HUMAN GROWTH AND DEVELOPMENT
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**THE BIRTH OF A HUMAN BEING**

**WHAT MAKES US WHO WE ARE?**

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In a delivery room in a maternity hospital, a mother is about to give birth after an eight-hour labour. There are four people present: the mother herself, the baby’s father, a midwife and a doctor. Everyone is trying to encourage the exhausted mother (‘Keep pushing!’, ‘You’re almost there!’, ‘Don’t forget your breathing!’).

Then the father shouts excitedly, ‘I can see its head!’

Suddenly, a fifth human being is in the room, a stranger, a new being that no one has ever seen before (though across the world four new babies are born every second).

‘It’s a girl!’ says the midwife.

It’s about the only thing they can tell about her at this stage, though soon they will weigh her and then there will be another fact to tell the relatives over the phone. If she had some obvious physical abnormality – a missing limb, a harelip, a spinal deformity – that would of course be another thing that they could see, and something that might drastically alter their initial response (see Chapter 9).

But apart from that, what else can they know about her?

Even her future appearance can’t really be discerned from the wizened ancient-looking little face (however much they may tell themselves she has her father’s eyes, her mother’s chin), let alone her future personality, her future abilities, her future life story.

What will she become? Will she be the prime minister or an office cleaner? Will she be happy? Will she be healthy? Will she be loved? Will she win honours or commit crimes? Will she one day be in a place like this bringing her own baby into the world?

It is impossible to tell.
What is it that determines what sort of person we become? Is a child’s future personality already determined at birth, or is a newborn baby like a blank sheet, waiting to be written on by life? Is our personality determined by anything, or do we choose for ourselves who we are, create ourselves out of nothing? These are important questions, not only from an academic point of view, but also from a very practical one, because our views on these questions radically affect the way we see the world, our attitudes to other people and the way we work with other people.

In this chapter we will provide an overview of the sorts of questions that we will be exploring in this book. To begin with, we will ask you to look at your own ideas and assumptions about what makes people who they are, as it is really those ideas and assumptions which will either be validated or called into question by what you read here. We will also offer a ‘health warning’ about theories. Fortunately or unfortunately, no theory about human life can ever be completely objective or value free. Trying to see ourselves completely objectively is a bit like trying to catch a glimpse of your mirror image when it’s not looking at you.

We will then look at two very old questions. The first of these can be summed up as ‘nature or nurture’. To what extent is who we are determined at birth and to what extent are we shaped by the environment we live in? And we will discuss the factors, both inherited and environmental, that contribute to human development, and consider how these factors interact. The second question has been debated by philosophers for thousands of years: the question of ‘free will’ versus ‘predetermination’.

Finally, we will mention the events that typically mark the turning points in our lives, the transitions that we all have to go through as we adjust to new circumstances and new life stages, and we will touch on the concept of personal resilience.

**Ideas, Theories and Prejudices**

It isn’t only psychologists and philosophers who like to come up with theories about what makes people who they are. All of us have been studying other people all our lives, for we need to understand other people in order to work out how best to deal with them. How to make friends, how to bring up our children, how to get others to cooperate with us, how to get over painful experiences – all of these everyday questions, and many more, require us to have ideas about ‘what makes people tick’. And most of us find this a fascinating question anyway. Why else do we watch and talk about reality shows on TV, or about people we know, or the characters in novels and films? But our ideas about ‘what makes people tick’ don’t come from nowhere and they are not really our own original thoughts. All our lives we are exposed to the ideas of others and to the ‘accepted wisdom’ of the society in which we live. So we all have an enormous store of ideas, theories, information and, undoubtedly, misinformation in our heads about what makes people what they are.

The following activity is intended to highlight some of your own personal ideas and assumptions about what shapes people’s lives.
ACTIVITY 1.1

The following are some types of dangerous or antisocial behaviour which you might encounter, either directly, or in the news. Why do people behave in these ways? Jot down a few thoughts for each:

- two parents spend almost all the family income on heroin, leaving hardly any money for food or clothes for the children
- a woman violently assaults her husband
- a 12-year-old boy gets hold of a gun and goes on a shooting spree at school with the intention of killing as many of his fellow-pupils as he can
- an adult breaks the arm of a toddler in an outburst of rage
- a young man becomes a suicide bomber and kills himself and 20 others in a railway station
- a group of men rob a bank at gunpoint, seriously injuring a bank employee
- an adult deliberately torments a child by threatening him with humiliation and violence
- a man violently assaults his wife
- an elderly woman steals from a shop
- a politician accepts a bribe
- a child sets a cat on fire
- a soldier has himself photographed with his foot on the head of a naked prisoner of war
- an adult sexually abuses a child.

