CHAPTER 1

What IS human development?





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Many people talk about 'development' in everyday life. Yet the way a person—or a family or culture—develops is not a simple matter. By the time you have read this book, we hope you will have a much better understanding of the way the development of human lives has been defined by scientists, by people of various cultures, and by people in earlier times.

This chapter sets the scene by looking at the ways that humans started to consider life in terms of its unfolding over time—as the journey from infancy to maturity, ignorance to understanding, simplicity to sophistication. This way of looking at the world has a long history in human societies, yet historically the idea that each person develops is a fairly recent idea. Human development can be defined as a process of progressive changes in people's lives over time that enables them to adapt more effectively to their environments. This definition is similar to ideas about child development that emerged at the end of the nineteenth century, but we are shifting the definition a little to take into account recent work in philosophy and biology.

- By referring to **people**, rather than the individual person, we acknowledge the importance of the connections between people, the cultures in which people grow and learn, the families that support this process, the different places people live and the education systems that help to develop a huge range of skills crucial in our societies.
- We refer to progressive changes over time, but this is not a simple matter: there are debates in communities and among scientists about what counts as improvement (progress) in human lives that we will consider in the chapters to come.
- By focusing on human development as a **process**, we pay attention to the conditions which enhance people's lives (such as being in a caring family) so that they can live better in the situations they encounter.
- Finally, we set development in its environments, to pay attention to the **places** where development happens, such as homes, schools, universities, workplaces, churches, temples, prisons, farms, shopping centres, the internet or any other locations.

Using this broad and dynamic definition will help us to consider the optimal conditions for creating positive change in people's lives: the settings, interventions and support that may be best for people at a particular times and places.

The field of development studies (e.g. Schuurman, 2002) has similarities to human development, but focuses more on countries and cultures as well as economic and social changes, while in human development we tend to be interested in the meaning of such changes for individuals in families and communities. We add to our own perspective here this sensitivity to the places and cultures in which development happens. Development studies has also gone through an earlier period of questioning about the meaning of 'progress' as they began to question the euro-western view that the world has been on a linear path of development from primitive to more modern or technologically advanced cultures. There is no longer an assumption that industrially 'developed' nations such as the USA, the UK, Denmark or Singapore are necessarily more advanced socially and culturally than more economically deprived (no longer called undeveloped or underdeveloped countries such as Papua New Guinea or Sri Lanka. There is much greater recognition now that each

country has its own knowledges, traditions and cultural strengths, from which the wider world at large might benefit. The slower way of life in small village societies may have advantages other than those accrued through the latest digital technologies. For example, such societies may have greater social coherence, intergenerational connection, consensus in spiritual values and respect for human life than you could find in the most technically and economically sophisticated cities of the world with their sizable populations of the homeless, the poor and sick, and the disenfranchised who have no legal status as citizens.

OUR APPROACH

This chapter will take you on a quick journey through time and some of the debates about human development that have emerged, especially in the last 150 years. We do this in order to show the way the field has emerged so that you, the reader, have more understanding of why certain kinds of research and ideas have been popular or have lost favour over time. This gives us the chance to show that ideas about development are still changing, and still in the process of being debated, so that you might add your own reflections to imagine where ideas might be going in future. We argue in this book for a new perspective on human development, one that builds on the theories and many research studies that have contributed to this field, but which also takes on board wider questions. These questions emerge when we take seriously the diversity of the world in all its cultures and places and the varieties of institutions that support development, especially families and schools.

To give you a more informed idea about the perspective that will be taken in this book, we will be using a view of development that considers the way our concepts and beliefs about developmental progress are socially constructed. Social constructionists argue that the things we take for granted as everyday reality (such as 'celebrities', 'good health' or 'at risk youth') are not timeless, measurable objects but are concepts created by people in societies over time (Burr, 2003). The branch of social construction that we will use is influenced by questions that philosophers and social theorists have raised in the last 50 years about the ways that our language and customs help to create the realities we experience (see readings at the end of this chapter). We are not trying to describe developmental truths that will stand firm for all time, or apply to every culture SAMPLE PASES and society in the world with a universal 'one size fits all' approach. We accept that different peoples have different views of what they regard as true, and that cultures across time have had very different ideas about what makes for a good journey through life. This does not mean that we are only interested in opinions—not at all. We will be considering some of the most important scientific advances of recent decades, such as understanding human genetics and the ways that humans and computers interact. However, we will be reflecting on scientific facts we explore to consider that they may mean different things to people of different histories, places and culture (see Kuhn, 1962).

What do YOU think?

What would you describe as the three most important factors in human development? After making your list, consider how your choices may have been influenced by what you learned from your family, where you lived growing up and your cultural 'home'.

HISTORY OF CHILD STUDIES

Back in the 1800s, there was much happening that led to a fascination with the possibilities of development, or of change that might lead to improvement. Philosophers such as Georg Wilhelm Friedrich Hegel and Karl Marx and educator John Dewey were all interested in the possibilities of positive change for societies as a whole (Matusov, DePalma & Drye, 2007). Darwin came along with a theory of evolution that proposed that over time species change to adapt more closely to their environments. One of the significant principles of Darwin's theory was natural selection. In every generation of a species, there will be random variations among organisms due to tiny genetic mutations. Most of the time the mutations are not helpful and can make the organism vulnerable in its environment, so they are less likely to survive. For example, an unusually brightly patterned gecko might be overly conspicuous in the bush and easily attacked by predators (hence not 'selected' to survive). Sometimes, though, an unusual feature might be an advantage to the survival of the whole species, so that organisms with this characteristic might live longer and produce more offspring who also have the mutation. So from the randomness of diversity comes the possibility of a new way of living that works better in the environment.



