questions being asked or if he is responding emotionally to embarrassing or shameful features in these questions not known to the interrogator. reasonable attempt must be made to reduce such extraneous influences; the meaning of the questions must be clear and obvious; the manner of the examiner must be neutral. There is no need to emphasize further the obvious significance of the interview upon the test and we may turn directly to the problems it

poses as to the accuracy of the lie detection procedure.

Though the technique of an interview is an art rather than a science, certain of its aspects are amenable to standardization and evaluation and it is likely that interview techniques within a multiexaminer unit could be reasonably standardized. Nevertheless, the reliability of the interview associated with the polygraph examination has never been statistically evaluated. Yet, it is known from other studies that the reliability of interviews (agreement between different interviewers in reporting identical material) varies widely; typical values range from 40 to 80 percent (Hyman, 1954). It is entirely possible, and probably desirable, to improve the content, format of questions and the order in which questions are presented in the lie detection interview. The problem with any single question is to determine whether alone or as a consequence of the order in which it appears it presents ambiguous unclear meanings to the recipient—not to the examiner. This can only be determined by an objective method, similar to the procedure used in the development of any standardized intelligence or personality test. The method is tedious but quite straightforward. It involves collecting all the answers that may be given in response to any particular form of asking a question, including the order in which it is presented. Since ultimately only "Yes" or "No" answers are desired, the real problem is to determine what the subject had in mind with each answer. This preliminary procedure is required to assure us that all of the characteristics of the questions employed in an interview are, in fact, known. There is no evidence that this has ever been done in lie detection or that advantage has been taken of techniques that are available for dealing with this problem. This is not to deny, of course, that the importance of the interview has been recognized or that efforts have been made to improve it on an intuitive, but not an objective, basis.

A standardized lie detection interview would apply primarily to situations which permit a routine procedure, such as in interrogation based on a personal history statement. It would, in effect, provide an "optimized" interview; it would standardize the interrogation and assure us that all persons are dealt with in the same manner. It would reduce the variability due to the personal technique and competence of the examiner. It would permit comparison of an individual's responses with that of the group. It would provide a basis for

training polygraph operators.

Another limitation to an interview is that the personal manner of the examiner can easily affect the outcome even if completely standard questions are used. Only anecdotal evidence is available on this point but it is obviously a matter of great importance. In psychotherapy, we know that a patient is urged to move from one therapist to another until he finds one in whom he can confide; the therapist is responsible for pointing this out if it is not otherwise obvious. Similar responsibilities concerning the mutual compatibility of the client and

Polygraph examiners acknowledge the existence of this problem and attempt to deal with it in a variety of ways, such as by supervision, attempting to "match" the examiner with the subject, observing the interview through a oneway mirror and/or over an intercom, and by encouraging an examiner to excuse himself from any interrogation in which he feels he is being ineffective. effort to act in accordance with such rules must be highly regarded. again, the question is whether such restraints are actually adhered to in prac-Doubtless, abuses are likely to creep in when the staff are overloaded, when there is inadequate supervision or when an examiner works alone.

It would be relatively easy to determine objectively the magnitude of such influences by comparing the effectiveness of different examiners with a carefully selected sample of similar cases. An interesting idea, which is being employed on an experimental basis in psychotherapy, is to observe the emotional responses of the therapist to the patient during interviews. This notion could be adapted

to research on the lie detection interview.

It would also seem highly desirable to create impartial boards of professional overseers to establish standards to guide and help the examiner as well as to assure the Government that thoroughly professional practices are being observed. It is believed that no such professional supervision and review is presently in effect anywhere in the Government.