學 大 文 中 港 香

心 中 究 研 會 社

Patterns of Urban Differentiation in
Hong Kong: A Reexamination of
Shevky's Theory of Urban Development

Siu-kai Lau

SOCIAL RESEARCH CENTRE

THE CHINESE UNIVERSITY
OF HONG KONG

The Chinese University of Hong Kong

Social Research Centre

PATTERNS OF URBAN DIFFERENTIATION IN HONG KONG:
A REEXAMINATION OF SHEVKY'S THEORY OF
URBAN DEVELOPMENT

by

Siu-kai Lau

March 1976

All manuscripts are processed through the Editorial
Sub-Committee and evaluated and approved by its members in
collaboration with invited reviewers of relevant specialties.

Members of the Editorial Sub-Committee:

       Dr. Fai-ming Wong (Chairman)

       Dr. Pedro Ng

       Mr. John Myers

PATTERNS OF URBAN DIFFERENTIATION IN HONG KONG: A REEXAMINATION OF SHEVKY'S THEORY OF URBAN DEVELOPMENT

Lau Siu-kai*

Since the Second World War, Hong Kong society has undergone large-scale social change, primarily through the processes of industrialization, modernization and urbanization. These processess of social change have transformed what was a relatively homogeneous society into a heterogeneous society which is characterized by a high level of both functional and structural differentiation. The forms and directions of differentiation in the urbanized society of Hong Kong are of interest to both social scientists and policy-makers alike. To the social scientists, the patterns of urban differentiation in a modernizing society which is at the same time marked by colonialism and pluralism will be of importance in formulating theories of urban development in particular, or of social development in general. To the policy-maker, empirical findings on the patterns of urban differentiation in Hong Kong can be translated into a system of urban indicators, which will be useful in the measurement of urban social change, and in the social planning processes for the improvement of the urban living conditions.

The purpose of this paper is to apply Shevky's theory of urban development to the case of Hong Kong. Shevky's theory is utilized here because of its importance in contemporary urban sociology and urban geography, and the wide support it has received from a host of empirical

* Lecturer in Sociology, United College, The Chinese University of Hong Kong.

studies conducted primarily in the cities of the Western world. By

applying Shevky's social area analytic technique, we attempt to investi-

gate three areas of substantial interest: (1) whether Hong Kong is a

differentiated urban society; (2) if Hong Kong is a differentiated

society, is the pattern of differentiation similar to that of Western

cities, or whether Hong Kong shows a distinctive pattern of urban

differentiation? (3) if Hong Kong demonstrates a different or slightly

different pattern of urban differentiation, how are we going to

reformulate Shevky's theory of urban development? We hope to provide

answers, however tentative and preliminary, to these three problem-areas

in this paper.

Shevky's Theory of Urban Development

Shevky's theory of urban development was presented in a precise

form only after the methodological counterpart to the theory -- the

social area analysis -- had been widely popularized.[1] Briefly,[2]

> . . . social area analysis refers to the specific
> technique and theoretical elaboration developed by
> Eshref Shevky and his associates in their studies
> of Los Angeles and San Francisco commencing in the
> later 1940s. It seeks to relate the areal differentiation
> of American cities to basic societal changes. Three
> basic constructs are used in describing complex urban
> social structures in an industrial society. These
> constructs--social rank (economic status), urbanization
> (family status), and segregation (ethnic status)--are
> purported to represent the urban social consequence of
> a shift from a rural and/or preindustrial way of life
> to an advanced industrial society. For each of these
> constructs, an index was developed, . . . Tract popu-
> lations in urban areas are thus defined by their scores
> on these two (sic) indices. Tracts having high scores
> on the social rank index tend to have residents who are
> employed in white collar occupations, who have attained
> high levels of education, and who live in expensive
> housing. Conversely, low scoring tracts are character-
> ized by blue collar occupations and low rental and

educational levels. The second index, urbanization, measures the population's stage in life cycle. High scoring tracts are dominated by families in the child-rearing stage, consequently having many young children and few women in the labor force and many single-family dwellings. Low scoring tracts have low rates of fertility, many working females, and high proportions of multiple-dwelling units. High scores on the third index, ethnic status, reflect strong concentrations of racial minorities while low scores define areas dominated by native-born white populations.