COMMENTS ON ACTIVITY 1.1

If you look at your answers, you may find that they fall into a number of different categories. In some cases, your answer may constitute a moral judgement: ‘greed’, ‘selfishness’ and so on. (A lot of people might describe corrupt politicians as greedy, for example, and regard that as sufficient explanation for their behaviour.) In other cases, you may have explained the behaviour in quasi-medical terms, without any moral judgement. (You might describe the boy who goes on a shooting spree as being emotionally disturbed or having some kind of mental illness, or the drug-abusing parents as having their thinking distorted by addiction.) Or, in some cases, you may use past events to account for behaviour. (You may have thought that a child who torments animals has probably been mistreated in some way herself, or that the woman who assaulted her husband may be responding to cruelty or mistreatment on his part.)

(Continued)
In short, in some cases, you will have been inclined to say that there is a reason which accounts for the behaviour and to some extent ‘excuses’ it, whereas in other cases you will have been more inclined to say that the behaviour is simply ‘bad’.

Actually which behaviour we choose to view in purely moral terms, and which behaviour we choose to understand in terms of external or internal causes, is probably quite an arbitrary distinction which is as much to do with our own personal circumstances as anything else. If you are a smoker, or if you use or have used illegal drugs, you may find drug addiction relatively easy to understand. Whether you are a man or a woman may well affect your attitude to several of the behaviours described. Parents are often more understanding than non-parents, of people who injure their children in a rage, because most parents have experienced such rages, even if they have not acted on them.

Most of us are more tolerant of ‘crimes of passion’ than of premeditated crimes, such as sexually abusing children or accepting bribes. And yet if we have experience of compulsive behaviour of some sort (even if it is only, say, a compulsion to buy cigarettes or play computer games), we may have personal experience that tells us that a person who appears to act coldly and rationally may in fact be driven in some way. A corrupt politician who accepts bribes is greedy, yes, but why are some greedy in that way and others not at all? If it is sufficient explanation to describe the corrupt politician as ‘greedy’, why is it not sufficient explanation to describe the child who torments animals as simply ‘wicked’? Our personal theories and ideas about why people are as they are and behave as they behave, are often quite inconsistent and arbitrary, based on our own experience and on our own needs.

A ‘health warning’ about theories

Our own personal interests influence the way we see the world. We are more likely to condemn behaviour which we ourselves are not guilty of, and excuse behaviour which we understand from our own personal experience. And this is true not just on an individual level but on a much wider level too.

We use ideas and theories to help us understand what makes us become what we are. But ideas and theories themselves grow and change and are shaped by circumstances. No theory about human beings, whether it is a homespun one we made up ourselves or one that is in a textbook, can be value-free. Things look different depending on our perspective, and on the dominant ideology of the society in which we live. For example Sigmund Freud, who we discuss in the next chapter, is sometimes criticised for basing a theory largely on the neuroses of middle-class Austrian Jewish women at a particular point in history, seen from the perspective of a middle-class Austrian Jewish man.
What is a Theory?

In the text we have used the words ‘idea’ and ‘theory’, often together. What is the difference between an idea and a theory? And how exactly do we apply theory to the messy realities of everyday life?

A theory is an organised, coherent set of ideas that offers an explanation for something we observe or experience. In science, a theory can be tested against evidence to see if the explanation it offers is an adequate one. Some theories are easier to test against evidence than others, and all sorts of problems and questions arise. What constitutes evidence? Who is collecting it? What assumptions do they bring with them? How is it collected? What is the context? How is it interpreted?

A theory is useful because it offers a map, a way of making sense of something. But the map is not the same as the territory. Consider the London Underground map, which has helped generations of Londoners and visitors to navigate their way around the capital since it was designed by Harry Beck in 1931. It is a classic of graphic design and clarity, but in order to achieve this it simplifies and distorts the actual geography of London. If one wants to really get to know London, as opposed to passing through it easily, one needs to walk its streets. Theory is a helpful guide and an orientation to the newcomer, but it cannot be mapped directly onto practice. We also need to learn through experience.

In this book we will look at theories which offer explanations of different aspects of human development. Research and thinking in this area is ongoing, especially in neuroscience and genetics, and is moving so fast that we cannot claim to be able to cover all the newest developments. But we will examine classic theories which have proved useful and influential in the past, and encourage you to think critically about what they can teach us today.

All the ideas and theories we are going to discuss in this book contain assumptions which can be challenged. Among the assumptions you will notice and may wish to question, you will find:

- assumptions about the roles of men and women
- assumptions that take heterosexuality as the norm and do not recognise that there are many different ways in which sexuality can be expressed (these can be termed ‘heteronormative’ assumptions)
- assumptions that North American/European society is somehow the norm for the whole world (these are called ‘Eurocentric’ assumptions)
- assumptions that ideas derived from the study of prosperous middle-class people are necessarily relevant to people from different backgrounds.

