

1 Introduction

Most children start to draw or paint when they are about 2 years old, and they take great pleasure in scribbling or daubing paint on the page. By the age of 4 or 5 years they are able to produce recognisable figures (see figure 1.1) and they continue to create interesting and charming pictures for a number of years. From the age of about 10 or 11, however, children's interest and confidence in art-making often declines; although their pictures may be more detailed, they seem to lack the boldness of those completed in their earlier years. Indeed, by adulthood most of us feel that we have not mastered the ability to draw and give up altogether, perhaps believing that we must have a special aptitude or gift to be able to produce a tolerably good picture. Yet this attitude has not always been so prevalent. In the nineteenth century sketching and painting in watercolours were a part of a young lady's education and, although not all girls would have had an aptitude for them, it was thought possible that these skills could be learned. In the latter part of that century and up until the 1940s formal tuition in drawing and painting were included as part of the standard curriculum in schools. Like many other skills, picture-making is a demanding activity and does not come easily to everyone, but it can, nonetheless, be improved with tuition and practice.

Pictures are becoming increasingly important in our modern world. We see visual images all around us – as illustrations or advertisements in books, newspapers and magazines and on billboards, on the television,



Figure 1.1 The king, *by the author at the age of 4 years.*

in the cinema and on our computer screens. Written instructions or explanations often come to us accompanied by illustrations, and sometimes instructions may even be presented entirely in pictorial form. Pictures are also produced as ‘art’. Usually we tend to think of art as an activity carried out by trained or amateur artists who deliberately set out to produce an artwork that will evoke some kind of response in the viewer. The communication of an idea is inherent in this process, although its interpretation may be as much on the side of the viewer as on that of the artist. Whether children are capable of engaging in the production of art is debatable. In fact, the notion of the *child artist* is relatively modern. In the eighteenth century Rousseau (1762/1964) would not have described the child in this way, even though he advocated the activity of drawing for children. By the late nineteenth century, however, reference was being made to the child as artist (e.g., Parker 1894) and the term *child art* may have been coined by Franz Cizek (see Viola 1936), who became a progressive art teacher in Vienna.

This change in the status of children’s scribbles and unsophisticated drawings came about, in part, because of a change in thinking about children themselves. Instead of thinking of them as potentially wayward beings in need of correction and firm guidance, some philosophers and educators believed them to be ‘innocents’, untainted by culture and civilisation and closer to a natural and noble state. This attitude was particularly related to children’s picture-making. Artists such as Kandinsky, Klee, Miró and Picasso have strived to capture an uncontaminated child-like purity of expression. To this day, many people continue to hold this rather romantic notion about children’s artwork, even though it seems to ignore the fact that children are brought up within a social setting and cannot help but be influenced by the culture that envelops them, and this includes the visual images they see. Increasingly the boundaries of what is and is not art are being expanded. Interestingly, a *drawing* was hardly considered to be art in the earlier part of the eighteenth century, but more the *preparation* for producing a work of art, such as a finely worked painting in oils. Nowadays almost any materials and subject matter are acceptable, although not necessarily without attracting plenty of public debate and, often, derision. For some people, art may also encompass children’s pictures. Although I do not agree that children’s pictures are always ‘art’ I shall, nonetheless, use the terms *art* and *artwork* in this book in relation to both children’s and adults’ production of pictures.

