# MAPPING MANILA SOCIETY BY PHOTOGRAPHS AND FACTOR ANALYSIS

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Sixteen photographs of individuals taken in Manila were described through the use of adjectives in a Q-technique and were intercorrelated. The resulting matrix was factor analyzed and yielded three factors, which were interpreted as three social classes, phenomenologically arrived at, namely 1) Westerner-Provinciano Filipino, 2) Urban Filipino, 3) Chinese.

It is a fact of common experience that people within a culture are capable of making quite accurate judgments of the social status of others of the same culture the instant they meet. They may not always be able to verbalize the objective bases of these judgments, but they can often enough agree on what behavior is fitting in the presence of people they may be seeing for the first time. For instance, Filipinos know when to say "ikaw" and when to say "kayo," or when to add the honorific, "po", to a sentence. There thus seems to be within the culture a "social map" which categorizes the various individuals that a person might meet in everyday life.

The purpose of this paper was to investigate the subjective set of categories which Manileños (in this case a sample of male university students) applied to their social environment. How did they classify the people they met? To answer this question there was need to invent a technique which could attain to phenomenal, subjective dimensions which were mostly pre-conscious, and at the same time to maintain scientific rigor.

#### Метнор

A photographer moving through various locations within Manila and using a telescopic lens

shot at random 80 pictures of men and women. Sixteen of these, eight men and eight women, were arbitrarily chosen, an attempt being made to maximize the variety of social "types."

Using data gathered in a previous bit of research (Lynch, 1965), the 20 adjectives most commonly used by Filipinos to describe people were picked through the REP test. These 20 were further reduced to 12 by combining similar ones and removing the socially meaningless adjectives. These 12 were the following friendly, intelligent, foreign blood, uneducated, modern, provinciano, proud (mayabang), rich, shy, domineering, handsome (pretty), dark-skinned.

The subjects, 20 male university students chosen at random, were then presented the photographs one at a time and were given the following instructions:

"Here are 12 adjectives. First, Choose the adjective that you feel best describes the picture and put it to your farthest right. Then, from the remaining adjectives, choose the one that you feel is an opposite description of the picture and put it to your farthest left.

Distribute the remaining adjectives where they fit best from left to right according as they apply to the picture."

Using the Q-sort approach, each photograph was then correlated with each of the other photographs. The resulting correlation matrix was then factor analyzed through an IBM 360 computer by the principal axes method and rotated to a varimax solution keeping orthogonal axes. The final factors were then interpreted as categories in the minds of the subjects into which they classified individuals that they met.

TABLE 1

CORRELATION MATRIX OF SIXTEEN PICTURES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0.36	0.11	0.36	0.22	0.18	0.16	0.08	0.21	0.32	0.22	0.25	0.08	0.06	0.21	0.09	0.27
2	0.11	0.51	0.18	0.33	0.41	0.35	0.28	0,15	0.14	0.51	0.15	0.42	0.27	0.42	0.24	0.24
3	0.36	0.18	0.58	0.58	0.08	0.38	0.04	0.51	0.16	0.45	0.33	0.37	0.21	-0.24	-0.04	0.48
4	0.22	0.33	0.58	0.66	0.42	0.66	0.20	0.41	0.05	0.62	-0.32	0.56	0.14	0.39	0.13	0.55
5	-0.18	0.41	-0.08	0.42	0.47	0.31	0.21	0.00	-0.18	0.35	0.03	0.32	0.47	0.40	0.27	0.23
6	0.16	0.35	0.38	0.66	0.31	0.66	0.33	0.43	0.06	0.59	0.25	0.54	0.17	0.34	0.14	0.46
7	0.08	0.28	0.04	0.20	0.21	0.33	0.33	0.33	0.06	0.19	-0.02	0.23	0.17	0.15	0.26	0.09
8	0.21	0.15	0.51	0.41	-0.00	0.43	0.03	0.51	0.08	0.38	0.36	0.37	0.19	-0.15	0.01	0.51
9	0.32	-0.14	0.16	-0.05	-0.18	-0.06	0.06	0.08	0.32	0.09	0.18	0.04	-0.04	0.26	0.16	0.13
10	0.22	0.51	0.45	0.62	0.35	0.59	0.19	0.38	0.09	0.62	-0.30	0.56	0.18	0.34	0.01	-0.45
11	0.25	0.15	0.33	-0.32	0.03	0.25	0.02	0.35	0.18	0.30	0.37	0.25	0.07	0.10	0.21	0.37
12	-0.08	0.42	0.37	0.56	0.32	0.54	0.23	-0.37	0.04	0.56	0.25	0.56	0.23	0.25	-0.00	0.31
13	0.06	0.27	0.21	0.14	0.47	0.17	0.17	0.19	0.04	0.18	0.07	0.23	0.47	0.28	0.14	0.07
14	0.21	0.42	0.24	0.39	0.40	0.34	0.15	0.15	0.26	0.34	0.10	0.25	0.28	0.42	0.42	0.27
15	0.09	0.24	-0.04	0.13	0.27	0.14	0.26	0.01	0.16	0.01	0.21	-0.00	0.14	0.42	0.42	0.04
16	0.27	-0.24	0.48	-0.53	0.23	-0.46	-0.09	0.51	0.13	0.46	0.37	0.37	0.07	0.27	0.04	0.55

