to permit the future extraction of appropriate family data for whole populations, and spanning an indefinite number of generations.

There is reason for believing that such modified handling procedures might perhaps prove quite simple in operation. Until recently, no serious thought had been directed to this end; but preliminary discussions in Canada, initiated for a rather different reason, suggest that some form of population accounting which takes cognizance of the family relationships from generation to generation may in fact be feasible. Without going into details, the essential feature lies in bringing together by means of a coding system (such as might be used with a punch-card medium) those records relating to the births, marriages and deaths of the offspring from a single pair of parents. There are a number of ways in which this can be accomplished. The product is in essence a family tree of the population, complete with the dates of all events, family sizes, causes of death, and, eventually, degree of consanguinity of the parents.

Most of the speculations regarding future populations imply that the problem is of practical importance. If so, is it not time that we started recording and handling our vital statistics to permit appropriate observations to be made on the differentials of reproduction, so that we shall not always be forced to draw conclusions about future populations from such meagre data? The possible negative correlation between family size and number of descendants which Dr. Goodhart postulates represents only one of the possible relevant kinds of observation.

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¹ Goodhart, C. B., *Nature*, 178, 561 (1956).

THERE is perhaps one way in which the tortoise might be expected to continue to slow down after he has beaten the hare.

The suggestion was that families (in the sense of 'lines of descent') of low average fertility might come to predominate in the population as a result of selection for success in life when indiscriminate mortality was low. This low average fertility is seen as being due to their having a high proportion of individuals who are subfecund, whether as a result of physiological sterility or because they are 'psychologically infecund' and disinclined to marry or have children. Such infecundity, whether physiological or psychological, is congenital and likely to be at least partly conditioned by inherited genetical factors, so that its already surprisingly high incidence in some communities must be the result of natural selection. It was suggested that this selection for relative infecundity (correlated with other inherited characteristics of high survival value) was likely to be extended in the future. If that does indeed happen, and the incidence of subfecundity is seriously increased, then the rate of population growth should continue to slow down for so long as the selection pressure is maintained; and that is not directly dependent upon the total numbers of the population, nor upon its average fertility.

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Splitting of Genera

THE recent passion for the progressive splitting up of genera has spread through most branches of zoology and latterly to botany as well. In fact, the present phase in taxonomy is to lump species and split genera, thus making genera on the whole as small as possible. In some groups (for example, Heteroptera, Cypræidae, birds of paradise) this practice has reached absurd limits. The steady march of this practice goes almost unnoticed until large general or popular books are compiled where all recent work is uncritically assimilated regardless of quality. Two such Australian works on shells^{1,2} and a recent book on birds³ are illustrations. They admirably serve their purpose of presenting to the public excellent well-illustrated identification handbooks; but the nomenclature used is highly unstable, which is particularly undesirable in a book of wide public appeal.

The solution for this problem lies with the two International Commissions for Nomenclature. It is not, of course, denied that a very large number of genera remain to be described; but the burden of proving their complete distinctness rests with the describer. At present, names are very often proposed on flimsy grounds and the work of proving their validity or otherwise is handed down to future workers. For example, Steadman and Cotton⁴ have summarized the 'accepted' classification of the Cypræidae, and the genera and even subfamilies are separated on characters which are no higher than specific. New genera are established using merely the specific characters of the unique species included without any additional evidence. The result is that two species such as *Cypraea tigris* L. and *C. pantherina* Sol. are placed in different genera, whereas they are only just distinct species which actually hybridize.

Such absurdities should have no standing in nomenclature. I would propose that taxonomists consider a clause to be added to the international rules laying down that no generic name proposed after a certain date (possibly placed in the past) has any standing unless full reasons are given for its separation, not merely that it must be accompanied by a description. The interpretation of the term 'full reasons' is, of course, of paramount importance and varies from group to group. For example, no mollusc genus should be proposed without a comparison of its anatomy with allied genera. Each group has its accepted characters used for differentiation purposes and these should be used. If in a group the main classification depends on one character, then the description of a new genus should include full details of that character. I believe some such clause is needed to prevent certain branches of taxonomy developing into a farce. The mere extra labour involved in describing more than the macromorphology will prevent many of the offenders from too lightly proposing names.

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¹ Allan, J., "Australasian Shells" (Melbourne, 1950).

² Allan, J., "Cowry Shells of World Seas" (Melbourne, 1955).

³ Roberts, A., "The Birds of South Africa" (London and Johannesburg, 1940).

⁴ Steadman, W. R., and Cotton, B. C., "A Key to the Classification of the Cowries", *Rec. S. Aust. Mus.*, 8, 503 (1946).