

Children's constructions of work

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Appendix F

Abstract

This thesis examines children's constructions of work: their own work at school and at home; possible future occupations; and work in manufacturing industry; and the resources drawn on in these. Such constructions are of interest in the context of concerns about how society reproduces itself and passes on knowledge, understanding and attitudes to the next generation, and in particular, how social and economic inequalities are reproduced and some groups remain disadvantaged. The thesis aims to contribute to understanding of the ways in which this happens, and to suggest how schools might effectively contribute to widen children's constructions of the potentialities for their own futures.

In the light of critiques of developmentalism, previous research in this area is critically scrutinised; it is argued that such research neglects the variety of children's experience in the immediate family and cultural contexts in which they live, and tends to explain societal inequalities in terms of individual development, thus pathologising certain groups of people. A broadly social constructionist perspective has been adopted, drawing on a range of theorists who have focused on behaviour and interaction rather than structures in the mind or the world.

Constructions of work and resources drawn on were investigated through interviews with forty-three children in two London primary schools, one in a predominantly middle class area and one in a working class area. Children interviewed were in Reception Class (4-5 years old), Year Three (7-8 years old) and Year Six (10-11 years old); numbers of boys and girls were almost equal.

The thesis argues that differences in experience between children can account for the differences in their constructions of work, and in particular, draws attention to the extremely limited experience and constructions of work of children in the families of the long-term unemployed.

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Introduction

This thesis is about children's constructions of work. In this category I include housework and school work as well as adult occupations (see Note 1). Thus I examine children's constructions of their own school and household work, and of adult occupational work, and the resources upon which they draw in these constructions.

Such constructions are of interest in the context of concerns about how society reproduces itself and passes on knowledge, understanding and attitudes to the next generation, and in particular, how social and economic inequalities are reproduced and some groups remain disadvantaged. These concerns are particularly pertinent in the context of a modern industrial, or a post-industrial, society. In traditional societies children are able to observe much of their community's work; work roles are often passed on from parent to child, and it is easy to see how patterns of inequality are reproduced. But in modern industrial and post-industrial societies children are separated from much of adult work, and despite hopes that compulsory schooling would provide greater equality of opportunity, it has been found that to a large extent patterns of inequality persist (Halsey, Heath and Ridge, 1980). A considerable body of research has explored the ways in which working class children come to be systematically disadvantaged, which have resulted in lower academic achievement and lower level jobs than middle class children (e.g. Bourdieu and Passeron, 1970/1977; Bernstein, 1971; Bowles and Gintis, 1976; Tough, 1976; Willis, 1977). One factor contributing to this appears to be occupational foreclosure (Lea, Tarpy and Webley, 1987); from a very early age children start to rule out occupations in terms of personal factors such as gender, social class and perceived ability, and the set of occupations under active consideration by adolescents is limited by

these factors (Gottfredson, 1981). An examination of primary school children's constructions of adult work and the resources they draw on in these constructions may be able to contribute to understanding of the ways in which this happens, and thus may offer some indications of the ways in which schools can most effectively contribute to widen children's constructions of work and of the potentialities for their own futures. The primary age range (four to eleven years) has been chosen since it is during this period that occupations are being ruled out, and because studies of children's understanding of work (e.g. Dahlberg, Holland and Varnava-Skouras, 1987) report differences between middle and working class children in this age range. Chapter 1 elaborates some of these ideas, and examines how schools may contribute to or combat the reproduction of social inequality.

To date research into children's thinking about work has generally been set in a developmental framework: that is, it assumes a regulated process of natural change in the human life span, through which adult thinking is more complex and rational than that of children. In Chapter 2 I will argue that this approach, with its focus on the description of a universal course of development, has resulted both in neglect of the variety of children's experience in the immediate family and cultural contexts in which they live, and in a tendency to explain societal inequalities in terms of individual development (Ingleby, 1986), thus pathologising certain groups of people (Burman, 1994). Developmentalism can be seen as a hegemonic approach which suppresses alternative explanations (Walkerdine, 1993; Morss, 1996). Morss therefore argues for the adoption of an 'anti-developmental' approach - one which 'involves the critical scrutiny of developmentalism and the search for realistic alternatives to developmental explanation' (1996: 51).

Such approaches are considered in Chapter 3. Morss argues that none of these is entirely successful in shedding all vestiges of developmental thinking, and all have other problems and limitations. In this thesis a broadly social constructionist approach has been adopted because it lends itself to a consideration of how children draw on experiential resources in their talk about work, and rules out the possibility of attributing differences in children's

constructions to differences in cognitive development. With its recognition of historical and cultural specificity (Burr, 1995), social constructionism permits an examination of the variety of children's constructions of occupational work; this investigation, while starting from an interest in broad differences in construction by social class, is concerned with individual experience and constructions, rather than generalised descriptions of development.

In Chapter 4 I explain the research design. Constructions of work and resources drawn on were investigated through interviews with forty-three children in two London primary schools, one in a predominantly middle class area and one in a working class area. Children interviewed were in Reception Class (4-5 years old), Year Three (7-8 years old) and Year Six (10-11 years old); numbers of boys and girls were almost equal. Constructions of three aspects of work were investigated. Work carried out by the children themselves, and by adults around them at home and at school, has meaning both in the present context of children's lives and as a resource for other constructions of adult work. Work children think they may do when they are grown up is of interest in terms of constructions of the potentialities of the future. Work in manufacturing industry was chosen because it seemed likely that this would lie outside the children's immediate experience or their aspirations, and their accounts would provide some insights into the processes of construction; moreover manufacturing may contrast with children's own occupational preferences in that it takes place in complex organisations. In analysing these interviews, children's constructions are examined in relation to resources drawn on, focusing particularly on differences in relation to social class and family work arrangements. Responses from children of different ages are examined in the context of the anti-developmental approach adopted. I will discuss differences in constructions in relation to gender when they occur, but in this thesis gender is not my central concern, as occupational sex-stereotyping has been extensively investigated elsewhere (e.g. Sharpe, 1976; Nemerowicz, 1979; Spender, 1982; Holland, 1987; Francis, 1996a).

In taking a social constructionist approach I am very aware that the narrative I am constructing is a specific one, relating to particular children in particular

social and educational settings in the early 1990s. It is also my version of the story, my construction, and as such it must be in part a product of my own life history. For example, it is clear that in asking about various jobs, the work I have engaged in myself and am familiar with, must influence both my questions and my responses to the children. I come from a family of teachers and clergymen, and despite my firm intentions never to become a teacher, and considerable efforts to investigate alternative possibilities, I found myself, to my slight bemusement, embarking on a career as a primary teacher at the start of the 1970s. I worked in a variety of London primary schools, ranging from those on inner city council estates to a school in a privileged middle class area, and spent three years working on a UNICEF project to improve primary schools in Northern Nigeria. I have only limited experience of work outside education; as a student I worked on farms milking cows, picking daffodils and making clotted cream. Throughout my teaching career I have organised class visits to work-places, and in 1986 I was appointed Teacher Fellow in the Primary Schools and Industry Centre at the Polytechnic of North London. This was when I first read some of the developmental studies of children's economic understanding, and found their notion of a single course of development to an adult level profoundly unsatisfactory. I felt that children's varied experience must be of greater importance than these studies suggested, and the research described in this thesis was originally conceived.

The time scale of the thesis perhaps needs some explanation. It was first planned in 1987, though, owing to various interruptions, the data was not collected until 1992-3. However, it will be noted that many of the theorists whose work I draw on have published their ideas during the 1990s. Thus they were not available to me when I was planning the project and collecting data, but have influenced the ways in which I have analysed and presented it. Davies (1982) described the steps involved in the research process:

- Step 1 Reading in area.
- Step 2 Observation of the world (data).
- Step 3 Moment of intuition or explanation (intuitive because it draws on 1 and 2 to make a coherent idea).

Step 4 Return to 1 to hunt out parallels in others and thereby gain higher credibility for own intuition.

Step 5 Write up stating ideas from others as prior which in one sense they are and which in another sense they are not. (1982: 185)

In this thesis, while my dissatisfaction with developmental explanations pre-dated the data collection, the clarity of thought and the vision of the theorists I have drawn on far exceeded my own ill-formed intuitions, and it is with gratitude that I acknowledge my debt to the thinking of Erica Burman, John Morss, Jean Lave and Etienne Wenger, Rex and Wendy Stainton Rogers, and Valerie Walkerdine.

