

Rational approaches to the genetic challenge

In this chapter, I present the main normative approaches to the ethics of genetics. I describe the views of six prominent authors in the field and contrast their prescriptive positions with my own nonconfrontational notion of rationality.

2.1 Six authors, three approaches

The dimensions of the ‘genetic challenge’ have been intensively studied in recent literature on philosophical bioethics.¹ The conclusions drawn by different authors vary considerably. Some say that all scientific and

¹ John Harris, 1998, *Clones, Genes, and Immortality: Ethics and the Genetic Revolution* (Oxford: Oxford University Press); Jonathan Glover, 1999, *Humanity: A Moral History of the Twentieth Century* (London: Jonathan Cape); Allen Buchanan, Dan W. Brock, Norman Daniels, and Daniel Wikler, 2000, *From Chance to Choice: Genetics and Justice* (Cambridge: Cambridge University Press); Deryck Beyleveld and Roger Brownsword, 2001, *Human Dignity and Biolaw* (Oxford: Oxford University Press); Matti Häyry, 2001a, *Playing God: Essays on Bioethics* (Helsinki: Helsinki University Press); Leon R. Kass, 2002, *Life, Liberty, and the Defense of Dignity: The Challenge for Bioethics* (San Francisco, CA: Encounter Books); Onora O’Neill, 2002, *Autonomy and Trust in Bioethics* (Cambridge: Cambridge University Press); Mary Warnock, 2002, *Making Babies: Is There a Right to Have Children?* (Oxford: Oxford University Press); Jürgen Habermas, 2003, *The Future of Human Nature*, translated by William Rehg, Max Pensky, and Hella Beister (Cambridge: Polity Press); Nicholas Agar, 2004, *Liberal Eugenics: In Defence of Human Enhancement* (Oxford: Blackwell); John Harris, 2004, *On Cloning* (London: Routledge); Richard Weikart, 2004, *From Darwin to Hitler: Evolutionary Ethics, Eugenics, and Racism in Germany* (New York, NY: Palgrave Macmillan); Jonathan Glover, 2006, *Choosing Children: Genes, Disability, and Design* (Oxford: Clarendon Press); Andrew Stark, 2006, *The Limits of Medicine: Cure or Enhancement* (Cambridge: Cambridge University Press); Jonathan Baron, 2007, *Against Bioethics* (Cambridge MA: MIT Press); Ronald M. Green, 2007, *Babies by Design: The Ethics of Genetic Choice* (New Haven, CT: Yale University Press); John Harris, 2007, *Enhancing Evolution: The Ethical Case for Making Better People* (Princeton, NJ: Princeton University Press); Matti Häyry, 2007c, *Cloning, Selection, and Values: Essays on Bioethical Intuitions* (Helsinki: Societas Philosophica Fennica); Michael J. Sandel, 2007, *The Case Against Perfection: Ethics in the Age of Genetic Engineering* (Cambridge, MA: The Belknap Press of Harvard University Press).

clinical advances in the field should be embraced and that regulation must in all cases be kept to a minimum. Others contend that the development and application of the new interventions devised by life scientists ought to be viewed with suspicion and in many cases halted or banned. More middle-of-the-road authors have suggested that since the promises are attractive and the threats alarming, sensitive regulation is needed to achieve a balance between the prospects and risks of the process.

In this chapter, I am more interested in the methods by which authors have reached their conclusions than in the conclusions themselves. I have chosen for closer scrutiny the approaches of six prominent scholars in bioethics: Jonathan Glover, John Harris, Leon Kass, Michael Sandel, Jürgen Habermas, and Ronald Green. By this choice I do not mean to imply that the work of others is any less significant – I will return to their arguments and views in the following chapters. Rather, I have made this particular selection because the three most interesting approaches to contemporary applied ethics are admirably represented, if not always thoroughly explicated, in the contributions of these six seminal authors.

The first approach stresses that the arguments presented for or against normative ethical views should always be transparent, clear, and rationally comprehensible. To realise this ideal, the proponents of the view analyse phenomena closely and try to reduce descriptions of them into sentences about concrete, tangible, easily understandable elements. In the case of reproductive cloning, for instance, they could argue that the procedure cannot be condoned now, because it is unsafe and the individuals created by it would probably be forced to suffer without their consent. Instead of introducing lofty moral doctrines or engaging in discussions on popular opinions, this approach brings the matter down to questions such as, ‘Does it hurt?’ and ‘Did they give you permission to do that?’ Of the authors that I have named, Glover and Harris come closest to this kind of thinking. I will describe their views in Section 2.2.²

² Jonathan Glover, 1977, *Causing Death and Saving Lives* (Harmondsworth: Penguin Books); Jonathan Glover, 1984, *What Sort of People Should There Be? Genetic Engineering, Brain Control, and Their Impact on Our Future World* (New York, NY: Penguin Books); Glover, 1999; Glover, 2006; John Harris, 1980, *Violence and Responsibility* (London: Routledge & Kegan Paul); John Harris, 1985, *The Value of Life: An Introduction to Medical Ethics* (London: Routledge); John Harris, 1992, *Wonderwoman and Superman: The Ethics of Human Biotechnology* (Oxford: Oxford University Press); Harris, 1998; Harris, 2004; Harris, 2007.

The second approach proceeds from the opposite end of the continuum. Its central tenet is that transparency, clarity, and comprehensibility in the sense understood by liberal individualists are fetishes of a historically distinctive, and mistaken, school of thought, namely analytical philosophy. Moral problems should not be dissected to death but taken holistically. They should be confronted in their complexity and with their emotional, social, and spiritual connections, acknowledging that they can contain mysteries which cannot be grasped by reason alone. Within this type of thinking, bans on cloning can be justified by appeals to emotional responses or to the secret of life that the practice would upset. Of my chosen ethicists, Kass and Sandel represent versions of this view which will be explained in more detail in Section 2.3.³

The third approach is, in a way, an attempt to strike a balance between the two extremes. It does aim at clarity and transparency in ethical assessments, but it can also settle for acceptance which is widely shared without necessarily insisting on an explanation for it. According to this approach, moral decisions should be made quasi-publicly. When we try to determine what is right or wrong, we must consider everyone's interests and opinions and promote rules that could be agreed to by all reasonable people. An argument against cloning within this outlook would be that its authorisation could not be rationally approved by everyone in society. Habermas and Green fall into this methodological category, although they tend to lean towards the opposite ends of the debate – Habermas towards complexity and Green towards simplicity.⁴ Their stances will be explicated in Section 2.4.

³ Leon R. Kass, 1985, *Toward a More Natural Science: Biology and Human Affairs* (New York, NY: The Free Press); Leon R. Kass, 1994, *The Hungry Soul: Eating and the Perfecting of Our Nature* (New York, NY: The Free Press); Leon R. Kass and James Q. Wilson, 1998, *The Ethics of Human Cloning* (Washington, DC: The American Enterprise Institute); Leon R. Kass and Amy A. Kass, 2000, *Wing to Wing, Oar to Oar: Readings on Courting and Marrying* (Notre Dame, IN: University of Notre Dame Press); Kass, 2002; Leon R. Kass, 2003, *The Beginning of Wisdom: Reading Genesis* (New York, NY: Free Press); Michael J. Sandel, 1982, *Liberalism and the Limits of Justice* (Cambridge: Cambridge University Press); Michael J. Sandel, 1996, *Democracy's Discontent: America in Search of a Public Philosophy* (Cambridge, MA: Harvard University Press); Michael J. Sandel, 2005a, *Public Philosophy: Essays on Morality in Politics* (Cambridge, MA: Harvard University Press); Sandel, 2007.

⁴ Jürgen Habermas, 1984–87, *The Theory of Communicative Action* Volumes I-II, translated by Thomas McCarthy (Cambridge: Polity Press); Jürgen Habermas, 1990, *Moral Consciousness and Communicative Action*, translated by Christian Lenhardt and Shierry Weber Nicholson (Cambridge, MA: MIT Press); Jürgen Habermas, 1993, *Justification and Application: Remarks on Discourse Ethics*, translated by Ciaran Cronin (Cambridge: Polity Press); Habermas, 2003; Ronald M. Green, 2001b, *The Human Embryo Research Debates: Bioethics in the Vortex of Controversy* (New York, NY: Oxford University Press); Green, 2007.