As authors we try to avoid biases of this kind – or at least to acknowledge them – but we are doubtless guilty of them all the same. We offer a male and a female perspective, but we are both white, middle-class, middle-aged and British. (When revising the text for the third
Many ideas have been widely accepted in the past, which we now would regard as obviously untrue. For instance, well into the twentieth century, there was a wide consensus among men in Britain, America and many other countries that women should not be allowed to choose the government of their own country. Sexism is still with us in many forms, of course, but there are very few people in any of those countries now who would seriously argue that women should not have the vote. Yet, less than a century ago, this was seen by many as a perfectly sensible and reasonable position to take.

An idea can become generally accepted and even regarded as ‘common sense’, when it suits vested interests in society to accept that idea as ‘true’:

Each society has its regime of truth, its ‘general politics’ of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements … the status of those who are charged with saying what counts as true. (Foucault, 1980: 131)

It is naïve to think that, while everything people thought in the past was mistaken, what we think now is simply ‘the unvarnished truth’, for doubtless many of the things we think of today as being self-evidently true will also seem quite obviously untrue from a future perspective. And even at a single point in time, there is not one generally accepted truth, but many different ones. What seems self-evident in one cultural context does not necessarily seem so in another. Any idea serves a purpose and we should always consider what that purpose might be – and whose purpose it is. This applies to ordinary and everyday ideas, including your own, as well as to the more systematic organisation of ideas that we call a theory, and to the big ideological systems which constitute political, religious or moral philosophies.

The so-called ‘nature or nurture’ question, which we will now consider, demonstrates very well how ideas can be used to serve such purposes – and it provides some examples of how different ideas have been used for political ends, as well as of how ideas may be used by individuals on a day-to-day basis to justify their own position.

**Nature and Nurture**

What determines who we are and what we become? Biological inheritance (‘nature’)? Or the environment we grow up in (‘nurture’)? As soon as we begin to think about this question, it becomes obvious that it is a crudely oversimplified one, and we cannot answer it by coming down either on one side or the other. But there is a long-running argument about the relative importance of inheritance and environment. As well as being a philosophical and scientific question since classical times, this is also a highly political question. ‘Nature’ or ‘nurture’ theories
can both be used by vested interests – at the level of society at large and at the individual level – to justify their position or their actions.

But before we go on, here is an exercise to explore where you yourself stand on the nature–nurture question.

**ACTIVITY 1.2**

At the beginning of this chapter we described the birth of a (fictional) child, and wondered what kind of person she would become: prime minister or office cleaner?

1. Suppose her parents were Mr and Mrs Smith. One was an office cleaner, and the other was long-term unemployed. Neither has any educational qualifications. What does that make you think about her chances of becoming prime minister?
2. Suppose her parents were Mr and Mrs Jones. Both came from distinguished, wealthy families. One is a world-famous economist, the other a TV personality. How likely is it that she will become an office cleaner?
3. Suppose her parents were Mr and Mrs Smith, but both died in a tragic accident straight after her birth – and she was then adopted and brought up as their own by Mr and Mrs Jones. How do you see her future prospects?

**COMMENTS ON ACTIVITY 1.2**

You will probably agree that – at least in the world as it now exists – the child of Mr and Mrs Smith is likely, on average, to have rather more modest career prospects than the child of Mr and Mrs Jones. There are many exceptions of course but, by and large, successful people are the children of other successful people, while poor people are the children of other poor people. But why is this? Is it because successful people are born with above-average abilities – and pass these abilities on to their children through their genes? (That would be a ‘nature’ theory.) Or is it just because successful people are able to provide their children with a better education, a more stimulating environment, better contacts and so on? (That would be a ‘nurture’ theory.)

Where you stand on these questions will be indicated by your answer to question 3. Do you think that the child of Mr and Mrs Smith, if adopted by Mr and Mrs Jones, will perform just as well, in terms of career achievements, as a natural child of Mr and Mrs Jones would do? (If so, you take a ‘nurture’ view on the question of career success: you think it’s mainly about upbringing and social circumstances.) Or do you think that the child of Mr and Mrs Smith, even if exposed to all the advantages that Mr and Mrs Jones can offer, will still probably not be a high-flyer, because it is likely that her natural parents were not of especially high ability and she is likely to have inherited their abilities? (If so, you lean towards a ‘nature’ view on this question: you think it’s mainly about genes.)
Of course career success is only one of a vast number of things that distinguish one person from another. Some of the differences between us are quite obviously the products of genetic inheritance, while others are undoubtedly the products of environment. Few would dispute that hair colour is the result of genetic inheritance, or that the ability to speak Slovenian is a product of environment. No one is born with the ability to speak Slovenian. The ability is acquired either by growing up in a Slovenian-speaking environment, or by being taught Slovenian by someone else who speaks it. On the other hand, the ability to acquire language as such would seem to be the product of genetic inheritance, since no other species is known to be able to acquire language, whatever the environment. (Although some chimpanzees have been trained to use a relatively small vocabulary, they do not acquire language in the human sense.)