The theoretical justification for social area analysis owes a good deal to the ideas of Louis Wirth.[3] Apparently, the concept of 'urbanization' is closely related to Wirth's idea of the decreasing importance of primary contacts within the city and the decreasing role of the family as a social unit. To this extent, 'urbanization' is somewhat similar to Durkheim's 'organic solidarity', Redfield's concept of 'urban' traits, or Toennies' gesellschaft. The question is whether such concepts developed at a societal level can be translated to meaningful differences within an urban area and whether Shevky's index of urbanization is an effective measure of such assumed differences. Evidently, Shevky's answer to this question is affirmative.

The main theme of Shevky's theory is that the city is both a product and a reflection of the structural arrangements and changing patterns of the larger society of which it is a part. In other words, the basic parameters of the larger society can be used to explain social organization and social change in the urban areas. Three such parameters can be identified, each a consequence of the increasing complexity and increasing scale of modern, industrialized societies:

(1) Functional differentiation or division of labor -- specialization of occupations and the expansion of occupational

categories would result in a hierarchical ranking of occupational groups according to levels of skill, education, income and prestige. This form of structural change can be measured by the construct of 'social rank'.

(2) Changes in the structure of economic production -- the process of industrialization and the nature of industrial production lead to a separation of home and work, both spatially and functionally, hence resulting in a transformation of the lifestyle of the populace. Alternative family patterns emerge and women enter the labor force. This structural change in the social system is represented by the construct of 'urbanization'.

(3) Changes in the profile of the population -- increasing mobility and diversity of the population are followed by territorial redistribution, isolation and segregation of subgroups in society. The resulting pattern is captured by the construct 'racial segregation'.

Urban development is conditioned by the changes in these three parameters in the larger society, which are incorporated into the urban society both spatially and structurally. And social area analysis is precisely the methodology to reveal and to analyze these changing dimensions in the urban areas.

Criticism and Extension of Shevky's Theory of Urban Development

The fruitfulness and validity of Shevky's theoretical framework have been under heavy criticism since its inauguration.[4] Despite occasional modification and refinement of basic constructs, the validity of the social area scheme is supported by numerous empirical studies, largely conducted in Western cities,[5] though occasionally some of the elements in the basic constructs are refined and modified. Subsequently, Shevky's theory has

been applied to the study of some non-Western cities, with lower levels of structural differentiation and industrialization, thus allowing for a dynamic interpretation of the original theory.[6] Generally speaking, Shevky's basic constructs are verified, even though some additional constructs have been discovered which reflect the specific socio-cultural contexts of the societies under consideration. Pooling the empirical findings from both the Western and the non-Western settings together, we might formulate a dynamic theory of urban development in the following way:

(1) In preindustrial societies, with a low level of structural differentiation, social area analysis would reveal a unidimensional pattern of urban development.

(2) As the level of structural differentiation of a society advances, social rank (or socio-economic status) will be the first dimension to emerge independently from social area analysis.

(3) At an even higher level of structural differentiation, 'urbanization' (or 'family status or 'family cycle') will be the next independent dimension to emerge.

(4) The construct of 'racial segregation' (or 'ethnic status') is not an universal construct for all societies. Rather, it reflects specific configurations of racial or ethnic relationships in different particular societies, and the forms 'racial segregation' assumes also might differ (e.g., in terms of occupational segregation, geographical segregation, etc.)

In the study of Hong Kong urban society below, we shall rely primarily upon the expanded theoretical framework presented above.