One way of describing the three approaches is to say that they represent the three normative doctrines of Western moral philosophy: consequentialism (outcome- and utility-directed ethics), teleology (purpose- and virtue-oriented ethics), and deontology (rule- and duty-based ethics). It is true that the first style is superbly exemplified by the writings of Jeremy Bentham, the founder of modern utilitarianism and the classical author whose work bears the closest resemblance to Glover and Harris.⁵ It is also true that the traditional and communitarian ways of thinking adopted by Kass and Sandel have been associated with the work of Aristotle, the paragon of teleological ethics.⁶ And it is true that Habermas and Green work quite consciously within the framework set up by Immanuel Kant, the archetype of duty-based moral philosophy.⁷ But this is not the whole picture: Glover and Harris do not always restrict their arguments to mere consequences;⁸ Kass and Sandel add two millennia of theology and philosophy to Aristotle's thinking; and Habermas and Green shun the solipsistic intellectualism of Kant. The prefix 'neo' could be added to the three traditional headings to mark the variation (neo-consequentialism and so on), but the headings should still not be used as more than a heuristic device in the context of the six named authors, whose ideas elude ready-made classifications.

In this chapter, I will first portray the three ways of tackling the 'genetic challenge' by the six scholars (Sections 2.2, 2.3, and 2.4) and state my reasons for not regarding any of them as *the* solution to the choice of methodology in this context (Section 2.5). I will then go on to state my own ideas about rationality and morality (Section 2.6) and the 'polite bystander's' point of view (Sections 2.7 and 2.8), which will then be assumed in the chapters dealing with the seven ways of making people better.

⁵ E.g. Jeremy Bentham, 1982, J. H. Burns and H. L. A. Hart (eds), *An Introduction to the Principles of Morals and Legislation* [1789] (London: Methuen).

⁶ Aristotle, 1982, *Nicomachean Ethics* (Cambridge, MA: Harvard University Press).

⁷ E.g. Immanuel Kant, 1994, *Ethical Philosophy* [*Grundlegung zur Metaphysik der Sitten* 1785a and *Metaphysische Anfangsgründe der Tugendlehre* 1797a], translated by J. W. Ellington, second edition (Indianapolis, IN: Hackett Publishing Company); Immanuel Kant, 1999, *Metaphysical Elements of Justice* [*Metaphysische Anfangsgründe der Rechtslehre* 1797b], translated by J. Ladd, second edition (Indianapolis, IN: Hackett Publishing Company).

⁸ Tuija Takala, 2003, 'Utilitarianism shot down by its own men?', *Cambridge Quarterly of Healthcare Ethics* 12: 447–54; Matti Häyry, 2007a, 'Utilitarianism and bioethics', Richard E. Ashcroft, Angus Dawson, Heather Draper, and John R. McMillan (eds), *Principles of Health Care Ethics*, second edition (Chichester: John Wiley & Sons): 57–64.

2.2 Rational tangibility: Glover and Harris

Glover, Harris, and other advocates of the ‘rational tangibility’ approach find the foundation of their search for morality in a startling question, namely, ‘Why is it wrong to kill people – if and when it is?’⁹ Just asking the question has stirred an array of objections. Opponents of the view have thought that ‘if’ and ‘when’ are not appropriate words in this context. Killing people is wrong, it is always wrong, and even to raise the question is dangerous and a sign of moral corruption. Human life has absolute value, which cannot and should not be discussed or weighed. Philosophers who even have to ask the question do not, by rights, deserve to lecture on ethics to unsuspecting audiences.¹⁰

The point of the query for Glover and Harris, however, is this. Some killing of human beings is accepted, anyway. People all around the world approve just warfare, capital punishment, self-defence, and terminations of pregnancy. Most of us condone at least some of these forms of killing. In addition, many human beings die before their time because their

⁹ The other advocates of this type of approach, with variations, include at least J. J. C. Smart, R. M. Hare, Peter Singer, and Julian Savulescu. Some of my own writings link me to this school, too, although I have in my more recent work emphasised a different fundamental question, which is, ‘Why can’t I do what I want – if and when I can’t?’ The contributions of Joel Feinberg and Robert Nozick have provided me with important insights in this development. See, e.g. J. J. C. Smart, 1973, ‘An outline of a system of utilitarian ethics’ [1961], reprinted in J. J. C. Smart and Bernard Williams (eds), *Utilitarianism: For and Against* (Cambridge: Cambridge University Press); R. M. Hare, 1975, ‘Abortion and the Golden Rule’, *Philosophy & Public Affairs* 4: 201–22; R. M. Hare, 1981, *Moral Thinking: Its Levels, Method and Point* (Oxford: Clarendon Press); Peter Singer, 1979, *Practical Ethics* (Cambridge: Cambridge University Press); Julian Savulescu, 1998a, ‘Consequentialism, reasons, value and justice’, *Bioethics* 12: 212–35; Joel Feinberg, 1967, ‘The forms and limits of utilitarianism’, *Philosophical Review* 76: 368–81; Joel Feinberg, 1984–88, *The Moral Limits of the Criminal Law* Volumes I–IV (Oxford: Oxford University Press); Robert Nozick, 1974, *Anarchy, State, and Utopia* (Oxford: Blackwell).

¹⁰ The opponents of the ‘rational tangibility’ view in ethics in general have included, among others, Elizabeth Anscombe, Bernard Williams, Philippa Foot, Anne Maclean, Onora O’Neill, and Jennifer Jackson. See, e.g. Elizabeth Anscombe, 1970, ‘War and murder’, Richard A. Wasserstrom (ed.), *War and Morality* (Belmont, CA: Wadsworth Publishing): 42–53; Bernard Williams, 1973a, ‘A critique of utilitarianism’, J. J. C. Smart and Bernard Williams (eds), *Utilitarianism: For and Against* (Cambridge: Cambridge University Press); Philippa Foot, 1978, *Virtues and Vices and Other Essays in Moral Philosophy* (Berkeley, CA: University of California Press); Philippa Foot, 2001, *Natural Goodness* (Oxford: Clarendon Press); Philippa Foot, 2002, *Moral Dilemmas: And Other Topics in Moral Philosophy* (Oxford: Clarendon Press); Anne Maclean, 1993, *The Elimination of Morality: Reflections on Utilitarianism and Bioethics* (London: Routledge); Onora O’Neill, 2002, *Autonomy and Trust in Bioethics* (Cambridge: Cambridge University Press); Jennifer Jackson, 2006, *Ethics in Medicine* (Cambridge: Polity Press).

lives are not saved. We could in many cases save those lives, for instance, by donating money to charitable organisations that run vaccination programmes in developing countries. By not doing this, we make ourselves almost as responsible for the deaths of unvaccinated children as we would be if we travelled to their countries and killed them. So killing people and knowingly letting them die is already going on, and the remaining questions – the ones that Glover and Harris ask – are, why and when is this right and why and when is it wrong?¹¹

Where can the answer to the questions be found? According to Glover and Harris, it *cannot* be found in God, nature,¹² religious tradition, deontological arguments, or moral sentiments.¹³ These yield answers that are false or unintelligible,¹⁴ conceptually incoherent or logically inadequate;¹⁵ and generate consequences that cannot be accepted.¹⁶ The only reliable guide in moral enquiries is rational argumentation,¹⁷ and this will in most cases lead to the consideration of the concrete, tangible impacts of our choices on people who are affected by them.¹⁸

The view that Glover and Harris develop by using rational argumentation states the following.¹⁹ It would be wrong to kill someone who has a life worth living²⁰ or a life of value.²¹ It would also be wrong to kill individuals who want to go on living, for two reasons. Their willingness to live can, for all we know, prove that their lives are worth living or have value.²² And, apart from this, it is important that people's autonomy is respected, especially in irreversible decisions such as hastening their death.²³ Furthermore, since there is no intrinsic moral difference between killing people and failing to save their lives, it would be wrong not to save individuals whose lives are worth living or have value, or who want to go on living.²⁴

According to Glover and Harris, then, one fundamental reason against killing people and failing to save their lives is that these choices would eliminate the worthwhile future existence of a currently existing

¹¹ Glover, 1977; Harris, 1992. Both Glover (2006) and Harris (2007) have published more recent books on aspects of the genetic challenge, but their theoretical stances (which in the new contributions remain unchanged) are presented best in the cited (older) works.