Darwin's ideas on evolution appeared at a significant time in Europe, when people had begun to believe that human beings were becoming progressively better as a result of human effort; especially, but not only, scientific effort. This belief challenged the Christian notion that humans were fully formed during

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The development of individuals was linked to the evolution of the ev

species through a process known as 'ontogeny recapitulates phylogeny', which means that the development of individuals in a species (ontogeny) mimics on a parallel path (recapitulates) the whole evolution of a species (phylogeny). Where did scientists get this idea? Those who studied the development of embryos of various species, including humans, had noticed a strange pattern: that embryos had what looked like slits on the side of the body, much as fish have gills. These early embryologists argued that you could see the whole evolution of species, from fish to amphibians to breathing animals in the changes taking place in an embryo, as though seeing evolution in fast forward. This seemingly irrefutable fact in the development of embryos set the scene for the field of child study to consider the development of the child as a series of stages that would lead to an evolution in the child's physiological and mental understanding (for more discussion, see Morss, 1990).

Many scholars early in the twentieth century brought evolutionary ideas into developmental theory, which has often been concerned with universal principles that show a pattern of development that occurs for all human beings. For example, in most species of frog, the embryo grows into a tadpole, which eventually becomes a young frog. The parallel process assumed for humans was that the baby becomes the child who grows into a teenager before becoming an adult. G. Stanley Hall, often described as the founder of the study of adolescence, argued that each individual's development followed an evolutionary path from the primitive infant to the less civilised teenager to the more highly evolved adult. Trying to link human development to the more predictable sequences in animals had its uses, but humans have tended to be much more interested in the variation within a species rather than focusing on our shared path from infancy to old age. In other words, we are often more interested in our individual uniqueness than in how similar we all are to each other. At the same time, we have often looked back to the idea of a universal sequence to be sure that we are still on the **normal** path in our development. A norm can be defined as a statistically average tendency, but it is often also seen as an expected appearance or behaviour. Sometimes these expectations become an ideal. Norms carry considerable weight in the field of human development, though sometimes these effects are hidden rather than overt.

Tutorial suggestions

Think about a developmental achievement such as 'being able to go out at night with friends'. Individuals could note down the age at which such an achievement could be expected. Then small groups could compare ages chosen, and consider whether this represents a norm. Would the age chosen be different if the question were asked: (a) 50 years ago? (b) in a different country? (c) with

The fascination with evolutionary theory early in the twentieth century led to some strange debates. Ontogeny was seen as the 'normal' path of development for most humans, but there was also great concern about people who seem to advance more slowly or more quickly through stages of development. Excitement was generated about 'precocious' children (baby geniuses) who

might be signs of the future direction of the human race. The idea was that if a child accelerated quickly through developmental stages, they would have more time in their lives after maturity for improvements to be added. Stephen Gould (1977) pointed out the problem with this logic: the process of evolution does not guarantee a positive outcome, such as a better type of person over time. Instead, species will change to fit their environment better, so a faster developing child might end up being less adaptable in a future world in which, say, more advanced looking children are picked earlier for military service. In such a world, the slower developing child might be at an evolutionary advantage for the future.

After all, what each culture wants in terms of important characteristics of its people will be different. In Aotearoa, the most prestigious sport is rugby, and families and schools may take pride in a young boy who has a particular strong build that might be valuable in a future rugby player. In south-eastern Asia, a girl who is unusually good with the slow, balanced movements of traditional dancing may be seen as especially noticeable. In Norway or New Zealand, a child who is able to handle a sailboat or rowing skull at a young age may be given special opportunities to take that talent further. In Māori societies, a boy with unusual oratorical and memory skills may be sent to learn traditional whakapapa (genealogical) knowledge from an elder. So, our Euro-Western fascination with children who move through developmental stages quickly is more of a cultural preference than having any relation to an evolutionary advantage.

By the same logic, sophisticated individuals might not be the most adaptable either. Gould (1977) pointed out that the 'best' adapted species—with the best track record in evolution—are bacteria, hardly the most complex and sophisticated animals on the planet. According to Gould, Darwinian evolutionary theory never made claims that the individual's development replayed the development of the whole species. Instead, during evolution a species either added improved bits to developing organisms and/or got rid of bits that were no longer needed. Some scientists propose that simplification is more impressive than complexity in evolution, by getting rid of superfluous details to become more streamlined over time. For example, the most evolved human body might be one that has no inefficient parts such as wisdom teeth or an appendix.

Developmental theorists have tried to overcome the contradiction between the idea that we all go through fixed stages over time, yet differ from one another in how we develop. This flexibility in the way individuals develop is called plasticity. Wohlwill (1973) used the metaphor of development as a moving 'escalator' to illustrate how development is both universal and plastic, by suggesting that every child is improving and developing (i.e. going *up* the escalator) but that there is a fixed position each child occupies in relation to other children the same age. The idea is that some children start off a few steps ahead or behind other children their age, and that these relative positions are maintained as the escalator rises. So, for any age peer-group there will be those 'precocious' children who are at the most advanced places on the escalator, with the 'slower' children on the back steps for their age group. To give even more flexibility, he argued that children may differ somewhat in their speed of ascension (e.g. some may shoot upwards from time to time) and some may reach a higher point than others at the end (maturity). As you will

see, we would like to keep open the possibility that people can develop as adults. Taking this position, we are reluctant to think of an 'end' to development. Wohlwill's metaphor of the escalator invites us to compare one another in terms of who has reached the highest levels. We propose that people take different paths, and develop differently: and perhaps we cannot compare one another's development, especially when we come to the very end of life.

