

Book Review

Bioethics - An Introduction for the Biosciences

By Ben Mepham

402 pp, Oxford University Press, 2005, ISBN 0-19-926715-4 (paperback, £21.99)

Bioethics by Ben Mepham is structured as a course, not simply as supporting reading. It is built on more than twenty years of experience in teaching bioethics, and the author's involvement in bioethics at the national level strongly informs the text.

The target audience is undergraduate students of biology and their teachers. The specifics of legal and regulatory considerations mean that the book is most relevant for a UK readership, but the underlying issues are universal and thus the book could certainly help support teaching of bioethics in other countries. It is organised into five sections, each contain three chapters. The first section explains what bioethics is about, including the author's particular contribution to moral thinking, *the ethical matrix*. The matrix is a tool to ensure that all aspects (well-being, autonomy and fairness) are considered with respect to all relevant parties, but without prescribing the answer. Later chapters provide opportunities to apply this.

The next three sections cover in turn: issues relating to people (e.g. reproductive technologies; to animals (e.g. their use in experiments); and other organisms and the environment (e.g. genetically modified crops and sustainability). The final section addresses general issues such as risk, the political dimension, and bioethics in the laboratory. The chapter entitled "The haves and have-nots" is a remarkable inclusion (in Section Two). Many biologists might think this topic should be left to social scientists. However, the chapter gives essential background information and it illustrates the universal implications of many bioethical questions.

Each chapter opens with a statement of its objectives and closes with a summary of the main points. Between these, typically, sections and subsection introduce and categorise the issues, outline any necessary background science (the author assumes an undergraduate knowledge of biology), indicate the nature of the ethical issues involved, discuss some of the strengths and weakness of different moral judgements, and may indicate and discuss some of the reasoning and decisions made at national level. The summary is followed by "exercises" - a list of topics to form the basis of an essay or group discussion - further reading, useful websites, and "notes", mainly a list of references. These last components are the conventional support of academic studies, while the exercises are the intended means for fostering development of thinking.

The author emphasises how important it is that students should engage in discussion and debate: "It is *remotely* [the author's italics] possible that you

could become proficient in ethical reasoning simply by reading widely and deeply. But supplementing your reading by engaging in ethical argument is a far surer way..." As a reader and arguer, I sympathise broadly with this sentiment, but the case is over-stated: it is quite possible to make good progress (if you have anything like an active mind) by reading alone, but, yes, it is very helpful to discuss and argue as well. But the more disappointing aspect of this is that the author could have done more to foster thinking. The exercise topics are of an unvarying type, where attention is focused on a significant but often narrow issue and the student is referred to relevant sections in the book. For example, "Is there a significant ethical difference between the use of MOET in cattle (section 9.2.2) and the use of ART in women (section 5.4)?" and "Evaluate the arguments advanced for and against the use of Golden Rice as a strategy for ameliorating vitamin A deficiency in LDC (section 11.8)". There is no problem with the exercises themselves, but students also need to address issues they have not met in the book, or issues in the book presented in a way that does not draw attention to the relevant sections. This would more realistically reflect the issues that graduates will face, the consequences of as yet unforeseen advances in biological. Furthermore, students' ability to think will advance much more rapidly if they sometimes are asked to tackle topics for which there are no precise models to hand. I would prefer topics of more varied types, from narrow to very wide focus, and varied too in their scope for thinking and the breadth and variety of factual background and of implications. Fortunately, none of these concerns are fatal: a course leader using "Bioethics" as a text can easily add their own ideas for discussion, of whatever breadth, depth, familiarity or unfamiliarity they wish, and can give or withhold information and ideas as they wish.

The theories of ethics are introduced in Chapter 2, which mostly does its job well. The amount of technical terminology is about right: not a lot, yet sufficient to give the students some key terms and concepts. The chapter also introduces some rigorous reasoning, which is essential if biologists are to seriously tackle bioethical issues. On a negative note, the "Natural Law" theory of ethics (that God or nature indicates what is right) was treated as a sub-issue in a section mainly devoted to the naturalistic fallacy. Whether it attracts us or not, the general public clearly thinks that the issue of what is or is not natural, is important. We should make sure our students understand enough about it. On the other hand, I have only praise for the precision, throughout the book, with which the author succinctly and clearly brought out the arguments for and against different resolutions of particular bioethical questions, and drew attention to how one ethical theory or another succeeded or failed in handling some key aspect of the question. However, I felt the lack of a final chapter to pull this together, summarising how the different ethical theories "performed". The utilitarian, deontological and virtue theories differ fundamentally in character and hence in how easily they can be applied to different kinds of issue (for example ones that are personal *versus* ones that affect whole communities of people or species of organism), and how clearly they give an answer to the question of what should be done. A chapter that drew attention to this and summarised it, would have given students an invaluable aid for grasping bioethics as a whole.

It is a commonplace that leaders of bioethics courses, while aiming to foster a high quality of reasoning and argument, should not impose their conclusions. The author also recommends that one should be the devil's advocate to stir up argument. While I adhere to both these sentiments, I also fear that too much even-handedness could kill an interesting subject. However, this was not a dry book, and not only because the bioethical issues are highly topical; partly it was because of its style, but in addition, whether accurately or not, I thought I could discern the person writing the book, and this considerably enlivened my reading.

Roger Downie has commented (in his parallel review of **Introduction to Bioethics** by John Bryant, Linda Baggott and John Searle) that suddenly we have two new books on bioethics; at last the cavalry has arrived to rescue the embattled teachers of the subject. These books should catalyse a step increase in the extent and quality of bioethics teaching and learning in the UK. However, like Roger, I have not attempted to compare their content and style. With regard to Ben Mepham's **Bioethics**, it is an invaluable resource: fluent, authoritative, almost as well-balanced as is humanly possible, and more comprehensive than it claims; it is also well-organised; and you can base a whole course on it. It is highly recommended.

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