

BOOK REVIEW

Evades_(,) ducks & waves

Fundamental bacterial genetics

N Trun and J Trempy

Blackwell Science Ltd, Oxford; 2003. 287 pp.

£27.50, paperback. ISBN 0-632-04448-9.

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Reviewed by P Dyson

Misplaced punctuation is a distraction. This is not an article about messing about in a lake (or celebrating a tricky manoeuvre), but the title of the review is a tribute to the best-selling book of Christmas 2003 in the UK, unusually popular given that its subject is punctuation: 'Eats_(,) shoots & leaves' (referring to an unlikely gun-toting panda in a café) by Lynn Truss. Having read it then from cover-to-cover in a couple of remarkably undisturbed sittings while my two daughters got on with, respectively, downloading tunes onto an Ipod and playing with a GameBoy, in preparing this review I was prompted to go back and remind myself of the proposal to revive use of the tilde (~) in English. It will probably never happen, of course, but it is disarming to find the tilde combined with the letter n (hence ñ) decorating 11 figures from the textbook on bacterial genetics under review, the Spanish consonant being used inappropriately in place of a simple dash. This prompted a suspicion of insufficient proof-reading, largely borne out in the text. More alarmingly, some terms are consistently wrongly spelt: examples being 'catene' for catenane (in fact, catene is Italian for strands, as in DNA strands); 'concatomer' for concatamer; and 'Shine-Delgarno' for Shine-Dalgarno. Of course, as mutations arise, so language diverges, especially on either side of the pond. I suspect technical terms that evade standard Spellcheckers are likely to evolve more rapidly.

New textbooks on microbial genetics appear once every 5 years or so, competing with more general

molecular genetics textbooks. The versatility of genetic analysis of many bacteria, especially *Escherichia coli*, means that quite complex concepts can be taught to undergraduates 'using a format and language easy to digest', the stated aim of this book. The authors go some way in achieving this goal with a layout and content that is commendable, for the most part. I believe that the main justification for a new book is not, contrary to the authors' claim, because other texts are less accessible to 'today's click and flick society' (an allusion to my daughters' generation), but simply to keep pace with advances in complete genome sequencing and subsequent functional genomic analysis, the subject of the last chapter. Here I was disappointed: the topic is covered superficially and needs fleshing out with tangible examples. The section on microarray analysis is entitled 'Techniques for examining the proteome – microarray technology'; the misleading assumption that 'microarray technology (can be) used to ascertain the composition of different proteomes' is maintained throughout this section.

So what are the strengths of this book? It covers most aspects of *E. coli* molecular genetics well, linking classical experiments with more contemporary analysis. There is more than enough detail to complement undergraduate courses on bacterial genetics that focus on *E. coli*. The figures lacking ñ's are clear enough. Separate For Your Interest (FYI) panels accompany the text and include 'information on the real-life impacts of a particular molecular mechanism or process'; these do help to enhance the overall content. The accompanying web site is very useful for teachers and students alike. But... I take issue with a genetics book with 'fundamental' in its title when it fails to embrace genetic complementation and the concept of *cis* and *trans*, let alone the cistron. Perhaps the language of genetics has moved one click beyond this. If it has, we will be the poorer for it.

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