

Perception of High-density Living in Hong Kong

by LAWRENCE H. TRAVERS, assistant professor, State University of New York, College of Arts and Science, Oswego, N. Y.

ABSTRACT.—Analysis of the Hong Kong experience of adaptation to urban living can provide insights into some of the problems that can be expected to occur in the rapidly expanding cities of the Third World. Population densities in Hong Kong are among the highest in the world, exceeding 400,000 persons per square mile in parts of Kowloon. Research based upon residence in a worker's dormitory and interviews with workers reveals a variety of adaptive strategies employed by people to cope with the stress of the crowded urban environment. An understanding of the individual's ability to adjust to the stress of high-density living must consider the meaning of density as a concept in the culture in addition to social and cultural norms.

DESPITE DECADES OF CONCERN about the possible effects of high living densities upon human behavior, we know very little about mankind's ability to adapt to crowded conditions. Fears persist that the presence of a behavioral sink among rat populations forced to live in very crowded quarters (*Calhoun 1962*) might have a correlate in human populations. Perhaps rather than simply observing human behavior in dense conditions, we might more profitably attempt to uncover the meaning of different crowded living situations for individuals in different societies. Analysis of the perceptions, as well as the behavior, of the inhabitants of cities like Hong Kong might help us to understand better why some areas of the world already overcrowded by most standards fail to exhibit a true behavioral sink.

Information about the concept of density was obtained by interviewing young Chinese worker-students in Hong Kong. For eight months in 1973 I lived in a worker's dormitory in Ngau Tau Kok, site of several large public-housing estates for low-income families and resettled squatters. Impressions were gained by living as much as possible the life of the residents of the area, through

informal conversations with many of the residents, and through structured interviews with cooperative individuals.

ACTUAL POPULATION DENSITIES

Densities in Hong Kong are among the highest in the world. In 1971 the Mongkok area in Kowloon had a density of 154,677 persons per square kilometer (or 400,612 persons per square mile) which is almost five times the living density of Manhattan Island (*H. K. Census & Statistics Dept. 1971*). In the area studied, the average family of five lives in a single room of about 120 square feet. Although in the newer housing estates each room has its own toilet and cooking space, in the older estates washing and toilet facilities are communal, and cooking is done on the exterior balcony which also serves as a corridor.

Though nearly half of the colony's population lives in such public housing, in 1971 there were still almost 30,000 squatters on the rooftops and hillsides in the urban area and 35,000 living in areas about the size of a bed-space. The congestion and crowded conditions in which nearly 4 million persons are living in less than 13 square miles of built-up land must truly be seen to be believed.

