

MEDICAL LAW AND ETHICS

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Speaking for the Dead

The Human Body in Biology and Medicine

SECOND EDITION

D. GARETH JONES
MAJA I. WHITAKER

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Second Edition

D. GARETH JONES and MAJA I. WHITAKER
University of Otago, New Zealand



ASHGATE

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SPEAKING FOR THE DEAD

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Notes on Contributors

D. Gareth Jones is Professor of Anatomy and Structural Biology at the University of Otago, Dunedin, New Zealand. He also serves as Deputy Vice-Chancellor (Academic and International) at that university. He is a neuroscientist, with considerable interests in bioethical issues as they relate to the human body.

Maja I. Whitaker is an Assistant Research Fellow in the Department of Anatomy and Structural Biology at the University of Otago.

Preface

The appearance of a second edition always requires justification. In this instance, events of enormous significance have taken place since the year 2000, with the result that about 50 per cent of the contents are new. Reflecting on these events, the ones of especial note include a motley assortment of retained body parts and organs scandals, and the flourishing of popular human body exhibitions, leading to the need for far more detailed analyses of these developments. Additionally, this edition extends much further beyond the confines of the dead body than did the first edition. This has resulted in largely new chapters on the developing body, neuroscience and modification of the body.

The introduction of this broader perspective in this edition has led to a rearrangement of much of the material, with the emphasis of each chapter being on 'the body', from the dead body to the plastinated body, and from the dissected body to the thinking body. In line with this change, 'cadavers' in the original subtitle has become 'the human body' in the present one.

Like the first edition, this edition proposes that the manner in which we respond to the dead, the use we make of their skeletal remains and their tissues, and the ways in which we learn about ourselves by studying them, raises ethical queries that go to the heart of what it means to be human. Hence, the apparently unfathomable gulf between them and us is far less unfathomable than we often imagine, and presses upon us the importance of understanding the many links between the living and the dead.

For many years, issues that anatomists would now consider to have ethical overtones were taken for granted. Indeed, most people failed to recognize that there are ethical issues in anatomy. The range of poignant ethical questions confronting those in clinical fields seemed to have passed anatomists by. Those in anatomy departments were spared having to confront issues like informed consent, or of deciding what to tell patients faced by imminent death, or when to turn off respirators. They simply dealt with dead people, and not unexpectedly, dead people did not seem to pose too many problems. The bodies had been obtained by legitimate means, as had the brains used in neuroanatomy classes and the skeletons that decorated the walls of the dissecting room, the anatomy museum, and sometimes the lecture theatre. Even histology slides were of dead, fixed pieces of tissue, sometimes from humans, sometimes from animals, that seemed to raise few if any ethical dilemmas. When the sections were of embryos, even these were often of pigs rather than human beings. When they were of humans, they had probably been obtained many years previously.

The use of human material in research had played an ever-decreasing role in recent years. While some devoted their time to studying human bones obtained

from archeological digs, these were not generally seen as posing any especially difficult ethical problems. As long as they were treated with care and dignity, they could be kept indefinitely.

All this began to change as a revolutionary renaissance we now know as bioethics broadened and transformed what had been the much more confined domain of medical ethics. Ethical analysis that had been confined to specifically clinical realms, and to isolated topics such as abortion, began to be applied to reproductive technologies and organ transplantation, immediately raising profound ethical queries at both ends of life. These ethical queries concerned the status of the embryo at one end and brain death at the other, both of which can only be addressed by reference to the human body.

What is surprising is that, as the human body has been increasingly exposed to ethical assessment, anatomists have barely responded to the challenges this has posed for them. No longer is it possible for the world of anatomy to remain isolated from the world of ethics, or even the variety of social forces milling around it. In reality, of course, it never has been isolated, but anatomists have acted as though this were the case. The bodies being 'anatomized' in the dissecting room were obtained in a variety of ways, some deeply unethical. The skeletons purchased from reputable companies in the West came from what were probably far less reputable sources in India. Much of the skeletal material of indigenous peoples emanated from a scientific culture far removed from that of today's, in some instances characterized by racist attitudes anathema to today's scientific climate.