THE BIG DEBATES

Nowadays, developmental psychologists are not so interested in mapping out stages of development, but in the twentieth century this was of vital importance. For example, in the field of cognition within developmental psychology, there is greater concern with a sequence of processes that may not be particularly age-specific. Jean Piaget, who is introduced next, set off a series of important conversations among academics in the USA and Europe about cognitive development.

Piaget: Universal Stages of Cognitive Development

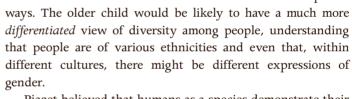
Jean Piaget, a French Swiss biologist and philosopher, was a key developmental theorist of the twentieth century. Having seen some of the horrifying actions of human beings during World War One, he sought to find out how people become rational and mature as they grow up. He turned to the philosophy of what it is possible to know about the world (epistemology); and to find evidence for what might be possible, he turned to children. Piaget's detailed descriptions of his own children were a breakthrough in research method. As a trained biologist, he was able to carry out detailed studies of animals as well as children in their habitats.

Piaget's approach to developmental change was grounded in the view that human beings are biological organisms who—like any other animal—must adapt to their immediate environments to survive. Piaget was interested in the way the individual child constructs a picture of the world to operate by. His theory is sometimes referred to as constructivist because it focuses on the way individuals construct knowledge from the materials around them as they develop. Piaget was also an interactionist who saw the importance of the relationship between the biological (e.g. brain) structures of the person and the way these structures work in our *environments* (Piaget, 1973).

Piaget argued that some changes in the child's thinking were more abrupt than others, and ESOMIT could take the child to a higher level of understanding. According to his theory, these leaps in thinking ability can be mapped out as a predictable sequence of stages. He described these changes using logical principles with mathematical justifications. Stages are an important part of many theories of development. They point to the differences between learning that leads to regular changes in thinking or behaviour over time, growth that simply shows an increase in size over time, and development that signals change that moves forward in a progressive sequence of improvements over time. Some examples may help to illustrate these important concepts

here. People can learn all kinds of things at any age. Learning can improve our skills, but we can also learn things that are detrimental to us: learning to drink in binges, learning to avoid situations that are stressful, such as particular classes, or obligations in caring for a sick person. So, learning does not necessarily lead to what a consensus of people in a society would think of as improvements; it is a more neutral process. Similarly, growth happens in almost all living organisms over time. A bacterium begins small and grows bigger. A lizard, such as a gecko, gets bigger over time and learns various things, such as what counts as a food source in its environment. According to the philosophy of development laid out by theorists like Piaget, a lizard would not be seen to *develop*—unless the lizard's internal structures and behaviours became more complex and differentiated in abrupt increases over time rather than through a continuous, smooth increase in size.

Bringing these ideas to human development, developmental stages in cognition were thought to take the child from understanding only the big picture (global understanding) to more differentiated understanding of more complexity and subtlety. So, for example, the young child might understand only vague (global) differences between people in their culture, such as that there are women and men whose voices sound different and who relate to the child in specific



Piaget believed that humans as a species demonstrate their intelligence through their adaptation to the environment (that is, humans learn to behave in ways that fit with what is required to survive in that setting). He also thought that the body's very structures provided the organisation that was needed to allow this survival to take place, through the ordered arrangement of structures and processes which are part of the human organism. A key feature of this organisation was the **schema**, which is a set or group of cognitive structures and processes that are used in understanding, and which help to organise our actions. Piaget also emphasised two important processes in adaptation which are key features of his theory of SAMPLE PAGES ONLY development. They were the twin processes of assimilation and accommodation, through which we gradually adapt our schemas to the particular objects and people in our environment. As a biologist, he believed strongly in the interaction between the organism and its environment, which is shown in the processes he described.



- Sensori-motor stage: The infant proceeds through a sequence of sub-stages through which they develop the beginning of a capacity to act on the world, as well as a sense of their physical self in the world.
- Pre-operational stage: In early childhood, the child is beginning to apply logical structures to thinking, but there are gaps due to the child's continuing struggle to separate themselves from the world around them.
- Concrete operational stage: The child now has a grasp of logical operations that allows them to understand physical properties such as quantity and volume, though only in concrete terms.
- Formal operational stage: At the most advanced level of thinking, the adolescent or adult is able to think abstractly.

FIGURE 1.1 Piaget's stages of cognitive development

In assimilation, the old schema is exercised by being used in familiar ways. Play was seen by Piaget as a way for children to practise a schema. For example, a child who had learned to blow a whistle might want to blow it over and over, varying the noise only slightly, in order to practise the schema of producing the noise.

Accommodation is a complementary process. In accommodation, the old schema won't do because the new information doesn't quite fit, so the schema alters (accommodates) to allow new information to be understood. As an example, a child's schema of playing with a puzzle, where a single piece is fitted into a groove, might need to change so that the child can do a multipiece puzzle, where pieces have to be interlocked. The old schema would have to alter (accommodate) in order to deal with the new information.

So, through this process of fitting new information into an old schema (assimilation), and changing a schema when the information didn't quite fit (accommodation), there would be a small forward movement of adaptation and therefore development. Again, since Piaget was influenced by biological principles, he thought that humans tended not to seek too much disruption in their development, but to aim for equilibrium, or balance, between the old and the new. Hence, development proceeds, in Piaget's view, through small steps of assimilation and accommodation, without too much of either one, so that over time, the individual reaches a new sort of balance at a more advanced level of adapting to the environment.