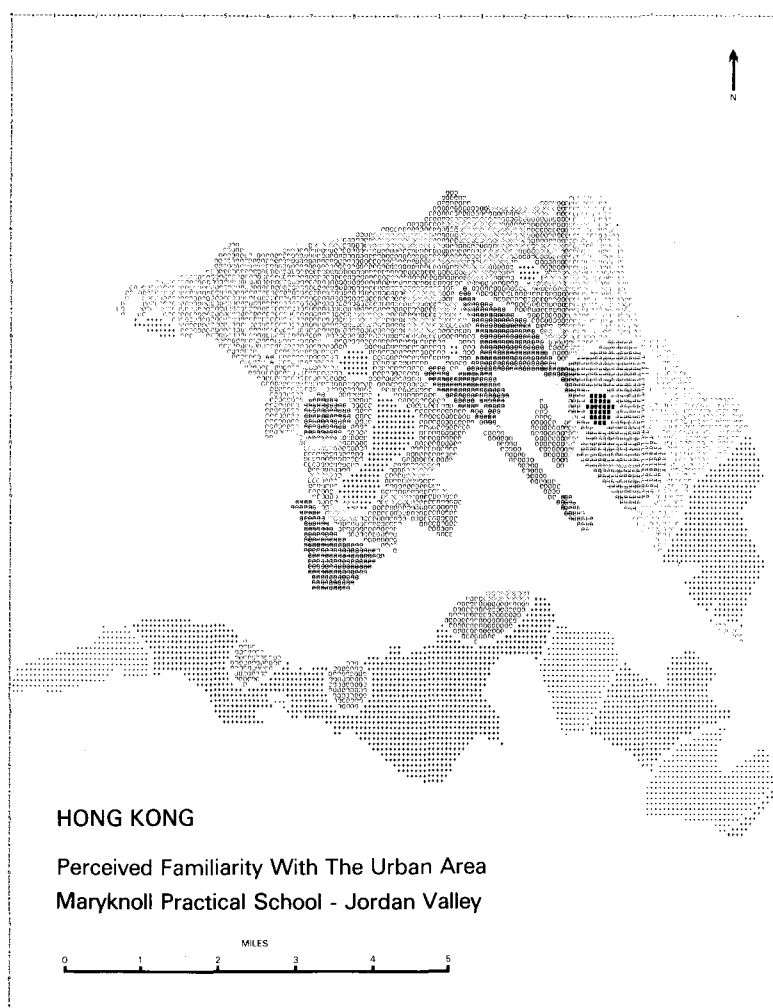
Crowded urban environments are, of

course, nothing new to the Chinese people. The Fengsheng neighborhood in Peking, considered to be fairly typical of other parts of that city, had a density of over 91,000 persons per square mile in 1972 (*Sidel 1974*). Most of the buildings there were reported to be one- or two-story structures. Li Choh Ming (1959) has calculated that in 1957 the average housing space per capita in 175 Chinese cities was 3.5 square meters, varying from 4.9 in small cities to 2.2 in big cities. Of necessity Chinese both in China and in Hong Kong have learned to adapt to crowded living conditions.

PERCEPTION OF POPULATION DENSITY

To obtain comparable data about the Chinese perception of the urban area, 46 male adolescent workers attending evening classes at a secondary school in Kowloon were interviewed. Each was asked to indicate on a six-interval scale his familiarity with 58 urban districts (fig. 1). The students were then given a second questionnaire, which required them to estimate as best they could the average population density for the same 58 urban districts on a six-interval scale.

Figure 1.—Familiarity with the Hong Kong and Kowloon urban area; 46 workers attending a school marked by a dot have been averaged together. Darker shading indicates greater familiarity.



Estimations of the density of different parts of the urban area reflect knowledge of those areas obtained in several ways. Knowledge gained by travelling along the streets of the city, the "action space" concept of urban geography, can be termed experiential familiarity. Responses to both questionnaires clearly reflect this type of knowledge. A second type of familiarity, observational, is also apparent in the case of districts such as the Peak. Home of the Colony's most wealthy residents, the Peak can be seen from many parts of the city, and even if one has never been there it is not difficult to formulate ideas about the type of housing and number of persons living there. Observational familiarity plays an important role in forming the image of Hong Kong and Kowloon, twin cities separated by a deep harbor and fringed by hills.

Other parts of the urban area never visited nor observable from afar can still be known by what I have termed informational familiarity. Newspapers, television, and acquaintances are all sources of information about unfamiliar places in the city. Of course, most often what one knows of the city and of the population density of any particular part of it is an amalgam of these three types of familiarity. The individual is constantly bombarded with information; and while most is quickly forgotten, impressions of the urban environment remain.

Due to the fact that the format of the density questionnaire required an estimation of the population density, which might be unfamiliar to some individuals, it was necessary to weight each response to the density questionnaire by the individual's response to each item on the familiarity questionnaire. The students' estimations of the population density could then be averaged and mapped (fig. 2).

The averaged familiarity surface (fig. 1) indicates, as expected, that the district in which the school is located