The study of children’s pictures began in the nineteenth century. One of the earliest enthusiasts was Töpffer (1848), who included two chapters on children’s drawings in a posthumously published book. His ideas were taken up by Gautier (1856) and then, later in the nineteenth century, a more scientific exploration of children’s pictures came in with, for example, the inclusion of drawings in Darwin’s (1877) study of his son’s

development, the publication of Cooke's (1886) article 'Our teaching and child nature', Ricci's *L'Arte dei Bambini* (1887) and Barnes' (1893) 'A study of children's drawings'. Over the years there has been a variety of approaches to the study of children's pictures; researchers have investigated different aspects and processes and professionals have used children's pictures for different purposes. For example, in the late nineteenth century psychologists became interested in how drawings could help reveal something about their cognitive processes, such as the formation of mental representations and memory. This approach burgeoned with the 'cognitive revolution' in the 1960s and has remained an important way of studying children's pictures. Other approaches and concerns have included the aesthetic and emotional dimensions of children's artwork, and the use of their pictures as indicators of their intelligence and emotional stability. Interest has also continued in children's understanding and appreciation of pictures as well as their own ability to produce them. Not least has been the concern of art educators regarding the purposes of art and the methods of teaching it. Although some of these approaches and interests go in and out of fashion, an interest in children's pictures continues to this day, as evidenced by a steady output of books and journal articles from researchers around the world.

The continuing accumulation of research findings is testament to the enduring popularity of this area of research. However, the large number of publications necessitates selectivity in a new book and this one is no exception. As I did not intend to write an all-inclusive compendium of known research, I have been deliberately selective, giving more coverage to some topics and less to others, such as the development of children's depiction of the human figure, which has been covered extensively in previous publications (e.g., Cox 1993, 1997). I have also been selective by sometimes choosing only a limited number of research studies on any one topic or issue. Again, it seems unnecessary to make an exhaustive inventory of studies when a point can be made with just a few examples of supporting evidence. I am well aware that not all authors would have made the same choices.

As the title of the book suggests, I shall be concerned primarily with pictures rather than other forms of artwork, such as three-dimensional modelling. And, although painting will be mentioned, I shall in fact concentrate on drawing since most research studies on children's pictures actually concern their drawings. This probably reflects the fact that children engage most in the activity of drawing, mainly because paper and pencils are more readily available and are less messy than paint. Celebrated for his draughtsmanship, David Hockney (Hockney & Joyce 1999) believes in the importance of drawing. He is also well known for his opinion that the image is crucial to art and also for his promotion of figural artworks as a vital genre. In fact, most of this book will be about

figural or representational pictures, as opposed to non-figural or abstract ones, since most children's artwork is figural.

I begin, in chapter 2, by addressing the following issues. What do children think counts as a picture and what does not? Do they need tuition in order to recognise the objects in pictures or is this an innate ability? Do they confuse the depicted object with the real object that it 'stands for'? How does children's understanding of the representational nature of pictures develop? Although I refer to various theories of visual perception and the perception of pictures, both in this chapter and from time to time in the rest of the book I felt that too much coverage of them could detract from my central focus, namely children's understanding and production of pictures. Consequently, I have included brief outlines of these theories in an appendix and have referred the reader to it where appropriate throughout the text.

In chapter 3 I pursue the issue of children's understanding of pictures, but with respect to their appreciation of them. What are their preferences regarding abstract or realistic pictures? Do they appreciate the emotional mood of a picture as well as its overt subject matter? Can they understand metaphorical expressions of emotion as well as literal ones? What do they understand about the intention of the artist and the role of the viewer in the interpretation of a picture? Since the pictured objects are not the same as the real ones, there is scope for misunderstanding or different interpretations of a picture (Freeman & Parsons 2001).

In chapter 4 I move on to discussing young children's first attempts at picture-making. Are their scribbles really 'purposeless pencillings', as Burt (1933, p. 319) thought? I examine the developments found within the scribbling period and consider the claim that children sometimes intend their scribbles to be representational. I also consider whether the scribbling period is actually necessary for later drawing development. Do children stumble on representational drawing by accident or are they actively involved in trying to make their pictures recognisable? Although children learn to draw more recognisable figures as they get older, their pictures may still look peculiar to adult eyes. For example, they often include objects and scenes drawn from an impossible viewpoint or from mixed perspectives. In chapter 5 I discuss the way that children select lines and shapes to 'stand for' real objects. It has been argued (e.g., by Luquet 1927/2001) that in creating their pictures children are focussing on what they know about the structure of the objects rather than on the way they happen to look from one particular viewpoint – a distinction known as intellectual versus visual realism. I review the evidence for this claim and consider the extent to which these two kinds of realism are linked to different stages in development. Finally in this chapter, I discuss the older child's desire to draw in a more visually realistic way and what factors might be influencing this change in emphasis.