¹² Glover, 1977, p. 84. ¹³ Harris, 1992, pp. 35, 40–3, 46, 146.

¹⁴ Glover, 1977, p. 84. ¹⁵ Glover, 1977, p. 25. ¹⁶ Glover, 1977, pp. 25–6.

¹⁷ Harris, 1992, p. 5. ¹⁸ See, e.g. Häyry, 2001a, pp. 64–78.

¹⁹ This formulation is mostly based on Glover, 1977. Judging by Glover's own later books his view remains the same. Harris's view differs from this only so slightly that it makes no difference in a general description such as this.

²⁰ Glover, 1977, p. 52. ²¹ Harris, 1985, pp. 15–19. ²² Glover, 1977, pp. 53–4.

²³ Glover, 1977, pp. 78–83. ²⁴ Glover, 1977, p. 116.

person. Similar reasons can be extended to reproductive choices. Failure to conceive and a decision to terminate a pregnancy would also eliminate the future existence of a person, albeit a currently nonexistent one. Therefore the view stipulates that it would be wrong not to bring about a life worth living or of value, provided that the life is qualitatively so good that it does not lower the average goodness of the lives of the population as a whole.²⁵ Slightly surprisingly, this does not seem to imply that people actually must have children or shy away from abortions. One reason cited for this is the need to respect people's reproductive autonomy;²⁶ another is that unwanted children can have lives qualitatively below the average.²⁷

Put in terms of worth, Glover and Harris postulate three categories of lives: those *more* worth living; those *less* worth living; and those *not* worth living. This postulation produces several normative judgements that have relevance in the discussion on making people better. The first is that if some people's lives can be made longer and more worth living without making other people's lives shorter or less worth living, it would be wrong not to do so.²⁸ This has obvious implications on the development of new drugs and treatments, including saviour sibling, stem cell, gene, and life-extending therapies. The second is that if we can choose between two future individuals, one who would have a good life and another who would have a so-so or a bad life, it would be wrong not to select the one with the good life.²⁹ This sanctions preimplantation genetic selection; and abortions on genetic grounds *when* this gives way to a new pregnancy through which an individual with a better life replaces the individual with the worse life. The third is that if we have to choose between creating a life less worth living and no life at all, it would *not* be wrong to choose the life less worth living. If parents can have only disabled children, having them can be better than remaining childless.³⁰ The fourth and final normative judgement is that it would be wrong to bring about lives which are not worth living. The criteria are difficult to specify, but prenatally predicted or diagnosed severe disabilities in a future child entail, according to this view, a moral duty not to conceive the child, or to terminate the pregnancy if it is already on the way.³¹

Critics of Glover and Harris tend to classify them as individualists and consequentialists. This is not unreasonable given some of their views.

²⁵ Glover, 1977, pp. 69–70, 140; cf. Harris, 1992, pp. 176–7. ²⁶ Harris, 1992, p. 71.

²⁷ Glover, 1977, pp. 140–2. ²⁸ Glover, 1977, pp. 54–7. ²⁹ Glover, 1977, p. 140

³⁰ Glover, 1977, p. 147; Harris, 1992, pp. 71–2. ³¹ Glover, 1977, pp. 145–8.

They believe that it is always justified 'to want more of a good thing than less of it',³² and the good things they have in mind are eventually experienced or lived by particular human beings. But the classification can, on closer scrutiny, be challenged on both accounts.

The principle of replaceability, needed in the defence of selective abortions, makes the role of individuals virtually void in the model. It does not matter which of two embryos or fetuses is allowed to continue its development as long as the resulting worth or value of life is maximised. Glover and Harris would not kill existing people against their will, presumably because they would have sufficient respect for the *subjective* worth or value of their lives. But they would, in the light of their theory, prefer a world with human lives which are more rather than less worthwhile. If I could be easily replaced by a better copy, Glover and Harris would have no problem with *me* being lost, because they have no respect for me as an *objectively* separate entity. And this is exactly the logic by which they also ignore the individuality of embryos and fetuses.

The division of lives into the three rather vague categories, in its turn, makes the consequentialism of the view questionable. The standard idea of the doctrine is that the impacts of actions and inactions can be assessed and compared with each other by using commensurable units of value. The question concerning expected outcomes is genuine and empirically testable: we ask which one of our action alternatives produces the best results, in the light of the knowledge we have about the world. But with the division introduced by Glover and assumed by Harris, the conclusion can be manipulated to match our predetermined views. If we do not want to condone the birth of individuals with a specific congenital ailment, we simply define this ailment as making their lives not worth living, and no further calculations are needed. This, I would like to argue, is not consequentialism in its purest form.³³

2.3 Moral transcendence: Kass and Sandel

Kass and Sandel's search for the basis of morality also centres on a startling question, in their case, 'What is the meaning of life?' or 'What gives human life its meaning?' This is the kind of enquiry that is made more frequently in religious contexts (and Woody Allen movies) than in contemporary philosophical ethics, which is why many scholars tend to dismiss their efforts as theological metaphysics smuggled into secular

³² Glover, 1977, p. 56. ³³ Cf. Häyry, 2007a.

discussion.³⁴ But, despite the heavy use of biblical language, both Kass and Sandel assure their readers that their arguments can be understood without any reference to particular religions.³⁵ Kass has in fact been criticised for *not* taking his views to their theological conclusion.³⁶

The answer to the questions cannot, according to Kass, be found in modern philosophical analyses, because these are hyper-rational and void of ethical significance. Clarity, consistency, and coherence are overrated, and the pride of place given to them is primarily responsible for the sorry state of current bioethics.³⁷ Utilitarian and other consequentialist ways of thinking, with their emphasis on rationalisation over reason, inclination over duty, and pleasure over goodness, are particularly detrimental to any moral pursuit.³⁸ And although Kass thinks that Kantian opposition to these degradations is admirable, the emphasis given within this school of thought on the pure *willing* of and *thinking* about the good and the right is not sufficient for him, either.³⁹ Since humans are also *begetting* and *belonging* beings, excessive concentration on the mind disembodies us and makes us less than human.⁴⁰ Instead of making intellect our starting point, Kass believes, physical and moral repugnance could be our best initial guide towards the right direction – to moral wisdom.⁴¹

The core of moral wisdom, Kass argues, can be found in biology, and in the close connection between sex and mortality. We are naturally (although not always consciously) drawn between two aspirations: *self-preservation* and the *urge to reproduce*. Self-preservation aims at personal permanence and satisfaction. But reproduction has a different goal altogether. Unlike and even against the first drive, it is self-denial for the sake of transcending our finite individual existence.⁴² Man and woman come together to produce a child that will eventually survive them both. The flesh, name, ways, and hopes of the parents will live on in the child, thus providing them a 'future beyond the grave'.⁴³ Having this aim in mind is what elevates love above lust and gives human life the meaning and

³⁴ E.g. Leon Eisenberg, 2003, 'Life, liberty, and the defense of dignity: The challenge for bioethics' (book review), *The New England Journal of Medicine* 348: 766–8; Carson Strong, 2005, 'Lost in translation: Religious arguments made secular', *American Journal of Bioethics* 5: 29–31.

³⁵ Kass, 2002, pp. 86, 114; Sandel, 2007, pp. 92–5.

³⁶ Marc D. Guerra, 2003, 'Life, liberty, and the defense of human dignity: The challenge for bioethics' (book review), *First Things*, February – www.firstthings.com/article.php?id_article=429.

³⁷ Kass, 2002, pp. 57–65. ³⁸ Kass, 2002, p. 16. ³⁹ Kass, 2002, pp. 16–17.

⁴⁰ Kass, 2002, p. 17. ⁴¹ Kass, 2002, pp. 149–53. Cf. Häyry, 2007c, pp. 57–73.

⁴² Kass, 2002, pp. 19, 155–7. ⁴³ Kass, 2002, p. 157.

dignity that it has.⁴⁴ Apart from the figurative immortality of individuals, it makes possible moral growth through the uninterrupted existence of 'families and communities of worship, where cultural practices enable the deepest insights of the mind to become embodied in the finest habits of the heart'.⁴⁵ Cultural continuity by procreation, not personal satisfaction, is the distinctively *human* and *dignified* element of our lives.