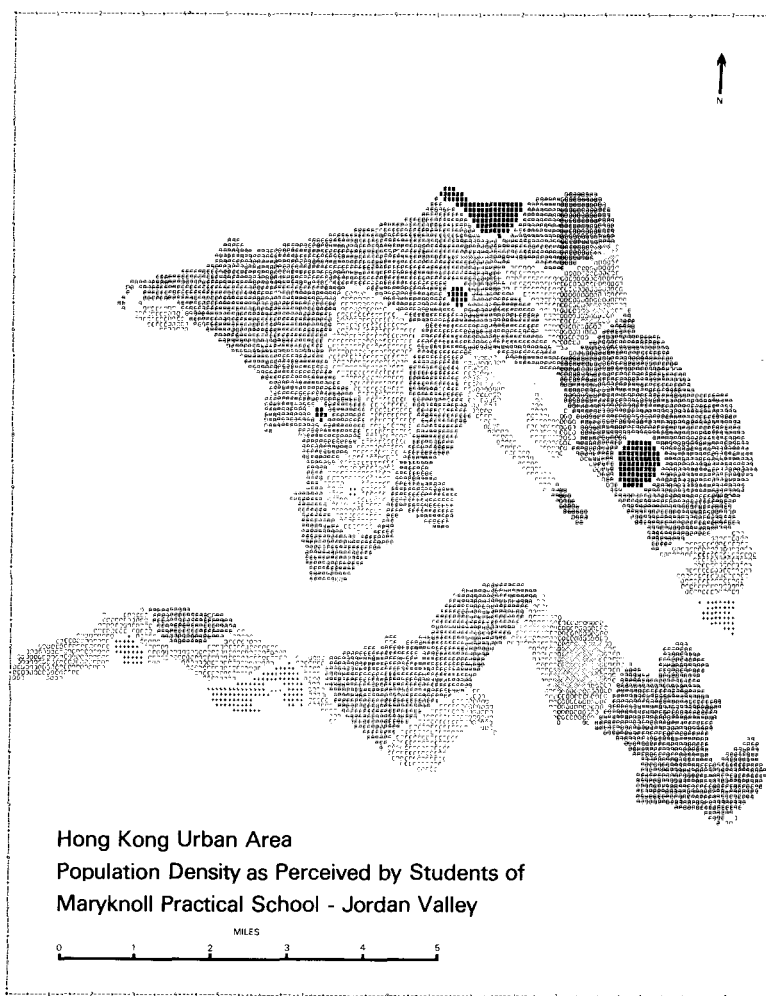
and where a majority of the students reside is most familiar. Major transportation corridors and business districts are well known; high-income residential areas, the urban fringe, and most of Hong Kong Island across the harbor are not very familiar.

The perceived population-density map (fig. 2) provides a generalized view of how these students view crowding and population density in their city. It indicates a high degree of uniformity as to which parts of the urban area are most crowded and which are least crowded. Surprisingly, the district in which most of the students live is not felt to be among the most crowded. This area, Ngau Tau Kok/Jordan Valley, had been selected for study because it was felt to be typical of the most densely populated residential areas in the city.

Assessment of the young worker-students' view of population density entailed comparing their perceptions with some measure of the actual population density for various parts of the city. This was accomplished by comparing the students' estimations with two very different measures of population density: net residential floor area per person and the number of persons per square kilometer for each urban district.

Net residential floor area per person is a measure of the degree of overcrowding in living quarters. It is calculated as one-half of the total floor area of a residential building, thus excluding kitchens, toilets, bathrooms, corridors, staircases, and landings. This information for 97 planning areas in the city was made available by the Crown Land & Survey Office of the Hong Kong Government. Aggregated to 58 districts and standardized, these data could then be compared with the standardized scores of the estimated population density, using Spearman's rank correlation. There is no similarity between the perceived and actual density measures for districts in Kowloon ($r_s = -0.06$) and

Figure 2.—The perception of urban area population density. Darker shading indicates more densely populated areas.



only minor similarity for districts located on Hong Kong Island ($r_s = 0.52$).

