

## **Chinese Mosaics and Culture**

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### **Lowenfeld Mosaics from Chinese Subjects from Different Cultural Backgrounds and at Different Times**

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#### **Summary of Main Findings**

Three collections of Lowenfeld Mosaics: the earliest collection was in 1954, in Malaya (now part of Malaysia), and consists of a sample of 109 mosaics from males ages between 10-26; the second sample was collected in the first half of 1986 in London, England and consists of 31 mosaics (15 boys and 16 girls) aged between 8-12; the third sample collected at the end of 1986 in the Guangdong Province of China and consists of 200 mosaics (100 boys and 100 girls) all born in 1974.

All these collections share the two major characteristics identical in my previous analyses (Woodcock 1986a, 1986b). All three groups produced well over 80% representational designs and all their mosaics showed the kind of structure that is associated with European designs.

Comparison was made between the Malayan and Guangdong, China groups on the question of colour preference and black was the least liked colour. However, whereas red was the most often preferred colour in Malaya, yellow was the colour most favoured in Guangdong, China.

In Guangdong, the diamond shape was overall the most popular, with the square a good second. Thus, it can perhaps be said that the four-sided figures were preferred to

the various shaped triangles.

In November 1986, I went to Guangzhou (Canton), a city in south China, and Panyu, a nearby rural district, to collect Lowenfeld Mosaics from 200 12-year-old children: 100 boys and 100 girls, 50 of each in each area.

This came about because, quite by chance, I came across a collection of Mosaics which contained, amongst collections from other parts of the world, one from Chinese subjects in Malaya, and one from mainly Moslem subjects in Tanganyika (now part of Tanzania), both collected over 30 years ago. I was so struck by the utter difference in the appearance of the Mosaics that it inspired me to pursue the idea of cultural difference and similarities and their possible elicitation through the Lowenfeld Mosaics.

I decided to test how far the characteristics which I had identified in the Mosaic responses of the Malayan Chinese subjects (Woodcock 1986a) would also be manifest in other Chinese subjects in other cultural settings.

These are [1] that there is a strong preponderance of representational designs over abstract patterns, which is the converse of Mosaics done by Europeans; [2] that the structure of the Mosaics, on the other hand, will be similar to the European abstract patterns which are markedly symmetrical.

To test this, I chose two groups of subjects with very different cultural backgrounds: one group in south China itself, from where most of the Malayan Chinese had emigrated, and the second group in London among Chinese, also probably originating from southern China, mainly via Hong Kong, who have received all their education in English schools.

For those unfamiliar with the Lowenfeld Mosaic Test, I would like to give here a brief description of the LMT. The LMT consists of a box of 456 coloured tiles and a tray. The mosaics are arranged in rows standing on their edges in the box, grouped by shape and displaying all the colours in each shape. There are 5 shapes, all bearing a

mathematical relationship to each other. The basic shape is a square from which the isosceles, equilateral and scalene triangles are derived; the sides of the diamond are the same length as the square (i.e. 30mm). Each shape is available in red, blue, yellow, black, green and white, arranged in that order. This box is presented to the subject along with a tray (fitted with plain white paper) the dimensions of which were chosen so that complete edged patterns can be made. In the field research workers should, according to Lowenfeld, use a half set.

The first important point about the LMT as a research instrument for cultural study is the non-verbal nature of the central response: it demands the minimum of skill to manipulate and no specialist knowledge to make a response. It is a tool which overcomes the main problem of cultural studies - that of the language of the response to the research enquiry. The second point to emphasise concern the LMT as a projective tool is the concept of the Total Response. This concept embraces the whole process of the making of a mosaic by the subject as well as the design s/he completes viz the design product. The latter forms the core of the Response and can be analysed entirely visually through looking at a collection of Responses, laid out side by side.

What I am going to do now is to show you in parallel, the kinds of Mosaics made by the 3 groups of Chinese subjects. I should like to let the Mosaics speak for themselves and to begin with a comparison between the indigenous Chinese and the Malayan Chinese.

1. But first I must just say a little about the differences in the setting, apart from the location and a gap of over 30 years, in which the LMT was administered. What was presented to the Malayan Chinese: for reasons not explained, some purple pieces were added to the set and displayed loosely on the lid of the box. I have chosen to omit from consideration all the mosaics using purple.

2. The second difference is that the LMT was presented as one of a battery of 9 non-verbal tests, both geometric and representational in content, to the boys/men in Malaya, whereas only the LMT were administered to the children in Guangdong, China.
3. The third is to do with administrative procedure. The Malayan subjects were said to have been given the “standard European” procedure (done before Lowenfeld’s book was published) and were asked only what they had made. Aside from that particular standard question, the subjects were also asked to choose the colour they liked best, and one they liked least, with a choice of second best colour.

