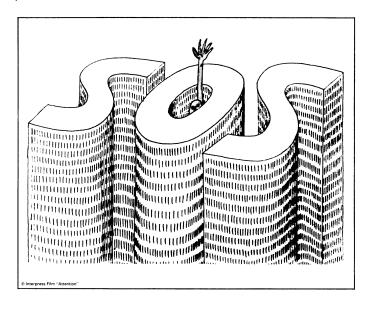
## CITIES, CROWDING & CRIME



Recent studies strengthen the evidence that crowding contributes to social problems and crime

## by Robert J. Trotter

Sexual perversion, irrational and excessive aggression, increased mortality rates, lowered fertility rates, maternal neglect of young, withdrawal and other psychotic behavior—these are among the reactions of rats, monkeys, hares, shrews and fish that have been experimentally forced to live in overcrowded conditions. Are overcrowded human populations subject to this type of psychological and physiological disintegration? Can such reactions, for instance, explain or in part account for crime in the crowded cities?

At the recent meeting of the American Psychological Association, psychologists reported results of new studies on the effects of crowding on humans. One study was conducted in the Netherlands, one of the most densely populated countries in the world (323 persons per square kilometer). Leo Levy and Allen N. Herzog of the University of Illinois Medical Center in Chicago compared high-density areas to lowdensity areas and found that higher density appeared to be positively related to such things as deaths due to heart disease, admissions to hospitals and mental hospitals, juvenile delinquency, illegitimacy, divorce and infant mortality. In Honolulu density was related to adult and infant death rates, TB, VD and prison rates. In Chicago one measure of density, the number of people per room, was correlated

with various types of social disintegration (SN: 4/15/72, p. 247). All of these findings tend to support some of the results of animal studies and suggest that human crowding is related to social disintegration and crime.

Arousal, stress, anxiety and frustration seem to be among the important results of crowding that can lead to personal and social degeneration. One thing that can sometimes lead to stress or anxiety, for instance, is infringement on personal space. Personal space or interpersonal physical distance (IPD) is defined as the area surrounding a person's body into which intruders may not come. Gay H. Price and James M. Dabbs Jr. of Georgia State University investigated the effects of age and sex on IPD. They found that personal space requirements become larger as children grow older. First grade boys and girls allowed another child to approach until a comfortable conversational distance was reported. Both boys and girls showed an IPD of 0.30 meters-about 12 inches. As children grow older, however, they need more personal space. Females in the 12th grade needed 0.45 meters and males the same age needed 0.60 meters. Other studies have shown cultural and racial differences in desired interaction distances. British and Germanic people prefer to interact at a greater distance than do Middle Eastern or Latin American people.

Blacks tend to interact at greater distances than do whites. Maintaining this personal space is not always easy in a crowded city, and overly close contact with strangers can sometimes lead to psychological discomfort and may even be perceived as threatening. This, in turn, can lead to arousal, anxiety and stress that can be physically harmful and that can sometimes lead to antisocial activity.

Yokov M. Epstein and John R. Aiello of Rutgers University have made physiological measures of arousal caused by crowding. Skin conductance levels were used as a measure of arousal. The subjects were monitored as they sat quietly in either a crowded or noncrowded room. Arousal increased over time in both conditions, but arousal increased significantly under the crowded conditions. And arousal was higher under all conditions for men.

In another set of experiments Epstein and Robert A. Karlin examined some of the social and behavioral effects of crowding. According to their definition, social crowding exists when the distance between individuals is less than the expected appropriate distance for a particular setting. What is appropriate in the bedroom, for instance, is not appropriate in the subway. Whenever the appropriate distance is not maintained, say Epstein and Karlin, stress reaction can result. Such things as heat, odors,

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noise and bodily contact add to the perception of crowding.

What happens socially when crowding is perceived? Groups of men and women were subjected to crowded and noncrowded conditions. They were given various tests and tasks to complete while their reactions and interactions were monitored. In general, report Epstein and Karlin, crowded men concealed their distress from each other, became competitive and developed attitudes of distrust and hostility-all of which can lead to aggression, stress and crime. Women, in contrast, have usually been subjected to social norms and training that allow them to react quite differently. They tend to share their distress. In a number of crowding experiments women reacted as if they were in the same boat rather than becoming competitive. They formed cooperative groups. There were usually positive sentiments between individuals. When asked to evaluate other members of the group, the crowded women gave more positive evaluations than did the noncrowded women or any of the men's groups.

One reason for criminal activity and social breakdown, therefore, may be that when crowded, men feel more negatively about each other, become more competitive, fight with each other and even become more disposed to engage in criminal activity to achieve their own ends at each other's expense.