Dimensions of Urban Differentiation in Hong Kong

Hong Kong as an urban society has undergone rapid population growth since the Second World War. At the end of the War, the population of Hong Kong stood at about 600,000, while in 1970 the population was more than 4 million. This rapid growth in population was due largely to the influx of refugees from Mainland China, particularly at the time immediately after the War and during the period of the Communist takeover. Hence, urbanization in Hong Kong is primarily related to the operation of exogenous factors rather than that of internal expansion. Consequently, serious problems arose. Firstly, the inadequacies of transport facilities lead to the concentration of population in a small area of the Colony, namely, the Victoria-Kowloon urban area. Secondly, insufficient housing supply resulted in urban squatting, creating problems connected with poor living conditions and the absence of residential facilities. Thirdly, industrialization based on foreign and local capital has led to industrial infiltration into residential areas, worsening even further the housing conditions in the urban area. Fourthly, the inability of the industrial-commercial substructure to provide employment to all Hong Kong residents in the labor force meant that many of them survived by taking up marginal jobs, usually involving traditional Chinese skills and organizational techniques. And the inability of the industrial structure to provide full employment signifies a typical case of overurbanization. Additionally, until the late 1950s, Hong Kong lacked an urban planning scheme. Even then urban planning consisted mainly of squatter resettlement and new town development. Therefore, up to 1966, the patterns of urban development in Hong Kong were the result of the operation of impersonal forces (or market forces). Individual choices of residential

locations are still the rule of the game. (Even though some new towns have already been built by 1966, the fact that they have not been included in this study means that the above statement is not affected.) Because of these facts, social area analysis can be utilized to study Hong Kong without violating its basic assumption of unhampered urban development. Hence, if Shevky's constructs are valid, upon the application of social area analysis, we should expect Hong Kong to manifest structural differentiation along the lines of 'socio-economic status' and 'family cycle'. Moreover, the specific characteristics of Hong Kong might supply some further dimensions of differentiation which would reveal particular processes at work there.

To study the above problems, we have conducted a factor analysis of 19 census districts in the urbanized areas of Hong Kong, using 27 variables to describe these census districts. Data for analysis are obtained from the 1966 by-census, which was a sample survey of 20% of the households in Hong Kong held on Tuesday, 2nd August, 1966.[7] The 1966 by-census is used simply because of the comprehensiveness of its socio-economic data items, and, the fact that we are more interested in theory-testing than in up-to-date description means that data recency is immaterial. Even though there is a moderate degree of sampling error in the by-census, the extent and direction of bias these sampling errors have on our research findings is difficult to measure or estimate. Hence, this aspect of the research must be a caveat to bear in mind. Several other caveats also have to be considered in interpreting the findings in this paper. First, the results of factor analysis are very much affected by the number and types of variables included in the original research design. Addition to or subtraction from the 27

variables used here might lead to a totally different picture of urban development in Hong Kong. Second, though the variables chosen are intended to approximate the variables used in the study of Western cities, differences in conceptualization of these variables and in the measurement devices employed would make our study and other studies to a certain extent incomparable. Furthermore, our choice of variables is affected by their availability in the by-census reports. Third, the smallness of the number of cases used here may also bias our results. As Rummel has pointed out:[8]

> When the interest is in inference from sample results to universal factors . . . the number of cases should exceed variables. The interrelationships among the variables are assumed to reflect -- to represent -- those in the universe. To impose a necessary dependence on these interrelationships, due to the number of cases being less than the number of variables, may bias the inferences that can be drawn.

In this study, the number of cases is smaller than the number of variables, thus constraining the number of factors that can be generated. Because of this, extra caution must be exercised in interpreting the results of factor analysis. Fourth, the fact that common factor analysis (with estimated communalities inserted in the diagonal of the correlation matrix), principal axis technique of initial factor extraction and varimax orthogonal factor rotational method are used in this study are also conditioning factors in the validity of the research findings. That other techniques of factor analysis, e.g., canonical factor analysis, multiple-group technique of factor extraction, and oblique factor rotation, might lead to different result is always possible. The reason that we are using the techniques reported here is that they are the most popular techniques in social area analysis,