Note 1

Traditionally, sociological studies of work have focused entirely on work which is economically rewarded (e.g. Argyle, 1972; Anthony, 1977). This definition was challenged in Oakley's (1974a, 1974b) studies of housework. More recent studies have generally taken a wider view: Pahl (1984) pointed out that the notion of 'work' includes a wide variety of productive and reproductive activities such as wage labour, self-employment, household work, child care and voluntary work. He argued:

Work can be understood only in relation to the specific social relations in which it is embedded. Specific people in specific sets of social relations and social relationships can be described precisely in terms of whether they are engaged in work or play. The word 'work' cannot be defined out of context. (1984: 128)

He discussed children's work only in relation to their contribution to household work; he did not consider school work. Corson (1991) distinguished between 'occupational work' which is instrumental towards some other goal (e.g. remuneration, survival of self and family) and 'recreational work', which is an end in itself (e.g. climbing a cliff, painting a picture). This distinction draws attention to the complexity of the concept of work, but is problematic in that recreational and other goals are not incompatible; the artist may also hope to sell the picture, or to use it to decorate a room and provide pleasure. Like Pahl, Corson did not consider the status of work carried out by children. However, James and Prout (1990) argued that school work should also be seen as a form of work. It can be included in Corson's category of occupational work since it is instrumental towards a goal, and in Pahl's terms, can be seen as a form of social reproduction.

CHAPTER 1

Children and work: the historical and educational context

In this chapter I outline the context in which the questions addressed in this thesis arose: the context of a modern industrial or post-industrial society in which children are separated from much adult work, and attend school. I will examine the ways in which schools prepare children for their adult work roles, both through the hidden and the taught curriculum. It has been argued that, despite the egalitarian aspirations of many teachers, the hidden curriculum contributes to the reproduction of socio-economic inequalities (Bowles and Gintis, 1976). The inclusion of input about adult work in the taught curriculum has been seen as a way of empowering all children, but is also promoted as a way of meeting the needs of industry and strengthening the national economy. These aims may not be compatible. The delivery of this aspect of the curriculum has generally been experiential; drawing on the ideas of Blyth (1984a), I argue that if schools are to contrive experiences of work for children, we need to know more about the experiences children already have, and the ways in which they draw on these in their constructions of work.

Children's experience of work in industrial and non-industrial societies

There is a great contrast between those non-industrial societies where children have access to many aspects of adult life including work, and modern industrial and post-industrial societies where children are involved in formal schooling and parents' work may be distant from the home, or in other ways inaccessible to children (Rogoff, 1990). In non-industrial societies most work is visible, and is

relatively simple technologically; production is not fragmented as it is in industrialised societies. Thus children are able to watch and learn about the whole range of work being carried out in their home communities, and from a young age they may have a clear view of the particular work they are likely to engage in as adults. Rogoff described how Mayan mothers help their daughters learn to weave. Toddlers are present when women are weaving and observe the process. By age five girls begin to set up their own looms, using scraps and leaves. Nine year olds are able to weave simple items independently, and thirteen year olds are skilled weavers, handling all aspects independently. These children are not only acquiring the necessary skills and knowledge for their adult work, they are also developing a strong identity as workers engaged in that sort of work.

Industrialisation has changed this relationship in many societies. Argyle summed up this contrast:

There are a number of difficulties in socialisation for work in modern societies which are absent in primitive societies - the need to choose between about twenty thousand different occupations, the difficulty of knowing what these jobs are like, the difficulty of seeing how these jobs contribute to society, and the lack of continuity between school work and later work. (1972: 62)

It is difficult for children to know what jobs are like because their experience of adult work is limited. As a result of complex division of labour and technology, work is fragmented and most commonly takes place away from the home. In a post-industrial society (Bell, 1974), the increasing emphasis on information technologies may make the nature of some jobs very hard to explain. Compulsory education also contributes to the separation of children from adult work; in this country the duration of childhood has been prolonged by the periodic raising of the school leaving age. James (1993) characterised the modern western notion of childhood in terms of the separation of children from the world of adults:

The time of childhood exerts a strong constraint on children's activities, buttressing a set of legal, physical and social boundaries which separate children off from the adult world ... Within it children's bodies become confined in designated safe but peripheral spaces: schools, playgroups, playgrounds, gardens, parks ... Ideally their social

contacts and access to knowledge are similarly restricted: to teachers and school class mates, family and close friends, to children's TV, children's games, children's books ... (1993: 107)

As James indicates, separating children from the adult world is intended to protect them; Holt characterised this view of childhood as:

... a kind of walled garden in which children, being small and weak, are protected from the harshness of the world outside until they become strong and clever enough to cope with it. (1975: 22)

However, he pointed out that this 'Happy, Safe, Protected, Innocent Childhood does not exist for many children' (1975: 23); Hendrick characterised it as a notion of 'a *desirable* state of childhood' (1990: 55) rather than what is actually experienced.

This construction of childhood is historically and culturally specific, and should be seen in relation to the ways childhood has been constructed in other times and places, and to changes in the social, economic, religious and political climate (Hendrick, 1990). While Ariès' controversial assertion that 'in medieval society the idea of childhood did not exist' (1962: 125) has been contested (e.g. by Pollock, 1983), it has drawn attention to the way that constructions of childhood have changed with time. There is general agreement that from the late seventeenth century a new attitude to children began to manifest itself (Plumb, 1975; Hendrick, 1990); this has been linked to social and economic changes brought about by industrialisation. The ways in which childhood has been constructed in Britain over the last two hundred years have been traced by Hendrick, showing how the multiple constructions of the early part of the period gradually evolved to modern western notions. He argued that the campaign to 'reclaim the factory child for civilisation' (1990: 41) fundamentally affected popular thinking about children. Another significant turning point was the legislation, in the mid-nineteenth century, which viewed juvenile delinquency as a distinct social problem, and assumed that children were not always responsible for their own actions, but needed care and protection. Hendrick considered that this view was ideologically related to the assumption that 'in the long run, only

education would prevent the “dangerous classes” from continually reproducing their malevolent characteristics’ (1990: 45); he quoted a Justice of the Peace in the mid-nineteenth century who declared: ‘I have no other conception of any other means of forcing civilisation downwards in society except by education’ (Hendrick, 1990: 45). Dale and Esland took a similar view: ‘the provision of education was ... closely related to the problem of securing social order’ (1977: 37).

This idea of promoting civil order through education can also be related to developmental theories which were becoming more influential at this time. These theories, both of progression of children to maturity, and of the evolution of the human species, drew on the work of Charles Darwin and built on pre-Darwinian developmental theories (Morss, 1990; Bradley, 1994). Walkerdine points out that the working classes were considered to be at a lower developmental level ‘further from reason and intensely threatening because of that’ (1993: 456). Rationality was presented as the most advanced form of thinking:

By producing rationality as the end-point of a quasi-evolutionary process, it has been understood as part and parcel of ensuring a rational and democratic government. The rational and autonomous individual was to be produced and regulated precisely through the construction of psycho-pedagogic practices designed to produce a citizen who would reason and be reasonable. (1993: 456)

In this view, then, the introduction of compulsory schooling was intended to develop rationality which would contribute to civil order. This involved teaching the working classes to accept their position in society:

A curriculum was sought which would facilitate the process of making the working class ‘rational’ by demonstrating to them that the existing organisation of the means of production was logically justified by the ‘laws’ of political economy and operated to the advantage of all members of society. (Grace, 1978: 18)

Thus education became ‘the main device through which the labour market is provided with differentiated manpower’ (Dale and Esland, 1977: 31), and had the function of maintaining and legitimising existing social inequalities. This function

was, to a large extent, achieved through the structures and routines of schooling. Illich (1971) called this ritual aspect of schooling which strengthened social inequalities a 'hidden curriculum'.