The view Kass puts forward has important implications for the technological ways of making people better. He readily admits that many of these, perhaps all, promote liberty, equality, health, longevity, freedom, prosperity, and happiness. But the problem is that they also threaten human dignity.⁴⁶ If sex is taken out of reproduction, the meaning of life – its erotic and social continuation – will be gradually lost. And taking sex out of reproduction is exactly what is happening with assisted insemination, in vitro fertilisation, and especially cloning, which does not even allow the union of two separate genomes.⁴⁷ The search for considerable life extension, again, challenges procreation indirectly by trying to make existing individuals so long-lived that few new individuals, if any, are eventually needed.⁴⁸ Based on these considerations, Kass thinks that if we let the specifically human part of our existence – again, erotic and social continuation – erode, we cease to be what we have been for millennia and slowly but surely turn into inhuman or posthuman beings.⁴⁹

Sandel, like Kass, believes that analytic ethics is unable to solve the problems created by the new genetics. When we are troubled by enhancements and other technological developments we are not fundamentally concerned about violations of autonomy, fairness, or individual rights, which are the bread and butter of the purely cerebral philosophers of our time.⁵⁰ Most ways of making people better actually promote freedom, justice, and rights, so there is no cause for complaint on this front. But

⁴⁴ Kass, 2002, p. 156. This, at least, is what I think Kass is saying. Here is a passage from the same page that I did not fully understand, though: 'Whether we know it or not, when we are sexually active we are voting with our genitalia for our own demise. The salmon swimming upstream to spawn and die tell the universal story: sex is bound up with death, to which it holds a partial answer in procreation.' I can understand that sex leads to procreation and procreation leads to an immortality of sorts, so that accounts for the 'partial answer' bit. But 'voting with our genitalia for our own demise'? Is there a causal connection between sex and death? Do people who do not have sex live longer? Am I missing something really obvious here?

⁴⁵ Kass, 2002, p. 53. ⁴⁶ Kass, 2002, p. 22.

⁴⁷ Kass, 2002, pp. 159–61. ⁴⁸ Kass, 2002, pp. 19–20.

⁴⁹ Kass, 2002, pp. 21–2. See also Francis Fukuyama, 2002, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (London: Profile Books).

⁵⁰ Sandel, 2007, pp. 6–9.

we *are* troubled, says Sandel, and to understand why we are ‘we need to confront questions ... about the moral status of nature, and about the proper moral stance of human beings toward the given world.’⁵¹ If these questions sound unfamiliar or theological, this cannot be helped because they have already been raised by science and technology.⁵² Human dignity is under threat by enhancements, cloning, and genetic engineering, and the task now is to find out ‘*how* these practices diminish our humanity’ and what ‘aspect of human freedom or human flourishing ... they threaten’.⁵³ Since the answer cannot be found in liberal principles, a more helpful vocabulary has to be assumed.

Sandel argues that the part of humanity biotechnology endangers is our ability to see and value the role of ‘giftedness’ in our lives.⁵⁴ By giftedness he means that human life is always partly beyond our control, and by the ability to see and value its role he means that this should be accepted and held in awe, not fought against or cursed. Sports, according to Sandel, provide a platform for the recognition of giftedness over human effort. The admiration we feel for a naturally talented top athlete will never be extended to mediocre sportspeople, even if they trained every bit as hard as the champion.⁵⁵ Parenthood, however, is the area of life where people understand the notion of giftedness best. Children come as they are, and good parents take this for granted and love their young unconditionally in their given state.⁵⁶ But the genetic challenge threatens to change this. If children are planned and designed, parents will have expectations concerning them and their love will become conditional. Aspirations of wilfulness, dominion, and moulding replace the traditional ideas of giftedness, reverence, and beholding in our attitudes toward the world as we see it.⁵⁷

The wrong Sandel sees in all this is that the genetic revolution can lead us to the assumption of a ‘project of mastery’, the abandonment of good habits of mind and ways of being, and the loss of ‘human goods embodied in important social practices’.⁵⁸ The goods that will be lost, with the sense of giftedness, are humility, a limited sense of responsibility, and solidarity.⁵⁹ Humility and reasonable accountability for what we do will be replaced by excessive pride in our achievements and a crushing liability for what we are as a result of our own manipulations. If we succeed, it is all our doing. But if we fail, we are also the only ones to blame. This, Sandel

⁵¹ Sandel, 2007, p. 9.

⁵² Sandel, 2007, pp. 9–10.

⁵³ Sandel, 2007, p. 24.

⁵⁴ Sandel, 2007, p. 29.

⁵⁵ Sandel, 2007, pp. 26–9.

⁵⁶ Sandel, 2007, pp. 45, 86.

⁵⁷ Sandel, 2007, p. 85.

⁵⁸ Sandel, 2007, pp. 96, 97–100.

⁵⁹ Sandel, 2007, p. 86.

argues, will undermine our sense of solidarity – the sensitivity to the role of chance in human life that makes us share risks and pool resources in the form of social insurance.⁶⁰ So, in the end, whatever the promises of new genetic technologies may be in terms of freedom, happiness, and fairness, we should be wary of them lest we lose the central human value of solidarity.

Although different in detail, the accounts of Kass and Sandel share a common core. What is at stake in the introduction of cloning, enhancements, and the like is not personal freedom or individual wellbeing but humanity as we know and cherish it. The answer to the question, ‘What gives human life its meaning?’ is essentially the same for both. We and our actions can contribute to realising value in our lives, but the ultimate answer transcends our limitations. The meaning of life must come from something beyond our desire, will, and manipulative power; be that God, nature, or just an inexplicable reverence for our biological, moral, and social existence.

2.4 Everybody’s acceptance: Habermas and Green

As seen so far, Glover, Harris, Kass, and Sandel are all interested in defining the kind of human life that is worth protecting and promoting. Glover and Harris find the answer in the quality of individual lives, while Kass and Sandel focus on the good life of the species as a whole. Habermas and Green initially deviate from this starting point. The basic question in their theories is, ‘How can a decision be acceptable to all?’ or ‘Which decisions take everyone’s interests fully into account?’ Interestingly, though, their own responses to the queries lead them to mutually conflicting normative conclusions when it comes to making people better.

Habermas requires that moral rules can be universalised. By this he means that a norm must meet the following requirement: ‘All affected can accept the consequences and the side effects its *general* observance can be anticipated to have for the satisfaction of *everyone’s* interests (and these consequences are preferred to those of known alternative possibilities for regulation).’⁶¹ As a justification for this, Habermas presents observations concerning human nature. It is important for us, as human beings, to create an identity and to preserve it during our lives. Since we are fundamentally social beings, our identities can only be formed and protected in interactions with other people. The web of these interactions constitutes

⁶⁰ Sandel, 2007, pp. 89–92. ⁶¹ Habermas, 1990, p. 65.

our form of life, and due to our social nature we can only have a universal morality in the context of a form of life. In that context we can negotiate, through argumentative discourse between equal participants, the particular norms and actions that can be accepted by all and are in everyone's interest.⁶²

In the negotiation, Habermas wants to keep the language used as neutral and generally accepted as possible. Many people have claimed, for instance, that bans on abortion, embryology, and genetic tests can be based solely on the intrinsic dignity of the early human being.⁶³ Habermas disagrees, although he believes that the practices in question are 'reifying', 'disgusting', and 'obscene'.⁶⁴ There is, he argues, reasonable variance in views concerning the moral status of embryos and fetuses, and while a value judgement in favour of the bans can be coherently made, it would be wrong to conflate values (everybody *agrees* that embryos have human value) and rights (everybody *does not agree* that embryos have human rights); the latter also being required for the establishment of a universal norm in this matter.⁶⁵

According to Habermas, an alternative way to approach the issue is to focus on *the ethical self-understanding of the human species*, which is a necessary condition of our individual and social development. If we do not have a clear and solid view of what makes us human, we cannot see and respect, as we should, ourselves and others as autonomous persons with our own life histories.⁶⁶ The clear and solid view that we currently have of ourselves includes at least three important elements: an awareness that there is a part of us that is naturally grown and not self-made (or otherwise human-made); a conviction that in the realm of the self-made we are capable of self-determined and responsible action; and a recognition of the equality of all human beings in our dealings with each other.⁶⁷ These elements are intertwined. If the distinction between the grown and the made is demolished, this will blur the idea of responsible self-determination and undermine our sense of and respect for equality.