and the replication of these techniques will guarantee a certain level of inter-study comparability. Fifth, the fact that census districts are used may also introduce some errors. Shevky's census tracts are geographical units delineated by the criterion of homogeneity of characteristics among the populations in the tracts. Census districts in Hong Kong are constructed based on criteria other than socio-economic homogeneity of the populations. Hence, there is a higher degree of heterogeneity (e.g., both the high-income groups and the low-income groups may be represented) in the Hong Kong census districts. Because of this difference, factor analysis might underestimate the intensity of differentiation in Hong Kong. As a result, if our study can still reveal several dimensions of urban differentiation, these dimensions should be even more striking were the census districts not used.

The 27 variables entered into the factor analysis (called R-factor analysis in the literature) here are:

(1) % of domestic households sharing premises with one or more households;

(2) % of domestic households occupying their own premises;

(3) % of domestic households with more than 4 persons in the households;

(4) % of households living in sound housing units (i.e., conventional buildings used for domestic accommodation);

(5) Density of population, i.e., population/sq. km.;

(6) Average number of dependents per household;

(7) % of population in the census district under 5 years in age;

(8) % of population over 55 years in age;

(9) % of population with English as the usual language;[9]

(10) % of population with Hakka as the usual language;

(11) % of population with Hoklo as the usual language;

(12) % of population with Sze Yap as the usual language;

(13) % of population originated from Chiu Chau;[10]

(14) % of population with secondary education;

(15) % of population with university education or higher;

(16) % of population enrolled in primary schools;

(17) % of economically active population employed in the modern sectors of the economy;[11]

(18) % of economically active population employed in the traditional sector of the economy;[12]

(19) % of economically active population who are females;

(20) % of economically active population who are married;

(21) % of male economically active population who are unemployed;

(22) % of working population who are unskilled, menial and semi-skilled;

(23) % of working population who are professional staff and qualified technologists;

(24) % of working population who are employed in manufacturing industries;

(25) % of working population who are employed in commerce;

(26) % of households with monthly household income of less than 399.99 Hong Kong dollars;

(27) % of households with monthly household income of more than 600 Hong Kong dollars.

The 19 census districts chosen represent the urbanized areas of Hong Kong, i.e., Hong Kong Island, Kowloon, and New Kowloon. They are:

(1) Central District;

(2) Sheung Wan;

(3) West District;

(4) Mid-levels, Pokfulam, and Peak;

(5) Wan Chai;

(6) Tai Hang;

(7) North Point;

(8) Shau Kei Wan;

(9) Aberdeen and South;

(10) Tsim Sha Tsui;

(11) Yau Ma Tei;

(12) Mong Kok;

(13) Hung Hom;

(14) Ho Man Tin;

(15) Cheung Sha Wan;

(16) Shek Kip Mei;

(17) Kowloon Tong;

(18) Kai Tak;

(19) Ngau Tau Kok and Lei Yue Mun.

Initial factor analysis using the principal axis technique with iterations yields 7 factors. However, in one of the factors, none of the variables have factor loadings high enough to allow it to be retained,[13] hence, as a result, only six factors remain (Table I). Factor rotation using the varimax criterion yields again seven factors,

this time, for each factor, at least one variable has a loading high enough to be included in the final factor loading matrix (Table II). The variances explained by the seven factors in the rotated factor matrix are 36.5%, 32.7%, 11.6%, 9.3%, 4.4%, 3.2% and 2.3% respectively, while the eigenvalues corresponding to the seven factors are 8.62, 7.73, 2.74, 2.19, 1.04, 0.77 and 0.55 respectively.