But when we come to discuss things such as personality traits, moral character, intelligence and abilities, then the argument becomes more difficult – and often more heated.

The ‘nature’ viewpoint

Although few of us have any difficulty with the idea that our genetic inheritance determines our basic physical characteristics, to many it seems far-fetched – and perhaps also distasteful – to think of genes determining our personality and behaviour as well. There are, however, countless examples in the animal kingdom of very complex and specific behaviours which are inherited rather than learnt. Spiders build intricate webs without being taught. Cuckoos, which are not even raised by their own parents, still know how to lay their eggs in the nests of other birds, just as their parents did. It seems clear that at least some behaviour patterns are encoded in the genes just as are physical characteristics, which means that, like physical characteristics, they will have evolved over time through the process of natural selection.

Studies of twins are one way in which researchers have explored the influence of genetic inheritance on personality and other individual characteristics. There are two kinds of twins. So-called ‘fraternal’ twins are conceived at about the same time and grow together in their mother’s womb, but are no more closely related than any other pair of siblings (that is to say that they share, on average, about 50 per cent of the same genes). Fraternal twins do not necessarily look alike and may not be of the same gender. ‘Identical’ twins, on the other hand, result when a single fertilised egg divides and the two resulting parts start growing into separate individuals. Such twins are not always absolutely identical because environmental factors – in the womb, at birth, or subsequently – may result in some differences. But they certainly look very alike – and they are genetically identical: they both have exactly the same set of genes.

Occasionally it happens that identical twins are separated at birth and this event allows scientists to look in reality at the kinds of questions that you considered hypothetically in
Activity 1.2. Is it the genetic parents, or the environment and the adults who actually raise a child, who have the most powerful influence on the child’s development? It is also possible to compare fraternal twins with identical twins.

Twin studies have shown that there are often surprising similarities between the lives, preferences, careers, and so on, of twins who have been separated. Oskar and Jack were twins raised respectively as a Nazi in Czechoslovakia and a Jew in Trinidad, yet when they finally met as middle-aged men, both wore the same kind of shirt, and both had the same odd habit of flushing the toilet before and after using it (Steen, 1996: 25). Recent research has tended to conclude that inheritance is the major factor in intelligence. The Minnesota Study of Twins Reared Apart concluded that variations in intelligence are 70 per cent related to inheritance, and only 30 per cent to all the environmental factors such as family circumstances, schooling, nutrition, and so on (Bouchard et al., 1990).

But there is a whole range of methodological difficulties with such studies, which should make us cautious of placing too much weight on such precise conclusions (Steen, 1996: 26–32). Even extraordinary stories, such as that of Oskar and Jack just mentioned, should be treated with caution. Naturally people are amazed when they notice similarities like this and want to tell the tale, just as we all do when we encounter coincidences. We do not get to hear of instances where there are no such similarities, just as we do not tell the tale of the countless occasions in our lives when coincidences do not occur.

There can be no doubt that genetics play an important role in making us who we are. But exactly how important a role this is continues to be a subject of debate. There have been claims in recent years, for example, that genetic causes have been identified for schizophrenia or autism, both of which have also been said to have been caused by childhood upbringing. It has even been suggested that a ‘gay gene’, making it more likely that a person will become homosexual, has been identified (see Steen, 1996: 185 ff). Recent research in genetics is bringing new insights to the nature–nurture debate. The Human Genome Project, completed in 2003, mapped and sequenced all the genes of human beings for the first time, and as this material became available to researchers it opened the door to new understandings of the causes of human diseases, conditions and behaviour. However, the science of genetics is extremely complex, and when new findings are reported in the popular press to a non-scientific public they are often over-simplified.

‘Nature’ ideas in everyday life

In common parlance the idea of the importance of inheritance is encapsulated in phrases such as ‘blood will out’, ‘the apple doesn’t fall far from the tree’ and ‘the leopard can’t change its spots’. The following exercise illustrates how ‘nature’ theories about human behaviour can crop up in a very direct way.
ACTIVITY 1.3

MATTHEW

You’re a school teacher visiting a lone-parent family, to discuss the problem of the son’s poor attendance at school, and his poor work when he is there. The boy – Matthew, aged 13 – is getting in increasing trouble with the law as well as missing most of his schooling and he is staying out at nights. Matthew’s father left the family home when Matthew was just a year old, and now has no contact with him at all.

