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## Measuring Social Change

The marvels of electronics recently permitted hundreds of millions of viewers around the earth to be the vicarious companions of astronauts Stafford, Cernan, and Young in their exciting trip around the moon. It was interesting during those days to reread the 1961 thoughts of several psychologists and social scientists on what it would mean to society to be able to send men into space. In 1961, the first manned space flight was still to come, but it was not far off, and, foreseeing success, the editor of *The Journal of Social Issues* devoted an issue to the expected social-psychological implications of Man in Space.

The speculations varied. Inexorably, one author thought, we would launch "more and more men in space. Many will not return but we shall go right on, partly from scientific curiosity, partly from military urgency, partly because when invention has made a breakthrough there is no cultural force which can stop the forward thrust." Another foresaw international arguments over the height to which national sovereignty extends, and expected indemnity problems from falling space vehicles. One of the authors reported widespread belief among businessmen that by-products valuable to the earthly economy would pay for the whole space program. Still another worried about the hostility among crew members that studies on isolation and confinement led him to expect would develop on lonely missions far from the earth. Nevertheless, he concluded, space capsules might have a silver lining: "Interpersonal conflict . . . is the most dangerous single problem mankind faces in this century. If we can solve these problems in space, perhaps we can transfer the solution closer to home. What is more, I optimistically suspect that we can."

Guesses concerning the degree of popular interest in space voyages also varied. One writer, influenced by the ease with which people adapt to a new noise or to many other changes in their environment, predicted that the first landing on the moon would be taken casually by most people. Other authors expected greater involvement. One rather quickly collected 944 space jokes and interpreted the upsurge of such jokes as an effort to assimilate the idea of space into more familiar frames of reference—to domesticate space, as it were, and thus avoid the necessity of making radical readjustments in one's thinking.

These thoughts should be considered speculations rather than predictions of social change. The theoretical base was too insubstantial in 1961 (as it is in 1969) to permit much in the way of predictions or inferences solidly grounded in social theory. This limitation was made explicit in one paper, and illustrated by the inability of William F. Ogburn in 1945 to predict the social impact of aviation in the following decade.

There is another inadequacy that could be corrected more quickly. It is risky to make quantitative predictions without firm knowledge of present status, and quantitative information about current social conditions and trends is often much more a wish than a reality. The wish is likely to be expressed frequently in the next few years. No longer must it be taken for granted that "when invention has made a breakthrough there is no cultural force which can stop the forward thrust." On the contrary, there is a growing move to try to analyze in advance all of the consequences of new technology, and not simply the immediate advantages. The analysts will surely try to include the social implications, but they will not be able to make quantitative predictions with assurance until we have improved our programs of collecting and analyzing information about social conditions and social change. It is hard to predict where we are going when we don't know where we are.—DAEL WOLFFLE