

THE USE OF THE LOWENFELD MOSAIC TECHNIQUE IN THE STUDY OF PERSONALITY

Dr Margaret Lowenfeld

Typescript from RORSCHACH PROCEEDINGS

When a test has been in use for many years in many countries and with an exceptionally wide range of subjects, it is time to look again at the basic concepts which underlie the design of the test. A congress such as this brings material also for thought and discussion concerning the fresh light which can be thrown upon the structure of personality in widely separated Continents, by the use of this test.

The Rorschach and the LMT share a common quality in that what they ask from the subject is a spontaneous response to a standardised set of stimuli.

In the Rorschach test the subject is asked to describe in words the experience aroused in him by contemplation of the stimuli presented to him. In the LMT in contrast, he is asked to relate himself to a set of mosaic shapes arranged in the box before him: to look at them, handle them, select some of them and do something with them - anything that occurs to him - on a rimmed rectangular tray which is placed before him. The behaviour and the comments of the subject while responding to this invitation are noted by the investigator and when the subject states that he is finished, the investigator will discuss with him what he has made and again note his comments.

A central fact about the LMT which has been proved by its use in many different countries, is that it is found to appeal to all types of people and all ages whether children from 2 1/2 years on: normal and disturbed, gifted average or all grades of backwardness: with normal, neurotic and psychotic adults, in marriage guidance counselling, in the study of vocational adaptation and in research into the structure of personality.

Two other advantages greatly increase its scope. The first is that it can be used an indefinite number of times with the same individual, which renders the LMT of considerable value in study of the changes taking place under psychotherapeutic treatment, or conversely during a process of deterioration under stress. The second is that since each

response made by any individual is recorded as it is completed - either by colour photography, if this is available, or by the more usual tracing around the pieces composing the design and colouring them later. In this way characteristic photos or drawings of mosaic designs make permanent records of changes undergone by individuals under treatment and offer also material for detailed topical research. Such records can be conveniently stored and re analysed later at any time when fresh insight has been gained into the nature of personality or fresh theories constructed.

We come therefore to the question as to why a spontaneous arrangement of coloured geometric shapes should give us any valid information about the people making them, and arising out of what basic reasoning was the test material designed.

To repeat - where the Rorschach test gives us insight into the subjective experience of the subject, the use of LMT enables us to achieve a picture of the personality in action. It is for this reason that many workers have two tests admirably complement each other.

The basic concept which gave rise to the design of the LMT is the belief that if an individual is to be presented with a situation requiring action, from which valid deductions can be made concerning his probable real life attitudes and responses to situations demanding action, that the material with which he is asked to act must be of a nature so fundamental to the universe in which we live that its reality will be apparent in any country and any situation.

At the time when the materials of the test were designed it seemed that the only sphere from which such universals could be drawn was that of elementary mathematics and it is on a basis of mathematical fact therefore that the test materials are designed.

The set of mosaic pieces which are presented to the subject came into being as follows:

First, the SQUARE - the simplest of all forms - with four sides of equal length and four equivalent right angles. (The question of a circle which runs this close, cannot be explained here, although it is interesting that the Zulus have no concept of a square and their mosaic designs are made in circles). The length of the side of the square is therefore the dominant linear dimension of the set.

Two mosaic types of angle are missing and these are supplied by the DIAMOND whose sides are equal in linear measurement to the square, but add two obtuse and two acute angles.

These two shapes complete the four sided pieces.

If however, the square be bisected diagonally, two right angled ISOSCELES TRIANGLES appear, the hypotenuse of which supply a new linear dimension.

The appearance of this new linear dimension gives an opportunity to create with it a second of the basic geometrical shapes, the EQUILATERAL TRIANGLE.

Through bisection of this triangle by a line drawn perpendicularly from the apex to the base, a third type of triangle, the SCALENE is constructed, this having one right angle and two acute angles.

These give interrelated shapes therefore which constitute the set of pieces in the box are:

Squares, diamonds, equilateral, isosceles and scalene triangles; each present in six colours.

If other pieces be added (as was done experimentally by some workers in the beginning of work with the test) which do not interrelate with the others in this way, then the validity of the findings based upon designs made with this enlarged set cannot be relied upon, as chance rather than mathematical relevance decides the composition of the designs.

How then is a decision to be arrived at as to how many specimens of each shape should be present in the box?!

The answer is based upon study of the simplest form of pattern or design that can be made with each single shape. Experiment with the different shapes will show that the answer is as follows:

For the SQUARE - a bigger square composed of four single square.

For the DIAMOND - three possibilities are present - an eight pointed star: a larger diamond made with four single diamonds, and an arrow shape made of 2 diamonds meeting on one side into which an identical pair can be fitted and the line continued indefinitely.

For the ISOSCELES TRIANGLE - two possibilities - either the formation of a square with four pieces, or a line made of triangles fitted together linearly, which can be continued indefinitely.