RESULTS found in Table 1.

The factor analysis brought out three The initial correlation matrix may be factors. The unrotated factor matrix may be seen in Table 2 (The signs have been reversed for convenience).

TABLE 2

٠						PRINCIPA	:		_		or Mai				
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•	ુ 3	:	:			0.6096		÷	7	1, 1	0.4105	<b>.</b> .	<u>.</u>	••	0.1185
	4					0.8101		ŧ	:		-0.0443	3			0.1054
i,	5	£ :	٠.	:		0.4771			٠	:	0.4827	· .	1.	e.	0.1376
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1	7					0.2804	:				0.3090	)			0.2152
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	9		<u>.</u>			0.1997	•				-0.0096	}	1		0.5445
	10					0.7610					0.0006	}	•		-0.1277
:	11	,				0.3978					0.3741				0.0548
	12	-	.** .	÷		0.6685	1.17				0.0407	·	:	£3	-0.3226
`	13				=	0.1963	•		:		0.6011				0.0568
	14					0.5168		•	,	•	0.3180	)			0.3068
	15	:	· •-	٠.		0.1827	3			. ,	0.4438	3	tī.		0.2304
	16		-			0.6482		٠,	1	-	0.2773		••	*	-0.0552

TABLE 3 MATRIX COMMUNALITIES

VARIABLE	ORIGINAL MATRIX COMMUNALITIES	ROTATED MATRIX COMMUNALITIES	, DIFFERENCE
1	0.335954	0.335953	0.000001
2	0.422193	0.422192	0.000001
3	0.554945	0.554944	0.000001
4	0.669061	0.669060	0.000001
· 5	0.479862	0.479861	0.000001
6	0.611886	0.611885	. 0.000001
7	0.220106	0.220105	0.000001
8	0.474370	0.474369	0.000001
9	0.337125	0.337124	0.000001
10	0.595506	0.595505	0.000001
11	0.301305	0.301304	0.000001
12	0.552234	0.552233	0.000001
13	0.402866	0.402865	0.000001
14	0.462662	0.462661	0.000001
15	0.283525	0.283524	0.000001
16	0.499658	0.499657	0.000001

Eight rotations were performed. The original and rotated matrix communalities are found in Table 3.

The final varimax matrix may be found in Table 4.

TABLE 4

	Final Vari	MAX MATRIX	
	1	2	3
1	0.298	0.018	-0.497
2	0.303	0.571	0.070
3	-0.688	0.048	0.281
4	0.734	0.359	0.042
5	0.146	0.662	0.143
6	0.671	0.391	0.095
7	0.139	0.397	0.208
8	0.669	0.111	0.118
9	0.044	0.134	0.563
10	0.677	0.371	0.005
11	0.504	0.124	0.178
12	0.621	0.352	0.207
13	-0.106	0.615	0.113
14	0.221	0.547	0.339
15	0.107	0.487	0.188
16	0.671	0.084	0.206

As an aid to the interpretation of the factors, a table is set up (Table 5) in which, under each photograph, the three adjectives are listed which "best describe" that photograph as well as the two adjectives which "least describe it."

FACTOR 1.