Matthew’s mother says his father was violent towards her and constantly in trouble with the police. She says, ‘Matthew takes after his father. There’s nothing I can do about it.’

What is your reaction to this comment?

COMMENTS ON ACTIVITY 1.3

Matthew’s behaviour may be similar to his father’s in some respects, but, as you may have observed, this doesn’t necessarily mean that this is some sort of unavoidable fate carried in the genes. There are all kinds of environmental reasons why Matthew might behave in the same sorts of ways as his father. For example, both Matthew and his father may have grown up in a community where there was a strong cultural expectation for boys to be tough and ‘hard’ and where a low value was placed on schooling. There may be a long family history of fathers abandoning their families and for sons feeling hurt and angry as a result, so that they find it difficult in turn to stay in a stable family relationship when they grow up. You may well have thought of other reasons.

But one can see how it may be easier for Matthew’s mother to take a ‘nature’ view of this by blaming his problems on his father’s genes than to face her own part in causing them. Her anger with Matthew’s father is being transferred onto his (and her) son as he grows up and reminds her more and more of his father. This makes it difficult for her to engage constructively with the problems that he is facing.

‘Nature’ ideas in the political arena

A ‘nature’ viewpoint can result in a rather fatalistic attitude – ‘That’s the way things are and there’s nothing we can do about it’ – and it can have the attraction that it lets people off the hook. We suggested earlier that it’s important to think carefully about why ideas become current and whose purposes they serve. You can see that ‘nature’ theories can be attractive not only to people like Matthew’s mother in the above activity, but also to those in positions of privilege and power, because they can be used to argue that the status quo is inevitable. They seem to justify inequality and it is no accident that ‘nature’ ideas tend to be more popular with
the political right. For example, the word ‘aristocracy’ comes from the Greek and means the ‘rule of the good’. The concept of an aristocracy was based on the idea that the upper class enjoyed more privileges and power because they were *innately superior* to other people. Racist theories are also ‘nature’ theories, as are ideas that women are innately inferior to men (or vice versa). And if those in positions of power can tell themselves that the poor are poor because they are ‘by nature’ incapable of earning a good living, or that criminals are criminals because they have criminal genes, then they can feel that they are absolved of responsibility.

But this is not to say that ‘nature’ theories have no validity. It can hardly be disputed that many of our characteristics are inherited: and there is certainly good evidence that genetics plays an important role in intelligence, personality and predisposition to some mental illnesses as well as to physical ones. Nor is it right to say that ‘nurture’ theories are necessarily less oppressive, as we will see below.

The ‘nurture’ viewpoint

The word ‘nurture’ refers in particular to the care received by a child from her parents. Nurture in this sense is one important part of the environment in which human growth takes place and few would argue that nurture in this sense does not make a difference to the kind of person we become. But when we speak of ‘nurture’ in the context of the nature–nurture debate, we are talking more generally about *any* kind of environmental influence, which may include anything from events before, during and after birth, to factors as diverse as cultural expectations, nutrition, education, political circumstances and so on. In short, for the purposes of this discussion, the word ‘nurture’ will cover all the factors other than biological inheritance which might make a difference to who we are and what we become.

In Chapter 5 we will look at the ideas of *behaviourists* (or ‘learning theorists’), starting with Pavlov and his famous dogs. As we will see, this strand within psychology accumulated impressive evidence that the environment shapes behaviour according to certain predictable rules.

Marxism, hugely influential on the history of the twentieth century, sees human thought and consciousness as being shaped by the society in which it took place. In particular, Karl Marx proposed that societies, including the roles that people play in them, their beliefs and their value systems, are the product of *economic* forces. The ‘means of production’ – the way that the economy is organised – was the determining factor, so that a certain set of values, ideas and behaviours would prevail in, say, feudal society, and another set in capitalist society:

Consciousness is, therefore, from the very beginning a social product, and remains so as long as men exist at all. (Marx, 1986 [1845]: 176)

You will find similar assertions in the writings of many who look at human life from a sociological perspective (see Chapter 10), whether they are inside or outside the Marxist tradition.
In the next chapter we will look at psychodynamic theories, originating with the ideas of Sigmund Freud. In some respects, Freud’s ideas could also be described as ‘nurture’ theories, both in the wide and the narrow sense of the word ‘nurture’. They place a great deal of emphasis on early childhood experience, including very basic things like toilet training, as a determining factor on how human beings grow and develop (although Freud also placed a huge emphasis on instinctive drives which he saw as biological, inherited and present from birth).

‘Nurture’ theories in everyday life

Just as you find ‘nature’ theories not only in academic texts, but also in everyday life, so also do you find ‘nurture’ theories. The following activity gives one example:

**ACTIVITY 1.4**

**LIZ**

You are a probation officer and you are meeting a new client, Liz, aged 19, to talk to her about a pre-sentence report which you’ve been asked to write (in which you will comment on the reasons for her offending and the likelihood of her offending again). Liz is charged with a series of violent assaults, using knives and other weapons, on other young women.