I had not discovered Peggie Thornton’s PhD Thesis before I went to were used to introduce the LMT than I would have liked, which resulted incidentally in possibly a greater emphasis on geometric China. In my administrative procedure, because there was a pressure of time, more words (as opposed to visual demonstration) qualities of the Mosaic pieces, especially in Panyu, where because the administrators were themselves unfamiliar with the names of the different triangles, they tended to emphasise these to the children.

However, the administrative procedure had been written down, and administrators had a chance to practice reading it out loud before doing it for real. This ensured a measure of uniformity of presentation. No such measure was taken or perhaps possible in Malaya.

4. Fourthly, in Malaya, the tray was presented with the shorter edge towards the subject, but in China, the standard way (the long edge towards the subject) was used for all the children. This needs to be taken into account when deciding whether the subject turned the tray to make the Mosaic,

As the Malayan collection has only male subjects, I shall only be comparing the Mosaics of the indigenous Chinese boys with those of the Malayan Chinese subjects.

The 20 urban Chinese boys in Malaya went to schools where English was the medium of instruction, so in this sense their educational environment was more like the UK Chinese. On the other hand, these children were mainly from the professional, educated and more Westernised class of Chinese society in Malaya, which makes them very different from the sample of UK Chinese children whose parents tended to have been illiterate, particularly in English.

Both groups were selected from the final year of their primary school. The urban boys in China all came from the two top schools in the area, where traditional Chinese art and calligraphy were encouraged alongside modern scientific subjects. whilst the boys from Guangzhou were all born in 1974, the Malayan group had a wider age range: i.e. between 10-13 years old.

**Illustration 1: Ten Slides from each group: shown in parallel**

Guangzhou (Urban) Boys  
(All born in 1974)

Malayan Chinese (Urban) Boys

Slide No.	Mosaic No.	Mosaic Description	Mosaic Description	Mosaic No.	Slide No.
1	13	Different shapes	Different shapes/patterns 1stY, 2nd R, [Age 10]	327	1
2	64	A small tree beside a house	Chinese house in the county with the trees around a road with the house [Age 13]	358	2
3	47	Tree, church & house (there is a Catholic	House with a tree beside it [Age 12]	326	3

		Church just before one arrives at his school)			
4	16	Rocket	A scout's badge [Age 12	354	4
5	65	A robot for lifting things	A star [Age 12]	351	5
6	78	Collective 1. Rocket 2. 5 pointed star 3. Flower 4. Ship 5. Watering Can	Begin as an attempt to make a map of Malaya with the different state in different colours. Too difficult - pattern on an Egyptian carpet [Age 12]	330	6
7	35	Conceptual: A house to symbolise the rigorous development/ reconstruction of Chinese society	A two-story town house	359	7
8	34	Conceptual: A ship. I would like to sail in this ship on the ocean of knowledge to explore the mysteries of Nature	A pattern 1st R, 2nd Y [Age 12]	356	8
9	27	Collective: Mixed shapes and objects: triangle, star, grass, square, sparrow, diamond, torch, bridge	Collective: mixed shape and objects: Polygon, torch, star medal (military) [Age 17]	300 Adult	9
10	73	Scene: Ship, seagull, sea	Scene: Cargo steamer at sea with clouds overhead [Age 17]	293 Adult	10

### **Breakdown of design type:**

**URBAN MALAYAN** - Only considering the Mosaics without purple pieces reduces the total to 15 subjects - 8 Representations [3 Single objects, 5 scenes], 2 collectives [1 of shapes, 1 of patterns], 2 applied abstract designs, 3 abstract patterns.

**GUANGZHOU** - 48 Representations [24 single objects, 14 scenes, 10 collectives of objects], 1 collective of mixed objects and shapes, and 1 collective of 20 shapes. There were no abstract patterns.

Now to compare the 2 rural groups of boys. The 50 boys from Panyu in China have all had then several years of primary education, but they do not all come from the same grade as some were repeating a year because they had not reached the required standard. All were, however born in 1974. The 26 rural Malayan Chinese children went to the local vernacular schools but had an even wider age range: i.e. between 10-14 years old.

The standard of education as well as that of the schools' equipment in the 2 rural groups were much below the urban schools and have a much wider variation. Rote learning, meagre visual teaching aids and lack of qualified staff seem to be true of both settings. The teachers in Panyu who were administering the LMT had great difficulty in matching the correct triangles to the terms in their demonstration, so tended to repeat them with greater emphasis. There were more omissions (e.g. forgetting to mention the tray so some children began their Mosaics on the table, ignoring the tray) and hence confusion.