The hidden curriculum

Vallance has argued that:

the hidden curriculum ... only went underground when schooling as a social institution was secure enough to turn for its justification from the control of groups to the welfare of individuals. (1974: 7)

During the nineteenth century the role of the structures and routines of schooling in preparing future workers was quite explicit; doubts were expressed about the value of literacy for future factory workers, but it was generally agreed that the socialising effect of schooling was to be welcomed by employers. In 1811 the committee of the Royal Lancasterian Institution for the Education of the Poor was told that while it may be useful for the poor to be able to read, the main advantage which arises from education is related to discipline and rationality: 'in school children are inured to habits of order and subordination' (quoted in Goldstrom 1972: 47). Similarly, Andrew Ure pointed out that:

the male spinners, even the most rude and uneducated ... always prefer children who have been educated at infant school, as they are obedient and docile. (1861: 423, quoted in Anthony, 1977: 64)

Johnson (1970) pointed out that Victorian schools were expected to raise the quality of the work force by attempting to control their patterns of thought and behaviour:

Supervised by its trusty teacher, surrounded by its playground wall, the school was to raise a new race of working people - respectful, cheerful, hard-working, loyal, pacific and religious. (Johnson, 1970: 119)

In the twentieth century employers have still looked to education to supply such characteristics in the future work force. In an unpublished survey conducted by the Manpower Services Commission in 1977, employers listed their requirements

for recruits in order of importance. 'Willingness and attitude to work' headed the list, above 'basic literacy and numeracy' (Jamieson and Lightfoot, 1982: 41).

Observing in primary schools, Pollard (1985) identified ways in which teachers encourage productivity, efficiency, order and discipline, which, he argued, could be said to meet industrial needs for a productive and compliant workforce. However, he pointed out that teachers act in this way as a result of their pragmatic concern to cope with their own working conditions, rather than from a desire to inculcate the dominant values of society and reproduce the capitalist system. This, then is a 'hidden' curriculum: teachers are not consciously serving the needs of industry.

The hidden curriculum has featured in many analyses by Marxist sociologists of the role of education in reproducing or maintaining the capitalist system (e.g. Althusser, 1971; Miliband, 1972; Bowles and Gintis, 1976; Dale and Esland, 1977; Hall, 1977; Willis, 1977; Apple, 1982). The ideas put forward by Bowles and Gintis in *Schooling in Capitalist America* (1976) are particularly fully and clearly presented. They argued that schools reproduce the capitalist system through two processes: legitimation and socialisation. Education legitimates the class structure and inequality by fostering the belief that economic success depends essentially on the possession of intellectual ability and the appropriate skills or education. However, Bowles and Gintis claimed that this belief is without grounds, presenting evidence that economic success is far more closely related to socio-economic class of parents than to ability. One explanation of how this comes about is included in the thesis put forward by Bourdieu and Passeron (1970/77); they argue that in France the examination system rewards most highly the 'cultural capital' (and particularly the forms of language) which the dominant classes acquire at home, and which is not explicitly passed on in schools.

Bowles and Gintis describe socialisation as the process through which education prepares young people for alienated work within the hierarchical structures of the capitalist economy. Schools shape the consciousness of future workers by fostering appropriate ideas, qualities, beliefs, values and self-concepts. For example, docility, passivity and obedience are rewarded while creativity and

independence are penalised. Thus young people are taught to be properly subordinate. Such socialisation is achieved because there is a structural correspondence between the social relations of schools and those of industry; it is through the form of the education system rather than through the content of the taught curriculum that the process takes place. Specifically Bowles and Gintis suggested that:

- the social relationships of schools replicate the hierarchical division of labour;
- alienation from work is common to both schools and industry: in both institutions workers have little control over the tasks they carry out, and motivation is through a system of external rewards (school grades, pay);
- fragmentation of work is also common to both institutions: in schools it arises from competition between students fostered through assessment, and from compartmentalisation of knowledge.

Bowles and Gintis considered that the socialisation of future leaders of industry differs from that of workers in that they may attend private schools and colleges where different qualities are valued, and they are likely to remain longer in education, studying at colleges and universities which foster greater independence and decision-making skills; again the structure of the education system can be seen to be meeting the needs of the industry.

This analysis has not gone unchallenged. For example, Coxhead (1977) identified problems in the statistical data, and Blackledge and Hunt (1985) pointed out that some of the assertions about schooling have not been demonstrated to be correct (e.g. that creativity is not rewarded, and that schools serving working class areas place greater emphasis on rule following). However, the most forceful critique of Bowles and Gintis' correspondence theory is that the correspondence they identify between education and the economy indicates a more harmonious relationship than in fact exists. In a later paper they acknowledged this, and presented a model in which the state, the family and capitalist production were seen as sites of social practice; the relations between these were described in much less deterministic terms than in their earlier work (Gintis and Bowles, 1981).

Other theorists (e.g. Apple, 1982; Giroux, 1983) have emphasised the role of resistance; pupils do not accept unquestioningly the values schools try to impose through either the taught or the hidden curriculum. In an ethnographic study of a group of working class boys, Willis (1977) examined the operation of counter-school culture, involving resistance and opposition to authority. He drew attention to the similarity between counter-school culture and shop-floor culture, both of which he saw as expressions of basic working-class attitudes and values. He argued that, as a consequence of this similarity, the transition from school to factory work is relatively easy; pupils choose to enter the shop-floor, thereby accepting their subordinate position in the socio-economic system. Ironically then, the pupils' resistance itself contributes to the reproduction of the social order, and to keeping the working classes in their underprivileged position. While this study has been enormously influential, it has also attracted some criticism (e.g. Burris, 1980; Blackledge and Hunt, 1985). A major difficulty is that Willis portrays resistance as the typical working class strategy; however, only a minority of boys in the school where his investigation took place were involved in the counter-school culture. The majority, almost entirely working class, were the 'ear'oles' (1977: 60) who conformed. Therefore to imply that resistance is a typical working class strategy is to overstate the case.

The Marxist argument is, then, that through the hidden curriculum schooling contributes to the reproduction of existing inequalities. While the school's socialisation may not be entirely successful, resistance may make pupils more likely to accept low level jobs. Schools also prepare pupils for adult work through the taught curriculum. While this is mainly through the development of knowledge and skills in particular subjects (which is beyond the scope of this thesis), it has also involved teaching children about work. In the next section I examine the range of arguments put forward in support of this aspect of the curriculum.

The taught curriculum

The notion that children in both primary and secondary schools should learn about work has been put forward in many countries (see Linton, 1990, and Schug, 1990, for examples relating to Scotland and to the USA); I will refer specifically to the debates in England and Wales during the last two decades because they relate to the context in which this research took place. Two distinct lines of argument have called for greater curriculum provision concerning adult work. The first asserts that children should learn about the society in which they live, and about work, which is central to society; in discussing curriculum developments linking schools and industry, Blyth referred to this as ‘education *about* industry’ (1984b: 82). The second emphasises the role of schools in preparing children for their future roles as working adults, and claims that this process should start in primary schools; this could be described as education *for* work, paralleling Blyth’s ‘education *for* industry’, a phrase which he used specifically in connection with the encouragement of ‘favourable attitudes to particular enterprises, or indeed to industrial society as a whole’ (1984b: 82).

Education about work

Various arguments have been put forward to support the inclusion of a societal element in the primary school curriculum. Blyth saw ‘education about industry’ as ‘part of social or environmental studies in a fairly conventional mode’ (1984b: 82), and Ross argued that ‘the child’s studies of his or her own society should be an essential initial reference point’ (1988a: 147) from which children can go on to develop understandings of other societies in the past and in other contemporary cultures; he saw the organisation of work within society as an essential aspect of such studies.

Learning about the arrangements of society, including work, can also be seen as important for empowering children. Blyth *et al.* pointed out that social sciences will help children ‘to learn to control their own lives and to contribute to the

control of the social arrangements under which they live, rather than to be controlled by them' (1976 :62).

Children already have some awareness of industry and commerce; Ross (1988b) argued that the role of schools was to extend these experiences and to enable children to develop concepts which would help them to understand their experiences in a broader context, and skills to seek out and use further information.

Whatever happens in school, pupils develop an economics perspective on their world. If teachers wish to ensure that this is a rational perspective, they must help their pupils to build a conceptual framework and to develop thinking skills which enable them to make sense of economic experience. (Chandler *et al.*, 1981: 76)

For the advocates of social studies education, learning about work in primary schools was not intended as part of careers education; Ross claimed that:

What is being suggested is not a form of vocational training for the primary school, or even the beginning of supplying information about careers. Nor should it be thrusting at children the benefits of enterprise. (1988a: 148)

However, others have advocated precisely this; their views are discussed below.