Any such exploration has to attempt to bring together the numerous strands of ethical discussion that are currently taking place on different facets of the human body, human tissue and human material. The results are surprising, since what has emerged is that, together, these constitute a common thread weaving its way through so many of the debates that constitute the medical side of bioethics. This is not a new finding, since as long ago as 1985, Kass commented in the following terms: 'How to treat dead bodies may seem to be a trivial moral question, compared with all the seemingly vital problems that confront the living. But, from a theoretical point of view, few are as illuminating of our self-conception and self-understanding'. This was the thrust of the first edition, and it is traced even more insistently in this second edition.

It is a truism to assert that anatomists need ethics. However, what is more important is that the ethical issues anatomists are confronted with are of concern to many others within society as well; hence this book is aimed at a general readership, that is, at anyone interested in ethical issues impinging upon the human body. However, this book differs from many others on bioethical issues, in that we have taken advantage of the interests of anatomists to view even well-known ethical issues from the perspective of those who are primarily concerned with the human body and human tissue. Responses to the first edition indicated that this approach has its merits, and hence is developed further in this one.

The need for another edition is demonstrated by the emergence of yet more ethical challenges associated with continuing uses and abuses of the human

body. The formulation of new Human Tissue Acts in one legislature after another represents the need to keep abreast of scientific developments. Nevertheless, reactions to some of these developments, including on occasion by anatomists and the general public are surprisingly ill informed. It is our hope that this new edition will rectify to some extent gaps that currently exist in what is a vitally important debate.

In this edition I have been joined by Maja Whitaker as co-author. This is in recognition of Maja's input into every facet of the writing and researching of this edition, and in ensuring that the book is as up to date and broadly informed as it can possibly be.

D. Gareth Jones
Dunedin, New Zealand

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Contents

<i>Notes on Contributors</i>	vii
<i>Preface</i>	ix
<i>Acknowledgements</i>	xiii
1 The Dead Body	1
Introduction	1
Anatomy and the Culture of Dissection	2
Anatomy, History and Society	7
The World of the Dead Body	14
The Ethical Significance of the Dead Body	21
2 The Dissected Body	25
Obtaining Bodies for Dissection	25
Why People Bequeath Their Bodies for Dissection	34
Is it Ethical to Use Unclaimed Bodies?	36
Cadavers as a Teaching Tool	40
Contemporary Ethical Quandaries	44
The Place of Autopsies in the World of Medicine	48
Tissues of the Body	54
Pulling the Threads Together	59
3 The Abused Body	61
Introduction	61
Teaching on the Clinically Dead	61
Research on the Clinically Dead	64
Dead Mothers and Living Babies	70
Age of the Neomort: An Unrealistic By-Way?	73
The Nazi Legacy	74
Further Unethical Experiments	80
The Centrality of Moral Complicity	82
4 The Plastinated Body	87
The Transformation of Dissection	87
The Advent of Plastination	93
Plastination as an Art Form	95
Communicating with Plastinates	99
Between Art and Science	100

	The Importance of Voluntary Donation	102
	<i>Body Worlds</i> as a Philosophical Statement	104
5	The Transplanted Body	107
	Human Organ Transplantation	107
	Consent in Cadaveric Organ Donation	112
	Organ Transplantation in Infants: The Use of Anencephalics	119
	Neural Transplantation: The Use of Fetuses	120
	Xenotransplantation: Crossing Species Boundaries	127
6	The Indigenous Body	137
	Background	137
	Policy Developments	139
	Scientific Interest and Indigenous Concerns	145
	Guidelines for Study of Human Skeletal Remains	158
7	The Developing Body	163
	Introduction	163
	Embryonic Development	163
	The Natural Wastage of Embryos	166
	Ethical Positions Regarding Embryos (and Fetuses)	167
	Embryos in a Human Context	170
	Embryos and Stem Cells	175
	Alternatives to Embryonic Stem Cells	187
8	The Thinking Body	191
	Introduction	191
	Brain Death	192
	Persistent Vegetative State	198
	Alzheimer's Disease	206
	Neuroimaging	209
9	The Modified Body	217
	Introduction	217
	Modifications in Fantasy	217
	Modifications in Reality	219
	Objections to Modifications and Enhancements	229
	The Blurred Distinction Between Therapy and Enhancement	232
	<i>References</i>	<i>241</i>
	<i>Index</i>	<i>293</i>