Westerner	vs.	Provinciano Native
4		.734
10		.677
6		.671
12		.621
2		.303
11		504
8		669
16		671

3

--- .688

All five individuals who load on this factor have western faces and the leading individual is described as "foreign blood" and "rich," and as not "provinciano," nor "dark skinned." The factor pertains to a westerner-native dichotomy and is not generalized to foreign-native. as can be seen from the absence of the Chinese from the "plus" group. Neither on the other hand do any of the urbanlooking Filipinos enter into the "minus" group but simply do not enter into this factor. There are overtones of being rich attached to the concept of Westerner such that this factor might be considered as having an economic element which has not been split off from it by the present factor analysis.

TABLE 5
Summary of Three Best Describing Adjectives and Three Least
Describing Adjectives For Each Picture

					P	I	C	T	U	R	E	S					
A	ADJECTIVES		1	2		9	}		4		5	6		7		8	;
	-		+	_	+	_	+	_	+		+	_	+		+		4.
1.	Dark Skinned	4	4	11	1	2	16	16	1	11	1	16	1	8	4	2	$\Pi$
II.	Domineering	1	5	2	1	0	9	2	3	0	4	3	1	2	4	1	6
III.	Foreign Blood	10	6	8	4	18	1	2	17	9	4	1	18	9	4	17	I
IV.	Friendly	3	6	3	2	3	3	0	7	0	7	0	9	0	7	1	5
V.	Handsome	11	0	2	8	8	0	1	2	1	2	2	8	2	2	6	.1
VI.	Intelligent	2	4	1	2	3	3	0	8	0	13	0	6	2	6	4	3
VII.	Modern	8	1	1	18	4	1	1	8	0	6	0	5	1	6	8	2
VIII.	Proud	4	2	1	11	3	8	3	0	2	7	4	3	5	6	3	9
IX.	Provinciana	3	11	16	2	1	13	17	0	15	0	18	0	10	1	1	9
X.	Rich	9	3	1	9	7	1	2	13	0	16	0	7	5	8	10	2
XI.	Shy	1	6	2	4	7	1	1	1	2	3	1	5	2	5	5	2
XII.	Uneducated	2	8	12	1	4	4	15	0	20	0	15	0	14	4	3	5

TABLE 5
Summary of Three Best Describing Adjectives and Three Least Describing Adjectives For Each Picture (Cont.)

