Whether or not because of this advice, the fund seems never to have been established. Nevertheless a long succession of British and other foreign workers, including myself, have found excellent working conditions and a great intellectual stimulus at the Stazione Zoologica. We have a great deal to gain from continuing this tradition. The laboratory has been re-equipped and is anxious to receive us. The fauna is very rich and healthy, and rumours of its wholesale destruction by pollution are quite untrue, as anyone who has worked there recently will testify.

Darwin's letters contain many interesting indications of his character and capacities. He regrets that he is not a better scholar of German. He repeatedly suggests caution. He speaks often of his health. He continually shows humility and concern for the labours of others. There is not a great deal about science, though he speaks of "the cause of Wallace's sad falling away" and that "Mivart much misrepresents my views". He says of *The Descent of Man* that "I suppose it was a mistake on my part to publish it; but anyhow it will pave the way for some better work". Indeed so it has!

Both correspondents were interested in barnacles, and at one point Dohrn suggested how the strange sac-like cirripedes are barnacles that are parasitic on crabs and other crustaceans. Darwin was for once enthusiastic: "This case seems to me the most interesting one of gradation ever recorded, viz from an animal with a stomach to one with roots like a plant".

The Stazione Zoologica and Dr Christiane Groeben the editor are to be congratulated in bringing this fascinating correspondence together. The letters and the notes tell us a lot, not only about the two chief characters but also about many others and about the state of zoology in the middle of the nineteenth century. □

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The psychology of babyhood

George Butterworth

Development in Infancy, 2nd Edn. By T.G.R. Bower. Pp.304. Hbk ISBN 0-7167-1301-2; pbk ISBN 0-7167-1302-0. (W.H. Freeman: 1982.) Hbk £15.80, $20; pbk £7.40, $9.95.

TOM Bower has long held a reputation as the *enfant terrible* of baby psychology. An otherwise sympathetic reviewer nevertheless said of the first edition of this seminal book that "it would serve for years as a source of ideas for doctoral theses that will prove it inconclusive theoretically and wrong or partially wrong experimentally" (J.S. Bruner *Nature* **252**, 514; 1974). Perhaps in response, Bower prefaces the second edition with the remark that some of his more outrageous speculations now seem positively conservative! This revision, extended by 50 pages, will both delight and infuriate for it retains all the originality and virtues — and some of the faults — of its predecessor.

Infancy researchers world-wide would now admit that the experimental evidence of the past eight years has vindicated many of Bower's claims. About half of his new material consists of reviews of experiments that corroborate his own studies of infant perception. For example, certain types of intersensory coordination such as that between seeing and hearing; perception of size and shape constancy or aspects of visual manual coordination are innately attuned to the characteristics of the environment.

Bower adds a new chapter on social development and this is logical, for what better purpose could an infant's precocious perceptual competence serve than to adapt the baby to the social world? Here he discusses a tantalizing new finding of gender identification among babies in their first year. It seems that infants, given the choice, prefer to observe a motion film of a baby of the same sex; they recognize the similarity between the other boy or girl and themselves, perhaps through sex-linked patterns of movement originating in differences in skeletal structure. A problem is that further details of this interesting phenomenon may prove hard to come by because the reference cited is unpublished.

For the most part, however, Bower is careful to qualify his claims in this new edition and he draws attention to the methodological problems involved in observing such unexpected phenomena in young babies.

The first edition of *Development in Infancy* had the effect of stimulating an original kind of research on the capabilities of babies. It has helped to usher in an ecological approach to problems of perception and cognition, at least in developmental psychology, which makes the remarkable capacities of young babies so much easier to understand. This new edition should inspire readers to examine further the functional significance of these capacities in laying the foundations for human social behaviour. □

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Patents for bioscience

B.J. Bate

Patenting in the Biological Sciences: A Practical Guide for Research Scientists in Biotechnology and the Pharmaceutical and Agrochemical Industries. By R.S. Crespi. Pp.211. ISBN 0-471-10151-6. (Wiley: 1982.) £16, $38.

BY AND LARGE the world's patent systems have coped adequately with the needs of industry, and have generally provided that stimulus to innovation that is often put forward in their justification. However, the past 20 years or so have seen developments, notably in the biosciences, for which such systems were not designed.

How, for example, do you patent a complex molecule which, even if it can be obtained in reasonable purity, may be difficult to analyse, may already occur in nature and is one of a range of possibly active compounds all of which cannot economically be tested? Or, if the invention lies in the selection or even engineering of a micro-organism for use in a chemical process, how are the public — who must be put into a position to use the invention at the end of the patent monopoly period — to be given access to the organism? And how is the patentee to be protected from those who, using the techniques of genetic engineering, seek to extract the operative "bits" and introduce them into a different organism? We are only just entering the jungle of microbiologically-based inventions, and R.S. Crespi's *Patenting in the Biological Sciences* is a comprehensive yet easily digestible guide that deserves a wider readership than the title may encourage.

Following a useful analysis of the structure of the patent specification, the author discusses how different types of invention may be claimed, illustrated by reference to patents covering *inter alia* cephalosporins, vitamin B_{12}, DDT, pyrethroids, vaccines, cell lines and Chakrabarty's *Pseudomonas*. Also included is an account of the patenting of products found in nature, and methods of treatment. The chapter on genetic engineering is particularly helpful, including as it does suggestions of where patentable features may be found, and a discussion of the Budapest Treaty. For a wider readership such common problems as confidential disclosure, experimental use and inventorship are well handled.

A book that attempts so much inevitably has a few faults: the index could be more helpful; more and better charts could be used; and the importance of full disclosure of all relevant experimental results deserves a note. And, incidentally, to which of the five individuals mentioned between pages 103 and 106 — patent agent, patent adviser, draftsman, patent attorney or practitioner — should the researcher look for advice? □

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