CORRESPONDENCE

PhD Theses

SIR,—Every university library in the country contains scores of PhD theses, each representing three years of full-time research financed by government or industry and three years' supervision by a member of the university staff as well as accessory technical assistance and consumable equipment. The return for the several thousands spent per PhD is a thesis on the library shelf and a piece of paper for the candidate which ensures that he will command a higher salary than he could otherwise expect.

This seems unnecessarily and excessively expensive in view of the fact that although these theses are theoretically available for consultation, the difficulties encountered in attempting to refer to them verge on the insurmountable, and the scientific community thus does not benefit from the work.

An essential part of training in research should be preparation for publication, yet the PhD candidate is allowed to indulge in a verbose expansiveness that no editor of a scientific journal would contemplate for a moment.

PhD theses should consist of work written up in the form of papers which, if they are not already published, should at least have been accepted by a reputable journal. (As is the practice with certain learned societies, the raw data on which conclusions are based may be deposited in suitable archives.) In this way a return for the large financial outlay will be guaranteed and the candidates will be trained to conduct research realistically. Furthermore, examiners will no longer be obliged to spend hours plodding through inordinate reams of rubbish to extract the few kernels of new and useful information.

My own students write directly for publication, which not only spurs their efforts during the research but saves them from the trauma of "writing up" during their last few months in the department. At the end of this, the idea of going through the thesis extracting the publishable parts and rewriting them for publication is so abhorrent that in most cases it is never accomplished.

Although in many universities it is possible to present papers alone for a PhD, there is resistance to this from both academic and administrative staff. Yet in a situation where two equally qualified applicants for a post have both submitted for a PhD—applicant A a normal thesis, applicant B papers—there is little doubt that B will be selected.

On the grounds of cost-effectiveness, obligation to the scientific community and self-interest of the candidate, the present system of preparing PhD theses should be discarded at the earliest opportunity.

Yours faithfully,

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Dowsing

SIR,—The current (January) number of *Theoria to Theory* contains an interview with Colonel Merrylees, a past president of the British Society of Dowsers, in which he talks among other things about his selection of young men for sensitivity in dowsing at an army establishment. This work has been the subject of destructive criticism in an article in *Nature* (229, 163; 1971). A comment on the attack in *Nature* will be published in the ensuing number of *Theoria to Theory* (April).

Yours faithfully,

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Obituary

Professor A. Ghigi

ALESSANDRO GHIGI, professor emeritus of the University of Bologna, who died in Bologna on November 20, 1970, in his ninety-sixth year, was born in that city in 1875. He was held in very high esteem in Italy, and was a member of the Pontificia Accademia delle Scienze and the Accademia Nazionale dei Lincei and also of the Accademia delle Scienze of Bologna, Torini and Modena, and many scientific societies in other countries. He was awarded honorary doctorates at the Universities of Boston and Coimbra.

His long and distinguished career encompassed many aspects of zoology; from 1902 to 1915 he was lecturer in zoology and agricultural entomology in the School of Agriculture of the University of Bologna, and subsequently lecturer in zoology and comparative anatomy in the University of Ferrara from 1904 till 1908, when he became professor, a position he held until the end of 1922. That year he was appointed to the chair of zoology at the University of Bologna, where he became Rector in 1930, a position he held for the unprecedented period of thirteen years. He directed the Institute of Zoology of the University which he established for almost thirty years, and which attained a high reputation both for its scientific and teaching standards.

He laid the basis of practical aviculture in Italy, which previously had been completely neglected, and also founded the Institute of Aviculture in Bologna. He was very interested in these subjects, and became Honorary President of the World Poultry Science Association. He was also a leading authority on ornamental pheasants and guinea-fowl. He studied the problems of game animals in relation to hunting, and contributed much biological information by the institution of observations on migration and the establishment of a laboratory of applied zoology concerning game animals, including birds.

Ghigi made several zoological expeditions: to Cyrenaica in 1920; the Dodecanese Islands in 1926; Tehuantepec, Mexico, in 1927; Morocco in 1930; and Lake Chapala and Patzcuaro, Mexico, in 1932; on which he collected numerous species, several new to science. His publications, of which there are more than 350, cover a wide range of subjects on various aspects of zoology including morphology, genetics and systematics, and deal with mollusca, crustacea, insects, mammals and especially birds.

He made a great contribution to the conservation of wild life, both nationally and internationally, and undoubtedly did more than any single individual to secure a better preservation of wild birds in Italy. He was a vice-president of the International Council for Bird