Also, because he was a biologist, Piaget was much more concerned about the human species in general than about the development of specific individuals. He was seeking truths about human understanding, ones that would apply to every group and culture in the world. In other words, he sought universal principles for development. Many researchers in human development still seek interventions with children in refugee camps or in impoverished inner city areas. We understand universals that will describe central truths that could be applied to societal situations, such a

this search because it focuses on the things that unite all humans together. However, our own experience suggests that such an approach must inevitably downplay the diversity in human societies due to our very different cultures and places, and also the ways that these differences impact on our bodies. One criticism of the universal approach that has been around for some decades, is that it creates a view of expected human development that is too narrow, and more likely to represent the view of the researchers who create it, researchers who live in euro-western countries in particular kinds of buildings (e.g. with electricity and running water), with certain kinds of education systems (e.g. that goes up to age 16 and beyond), with particular kinds of family structures (e.g. nuclear rather than extended generation).

What do YOU think?

What aspect of your own life so far do you think would be the same for just about every other person on earth of the same age? You might think about things to do with the body, feelings about some person or your understanding of an event in your life.

Sigmund Freud: Universal Stages of Sexual-Emotional Development

Even before Piaget was mapping out his stages of children's understanding in the 1920s in Switzerland, Sigmund Freud, a medical doctor in Vienna, was working with Austrian patients who had psychological difficulties that seemed to stem from problems in their early family lives. Freud was also influenced by the significant theoretical developments in biology that emphasised stages as significant leaps. He thought this could characterise change in the human organism, especially in what we now call personality. While Piaget focused on the development of (increasingly) rational understandings of the world, Freud was more interested in how children came to be emotionally stable, functioning members of their societies, given all the stresses everyone seemed to undergo in life. Freud was working with women who he thought had experiences of early sexual abuse. Such topics were never talked about or acknowledged in European societies of the early 1900s. When he started to discuss the sexual feelings and strong emotions that his patients were describing as part of their childhoods, he was severely The work stages, where he proposed sexuality, and that how these are sexuality, and in the wider culture, determine the path of emotional development in the child.

Freud proposed that most conflicts in people's lives are internal ('intrapsychic') ones. In his theory, conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality: the id, against the conflict is caused by tension between three main structures of personality.

and superego. The id is the original set of instincts and drives of the infant that are ruled by the 'pleasure principle' of getting needs met in any way possible. The ego develops later. Once the infant begins to run into the realities of not getting what is wanted right away, they become capable of conscious reasoning, tempering daily interactions with more realistic expectations of the world. Finally, the superego develops from the ego, as the child learns to internalise the messages about appropriate behaviour received from their parents. In this way the child develops a conscience, and becomes a functioning member of society.

At the end of the nineteenth century, Freud began to study the impact of childhood on his medical patients. He focused on the many problems that people had in their adult lives, such as obsessive thoughts and behaviours that might be socially acceptable in young people (e.g. thumb sucking) but not acceptable in adults, although they might linger on in some form (e.g. chewing on ballpoint pens). Freud gave the world the notion of the 'unconscious', the part of mental life hidden from view, of which we are not aware. The unconscious operates on an entirely different level from 'conscious' thought. A 'Freudian slip' is a humorous use of words in which a person accidentally says what they might be unconsciously feeling rather than what they intended to say. For example, a person might refer to a friend who has just come inside after a long sports match as 'looking filthy', when the person intended to say 'fit and healthy'. (One of us still apologises to the friend about that.) Freud's legacy for childhood was to recognise the complex, significant emotions children experience, and to raise awareness of the possibility that childhood trauma could affect adult life much later on. He is also the originator of a therapy tradition, psychoanalysis, which is still very popular, and is still a focus of widespread academic interest.

Many people find Freud's focus on sexuality as the energising force of personality (even for small children) difficult to understand. It is helpful to remember that his idea of 'eros' or sexuality is part of a wider focus on a 'life-force' rather than on sexual behaviour. Such ideas were central to the literature of Europe during the late nineteenth century, and thus Freud (like any theorist) should be seen as very much a product of his times. It is worth noting that this wider view of sexuality as a part of the energy of life has similarities to more holistic ideas about sexuality in Māori culture.

Gender was an important concept for Freud. He considered that much of development was about learning to fit in with notions of manhood and womanhood appropriate to one's (European) culture. Same-gender parent-child relationships could provide the child with a model of emotional life, while the partner/spouse of that parent could provide a model of the child's future love relationships. For example, the 'Oedipus complex' describes a boy's feelings of jealousy and rivalry Anna extended his theory by suggesting that, in adolescence, young people have a 'second chance' to put some of the emotions and traumas from early childhood right as they renegotiate close relationships with parents.

- Oral stage: The infant's emotional energies are involved in coping with issues related to the oral: feeding, weaning and cutting teeth.
- Anal stage: Freud pointed to toilet-training as an example of the importance of controlling personal expressions as the very young child becomes an acceptable member of society. He noted the emotional energies involved in getting the child through this task.
- Phallic stage or nuclear family conflict: Freud thought that in early childhood, around age 5 years or so, the child becomes more aware of her/his genitals and also begins to identify with the parent of the same sex. The 'Oedipus complex' ('Electra complex' in girls) refers to Freud's view that the boy is upset when he becomes aware that he is in competition with his father for the affections of his mother. The complex is resolved through identifying with the same-sex parent. Thus, according to this theory, the child develops a sense of its sexuality, learning to desire the parent of the opposite sex.
- Latency: Freud thought that children's sexual awareness goes 'underground' during the primary school years.
- Genital stage: Once puberty is reached, the child moves towards a heterosexual relationship and integration of the emotional battles of the earlier stages.