For the EQUILATERAL TRIANGLE - two possibilities - a hexagon with six pieces and a larger triangle formed by four single triangles.

For the SCALENE - two possibilities - an oblong made with 4 pieces and a hexagon with 12 pieces.

There are therefore present in the box sufficient of each shape to make the larger basic patterns itemised above.

These basic single designs are termed FUNDAMENTAL PATTERNS.

To come now to the question of colour which is very important in a test of this nature. Here again it is essential that the colours selected be those which occur in ordinary life and so likely to be familiar to all subjects. Black and white are easy and occur everywhere - the remaining four - red, blue, green and yellow were thought of as the jewel colours,

So we arrive at six colours and five shapes present in the numbers needed for construction of a Fundamental pattern, and in each colour.

To consider the TRAY - this is oblong, sized 124 inches x 104 inches (31.6 cm x 26.5 cm) surrounded by a narrow rim. This makes it possible to construct edge patterns with all the shapes except the square. Unfortunately there are no dimensions which enable closely fitting edge patterns of all five shapes to be made. The tray should be covered with an exactly fitting piece of white paper on which the design is later drawn.

It is important also, particularly in anthropological work that the tray be presented with the long side towards the subject. Placed upright the shape becomes for the subject accustomed to another outline than our own, that of the book page, the window, the picture, and these resemblances tend to influence the response.

The instructions given to the subject after the composition of the groups of pieces in the box have been explained are:

"Now I want you to do something with the pieces in this box on this tray. You may use as few or as many pieces as you like and whatever of the shapes and colours you wish. Tell me when you are finished".

Designs when made can be of many types. The primary classification of a group of designs is into Representational or Abstract - the latter word being used as in modern art.

Designs may achieve the maker's aim, or fail to do so, in which case they are termed 'successful' or 'unsuccessful'; they may also be 'incoherent'. These main classifications fall into many sub groups, detailed study of which will be found in The Lowenfeld Mosaic Test published by Newman Neame Ltd. London.

A fundamental difference between many of the designs made in the U.S.A and in Europe is that in the U.S.A. attention tends to be focused on the area of the tray, rather than on the inter relation of the individual pieces. The aim then is, as one distinguished American put it 'to make these spaces come alive'.

Designs of this sort may also have a three-dimensional quality, pieces being superimposed upon others. In Europe where the focus tends to be on the relation of shape to shape and colour to colour, and where designs are very frequently both centrally placed and symmetrical, it may even occur that one complete design is constructed on top of another entirely filling the tray.

The question therefore remains - how can what an individual does with these shapes and colours on this tray tell us anything about himself. A description, given recently by an adult patient with considerable experience of working with the LMT, answers this rather succinctly:

'I have never, on all the many occasions when I have made a mosaic, gone to the material knowing beforehand what I am going to make, or saying to myself, "Now I will make, or try to express..." whatever the resulting mosaic may have been. It has always been the contact with the material - seeing it, touching it, playing around with it - that has summoned up my ideas: has, so to speak, opened the door for my imagination, released it and provided a form or channel into which it can flow. This makes using these materials a creative experience of considerable richness, a means of communication.'

The last sentence describes the potentialities latent in work with the LMT. It should, however, not be expected that such an experience would be present in all subjects. The question is always whether the maker of a design is conscious of the communication made or not. The depth and extent of the communication depends on the experience, understanding and the skill in interpretation of the investigator.

One great advantage of the LMT therefore is that it enables an adult with any form of training in the carrying out with accuracy of identical procedures to make sound collections of mosaic designs, noting (in pencil preferably) on the back, name (or initials) age, sex and general occupation of the maker, and send these to a worker trained in the use of the LMT for classification and interpretation.

Coloured slides were then shown illustrative of

A. African children aged 9-14, some from the Luo tribe, some Zulu, some Nigerian.

B. In contrast, three slides of designs made by a doctor from Northern Europe with a keen interest in mathematics. The first two large ingenious constructions of blue and green scalene triangles, in the centre of which appeared a black whirl. In the second, also of scalenes, only of red and yellow. The third made later, a striking dramatic picture of a fierce black and yellow tiger with big black claws.

C. A series of six slides made by an English girl of 19 under treatment for uncontrollable behaviour.

These were followed by single slides of representational designs:

1. Made by a successfully married woman with children, who felt shut in by life and expressed her wish for fun and merriment in a vivid design of a clown.

2. A snake rising from the sea and spitting poison on a little man in a boat, made by a successful American businessman.

3. An ideational design of green grass covering a red and molten earth, and rising from the centre of the grass an unidentified flower 'I do not know what flower this is going to be' said the maker 'only that it is there - and growing'. Above is a cloud described by the maker as 'all the sadness and feelings of loss that are in me'.

This series of slides was chosen rather to illustrate dramatic possibilities inherent in the test than in any way to present standard classification.

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Paper read by Dr.Margaret Lowenfeld

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