

When people migrate

International projects are studying the causes and effects of migration and man's ability to adapt to urban life

by Robert J. Trotter

Migration marches on. Since World War II at least one billion people have migrated—some from country to country, but most from rural to urban areas. The Commission on Population Growth and the American Future (SN: 3/18/72, p. 181) predicts that by the year 2000, 85 percent of all Americans will be living in metropolitan areas. As more and more nations become industrialized, the pattern will be repeated.

To study the results of rural-to-urban migration requires detailed before-and-after examinations. But such studies become increasingly impossible as populations become increasingly mobile. For example, Alvin Toffler, in *Future Shock*, says that in 1967, 108 million Americans took 360 million trips, accounting for 312 billion passenger miles. In that same year 36.6 million Americans made a permanent change of residence. This type of mobility does not lend itself to controlled psychological and medical examination of populations.

A unique situation, however, exists in Montenegro, Yugoslavia. Beginning in 1964 the one-time Turkish garrison town of Berena was transformed into the industrial city of Ivangrad. Peasants from the surrounding area were recruited by the Government to the city for work in a large paper and cellulose mill, a plywood and plywood products factory, a leather factory and a coal mine. About 2,000 workers made the abrupt transition from sheep-herding one day to work in the factory the next, from life in a mountain hut to an apartment in a modern high-rise building, from providing their own food to shopping in a supermarket.

The migration to Ivangrad has been the subject of a study sponsored by the Yugoslavia Federal Institute of Public Health, the U.S. National Center for Health Statistics and the U.S. Public Health Service. It is also one of the research programs constituting the United States participation in the International Biological Program. This particular IBP program (Biosocial Adaptations of Migrant and Urban Populations) is directed by Everett S. Lee of the University of Georgia in Athens. It is sponsored by the National Science Foundation.

The objectives of the program, as outlined by Lee, are to find the answers to the following questions:

- How do migrants differ from nonmigrants in the area of origin? From nonmigrants in the area of destination? From nonmigrants in other migration streams? From migrants of earlier times?

- What is the impact of migration on the structure of the population at origin? On the structure of the population at destination? On the social and psychological milieu at origin and at destination?

- What is the impact of migration on the psychological state of the migrant? On the psychological state of the migrant's children?

- What changes in social and economic conditions have the greatest effect on the volume of migration? On the selection of prospective migrants? On the types of migrants' origins and destinations?

- What are the most important factors in assimilation of migrants at destination?

- What are the most important obstacles to the assimilation of migrants?

The answers should bring about an understanding of how man does or does not adapt to a strange and disturbing environment such as a crowded urban ghetto. They could also contribute to the search for social justice and help in the fight to alleviate chronic poverty and deprivation.

The research in Yugoslavia will answer some of the questions. An experimental group, consisting of 1,963 newly industrialized city workers (recruited directly from rural life), is being compared to a control group, consisting of 1,687 nonindustrial persons (those who remained on the farm). All the factory workers were given a series of psychological, physical and mental examinations, and all were given two-hour interviews in their homes. The interview was structured to give a complete picture of the worker's childhood and family background, together with many items designed to show attitudes toward country and city life, and feelings of pessimism and optimism. Religion of parents, income, housing, smoking habits, drinking habits, amusement patterns, friends, family relations and other items of demographic or socioeconomic importance were also included.

Each worker was given two intel-

ligence tests by psychologists and then examined by a team of physicians. A complete physical examination (X-rays, tests of vital capacity, blood tests, EKG, urine analysis, etc.) was followed by a psychiatric examination.

The controls, selected in the villages from which the workers had migrated, were given the same interviews and examinations. Testing and examinations for both workers and controls were first administered in 1966, and the procedure was repeated exactly in 1967 and 1968 for all the workers. In 1971 the workers and control group were tested again.

An industrial medical team remains in Ivangrad throughout the year and constantly monitors the factories and collects information on each worker as to his success in meeting quotas, getting along with other workers, his supervisors and townsmen. The records maintained by the factory management are made available for each worker.

This, says Lee, is the largest study of its kind and perhaps the best designed. Nearly 100 percent of the persons in the sample were interviewed and tested. In addition to its advantages as a longitudinal study, there is the opportunity to examine at first hand the adjustment of peasants whose way of life had changed only moderately over the past two centuries.

Initial results indicate a high degree of selection for the most intelligent, healthiest and most optimistic among the persons opting for factory work. They have less indication of marked or incipient mental disorder. Migrants also appear to be taller, heavier, have fewer defects and lower blood pressure and heart rates.

Lee says it is now possible to predict who will migrate, where and why. The young (21- to 26-year-old), healthy, educated males are the most likely to give up rural life for the city. They go in search of better jobs, to be with persons of similar educational background, and to escape what Lee calls "the tyranny of the family." They are usually better off after migration for what they have learned along the way, says Lee. Studies in the United States have shown this and Lee feels the same pattern is emerging throughout the world.

The controlled study in Yugoslavia follows this pattern, but it does not answer all of the questions posed by Lee. However, IBP scientists are studying migratory characteristics in the United States, Sweden, Scotland, Hungary, Israel, South Africa, Thailand and at least 10 other countries. The results of much of this research will be presented at the 5th General Assembly of the IBP in Seattle, Wash., this September. □