It is rare for very young children to organise their figures in a systematic way on the page. Indeed, the figures are not presented as part of a scene and may not even be aligned with the edges of the page. The way that children learn to construct their pictures in a more coherent way is discussed in chapter 6. A further, important problem in picture-making is how to suggest the third, or depth, dimension, given that the picture surface has only two spatial dimensions. I discuss children's developing ability to use a number of pictorial devices for this purpose, such as occlusion, size and height on the page, and the depth lines of linear convergence perspective. As well as their ability to use pictorial depth cues, children also develop a sensitivity to aesthetic composition, although this may be overshadowed by their desire to master the representation of spatial structure. Moving on to chapter 7, I discuss children's ability to depict the expression of emotion. This includes both the literal expression of emotion (e.g., a happy face or a sad face) and also non-literal or metaphorical ways of suggesting emotional mood (e.g., bright colours and a blooming tree for happiness and dark colours and a withered tree for sadness). Does this ability occur later than the ability to *understand* the emotional mood of a picture and, in their own pictures, do children use literal means of expressing emotion earlier than they use the non-literal? Is it true that the pictures produced by very young children are highly expressive but that this quality declines as children become more concerned with visual realism?

Some authors (e.g., Luquet 1927/2001; Eng 1954; Kellogg & O'Dell 1967) have claimed to find similarities between children's pictures and those produced in prehistoric or preliterate societies. The implication is that the changes that occur in a child's artistic development parallel those in the history of art, both of which are moving towards a natural or predetermined goal – the 'ontogeny recapitulates phylogeny' argument (Haeckel 1906). Other authors (e.g., Hagen 1985) reject this view entirely even claiming that there is no development in art. In chapter 8 I discuss the beginnings of art in prehistoric times and go on to trace changes over the historical period, assessing the extent to which we can see similarities to or differences from the artistic developments taking place within the child. With regard to both the history of art and the child's artistic development, I consider whether changes can be regarded as systematic and orderly and also discuss the reasons that changes come about.

Up to this point in the book I have discussed artistic development in typically developing children. In chapter 9 I consider artistic development in those who might be regarded as special. I have included a number of different groups: children with a non-specific intellectual disability, those with Down's syndrome, talented artists, some of whom have autism, and blind children. Is the artistic development of those children who have some kind of disability the same but slower than that of typically

developing children, or do these special children develop in a different way? I outline the skills that talented artists seem to share, including those with autism, and consider some biological and environmental influences that might have been responsible for their talent. The inclusion of blind children in a book about art might seem an odd choice. Surely, art is a visual medium. So, how can blind people understand pictures or even produce them themselves? In fact, with a special raised-line kit, blind people can recognise and produce pictures. Indeed, the study of blind children's use of raised-line pictures has been very important in furthering our understanding of artistic development. That it is not confined to sighted individuals raises interesting questions about what psychological processes are actually involved in art-making.

Since most research studies have been conducted not only on typically developing children but also on those living in western countries, we may have a biased view of the pattern of artistic development. In chapter 10 I review a number of cross-cultural studies and those that have tested children in various non-western cultures. Is the ability to understand and appreciate pictures universal? Do adults or children in non-pictorial cultures need tuition in order to understand pictures or is this ability innate? I describe some of the differences in the style of children's pictures around the world and speculate about the way these styles might be transmitted from one generation of children to the next. But, as well as identifying differences, I also consider what aspects of children's picture-making activity can be regarded as universal.

