clinically affected homozygotes. In contrast to the sex-linked G6PD deficiency, morphological studies of red cells show that the defect in heterozygotes for enzymopenic methaemoglobinemia is distributed diffusely in the red cell population, which is in keeping with autosomal inheritance.

In summary, Dr. Tönz's monograph is a valuable addition to medical and genetic literature; it is excellently organized and illustrated, and the translation into English, though not entirely free from blemishes, has been well done on the whole.

J. V. Dacie


The second volume of this excellent atlas has now appeared, and in many ways is an improvement on the first. I still have two major points of criticism. First, that it would be most desirable and in line with zoological practice to give authorities for specific names. Second, and I think more important, the authors should stop using a variety of terms to describe the chromosomes, including terms of such doubtful validity as 'subtelocentric', 'subacrocentric'—what do these mean? A telocentric chromosome strictly has no short arms and a completely terminal centromere, and it is questionable whether such chromosomes really exist. Does a sub-telocentric have less than no short arms? This is of course absurd, but I use it to illustrate the problems.

In a recent apologia in the Mammalian Chromosome Newsletter (Vol. 9, No. 4, September, 1968) Dr. Hsu recognizes both these problems. The first was apparently taken as a calculated risk; the calculation has not come off, so could we have the authorities for each proper name please? The second, Hsu agrees that there are problems with the terms used, and that these are both subjective and inaccurate; surely, therefore, the answer is not to continue to use all the terms available indiscriminately but to choose which terms are best and accurate, define them, and stick to them. Surely three are sufficient to describe chromosome morphology, especially when the karyotype is given for each species: these are 'acrocentric', 'submetacentric', and 'metacentric'. All the others are superfluous.

The cumulative index given in the present volume will be of great value as it builds up, and the authors are to be commended on the clearer and more uniform reproductions in the present volume. If future volumes continue to improve at the same rate, the final publication should be of great value to all mammalian cytogeneticists.

John L. Hamerton

Primer of Chromosome Practice. Plant and Animal Chromosomes Under the Microscope. By G. Haskell and A. B. Wills. (Pp. xv+180; illus-