Habermas believes that the ethical self-understanding of the species provides grounds for rejecting reproductive selection in all its forms, cloning, and gene therapies that are not aimed at restoring the health of the treated individuals.⁶⁸ In all these cases, the moral logic is the same. If individuals are the result, even partially, of parental choices or technological

⁶² Habermas, 1990, pp. 130, 207; Habermas, 1993, pp. 31, 37, 83–4.

⁶³ Habermas, 2003, pp. 29–37. ⁶⁴ Habermas, 2003, pp. 20, 39.

⁶⁵ Habermas, 2003, pp. 31–2, 36. ⁶⁶ Habermas, 2003, p. 25.

⁶⁷ Habermas, 2003, pp. 29, 42, 56–8. ⁶⁸ Habermas, 2003, pp. 43–4, 52, 57–8, 63–4, 73–4.

manipulation, they will lose their actual and perceived ‘ownness’. They can still understand themselves as social beings in communicative interaction with others. But they will not be able to claim a natural core self, untouched by others, which could be used as their own perspective to controversial matters. This part of them has been taken over by other people’s choices, and the selected and manipulated individuals have been left without a sense of self-madness, identity, or freedom.⁶⁹

Habermas does not maintain that people who have been screened, cloned, or enhanced would be or feel any less human or possess less human dignity. The argument is not in that sense metaphysical or psychological. The crux of the matter is what we do to our self-understanding as a species if we even try to choose people or interfere with them without their consent.⁷⁰ By doing this we would neither be listening to them nor giving them a chance to say ‘Yes’ or ‘No’ based on their own interests and reasons. Yet everybody’s opportunity to agree or to disagree is a necessary condition for the formulation of universally acceptable norms – which define our humanity. If some individuals are denied their say in our communicative interaction, as is suggested by genetic engineering, we cannot see ourselves as equal, autonomous, responsible agents any more.⁷¹ The ‘moral indignation proper’ that accompanies this revelation differs drastically from the less serious ‘disgust at something obscene’ that we feel, for instance, in debates over the use of embryos in research. As Habermas puts it, ‘It is the feeling of vertigo that seizes us when the ground beneath our feet, which we believed to be solid, begins to slip’.⁷² Gene technologies destroy, conceptually speaking, the foundation of our moral life.

Green agrees with Habermas that moral norms should be acceptable to all. His formulation of this is: ‘The right thing to do is that which omnipartial, rational persons would accept as a public rule of conduct (norm): that is, as a form of conduct known by everyone and applicable to everyone’.⁷³ An interesting difference, and probably the one that accounts for the disagreement in the ensuing normative conclusions, is that Green restricts the scope of moral decision makers to *rational* persons. Habermas requires in his universalisation thesis that *everyone* affected by a norm’s general observance should have a say in its approval.⁷⁴ This leads him to examine how selection, cloning, and enhancements influence everyone’s

⁶⁹ Habermas, 2003, pp. 56–8. ⁷⁰ Habermas, 2003, p. 60.

⁷¹ Habermas, 2003, pp. 54–7. ⁷² Habermas, 2003, p. 39.

⁷³ Ronald M. Green, 2005, ‘New challenges of genetics and ethics’ – www.dartmouth.edu/~ethics/resources/elsi2005.html.

⁷⁴ Habermas, 1990, p. 65.

prospects to participate equally, freely, and responsibly in genetic decision making; and to conclude that genetic advances challenge the very root of our prevailing morality by cancelling out this type of participation by all. For Green, it seems to be sufficient that a group of rational persons accept the norm, provided that they take everybody's interests into account in the process.

Green himself accounts for interests by first giving meticulous descriptions of scientific achievements and people's reactions to them, and then examining critically arguments against the use of genetics.⁷⁵ The results of his analysis can be summarised in three main points. The first is that worries about children and families in the age of genetics are exaggerated. The second is that people's fear of change is often the only (irrational) reason for their objections. The third is that all risks and challenges posed by genetics can be dealt with by regulations rather than prohibitions. Let me explain these one by one.

The first point allays all concerns about psychological damage potentially caused to children and families by selection, cloning, and gene therapies. It is possible that parents will expect specific traits or qualities to manifest in their chosen or enhanced offspring, and it is possible that their young will feel the pressure of these expectations. But Green argues that this should not prevent us from using these techniques. As a reason for this, he offers a 'psychological principle', namely, the generalisation that 'Parental Love Almost Always Prevails.'⁷⁶ By this Green means that parents nearly without fail 'bond to children *as they are*' and 'love the children they get no matter what qualities they possess'.⁷⁷ He gives as an illustration his daughter who wanted to have a girl, had a boy, and five years later 'could not imagine this wonderful child to be other than what he is'.⁷⁸ He also cites disability activists who argue that 'parents love their disabled children, often regard them as the highlight of their lives, and usually adjust their various family responsibilities to meet the extra needs of their "special" child'.⁷⁹ So it does not pay to agonise over the impact of genetics on children: parents will connect with them anyway.

The second point is designed to cover residual anxieties about the ill-effects of change. Even given that parental love almost always prevails, society, morality, and humanity may become different as a result of genetic selection and enhancements. Against those who use this as an argument for prohibitions (like Kass, Sandel, and Habermas do), Green

⁷⁵ Green, 2007. ⁷⁶ Green, 2007, p. 114. ⁷⁷ Green, 2007, p. 116.

⁷⁸ Green, 2007, p. 114. ⁷⁹ Green, 2007, p. 115.

evokes the ‘reversal test’ introduced by Nick Bostrom and Toby Ord.⁸⁰ The idea is that if changes to one direction are seen as dangerous, the situation is reversed and people are asked to judge corresponding changes to the opposite direction. For instance, if people oppose genetic attempts to raise the intelligence quotient (IQ) of a population by 10 points, they are invited to think whether *lowering* the IQ of the same population by 10 points would be a better idea. If both proposals are met with suspicion and only the prevailing situation is deemed acceptable, the evaluators could ‘suffer from *status quo bias*’.⁸¹ And if this is the only reason for opposing changes, it can be ignored as irrational.

The third point is that the more concrete physical, moral, and social risks related to genetic advances can be controlled best by regulation. Green offers four guidelines for this: ‘Genetic interventions should always be aimed at what is reasonably in the child’s best interests’;⁸² ‘Genetic interventions should be almost as safe as natural reproduction’;⁸³ ‘We should avoid and discourage interventions that confer only positional advantage’;⁸⁴ and ‘Genetic interventions should not reinforce or increase unjust inequality and discrimination, economic inequality, or racism’.⁸⁵ It is notable that these norms are geared towards accommodating almost all forms of selection, reproduction, therapy, and enhancement, provided that they are ‘reasonably’ or ‘almost’ safe. The only prohibitions that Green seems to condone are against clones bred for organ donation (glaringly exploitative but also science fiction);⁸⁶ height modification with an increased risk of heart disease (a question of physical harm and safety);⁸⁷ reducing children’s cognitive abilities to make them more obedient to the elders of a religious cult (here again Green’s basic concern is future vulnerability to harm);⁸⁸ and elevated red blood cell function with an increased risk of heart disease (bodily harm yet again).⁸⁹

It seems, then, that the general requirement of universal acceptance, shared by Habermas and Green, can produce very different norms depending on the details of the chosen moral theory. Habermas starts from everybody’s consent and ends up condemning selection, cloning, and enhancements in their entirety, while Green settles for the consent of

⁸⁰ Green, 2007, pp. 104–6; Nick Bostrom and Toby Ord, 2006, ‘The reversal test: Eliminating status quo bias in applied ethics’, *Ethics* 116: 656–79.

⁸¹ Green, 2007, p. 104; quoting Bostrom and Ord, 2006 (italics added).

⁸² Green, 2007, p. 216 (italics removed). ⁸³ Green, 2007, p. 218 (italics removed).

⁸⁴ Green, 2007, p. 223 (italics removed). ⁸⁵ Green, 2007, p. 225 (italics removed).

⁸⁶ Green, 2007, p. 216. ⁸⁷ Green, 2007, p. 217.

