the method, and a list of literature references. So the treatise serves as a "cookbook," but also provides enough background and literature reference to allow the "cooking" to be done with intelligence and insight. With the exception of a few ASTM methods, however, none of the procedures are intended to be standard or official. The choice of methods was left to the authors, who were selected on the basis of their special knowledge of their subjects. Some chapters, therefore, show bias for certain methods; others provide several methods for a particular measurement, along with enough background information to allow the reader to choose according to his own purpose.

Any attempt to produce such a treatise that is simultaneously comprehensive in scope, definitive in treatment, and uniform in presentation can never be completely successful. In this case, however, it is certainly better to have fallen short in a monumental enterprise than to have succeeded in a mediocre one. The seven years that went into the planning, writing, and editing of the book were well spent—to the benefit of the beginner or casual user who needs a recipe as well as to that of the practitioner who needs a good head start into the literature.

ROBERT H. MEADE
U.S. Geological Survey,
Woods Hole, Massachusetts

The New Zealand National Character

At the time of its first appearance (1960), this study, **The Fern and The Tiki: An American View of New Zealand National Character, Social Attitudes, and Race Relations** [Holt, Rinehart, and Winston, New York, 1965 (reprint). 254 pp., $1.95], by David P. Ausubel, aroused considerable interest in that country where a number of readers disagreed with it. I can say that I have seen and heard nearly all that Ausubel reports that he has actually seen and heard.

But agreement on manifest facts is not sufficient for a study of national character. Facts must be tallied and measured, so that observers can agree that they have seen swallows and that they have seen enough swallows to make a summer. Behavior, social roles, and beliefs should preferably be accounted for in historical development as well as in functional maintenance. Reporting must have clear standards of comparison and assessment. Ausubel meets these requirements somewhat better than von Keyserling who completely rejected systematic empirical method, but he is very much behind Gunnar Myrdal who based his work on a vast quantitative foundation. Frequency, quantity, and the precise identity of actions generally elude the reader of *The Fern and the Tiki*, and the ascriptions of meaning are often only half right. But because Ausubel's evidence is not systematically presented, conflicts of judgment must remain unresolved, as they might over the findings of any intelligent journalist who had insufficient time for full scholarly inquiry.

For example, everyone will agree that the country is interested in rugby football. But is there really a Black Monday at the high school when the first team has lost on Saturday? I doubt that most of my school friends knew whether the team had lost or won. Has there been such a change in 40 years? I can only say that I know of some schools where there has not. A better statement is that the country is interested in sports—in soccer, field hockey, cricket, racing, track, golf, fishing, swimming, skiing, and others. But how interested? What are the measures? At least 50 percent, the women, know nothing of rugby, and a majority, men and women, know nothing of racing. In an analysis of national character, the importance of a quiet majority should not be obscured by the flamboyant enthusiasm of the minority.

Historical accounting for values and actions requires attention to beginnings as well as to continuation, and Ausubel was undoubtedly hindered by the fact that New Zealand scholars have written so little on their social history.

Graduation ceremonies in the universities are sometimes occasions for rowdiness, and Ausubel ascribes this to current anti-authority feelings of youth. Perhaps this correctly accounts for the present maintenance of rowdiness, but if placed in historical perspective these feelings must be located in England where the customs arose. They have not come into being just at this moment in order to provide an institutionalized outlet to feelings which Ausubel holds to be both strong and dysfunctional. Such an arbitrary juxtaposition of institutions and individual needs is no advance on the famous hypothesis that linked swaddling and the Russian character.

The best section of the book concerns race relations, an area of national life that had been studied in detail by Beaglehole and his associates at Victoria University who thereby provided a foundation for further research. Society has a need for myths about crucial processes and structures, especially ones where the tensions make for some uncertainty. The New Zealand myth about race relations is a comfortable one, but as Ausubel states, race relations in New Zealand do not assure everyone of dignity and equal opportunity and treatment. From time to time, a society also has a need to review its discrepancies, and this section, a partial and popular version of a fuller study that Ausubel has published, is a useful report that should help in altering either the myth or the reality.

H. B. HAWTHORN
Department of Anthropology and Sociology, University of British Columbia

Textbook and Reference Source

If it is the task of a high-level textbook to present fundamental principles clearly, to fortify these principles with evaluated reports, to identify areas that require additional research, and to inspire the reader to increased efforts in microbiology (or in whatever subject is covered) as a professional pursuit, then this book, **Basic Bacteriology: Its Biological and Chemical Background** (Williams and Wilkins, Baltimore, Md., ed. 3, 1965. 1015 pp., $17.50), by Carl Lamanna and M. Frank Mallette, serves pedagogical ideals well. It is a text for the thinking bacteriologist. It is no mere compendium of ancient and novel information about bacteria, but a philosophical and sophisticated work in which teachability is enhanced by constantly raising proper questions. These questions are subsequently discussed in a penetrating manner which avoids any final word so that the reader's own curiosity is permitted to join the fray. For example, on page 354, the authors make the following statement: "It is an extraordinary fact that the superior merit of the simple device of using logarithms to the base 2 in calculating and plotting growth curve data has been largely ignored though emphasized as recently as 1942 by Monod."