FIGURE 1.2 Freud's stages of sexual-emotional development

Freud suggested that two kinds of energy were important for life, the life force (libido) that pushes us along to change during development, and the more negative energy of the death wish (thanatos). To follow on, he suggested that there are positive forces towards living life (sexual energy was only one of several sources of positive energy) and negative forces towards stagnation and giving up. Both these kinds of energies flowed in conscious as well as unconscious thoughts. These ideas can be useful when considering why people might express racial hostility towards a whole group of people different from themselves. Freud argued that we all have a tendency to focus on our own importance, and hence tend to see ourselves as 'insiders'. When we look at other groups there are unconscious forces fuelled by negative energy. He suggested that a way to cope with the pain of admitting we have faults is to 'project' our own (perceived) negative qualities onto others. This might not be too serious at a football game, when one team is biased in seeing only the good in their team and all the faults in the other team. When it leads to violence, racial tension and even genocide, Freud

was not long under way when Freud put his theories together, one of his models for development. In the steam engine, there is a build-up of water pressure that eventually expands and pushes parts of the motor. Freud talked about the ways that energies circulate in the person's body, with the possibility of getting blocked the steam of the motor. energies circulate in the person's body, with the possibility of getting blocked. With enough

pressure from this blockage, there could be an explosion of energy in inappropriate places if the person could not integrate their unconscious concerns into their everyday conscious thoughts.

GOING BEYOND STAGES TO WIDER CULTURAL PROCESSES

Two theorists of the twentieth century, both with Russian ancestry, had a major impact on changing the way we consider development today. Both Lev Vygotsky and, several decades later, Urie Bronfenbrenner, rather than focus on the individual child as a developing organism, focused more on the social and cultural milieu, or surrounding, of the child developing in a particular cultural setting.

We look at Vygotsky first, as he was interested in the same big questions about human development of concern to the other major theorists above. Bronfenbrenner focused specifically on one aspect of development: the potential for interlocking systems of family, place and culture to influence the course of development. Though he was not trying to create a theory to explain developmental change, Bronfenbrenner's ideas about factors important in development have been very influential in many countries, including New Zealand.

Lev Vygotsky: Parallels in Individual and Cultural-Historical Development

Vygotsky's perspective on development differs significantly from those of Freud, Piaget and Erik Erikson (whose work we will meet in later chapters). Vygotsky was not just concerned with the development of each individual child; he was also interested in a number of interlinked developmental processes, from small to large scale. He would study the development of a particular skill, such as learning to wave goodbye to family members leaving a room. At the same time, he would consider the influence of the ideas of Charles Darwin on the evolution of species and the idea that the development of each child has a biological underpinning. He gave culture a stronger role than biology, though, suggesting that the development of whole societies and cultures across history could surpass biological development. In terms of the 'nature-nurture' debate, which we will discuss in Chapter 4, he can be seen in the tradition of those who would argue that humans can become more 'civilised' than animals. Not surprisingly, he gave education a central role in the development of both individuals and the continuing changes in society over time. We mentioned earlier that Piaget was a constructivist who thought that the child made up theories to explain how the world works, drawing on biological capacities to adapt to the environment. Vygotsky was a social constructionist who was interested in the way the child constructed knowledge arising out of the social and cultural context within which it lives, in order to adapt to their own

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social setting. Piaget considered the environment in much more general terms, whereas Vygotsky was much more interested in how learning and development, especially the 'mind', arises out of particular cultural and language contexts (Vygotsky 1962–1971).

Like Piaget, Vygotsky was greatly concerned with advances in children's thinking, though he saw each culture as providing a different setting with different goals for the development of mental functioning. He argued that each culture has, in a sense, its own 'cultural curriculum' (Rogoff, 1990, p. 190). Vygotsky emphasised the importance of the people surrounding a child. He saw them as crucial for supporting and enhancing the child's development. At the same time, he was not just concerned with the child alone; he was also concerned with the effects of this interaction on older peers and adults. Development occurs in interactions between people: this process is referred to as co-construction. It signals the importance of knowledge creation as a dynamic process in which children learn with the help of adults. Knowledge already existing in society (such as knowledge about the process of reading) is constructed anew by the child and adult working together.

What do YOU think?

Think about a time you learned something by working closely with another person. What might that person have learned from you during this process? How might that affect what each of you do in future, either doing the same thing or helping someone else to do it?

Another unusual feature of Vygotsky's theory was his emphasis on the 'tools' that humans use to enhance their mental capabilities. He argued that language was the most important symbolic tool in development. Though Vygotsky was interested in the idea of stages of development, he died before these ideas could be worked into his theory. He described the newborn child as already being a member of a particular culture, and argued that over time the child becomes more unique and differentiated from others in that culture. Of course, the paths of development available to the child will, in this theory, differ according to the biological uniqueness of particular children together with the cultures involved. The differentiation of the child from others was thought to be produced by two key processes: internalisation, and the zone of proximal development.

