

BOOK REVIEW

'Genetic dreams and nightmares'?

Genetic Destinies

P Little

Oxford University Press, Oxford. 2002; 264 pp.
£18.99, hardback. ISBN 0-19-850454-3

Reviewed by G Oxford

Heredity (2003) 90, 348. doi:10.1038/sj.hdy.6800232

Over the last few years, a number of books have been published that explore, for the lay reader, the enormous implications of the Human Genome Project and burgeoning postgenomic knowledge for our future destiny. Outlooks vary from beautiful dreams to nightmares and this is (almost) the title of the opening chapter in Peter Little's recent addition to the genre. If an author hasn't roused the reader's interest with their first chapter they have failed – in this book the first chapter grabs you by the throat! We are presented with two scenarios, the gene dream and the gene nightmare. Jeanne Dream's life is aided and abetted with genetic knowledge throughout, from her affluent parents being checked before her birth for unfortunate gene differences that might give rise to problems for their baby, DNA scans of possible embryos after IVF, DNA testing after birth and the implanting of a remote readable chip under her skin recording her genetically determined drug-response profiles, and so on. Her life spans 120 years and ends with a dignified death at a time of her choosing. The gene nightmare follows Jean Battler, born of poor parents and for whom DNA testing is used as a club to beat her with at every turn. Intelligence-gene testing shows that her IQ is only 80, below the threshold required for state education, DNA tests reveal a criminal predisposition for which preventative imprisonment in a foster home is advised by

genetic paracounsellors, etc. She dies after great pain and suffering, aged 28. Interestingly, the lives of the two women briefly interact.

The rest of the book examines, *inter alia*, the storage of genetic information, the processes of development (with a lovely sculptural analogy of how fingers emerge from a 'paddle' as a result of apoptosis), and why individual humans are the same (compared with other species) but at the same time very different (between individuals). In the latter section, the misplacing of an adenine base (twice) in the example of phylogenetic tree construction (p 58) might throw nongenetical readers. Other chapters explore genes and health, race, genes and personality, IQ and much more. In the final chapter, Little returns to the gene dream and the gene nightmare scenarios posed at the start and considers each of the events described, broadly ranking them as reality, possible or impossible and, if possible, with a likely timescale.

This is a most impressive and highly readable book. It explains complex ideas in simple ways, such that anyone can follow the arguments, but is never condescending. One neat idea was the inclusion of a 'yrossolg' (reverse glossary), which translates simplified terms introduced in the body of the book into more conventional genetic nomenclature and explains them in more detail. A minor gripe, the book would have benefited from a short bibliography for readers stimulated to enquire more deeply into the topics covered. I hope it eventually appears as a paperback, thereby reaching a wider audience.

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