When you ask Liz about the reasons for her offending, she shrugs:

I can’t help myself. I just see red and then my mind goes a blank. I was beaten myself as a child, you see. My dad used to beat me and then my stepdad. My mum pretended she didn’t know it was going on. I was taken into care when I was 6 and my stepdad was sent to jail for assaulting me, but my mum got back together with him again when he came out. So I suppose that was it. It’s just what was put into my head when I was a child and I can’t help it.

What might your response be to Liz and what could you put in your report?

**COMMENTS ON ACTIVITY 1.4**

It may have struck you that if Liz doesn’t take some more responsibility for her own actions, she is going to have difficulty persuading a court to be lenient with her. More seriously, she is going to have difficulty in changing her behaviour or progressing with her life if she doesn’t see herself as having any kind of control over it.
There can be little doubt that violent and unhappy relationships in childhood can predispose people to crime and other deviant behaviour in adult life (in Chapter 3, we will consider some reasons why this is), so Liz is not wrong in seeing her childhood abuse as a major contributing factor in her present problems. But in the long run it is not going to help her if she insists on seeing her problems in such a fatalistic way, even though in the short run it may seem easier to ‘let herself off the hook’ by blaming her unhappy childhood.

(‘Nurture’ as well as ‘nature’ can be used to let ourselves off the hook, particularly for those, like Liz, who are genuinely the victims of mistreatment.)

But you could also argue that if it is possible to learn violent behaviour, then it must also be possible to learn another way of acting!

You could even argue that Liz’s fatalism is in itself a learnt behaviour, which could likewise be unlearnt. (See the discussion on ‘Learnt Helplessness’ in Chapter 5.)

‘Nurture’ ideas in the political arena

Historically, ‘nature’ theories have been used as the rationale for oppression of various kinds, as we’ve noted above, and they tend to be associated with the political right. The idea that human beings are shaped by their environment, on the other hand, has always been attractive to the political left, which sees the poor as being poor not because of their innate qualities, but because they have not been given access to the advantages enjoyed by the rich.

However, the idea that human beings are entirely the product of their environment has also been used in extremely oppressive ways by the political left. The infamous Pol Pot regime in Cambodia in 1975, for example, justified the horrors of its notorious Year Zero, with its death toll of around 2 million, with the idea that it was possible to change people by totally wiping out the influence of the past, and those individuals seen as responsible for transmitting that influence, and retraining an entire population to start again.

Much closer to home, parents of schizophrenia sufferers, or of children with autism, might well complain about ‘nurture’ theories, fashionable in the 1960s and 1970s, that blamed them for their children’s problems. For instance, it was suggested that parents could make their children schizophrenic by putting them in ‘double binds’, giving them contradictory messages (Bateson, 1973: 201 ff). From the perspective of a parent, such theories must feel much more oppressive than theories which propose a genetic origin for these problems.

Beyond nature and nurture

It is too simplistic to reduce the various factors that make people what they are to ‘nature’ and ‘nurture’, and no one would seriously suggest that it is all one or all the other. In reality a whole range of different factors contributes to making us what we are, some of which
could be described as nature, some as nurture, and some of which could be assigned to either category. It is more helpful to see nature and nurture as acting together, ‘nature via nurture’ (Ridley, 2004). Recent research in genetics and neuroscience shows us in increasing detail how this happens, and more is constantly being discovered. Rather than seeing genes as a blueprint, we need to understand them differently:

Genes are cogs in the machine, not gods in the sky. Switched on and off through life, by external as well as internal events, their job is to absorb information from the environment at least as often as to transmit it from the past. Genes do more than carry information; they respond to experience. (Ridley, 2004: 229)

In Chapter 3, when we look at attachment, we will see how neuroscience is helping us to understand how brain development is critically affected by the kind of nurture a child receives in the early years. And it is not just in the early years that environmental influences can shape the brain. Research into neuroplasticity (the ability of the brain to change) is showing that brain development can continue throughout life. For example, scans of musicians’ brains show that clear differences emerge with time and practice compared to the brains of non-musicians. For string players, the area controlling the left hand expands significantly, and in trumpeters the neurons that respond to ‘brassy’ sounds enlarge (Elbert et al., 1995; Pantev et al., 2001, cited in Doidge, 2007: 289).