In chapter 11 I discuss the use of children's drawings by various groups of professionals, such as educational psychologists, clinicians and therapists. In particular, I discuss the evidence for the use of children's drawings as indicators of intelligence or emotional stability. How reliable and valid are the tests based on children's drawings? In addition, I review some of the studies that show that drawings can be useful as memory aids, particularly applicable when children are interviewed by social workers or police investigators and when their eye-witness testimony may be used in court proceedings. If drawings are useful aids to memory then they should also have a role in children's education. In chapter 12 I discuss children's art and education. First of all I outline the view that there should be freedom of expression in art and that adults should refrain from influencing what children produce, for fear of stifling their creativity. I argue that, in fact, children's art does not proceed in a vacuum and that 'outside' influences are an inevitable part of the process. I outline the kinds of art curricula devised at different times and in different countries and discuss comparative studies that have documented the differences in children's artwork associated with different educational approaches. I outline the core activities included in modern school curricula for art, including observational drawing and appreciation of adults' art, and review studies

that have tried to evaluate the efficacy of particular approaches to art teaching. In chapter 13 I highlight some of the issues arising from my review of the literature on the various topics covered in this book.

Like adult artists, children produce pictures for a number of reasons – to express and communicate their ideas and feelings, to exercise control over the pictorial domain and, not least, to engage in a very pleasurable activity. It is well over a hundred years since children’s pictures became the focus of research, and children’s artwork continues to fascinate parents, teachers and a variety of others working with or interested in children. My aim in this book is to help further that interest and appreciation.

2 Children's understanding of the representational nature of pictures

In our modern-day culture we are surrounded by visual images. We see them on television, in the cinema and on our computer screens, in books, newspapers and magazines, on advertising boards, stamps, greetings cards and T-shirts, as information in schools and museums and as art in galleries as well as in our own homes. No other creatures apart from human beings have habitually produced or made use of pictures for communication or indeed for any other purpose (Cabe 1980; Gibson 1980) and there has probably never been a time in history when visual imagery has been so prolific and ubiquitous.

What is a picture?

It is difficult to define a picture. It can be as simple as a few marks or a wash of colour on paper or canvas; it can be a photograph or a computer-aided image; it can be a decorative pattern or a representation of real or imagined objects; it can appear to be 'flat' or have the quality of depth, even to the extent that we feel we are looking into a real three-dimensional space; it may or may not have meaning beyond its materials; it may be regarded as 'art' or may have a more functional purpose such as an illustration or a diagram. As Gibson (1979) says, 'No one seems to know what a picture *is*' (p. 270). One thing we can say, I think, is that a picture is a surface that may have been painted or marked in some way for the purpose of evoking some kind of response (in terms of sensation, thought, interpretation or emotion) from the viewer. Usually, pictures are deliberately produced although, as Deręgowski (2000) has pointed out, they can sometimes occur unintentionally – for example, when we recognise a particular object in an accidental ink blot or stain; but even accidentally produced pictures may then be *chosen* by the artist to be shown as artworks.

Very many pictures are representational in that they present the viewer with a realistic and life-like image of people and objects. In addition, the artist may be trying to capture an incident in an historical or religious story or the emotion or psychological truth in a particular situation or encounter. Different genres such as historical painting and religious

painting, portraiture, still-life and landscape have different subject matter and different purposes. As with the development of landscape painting in Europe in the seventeenth century, pictures may challenge what can count as suitable subject matter.¹ They can also challenge conventional ways of depicting subjects, as when, for example, Max Ernst's *The Virgin Spanking the Christ Child before Three Witnesses* presented an unusual and perhaps shocking alternative to conventional images of the virgin and child. Others, such as Chris Ofili's *Afrodizzia*, in which elephant dung was incorporated into the picture, not only allude to an African context but also challenge our assumptions about what kinds of materials can be used in a picture.

