

The green revolution is the process by which very high yielding grains are introduced into developing countries and indeed into developed countries. There are a couple of problems with this revolution. The first is that it is far from certain that these new varieties of grain are hardy enough to cope with the possible diseases. There was a dramatic case in the United States in 1970 when a hybrid corn was attacked so severely by a particular form of blight that there were very real questions about the total yield of corn in the United States last year. It is quite possible that the grains which have been developed in order to feed people in the developing countries may also become extremely vulnerable to pests. One might get higher yields in the short run, but a major natural catastrophe in the long run.

The second problem, of course, is that the green revolution is really misnamed, because the green revolution is actually a fertilizer and pesticide revolution—it is possible to produce a great deal more grain if one greatly increases the amounts of fertilizer and pesticide which are used. Now, although it is possible to overestimate the ecological and environmental dangers to the world, it is also clear that pesticides such as DDT are having very serious, and not yet understood, consequences. Therefore, the whole effort to produce an industrial-style agricultural revolution may be very dangerous, if only because the green revolution, of itself, disrupts family, social and cultural patterns.

The question is are there any alternatives? If there are not, we obviously have to do what we are already doing because it is the only thing that we know. But there is now very clear-cut evidence that there exists an alternative style of development, an alternative pattern by which countries can jump from the agricultural era, bypassing the industrial era, and in some cases from hunting and gathering, and move directly into the communications era. Once the question of development is conceptualised in this way, one can perceive that it may be easier for the developing countries to move directly from agriculture to communications than it is for the developed countries to move from industry to communications.

This tape, with the conversation we are going to have immediately after it by telephone, are small illustrations of the potential of the communications era. They demonstrate that today it is information which really makes for production, that both human beings and machines can simply be seen as mechanisms for using information. A very advanced machine, based on a combination of computers and machinery, makes it possible not only to produce a particular type of good but to produce a very wide range of goods without anybody doing anything to it at all. You can set a machine, for example, and it will turn out clothes which have very different patterns; it will cut through the cloth on a laser principle. It is infinitely more efficient than the old-fashioned cutting machine.

If there are these new technologies, if it is possible to move new ideas to the developing countries, why don't we do it, apart from the fact that we continue to be trapped by old ideas. We seem to believe that we in the developed countries are brighter, smarter, more intelligent than everybody else. We seem to argue that if we still haven't understood how to manage a country in terms of the communications era then nobody else can do so. But this doesn't necessarily follow, because what is so alien to us about this new world we are moving into—this world based on communication satellites, on telephone, on television, on radio—is precisely that it is based on community and family values.

The Western world is still trying to convince the developing countries that the most efficient method of learning is through literacy, in other words, we must first teach people to read and write and then they can read and write what they need to learn. But this is a long way round to come home. Of course we had to do it when all the technology we had was the Guttenberg Press; we could move ideas only through the process of mechanically inking words on paper and then giving them to people so that they could learn them. But suppose we now recognise that tape and film and telephones and other methods are available. It is obviously easier for people to learn in many areas through sound and image than through words; and yet, when I talk about the possibility that literacy is not a necessary skill for training, the degree of anger educational experts show is quite extraordinary. I now believe that people are so afraid that literacy may not be the key value of all that they are determined that we will do everything through literacy.

I am not saying that literacy is not useful. I am saying that if we want to move ideas quickly, which we must if we are to achieve a process of development, it is essential to rethink the whole process of moving ideas and to take advantage of the new technologies. And to do that we have to think about how we can use television and radio and tape and whatever is feasible within the culture and

