Beck's Y and Binder's Fhd responses. Following the line of Binder's analysis, Bapaport has used ch symbol for scoring shading responses in all its divergent categories, and C\textsuperscript{c} score for achromatic colour responses. Guirdham(121) also used the same symbol. Both ch and C\textsuperscript{c} appear in the usual variations of Fch, chF and ch, and FC\textsuperscript{c}, C\textsuperscript{c}F and C\textsuperscript{c} based on involvement of form in the associations. He does not give separate scoring for Vista responses. Bapaport (92) has, in addition, used F(C) symbol for two different kinds of responses, e.g. (a) subject making out forms within a heavily shaded area without using the shading as such, or (b) using different shadings of some brightly coloured area to elaborate his responses. Klopfer holds regarding the reactions specified by the first variety of F(C) responses of Bapaport, that shading determinants enters into such responses only if the shading is used to emphasize surface texture, otherwise they are dealt as di F responses. Binder's F(Fb) score includes
 Rapaport's $F(C)$ score. Piotrowski (33) used symbol $C^*$ for responses which are qualified by dark nuances of the blot, with two variations, $FC^*$ and $C^*$. His $FC^*$ coincide with Binder's $Fnd$ and $C^*$ with Binder's $Hd$ score. He also used $c$ score with variations as $Fc$ and $c$ and $Fcw$. His $Fc$ scores are equivalent to Klopfer's $Fc$ and $FK$ score combined and Binder's $F(Fb)$ score. He scored $c$ for responses where forms are disregarded e.g. Topographic map, X-ray etc. $Fcw$ is scored where white is used as colour, which is rarely being done.

Divergent Determinants - There are certain responses which cannot be categorised in these four different types of determinants and their subtypes. Many of them occur in which movement, colour and shading or any of their subcategories blend. Following Rorschach's tradition, Beck and others score such responses with multiple determinant. Beck (9) says in devising the symbols to represent these responses, it is advisable to set a period between the letters standing for the different categories, e.g. $MiFC:FK$ or $V$. Another diverse determinant rare in occurrence is $PO$ recognised by Rorschach, Beck and others (95, 9). These are responses determined by position of the blot, e.g. a part of the blot is called the heart as it is in the centre. (Rorschach stressed diagnostic importance of such responses). This score has been accepted by Klopfer as well, Hertz used the symbol $NO$ (48) for the responses which are determined solely by number of blot areas used by it.

Popular & Original Responses - A response is classified as a popular response, if it is frequently elicited by a given blot area. If it is only rarely associated within a given area it is termed original. Popularity - (95) originality, is a concept presented by Rorschach in his posthumus publication.
Popular or Vulgar responses were defined as those interpretations which occur once in every three records. The original were defined as those which occur once in every hundred records. Different workers later gave various criteria for evaluating popular responses. Guirdham (121) called a response occurring once in every six records, a popular response. Other workers, e.g. Hertz(48), Klopfer (64) applying the same criteria gave a list of popular responses. Beck (9) distinguished twenty popular responses on the basis that the percentage of frequency of a given response to a W or D (the only location in which P response may occur) is approximately three times or more greater than the next most frequent responses. The popular responses forwarded by different authors have been listed in the Appendix in a tabular form. The present author did not find out P responses of her population. P responses have been found to be much affected by cultural differences of subjects. There was, moreover, no published list of P calculated from protocols of Indian population to consult. Hence it was preferred not to score P responses of individual subjects following any of the lists given in the Appendix.

There is universal agreement as to the method of determining the original responses. Some Rorschach workers, e.g. Beck (9), no longer score this category. Klopfer (64) distinguishes between main responses which are original and original addition to more frequently perceived responses; the latter scored with an additional original score. The present investigator did not use the original score following Beck's line of argument.

Content: After evaluation of dimension or location, determinants and then ascertainments of level of accuracy of the forms perceived, the next question was what has been seen. The range of association given by subjects has no boundaries. However, there is concentration in two principal categories. These are the percepts of human, specified as H, and the
the animal as A, with human details (Hd), and animal details (Ad), adding to these, the anatomy association (At), we encompass the majority of association. Besides these categories, Beck made 29 more classifications using short abbreviations for each. He also gave two more, e.g., Adx and Hdx, which are given to parts of animal and human seen in place where usually full figures were seen. Rorschach and others give Bo scores in dimension to such responses. Klopfer (64) used seven broad classifications of content apart from H and A responses (which in turn, are having five subtypes each, e.g., Human (H), human details (Hd), human anatomy (At), symbolic use of parts of man's figure (Hd abs), and caricature and mythological figures (H). Linder (126) was the first to make extensive study on content analysis of the Test's associations, suggested 43 categories of Rorschach content. List of contents scored by Klopfer is given in the Appendix. The present investigator scored content according to Klopfer's method, though did not use all the subdivisions of H and A responses, with some alterations here and there.

**Recording Technique**

The recording technique as suggested by Rorschach goes as follows:

On a sheet of paper, first the number of the cards are identified by the Roman numerals. After each number, in the parenthesis, is stated the time required for the first response in that figure. This is followed by the number of responses to each card by Arabic numerals. The number of responses are taken as cumulative, hence the final one shows the total number of responses or R. A fresh numbering for each card is also given by many workers. Then there are verbatim reproduction of the responses given by the subjects and also informations gathered through enquiry. On the extreme right comes scoring for each response in abbreviated symbols.
mentioned before. The record should contain more than mere answers given by the subjects. Facial expressions, other expressive behaviour and emotions are also noted down. Also, the presence of shock, if there is any, should be recorded. Shock refers to evidences of disturbance in reaction to color, shading or kinesthetic aspect of the cards.