⁸⁸ Green, 2007, p. 218. ⁸⁹ Green, 2007, p. 224.

rational people and finishes off by approving all the debated practices in monitored and regulated forms.

2.5 Why none of the approaches is *the one*

I do *not* aim in this book to criticise other ethicists' views at a normative level. To claim that any of the six scholars whom I have introduced is wrong in any absolute sense forms no part of my philosophical conclusions. But for the sake of clarity and fairness, it is probably best that I express my own personal opinions concerning the six views before moving on to point out their limited applicability and troubled relationships with each other. While inadmissible as theoretical evidence, these opinions undoubtedly set the background against which the rest of my argument should be viewed. Let me re-emphasise, however, that I do *not* see the following scattered musings, for reasons that will become apparent in the next sections, as conclusive enforcements or criticisms of the ideas of Glover, Harris, Kass, Sandel, Habermas, and Green.

To begin with, I have a lot of sympathy for the commonsense and dedication of Glover and Harris. Their prescriptions are always designed to reduce suffering and to promote the physical and psychological good of humanity in an impartial and equitable manner. If traditional rules or prevailing opinions seem to intervene, they are brushed aside with arguments that show their intellectual weaknesses. Metaphysical assumptions are kept to a minimum and religion is kept apart from moral judgements. Responsibility is assigned to deliberate omissions as well as actions, which is a good way of making the prevailing situation just one of the options open to us when we make our choices.

I see two main question marks in the model advocated by Glover and Harris. The first is their division of life's worth or value into the three levels of 'more', 'less', and 'none'. Many qualities can, of course, be divided like this – intended insults are more offensive or less offensive or not offensive at all, and so on. But in this case it seems that definitions follow evaluations rather than precede them. In prenatal choices Glover and Harris tend to decide first that, say, parents should not have blind children if they can have seeing children instead. To justify this choice, they then decree that the lives of blind people have less worth or value than the lives of seeing people. This seems to apply across the board. We do not have a primary criterion of worth or value which could then be predictably applied to particular cases; we have a list of cases that Glover and Harris have reacted to intuitively and rationalisations of these reactions in terms of

worth and value. My second problem with the model is its tendency to see opposing views as irrational. All appeals to prevailing norms and values, be they grounded on religion, local custom, or people's actual beliefs, are dismissed as going against reason – unless they happen to support the ideas championed by Glover and Harris, in which case they go unquestioned. So while I personally agree with their general ethos, I see difficulties both in their positive case for this ethos and in their defence of it against challenges.

Kass and Sandel's particular strength lies in their allegiance to humanity's and community's accumulated wisdom. People have lived together in groups for millennia and their organically developed ways of thinking can well indicate our best responses to social and natural threats. When our ways of thinking are deeply ingrained, it is also possible that immediate reactions of indignation and repugnance mark the boundaries of morality more reliably than analytical efforts by philosophers and ethicists. As to the ideals we should aim at, Kass and Sandel are not afraid to use metaphors that can be considered old-fashioned but are understood by most people. A prominent example of this is the notion of 'giftedness' which is set against our will to control matters in our environment.

My personal difficulties with the views of Kass and Sandel are twofold. Their reliance on concepts that have deep cultural meaning makes, in my eyes, their philosophy shallow. Erotic and social continuation through sex and reproduction has so far been a feature of human life, and children have often been seen as gifts. But these are just isolated observations. It is also true, and culturally meaningful, that sex gives pleasure whether or not it is linked with reproduction. Why is *this* not seen as the cornerstone of ethics? Their failure to compare and examine things further gives me the impression that the authors are just hanging on to the first words they can find in justifying their preset views on gene technologies. This is linked to my other concern, as well. Kass and Sandel admit that genetic advances could, and probably would, promote autonomy, rights, fairness, liberty, equality, justice, health, longevity, prosperity, and happiness – but argue that progress would still be wrong because it would threaten the meaning of life. What exactly can this mean? Would it not be good to endorse the listed values? It seems to me that Kass and Sandel turn their backs on all these modern ideals rather too casually. It is one thing to have a traditional sense of what is right and what is wrong, but quite another to completely disregard the principles on which our current liberal and democratic societies are founded.

Habermas and Green definitely have a point when they say that universal consensus is a prerequisite of universal morality. Habermas moves cleverly from this position to the idea that we would be wrong to make decisions for future generations without their permission. Once the argument has proceeded to this stage, nothing seems to be able to save genetic selection, cloning, and enhancements. Green takes a different route and postulates rational persons who will make the decisions hypothetically for themselves and others. The shift from all to 'only' rational individuals seems acceptable, because we would probably dislike being captive to the opinions of irrational people. And the way rationality pans out in Green's view, his permissive conclusions seem to be difficult to escape if we have already gotten so far as to approve the original limitation.

I do not want to engage in involved arguments with either Habermas or Green at this stage, and I will simply state the main worries I have with their approaches. I do not understand how Habermas can dodge the fact that by deciding *not* to enhance their offspring parents already make a choice for which consent would be needed. The only way to respect future generations would seem to be not to produce them at all (a respectable solution, I believe, but probably not one that he is after). In Green's thinking, I do not fully grasp his notion of 'rationality'. If we are trying to determine what people could rationally condone *and* we know that apparently rational people like Habermas do not condone human cloning, how can we legitimately and without argument ignore the variation in opinions?

I will return to the more specific views of Glover, Harris, Kass, Sandel, Habermas, and Green in Chapters 3, 4, 5, 6, 7, 8, and 9. Going any deeper into their general theories at this stage would be futile, because there is no Archimedean point from which I could judge them in a universally gratifying way. I may personally think that some or all of these authors are mad as hatters, but then again, they have all attracted at some point in their career, reviews stating that they are the best thing since sliced bread. This enthusiastic support for conflicting views is, in fact, my main justification for saying that none of these views is *the* one that should be endorsed by everyone in all places and at all times. Glover and Harris will never be accepted by the proponents of Kass and Sandel; Kass and Sandel will never be accepted by the defenders of Glover and Harris. Habermas and Green come from the same approximate school of thought, but they cannot even be accepted by each other. Are some of them right and some of them wrong? This is a distinct possibility, but who is and on what criteria?

I believe that it is more constructive to try to find points and methods of comparison on a different level.⁹⁰

2.6 A nonconfrontational notion of rationality

Ethical debates on the genetic challenge are often sharply polarised. Some authors hail all developments in the field, while others see them as a peril. Could this mark an unavoidable clash between *rationality* and *morality*? I do not think so, but the language used by many proponents and opponents of new technologies certainly encourages the idea. Glover and Harris do not see much value in traditional moral norms when these cannot be upheld by rational arguments.⁹¹ And Kass and Sandel reject excessive rationality because it tends to erode the foundation of our shared morality.⁹² This, however, does not necessarily reveal a gap between rationality and morality. Most work is done in these descriptions by attributes such as ‘traditional’ and ‘excessive’. If the concepts are adequately defined, very few philosophical ethicists would like to be labelled as either ‘irrational’ or ‘immoral’.

Let me propose and explicate, for the purposes of this book, the following *nonconfrontational notion of rationality*:

A decision is rational insofar as it is based on beliefs that form a coherent whole and are consistent with how things are in the world; and it is aimed at optimising the immediate or long-term impacts on entities that matter.

This definition is not intended to be complete or exclusive. Rationality can, for all I know, have many additional dimensions and aspects. But it

⁹⁰ What I take to be a similar point in a closely related field is succinctly expressed by Margaret Brazier and Emma Cave in the context of legislating on what is permissible in genetics, biotechnology, and reproduction: ‘But above all, each side of the moral debate is convinced that they are right and the other irretrievably wrong. What tends to be overlooked is that, in many ethical debates today, there is no answer that will be accepted as unchallengeably right. The question for legislators is not to find a right answer, to achieve a moral consensus, but to determine how in a liberal, democratic society legislation can be formulated in the absence of such consensus. To evade that task is to give the scientists free rein to do as they see fit. To criticise them with hindsight is unfair and unproductive. Theologians, ethicists, lawyers, and (indeed) all citizens must be prepared to grapple with these awkward moral dilemmas and, probably, be ready to compromise.’ Margaret Brazier and Emma Cave, 2007, *Medicine, Patients and the Law*, fourth edition (London: Penguin Books), p. 68. On the possibility of pluralism from a philosophical angle, see David Archard (ed.), 1996, *Philosophy and Pluralism* (Cambridge: Cambridge University Press).