## Illustration 2: Ten Slides from each group: shown in parallel

### Guangdong/Malayan Chinese Rural Boys

Slide No	Mosaic No	PANYU All born 1974	MALAYAN	Mosaic No	Slide No
1	149	A Rose	Flower [Age 12]	181	1
2	124	Trees	Farm house [Age 13] = meaning farm	179	2
3	103	Scene: Houses, 5-star flower and flower seedlings	Scene: House, flowers in front of house on the roadside [Age 10]	186	3
4	192	Pattern (Re-160 rural girls)	Just a pattern [Age 12]	170	4
5	129	A house	A house [Age 11]	180	5
6	167	Airplane	A Chinese umbrella [Age 14]	178	6
7	126	A ship and a house	A flower pot [Age 12]	190	7
8	134	Rocket	An Indian [Age 12]	172	8
9	109	Collective of 7 items: mixed shapes and objects: hexagon etc-ship (unfinished) [re rural girls no. 182]	Face of man [Age 12]	166	9
10	146	Goldfish	A triangle [Age 12]	173	10



## **Breakdown of design types:**

**RURAL MALAYAN:** considering only the Mosaics without purple pieces reduces the number of subjects to 20: 19 Representations [18 single objects, 1 scene], 1 abstract pattern.

**PANYU:** 36 Representations [22 single objects, 3 scenes, 11 collectives of objects], 5 collectives of mixed objects and shapes, 2 single shapes, 4 collectives of shapes, 3 abstract patterns.

The 3 major similarities demonstrated by all groups, including the UK Chinese, the older subjects in the Malayan group and the girls in the indigenous group:

1. A large proportion of representational mosaics,  
Percentage of representational mosaics for each collection:  
[a] The Malayan Chinese = 90.8%  
[b] The UK Chinese = 90.3%  
[c] The Indigenous Chinese = 94.0%

Note: the number of representational scenes found in all three collections were similar to that found by Ames & Ilg within a similar age range of American children.

2. When the subject makes an abstract pattern, the design structure is similar to that noted in Europe.
3. There is a special use of colour which is more common among these three groups, but not in Europe - that is, where the Mosaic gives an impression of colourfulness without necessarily having colour balance or incoherence.

Some of the differences noted so far:

1. The greater proportion of abstract patterns in the urban group compared with the rural group in Malaya was not reflected in the Indigenous Chinese sample.
2. Altogether the Chinese from China do more representational collectives than those from Malaya or the UK and very many more than is found in European or American collections. Lowenfeld's suggestion (1954) that collectives were mainly produced by people of sub-normal intelligence, is not borne out by these groups, certainly not by the urban groups.
3. With regard to abstract designs, the indigenous Chinese children made half the number made by the UK Chinese children and the Malayan Chinese children made half again as many as the UK Chinese children.

There were no applied designs at all from China or the UK, where in Malaya, this category was equal in size to the abstract patterns.

4. In the collection from China, there were a number of conceptual representations not present in any of the other collections.

Next, I would like to show you some of the Mosaics made by the girls from China. There are different ways of presenting the similarities and contrasts between the 4 groups from China. Ideally, I should do them all, so you can more easily grasp the subtleties, but because of the pressure of time, I have only done one kind. I shall first do a comparison between the urban and rural boys, then between that of the girls.

### Illustration 3: Ten Slides from each group: shown in parallel

Guangdong Boys

Slide No.	Mosaic No.	URBAN	RURAL	Mosaic No.	Slide No.
1	11	*A flower: rep. The friendship between my country and England	Pattern	168	1
2	71	Collective of 4 objects: ship, house, person, horse	Collective of 4 objects: person, fish, tree airplane	183	2
3	91	Sailing ship	Ship	125	3
4	72	Scene: House and tree	Scene: house & flower	105	4
5	63	Fish	Fish and tree	148	5
6	12	Flowers	Flowers	128	6
7	92	A P.L.A. man	Person	200	7
8	66	Rocket	Rocket	150	8
9	76	1. Fox 2. Sunflower 3. Pigeon 4. Cock 5. Lighthouse	Goose, Christmas tree	131	9
10	3	Scene: Spaceship returning to earth after mission	Eagle	163	10