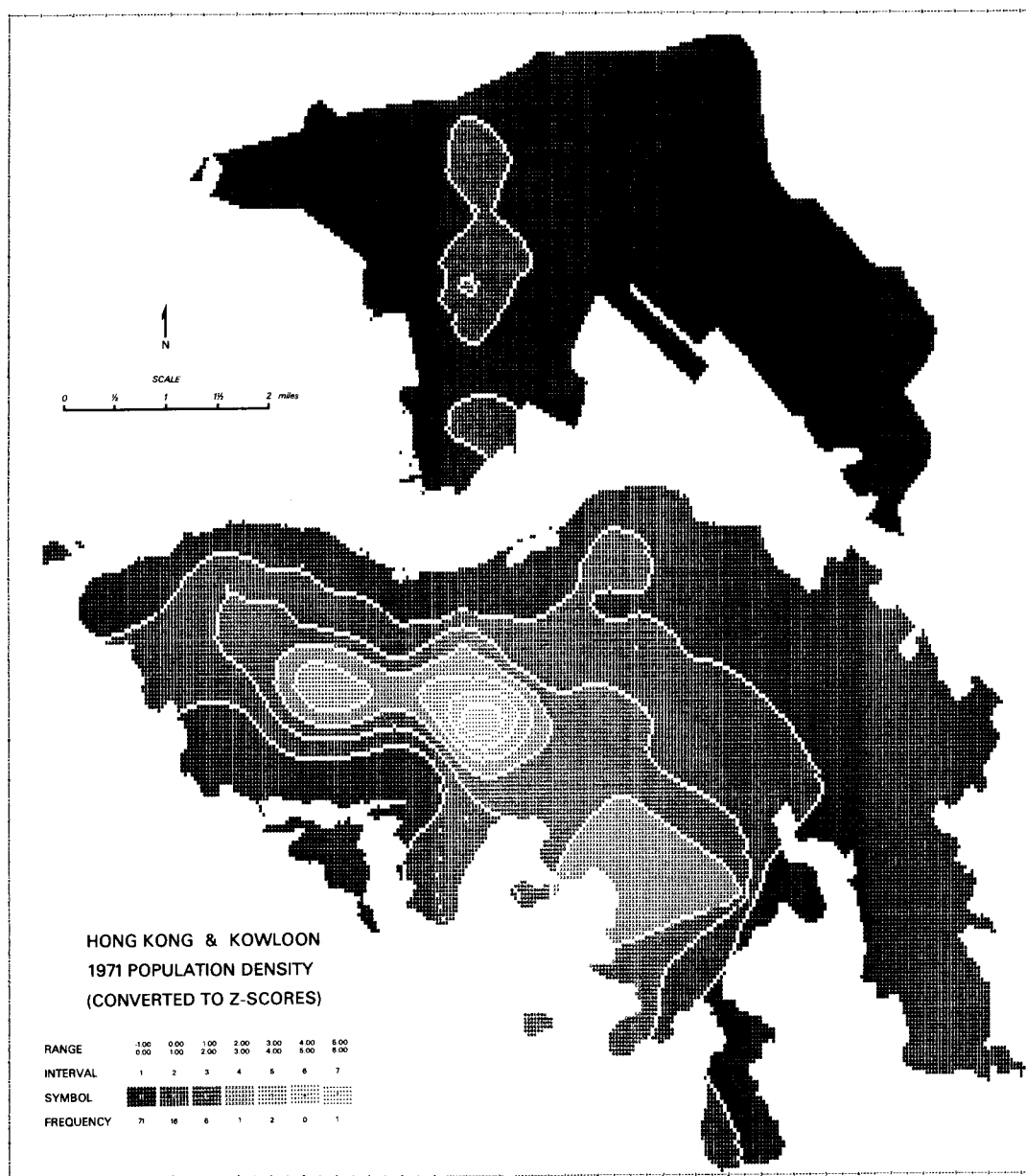
The population density perceived by worker-students is much closer to the other measure of density, the number of persons per square kilometer. The number of persons living in each city block was available from the 1971 Hong Kong Census of Population; the area of each of the 58 districts was measured, using a polar planimeter. Comparison of the perceived density measure with the

number of persons per square kilometer shows a high degree of correlation. The similarity is highest for districts on Hong Kong Island ($r_s = 0.88$) and only slightly lower for districts in Kowloon ($r_s = 0.83$).

DISCUSSION

The fact that worker-students' perceptions of the urban population density closely approximates the actual number of persons per square kilometer reveals

Figure 3.—Actual population density of the urban area computed as the ratio of net residential floor area per person.



something about their concept of density. While it is highly unlikely that these individuals had in mind any idea as complex as “number of persons per square kilometer,” they probably were interpreting the concept of dense or crowded conditions to mean the everyday sidewalk population of each urban district. An area of the city is con-

sidered densely populated in terms of the number of people one should expect to observe and rub shoulders with when walking the streets of the city.

Despite the fact that most of the urban area, except for that inhabited by the very rich, has a net residential floor area of 25 square feet per person, this uniformity of living density was not