Interpretations of the results will show that the two dominant factors which in combination account for about 70% of the total variance in the original correlation matrix are the factors of socio-economic status (or 'social rank') and family status (or 'urbanization') respectively, thus testifying to the validity of the theoretical framework of Shevky. Hence, the general conclusion derived from the factor analysis is that Hong Kong is a differentiated urban society, and the direction differentiation takes is the direction already taken by the Western societies. The implications that Hong Kong is different-iated along the dimension of socio-economic status are:

(1) a census district with a higher percentage of professional workers in its population tends also to have

(2) a lesser percentage of the population employed in manufacturing;

(3) a lesser percentage of households with low incomes;

(4) a higher percentage of households with higher incomes;

(5) a smaller proportion of small children (maybe due to family planning);

(6) a higher proportion of elderly persons (maybe due to longer life expectancy);

(7) a higher percentage of English-speaking people;

TABLE I

UNROTATED FACTOR LOADINGS

Variable	__	Factor	__	__	__	__
	I	II	III	IV	V	VI
1. % Domestic Households: Premise Sharing		-.856				
2. % Domestic Households: Own Premise		.873				
3. % Domestic Households: >4 persons		.898				
4. % Households: Sound Housing Units	-.402	-.614	-.526			-.532
5. Density of Population		.870				
6. Average Number of Dependents/Household		.514				
7. % Population: <5 years	-.752					
8. % Population: >55 years	.747					
9. % Population: English Usual Language	.709	.555	.453	.514		
10. % Population: Hakka Usual Language		.741				
11. % Population: Hoklo Usual Language				.598		
12. % Population: Sze Yap Usual Language	-.575	.615				
13. % Population: Chiu Chau Origin	-.537					
14. % Population: Secondary Education	.841					
15. % Population: University Education or Higher	.923	.451				
16. % Population: Primary School Enrollment	-.665		-.764			
17. % Economically Active Population: Modern Sector			.787			
18. % Economically Active Population: Traditional Sector	.599	.501			-.454	
19. % Economically Active Population: Female		.798	.478			
20. % Economically Active Population: Married	-.483				-.542	
21. % Male Economically Active Population: Unemployed		.477	.449			
22. % Working Population: Unskilled, Semi-skilled, Menial	.906					
23. % Working Population: Professional				.468		
24. % Working Population: Manufacturing	-.816			-.696		
25. % Working Population: Commerce		-.580				
26. % Households: <$399.99	-.929					
27. % Households: >$600.00	.895					
Variance Explained by Factor (%)	32.20	29.00	10.70	8.60	3.70	2.50
Eigenvalues	8.70	7.84	2.89	2.32	0.99	0.66

TABLE II

ROTATED FACTOR LOADINGS

Variable	Factor						
	I	II	III	IV	V	VI	VII
1. % Domestic Households: Premise Sharing		-.953					
2. % Domestic Households: Own Premise		.949					
3. % Domestic Households: > 4 persons		.927					
4. % Households: Sound Housing Units				-.616			
5. Density of Population			-.419				
6. Average Number of Dependents/Household		.853					.698
7. % Population: < 5 years	-.719						
8. % Population: > 55 years	.723						
9. % Population: English Usual Language	.760			-.404			
10. % Population: Hakka Usual Language							
11. % Population: Hoklo Usual Language				.907			
12. % Population: Sze Yap Usual Language	-.465	.620					
13. % Population: Chiu Chau Origin	-.595	.628			.745		
14. % Population: Secondary Education	.763	-.419					
15. % Population: University Education or highe	.894						
16. % Population: Primary School Enrollment	-.560	.497					
17. % Economically Active Population: Modern Sector			.921				
18. % Economically Active Population: Traditional Sector			-.913				
19. % Economically Active Population: Female	.765	.402					
20. % Economically Active Population: Married		.630		.657			
21. % Male Economically Active Population: Unemployed							
22. % Working Population: Unskilled, Semi-skilled, Menial		.536				.658	
23. % Working Population: Professional	.881						
24. % Working Population: Manufacturing	-.733						
25. % Working Population: Commerce					.643		
26. % Households: < $399.99	-.868			-.489	-.657		
27. % Households: > $600.00	.872						
Variance Explained by Factor (%)	36.50	32.70	11.60	9.30	4.40	3.20	2.30
Eigenvalue	8.62	7.73	2.74	2.19	1.04	0.77	0.55

(8) a lower percentage of persons speaking Sze Yap language
or originated from Chiu Chau;

(9) a higher proportion of people with secondary education;

(10) a higher proportion of people with university or above
education;

(11) a lower proportion of children enrolled in primary
school (due to the small number of children in the
districts);

(12) a higher proportion of females entering the labor force.