\*Traditional art: bird's eye view

**Illustration 4: Fifteen slides from each group: shown in parallel**

**Guangdong Girls**

Slide No	Mosaic No	URBAN	RURAL	Mosaic No	Slide No
1	41	Flower (traditional art - birds eye view)	Flower, Triangle	156	1
2	45	The letter 'W'	= meaning word	158	2
3	69	Different shapes (Re rural bot no.106)	A house and different shapes (re rural boy no. 109)	182	3
4	18	Pattern: I think that I have done is peculiar. I like doing peculiar things	Pattern: (the teachers would not accept this. Thought the girl didn't know what she was doing (re rural boy no. 190)	160	4
5	57	Conceptual: the roads to the happy world (paradise)	A square	119	5
6	80	Scene: 1. Field 2. White cloud 3. TV transmitter 4. House 5. Trees 6. Small boat on lake	Scene: Flowers, grass and mountains	196	6

7	7	(Flowers in a garden) Garden flowers	Flower (The teacher appreciated this Mosaic most, thought it very meaningful)	159	7
8	56	A ship at sea	Ship	117	8
9	62	Scene: Conceptual: Red autumn tree; a dancing red butterfly, a street light lighting the road; Autumn makes people feel vigour and brightness	Collective: 1. Mud house 2. Snowflake flower 3. 2 colour flowers 4. Palace 5. Mountains	155	9
10	49	Collective: Rocket, fish houses	Collective of 5 objects: House, rabbit, fish	141	10
11	27	This house is suited in a village powered by solar energy	House	142	11
12	39	Young female Pioneer (took full time to achieve	Terrapin (worked out deliberately but very quickly	191	12
13	96	Deer	Butterfly	189	13
14	14	Two chickens quarrelling (Because green beaked chicken	Doll	154	14

		put the red hat onto the white beaked chicken's head)			
15	1	Hammer	Rocket	135	15

As you can see, the girls' mosaics are both more traditional and more unusual, e.g. the city girl who made a representation of a house powered by solar energy. This is 1986 in China.

### **Breakdown of design type:**

**GUANZHOU GIRLS:** 38 Representations [13 Single objects, 15 scenes, 10 collectives of objects], 3 collectives of mixed objects and shapes, 2 single shapes, 1 collective of shapes, 4 abstract patterns, 2 collectives of mixed patterns, shapes and objects.

**PANYU GIRLS:** 36 Representations [26 single objects, NO scenes, 10 collectives of objects], 7 collectives of mixed objects and shapes, 2 Single shapes, 2 collectives of shapes, 2 abstract patterns and 1 collective of patterns.

I am now going to say something further about the Mosaics from Guangdong, China. There were certain differences between the urban and rural groups; but there were also evidence of differences between the sexes in the mosaics collected from China.

The urban children made many more scenes [29] than the rural children [3]. Whilst all groups contributed a similar number of collective Representations - 10 each, except for the Panyu boys, where there were 11 such mosaics. There were more mixed shape and object collectives from the rural group (12 vs 4). There were a few unsuccessful mosaics, all from Panyu. Like the Americans of a similar age, the girls made more abstract patterns than the boys.

As yet the Mosaics have not been fully analysed, but in general the kind of objects represented in the Malayan, London and Guangdong collections seem also to reflect the times. Interestingly in Guangdong space rockets were made by a similar proportion of boys and girls, both urban and rural [rockets were also the subject of two mosaics from the London collection]; and boys were no more afraid of making so-called feminine objects like flowers than girls were of making masculine objects like a hammer. [One of the names for china is the Flowers Land, and flowers are an important cultural symbol]

Some observations in a wider context;

From other studies in America, we know that the high proportion of representational designs from subjects over ten years of age is characteristic neither of American nor of English children of a similar age. (Ames & Ilg 1962; Stewart & Leland 1952).

Furthermore, the collection of Mosaics from Guangdong Province in China throws doubt upon the universal validity of Lowenfeld's contention that collectives of objects are indicative of immaturity or low intelligence. In this respect, the statistics for these Chinese mosaics resemble the American collections, where a significant proportion make what are termed "Immature" and "Slab" patterns.

I now come to the matter of colour preference amongst the sample of Chinese children in Malaya as well as those from Guangdong. All 4 groups [at this point I am including the girls from Guangdong] like black the least, but there is a difference in the colour preference. In Malaya, all the Chinese largely preferred red to any other colour, with blue coming second and all other colours a long way behind. In Guangdong, yellow was the favourite colour, with red a close second and green an even closer third, blue being very much further behind.

Looking more closely at the figures there were more subtle differences between the urban and rural groups of both places. In Malaya, taking the first and second choices

together, the urban boys preferred yellow marginally to red and blue which tie for second place; in Guangzhou the boys clearly preferred yellow, with green a close second and red and blue tying for third place a long way behind. Of the rural boys, the Malayan group preferred red followed by blue marginally ahead of yellow, both some way behind. In Panyu, the boys preferred red with yellow a close second with blue lying fourth a long way behind. Thus, in this analysis, yellow and red are shown to be indisputably the colours of choice. Furthermore, urban boys seem to prefer yellow, whereas rural boys seem to favour red.