This new edition has retained the

previous chapter headings which include topics on the scope of bacteriology, occurrence and taxonomy, general properties, microscopy, dyes and staining, structure, surface properties, growth, enzymes, physical factors, nutrition, genetics, metabolism, and chemical disinfection. Carefully selected new material has been incorporated in all chapters without marring their original integrity and unity; easily recognized additions were numerical taxonomy, fimbriae, the report of the international commission on enzymes, the control of enzyme synthesis, nutrition and ecology, the mapping and expression of genes and chromosomes, carbohydrate metabolism, and stereoisomerism in biology. The chapters on enzymes, genetics, and metabolism have been greatly enlarged. The chapter on dyes and staining retains its primary status among those found in textbooks on the field.

Among the mechanical features that I appreciated are the quality of the paper, the improved and detailed table of contents with the larger print used for the page number of each chapter, subdivision of the references into convenient subjects following each chapter, and the exhaustive index.

Despite the overall excellence of the volume, I must comment on two negative aspects. The chapter on metabolism remains disproportionately long and leaves a somewhat cluttered impression owing to the detailed and complex information presented; the high costs of modern publication must account for the failure to add any significant new illustrations or tables.

Lamanna and Mallette's *Basic Bacteriology* will forever hold its unique position as a satisfying first textbook for the serious student, and as an idea-stimulating reference source.

C. L. SAN CLEMENTE
Department of Public Health and Microbiology, Michigan State University, East Lansing

The Social Responsibility of Gynecology and Obstetrics

In this era of malignant tensions between ideologies, nations, and ethnic groups, and between man and his environment, tensions so great that the stress they engender threatens humanity with adrenal insufficiency, any contribution focused on lessening tension is a laudable effort. This report of the Hopkins symposium, **The Social Responsibility of Gynecology and Obstetrics** (Johns Hopkins Press, Baltimore, Md., 1965. 224 pp., $5.95), edited by Allan C. Barnes, considers a female's tensions with her own sexual and reproductive capacities and in what ways empathetic, knowledgeable medical care may lessen these tensions.

The title of this volume brings in focus a topic long blurred. It is platitudinous to state that American gynecologists have a superior ability to prevent and treat physical ailments; it is less platitudinous to state that they are highly deficient in the ability needed to prevent and treat the social pathology that stems from the sexual and reproductive capacities of the female. Furthermore, American medicine has been less than outstanding in furnishing sociomedical leadership and in molding the attitudes of physicians. One is reminded of this daily. At noon yesterday, I lunched with a group of gynecological residents at a hospital where I had given guest rounds. Conversation turned to the problem of global population. The grim realities of world hunger, illiteracy, and poverty were strongly stated. Yet two of the several young doctors who strongly endorsed birth control based their enthusiasm almost wholly on its potential for reducing welfare rolls, diminishing the tax burden, and preventing overbreeding by inferior stock. They felt no responsibility toward feeding less affluent nations. That effective contraception might help reduce acute and chronic stress at the individual and family level had escaped them.

The volume reviewed has a loose structure held together by two straps—all the papers were presented at a one-day symposium held under the egis of the Department of Obstetrics and Gynecology at Johns Hopkins University and each deals with courses of sexual and family stress and techniques to reduce them.

Allan Barnes, an eminent, thoughtful professor of obstetrics and gynecology, artfully weaves the volume into a single cloth with a prologue, epilogue, and a philosophic link between disparate sections on the population explosion, the concept of fetal excellence, the control of neoplasia, the law (in relation to functions of the female reproductive tract), agencies (social), and the individual (patient and physician). One wishes that some of the less germane material, such as neoplasia, had been omitted and that more pertinent topics, such as the social obstacles delaying the obstetrician-gynecologist from assuming an intelligent, liberal leadership role in social problems of his art, had been expanded. The contributors and assuredly the editor, are thoughtful liberals ahead of their time.

In commenting on the civil rights of the fetus, Barnes writes: "Have you and I the right to condemn him to be born to dirt and squalor, into a family which does not want him, cannot afford him, and will totally neglect him? Have we the right to force the anomalous to be born, even when his defect can be diagnosed months before term? Must we await the miraculous appearance of a neonatal Thomas Jefferson, or is it part of our social responsibility to compose a new Bill of Rights?"

Carl Taylor writes: "My major thesis is that doctors are not now adequately fulfilling their role in educating their patients about contraception. . . . As with other social implications of our professional responsibility we [the medical profession] should lead, not follow, the important social movements of our time."

Leon Eisenberg writes: "With man, self-consciousness has been added to the laws of biology. It is within man's grasp to foresee the consequences of his multiplication, to consider quality as a greater good than quantity, and to reorder his behaviour before the cataclysm. Whether man will, rests upon just such efforts as ours in this conference."

There is much in the volume that involves the social scientist as deeply as the obstetrician-gynecologist. Barnes writes: "We have artificially constructed a society in which to be married is 'a good thing' and 'divorce is a bad thing,' although there is not a shred of scientific evidence to support either of these contentions. The pressures on our young people toward marriage are greater than any pressure they may feel to contibute significantly to the progress of our society."

This volume presents strong thinking and good writing. It is too bad that no one selected the audience before whom these papers were delivered.

ALAN F. GUTTMACHER
Planned Parenthood Federation of America, New York