⁹¹ Glover, 1977, pp. 25, 84; Harris, 1992, pp. 35, 40–3, 46, 146.

⁹² Kass, 2002, pp. 57–65; Sandel, 2007, p. 9.

seems to me that none of the features listed here can be easily repudiated. And it seems to me that these features are all useful when it comes to identifying and classifying philosophical views in bioethical debates. Some explanations are needed, though.

Decision. The definition is limited to the rationality of decisions, but it is also important to discuss the rationality of persons, views, and arguments. I believe that the connection can be made in each case without straining the idea too much. Persons are rational insofar as their decisions tend to be rational; and views and arguments are rational insofar as they tend to support rational decisions. Similar links can be built to any area in which the concept is required.

Insofar as. The definition does not give clear-cut criteria for rationality. It does not include expressions such as ‘only if’ or ‘if’, which would imply that necessary or sufficient conditions were given. The more (or less) a decision complies with the defining features, the more (or less) rational it is. Objects of assessment are not in this model black or white, but different shades of grey.

Based on beliefs. Decisions must be based on beliefs in order to be evaluated for their rationality. It is possible that human actions or behaviours are sometimes instinctive or automatic and that no cognitive mental states or processes are then consciously involved. In these cases, rationality does not enter the discussion; or if it does, it does so indirectly. It is neither rational nor irrational that I involuntarily and without thought straighten my leg as a response to the physician’s reflex hammer. And if I do something mechanically, say, based on intensive training, it is the decision to give or take the training that can be indirectly assessed.

Beliefs that form a coherent whole. A decision is not fully rational if it is based on a set of beliefs that can yield different results in relevantly similar cases. The recognition of this principle has given rise to a variety of ‘parity of reasoning’ arguments in bioethics.⁹³ Champions of embryo research, for instance, point out that people who protect blastocysts in the scientific context should also be extremely worried about the loss of unborn human life in early miscarriages. Opponents of late abortions, in contrast, note that the criterion of moral worth implied by third-trimester terminations can also be used in defence of infanticide. The logic in both cases is to show that the views launched by the opposition

⁹³ See Søren Holm, 2003b, “Parity of reasoning” argument in bioethics – some methodological considerations’, Matti Häyry and Tuija Takala (eds), *Scratching the Surface of Bioethics* (Amsterdam: Rodopi): 47–56.

are either wrong because they lead to ridiculous or intolerable norms or incoherent because they cannot be followed to their logical conclusions. My impression is that all current views in bioethics, and quite possibly all ethical stances, have shortcomings of this type. Sometimes these can be explained away, but even if they cannot, they merely show that no position is *fully* rational *and* completely free of funny or repulsive entailments, especially in the eyes of its adversaries.

Beliefs that are consistent with how things are in the world. If decisions are based on beliefs that have *no* regard to how things are in the world around us, they can legitimately be called irrational. But this is very rarely the case in bioethical disputes. Mostly, parties just disagree because their world views are in conflict. Some believe that the universe consists exclusively of matter, events, and people's individual experiences and actions. Others hold that the world also contains social, cultural, or spiritual elements. For the former, only analytic and secular considerations are feasible; for the latter, traditional and religious ideas can also have their place. Insofar as people's world views are coherent and beliefs consistent with these views, their decisions are, according to my nonconfrontational account, rational.⁹⁴

Aimed at optimising. Notions of rationality differ radically in their preferred approaches to optimising the effects of decisions. Some aim at maximising good impacts; others at minimising bad ones. Some dictate that risk-taking is a true sign of rationality; others that precaution is the preferable choice. Yet others specify more complex mixtures of strategies, sometimes guided by external responses to the original moves made by the agent. Choices made between these views can influence considerably the resulting rationalities.

Optimising the immediate or long-term impacts. Many general theories of rationality can only accommodate decisions and doctrines that concentrate on physical, psychological, and economic consequences.⁹⁵ This is not true of my nonconfrontational account. The question will be further clarified below in my description of entities that matter, but

⁹⁴ This analysis equates the way the world *is* and the way it *is seen to be*. Some people argue, and they can be right in arguing, that at least the physical world is what it is regardless of what we think. The definition that I am offering here is, however, a definition of rationality in the context of *morality*. And morality cannot, as far as I can see, be helpfully reduced to physics. Its intricacies can, therefore, be handled better by assuming the relative validity of spiritual (etc.) as well as physical explanations and justifications.

⁹⁵ See, e.g. John Rawls, 1972, *A Theory of Justice* (Oxford: Oxford University Press); John C. Harsanyi, 1978, 'Bayesian decision theory and utilitarian ethics', *The American Economic Review* 68: 223–8.

the gist of the affair is this. Some analyses of what is rational restrict, legitimately from their own point of view, their attention to the actual, probable, hoped-for, or dreaded material outcomes of choices and actions now and in the future. But others can with equal justification focus on the immediate, and possibly immaterial, impacts that our decisions have on ourselves and on other significant beings: violations of rights, disrespect for dignity, threats to communal integrity, corruption of the character, and the like. Ways of optimising these can differ drastically from the arithmetical calculation of hedonistic or monetary gains.

Optimising impacts on entities that matter. The definition of entities that matter tends to bring moral overtones to the discussion. Consider, for instance, the following list of possibilities: God, man, woman, human being, sentient being, living being, nature, and culture. Almost regardless of other dimensions, rationalities identifying these as significant entities turn into corresponding ethical doctrines: theological, patriarchal, feministic, humanistic, hedonistic, vitalistic, ecological, and communitarian.

The three approaches that I have studied here suggest a different classification. Glover and Harris focus on persons as beings who can value their own lives, and attach importance to the degree to which their lives are worth living. Kass and Sandel place value on tradition; on the dignity of human life; and on solidarity between members of communities and societies. Habermas and Green concentrate on principles and their acceptability, arguing that negotiations between discerning individuals produce norms that ultimately matter. To put these positions in a nutshell, they define *persons*, *traditions*, or *principles* as the entities that matter. Morality comes into play in different ways in these accounts. The 'person' model usually recognises a distinction between prudential decisions that concern only agents themselves and moral ones that also involve others. The 'tradition' perspective normally sees all individual-related calculations as merely prudential and requires that morality should go beyond these. And the 'principles' approach is prone to drawing a line between genuinely moral considerations and the contingencies of mere personal happiness and prevailing ways.

The rationalities of Glover, Harris, Kass, Sandel, Habermas, and Green have been summarised in the light of these considerations in Table 2.1.

The 'high' level of coherence required by every author shows that the core of rationality for them all is in the resolve not to tolerate illogical,

Table 2.1 *Six rationalities*

	What level of coherence is required?	How are things in the world?	How should impacts be optimised?	What entities matter?	What makes decisions moral?
Glover	High	Scientific	By maximising and	Persons and their lives	Regard for others
Harris	High	Scientific	minimising	worth living	
Kass	High	Spiritual	By respecting	Traditions and their	Disregard for individual
Sandel	High	Traditional	humanity's continuity	preservation	concerns
Habermas	High	Scientific and moral	By communication and negotiation	Principles and their acceptability	Disregard for contingent concerns
Green	High	Scientific			

self-contradictory views. The variation in all other respects, in turn, reflects the width and depth of disagreement between ethicists. This disagreement is not always made visible, though. On the contrary, in current bioethical debates participants often *avoid* revealing their views on the major variants listed here: how they believe things are in the world; how they think impacts should be optimised; and what entities matter to them.⁹⁶ The role of faith, ideology, and values in arguments is hidden and disputes are dressed up as purely logical exercises in coherence. This gives conflicting claims an air of universality that is not always conducive to respectful dialogue. If one view is universally right, then all others are universally wrong; and since this can seldom be proven by logic alone, the judgement depends ultimately on the choice of worldviews, attitudes, and ideas about the foundation of moral worth. More often than not, the result is a heated doctrinal shouting match camouflaged as a dispute over what makes sense and what is reasonable.

