

Universals and Cultural Regularities: Aspects of Performance in the Lowenfeld Mosaic Test

Theodora M. Abel and Rhoda Metraux

73rd Annual Meeting, American Anthropological Association, Mexico, D.F.

Session 303, Psychological Anthropology, November 21, 1974

Slides used in presentation in Mexico

Slide Number	Location	Sample, Informant Number, Description
1	p. 2, line 9	Lowenfeld Mosaic Test: Box, tray, forms/colours
2	p. 2, line 17	Lowenfeld Mosaic Sample: Montserrat, Jamaica, Amerind and latmul (types with figures)
3	p. 5, line 4/5	MAE 1953 (Montserrat). TM-27, adolescent boy (Poppy Lynch): "Draught board" and "Poppy" (made of cloth and "you buy for poor").
4	p. 5, line 6/7	MAE 1953 (Montserrat). TM-21. Adolescent boy (John Greenaway): Mixed two-piece combinations (actually none of these is ET on Sq.), which he calls "nothing special"
5	p. 5, line 7/8	Jamaica. C-005, adult male: horizontal rows, mostly single shapes, varied colours; a few 3-piece combinations (in 2 rows, paired RATs, mixed colours; in 1 row, 4 paired ETs, monochrome but contrasting).
6	p. 6, line 3	Jamaica, C-060, adult male: one of three small designs on tray-made up of a curved row of red ScTs
7	p. 6, line 9	MAE 1953 (Montserrat). TM-35, adolescent boy (Michael Skerritt): One of three unrelated figures on tray – but all (farm bee, house and cassava mill) related to local life.
8	p. 6, line 13/14	Amerind, F-7 (Zuni). Adolescent girl: a scene made up of small sets of pieces depicting houses (RAT on sq.), mountains with snow (B1 and W Sq. and W triangles), and bird (blue and Y mixed pieces) – harmoniously grouped on board.
9	p. 6, line 20	latmul, 12-am, schoolboy: "Church," a well-centred and propositioned single structure. It could also be taken for a male figure (lacking penis).
10	p. 6, line 20	latmul, 18-M (Morok) / no.2: "Moon in clouds with star" – 6 colour moon (hexagon) between cloud streamers (varied coloured Ds) with star (square made of 4 RATs) at left. Centred and well-balanced, somewhat asymmetrical
11	p. 7, line 16	latmul, 21-M (Lugulandimi), adult male, No.1: "Crocodile" made with mixed forms and colours, filling board.
12	p. 7, line 17	Amerind. M-2 (Navaho), adolescent boy: "Apple" that stands for "red power" Red/black core (ETs), red (multi-form) rim, white (multiform) crowded (not fitted) between rim and core.
13	p. 8, line 18/19	Amerind. M-2 (Navaho), adolescent boy: "Apple" that stands for "Red Power": Red black core (ETs), red (multiform) rim, white (multiform crowded (not fitted) between rim and core.
14	p. 10, line 5	Amerind. M-5 (Laguna), adolescent boy: well organised design, central core (person_ with balanced symmetrical elaboration in form and colour.

Experience over a generation with the use of projective techniques in field research has demonstrated that, where tests – particularly a battery of diversified tests- have been carefully selected and competently administered, projective materials can make a significant contribution to culture analysis – to our understanding of cultural configurations and in some cases, to the delineation of cultural personality. More specifically, they can heighten our awareness of cultural personality. More specifically, they can heighten our awareness of cultural style and, thus, our understanding of aspects of cultural communications systems.

In earlier studies there was some expectation that blind analysis of projective materials could, in some measure, provide independent evidence that could be compared with findings arrived at by other methods of observation and analysis by the field worker. Today, however, it is widely accepted that far more fruitful insights are obtained when the data obtained by means of projective techniques are placed within the cultural frame, that is, when the field researcher and the analyst (if they are different individuals) collaborate fully in the task of analysis and interpretation.

Cross-cultural comparisons of projective materials, particularly the Rorschach test, have been made for a variety of purposes. But such comparisons rather seldom have been undertaken in order to sharpen our perceptions of and insights into cultural regularities in particular cultures. For this purpose it is crucial to be aware both of universal potentialities inherent in the design of the test itself as it is used in performance and the way these universals are drawn upon and are (or are not) elaborated in the performance of individual members of a society. The culturally regular uses made of these sets of universals provide the background for regularities that may be peculiar to, even unique in, a particular cultural style.