— + — + — + — + — + — + — + — + — + — +														•				
- + - + - + - + - + - + - + - + - + -						P	I	С	T	U	R	E	S					
II. Domineering 1 4 0 3 4 2 1 8 1 13 2 5 5 0 1 1  III. Foreign Blood 6 10 2 20 11 0 1 13 10 1 9 5 13 3 16  IV. Friendly 1 2 2 0 3 13 2 2 2 5 1 10 1 15 6  V. Handsome 16 1 0 7 4 4 1 2 3 2 1 9 2 11 10  VI. Intelligent 4 2 1 1 6 2 1 8 1 9 1 9 0 9 7  VII. Modern 8 0 1 16 7 1 5 3 4 8 3 9 0 7 5  VIII. Proud 5 1 0 8 3 4 1 10 0 13 2 3 6 2 2  IX. Provinciana 2 10 15 0 1 13 16 2 11 2 14 2 9 2 2 1  X. Rich 4 8 2 7 5 1 4 12 1 9 1 7 2 1 8  XI. Shy 2 8 6 1 4 7 1 2 5 2 5 1 3 7 1	A	DJECTIVES		9		.10		11		12		13		14		15		16
II. Domineering 1 4 0 3 4 2 1 8 1 13 2 5 5 0 1 1  III. Foreign Blood 6 10 2 20 11 0 1 13 10 1 9 5 13 3 16  IV. Friendly 1 2 2 0 3 13 2 2 2 5 1 10 1 15 6  V. Handsome 16 1 0 7 4 4 1 2 3 2 1 9 2 11 10  VI. Intelligent 4 2 1 1 6 2 1 8 1 9 1 9 0 9 7  VII. Modern 8 0 1 16 7 1 5 3 4 8 3 9 0 7 5  VIII. Proud 5 1 0 8 3 4 1 10 0 13 2 3 6 2 2  IX. Provinciana 2 10 15 0 1 13 16 2 11 2 14 2 9 2 2 1  X. Rich 4 8 2 7 5 1 4 12 1 9 1 7 2 1 8  XI. Shy 2 8 6 1 4 7 1 2 5 2 5 1 3 7 1		_	_	+	_	+		+	_	+	_	+	_	+	_	+	_	+
III. Foreign Blood 6 10 2 20 11 0 1 13 10 1 9 5 13 3 16 IV. Friendly 1 2 2 0 3 13 2 2 2 5 1 10 1 15 6 V. Handsome 16 1 0 7 4 4 1 2 3 2 1 9 2 11 10 VI. Intelligent 4 2 1 1 6 2 1 8 1 9 1 9 0 9 7 VII. Modern 8 0 1 16 7 1 5 3 4 8 3 9 0 7 5 VIII. Proud 5 1 0 8 3 4 1 10 0 13 2 3 6 2 2 IX. Provinciana 2 10 15 0 1 13 16 2 11 2 14 2 9 2 2 1 X. Rich 4 8 2 7 5 1 4 12 1 9 1 7 2 1 8 XI. Shy 2 8 6 1 4 7 1 2 5 2 5 1 3 7 1	I.	Dark Skinned	10	5	18	0	8	4	17	2	11	0	12	2	10	2	1	11
IV. Friendly       1       2       2       0       3       13       2       2       2       5       1       10       1       15       6         V. Handsome       16       1       0       7       4       4       1       2       3       2       1       9       2       11       10         VI. Intelligent       4       2       1       1       6       2       1       8       1       9       1       9       0       9       7         VII. Modern       8       0       1       16       7       1       5       3       4       8       3       9       0       7       5         VIII. Proud       5       1       0       8       3       4       1       10       0       13       2       3       6       2       2         IX. Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X. Rich       4       8       2       7       5       1       4       7       1	II.	Domineering	1	4	0	3	4	2	1	8	. 1	13	2	5	5	0	1	10
IV. Friendly       1       2       2       0       3       13       2       2       2       5       1       10       1       15       6         V. Handsome       16       1       0       7       4       4       1       2       3       2       1       9       2       11       10         VI. Intelligent       4       2       1       1       6       2       1       8       1       9       1       9       0       9       7         VII. Modern       8       0       1       16       7       1       5       3       4       8       3       9       0       7       5         VIII. Proud       5       1       0       8       3       4       1       10       0       13       2       3       6       2       2         IX. Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X. Rich       4       8       2       7       5       1       4       12       1	III.	Foreign Blood	6	10	2	20	11	0	1	13	10	1	9	5	13	3	16	1
VI. Intelligent       4       2       1       1       6       2       1       8       1       9       1       9       0       9       7         VII. Modern       8       0       1       16       7       1       5       3       4       8       3       9       0       7       5         VIII. Proud       5       1       0       8       3       4       1       10       0       13       2       3       6       2       2         IX. Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X. Rich       4       8       2       7       5       1       4       12       1       9       1       7       2       1       8         XI. Shy       2       8       6       1       4       7       1       2       5       2       5       1       3       7       1	IV.		1	2	2	0	3	13	2	2	2	5	1	10	1	15	6	1
VII.       Modern       8       0       1       16       7       1       5       3       4       8       3       9       0       7       5         VIII.       Proud       5       1       0       8       3       4       1       10       0       13       2       3       6       2       2         IX.       Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X.       Rich       4       8       2       7       5       1       4       12       1       9       1       7       2       1       8         XI.       Shy       2       8       6       1       4       7       1       2       5       2       5       1       3       7       1	V.	Handsome	16	1	0	7	4	4	1.	2	3	2	· 1	9	2	11	10	0
VIII. Proud       5       1       0       8       3       4       1       10       0       13       2       3       6       2       2         IX. Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X. Rich       4       8       2       7       5       1       4       12       1       9       1       7       2       1       8         XI. Shy       2       8       6       1       4       7       1       2       5       2       5       1       3       7       1	VI.	Intelligent	4	2	. 1	. 1	6	2	1	8	1	9	1	9	0	9	7	0
IX.       Provinciana       2       10       15       0       1       13       16       2       11       2       14       2       9       2       2       1         X.       Rich       4       8       2       7       5       1       4       12       1       9       1       7       2       1       8         XI.       Shy       2       8       6       1       4       7       1       2       5       2       5       1       3       7       1	VII.		8	0	1	16	7	1	5	3	4	8	3	9	0	7	5	2
X. Rich 4 8 2 7 5 1 4 12 1 9 1 7 2 1 8 XI. Shy 2 8 6 1 4 7 1 2 5 2 5 1 3 7 1	VIII.	Proud	5	1	0	8	3	4	1	10	0	13	2	3	6	2	2	6
XI. Shy 2 8 6 1 4 7 1 2 5 2 5 1 3 7 1	ÍΧ.	Provinciana	2	10	15	0	1	13	16	2	11	2	14	2	9	2	2	11
	X.	Rich	4	8	2	7	5	1	4	12	1	9	1	7	2	1	8	5
XII. Uneducated 1 8 13 0 4 9 16 2 11 0 12 1 9 1 1	XI.	Shy	. 2	8	6	1	4	7	1	2	5	2	5	1	3	7	1	6
	XII.	Uneducated	1	8	13	0	4	9	16	2	11	0.	12	1	9	1	1	6