That Hong Kong urban society is also differentiated along the
'family status' dimension implies:

(1) the larger the proportion of married persons in a census
district;

(2) the larger the proportion of unskilled, semi-skilled,
and menial workers;

(3) the larger the proportion of females entering into the
labor force (though not as high as that of professionals);

(4) the larger the proportion of people living in single-
family dwelling units;

(5) the smaller the proportion of people sharing the housing
units with other families or persons;

(6) the larger the size of the family or household;

(7) the larger the average number of dependents in the
households;

(8) the larger the proportion of people using Hoklo as the
usual language;

(9) the larger the proportion of people originated from Chiu
Chau;

(10) the smaller the proportion of persons with secondary
education;

(11) the larger the proportion of persons enrolled in primary
schools (because of the larger proportion of small
children in the population of the district);

Factor III represents a dimension of modernity/tradition. In other words, Hong Kong is still a society in the process of modernization, hence modern elements and traditional elements have not yet fully integrated, but tend to differentiate in independent directions. These independent directions are also revealed in geographical terms. Thus, in the rotated factor matrix, it can be shown that districts with a larger percentage of people employed in modern sectors of the economy tend also to have a smaller proportion of people employed in traditionalistic pursuits, signifying the fact that there is a geographical differentiation between modernity and tradition. That modernity results in a higher standard of living is shown by the fact that in Factor III, density of population is directly correlated with modernity while it is inversely related to tradition.

Factor IV can be described as the dimension of ethnic culture or lifestyle, which is different from the dimension of 'racial segregation' in Shevky's schema. Shevky's schema is that 'racial segregation' is segregation of races along occupational and income lines, i.e., minorities are restricted to manual labor groups and low income groups. On the other hand, what Factor IV shows here is a different culture or life-styles of the Hakka population, which is a minority population in Hong Kong with agriculture as the major occupation. The Hakka people, as indicated by the factor matrix, tend to be less likely to be employed

in the field of commerce, to have a higher proportion married, to have more old people among them and to live in not very sound housing units, all reflecting their rural background.

Factor V can be considered to be the factor of functional differentiation of ethnic groups in terms of the different industries or sectors of economy where ethnic groups are employed. Thus, as shown here, the Sze Yap people are more likely to be employed in the manufacturing industries and less likely to be found in commerce.

Factor VI is only loaded with one variable -- unemployment, so is Factor VII (loaded with population density), hence both of them can be removed from analysis without any substantive effect.

Conclusion

What can we conclude from our factor analysis? Most importantly we have demonstrated support for Shevky's theory that the two major dimensions of urban differentiation are 'socio-economic status' and 'family status'. We have also demonstrated that Hong Kong is a differentiated urban society. However, several refinements or supplements to Shevky's model are suggested:

(1) A society characterized by confrontation between modern and traditional elements will show an urban differentiation pattern marked by the independent, disjunctive development of the two sets of elements. Whether a higher level of modernization would lead to the elimination of this dimension of urban differentiation is difficult to tell; nonetheless, this dimension is very important in understanding structural differentiation in modernizing societies.

(2) 'Racial segregation' is not necessarily a dimension in urban differentiation. The traditional division of labor among ethnic groups might be carried over into the urban setting, imposing a conditioning factor on the processes of urban differentiation, and resulting in different lifestyles among the groups.

NOTES

[1] See Eshref Shevky and Marilyn Williams, The Social Area of Los Angeles (Berkeley and Los Angeles: The University of California Press, 1949); Wendell Bell and Eshref Shevky, Social Area Analysis: Theory, Illustrative Application, and Computational Procedure (Stanford: Stanford University Press, 1955).