In the Lowenfeld Mosaic Test (LMT), a free, non-verbal performance test, the subject is presented with a box of 256 plastic tiles of five related geometric shapes, each in six colours, and a tray, which provides a bounded working surface, and is asked to make something, using the tiles as he (or she) please. **(SLIDE 1)** The test stimulates the subject's own spontaneous capabilities and each step in the process of production can be followed and recorded. Process and product can be shared with others for purposes of discussion and interpretation and whole sets of designs can be

displayed for simultaneous viewing. This is also one of the every few projective techniques in which the subject, as he works, can observe his own procedures and, in the end can judge the product by his own standards.

The samples we are discussing here and of which we shall present examples come from four sources (Slide 2): two from the Caribbean area (rural villagers on the islands of Montserrat and Jamaica), one from a culture area in the American Southwest (Pueblo and Navaho), and one from lowland New Guinea (an autonomous village by Gregory Bateson 1958) in the early 1930s¹. Only two, Montserrat and Iatmul, may be regarded as relatively full cultural samples, as these include performances by individuals of both sexes and a wide age range. The Amerind group

¹ In each case the set of LMT designs forms part of a larger body of research materials collected for variety of purposes, not discussed in connection with this paper. (Footnote continued, p.3)

The LMT samples are made up as follows:

1. **Montserrat, West Indies** – The LMT sample consists of 65 adults and adolescents and 8 children (T: 35 males, 38 females) out of a population of some 500 in Danio Village (Pseudonym). Three other projective tests were administered by the psychologist (TMA), who spent one month in the field living in the village, and five others over a longer period by the anthropologist (RM) to a smaller number of subjects. A collection of free drawings by adolescents and children also was made. Field work was carried out in 1953-54 under grants from the Social Science Research Council and the Institute for Intercultural Studies, New York. For published references, see Abel 1958, 1960; Abel and Metraux, 1956, 1959; Metraux, 1957; Metraux and Abel, 1957.

2. **Jamaica, West Indies.** – The LMT sample consists of 60 male subjects (fisherman, subsistence farmers, and unskilled and rudimentarily skilled manual workers) from three villages. The LMY (one of 19 psychological and other tests given) was administered by Hilary Sherlock and analysed by TMA, as part of a medical anthropological study of chronic marijuana use. The productions discussed here should be regarded as characteristic only of this marginal male Jamaican group, not of rural Jamaican culture as a whole. On this study, see Rubin and Comitias (in press); for an earlier study of Jamaican children's LMT productions, see Kerr, 1963).

3. **American Southwest** – The LMT sample consists of 30 adolescents (15 boys and 15 girls), 27 from different pueblos and 3 Navaho, all students in the upper 3 grades of a Catholic high school in Santa Fe, New Mexico. Subjects were selected by the school counsellor in terms of their availability on a particular day. This material, taken from research now in progress by the psychologist (TMA), comprises work by one age group in a limited culture-area sample.

4. **Iatmul.** – The LMT sample (all from the Eastern Iatmul village of Tamanu, population approximately 1000) consists of two consecutive series (a) 50 adolescents (26 boys in Standard V and 24 girls in Standards IV and V, age range 11-16), who were given a battery of 5 tests, ending with the LMT, in the setting of St. Joseph's School, the village government school, and (b) 31 adult volunteers (25 males and 6 females, age range early 20s to late 50s or early 60s), most of whom were also given the Weigel Goldstein Scherer Colour-form test and, on other occasions, the Stewart Ring Puzzle test. Two things are significant about this sample: no subject, child or adult, saw a design made by any other individual and the adult volunteers themselves strenuously insisted that they be allowed to try out the games (PE, **pillar**) in which their children had been engaged earlier. The sample was collected in 1971 by the anthropologist (RM) as part of ongoing field research supported by grants from the National Science Foundation (1966-1970) and the Jane Tannenbaum Fund of the American Museum of Natural History, New York (1971-). Analysis is the joint work of the new authors (TMA and RM).

consists of adolescent's form within a limited culture area, all of them students in an American high school. The Jamaicans, all marginal rural males, were selected for a special research purpose.

The samples differ also in one very noteworthy respect. Two groups, the latmul and the Amerinds, come from a culture or of a culture area with very long and still viable artistic traditions, traditions in which highly elaborated formal visual designs are incorporated in ritual as well as in craft productions and are a vital aspect of the non-verbal communication system (Forge, 1974). Today, both groups live to a greater or lesser extent within two culture, but both are conservators and the oldest latmul men had still experienced their fully functioning tradition cultural.