Perhaps this is an appropriate moment for me to mention a fact about the Chinese use of colour. The Chinese [at least the southern Chinese] like bright colours and lots of it - they feel it is positive, active and cheerful to see lots of bright colours together. They do not have the Western sense of cultivated cool sophistication. This colourfulness is particularly emphasised in two aspects of daily life - that of the public ceremonial, of imperial splendour and in anything to do with children, especially their dress. So, I would expect to find this reflected in the Mosaics where this feature would be deliberately built in irrespective of whether it is realistic or not. Therefore, in any analysis this would be something to look out for and perhaps compare with Other collections.

When we come to look at the shape preferences in' the Guangdong sample [i.e. according to their answers to a question as opposed to what they actually used in the making of their mosaics] we find a distinct difference between the rural and urban, but the same order of difference between boys and girls. The diamond shape is overall the most popular, with the square a good second; altogether, these two shapes accounted for 134 out of the 200 choices. However, if looked at from the urban or rural angle, there is an interesting difference: 54 out of the 100 Guangzhou children preferred the diamond, whereas only 30 (out of 100) did in Panyu; on the other hand, 40 of the Panyu children preferred the square and only 10 of the Guangzhou children did, with both the scalene and equilateral beating it into fourth place. So that although the four-sided figure still predominates, the square, despite being of traditional culturally symbolic significance, only just marginally retains the lead even in the rural areas. However, when I came to



examine the shapes MADE by the children, when they make shapes, the four- sided figure still predominates and interestingly reflecting the same urban/rural bias. It may be worth noting that more girls made triangles than diamonds and no urban girl made a diamond.

Finally, a selection of boys' and girls' Mosaics from London and Guangzhou compared.

**Illustration 5:** Guangzhou and UK Chinese Boys and Girls [Mainly Urban]

Slide No	Mosaic No	GUANGZHOU	LONDON	Mosaic No.	Slide No.
1	30	A house [B]	A house [G]	29	1
2	22	Conceptual 'Flying into the future' [B]	Scene in space [B]	12	2
3	89	A small house [B]	A house [G]	20	3
4	190	A rocket [G]	A rocket [B]	16	4
5	97	1. Car's badge 2. Rocket 3. Young girl [G]	1. A person in a skirt 2. A tree in a pot [G]	31	5
6	52	A chrysanthemum and a rose [G]	A glower in a garden and the sun [G]	26	6
7	61	Scene: Flowers and butterflies [G]	Scene: flower, rabbit, grass [G]	22	7
8	145	An eagle [B]	A Bird [B]	3	8
9	77	Scene; Decorated <b>gateway</b> with flowers, at festival time [B]	Scene: Sailing boat on the river, moon and stars [G]	14	9
10	15	A bridge [B]	Three blocks [B]	21	10

[B]= Boy; [G]= Girl.

Guangzhou Nos 9 & 10 not found in other collections.

London No.9 more expected from Guangzhou

No.10 3 dimensional - a conscious decision, unlike the patterns in Malaya.

Breakdown of design type in London sample of 27 mosaics: [only mosaics from subjects aged between 10-12 included]: 24 Representations [16 single objects, 7 scenes, 1 collective of objects], 1 unspecified symmetrical shape, 1 asymmetrical shape, 1 abstract pattern.

To conclude, I think that what these Mosaics show is that the cultural background and one's individuality are so inextricably interwoven into the personality that one cannot ignore one or the other. Perhaps the next question to ask is: How many generations and in what kind of conditions does it take for an immigrant population to replace their indigenous culture with that of their adopted country?

[See Appendix]

## Appendix

Key to symbols:

R = Representational

R0 = Representational, object

RoxS = Representational, objects in a scene

Roxc = Representational, collective of objects

Rs = Representational, shape eg oblong type pattern [China 79]

Rsrc = Representational, collective of shapes

Rmos = Representational, mixed collective of objects & shapes

A = Abstract Designs

Aa = Applied abstract designs e.g. A design for cloth for a shirt [Malaya] Ap = Pure abstract pattern

Ar = pattern with representational idea e.g. A flower pattern [China 104] ARo = Pattern + representation of object

ARmos: Pattern + representations of shape & object

G: Guangdong, China; L: London; \*: 4 Children in the London sample were out of the age range 10-12

Table I comparison among the Malaysian, English and Chinese samples

Table II comparison between Guangdong and London boys and girls and between the Guangdong urban and rural groups

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