Education for work

There are two distinct strands to the argument that schools should be preparing children for their future roles as working adults. One is concerned with empowering the child; the other with the needs of industry and the economy.

The idea of empowering children by broadening their aspirations stems from the liberal ideal that education should result in greater equality of opportunity, thus enabling pupils to fulfil their potential. There is evidence suggesting that children tend to consider only a narrow range of possible occupations; Nelson (1963) found that nine to eighteen year olds rejected far more occupations than they considered as possibilities. This has been seen as a process of 'occupational foreclosure' (Lea *et al.*, 1987: 387) through which children gradually

circumscribe the range of occupations to which they might aspire; Gottfredson (1981) argued that six to eight year olds rule out jobs in terms of gender, and nine to thirteen year olds in terms of social class and perceived ability. Thus Gottfredson argued that adolescents only consider occupations within a particular circumscribed range. While Kelly (1989) found that specific jobs opted for rarely remained the same throughout the years of secondary schooling, Widdows (1995) reports that many students are making career choices earlier than used to be the case, often before they are thirteen years old, and before structured career input has been offered. Expectations of the potentiality of the future may be behaviourally self-fulfilling (Furnham and Stacey, 1991; Taylor, 1985), for example in choice of school subject options, effort made in school work, and choice of out-of-school activities. These arguments and observations suggest that the primary years may be a crucial time for intervention in the process of forming occupational preferences.

The changing nature of employment opportunities means that traditional methods of finding out about possible career opportunities through the family and community may now be less effective. Roberts claims that 'until the 1960s it was possible for most young people to base an identity on what they were pretty sure they would become ... that is impossible now' (1995: 31). Some young people, particularly white working class boys, have lost motivation and become disillusioned as they find that the traditional jobs which they had expected have disappeared (e.g. *Panorama*, 1995); 'the jobs their fathers got do not exist any more, yet their strategy for dealing with the world of work has not altered' (*The Guardian*, 1996: 6).

It is considerations of these kinds which have contributed to the decision to advise teachers that careers education should start in the primary school (NCC, 1990a; SCAA, 1995). The Schools Curriculum Assessment Authority (SCAA) recommends that children in Key Stage One (five to seven years old) should investigate the work which is carried out locally, finding out about different kinds of jobs and the particular knowledge and skills that they involve; at Key Stage Two (seven to eleven years):

pupils should ... find out about people working in a range of occupations, especially in new and expanding industries in this country and abroad ... begin to discuss careers ... [and] be given opportunities to express views about their own future lives. (1995: 18)

The arguments considered so far in this section have focused on empowering young people; other arguments start from the needs of industry and the national economy. At a time when British industry is declining, both industrialists and politicians have expressed concern about negative attitudes to industry, and called for education to produce young people who have the skills and understandings needed by industry. For example, in 1976, the Prime Minister, James Callaghan, made a speech at Ruskin College, Oxford, in which he stated:

I have been concerned to find that many of our best trained students who have completed the higher levels of education at university or polytechnic have no desire or intention of joining industry. Their preferences are to stay in academic life (very pleasant, I know) or to find their way into the civil service. (1976: 72)

Similar sentiments were expressed in a survey of employers in the East Midlands by Richards (summarised in Moore, 1988); they were concerned that young people (especially the 'bright' ones) should be given a positive view of industry and be attracted to it. In addition, several branches of the Institute of Directors considered that schools should focus on some young people's apathetic and uncooperative attitudes to work (Goldsmith, 1984). Anti-industrial attitudes were said by Wiener (1981) to have been encouraged through the school curriculum; while this analysis related specifically to public schools, it was given considerable exposure and appears to have influenced politicians' views (Ahier, 1988; Ross, 1992a, 1995). It has been suggested that education could foster more positive attitudes to industry, for example, by providing up-to-date and correct information (Jamieson and Lightfoot, 1982).

The needs of the national economy have also been identified in terms of entrepreneurial skills. For example, *Curriculum Guidance 4: Education for Economic and Industrial Understanding*, one of the cross-curricular themes of the National Curriculum, stated that:

Pupils need education for economic and industrial understanding to help them to contribute to an industrialised, highly technological society. With increasing economic competitiveness, both in the European Community and world-wide, the nation's prosperity depends more than ever on the knowledge, understanding and skills of young people. To meet this challenge, pupils need to understand enterprise and wealth creation and develop entrepreneurial skills. (NCC, 1990b: 1)

There have been obvious tensions between different groups promoting the inclusion of work-related elements in the curriculum. For example, while advice emanating from the government has tended to stress industry and enterprise, Ross (1992a) pointed out that educationalists have made consistent efforts to broaden these notions to include a much wider range of work; for example, 'enterprise' was taken back to its dictionary definition which allowed for social enterprise, rather than being used in a strictly economic sense. And while many educationalists were concerned to empower children, Bash, Coulby and Jones argued that complaints from politicians and industrialists about the lack of connection between school and work 'could be interpreted as evidence of capitalist dissatisfaction that the correspondence principle was not being successfully implemented' (1985: 147). Similarly Ross pondered:

Did a minister or civil servant in the early 1980s read Bowles and Gintis and exclaim 'this is a good idea! We ought to get it working here!'? The history of primary education in England and Wales during the 1980s suggests that this proposition may not be as far-fetched as it seems. (1992a: 53)

There were also concerns that the government's intention was to indoctrinate children. For example, Perry (1989) argued that DES advice that children should 'acquire an understanding of the values of a free society and its economic ... foundations' (1984: Annex, para. 12) is potentially indoctrinatory:

teachers are asked to explore with their pupils value-laden concepts such as profit; wealth distribution; exploitation; the right to work; the dignity of labour; pollution; state ownership; capitalism - and so on. What is more, the wording of the circular suggests that the value laden nature of such concepts should in no way be addressed in a neutral fashion but that they should be taught in such a way which directs the

young towards the predominant values of their own society, and how these relate to its economic structures. (Perry, 1989, quoted by Costello, 1992: 83)

Ross argued that 'there are clear dangers of schools uncritically reflecting capitalistic structures to children' (1992a, 59), and proposed that teachers should encourage critical enquiry into social and economic structures and relationships. Similarly Ford stressed that:

economic and industrial understanding is not concerned with a blind acceptance of neo-classical free-market economics... it is not about developing positive attitudes to industry ... [It] is concerned ... to develop individual capacity in critical thinking and informed decision making. In this way it can empower pupils. (Ford, 1992: 26)

Thus the inclusion of curriculum elements concerned with preparing children for work has been supported by groups with very different motivations; such input has been seen in terms of empowering children and promoting greater equality of opportunity; but may also be used to teach children more about existing capitalist structures and to make the hierarchy of occupations seem 'natural' and acceptable.

The impact of these arguments on taught curriculum

These various arguments for the inclusion of a work-related element in the primary curriculum have led to a number of developments outlined by Ross (1988b). Work as an aspect of social studies was promoted particularly through a curriculum development project based at Liverpool, *Place, Time and Society 8-13*, directed by Alan Blyth (Blyth *et al.* 1976), and through various materials produced by the Inner London Education Authority (ILEA, 1980; Wagstaff, 1980). The Schools Council Industry Project (SCIP), set up in 1978, published an exploratory survey of schools-industry links in the 8-13 age range (*We Make Kettles*, Jamieson, 1984). Added impetus for primary schools to set up links with workplaces was provided by a national primary schools industry competition in Industry Year 1986 (Smith, 1986).

The impact of all these developments was a considerable growth in the volume of primary schools industry work in the 1980s. Jamieson found scarcely a dozen examples in 1982 (Jamieson, 1984), whereas it was estimated that about half the primary schools in England had some links with industry during 1986, Industry Year (DES, 1987). Similarly surveys of school-business links in 1992 and 1995 each showed that more than half the primary schools had links or contacts with local business, and nearly a third had arranged for pupils to visit local businesses (DfE, 1993; DfEE, 1996). (Admittedly these comparisons rely on very different types of evidence, and may over-estimate the increase in industrial links during the 1980s.) However, the intense pressure on time created by the National Curriculum may now have squeezed out such activities in many schools; the cross-curricular themes concerning careers education and economic and industrial understanding (NCC, 1990a, 1990b) are not part of the statutory curriculum, and are less likely to be given priority. Similarly SCAA could only suggest that primary schools might fit careers education into some of the time 'freed-up' (1995: 1) by the Dearing Review of the National Curriculum (Dearing, 1994).