A slightly different explanation is the "overload theory." Stanley Milgram of the City University of New York has explained how the overload theory works. People in overcrowded cities, he suggests, are constantly bombarded by sensory stimuli (horns honking, phones ringing, lights flashing, people talking, etc., etc.) at such a rate that not all stimuli can be processed. To adapt to this sensory overload, city people tend to allocate less time to each input, disregard certain low priority inputs and decrease involvement with other people. These factors lead to a lower level of social responsibility and hence a lower rate of intervention in criminal activity. Where intervention is not expected, crime rates tend to increase.

Experiments conducted by Donna Gelfand of the University of Utah tend to confirm Milgram's theory. People raised in small towns reported shoplifting (done by an experimenter) at about twice the rate of people raised in large cities. Gelfand suggests that people raised in rural areas learn that they must rely on their neighbors while city dwellers learn to rely on municipal services. Therefore, an urbanite who sees a crime being committed is likely to let the police handle it rather than get personally involved.

Frustration also affects criminal ac-

tivity, and frustration has become almost an accepted fact of city life. Annoying interruptions, for example, often lead to frustration. Ineffective phone service, traffic and parking problems, transit strikes, construction noises and many other daily happenings interrupt life and lead to frustrations. And frustrations can lead to criminal behavior, says R. Lance Shotland of Pennsylvania State University.

Milgram and Shotland demonstrated experimentally how frustration can play a part in property crimes. They sent letters inviting people to come to a Manhattan theater to rate a television program. As a reward the subjects were to receive transistor radios. The subjects rated the program and were told where they could pick up their radios. They were sent to different offices that were fronts for the experiment. The offices looked real. They were furnished and each contained a charity display with about \$14 in bills and change in it. There were no people in the offices and the subjects were monitored by closed circuit television.

In the high-frustration condition a rude message in the office said that no more free radios would be distributed until further notice. No reason was given for the empty office. In the low-frustration condition the message was apologetic. It explained that the workers were ill and that the radios could be picked up in another office. In the high-frustration condition 18.7 percent of the subjects stole something from the office including charity money, ash trays, plants, tools, etc. In the low-frustration condition only 2.9 percent of the subjects took anything.

The frustrations of life are increased for the lower class members of society. The Report of the National Advisory Commission on Civil Disorder stated that "middle-class citizens, although subject to many of the same frustrations and resentments in dealing with the public bureaucracy as ghetto residents, find it relatively easier to locate the proper agency for help and redress." Therefore, says Shotland, "One might expect and obtain more criminal activity from the lower class as they are more frustrated. They cannot use communication with a representative of government or a real or theoretical law suit as a substitute for aggression. They do not feel that they have any control over the annoyance.'

With good evidence that crowding does contribute to social problems and increased criminal activity, is there any hope that crime rates can be lowered in the already overcrowded cities? Hong Kong is the most densely populated area in the world (3,912 persons per square kilometer) yet its crime rate is only half that of the United States (22 persons per square kilometer). So

crowding need not always be a great contributing factor to criminal activity. Cultural attitudes are involved. The people of Hong Kong react differently to crowding than do the people of the United States. Similarly, women react differently to crowding than do men. But changing the cultural patterns, even if possible, would be only a long-range solution to the problems caused by crowding. It will be as difficult to achieve as eliminating poverty.

Architectural design, some have suggested, is a possible and more immediate solution to some of the problems caused by crowding. "Architecture will not eliminate poverty or other conditions surrounding it," says Shotland. But there are certain conditions that architecture can effect. Movable walls and ceilings can lend flexibility to a setting and allow people to increase personal space when necessary. Other architectural strategies can help make crime and criminals more visible and easier to report. But in areas where there is a high turnover of residents, says Shotland, intruders cannot be easily identified. All neighbors begin to look like strangers, and architectural design is not much help.

New York's Chinatown has traditionally had a low crime rate. But in recent years street crime has increased in Chinatown. Indications are that this may be due to an increase in population and immigration from the Orient. Little Italy, adjacent to Chinatown, has comparatively little crime. Architecturally, both neighborhoods are the same, a grid pattern of tenements. Little Italy, however, has a stable population and has not had a great influx of strangers. The residents know each other, says Shotland, and can and do recognize and challenge strangers. Correct architecture cannot guarantee a knowledge of one's neighbors but it can, he says, foster this knowledge by designing so there are only a small number of neighbors to be recognized. Increased contact between neighbors leads to friendships and raises the rate of bystander intervention. In conclusion, Shotland says, architectural design can only contribute toward the lowering of crime rates. It is not a panacea and is no guarantee of reduced crime rates.

A total solution to the many problems caused by crowding is not in sight. Ongoing and future research on human crowding should, however, continue to offer additional clues to the solution of crime in the crowded cities.

Robert J. Trotter, SN Senior Editor and Behavioral Sciences Editor, has begun a six-month leave of absence to complete a textbook on psychology he is writing for Xerox College Publishing. He will continue to contribute occasional articles during this period.