

This is the third of the three essays which won second prize in the 1984 Honeywell Futurist Awards Competition.

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. . . These extensive changes have affected society profoundly, but predictably.

People reacted to these changes as they have to every change before, in a variety of ways. Many saw these advances as a means of expanding their horizons. No longer were they confined to the Earth and its vicinity, man could adapt both himself and his environment to space, and this opened up new avenues for exploration and growth.

Many reacted negatively. They felt that the money being devoted to further space development could be better spent improving space manufacture and other Earth-oriented space systems.

The largest group, as always, was the neutral majority. They accepted the changes as such; now that extended space travel was possible, they would go. However, if the negative minority had proven to be the more influential, the "neutrals" would have supported them just as readily. In this way, they are perhaps the most influential of the groups; once persuaded, they guide society's long-term policies.

Because they do support change, society in general becomes tolerant of the new ideas. The next generation of children will grow up in a world where calcium implants and ecological support systems, and therefore man's permanent presence in space, are "natural" and commonplace. This is completely analogous to our own generation to whom computers and rockets, which were practically unheard of in our parents' childhood, were everyday items.

Aside from their ideological impact, these developments affected, and continue to affect, society in another way: spinoffs. Few people stop to think of how many of the items that we rely on are direct benefits from space. Highly purified drugs such as insulin have saved many lives. The internal calcium pump has found additional use in bedridden patients. The ecological system has increased our knowledge of how organisms interact, and has increased world food production 20%. If we took away these advances as well as the hundreds of other vital products, from high-durability metal alloys to "vacuum suits" for divers and workers in low pressure conditions, we would find ourselves terribly lacking in many crucial areas. In short, space has become a necessary, and worthwhile, effort.

It is difficult to predict what changes will come next, and it is often risky for those who are in a position to make those changes to do so; society will always be divided in its opinions, especially on the validity of space development, since we have always been confined to the Earth in the past. These advances are important, though. We have an inborn

need to explore and develop our universe and to grow as a species. Without this need we would never have advanced to where we are today. To grow, though, we must move into space. As Tsiolkovsky once said, the Earth has long been considered the cradle of mankind, but man cannot live in the cradle forever.