While pressure on time has undoubtedly been a major factor in limiting the ways in which work has been introduced into the taught curriculum, it is also evident that many teachers have been reluctant to introduce such ideas into primary classrooms. This can be related to the notions of development and of childhood discussed at the start of this chapter.

In 1971, Lawton, Campbell and Burkitt observed that little social science based work appeared to be going on in primary schools. They concluded that one reason for this was that some teachers underestimated what children are capable of understanding about society. This diagnosis accorded with that of Rogers (1968), an American educationalist who reviewed the state of teaching in the social subjects in British schools. He pointed out that while the Plowden Report (CACE, 1967) identified among its aims that education should help children to cope with social and economic change, critically examine their own society, and understand the nature of a democratic society, none of these areas were referred to

in the curriculum advice. He considered that a major reason for this omission was the dominance of Piaget in English educational thinking. Rogers believed that Piaget's findings about children's egocentricity and about the late development of formal thinking were responsible for suggestions (e.g. by McNaughton, 1966) that primary school children are not capable of considering alternative explanations, and that they make limited sense of material dealing with relationships between people. This perception, Rogers claimed, often resulted in 'overtly simplistic, intellectually undemanding studies emphasising the "concrete", and (therefore) the nearby' (1968: 40).

Another reason why primary teachers may be reluctant to include curriculum input about the world of work could result from what Alexander labelled 'the primary ideology' (1984: 15); the construction of childhood as the age of innocence during which children should be protected from the 'harmful and unpleasant aspects of the outside world' (King, 1978: 13). White related this to the long tradition of professional insularity which has made the primary classroom a 'cosy, inward-looking world, quite cut off from the complexities of politics' (1982: 203). Thus teachers are reluctant to raise socio-political issues with their pupils (Carrington and Troyna, 1988). Some teachers have interpreted calls for greater input about the world of work as suggestions that they should indoctrinate children with capitalist ideas (see earlier discussion). Others are reluctant to initiate discussion of controversial issues such as inequalities, profit, gender roles, and issues of class and status, though Ross (1988a) has argued that such issues can and should be raised in primary schools.

When content about work has been introduced to young children, it frequently reflects both notions of egocentricity and of 'cosiness' by focusing on 'people that help us'. Workers such as police officers, school crossing attendants, doctors, nurses and fire-fighters are presented in an altruistic light, and their roles are seen only in relation to the children. The fact that they are working, and being paid, is not generally touched on.

A further reason advanced for reluctance to introduce work into the primary curriculum was that many teachers felt that they lacked the necessary knowledge

and skills; few primary teachers have had training in the social sciences, and very few have any industrial experience on which to draw (Jamieson, 1984); the introduction of the Teacher Placement Service in 1988 offering teachers the opportunity to carry out a placement in industry was intended to remedy this (Cathcart and Esland, 1989).

The role of experience in teaching about work

In much of the curriculum advice offered, schools have been encouraged to adopt an experiential approach, including workplace visits, visits from industrial workers and managers to schools, mini-enterprises and simulations (Ross and Smith, 1985; Ross and Hutchings, 1987). Smith pointed out that:

Learning through experience has been one of the central tenets of schools-industry work; the School Curriculum Industry Partnership, for instance, made this one of its key principles from the very beginning. (1988: 11)

Such an experiential approach fitted in well with traditions of primary teaching in this country: the 1931 Hadow Report insisted that the curriculum 'should be seen in terms of activity and experience, rather than of knowledge to be acquired and facts to be stored' (Consultative Committee of the Board of Education, 1931: 75). This emphasis on provision of experience has been a continuing theme: *Curriculum Guidance 4: Education for Economic and Industrial Understanding* states that:

Pupils in all Key Stages should visit and investigate industries and other places of work ... have opportunities to talk and work with adults from industry and the community ... [and take part] in small-scale business and community enterprise projects... (NCC, 1990b: 6)

The value of this experiential approach is frequently claimed in case studies of classroom practice. Teachers have drawn attention to the value of experience in creating enthusiasm (e.g. Benfield, 1988) and motivating children (e.g. Fitzpatrick, 1988), though Ross (1990a) pointed out that some, worryingly, tend to assume that if the children have enjoyed themselves then learning *must* have

taken place, and Atherton *et al.* (1992) question that assumption that economic and industrial understanding necessarily develops by spending time in an industrial context. At a more analytical level, some case studies show how shared experience creates opportunities for discussion and interaction between children, which may lead to increased knowledge and understanding (e.g. Ross, 1983).

Ross (1990b, 1992b) has examined the effects of providing specific experiences. He investigated the understandings of hierarchy and of capital of children in classes which had visited different workplaces. In his analysis of hierarchy, in which he related understanding to age, sex and verbal reasoning score as well as to school class (and thus the particular experience of workplaces offered during the project), he concluded that:

One of the most important factors affecting children's development in this conceptual area seems clearly to be the kinds of experience they have of industrial and commercial life. (1990b: 139)

He considered that the characteristics of the workplaces visited (such as size, and role or status differentiation) were significant for the children's perceptions, and suggested that educators should therefore aim for children to visit a wide range of workplaces, chosen at least in part for their different organisational characteristics.

A further reason for an experiential approach is that this offers the best potential for developing critical awareness of work arrangements. Ross (1988a) argued that listening to the range of views put forward by workers, trades unionists and management would preclude the possibility of indoctrination with any single view.

However, school visits increasingly have to justify their value, in terms of both time, in an increasingly crowded curriculum, and money. Comparisons with economics education programs in the United States show that the British emphasis on provision of experience in this area is not a universal approach (Ahier, 1992). The American approach often focuses on 'instruction'; a frequent starting point being a definition of the concept by the teacher which is then elaborated through examples (e.g. Laughlin and Odorzynski, 1992; Reinke, 1992;

Schug and Lephardt, 1992). Such approaches may draw on children's out-of-school experiences; Fox (1978) pointed out that all children bring to school an 'economic knapsack' of attitudes and unprocessed direct experience of various economic activities including work.

Blyth (1984a) argued that in planning the provision of experience in school, educators have frequently ignored the duration and range of children's experience outside the school. Such experience has also been largely ignored by education researchers; it is sociologists and anthropologists, he pointed out, who have contributed most to investigating it. However, he argued that it is important for teachers to know about such experience, and to take it into account in their curriculum planning. It is only in this way that schools can provide experiences which enable children to learn. At the beginning of this chapter I discussed the constraints which limit children's experience of work in industrialised societies. I will now move on to consider the range of ways in which children *are* able to experience work.

Children's experience of work

Experience can be categorised in a number of different ways depending on its immediacy: those which are most immediate are labelled as personal, direct, first-hand or concrete; those which are less immediate are referred to as indirect, second-hand or vicarious. Participating in an event would be a first-hand or direct experience; being told about it would be second-hand or indirect. However, observing an event is sometimes referred to as direct and sometimes as indirect. 'Vicarious' is used to describe that which is not experienced personally but is imagined through the experience of others, usually when this is presented in a particularly vivid way in talk, on television, in books, or when the observer is present at the event. These words draw attention to important differences, but do not make sufficiently clear the precise nature and quality of experiences, and therefore can add to confusion. Moreover, as Stainton Rogers and Stainton Rogers (1992) point out, even those things which we have experienced at first hand, such

as our own childhood, are available to us only as stories: stories we tell ourselves; stories others tell us; and stories related to artefacts such as photographs.

One way in which children experience work is through their own participation in school and household work (Butorac, 1988, 1989). Both Gannaway (1976) and Burris (1976) have found that pupils think about school work and job work in comparable terms, and see similarities between schools and adult workplaces. Children may also participate in adult occupational work, often in family businesses, or helping with a particular task. However, in the West their experience will be very different from that of the worker; generally they are not economically dependent on any payment and do not have to work all day and every day.

