

reflections on psychology, or the current state of New York streets, set in the historical context of the Bay of Naples in 1772? A great deal of one's sense of the success or failure of this book depends on one's answer to this question. If one feels preached at in the reflective passages, the book begins to lose its hold, especially if the lectures on, say, the nature of credibility or pleasure, or the effects of distance on one's appreciation of objects, seem facile. On the other hand, these interruptions of the modern voice often work wittily and engagingly, helping the book, in the best sense, to become a collector's item in itself, perhaps a picture from the past. Or, most ambitiously, an echo of that other late-eighteenth-century glimpse of the Bay of Naples, Mozart's *Così fan tutte*. Indeed, the theme of amorality, cynicism and fickleness is not one that this allegedly élitist and obscure writer makes difficult to grasp. In musical terms, one might even describe the subject of the book as a question of vocal emphasis: the volcano lover or the volcano lover?

The musical allusions are completed at the end of the novel with four monologues by women whose lives had interlocked with Hamilton's. The last of these is the Neapolitan revolutionary Eleonara de Fonseca Pimental, Portuguese by birth and an eventual convert to republicanism. She loses her life in the cause of anti-élitist politics but not before the book gives her its last words: "... I cannot forgive those who did not care about more than their own glory or well-being. They thought they were civilized. They were despicable. Damn them all."

Many readers will find the varieties of tone and of aesthetic judgement in this novel annoying, and no doubt further proof of the author's personal need to show off and be obscure. But few authors are as accustomed to such accusations as Sontag. By bravely carrying on regardless, and by drawing on a remarkable geological, sexual and political story, she has answered back. She describes a necessary tragedy with an antiquarian's touch of gallows humour: throughout, we know that the volcano can stay dormant, allowing us to admire it, or explode, when we must run or be buried. The operatic intelligence that keeps this novel alive allowed this reader at least to hear the unmistakable sound of Maria Callas between the lines: she is never mentioned, but part of Sontag's purpose in introducing scenes from Puccini's *Tosca* is to hint at her reader's knowledge and let music do the rest. □

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## Genetic drift

Christopher Wills

**The Search for the Gene.** By Bruce Wallace. Cornell University Press: 1992. Pp. 224. \$34.95 (hbk), \$12.95 (pbk).

I AM fond of saying that inside every fat book there is a thin one screaming to get out. This book is an exception — it is a thin book, but, defying logic, there is a fat one inside screaming to get out.

Bruce Wallace provides us with a highly personal, highly selective and — dare I say it — highly quirky survey of the search for the gene. He examines some of the more obscure and dusty byways of the history of genetics at great length, often with considerable insight and humour. But the book leaves out so much that the reader looks in vain for its shadow companion, the fat book that might have been. Bits of the fat book actually appear here and there, in the form of boxes that deal in more depth with various topics and together are almost as long as the main text.

The author begins with a quick look at the world of agriculture and of plant and animal breeding before Mendel, and quotes Haldane's comment that there was probably very little conscious selection going on during the appearance of domesticated crops — that selection for the most fertile seeds would have happened largely automatically. Then, two pages later, he points out that farmers must have been very observant to find the first few plants of the various strains of wheat that produce hard and soft flours. The reader expects him to pick a fight with Haldane, which would be easy enough, but instead he moves on.

A few pages further, tyro readers will be bewildered by an extended discussion of Boveri's important work on dispermy in sea-urchin eggs, which showed as

early as 1902 that each chromosome is essential for development. It would have been a good deal clearer if the difference between three-poled and four-poled dispermic eggs had been explained at the outset, but without this foundation I expect most readers will soon be lost.

Much later, Wallace takes the reader through an interesting history of how the genetic code was worked out. He quite properly emphasizes something that is usually glossed over: that by 1963 most of the code had been worked out by clever use of artificial oligomers of RNA. But he does not mention the beautiful demonstration by Crick, Barnett, Brenner and Watts-Tobin, done at the start of the search for the code, that the code must be read in threes or, less probably, in multiples of three. Nor does he discuss the work by Nierenberg, Leder and others that rapidly and elegantly clinched the identity of all the codons and essentially established the code almost overnight. The story is disconcertingly incomplete, emphasizing things that are usually left out and leaving out things that are usually emphasized.

The audience for the book is not clear. It might be read by undergraduates with a little spare time (though I haven't met any of those for quite some time) who are taking a genetics course and want to explore some of the background to what is certainly one of the most exciting scientific stories of our century. Readers who do have that background will certainly stumble on things they did not know, and will enjoy Wallace's refreshing approach to things we take for granted. The book is really an old-fashioned ramble rather than a tightly organized history, and should have been presented as such. □

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