So a complex interplay between inherited and environmental factors is at work. Some of these factors are:

• genetic inheritance
• other physical factors such as nutrition, health, physical injury, not only after birth, but from conception onwards – for example, a baby’s growth may be inhibited if a mother drinks or smokes during pregnancy, and serious brain damage can be caused by complications during the birth itself
• upbringing, early relationships, position in the family (older children have a different experience from middle and youngest children, for example), traumatic and/or positive experiences
• cultural factors – nationality, social class, geography (whether one grows up in the country or a town, for example), ethnic background, time in history
• random life events (car accidents, lottery wins, chance meetings …).

One could think of many more. But the important thing to note here is how all these factors interact with one another. What sex we are, for example, is a matter of genetic inheritance and it has (of course) many purely physical implications: women can give birth and breastfeed, men can’t; boys are more likely to suffer from certain inherited conditions (haemophilia, colour-blindness); men and women have different hormones in their bloodstream – and so on. But the way in which the sexes are viewed, the expectations of them, the roles and behaviour which are considered appropriate and inappropriate, will depend on cultural factors. (There is a further discussion on gender roles in Chapter 5.)
To give another example: physical appearance might seem a purely inherited feature at first glance, but in fact a whole range of environmental factors can affect physical appearance. In rare cases a child’s physical growth can be affected not only by malnutrition but by emotional abuse and rejection (‘psychosocial short stature’: see Iwaniec, 2004: 52). And the significance attached to physical appearance will depend very much on culture, as can be seen from the fact that plumpness and white skin have been regarded as beautiful and desirable in some societies at some stages in European history, while thinness and sun-tanned skin have been the ideal at others.

**Existential questions**

We would suggest too that, in addition to the interacting influences of nature and nurture, our thoughts and beliefs are shaped by the fact that life poses certain unavoidable questions – ‘existential’ questions – which would be faced by any thinking being, even, hypothetically, an alien from another planet or a sentient machine (for a fictional example of the latter, see Beckett, 2010).
For example, there is the fact of death (see Chapter 12). Our lives are finite. Even for an extraterrestrial alien or a robot, the possibility of non-existence would be an inevitable corollary of existence. And there is the fact too of individuality. The fact that we exist as individuals means that there are other things in existence which are separate from us. So, as well as being limited in time, our lives are also necessarily located in space. (The way that we come to terms with the concept of ‘self’ and ‘others’ is something that is of particular interest to the object relations theorists whom we will discuss in the next chapter and in Chapter 3, and to theories of cognitive development, which are the subject of Chapter 4.)

Another existential aspect of being a conscious being, and not merely an automaton, is that we feel ourselves to be making choices. This is something we'll now discuss further.

**Free Will versus Predetermination**

As human beings, we don't feel ourselves to be passive passengers of bodies which simply respond to our genes or our environment. We feel as if we are constantly making decisions, and often difficult and painful ones. As old, or older, than the nature–nurture question, and even more fundamental is the question of whether or not we have free will. Here it is, for instance, in Chaucer's *Canterbury Tales*, written in the fourteenth century:

> But I kan nat bulte it to the bren …
> Whether that Goddes worthy forwiting
> Streyneth me nedeley for to doon a thyng …
> Or elles, if free choys be graunted me
> To do that same thyng, or do it noght. (Crawley (ed.), 1992: 470)

(Rough translation: ‘But I can't sift the grain from the chaff … [as to] whether God’s worthy foreknowledge constrains me necessarily to do a thing … or else, if free choice is granted me to do that same thing or not do it.’)

All the writers we have quoted so far in this chapter assume that there are causes for human behaviour, whether those causes are genetic or otherwise. Yet most of us also believe that there is such a thing as choice and personal responsibility. The French existentialist Jean-Paul Sartre wrote: 'I am condemned to be free … we are not free to cease being free’ (2001 [1943]: 184). When people like Liz (in Activity 1.4) blame their behaviour on external factors outside their control, Sartre would say that they were acting in ‘bad faith’ by denying the existence of their own capacity to choose. Most of the world’s religions see human beings as making choices between good and evil and ultimately taking the consequences of those choices.

Here is one more activity, based on a real-life case, for you to consider where you stand on this issue:
ACTIVITY 1.5

In England in 1993, Jon Venables and Robert Thompson, then both aged 10, were found guilty of the murder of a toddler, James Bulger, whom they had picked up in a shopping mall, taken to a railway line and beaten to death by hitting him with bricks. Many have said that these boys committed this appalling act because they were ‘evil’, while others have suggested that there must have been distressing events in their previous childhood that caused them to act in this way. What is your own view about why they might have done this and how they should be seen?

COMMENTS ON ACTIVITY 1.5

If you incline to the view that these boys were indeed evil (and few would dispute that evil is an appropriate word for what they did), you need to ask yourself precisely what you mean by that. Are you saying that they were born with a propensity to do bad things (a nature theory) and, if so, how can they be blamed for what they did any more than a person born blind can be blamed for not being able to see?