Another way in which children could be said to 'participate' in occupational work is in play. While acting out the roles of adults at work, children can be said to be cognitively reconstructing and thus augmenting their understanding of the adult world (James, 1993). However, the experience of playing also pertains to the issues and concerns of the child's own social world, such as relationships and power (Walkerdine, 1981).

Children can also experience work through observing others. The range of occupations which are 'visible' is somewhat limited (to jobs such as police officers, doctors, shop workers, teachers, builders), and observation in workplaces may add little to understanding, since much work is technologically complex, or is so fragmented that only a small part of the process can be seen. The difficulty of making sense of what is observed is demonstrated in adults' accounts of childhood visits to parents' workplaces:

I remember visiting my father's workplace, at the Post Office, and from what I saw during these visits, his job entailed him simply walking around what seemed to me a very large building, and talking to his friends. (CR)

The visits to my parents' workplaces were entertaining but did not clear up my confusion; if anything they added to it. My mother's office ... was quite nicely decorated with desks and chairs, filing cabinets, coat rails, adding machines (which provided me with hours of

amusement) and an internal telephone system. My sister and I sat and talked to each other. (SI)

(quoted in Hutchings, 1988: 7)

The idea that observation offers direct and unmediated access to the world 'is so taken for granted, and so fundamental to scientists' understanding of their current practice, that it is difficult to resist viewing it as self-evident' (Potter 1996: 20). However, as Collier points out, empiricism's view of observation is inadequate in that it fails to recognise that 'experience is determined not just by what is there, but by what we have already learnt' (1994: 72), and it fails to take account of the relationship between language and what we see. Collier argues that we generally distinguish between different categories only when we can label them. Talk plays a crucial role in making sense of situations we observe. Parke (1993) discusses the role of language in children's economic experience in relation to the supermarket, which he argues is a strange language phenomenon in that language is not really necessary for customers to cope with it. Children visiting a supermarket get no linguistic insight into the economic concepts which are used by retailers. Words such as supply and demand, competition and overheads, used by retailers in a very specific sense which is different from the normal everyday meaning, are not made available to children. In the supermarket the child may notice many things, but it is language which offers 'the tools with which to bring past experience under control' (1993: 36).

Children may also gain experience of work through the media. There is evidence that general knowledge is acquired from television (Noble, 1963; Cullingford, 1984; Messenger Davies, 1989). Jundin (1983, described by Lea *et al.*, 1987) found that Swedish children who watched television the most and who read more newspapers had the most extensive economic knowledge. Ross (1992b) interviewed two children who claimed television was the source of their ideas about capital; referring to loan sharks in *Dynasty* and to starting up a shop in *EastEnders*. DeFleur and DeFleur (1967) found that while children had the greatest knowledge of those occupations they would have encountered in the community, they also had considerable knowledge of occupations which had

probably only been seen on television; however, this knowledge reflected the stereotyped portrayal (DeFleur, 1964). Content analysis of American television programmes shows that certain occupations are over-represented (e.g. police, lawyers) and others under-represented (e.g. clerical and sales workers); work is not portrayed as difficult or time-consuming, but rather as a source of status, respect and success (Signorielli, 1993). Children's books, like television programmes, have often presented stereotyped images of work, over-representing male and professional workers, and under-representing employed mothers (Stefflre, 1969; Britton, 1973; Zimet, 1976).

While the media undoubtedly provide a considerable amount of occupational information (both factual and fictional), the ways in which children perceive and draw on this information are not uniform, and may be strongly related to the specific context in which they watch the programme or read the book, and in particular to interaction with other viewers and readers. Durkin (1985), reporting on a wide range of research concerning television and sex role stereotyping (including occupational sex roles), found that while stereotyped images were frequently presented, there was no simple relationship between amount of television watched and degree of sex-role stereotyping. He explained this by pointing out that programmes are not uniform in their messages, and therefore children who watch more undoubtedly get more varied messages. However, he also reported on research which indicated that the programme content may be less important than the social context of watching, whether this was at home or at school (e.g. Messaris and Seratt, 1981; McLeod *et al.*, 1982). Children who watched counter-stereotyped programmes in a group and then discussed them with a teacher were more likely to change their views than those who watched at school or at home without any discussion (Johnston and Ettema, 1982). Signorielli (1993) found that high television viewers were significantly more likely to want jobs with high prestige and pay but little work.

It is evident that talk plays an important role in making sense of what is observed. However, talk about work may make little sense to children if they are not also able to observe. Parke suggests that children's vocabulary is a three-part

system: words whose meanings are known; words whose meanings are not known or only partially known; and meanings whose words are not known. In the supermarket it may be that the child has some inklings of meanings but does not have the vocabulary to express them; however, when parents talk about their occupational work at home, in some cases children may not know the meanings of the words their parents use, and so the talk may wash over their heads.

Summary

It has been suggested that the hidden curriculum contributes to the reproduction of inequality. It is less clear what the effect of economic and careers elements in the taught curriculum might be, since their inclusion has been supported both by those who wish to empower children by offering them wider perspectives on work and a more critical view of work arrangements, and by those who wish to promote the capitalist economy with its hierarchy of occupations. Curriculum input concerning adult work has generally involved an experiential approach; this can be seen as particularly important in developing children's critical awareness, and avoiding indoctrination. However, little is known about children's out-of-school experiences of adult work. Moreover, the relationship between experience and understanding gained is a complex one. The implication is that it is not enough to investigate children's experiences; it is also necessary to know how experiences contribute to the construction of understanding. However, research into children's understanding of the economic and social world has generally paid little attention to their experiences. I suggest that this is because such research, whether conducted by developmental psychologists (e.g. Furth, 1980; Berti and Bombi, 1988) or by sociologists (e.g. Burris, 1976) has generally used a developmental framework. This framework, and the reasons why it has resulted in such a limited analysis of experience, will be the focus of the next chapter.

CHAPTER 2

Developmental views of children's understanding of work

Developmentalism has been central to the majority of research into children's understanding of adult work. In this chapter I examine the characteristics of such research, review the ways in which it has considered children's experience, and identify conceptual and moral /political problems which are implicit in this approach.

Morss defines developmentalism as 'the production of, and reliance on, explanatory statements concerning general regulation of natural changes in the human life-span' (1996: 51). Such change is seen as uni-directional, and generally involves the notion that adult thinking is more rational and complex than that of children. This is not seen simply as an accumulation of knowledge, but rather as a fundamental change in the quality of thinking:

Development, as distinct from learning, ... is not a question of knowing and remembering, from less to more, but of knowing and understanding differently. (Furth, 1980: 11)

Development is thus towards a particular goal, logical abstract thought, though not everyone will reach this goal. As I indicated in the previous chapter, the notion of rational citizens who conform because of their level of development was central to the nineteenth century ideal of democratic government (Walkerdine, 1993). The masses presented a threat with their lower, and unreasoning, level of development and therefore had to be educated to reach the stage of rationality. Primitive peoples presented a similar threat; the development of the species was seen in the same terms as development of the individual.

Developmental theorists assume that there are general laws governing the natural process of developmental change, and that these can be discovered

through research (Karmiloff-Smith, 1992). The notion that all children pass through a series of identifiable and fixed stages in their thinking and behaviour is a strong form of the developmental thesis associated particularly with the work of Jean Piaget. This has been adopted in the majority of studies of children's ideas about work; researchers have aimed to identify stages of development and changes in the quality of children's thinking at different ages.

Only a handful of studies have focused entirely on children's knowledge and understanding of work: Goldstein and Oldham (1979); Shields and Duveen (1983); Dahlberg *et al.* (1987); and Roberts and Dolan (1989). Career theorists have considered the development of children's ideas about their own future occupations (e.g. Ginzberg *et al.*, 1951; Ginzberg, 1972 ; Super *et al.*, 1957; Super, 1957, 1963; Havighurst, 1964; Gottfredson, 1981); these studies make only limited comments about children below the age of eleven. In addition a few researchers have focused on particular aspects of work, and while taking a broadly developmental view, have had other central concerns: the ways in which ideas are passed on in families (e.g. Goodnow and Burns, 1985; Warton and Goodnow, 1991); the socially generated code through which children share ideas about work (Butorac, 1988, 1989). Such studies are discussed in the relevant data chapters.