Oberholzer (79, 80) has introduced the concept of black shock; Schachter (132) red shock, and Localli-Usteri (127) the kinesthetic shock. The evidence of shock, they noted, and expressed through uneasiness, exclamation or any other emotional disturbances, delay, hesitation, marked fall in good form level or marked increase or decrease in number of responses.

After the recording comes the problem of tabulation. Klopfer has introduced individual record sheet, a six page folder, 8½ by 11 inches, along with picture sheet on which there appears reproduction of all the blots to be issued and indicating the areas chosen by the subject for his responses. Klopfer preferred writing scoring symbols for each response on a separate sheet rather than along with the responses and hence, in his record sheet one page is exclusively devoted to the scoring of each response.

In the tabulation, the total number of responses or R, number of failures or rejections of cards (if there is any), and timing scores in form of T/R and average reaction time of giving the first response to each card, R.T., form the first preliminaries; T/R is calculated by dividing the total time taken for the ten cards by the R., and R.T., is calculated in two sets by finding out averages of reaction times of achromatic and chromatic sets. In the Location category, the total number of each of the symbol and percentage of each, out of a total number of
responses are calculated. Apart from these, there are two essential steps of location categories; these are calculating mode of approach or apperception types and sequence. The mode of approach or apperception type is evaluated by finding out relationship between different location categories. Klopfer in his recording blank gives expected relation of these categories as expressed in percentages. He used parenthesis and underlining to indicate underemphasis and overemphasis respectively in the use of any one of the five major location categories. Single or multiple parentheses or lines are used depending on degree of under- or overemphasis. The expected relation is expressed as W-D-d-S Dd, and if the W is overemphasized at the expense of D this will be referred as W-(D)-d-Dd, and so on. Sequence in the mode of approach is another important step of tabulation. The expected sequence in each card is W-D-d-Dd or the reversal of it. This is known as systematic sequence. An unsystematic sequence is one in which there is any violation of this sequence for instance, the use of Dd or S between W and D, or the insertion of W5 somewhere in the middle of the stream, e.g. W-Dd-D-d-S, or D-d-W-Dd-S. The problem of succession does not arise where only one response is given to a card or where only one location category is used. Klopfer gives rules to score this sequence as follows: 1) If not more than one card shows either a systematic or unsystematic order, succession cannot be scored, 2) If there are any cards in which there is no succession, the number of such card is added to the number of systematic or unsystematic cards whichever is greater. The type of succession may be read from the following table:
Beck and his followers score Z or organization value quantitatively for degree of organization of the blot areas involved in conceptualizing the association. Addition of the individual Z score gives the value of Z, which is taken into consideration in course of interpretation.

In the determinant category, the total number of each of the subtypes and only percentages of F responses out of total number of responses are calculated. Percentage of good form responses out of total number of F responses, i.e. F,+%, is also evaluated. The calculation of total colour value, however, runs in the following line, as suggested by Rorschach. Each C is given 1.5 score, CF 1, and FC .5 scores. These scores are added to give sum C or C value. Klopfer suggested calculation of C in the following way: $\frac{FC + 2 CF + 3 C}{2}$. He also adds further refinements like drawing the psychogram, or histogram showing distribution of different score in an individual record, and also percentages of form predominating shading scores along with F out of total number of R.

Various other ratios relating to determinants are also taken into consideration for detailed analysis of the record. These are: the ratio between F and form predominating shading scores, between chromatic and achromatic colours, between differentiated and undifferentiated shading responses, and also ratio between animal and inanimate movements and achromatic colour and texture responses. These are usually made use of
by followers of Klopfer's method as originally suggested by him. Other workers also make use of ratios like $FC : CF$ and $C_1 : M$ and $W : M_1$, and responses to last three cards. In content category, percentages of $A$ and $H$, out of total number of $R$ are calculated. The percentages of $A$ and $H$ includes $Ad$ and $Hd$ responses respectively.

Lastly, the total popular and original responses as well as percentages of them out of $R$ are calculated.

The tabulation sheet made use of by the present investigator is given in the Appendix (47-81).

The problem of interpretation of the protocol comes after the tabulation of the individual record is over. This is the most difficult and complicated part of the test. This is an analytic and synthetic approach to the problem. The first step for interpretation is analytical, where a protocol is treated in three different ways, e.g. quantitative analysis, sequence analysis and content analysis. In quantitative analysis cumulative scores, percentages and ratios are taken into consideration. In the sequence analysis the order of arrival and distribution of different scoring categories in the ten cards are considered. In the content analysis the significance of the specific associations are given and their symbolic meanings are made use of in course of interpretation. Psychoanalytically oriented interpreters are the person who can make of this analysis with greater skill. Hence the general interpreters usually base their interpretations on sequence and quantitative analysis only. After this initial stage of analysis comes the next stage where informations gathered through different types of analysis are integrated together and synthesized.
In the final stage, the interpreters are to take full view of the synthesized informations in the light of subject's age, cultural background, and developmental history (if available). In certain cases, if necessary, the specific information gathered by analytical interpretations should be verified by case history. This stage also covers the drawing of the personality picture of the individual concerned.