A central notion in Vygotsky's theory of development is that society's control over the child's actions moves inwards to self-control by the child. Internalisation refers to the way that an external action by the child is transformed into an internal action or thought. It has become more common to use the word appropriation rather than internalisation (Rogoff, 1990) to indicate that children are taking actions and language from the wider culture to keep as their own personal reference points. For example, infants make many movements with their hands and fingers. An infant might make a pointing gesture quite by accident. This might lead to an older brother calling out, 'Oh look! Carly is pointing at me!' This could start a process through which the infant's movement become shaped to the usual ways of operating in the family and the culture, as in using a first to

point to things. Later, the infant would be able to point to what she wanted to eat. Her intention to point would be an internalised action, and become part of her inner world of intentions. In some countries, pointing has more negative meanings, and the infant's first accidental pointings might not be encouraged and built upon.

Another important concept is the zone of proximal development (ZPD). This is the difference between a child's 'actual developmental level as determined by independent problem solving', and the higher level of 'potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1971, p. 86). In the example above, of pointing, Carly was capable of acting (pointing) long before she understood what pointing was for. The actions of her family members helped her to learn how to act in the appropriate ways of her culture, through their support for her actions. This support might be verbal, or it might be through simply demonstrating how to do something. Vygotsky has been seen by some Māori researchers (e.g. Tangaere, 1997) as more relevant for a Māori approach to learning than other theorists, partly because of the central place of language and culture in his theory, and partly, we think, because Vygotsky's theory offers more space for relational learning. For Piaget, the development of the child was an individual achievement. For Vygotsky, development could not happen without interaction and support for learning. Piaget emphasised readiness to learn, which he thought was related to the child's biological maturation. Someone following this idea would not attempt to teach a child until they thought he or she was ready. In contrast, Vygotsky put more emphasis on support for learning at every age, with just enough challenge to keep the child reaching for new competencies. For example, unlike Piaget, Vygotsky did not try to separate biology and culture; he considered that even the newborn baby is fully a member of a culture, surrounded by the language of that culture (even though the infant cannot yet speak that language).

Vygotsky, like Piaget, was interested in the possibility of the child's progress as a series of universal stages, influenced by a biological process of maturation. The ZPD concept was modified to create an important idea in educational practice: that of **scaffolding** (Wood & Middleton, 1975). Scaffolding refers to the ways that the parent or teacher creates a supporting structure around the child to assist and enable their learning. For example, the child learning the whakapapa (genealogy) of family lineage may be given subtle hints and reminders as they practise the sequence of ancestral connections and events. There are major implications for educational and cultural practice according to whether we expect children's development to emerge 'naturally', or whether we see their development as aided by a process such as scaffolding.

Urie Bronfenbrenner: Systems Influence The Individual

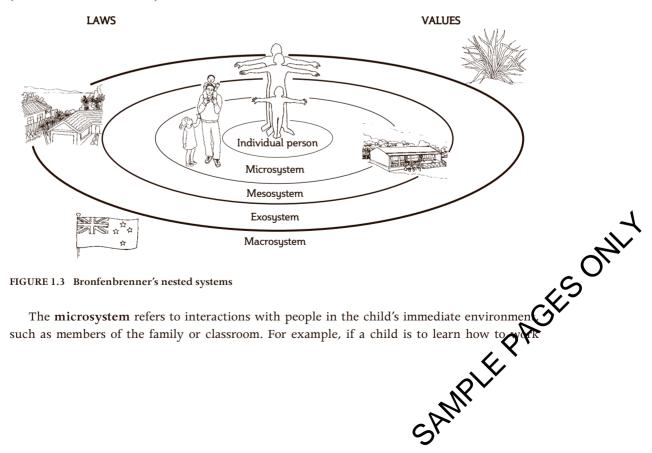
Urie Bronfenbrenner was born in Moscow in 1917, and emigrated from Russia to the USA when he was 6. Bronfenbrenner was one of the key writers who brought Vygotsky's work to the attention of the western world. Unlike other theorists mentioned in this chapter, his writings do not constitute a comprehensive theory of development, but his work has inspired a number of fruitful research.

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directions. We admire his willingness to tackle large-scale factors in development, such as family structure, parental education and economic change, rather than to focus narrowly on the individual child in the family. Like other key theorists we will cover, he considers that developmental processes increase in complexity over time in people's lives. His interest in the social and cultural context of human development provides a useful extension of Vygotsky's ideas on cultural context. While Vygotsky's ideas have not always been easy to translate into research designs, Bronfenbrenner has created a model of contextual factors that has achieved popular appeal through its simple practicality and relevance. Bronfenbrenner (2001) pointed out that his model has developed over time, just as people do.

Bronfenbrenner used ideas about interlinking social 'systems' to talk about five kinds of contexts that surround the individual child. Bronfenbrenner's emphasis on the influences of society and culture on the child's development makes the important point that development is always grounded in a particular society at a particular time in history. His ideas also draw attention to the interaction between these different aspects of a person's 'ecology', and their ability to change the course of development for individuals and families (Bronfenbrenner, 1979, 1986, 2001, 2006).

In Bronfenbrenner's model, the influences surrounding the developing individual were drawn as concentric circles proceeding outwards from the small circle of the individual person to the micro-level influences in the small group of people in the home, to the outer circles representing the macro-level influences of the wider world of a whole society or culture. He refers to this as a change in developmental focus from the proximal (near) to the more distant (see Bronfenbrenner, 2005).



cooperatively with others, there is much to be learned about cooperation from their interactions with people with whom they spend the most time: family members and classmates. The mesosystem refers to a system of connections that links microsystems together. In the case of learning about cooperation, the kinds of relationships between home and school could be key areas in which cooperative learning could be enhanced if it is considered important in both settings. The exosystem refers to larger social systems, such as public media, communities and neighbourhoods. The messages about cooperation on television and in children's books provide a context for the child's understanding, as do community projects such as school and neighbourhood fundraising events. The macrosystem of large cultural patterns includes social class and the political system of the country. It might be relevant to consider how cooperatively our parliamentary system works, both in terms of the way parties are created under mixed member proportional voting (called MMP in New Zealand) and the level of cooperative debate at the Beehive (one of New Zealand's parliament buildings). The chronosystem refers to the way that all these processes emerge over time. This includes each child's progress towards adulthood as well as social changes in a country's history; for example, in terms of social legislation.