In contrast the Montserratians and Jamaicans tested lack any organised tradition of visual art forms on which individuals could draw. They are (and in Montserrat, in 1953, explicitly saw themselves as) marginally related to a way of life extends far beyond the borders of their villages and islands.²

Here we shall present only three sets of universal,³ defined as occurring within the repertoire of designs produced by a cultural group but not, as a whole, by any one individual. They have to do with (1) simple, fundamental patterns, (2) the type of design, and (3) the approach to the task. In each case we shall indicate common and contrasting ways these are handled in the four groups.

The first set of universals, and the most elementary, is related to the geometric properties of the tiles as they are exploited in making designs. They consist of a number of simple, fundamental patterns. Here we shall mention only four. One is a

² In fact, in the 1950s Montserrat, as an island society, was on the verge of collapse: estate production of commercial crops was breaking down and, within a few years, the larger estates were sold, very large numbers of people (including almost half the population of Danio Village) emigrated to England and elsewhere, and new life styles were emerging as an island venture into tourism was attempted. The imminence of collapse was not realised in 1953, but dissatisfaction was chronic and, at that time, acute. In this respect Montserrat contrasts extremely with latmul; there, in spite of slow change and attenuation, the culture is still essentially intact, and orientation is basically centripetal.

³ There and other universals are discussed quite fully, but from a very different viewpoint, by Margaret Lowenfeld in her book on the Mosaic test (1954), written before the test had been widely used for cultural analysis.

hexagon consisting of equilateral triangles. The second is a groups of squares forming a larger square or oblong, sometimes called a house or a box. The third is a two-piece pattern made by placing a triangle (equilateral or isosceles) on a square. The fourth consists of horizontal or vertical rows using different shapes and/or colours and covering the tray (Called linear collectives by Lowenfeld). All occurred in the four samples.

In the Jamaican and Montserrat samples these very simple patterns often appeared as the total design achieved by the subject, variously adolescents and latmul adults they were integrated into larger, more elaborated designs. Where they were used, singly or in combination, by latmul adolescents they were often placed on the tray in a way that suggested a perceived visual integration.

In the case of the fundamental patterns, complexity of use (elaboration, repetition and contrast in the use of colour and form), rhythm and placement in space and all culturally differentiating facets.

The second set of universals has to do with the types of design, which Lowenfeld categorized as **representational**, **abstract**, and **conceptual**. To these categories we have added **emblematic**, a type of design which Lowenfeld treated as a subcategory of representational.

Representation designs are those that depict objects in the natural or the manmade world—houses, flowers, birds, persons, machinery, baskets, table clothes, scenes, and so on. Representational design occurred in various proportions and were more or less elaborated in all four groups.

Less than half the Jamaicans portrayed objects, and these were limited to concrete things in their immediate environment, such as a comb, a chair, a belt; only one person made an animate object, a centipede (**tumble tod**).

In many respects the Montserrat representational designs were similar to those of the Jamaicans, but they were worked out with more care and elaboration. Examples of these more complicated designs were houses showing various aspects, both inside

and outside, windows, steps, and so forth, and also a chimney, flowers, a farm bee, sprigged material, a tablecloth, a draughts board.

The Amerind adolescents have most of their lives been exposed to two cultures, their particular Indian culture and American culture. Their representations, much more elaborated than the two already discussed, have reference to both cultures. In addition to houses and scenes in which snow, trees, mountain, grass, sky or clouds were represented, there were designs for beadwork, festival costumes, Jewellery or embroidery. But one boy also made a pickup truck, an important piece of equipment in daily living.

Among the latmul types of design were age graded. Naturalistic representational designs were made only by school-age children and (with one exception) by young adults, some of whom had minimal schooling experience. Examples are village houses, churches, persons, flowers, trees, and birds; older informants occasionally made knowledgeable comments about the way a leaf grew out of a stem or about the colour or the proportion of the head to the body of a water bird. A transitional age group predominately depicted (but with great individual visualisation) a type of wall weaving in which the interwoven strands form a repetitive abstract design, thus combining, in one design, the concrete and the abstract.⁴

Among the latmul ~~abstract—that is, non-representational~~ – designs also were limited to the productions of the school children and young adults, many of whom became fascinated with exploring the new medium and experimented with form and colour in virtuoso's manner. Neither naturalistic representations nor abstract designs, as such, appeared in the productions of the older mature men, all of them expert carvers. The age-grading of design type among the latmul suggests an emergent shift in cultural style, based on changing life experience.⁵

⁴ This technique of wall-weaving (PE, **belem**) is well known to the latmul and, since it is not part of the latmul repertoire, may be learned by both men and women. It is not used in traditional house wall construction in Tambunam. Thus, this transitional age group use the new medium (LMT tiles) to depict a construction technique that is local and well known, but foreign to Tamanu/latmul culture.