While only a few studies focus entirely on understanding of adult work, many broader studies of children's economic understanding include some aspects of work. First, there are those which examine children's conceptions of various aspects of the network of economic relations determined by the exchange of goods, money and work (e.g. Strauss, 1952; Danziger, 1958; Sutton, 1962; Jahoda, 1979, 1981, 1983, 1984a, 1984b; Furth, Baur and Smith 1976, Furth, 1978, 1979, 1980; Burris, 1976, 1983; Berti and Bombi, 1981, 1988; Berti, Bombi and Lis, 1982; Berti, Bombi and De Beni, 1986a, 1986b; Leiser, 1983; Schug, 1983, 1987, 1990; Schug and Birkey, 1985; Schug and Lephardt, 1992; Linton, 1990; Takahashi and Hatano, 1994). A second group examine children's ideas about social and occupational stratification (e.g. Danziger, 1958; Jahoda, 1959; Burris, 1976, 1983; Connell, 1977; Baldus and Tribe, 1978; Siegal, 1981;

Leahy, 1981, 1983; Emler and Dickinson, 1985; Burgard, Cheyne and Jahoda, 1989; Dickinson, 1990). Both groups include investigations of some aspects of children's constructions of adult work, even where this was not their principal focus. Emler (1995) and Bowes and Goodnow (1996) have reviewed research into children's understanding of work, while reviews of the whole range of research into children's economic understanding are provided by Stacey (1982); Furnham (1986); Lea, Tarpy and Webley (1987); Berti and Bombi (1988); Meadows (1993); and Lewis, Webley and Furnham (1995).

This chapter is divided into two sections: the first critically reviews the main characteristics of developmental research into children's social and economic thinking, and considers some areas of debate between theorists in this field; the second categorises and discusses the ways in which children's experience has been considered in developmental studies.

Developmental research concerning children's constructions of adult work

As I indicated above, the majority of research into the development of children's ideas about the economic and industrial world has drawn on the work of Jean Piaget. Some researchers explicitly relate their methods and findings to his (e.g. Furth, 1980; Berti and Bombi, 1988). Others use his theory as a starting point but claim that understanding of social systems does not parallel that of physical systems (e.g. Jahoda, 1984a); that their findings differ from his in terms of the stages identified (e.g. Danziger, 1958); or that the role of social experience is greater than Piaget assumed (e.g. Burris, 1976, 1983). A third group of researchers, while taking a developmental approach, explicitly distance themselves from Piaget's ideas and frame their research questions around experiential differences between groups of children (e.g. Emler and Dickinson, 1985; Dahlberg *et al.*, 1987). A fourth group consists of the career theorists, who adopt a developmental approach but do not explicitly refer to Piaget's theory.

In this section I will show how the Piagetian framework has been used in studies of children's social and economic development. I discuss this in relation to the epistemic subject; causes of development; understanding of the social world; emphasis on the structure of thought; stages of development leading to an adult level; and the emphasis on 'normality'. Areas of debate among theorists concerning each of these are identified. These have arisen in part from disagreements over the interpretation of Piaget's own work. He wrote a great deal over a long period, and while his ideas did not change radically, there were considerable changes in emphasis. Moreover, Piaget's prose style is daunting, and 'it is often hard to be sure just what claim he is making' (Boden, 1979: 24); thus some aspects of his theory are open to a wide range of interpretations (Furth, 1978).

The epistemic subject

Piaget's main concern was to describe the universal course of development in what he termed the 'epistemic' subject (Boden, 1979). 'For Piaget, the individual subject is an exemplar, the typical representation of the species' (Venn and Walkerdine, 1978: 79). Thus he did not attempt to analyse differences between individuals which might be seen to result from differences in experience. Similarly, research into the development of children's social and economic ideas has not been concerned with individual differences, though some attention has been paid to group differences in an attempt to identify those aspects of the environment which may speed up development. Studies with this concern will be discussed later in this chapter, in relation to children's experience.

The causes of development

Piaget identified four factors involved in mental development: organic growth and maturation of the nervous and endocrine systems; an internal mechanism of equilibration; physical and logico-mathematical experience acquired in actions upon objects; and social interaction and transmission; all four factors are

necessary for development and no single one would be adequate on its own (Piaget and Inhelder, 1966/1969).

Theorists drawing on Piaget's ideas have debated the relative importance of maturation and experience. For example, Isaacs (1930) considered that Piaget's theory placed too much emphasis on maturation, while both Donaldson (1978) and Turiel (1983) asserted that the theory is not maturational because development results entirely from interaction between the child and the environment in which the child actively constructs meaning. However, they both note that the development of the nervous system opens up, or limits, new possibilities. Thus similar experiences would influence children at different stages in different ways. Furth (1980) has explained his view by using a metaphor: the sun, soil, water and temperature all affect the growth of a plant, but it is the biological structure that determines which plant grows.

A second area of debate has related to the role of social interaction. Piaget's main interest was in the development of thought which resulted from physical and logico-mathematical experience, or action upon objects in the world. In his earlier work he saw social interaction as an intrusion which muddled the picture of the child's own original thinking and attempted to distinguish the child's original convictions from all previous adult influences such as parents and the interviewer (Piaget, 1926/1929); however, in later writings he included social interaction and transmission among the factors involved in mental development (Piaget and Inhelder, 1966/1969). He considered that exchange of views could speed up development in older children, but younger children's talk was seen as too egocentric for real communication to take place (Piaget, 1923/1926; 1964/1967). However, it is widely considered that he underestimated the importance of the social dimension in the construction of knowledge (e.g. Donaldson, 1978; Tizard and Hughes, 1984; Wood, 1988; Schaffer, 1989; Meadows, 1993).

Piaget's neglect of the social arose from his contention that language reflects or represents thought, and does not contribute to development (1923/1926). Many subsequent theorists have instead followed Vygotsky (1934/1986), believing that 'language ... structures and directs the processes of thinking and concept

formation' (Wood, 1988: 29); in this view social interaction must play a much more significant role in development.

Piagetian theorists investigating children's economic and social understanding have taken up Piaget's ideas about physical and social experience in various ways. Furth (1980) indicated that his interest, like that of Piaget, was in the child's original convictions; comments in which children repeated what they had heard other people say were considered of no interest unless the idea had become a part of the child's overall understanding, in which case it became a 'spontaneous conviction' rather than simply a 'verbal memory'. In contrast, Berti and Bombi claimed that they were extending Piaget's theory by considering those experiences that are verbally mediated:

the greater part of the information available to children about work, the means of production, or buying and selling comes through adults' conversation and the mass media. (1988: 5)

However, in much of their analysis they seem to lose sight of the importance of social interaction. For example, in discussing the understanding of production of children living in contrasting economic environments, they refer only to the possibilities for the children to *observe* production processes. (This investigation will be discussed in detail later in this chapter.)

One aspect of social interaction which has been of concern to Piagetian theorists in this area is the interview itself: Furth (1980), Jahoda (1979, 1981), and Ng (1983) all commented that at times children appear to construct understanding during the research interview. While it was acknowledged that the interview acted as a stimulus, the construction of understanding was considered to be a thought process within the individual child which was reflected in their spoken words.

Can Piaget's ideas be applied to understanding of the social world?

Since Piaget's theory is set out and elaborated mainly in terms of the development of physical and logico-mathematical thought, researchers investigating the

development of children's social and economic understanding have had to make a leap; the majority of them are explicit in their attempts to find out whether development in these areas runs parallel with understanding of the physical world. Piaget himself asserted that 'the reaction of intelligence ... to the social environment is exactly parallel to its reaction to the physical environment' (1947/1963: 60); however, he made very limited investigations of children's thinking in this area.

Some researchers have concluded that learning about the social world is less effective and lags behind learning about the physical world. For example, Furth, Baur and Smith (1976) considered that social institutions are not manipulable (like physical objects), and are abstract entities which can only be fully grasped through thought; they argue that it is not until age eleven or twelve that children have societal ideas of the coherence and systematic quality which Piaget describes for the stage of concrete operations. Berti and Bombi suggested that in making sense of all information received through talk, children may not be 'in a position to use the most advanced instruments of their intelligence' (1988: 6). However, Piaget asserted that:

the activities of the subject acting on objects, and the activities of subjects when they interact with each other are reducible in reality to one and the same overarching system, in which the social aspect and the logical aspect are inseparable, both in form and content.
(1950/1995: 88)

He claimed that individual mental operations are identical with social co-operations (Piaget, 1945/1995, 1950/1995; DeVries, 1997).