FACTOR	2.	Urban	Filipino
5			.662
13			.615
2			.571
14			.547
15			.487
7			.397
6			.391
10			.371
4.			.359
12			.352

The leading picture in this factor is clearly seen as a city Filipino, "intelligent," "modern," "rich," and "educated." On the whole, none of those pictures which loaded high on the first factor loaded high on the second, indicating that the urban Filipino is another dimension from the Westerner-Provinciano dichotomy. Similarly none of the pictures of clearly Chinese individuals entered into this second factor. Accordingly it seems to be a unipolar factor which can be called that of the "urban Filipino."

FACTOR 3. "CHINESE" FACTOR

	,	
14		.339
. 1		<del>497</del>
9	·	<b>—</b> .563

The highest loadings on this factor are found in two Chinese faces and both are on the negative side. The only other Chinese face, a young man, number 7, also loads (—.208) on this factor. On the positive side is the single picture of an attractive Filipina girl.. Accordingly it may be proper to call this dimension the "Chinese" factor.

How does one explain the presence of the attractive girl on the positive pole? Perhaps there is a "personal attractiveness" element mixed in with this factor. It is as if the Chinese, who are the object of racial prejudice in the Philippines, are seen as personally unattractive. The Chinese youth, number 7, who seems to represent a higher class Chinese, does not incur this condemnation to the same extent, but nevertheless is still included in the general stereotype.

### DISCUSSION

The factor analysis brought out the way the Filipinos in the sample structured the social world of Manila. Pre-eminent was the Westerner, in contrast to whom was not the urban, educated Filipino but the provinciano. The urban Filipino oc-

cupied a separate category by himself. The third group was marked more by its lower end, constituted by those who are low on the totem pole of social desirability, among whom were the Chinese. Interpreting more broadly by splitting the first factor into its two poles, one can say that the following are the type clusters into which people classify the population around them:

- 1. a) Westerners
  - b) Uneducated Filipinos
- 2. Educated Filipinos
- 3. Chinese

The mathematical lumping together into one factor of the westerner and the provinciano may be interpreted psychologically as a reciprocal self-defining relationship - that is, "a relationship in which the roles of the two parties are defined with reference to one another" (Kelman. 1966, p. 512). In the Philippine context, it may be the carry over of the old colonial relationship, which the subjects of the present experiment see as still existing between the Westerner and the more backward segment of the population. The educated urban Filipino, however, does not define himself by reciprocal relationships with the Westerner, but placed himself in an independent category, defining himself by himself ("The Filipino is a Filipino is a Filipino.").

By placing a pretty girl opposite the Chinese on the third factor, the subject, young men, seem to be saying that the Chinese are undesirable. From the applied adjectives, their attitudes towards the Westerner are more favorable than towards the Chinese or perhaps even towards the provinciano Filipino.

This method, using photographs and combining the Q-technique with factor

analysis, seems to have been a very useful approach to the study of social class. Its advantages are the following:

- 1. It taps a deeper, pre-conscious level of judgment than the ordinary questionnaire approach.
- 2. It brings out a truly phenomenological view of the world, in this case social classes as perceived by the subjects themselves rather than by an outside observer.
- 3. The classification of perceptions is a purely mathematical affair, even the notations being performed by computer. In fact the computer expert who analyzed the data had not seen the pictures nor did he know what the variables were about.

Now that such a technique has been invented, it remains to apply it to different populations. Do the people in various parts of the Philippines have a similar map of society as the Manila sample did? This is a new line for further research.

Another line of research might be the nature of racial prejudice against Chinese. Under what circumstances would they become more personally attractive and accordingly more "Filipino"? Would a pretty Chinese girl have ended up in the negative side of Factor 3? This too is a line for further research.

## REFERENCES

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