Bronfenbrenner put the individual person at the heart of what there is to know about human development. It is interesting that in New Zealand, the diagram used to illustrate Bronfenbrenner's concentric circles of influence sometimes includes a whole family in the centre rather than the individual child. Recently, Foster and Kalil (2005) have summarised Bronfenbrenner's approach as focusing on the four features of process, persons, context and time, in order to suggest that social policies should keep all these concerns to the forefront. For example, they suggest that the dynamic relationships between all the people and services around the child must be kept in focus as the ramifications of any particular policy are considered.

Tutorial suggestions

- 1. What does it mean to say that development 'proceeds in a sequential way'? (Think about this question with regard to learning to cook a meal, which requires learning a sequence of skills.) Do the theories covered so far differ in answering this question?
- 2. How important are speed and change to development? When might it be possible to accelerate the speed of development? Is every change in life necessarily an improvement?

Barbara Rogoff (e.g. her 1990 publication) has pointed to the way that Bronfenbrenner's work has helped developmental theorists to move away from the fascination with individual or cultures as though these are finite, discrete units that can be pinned down or askly

described. In this book, we will keep in mind the multiple systems that have been suggested by anthropologists Super and Harkness (e.g. their 1997 publication) who considered the way that children fit into the 'niche' or small setting in which they live. One type of niche contains the physical and social particulars of that family, culture and time. They also referred to a psychological niche, which would contain the caregivers' beliefs about nature and nurture, and the way to raise and discipline children and young people. Wider than these would be the ideas about childhood and customs in a particular culture about childrearing and the place of youth. We think that there are particular socially constructed discourses that are important here, and to these we now turn.

Our Approach to Human Development: Complex Constructionist Ecology

We find it helpful to think about the different ways of looking at development as reflecting different discourses that have been culturally constructed. A discourse is a way of thinking about a phenomenon or topic that both describes and produces certain other ideas and expectations. You could think of a discourse as being similar to an old-style pebbled glass pane used for front doors or bathroom windows: these allow you to see what's on the other side of the glass, but give an altered view. When you look at a small person, you are not just seeing a unique human being,



but an interpreted idea of 'the child' or the 'short adult' created by the discourses in society that help to define who we can be.

Take the term 'stress' as an example of a socially constructed term. Many people talk about stress as though it is a pressure that builds up inside a person until they 'blow up'—a metaphor that is taken from the theory of hydraulics. There is a discourse around stress that reflects our understanding (supported by psychoanalytic ideas) that too much stress may be bad for you. Yet, although stress is familiar to Euro-Western populations from magazine and television programs, and a topic of many everyday conversations, it is not a common phenomenon in every culture, nor would it have been well known in New Zealand 100 years ago. So, does this mean that stress has been 'discovered'? Our answer to that question is 'No-it has been produced'. So, did stress exist before the word was coined? Well, we see stress as a product of social conditions, and the theories about it as a response to social phenomena. In every culture, people strive to make sense of the world: individuals are born into ready-made discursive worlds, with ready-made meanings available for them to draw upon. Psychoanalytic ideas purport to explain the social and personal conditions of its time—for all of us are bound by the resources for making meaning that are available to us (Davies, 1990). As we go through life, we adapt the meanings we started with: we take new learnings and use them to make meaning of our lives. In another 100 years, perhaps stress will no longer exist!

We think that people work together for common projects in families, villages, cities, societies and tribes, and that these projects and ways of doing things are reflected in our cultural values and understandings. The French philosopher Michel Foucault's theory of knowledge, from which we and many others have derived these ideas about discourse, helps us to understand how this comes about (see Gutting, 2005, for an accessible introduction). Any theory of development must accommodate diversity without trying to unify all cultures. This is why we think that seeing our own discourses as resources for understanding is a more forgiving way of using theory than trying to make universal claims about human development. In this book, we think of a theory as a coherent set of statements that attempt to explain a phenomenon. Each theory is set within a particular discursive context or way of understanding the world. Different discourses produce different kinds of explanations—they even draw our attention to different kinds of problems. Human development theories try to explain why people become more competent, skilled and aware as they grow from infancy to childhood to adulthood. They also direct our efforts in many ways.

People, whether 4 years old or 40, are full of contradictions, wisdom and humour. The 4-yearold, though, will be seen very differently from the 40-year-old, even if the two people are doing exactly the same thing. If 4-year-old Marie and 40-year-old Angelina both decide they want a ESONI tattoo, the actions will be interpreted very differently. Whereas someone might contact child welfare authorities on Marie's behalf, Angelina is less likely to be questioned. When it comes to swinging upside down on a set of monkey bars in a school playground at lunchtime, while wearing a dress, Angelina is the one who might get 'reported'. One way to explain this would be that the first example of tattooing is adult territory, part of a discourse about adulthood. Swinging free at lunchtime is part of a discourse about childhood as a time of play and innocence. Culture will differ in how these discourses are created. What we note here is that we are all influenced by discourses about 'childhood', 'adolescence' and 'adulthood' in terms of what we see as real and how this affects our own behaviour.