Abstract designs also occurred with considerable frequency in the other samples. Among the Jamaicans they account for some 65% of the productions, but all exceedingly simple. Only one Jamaican subject carried out a more elaborate design, a large hexagon formed of diamonds and isosceles triangles.

Emblematic designs, that is, representational designs that have reference ideational systems (mythology, ritual, and so forth) occur occasionally in all the samples. In latmul they form a major category characteristic of the productions of all the old, mature men. The designs represent crocodiles and other creatures, in two cases mask, and in one the moon in clouds with a star. In every case the crocodile (or other creature) depicted a specific, named supernatural (PE, **masalai**) connected with the maker's clan, as were the masks, also named, and the moon-cloud-star design had reference to the esoteric, core mythology of the maker's clan.

The productions of the pueblo adolescents included elements that were, essentially, emblematic. In their designs some elements were naturalistic, but others drew on the traditional representations of, for example, birds, sun, clouds, sky, mountain.

However, the uses made of emblematic materials by the older latmul men and the pueblo adolescents were highly contrasting. The pueblo adolescents used **emblematic design elements** in their compositions much as pueblo potters, as described in Bunzel's fine study (Bunzel, 1972), used well known traditional design elements to produce "new: designs on their pots. In contrast, the latmul men chose wholly **traditional emblematic themes** but, faced with a new medium, broke away (with one exception, the maker of a mask) from the traditional style of presentation and produced highly individualised, playful representations, expressive in their originality.

Conceptual designs, that is, designs in which 'representations of objects are used to convey an abstraction which may be either an emotional or a mental concept'

(Lowenfeld, p.65), are rare in all these samples.⁶ One Jamaican produced a conceptual design with religious implications and two pueblo boys produced designs related to the idea of “red power.” The whole design made by one boy was an “apple.” At the centre of the tray he placed a red and a black equilateral triangle, explaining that these represented Indians and Blacks. He surrounded the triangles with many different shaped white pieces representing Anglos. Around the edge he made a circle or red pieces. He said this design represented the Anglos squeezing the Blacks and Indians.⁷

The third set of universal, the most complex, concerns **the approach to the task**, which we can discuss here only briefly and fragmentarily. Lowenfeld (1954) categories the basic approaches as **planned** (that is, the subject begins with a plan which he proceeds, more or less successfully, to carry out), or **emergent** (that is, the subject in the course of trying out possibilities simultaneously develops an idea and a design), and **post facto** (that is, the subject having made a design “recognises” and/or “names” it). In practice, these three types are not often so clear-cut, but general tendencies can be differentiated—occasionally with some surprises for the observer or even for the maker of the design.

The Jamaican and Montserrat subjects proceeded either very cautiously or in a slap dash manner (less characteristic of the Montserradians who worked with greater care and interest) in their approach. They were not particularly experimental (trying out different combinations of forms and colours) nor did they take the whole board into consideration as a defined, framed space. More frequently than not Jamaican subjects used just two fingers of one hand in pushing pieces around on the board until some sort of design was achieved. A number of Montserradians began with a plan, which they carried out; but more often than not, designs appear to have been named **post facto** because, on completion they appeared to resemble something. Quite a few of these subjects made a mosaic that looked unfinished or poorly articulated, as though

⁶ Only one latmul design, made by a young woman, approached a conceptual design, but it is doubtful whether she was fully conscious of the feminine-protest implications of the design although, in her behaviour, she was fully conscious—as were others—of her feminine-protest, masculine-oriented attitudes.

⁷ It appears likely that the heavy emphasis on “Indian” themes in the Amerind designs reflects a different, but not unrelated approach to the search for identity among the adolescents.

they gave up and were not aware of the incompleteness. For example, one Jamaican made a poor hexagon which he called a somewhat irregular umbrella (as an afterthought). And one boy in Montserrat made an incomplete and crooked design with squares which he called referring to a very popular game among men, a draught board.

Both planning and experimentation were characteristics of the work of the latmul and Amerind subjects. What was interesting, however, was that quite a few of the Amerind adolescents were “unaware: of just what they were producing and showed clear surprise that what appeared was actually a representation—of a bird, a dancer at a festival with evergreen boughs at his feet, or “me in the middle of a festival, all dressed up.”

In her study of pueblo potters, Bunzel commented that potters get a perceptual (not intellectual) idea ahead of a design. Designs are not copied but are individually composed out of various design elements and the composition is likely to be named on completion. This appeared to be the way many of the Amerind adolescents functioned in making Mosaic designs. They had a perceptual idea for a composition but were surprised at the outcome.