If my nonconfrontational account can be relied on, there are many divergent rationalities, all of which can be simultaneously valid. There

⁹⁶ One author who makes this avoidance explicit is Harris, 1992, p. 5. But it is also quite a chore to tease out the theoretical presuppositions of Glover, 2006, Kass, 2002, Sandel, 2007, and Green, 2007. Habermas, 2003, is the only one of my six chosen authors who makes his fundamental ethical views explicitly known in his treatise on the ethics of genetics.

are also, as a consequence of this, many rational moralities. Views that are grossly incoherent can be deemed irrational, and ethical doctrines that are based on such views can be put in the same category and dismissed. But the remaining moralities are all more or less rational. Their ‘shades of grey’ can be assessed both internally and externally. The internal evaluation must be conducted in terms of coherence only: any variety in the other factors produces a different type of rationality, to be judged by its own criteria. The external evaluation can include all the aspects, and there are potentially as many verdicts as there are competing rationalities.

2.7 Equilibria, equipoises, and polite bystanders

The possibility of measuring rationalities can lead to a temptation to compare them and to elevate one of them above the others. I believe that this temptation should be resisted. But an examination of how the method of ‘reflective equilibrium’ could be used in the assessment illustrates nicely some of the features of my own ‘polite bystander’s point of view’.

Philosophers have used the notion of a *reflective equilibrium* in attempts to choose the best principles of induction⁹⁷ and justice.⁹⁸ The idea in ethics is to seek a balance between our particular judgements about morality and the general principles that can explain or justify these in the best possible way. We can, for instance, make a considered judgement that racial minorities should have special protections, and also hold the principle that race should not influence our policies.⁹⁹ If the view on protections is strong, the principle of racial neutrality cannot in its strictest form be our final theoretical stand. According to the doctrine of reflective equilibrium, we must revise the general rule – and possibly also our opinions on more specific norms – until the situation is stable. This is the method that John Rawls utilised to prove that his theory of justice as fairness is better than any of the competing doctrines.¹⁰⁰ Could it also be evoked to show how one rationality is superior to all others?

The answer is ‘No and yes and no’. The method of reflective equilibrium cannot support the view that one rationality should be assumed by

⁹⁷ Nelson Goodman, 1955, *Fact, Fiction, and Forecast* (Cambridge, MA: Harvard University Press), pp. 65–8.

⁹⁸ Rawls, 1972, pp. 20, 48–51, 120, 432.

⁹⁹ Ronald Dworkin, 1989, ‘The original position’, Norman Daniels (ed.), *Reading Rawls: Critical Studies on Rawls’ ‘A Theory of Justice’* [1975] (Stanford, CA: Stanford University Press), pp. 16–53, 29.

¹⁰⁰ Rawls, 1972.

all the authors whose notions I have outlined in the preceding sections. The problem is that the model presupposes relatively similar judgements on particular normative issues to begin with. Rawls, in introducing the approach to ethics, postulated that human beings have a sense of justice that guides them roughly into the same direction.¹⁰¹ This may or may not be true in the context of political justice, but in debates on genetic advances it is clearly a questionable assumption. People's views on selection, cloning, and enhancements differ so markedly that it seems impossible that one rationality or rational morality could satisfy them all.

The method could be used in more limited settings. When ethicists by and large agree on the opportunities (Glover, Harris, and Green) or threats (Kass, Sandel, and Habermas) of making people better but disagree on the level of theory, it should be possible to commence balancing exercises that would ideally lead to some doctrinal convergence. In the end, this could lead to fewer and more comprehensive normative views on rationality and rational morality. But it is not obvious what the advantages of such an undertaking would be. There would still be separate doctrines for the proponents and opponents of genetic advances, and some of the clarity and variety offered by the competition between approaches yielding parallel conclusions would be lost.

In Chapters 3, 4, 5, 6, 7, 8, and 9 I will *not* be trying to find a reflective equilibrium between 'our' particular judgements and 'our' preferred rationality or morality. There is no 'we' that would support this line of enquiry. Instead, I will tacitly assume that the six rationalities described so far – and other rationalities that will emerge in the course of the analysis – represent, more or less, the balance that their authors have had in mind in expressing their views.

If any comparison is involved, it will be in the spirit of *reflective equipoise*. In clinical trials, the principle of equipoise states that experiments are morally acceptable if medical experts genuinely disagree on the value of alternative treatments.¹⁰² Researchers themselves are not required to be drawn between options; it is sufficient for them to ascertain that some of their colleagues would prefer each alternative.

Ethical analyses are not controlled trials that would confirm moral judgements like medical experiments confirm clinical decisions. But I like the idea of philosophers studying practical issues fully recognising that for each normative view examined there is a reputable school of

¹⁰¹ Rawls, 1972, pp. 567–77; cf. Dworkin, 1989, pp. 22–3.

¹⁰² B. Freedman, 1987, 'Equipoise and the ethics of clinical research', *The New England Journal of Medicine* 317: 141–5.

thought which believes in its accuracy. I do not need to be drawn between the options myself; it is enough for me to acknowledge that the philosophical community is.

This leads to the definition of my *polite bystander's point of view*. In what follows, I will constantly assume that all the scrutinised principles and judgements have respectable support among philosophical, bioethical, or other relevant scholars (reflective equipoise) *and* that the combination of principles and judgements is in each case in a stable balance (reflective equilibrium) seen from their author's angle. I will not intentionally take sides in the issues that I analyse, *except* in cases in which I think that a solution could be accepted by all parties. Instead, I will politely and from a distance describe views, study their interpretations, and formulate possible evaluations of them from different perspectives.

2.8 Plan for the rest of the book

I have now presented the main ethical themes surrounding the 'genetic challenge' and the methodological styles that can be assumed in investigating them. It is time to make a note of the findings so far and to lay down a plan for the rest of the book.

In Chapter 1, I described the background and primary issues of 'making people better'. Seven practices were identified: selection for the best babies, selection for deaf embryos, selection for saviour siblings, human reproductive cloning, stem cell research, gene therapies, and considerable life extension. In Section 1.9, I went on to list the related ethical issues to be studied in more detail: parental responsibility; the relationship between law and morality; the instrumental use of people; our licence to design the lives of others; human vulnerability; the effect of optimistic and pessimistic attitudes on ethics; and the meaning of life.

In the first part of Chapter 2, I sketched six notable approaches to the genetic challenge, those of Jonathan Glover, John Harris, Leon Kass, Michael Sandel, Jürgen Habermas, and Ronald Green. In the latter part of the chapter, I have explored my own methodological preferences. These are based on my 'nonconfrontational notion of rationality', which denies the supremacy of any particular theory of rational morality. Ethical doctrines can be examined by assuming a reflective equipoise among them, but attempts to reduce them into one by using devices such as the reflective equilibrium are bound to be biased.

In Chapters 3, 4, 5, 6, 7, 8, and 9, I aim to create a comprehensive account of the main ethical arguments and approaches that can be used in the

assessment of the genetic challenge and the seven ways of making people better. I will do this by assuming the ‘polite bystander’s point of view’ – by analysing impartially judgements, principles, rationalities, and rational moralities as applied to my chosen themes and questions.

What will emerge from these analyses, I hope, is a sharper picture of the multimodal distribution of normative convictions regarding advances in genetics; and clusters of judgements, principles, beliefs, attitudes, and ideals that explain the variance and define distinct rationalities and moralities. By ‘multimodal distribution’ I mean the phenomenon we have already encountered with the ethical views presented in this chapter. The views of the six philosophers do not follow the ‘bell curve’ (unimodal) normal distribution model. There is no convergence on moderate, middle-of-the-road positions; instead, opinions are polarised into two extreme positions. I hope that this image becomes more focused in the next seven chapters.

In Chapter 10, I will summarise the rationalities employed in the ethics of genetics in terms of philosophical assumptions, ethical intuitions, and normative commitments, as they have been unveiled in Chapters 3, 4, 5, 6, 7, 8, and 9. My analysis of the rationalities will bear a resemblance to Henry Sidgwick’s nineteenth-century definition and assessment of the three main approaches to moral philosophy in *The Methods of Ethics*.¹⁰³ Accordingly, one of my aims in this book will be to outline the main contemporary ‘methods of genetics’ for further examination.

¹⁰³ Henry Sidgwick, 1907, *The Methods of Ethics* [1874], seventh edition (London: Macmillan). See also Matti Häyry, 1994b, *Liberal Utilitarianism and Applied Ethics* (London: Routledge), pp. 50–3.