Chapter 1

The Dead Body

Introduction

In the eyes of most people anatomy and cadavers are inseparable. Talk to practising doctors about their experiences as medical students in anatomy, and their thoughts will drift instinctively to the dissecting room and the dead bodies, the cadavers, they encountered there. One of the most vivid accounts of a first acquaintance with a dissecting room is provided by the composer Hector Berlioz. In his *Memoirs* (1969, 46), he writes:

... I gave myself up wholly to studying for the career which had been thrust upon me. It was soon put to a somewhat severe test when Robert, having announced one morning that he had bought a 'subject' (a corpse), took me for the first time to the dissecting room ... at the sight of that terrible charnel-house – fragments of limbs, the grinning heads and gaping skulls, the bloody quagmire underfoot and the atrocious smell it gave off, the swarms of sparrows wrangling over scraps of lung, the rats in their corner gnawing the bleeding vertebrae – such a feeling of revulsion possessed me that I leapt through the window of the dissecting-room and fled for home as though Death and all his hideous train were at my heels. The shock of that first impression lasted for twenty-four hours. I did not want to hear another word about anatomy, dissection or medicine, and I meditated a hundred mad schemes of escape from the future that hung over me.

It is not clear how accurate was this description of the dissecting room Berlioz encountered in the Paris of 1822. Regardless of the excessive repulsive feelings that may have coloured his account, and of the rebellion against his father that was so much a part of his unhappy encounter with the world of medicine, it is a highly evocative picture that lingers in the memory. This is not all there is to know about anatomy, but it is a facet of the anatomist's world that cannot be entirely dismissed.

Almost invariably the dissecting room is seen as the place where anatomy begins and ends. This is a travesty, as unhelpful as it is misleading. The suggestion that the world of the anatomist is nothing more than that of dead bodies lying on slabs in the dissecting room is a caricature, missing as it does anything that can be seen and understood using microscopes. The other world of cells, let alone everything that can be studied at the subcellular or molecular levels, is tragically lost. While this misapprehension is of greater interest to anatomists than to anyone else, it needs to be borne in mind throughout this book as we move seamlessly

from the macroscopic to the microscopic and back again. A second unfortunate implication is the impression that dead bodies are of little concern to anyone other than anatomists (and in a parallel clinical context, pathologists). From the perspective of this book, this is an even more serious misconception than the first, since anatomy has a great deal to contribute to the world of clinical medicine, providing as it does entry to an appreciation of the significance of the dead body. This, in turn, has another consequence, namely, that it is impossible to approach the dead body in an ethical vacuum, whether it is within the context of anatomy or of clinical medicine. One point that we hope will emerge is that the ethical context developed to understand the uses and abuses of the dead body in the dissecting room is relevant to the development of appropriate ethical contexts within clinical medicine. The reason for this is that, since the dead body was once a living human body, there is a strand between the two, with mutual connections leading in both directions.

In more recent times, the significance of the dead body for the world beyond academia and clinical medicine has become readily apparent in two quite different domains. The dead body has moved into the public domain in dramatic fashion with the unprecedented popularity of plastination exhibitions (Chapter 4). These are neither anatomy in a strict sense, nor are they clinical medicine. We shall examine how they can best be categorized in due course, but there is no doubt that they extend the boundaries of conventional perspectives in ethically challenging ways. The other domain is that of research using the human body and human tissue. While research projects utilize human material in a variety of contexts, the most striking is the use of human embryos (Chapter 7). The ethical debate here is probably more vociferous than in any of the other areas we shall encounter, and it is not generally approached from the perspective of a dead human body. However, we consider that the approach we shall adopt is a potentially fruitful one.