Or are you saying that we all make choices between good and evil, and these boys chose evil of their own free will? If so, we’d have to ask you whether, at 10 years old, you were ever tempted to kidnap and murder a small child, and had to resist that temptation? If not, clearly this was not just a matter of choice.

Or are you saying that these boys became evil as a result of something in their upbringing? If so, you are really agreeing with those who say the act must have been the result of environmental factors (a nurture theory). The obvious question then is why do other children, from similar or worse environments, not commit such crimes? One answer might be that no two environments are exactly alike and we can never know all the subtle influences that might tip a person one way or the other. Another might be that no two individuals are born exactly alike, so the environment never affects any two people in exactly the same way.

Clearly, whether we believe in free will or not can have huge implications for how we act and how we view other people. In fact, as we noted earlier, people tend to make moral judgements in some cases and look for causes in others – and don’t necessarily do so in a very consistent way. But we are not here going to attempt any sort of resolution of this question that has troubled great thinkers for several millennia, beyond offering a pragmatic compromise.

We don’t wish to dissuade anyone from believing that they make real choices in their lives. We also believe that the idea of personal responsibility is necessary for society to function. But if you look at the things that you think of as free choices, and consider why other people make different choices from yours, it is hard to avoid noticing that there is a pattern.
As we’ve discussed, evidence exists that people with the same genes are more likely to make the same choices. We also know that people can be trained to act differently by rewarding or punishing different behaviours – and that people with the same childhood experiences often have the same kinds of problems in later life.

Ridley (2004), citing the work of neuroscientist Walter Freeman (1999), proposes that ‘free will is entirely compatible with a brain exquisitely prespecified by, and run by, genes’. By moving away from a linear view of cause and effect and taking account of how feedback influences behaviour from moment to moment it is possible to begin to see how this apparently contradictory statement could make sense. There is evidence that genes behave in this circular way, being switched on and off by events in the external world, and by each other (Ridley, 2004: 275).

We may not be automatons, but we are shaped, if not controlled, by our history and by the world around us. We suggest that this requires us to try not to judge other people in a moral sense, and to try to understand the reasons why people act as they do. And yet at the same time we cannot function without taking some responsibility for our own actions, and expecting others to take responsibility for theirs.

**Events, Transitions, Resilience**

It can be an interesting exercise to draw a line representing the course of your own life, marking on it what you see as the high and low points, the times of rapid personal change and the times of stability. You will probably find that most of the turning points you notice will be related to events of different kinds: births, deaths, moves, the beginnings and endings of relationships, leaving school, changes of job, retirement, accidents, windfalls … Some of these events might seem to you to have been freely chosen (you choose to get married, to change your job, to go to college). Some of them may have been unexpected (a lottery win, a bereavement, an unplanned pregnancy). Some of them may have been outside of your control, but nevertheless expected (going to secondary school, leaving school, becoming an adult, growing old). Some of them may have been expected but not inevitable (you become a parent, you enter the world of work, you get a home of your own). Human growth and change can be understood as a complex interlocking web of such events, some of which we choose, and some of which we have to adjust to whether we like them or not. We have to change within ourselves in order to get to places that we want to reach, or even just to cope with the places in which we find ourselves.

In this book we will often come back to this theme, when we discuss the transitions which life requires us to make (becoming an adult, growing old …) and the challenges which life faces us with (bereavement, the birth of a child, disability …). One interesting question is how it is that people cope so differently with these things. Some are ground down by adversity, and find even small changes difficult to handle. Some seem to be much more resilient, manage change much better, and move on much more easily from painful experiences. Resilience too, a big question in the study of human growth, is another topic we will be coming back to later in Chapter 6.
The chapter began with an account of the birth of a child and looked at some ideas about what will shape her as she grows and develops. But ideas themselves are not fixed, so we began by giving a warning about ideas and theories. They are not neutral. People use them for their own ends.

In particular, we looked at the debate about the extent to which our identity is determined by our genes and by environmental factors (the ’nature and nurture’ debate). We looked at the way this debate has very practical implications, both in daily life and in politics, and we proposed that we need to see human growth as being the product of a number of interacting factors, of which genetic inheritance is one.

We considered another very ancient subject of debate – between free will and predetermination – and looked at the issues this raises.

Finally, we discussed the way our growth and development over our lives is marked by a series of events, some chosen, some not, some expected, some completely unexpected, some welcome, some not welcome at all. We looked at the transitions that we have to go through in the course of a lifespan, and at the fact that some people are much better at coping with changes than others: some are more resilient.

In the next chapter, we will look at the ideas of Freud, who saw human personality developing as the result of our having to try to strike a balance, from the moment of birth onwards, between instinctive drives, the external environment and previous learning.

Further Reading