Not all pictures are representational. Indeed, many are what we call 'abstract' and may have no further meaning than the pattern they present to us or the materials they are made of. Some artists, adopting a minimalist approach, have completely rejected the notion that a picture should represent something else or have any meaning other than itself. As Frank Stella declared about his striped and geometric paintings, there is nothing 'besides the paint and the canvas' and 'what you see is what you see' (Glaser 1968, pp. 157–8). Whether or not pictures are representational, it is not necessarily the case that the job of the artist is to convey some meaning or message that we, the viewers, must try to discover; an alternative approach to our thinking about pictures is that the meaning is 'something that is to be constructed and then imposed' by the critic or observer (Wollheim 1993, p. 134). For example, the image of *Myra* by Marcus Harvey is not shocking in itself – it is simply a portrait of a woman – but rather is transformed by our knowledge that Myra Hindley was one of the 'Moors murderers' who tortured and killed a number of children in the 1960s. The poignancy and horror we might feel is then compounded by the way the image has been constructed – from children's handprints. So, the business of making and looking at pictures is not unidirectional – one of 'giver and receiver' – but an interaction of the intention, ideas and skill of the artist *and* the level of knowledge and personal and social references that the viewer brings to the enterprise of engaging with a work of art.

What do children think a picture is?

Thomas, Nye, Rowley and Robinson (2001, study 1) gave children a variety of objects, models and pictures and asked them to point to

¹ With a few exceptions, such as a landscape by Altdorfer painted in 1532, most landscapes were included either as the backdrop to portraits or historical or religious paintings or provided a context in which events took place. Dutch painters in the seventeenth century focussed on the naturalistic landscape as a topic in its own right.

the ones that are 'just pictures'. Three- and 4-year-olds judged that real objects such as a packet of crisps or a candy-bar are not pictures. They also did not accept clay or pottery models of animals as pictures. Nonetheless, what they did regard as pictures is quite wide – colour photographs of real objects, line drawings of recognisable objects as well as nonsense objects, drawings of an abstract irregular shape, a drawing of a circle bisected by a wavy line, complex abstract forms and repeated patterns. At age 6 to 8 years children made exactly the same judgements except that a few had doubts about the patterns and were not inclined to accept them as pictures. By age 9 to 10 years there was a distinct change in children's judgements: with regard to the drawings, nearly all of them regarded the realistic drawings of objects as pictures; however, rather few accepted the abstract pictures, the patterns or the drawings of nonsense objects.

In further studies these researchers found that whereas 3- to 4-year-olds accepted script and numbers (study 2) and also plain cards (study 3) as pictures, older children rejected them. That younger children include writing in their category of a picture is not surprising, since both writing and drawing can be done with the same materials and the first letters that children produce are often those included in their drawings (Kellogg 1969). Historically, early writing systems were based on pictographs (see chapter 8) and even today writing or printed text is acceptable as a picture to (some) adults (e.g., Fiona Banner's *The Desert*, a huge picture containing a transcription, in the artist's own words, of the events of the film *Lawrence of Arabia*). The youngest of Thomas and colleagues' (2001) children accepted images on paper or card as pictures but were less likely to accept images on the surface of a block or on a mug (study 3). The findings were the same whether the children were asked to identify 'pictures' or 'drawings' (study 4).

It seems, then, that the younger child's notions of what a picture is are quite wide, although they seem to be restricted to two-dimensional surfaces. But by the ages of 9 or 10 years children have become more rigid in what they think. In particular, they seem to have adopted the criterion of visual realism as the main yardstick by which to make their judgement. Even though the pictures of nonsense objects in Thomas and colleagues' study were composed of visually realistic parts, these children still rejected them. This greater emphasis on representation and visual realism by older children has also been reported by Gardner, Winner and Kircher (1975), Freeman (1980) and Parsons (1987).

Babies' responses to objects and pictures

Pictures can engage our thoughts, imagination and emotions but they are, nonetheless, primarily visual things. So, when do we first engage