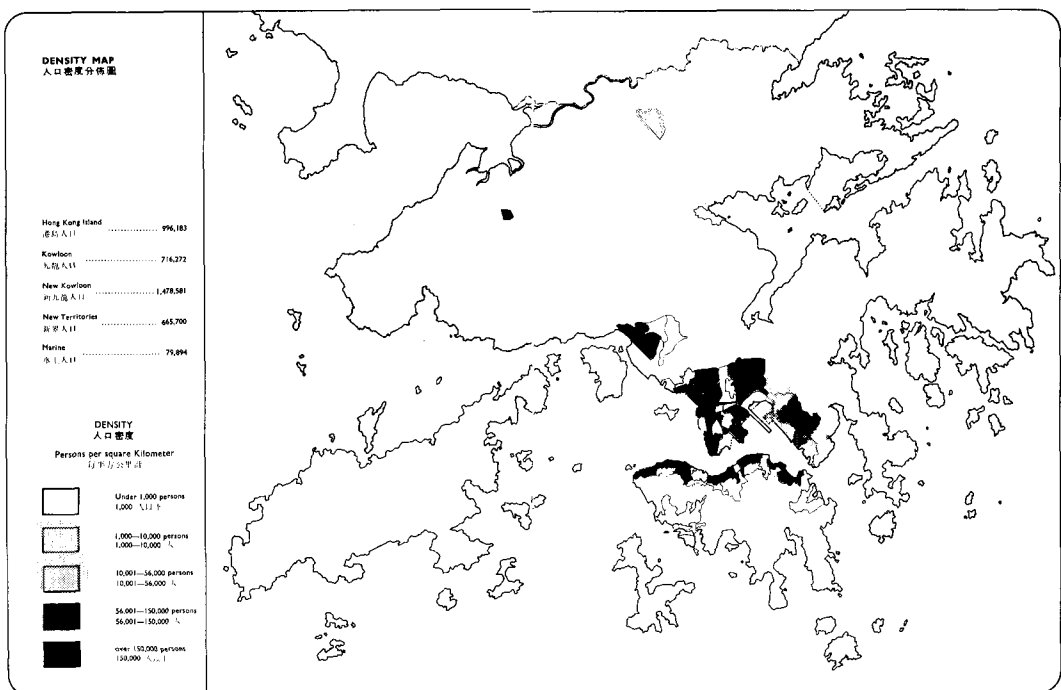
perceived by the respondents. Perhaps this type of density is less obvious, being hidden behind the facades of countless buildings. More likely, it indicates that the term for dense, crowded conditions, *chàuhmaht* in Cantonese, is not usually identified with lack of space in one's living quarters. Indeed, as Goodstadt (1969) and Hopkins (1971) have shown, the quality and amount of dwelling space are not a major concern of most Hong Kong Chinese. Only the very wealthy in Hong Kong can improve their living accommodations; all others must be content with a place in which to cook, sleep, and store possessions.

Despite such high densities, the Chinese in Hong Kong appear to have made a successful adjustment to the present situation. Several studies have revealed that the Chinese family in Hong Kong has learned well how to cope with the environmental stress of crowding. Schmitt (1963) found little rela-

tionship between density and crime rates or morbidity. Mitchell (1971) found a high tolerance for crowded living conditions among Chinese so long as only one household occupied the dwelling unit. On the other hand, Anderson (1972) found that even when three families were forced by economic circumstances to live together, the situation was made tolerable by the adoption of behavioral norms that were rigidly enforced by all. These studies reinforce the finding of Kaye (1960), who studied the Chinese inhabitants of an old lane in Singapore. She found a highly structured code of behavior for both children and adults.

In Ngau Tau Kok, most families are highly tolerant of their neighbor's activities. The clacking of plastic tiles in playing the game of *Mahjong* at 3 a.m. and children playing in the corridors of the buildings is no cause for one to become angry. Arguments, even when of

Figure 4.—Actual population density map of Hong Kong computed as the number of persons per square kilometer.



a very personal nature, are carried on in public, and neighbors often become involved.

Individuals spend as much time as possible outside the home, and many young adults return only to eat and sleep. Housewives shop in street markets at least twice daily, carrying their infants on their backs; young unmarried workers enroll in evening courses at schools; husbands returning home after working 10 hours escape into the fantasy world of television.

Some methods of coping with the crowded urban environment, on the other hand, show evidence of what might be called social pathologies. Despite the relatively low incidence of serious crime, many people live in a world of fear where every young male is believed to be a potential robber or mugger. The doors and windows of every home are barred with special steel gates; the city imprisons itself each night. Drugs and gambling are serious problems throughout much of the urban area. Little concern is shown for anyone in need who is not a relative or close friend. However, this social anomaly, often described by social workers and government officials, is probably not as much a result of the crowded living conditions as of the continued inability of most Chinese to identify with a foreign colonial government. Alienated from his homeland in China and uncertain of the future political status of the colony, many individuals have simply ceased caring about anyone outside the family.

CONCLUSION

The ability of Chinese, both young and old, to cope with the crowded living conditions that exist in most parts of Hong Kong is closely tied into the social fabric of Chinese society. Most people have made a successful adjustment to

living densities that most Westerners would find intolerable. The ability of individuals and families in other societies to adjust to such high living densities in the rapidly growing cities of the Third World is difficult to predict because few places have yet experienced the densities of urban Hong Kong and Kowloon. Assessment of their ability to adjust must take into consideration the individuals' psychological perceptions of density in addition to the social and cultural norms of the society.

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