We shall also explore two even more surprising areas with their respective emphases upon the nervous system (Chapter 8) and human enhancement (Chapter 9). While many of the topics covered in these chapters do not deal with dead human material, we consider they are natural extensions of what may be regarded as the core themes in the earlier chapters.

Anatomy and the Culture of Dissection

‘Anatomy’ is generally defined as ‘the science of the structure of the bodies of humans, animals and plants; a treatise in this field; the artificial separation of the parts of a human, animal or vegetable body, in order to discover their position, structure and relations; dissection’ (*Shorter Oxford English Dictionary* 2002). ‘Anatomy’ can also refer to a detailed analysis of a particular topic (for instance, ‘the anatomy of a crime’) and, in a non-technical sense, the human body (*Collins English Dictionary & Thesaurus* 2006). Quite clearly, ‘anatomy’ in the sense in

which it is used in anatomy departments is far more specific than many of these definitions.

Anatomy departments as discussed here limit their attention to human anatomy. They are departments of human anatomy, even though much research within them concentrates more on rats and mice than on humans. Central to their *raison d'être* is the structure of the human body. This is particularly the case for teaching, in which dissection of the human body constitutes a central activity. For medical students in particular, anatomy is largely defined as what can be learned from dissection of the human body. Gross anatomy, with its dissection and macroscopic study of the regions and systems of the human body, is the closest we come to a public image of anatomy, regardless of how members of an anatomy department may view the scope of their discipline. Anatomy, in this sense, is replete with nineteenth-century connotations that sit uneasily alongside the activities conducted in many contemporary anatomy departments.

It is impossible to move beyond this elementary point without enquiring into the culture of dissection, with its roots in the sixteenth and seventeenth centuries. No matter how anatomy is defined in the twenty-first century, there is no debate as to its position within the spectrum of academic disciplines: it is a biological science. What debate there is, concerns whether it belongs mainly within the domain of medicine, as a science serving medical education, or as one of the biomedical sciences.

In other words, were we to use the verb 'anatomize' or the noun 'anatomization' today, we would use it in a scientific sense. When a body is anatomized, or dissected, a complete body is reduced to its component parts in an attempt to build up a new body of knowledge. More specifically, the body of one individual is dissected so that a profession's understanding of the morphology and function of bodies in general can be increased. In the light of that which is learned about specific bodies, the intention is to strengthen and broaden the science of anatomy in general.

But what do we mean by such an obvious term as 'the body'? According to Kass (1985), the term in Old English referred to the living body, and only later in Middle English was the same term used for the dead body or corpse. Later, it was used to refer to the person or individual being.

Kass argues that, although the term 'body', in its primary usage, refers to the body of human beings or of animals, it is an abstraction. The body is always *some* body, it is *somebody's* body. This, in turn, raises questions such as: is my body mine or is it me? Can it be alienated from me, like other property of mine, such as my car or my dog? On what basis do I claim property rights over my body? Do I hold my body as a gift? If so, is it mine to dispose of as I wish? However we wish to answer questions such as these, we find we are moving continually between a particular body, *somebody's* body, and the body in general. Whether or not Kass is correct, we have to agree with him that we cannot limit our horizons and interests to a generalized 'body'. Cadavers, body parts, tissues and bony remains always come from particular individuals, and even when these individuals lived in the

distant past, they can never be completely dehumanized. They still remind us that they were once one of us.

However, the scientific ethos within which anatomy has functioned for two hundred years (see Chapter 2) arose out of a bewildering array of competing cultural forces. These provide a much broader appreciation of anatomy than that obtained by viewing it solely as the science of dissection.

