



### C. F. A. Pantin, Editor 1946 to 1960

EIGHT years ago the *Quarterly Journal of Microscopical Science* celebrated its centenary; now it must regretfully record an event of a different sort, namely the retirement of Professor C. F. A. Pantin after a distinguished editorship of 15 years.

The death of Professor Goodrich in 1946 presented the *Journal's* then owner, Dr. G. P. Bidder, with a more than usually difficult problem. He had to find a successor not only willing to undertake the arduous duties which the editorship of any journal imposes, but also someone who could be relied upon to maintain the vigour of the *Quarterly Journal* at a time when its acknowledged fields of comparative anatomy and embryology no longer held their former pre-eminent places in zoological research. What in fact emerged from the negotiations of that time was a partnership between an experimental zoologist and a cytologist, a partnership which was to prove of singular benefit to the *Quarterly Journal*. The relation between the editors—Pantin and Baker—has been undefined and informal. Each has attracted papers in his own field and each has read and criticized the manuscripts. Pantin has conducted the not infrequently arduous correspondence with authors while Baker has assumed the no less vital responsibility of seeing accepted manuscripts through the Press. This process of double refinement has contributed much to the high standard of publication which we may claim as characteristic of the *Journal*.

In some respects the duties of the editor of a scientific journal resemble those of an examiner for a higher degree, but there are important differences: an editor is appointed for an indefinite term; he must be prepared to examine his colleagues as well as his juniors; and, so far from being forbidden to write in the margin, this is precisely what he is expected to do. Anyone who has contributed to the *Quarterly Journal* will have experienced the benefit of Pantin's wise judgement and constructive advice; those who have submitted their juvenalia will know with what understanding and patience he has upheld the standards of scientific publication by his insistence on factual accuracy and well-supported argument. For it should not be forgotten that whatever merits can be claimed for scientific publication today, these are very largely due to the devoted and almost anonymous services of the editors of our major scientific journals.

We have already described Pantin as an experimental zoologist and this is indeed what he was when he became editor of the *Quarterly Journal*—distinguished for his researches into amoeboid movement, the crustacean neuromuscular system, and above all for his studies of the elementary nervous system as exemplified by that of the sea anemone. This work found its natural place, not in the *Quarterly Journal* but in the *Journal of Experimental Biology*

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and elsewhere, for the methods employed were essentially physiological and not anatomical. But Pantin's approach was synthetic, it was that of a functional zoologist interested in the machinery of life. The results of his physiological analysis of the elementary nervous system could be interpreted, not by invoking special properties of coelenterate nerves and muscles, but by postulating particular spatial relationships of conventional elements. By the time Pantin became an editor of the *Quarterly Journal* he was already beginning to turn his attention to these spatial arrangements, and important papers on the organization of the actinian muscular and nervous systems have rightly appeared in the *Quarterly Journal*.

This is not the place for a general laudation: Pantin's many other activities, academic and administrative—particularly those associated with the Chair of Zoology at Cambridge and his Presidency of the Linnean Society during the recent arduous celebrations of the Darwin-Wallace Centenary and the Royal Society Tercentenary—are only relevant here in so far as they indicate the heavy burden which he latterly carried while editing the *Quarterly Journal*. But we have referred to his researches into the elementary nervous system because they illustrate particularly clearly the field into which the *Quarterly Journal* has moved during the last 15 years. As the editors wrote in the centenary number (*Quart. J. micr. Sci.* 94, 1953): 'The new morphology differs from the preceding, evolutionary, phase. It is concerned with the machinery of living matter rather than with its phylogenetic origin and systematic relationships.' And the *Quarterly Journal* has itself, during the period of Pantin's editorship, provided an important medium for a wide range of papers in the 'new morphology'. But there is one feature of present-day functional morphology which is indeed new, namely the availability of powerful new methods for studying the structure of living machinery: the electron, phase-contrast, and polarizing microscopes, autoradiography, histochemistry, and so on. These are cytological methods and it is primarily at the level of cytology and fine structure that important new advances in the study of living machinery are likely to occur. Much cytological work now being published is essentially descriptive—'the enthusiastic description of objects', to quote the editors again. This is a necessary phase and it would not be an exaggeration to say that almost the whole of invertebrate and vertebrate microscopy is now waiting to be done afresh at the new level of physical and chemical discrimination. But again—and particularly at this level—structure and function are complements and we may look forward with confidence to the continuing service of the *Quarterly Journal* in the interest of the 'new morphology' in years to come. Believing as they do that future investigations will be predominantly cytological, the Board of the Company of Biologists (who have owned and administered the *Journal* since 1947) have invited a second cytologist to join Dr. Baker in the editorship. Professor H. G. Callan's studies of the oocyte nuclei and lamp-brush chromosomes of newts are well known. They combine anatomical investigation at the cytological level with bold functional interpretation, and this particularly well qualifies him to

succeed Professor Pantin as co-editor with Dr. Baker of the *Quarterly Journal of Microscopical Science*. His appointment is in itself an indication of the extent to which the journal is moving into the field of the 'new morphology', a move which owes much to the retiring editor's influence and foresight.

### Editorial note

AFTER full discussion with the Board of Directors of the Company of Biologists, we have decided to make a gradual change in the scope of this journal. It is our intention to transform the *Quarterly Journal* into a journal of cytology and of the study of organic fine structure. We have not reached this decision without serious consideration, for important papers from a much wider field have been published in the *Quarterly Journal* over many decades. We have been influenced chiefly by the knowledge that although for several years past the *Quarterly Journal* has received an increasing number of contributions falling within the compass of cytology, many British cytologists send their papers abroad for publication because no journal in our own country has explicitly aimed to serve their interests. In the future we hope that such papers will come instead to the *Quarterly Journal*. We also hope that authors in other countries, whose work lies in our chosen field, will continue to find this journal a suitable vehicle for their discoveries.

The subject-matter of our journal will continue to be varied, since we interpret the word *cytology* in the widest sense. Everything that relates directly to the structure, chemical composition, physical nature, and functions of animal and plant cells, or to the techniques that are used in cytological investigations, will be within our scope. We envisage in the immediate future a great extension of the use of electron microscopes in biological laboratories, and we shall particularly welcome papers resulting from work in this field.

J. R. B.  
H. G. C.