We call our approach Complex Constructionist Ecology, to keep our attention on the complexities of an ecological approach that does not take the world for granted. Sometimes the word 'ecology' is used simply to put a context around the individual, who is assumed to remain a pretty stable object through time. We look upon human beings as more complex, fluid and malleable than this. We think that many ecologists also take this view, seeing something like a 'wetland forest' as a combination of interlinked plants, animals and climate, in a particular location at a particular time. The components of this forest, such as the people walking through it, are not completely separate from it, but influence and are influenced by their involvement in it. We add more to this complex ecological view, because we are interested in human development that puts society and culture at the forefront.

We add the word 'constructionist' to signal that objects and events in the world are not simply there, in a concrete sense, but also only 'there' for us if we take note of them because they are important in our lives. What we find important—or irrelevant—depends on our cultural understanding, shaped by our place in the history of our families over time. A constructionist view gives us the chance to put aside the idea of universal stages or features of human development. We find this tendency part of the troubling 'one size fits all' view that pushes cultural influences to the background in development. There are many moves towards a constructionist view in Aotearoa. Perhaps because we value individuality at the same time as we value fairness and inclusion, we are less available to be converted by voices of authority. We are far enough away from the origins of Euro-Western knowledges to have a long perspective, whilst also granting them respect.

To move to an auditory metaphor to describe a complex constructionist ecology, we think that development proceeds like the bush concert created in Aotearoa by the sound of flax leaves slapping, ti kouka (cabbage trees) snapping with their distinctive reedy melody, fantails and sparrows cheeping, small creatures rustling and whispering in the undergrowth, and human feet and voices adding their own rhythmic patterns. Like any conversation, the sounds weave around, sometimes getting off the point, sometimes in conflict (perhaps when a four-wheel-drive vehicle gets close) and sometimes in harmony. Sometimes there are patterns, sometimes not. It is a landscape of enormous complexity in which each of us must do the best we can based on the best information in our own locality—though of course this information is never complete.

THE FUTURE OF HUMAN DEVELOPMENT

ESONIT Theories of human development are constantly changing. Perhaps human societies and our interactions with the world itself are developing: getting progressively more complex over time. There are growing concerns about human influences on the world's climate, and the likelihood of adverse changes on human societies from scarcity of water and food shortages to rising seal levels and increasingly destructive storms and floods. This paints a very different background

perhaps, to the more optimistic views of human development created by theorists from affluent societies excited, as many were, by new, modern technologies such as electricity, cars, telephones and computers.

We, too, are the products of our own times and histories. We believe that humans can make a difference, intentionally, rather than letting 'development' happen. We believe that how you treat your children, your self and your clients, parents, partners, patients and students will make a difference to how we all will go on in life. Development is a serious matter. While we may seem to have been paying a lot of attention to the big picture, it is also important to notice that the big picture is made up of many sounds, made by different sources. What you do does make a difference to how others go on. Your own action might be a small voice speaking, but many voices together can make quite a roar.

Summary

Please fill in the gaps below to help create your own summary of this chapter. The traditional definition of human development is that it is a process of _ changes in people's lives over ___ that enables them to more effectively to their environments. Much of the theory and research of the late nineteenth and twentieth centuries considered human development from the viewpoint of people in fairly affluent European and North American settings. By paying attention to the concepts such as _ notions of human development can be expanded much more widely. Give an example from your own setting. A number of key historical shifts have been influential in the creation of the field of human development. The theory of Charles Darwin, which has often been misunderstood, is one of these. The notion of natural selection emphasises that there is diversity in every _, and that such diversity may be adaptive in that species due to _ particular environment, making it more likely that members of the species with that peculiarity might survive to pass on that characteristic to future generations. Changes in species over time are called phylogeny, while changes in the individual are called ontogeny. Early developmental researchers thought the two processes were linked, which was seen as further evidence of universal processes in development. Theories patterns of development. For Piaget and Freud, norms were related to stages in development that were thought to be a universal sequence for all. Write down all the key concepts of these theories in bold type with your own definition and an example for each.

- Vygotsky brought in social _______ ideas to development, emphasising the ways that who we are and what we do are both created and constrained by the language and the cultural habits in which we grow up. How do the concepts (in bold in the text) illustrate this main principle of his theory?
- Bronfenbrenner made developmental researchers think more about the settings in which the individual lives, which he referred to as levels of ______ surrounding the person. Name these systems and give an example from your own life for each of them. Another approach that considers the wider setting around the child, taking on board ideas from both Bronfenbrenner and Vygotsky, is the socio-cultural approach, which has become influential in developmental research.
- The approach to human development taken by Claiborne and Drewery is called c_____ c____ e____. This is influenced by socio-cultural ideas, but also recognises the historical traditions around developmental theories that continue to influence cultural expectations about people at various ages, child-rearing patterns and social norms today. An important aspect of the constructionist approach is in the use of discourse. A discourse is a set of related notions in a culture or society that create the possibilities for people's lives, even though the ideas seem to point to a universal, concrete reality rather than a more variable process that may be hidden from our awareness.
- Write down a brief description of a discourse that has shaped your life, such as a discourse about 'troublesome youth' or 'mid-life crises'. For the rest of the book, we will be looking at human development as a complex process going backwards and forwards in time, with multidirectional influences (such as in co-construction). We will consider how ideas are constructed within cultures, and think about our interconnections within our environments as part of a larger ecology.

SAMPLEPACESOMIT