Columbia University. For those who dislike the printed presentation of the verbatim proceedings of a congress as regurgitated by a tape recorder, let me hasten to add that this is not such a production. The discussion was not reproduced unless a particular contribution was felt to be of sufficient weight to be capable of standing as an independent communication. Individual speakers, however, were asked to include the substance of the discussions in their draft for publication. Such an arrangement leads to less rapid publication but the consequent improved quality and readability of the end-product more than compensates for the delay.

The diagnosis and management of abnormalities of the fetus '*in utero*' is a new branch of medicine which is not yet a specialty. The opening up of this field may be dated to the work of Bevis who, in 1953 in Manchester, obtained liquor amnii for prediction of the severity of rhesus iso-immunization. This great development received little recognition at the time, but it demonstrated that the fetus was not an inaccessible prisoner in its intrauterine environment. In its way it was similar to the landing of the first earth rocket on the moon; it was a prediction of great things to come in a region hitherto out of reach. Liley's introduction of intrauterine transfusion of the fetus severely affected by erythroblastosis might be equated with man's landing on the moon.

Other relevant developments have been Saling's use of fetal blood sampling in labour after rupture of the membranes and amnioscopy before labour; maternal urinary oestriol and other determinations to assess fetal well-being; obtaining liquor amnii for ABO blood group and nuclear chromatin determination together with chromosome analysis plus the controversial procedure of placental biopsy. What sort of techniques will develop in the future can only be guessed at. What is certain is that there has been a minor revolution in our thinking, and the fetus is now an object of diagnostic and therapeutic attention from a very early age.

There are two main preoccupations of the contributors: (a) the problem in late pregnancy or labour of discovering the state of the baby *in utero*—particularly with reference to oxygenation but also haemolysis in iso-immunization; (b) the problem in early pregnancy of deciding whether or not some fundamental fetal disorder may be present in cases where family history may suggest the likelihood. It is the second group that is likely to prove of particular interest to geneticists.

The geneticist may find himself misled by certain chapters where there is failure to differentiate clearly between what is possible today and what might conceivably be achieved in the future. This is not said as a criticism but rather as a warning for the reader lest he expect his obstetric colleagues to perform all the diagnostic procedures referred to. Some of these are still purely speculative, while others, such as placental biopsy in the course of pregnancy, have been performed in particular units in certain parts of the world and are of such a nature that it is highly unlikely that an obstetrician in the United Kingdom would be willing to perform them.

In what may be termed a development area of this sort it is, of course, entirely appropriate that there should be speculation as a stimulus to initiative. The sections of particular relevance include a chapter on The Future of Antepartum Morphologic Studies by William Blanc ('morphologic' misleads as to the scope of this chapter); Prenatal Sex-Chromatin and Chromosome Analysis by Harold P. Klinger and Orlando J. Miller; and Placental Biopsy by Hermógenes Alvarez. There are also chapters which outline the current situations with regard to the rhesus problem.

Blanc's chapter is one in which the crystal-gazing component is particularly prominent, at times extending to the realms of fantasy. At one point it is implied that a neurological examination of the fetus is possible and that the fetal tongue may be inspected! On the other hand the contribution by Klinger and Miller is of a realistic nature. They draw attention to the fact that, despite all that has been written about the matter, only four successful cases of prenatal chromosome determination had been reported in the scientific literature at the time of writing!

This is certainly a book for the obstetrician's bookshelf. For the geneticist it might be adequate to borrow it for an evening.

J. S. Scott

Modern Biology. By Hans Joachim Bogen. Modern Science Series. Translated from the German by Harold Oldroyd. (Pp. 335; 182 illustrations. 45s.) London: Weidenfeld & Nicholson. 1969.

This book is a highly successful popular exposition of biology at the cell level: structure, biochemistry, immunity, and heredity are discussed with a wealth of illustrations in which colour has been used freely. A concluding chapter deals with the origin of life and the future of man. It can readily be recommended as an introductory text for medical students.