Mr. Rosenthal. That the scientific community must address themselves by way of design to considering the problems that the subcom-

mittee is considering, to wit, the invasion of privacy.

Mr. BARAN. That is right. Since this is occurring in both the private and public sector and is so widespread, I doubt whether you could sit down and write some laws and pass them that would solve the problem.

Mr. ROSENTHAL. Simply because the technology is not sufficiently

advanced for those laws to be written today.

Mr. BARAN. That is right. That is one of the key elements.

Mr. Rosenthal. Thank you, Mr. Chairman.

Mr. Gallagher. Thank you, Mr. Rosenthal. You said we are in shades of gray. Would not a statistical data bank wash out the gray and replace it with black if we were to adopt it at this stage of the

We are talking now as a mechanism of totalitarianism or the police

state that you mentioned.

Mr. BARAN. If we are to adopt it without protection possibly.

From the way the gentleman spoke yesterday, at least later in the afternoon they were aware of the existence of this problem. I think a suitable system emerging will have much more in the way of protection than the example that you have cited.

Mr. GALLAGHER. This would call for a great deal more study.

Mr. Baran. A great deal more head scratching and hard detailed work on a specific system.

Mr. Gallagher. Thank you very much, Mr. Baran, for your appear-

ance here today and your really outstanding contribution.

The next witness before the subcommittee is Burton E. Squires, Jr., visiting assistant professor of computer science, University of Illinois, Urbana, Ill. We welcome you here this morning.

STATEMENT OF BURTON E. SQUIRES, JR., VISITING ASSISTANT PROFESSOR OF COMPUTER SCIENCE, UNIVERSITY OF ILLINOIS, URBANA, ILL.

Mr. Squires. Thank you, Mr. Chairman.

Mr. Gallagher. Will you please proceed? I saw you wince at a few questions.

Mr. ROSENTHAL. I did, too; I was not sure whether you winced be-

cause of the question or because of the answer.

Mr. Squires. Mr. Chairman, I would like first to express my appreciation to you and to your committee in inviting me to these hearings. This is a very difficult and complex area, involving intimate knowledge in the fields of governmental and individual rights, psychometry, statistics, and modern technology. The task you have undertaken, to familiarize yourselves with the essentials of these fields, is indeed a formidable one. Through these hearings you have already made significant progress in protecting our right of privacy. You are now collecting data that will help all of us more reasonably to assess the full political implications of automatic data processing equipment. you know, my specialty is in the field of computer science, and I will try to confine my remarks to this area. However, I feel quite deeply that we are here dealing with a technology that is as potentially dangerous and powerful as a nuclear explosive device.