Mr. Gallagher. Could such a system as that be built in an ancillary way to what we are now discussing?

Mr. Baran. Yes. Once you have the information you can process

it anyway you want to.

Mr. Gallagher. You also said that the centralization of the information would result in the loss of an individual's privacy as we know privacy today. Could you explain how privacy could be destroyed

by such a system? Mr. Baran. Suppose we build our future systems without any safeguards at all and all information—this whole list of records that we accumulate during our life—is available in various systems. Let us suppose these systems are highly interconnected for the sake of Then each and every one of these files can be separately interrogated, asking, "Do you have any information on so and so?" Do you have any information on so and so, and work on back and accumulate all the information you wish. Whether the information is centralized in one central data bank or whether it is spread around the country doesn't make a darn bit of difference. The result is the

Mr. Gallagher. Basically we could sum up, Mr. Baran, that we certainly should not attempt to impede the growth of technology but at the same time we should start devoting more time to building in safeguards so that this technology can serve man rather than sub-

ordinate him to its decisions.

Mr. BARAN. That is right. I do not think we are going to be able to stop technology. I think that decision is not ours. But what we can do is to provide all the safeguards we possibly can. This, I think, is the direction we should be going.

Mr. Gallagher. You feel at this moment that we have not utilized our resources in the direction of proper safeguards with regard to

the privacy issue.

Mr. Baran. That is right. As you know, it is a new problem. It is one that we have generally been unaware of in the computer field. It is so new we have just not built a large body of people concerned about this problem. I think the fact that you are holding these hearings will do very much to stimulate interest in seeing that such safeguards are forthcoming. The fact that you are holding these hearings will be sufficient to cause many of my colleagues to go back to the drawing boards tomorrow and start dreaming up ways-better ways-of protecting information.

Mr. Gallagher. We want to thank you very much for your contri-

bution here this morning. Mr. Rosenthal.

Mr. Rosenthal. Thank you, Mr. Chairman.

In the broadest context, and one I think that perhaps I might understand and some of the American people might understand, it is really quite hard for us nontechnicians to visualize all of the manifestations of the proposal. But putting it in simple context, I seem to fall back on the proposition that it cannot happen here. I wonder if it ever could happen here, if that day came to pass. I think you cited some examples. Perhaps some incident that happened in high school might be fed into a computer. The type of car a person bought, whether he bought a motor scooter which apparently is popular with some people today. What book club he belonged to. What magazines he subscribed to.