Developing a Vision of the Interior of the Body

Prior to the modern, dispassionate, scientific approach to the human body, anatomy was part of a popular culture enamoured with the interior of the body but experiencing great difficulty in coming to terms with this largely hidden domain. In the Early Modern period in Europe, particularly the sixteenth and seventeenth centuries, there existed a fascination with the body that led inevitably to a morbid curiosity with dissection – the only known way of exploring this tantalizing and exotic territory. Dissection was not carried out in a sanitized environment as in the modern dissecting room, but in anatomy theatres with bodies straight from the gallows. It was carried out in a manner imbued with a prescientific understanding of the body, and in close association with playwrights and poets, a world far removed from modern conceptions. Jonathan Sawday in his elegant book, *The Body Emblazoned* (1995), brings to light the culture of dissection in the Early Modern period, with the morbid eroticism of some Renaissance poetry and theatre, the longing of writers to explore the unknown mysteries of the body's interior, and the surprisingly close connection between the respective theatres of playwrights and anatomists.

In sixteenth- and seventeenth-century Europe, the body was considered taboo, was viewed as capricious, and was talked of in the language of treason, treachery, duplicity and secrecy (as in the writings of John Donne). According to Sawday (1995, 43), this was an 'intangible world of imaginative and symbolic desire, where ritual, intellectual curiosity, and the sovereign rites of justice and punishment, merge into a fascination with the human interior'.

Contributing to the flourishing of anatomy during this period was a fascination for matters of sexuality and pain, which in turn were closely associated with dissection. Of considerable surprise is the conjunction between the anatomy lecture theatre *cum* dissecting room, and the playhouse. In analyzing the play *The Anatomist*, by the seventeenth-century writer Edward Ravenscroft, Sawday (1995, 46) finds that 'the role of the corpse ... conceals criminality, duplicity, and licence'. In the play, the corpse serves as a focus of attention, a place for demonstrating technical skill and a refuge from the outraged guardians of sexual morality. Sawday further argues that in order to obtain the delights of the flesh, the play suggests that we first have to be willing to become flesh. 'And once we are flesh, what happens when the anatomist catches our eye?' (Sawday 1995, 47).

Earlier, in 1594, Thomas Nashe writes in *The Unfortunate Traveller*, of his narrator being examined and then locked up to await dissection. At this point, the character meditates:

Oh, the cold sweating cares which I conceived after I knew I should be cut like a French summer doublet! Methought already the blood began to gush out at my nose. If a flea on the arm had bit me, I deemed the instrument had pricked me. Well, well, I may scoff at a shrewd turn, but there's no such ready way to make a man a true Christian as to persuade himself he is taken up for an anatomy ... Not a drop of sweat trickled down my breast and my sides, but I dreamt it was a smooth-edged razor tenderly slicing down my breast and my sides. If any knocked at the door, I supposed it was the beadle of Surgeon's Hall come for me. (quoted in Sawday 1995, 49)

Even stranger to us are the accounts of poets and writers outlining their dreams of dissection, feeling the hand of the dissector with its associated shiver of erotic anticipation. Such erotic dreams of partition were present in poetic texts until well into the seventeenth century. Being dissected was seen as the most complete form of physical surrender. An illustration of this is a poem dating from 1659 by Richard Lovelace, who, addressing his mistress, makes his poetic persona surrender to her:

Ah my fair Murtheresse! Dost thou cruelly heal,

With Various pains to make me well?

Then let me be

Thy cut Anatomie,

And in each mangled part my heart you'll see (quoted in Sawday 1995, 51)

Sawday argues that, by accepting the most complete form of physical surrender, namely dissection, the poem is able to express the extent of the poet's desire for his beloved.

The fascination and horror of dissection stemmed, in part, from its close liaison with public executions (Hildebrandt 2008). In the sixteenth and seventeenth centuries, the felon, executioner, anatomist, plus various advisers and assistants each played a carefully orchestrated part in the spectacle that made up the culture of dissection: these were two acts in a single drama. It was not until the eighteenth century that clinical detachment emerged. Prior to William Harvey's time (1578–1657):

... anatomies were performed in public ... as ritualistic expressions of often contradictory layers of meaning, rather than as scientific investigations in any