dispute) and certainly it is hard to think of more modern comparison. Ogden Nash would be proud of rhymes such as those in the grook

Love is like
a pineapple,
sweet and
undefinable.

and Jacques Prévert would probably not disclaim the grook entitled "Majority Rule" (too long to quote) which contributes a new insight on the democratic process. Hein, however, is more serious than Nash and less iconoclastic than Prévert. His style is so natural a vehicle for his thought (no mean feat in a foreign tongue) that many of the grooks have the quality of proverbs; what more frequently followed advice could there be than

If no thought
your mind does visit,
make your speech
not too explicit.

It is hard to believe that the sentiment

Sub specie
aeternitatis
even the dearest bought
is gratis

is Piet Hein and not Bartlett's quotations, and who would deny the arithmetic of

When you're adding up committees
there's a useful rule of thumb:
that talents make a difference,
but follies make a sum.

The grooks, each of which is illustrated with a drawing as economical as the words, cover a range of themes from the Channel tunnel to the psychology of spinning a coin. Though each is self contained, all are pervaded by the author's outlook, and the only cause for regret is that the two volumes, each containing about fifty poems, are so quickly read. But what they lack in volume they make up in concentration. Finally, a grook for astronomers,

The universe may
be as great as they say.
But it wouldn't be missed
if it didn't exist.

NICHOLAS WADE

CELL ULTRASTRUCTURE

Plant Cells

An Introduction to Plant Protoplasm. By Roger Buvat. Translated from the French by Harold Oldroyd. (World University Library.) Pp. 256. (Weidenfeld and Nicolson: London, December 1969.) 35s.

THE book contains a great amount of information in a condensed but very readable form. It attempts and introduces so many topics that at a first glance one is inclined to dismiss the book as too superficial, but the initial chapters serve to show the historical background and the experimental techniques which have been used to obtain the information about the organelles of the plant cell discussed in detail in the succeeding chapters.

In the first three chapters, besides a brief historical introduction about the concepts of the cell and tissues, there is a very succinct outline of the chemical and physical properties of the cell constituents. The succeeding chapters describe in detail each cell organelle so that its relationship within the cytoplasm as a whole is made clear, its appearance both with the optical and electron microscope is described and its function within the total metabolism of the cell is discussed. The subject is one in which very active and exciting research is at present being carried out so that the ideas are constantly being modified and the emphasis shifted. Any book therefore inevitably lags behind the current views, and this is very apparent

in this book in the very inadequate and short account which is given of microtubules and their function.

The book, however, covers a good introductory and elementary course in cell ultrastructure and biochemistry. It is illustrated with good electron micrographs and extremely good line drawings and diagrams. It lacks a detailed index, which at a first reading is disconcerting, but the book is so well planned and systematically arranged that after a little while the reader can easily find his way around the various parts of the book.

Some of the terminology which is used is unusual and old-fashioned, such as glucides for carbohydrates, pecto-cellulose for the polysaccharides of the cell wall and rugose endoplasmic reticulum for rough endoplasmic reticulum, but these are minor faults in a very good book which is ideal for the sixth form pupil, the first year undergraduate in cell biology and the interested layman.

D. H. NORTHCOTE

NERVE SYMPOSIUM

Neurobiology of Invertebrates

(Proceedings of a Symposium held at the Biological Research Institute of the Hungarian Academy of Sciences, Tihany, Hungary, September 4-7, 1967.) Edited by J. Salanki. Pp. 501. (Plenum Press: New York, 1968.) n.p.

THE programmes at international symposia frequently tend to be too crowded, resulting in over-condensed individual contributions. This is a particularly serious fault if, for linguistic reasons, a large part of the relevant background literature is inaccessible to the majority of readers. On the whole, this volume is adequate in this respect, thirty-four contributions being covered in 500 pages of text and figures. About one third of these papers are well documented accounts of work presented in sufficient detail to be useful to the general reader as well as to the specialist. The remainder are either more specific research reports, or if wider ranging do not give enough corroborative detail without recourse to the original literature quoted. For instance, one would have liked to see more of the evidence which led one contributor to suggest that . . . "together with GABA or some other specific inhibitory transmitter the compounds of the catecholamine group participate in the transmission of inhibitory nerve influences" . . . at the arthropod neuromuscular junction. Even in this case, however, the attention of the interested reader is directed to a specific part of the Russian literature—a great help to those unfamiliar with the language.

The title of the symposium is too general to be informative. Though diverse as to subject matter, the majority of the papers fall into two groups: (1) histochemical localization, physiology and biochemistry of neural and neuromuscular transmitter substances; (2) electrophysiology—of individual neurones (mostly central) and groups of neurones, their interactions and their integrative roles. The remainder are ultrastructural studies. The organization of the volume is chronological according to the four days' programme; it is also largely logical, though, as the editor points out, there is considerable overlap between the four resultant sections. A degree of rearrangement (for example, placing the neuropharmacological studies in one section) would have made for easier reading.

Two thirds of the papers are concerned with molluscs, and of these more than half with gastropods; most of the remainder are on insects. Only a few are truly comparative in approach. Perhaps rather regrettably in a meeting of scientists from East and West, most of the review papers deal with the authors' own work in a selected area and do not cover as much ground as one might have hoped.

The volume is very well produced and the many figures and plates are of uniformly high quality.

R. DE G. WEEVERS