As we have already stated, among the latmul, only school-age children and young adults experimented widely with form and colour and abstract possibilities for design.⁸ But planned design characterised some designs at all age levels and all designs by mature adults, including men and women in the transitional age group—those who chose to make weaving designs. One unique feature characterised almost all male adult and some schoolboy performances; As an initial move the subject would remove one piece from the box (for example, a red square) and place it near the centre of the board. He would then gaze at this intently, as though he were focusing his

⁸ There were, however, stylistic differences in the way men and boys, on the one hand, and girls, on the other, tended to experiment. Girls tended to dissolve experiments—which might take various forms—until they arrived at something that pleased them. Men and boys, in contrast, whether they worked on a series of experiments or on several simultaneously, tended to complete and retain what they made and discarded few pieces or perceptual ideas once they were in train.

attention or gathering energy.⁹ Finally, after some seconds or even a minute or two, he would set to work rapidly and often with very few alterations complete a design. Often, rather than actually removing pieces from the box, the man's hand would hover over the rows until he reached a decision, and men in general had relatively few discards. The "key piece"—the one first selected—almost invariably was incorporated in the design.¹⁰ In addition, in most cases, adult men either asked immediately to make a second Mosaic (as though the first one were, in itself, practice or an experiment) or they returned on another day and asked to make another. This, too, is highly unusual. In their total performance these men worked very much as they do with their carvings, where one blunder with the adze or chisel may spoil a work in progress.

What we hope to have demonstrated in this brief paper is not that there are universals, but that experience of working with them in cross-cultural analysis of projective tests (here the LMT) expands our awareness of the diversity of ways in which such universals may be handled. As one outcome, this redirects and refines our attention to detailed but interlocking regularities in the performances of individual members of any one specific cultural group.

Superficially, comparisons of culturally complex performances, such as those by the latmul of Tamanu and the Amerind adolescents, are more rewarding. However, we think that diversity—including careful work with the performances of peoples with very restricted lifestyles—is the key to innovative research in this field.

⁹ This seems to parallel the manner in which the experienced latmul carver holds out in front of him and gazes at a block of wood before he begins the task of roughing out the mask or other object he intends to make.

¹⁰ There is even some suggestion that loss of this "key piece" signals, in the case of an latmul man, psychological disturbance, whether mild and temporary or possibly more deep-seated and chronic.

References

- Abel, Theodora M. 1958. The Szondi Profile of the Negro Peasants of Montserrat, B.W.I., Szondi Newsletter, VI:4 (December), 3-9.
- . 1960. Differential Responses to Projective Testing in a Negro Peasant Community: Montserrat, B.W.I., International Journal of Social Psychiatry, VI:3/4 (Autumn), 218-224.
- , and Rhoda Metraux. 1956. Pruebas Proyectivas en una Comunidad Rural: Montserrat, Criminalia XXII:2 (February), 100-108.
- , and Rhoda Metraux. 1959. Sex Differences in a Negro Peasant Community, Montserrat, B.W.I., Journal of Projective Techniques, XXIII:2, 127-133.
- Bateson, Gregory. 1958. Naven, 2nd ed. Stanford: Stanford University Press. (First published 1936, Cambridge University Press.)
- Bunzel, Ruth L. 1972. The Pueblo Potter: A Study of Creative Imagination in Primitive Art. New York: Dover. (First published 1929, Columbia University Press.)
- Forge, Anthony. 1974. The Problem of Meaning and the Art of New Guinea. In unpublished report on symposium, The Art of Oceania, McMaster University, Hamilton, Ontario, Canada, 21-26 August.
- Kerr, Madeline. 1963. Personality and Conflict in Jamaica, 2nd ed. London: Collins. (First published, 1952.)
- Lowenfeld, Margaret. 1954. The Lowenfeld Mosaic Test. London: Newman Neame.
- Metraux, Rhoda. 1957. Montserrat, B.W.I.: Some Implications of Suspended Culture Change, Transactions of The New York Academy of Sciences, Ser. 2, XX:2 (December), 205-211.
- , and Theodora M. Abel. 1957. Normal and Deviant Behavior in a Peasant Community: Montserrat, B.W.I., American Journal of Orthopsychiatry, XXVII:1 (January), 167-184.
- Rubin, Vera, and Lambros Comitas. In press. Ganja in Jamaica: A Medical Anthropological Study of Chronic Marijuana Use. The Hague: Mouton.