[2] Hughes, James W., Urban Indicators, Metropolitan Evolution, and Public Policy (New Brunswick, N.J.: Center for Urban Policy Research, Rutgers University, The State University of New Jersey, 1972), pp. 20-1.

[3] Louis Wirth, "Urbanism as a Way of Life," American Journal of Sociology, 44 (1938), 1-24.

[4] See particularly, Amos H. Hawley and Otis Dudley Duncan, "Social Area Analysis: A Critical Appraisal," Land Economics 33 (Nov. 1957), 337-340. See also B.T. Robson, Urban Analysis: A Study of City Structure (London: Cambridge University Press, 1969), p. 52.

[5] For example, Hans Blumenfeld, "The Urban Pattern," The Annals of the American Academy of Political and Social Science, 352 (March 1964), p. 80; Wendell Bell, "Economic, Family, and Ethnic Status: An Empirical Test," American Sociological Review, XX (Feb. 1955), p. 45. Theodore Anderson and Lee L. Bean, "The Shevky-Bell Social Areas: Confirmation of Results and a Reinterpretation," Social Forces, XL (December 1961), pp. 119-124; Maurice D. VanArsdol, Jr., Santo F. Camilleri, and Calvin F. Schmidt, "An Application of the Shevky Social Area Indexes to a Model of Urban Society," Social Forces, 37 (October 1958), p. 31; VanArsdol, Camilleri, and Schmidt, "The Generality of Urban Social Area Indexes," American Sociological Review, XXIII (June 1958), pp. 277-284

[6] See Janet Abu-Lughod, "Testing the Theory of Social Area Analysis: The Ecology of Cairo, Egypt," American Sociological Review (April 1969), p. 198 and Dennis McElrath, "Societal Scale and Social Differentiation: Accra, Ghana," in Scott Greer, Dennis McElrath, David Minar, and Peter Orleans, The New Urbanization (New York: St. Martin's Press, 1968), pp. 33-52.

[7] See Commissioner for Census and Statistics, Report of the By-Census 1966, 2 volumes (Hong Kong Government Press, 1966).

[8] R.J. Rummel, Applied Factor Analysis (Evanston, Ill.: Northwestern University Press, 1970), p. 220.

[9] The common language in Hong Kong is Cantonese.

[10] Chiu Chau people are the largest ethnic minority among the Chinese in Hong Kong.

[11] The modern sector of the economy is defined by the Census and Statistics Department of Hong Kong as distinguished by these typical characteristics:

    (1) Premises usually specially designed for the industrial undertaking.

    (2) Undertakings are often large.

    (3) Equipment often includes power-driven machinery.

    (4) Labor (i) works set hours; (ii) is paid an agreed or contracted rate per month, per day or per hour, with extra for overtime; or on piece work at an agreed or contracted rate; (iii) is union organized.

    (5) The capital is that of a joint stock (limited) company, the capital-labor ratio is high, the levels of technology and productivity are high and bear an economic relationship to the rewards.

See Commissioner for Census and Statistics, op. cit., vol. I, p. XXVI.

[12] The traditional sector of the economy is distinguished from the modern sector by these typical characteristics:

    (1) Premises usually not designed for the industrial undertaking, e.g., domestic premises, the street, a village out-house or squatter shack.

    (2) Undertakings are small, usually under 20 persons.

    (3) Equipment consists of craft tools or simple machinery; power-driven machinery is the exception.

    (4) Labor (i) is usually from one family, clan village or district; (ii) hours and conditions of work are not specified; (iii) receives no agreed or contracted rate of pay per month, day, or hour; but either piece-work on a customary basis, or profit-sharing with pocket money; unpaid family help is very common; (iv) is not organized into unions.

    (5) The working capital is provided on a family or partnership basis and the capital-labor ratio is low. Productivity and rewards are not related.

[13] Only factor loadings larger than .40 are retained.