Others have argued that understanding of the social world develops earlier than that of the physical world: Dahlberg *et al.* (1987) pointed out that children have immediate concrete experience of the social world from an early age and social understanding need not await the capacity for abstract reasoning; Hoffman (1981) suggested that the interactional context between people compensates for human complexity, and that empathy plays a role; Dunn (1988) attributed early social understanding to self-concern, affective experience and contribution to

social discourse; and Glick (1978) argued that social cognition was not based on logic, but rather on probability, shared belief systems, cultural stereotypes and scripts.

The dichotomy suggested above between the social and physical worlds is perhaps too simplistic; Jahoda (1979) proposed that we need to distinguish between social relations (persons and their interactions) and social institutions, which constitute systems. Whereas social relations may present greater challenges to the learner, he argued that there are logical structures underlying social institutions or systems which parallel those of physical systems. In a later paper (1984a), Jahoda developed these ideas asserting that there are two elements involved in understanding social systems: the first is general information about the social world (such as the existence of factories); the second is a knowledge of the rules and norms which regulate relationships within social systems. He argued that while general information is picked up casually from adult conversations and the media, rules and norms are usually implicit, and are not generally articulated except in conflict situations. Lacking knowledge of these rules, children tend to apply the rules and norms which apply to social relationships at home and at school, and this is what leads children to develop misconceptions. Jahoda suggested that this shift from personal to societal orientation may well be a fundamental difference between thinking in the socio-economic and logico-mathematical spheres. Therefore it makes little sense to look for parallels in the way in which children develop understanding in each of these areas, or to label children's responses in terms of Piagetian stages (1984b).

Another possible difference between understanding physical systems and social systems lies in the availability of experience. Whereas it is usually assumed that direct experience of physical systems is widely available, Berti and Bombi pointed out that 'macro-social events ... enter in only a sporadic and fragmentary way the range of social reality which it is possible for children to experience directly' (1988: 5). However, Jahoda (1979) argued that necessary information about physical systems is not always available either, and that theorising on the basis of partial information is common to both social and physical cognition.

Moreover, even when information about physical systems is available, it has been shown that both children and adults fundamentally misconstrue what they see (Driver, 1963; Osborne and Freyberg, 1985).

Emphasis on the structure rather than content of thought

A characteristic of Piagetian cognitive developmentalism is an emphasis on *how* children think rather than *what* they think: 'the content of thought is accorded less attention than its generalisable structure' (Burman, 1994: 154). Piaget's main interest was in the process by which experience is assimilated into existing structures and by which these structures are adjusted to accommodate the new ideas.

Following Piaget's lead, many of the studies of children's social and economic thinking have focused on the structure (sometimes referred to as the framework) of thought (Dahlberg *et al.*, 1987). For example, Furth (1980) stated:

The word 'thinking' has been used deliberately rather than 'knowing' to make clear the direction of this investigation. In this study the concern is with the general theoretical framework that children use in making sense of societal events, rather than with particular information that they may or may not have about particular societal content ... the study is not looking for known and remembered information, but at the theoretical framework by which information is taken in and becomes part of a meaningful whole. (1980: 4)

Furth argued that environmental experience is important in providing the raw material from which understanding can be built, but saw children's thinking and behaviour as 'primarily a product of their developing minds' (1980: 10). He drew on the analogy of a child learning to speak; the child's specific environmental experience is crucial in determining which language will be spoken (the content), but it is less obvious why the child acquires the mastery of any language at all (the framework). His research interest was in how children develop the framework of thought about the social world. He saw this as an interpretive system which allowed children to link, and thus make sense of, the different social and economic events they experienced; the example of such a framework he set out is of understanding the flow of goods and money in the various

transactions centred around a shop. It is not entirely clear why this is assumed to be a part of the framework of thought rather than the content; exchange through shops is not universal to all cultures, and it is not easy to see how this parallels his analogy of language learning. Nor is it clear why Furth assumed that this understanding resulted from the development of more logical thinking and resolution of cognitive conflicts; it is surely equally plausible to assume that it might be the product of specific experience (e.g. as a shopkeeper's daughter) or of social interaction between adults and children.

When researchers have chosen to focus on the content of thought, they have had to distance themselves from the ideas of Piaget (e.g. Emler and Dickinson, 1985; Dahlberg *et al.*, 1987). Emler and Dickinson argued that:

Cognitive-developmental principles can tell us something about the sequence in which children acquire knowledge, but not everything about the particular knowledge they will acquire. This also depends on its currency and availability in their various social milieux. (1985: 197)

They therefore used Moscovici's (1984) notion of 'social representations', arguing that knowledge is socially generated and sustained. Berti and Bombi (1988) criticised this study, arguing that Emler and Dickinson had not correctly understood the interactionist perspective, in that the problem is not to discover which information children assimilate, but to identify 'the processes through which children assimilate the information which is dominant widespread and important within their community' (1988: 22).

Stages of development

The identification of stages of development is one of the most influential aspects of Piaget's theory; at each stage the structure of children's thinking is distinctive, and transition to a new stage marks a fundamental reorganisation of structures of thinking. In Piaget's earlier work he saw the transitions from one stage to another as short sharp periods of disequilibrium; subsequent theorists have suggested that the transition from one stage to another is longer than Piaget suggested, making

each stage less discrete, and Piaget himself described less step-like stages in his later work (Meadows, 1986, 1993).

Piagetian studies of children's economic understanding have followed Piaget in identifying stages. Researchers have generally categorised children's responses to questions asked in interview; these categories of response are then seen as levels of development within that particular concept. Thus, in discussing the example below, Burris argued that the distribution of responses 'suggests a possible developmental sequence from the first type of explanation to the second to the third' (1976: 194).

Children's explanations of why some people get paid more money than others for their jobs:

<i>Type of response</i>	<i>% giving response</i>	
	2nd grade	5th grade
Work more or harder	84.6	63.4
More important, functional or helpful work	15.4	36.7
More training or education required	0.0	16.7
TOTAL	N=26	N=30

* Excludes 'don't know' responses. Column totals exceed 100% because of multiple responses.

(Burris, 1976: 192)

Some writers have then attempted a synthesis of the levels identified within the various economic concepts to produce generalised levels, which have in some cases been equated to Piagetian stages of development (e.g. Berti and Bombi, 1988). Burris claimed that his findings indicate that there are discrete stages in children's representations; these 'generally satisfy the basic criteria which Piaget has used for identifying stages in other areas of cognitive development' (1976: 268).

The stages are said to represent qualitative changes in thinking; however, it is not always easy to see what is meant by this claim, and theorists are rarely explicit on this point. For example, Furth saw qualitative difference as something which is recognisable, but need not be systematically analysed, saying: 'there is as little point to expect an experimental proof on this score, as, say, on the difference between the music of Bach and Chopin' (1980: 76).

One difficulty with the stage model is that it involves an assumption that development proceeds evenly in all concepts; Meadows points out that in studies of children's economic understanding 'data about the uniformity of "stage" across different concepts or the separation of "stage"' are not usually conclusive, and are often simply not presented' (1993: 141). Holroyd (1990), reviewing a number of Piagetian studies of economic understanding, concluded that this lack of uniformity demonstrates that experience, rather than maturation, is the major factor in development.

The problematic nature of identifying stages becomes apparent in the descriptions of criteria used to define them. Furth set out specific, as well as general, criteria for each stage he identified. The general criteria 'state global characteristics of children's societal thinking' (1980: 48) while the specific criteria are framed in terms of understanding of transactions in a shop, which, as I have indicated, Furth used to represent the framework or structure of thinking in this area. Criteria for the first stage are given below:

Stage I: Personalistic elaborations and absence of interpretive system

General criteria: Children fail to recognise the basic functions of money and confuse personal and societal roles, neither of which they understand. In contact with societal events they either do not see a need for explanation of what they observe, or, when they do, they associate personal experiences in playful elaborations, largely unconstrained by logical or functional exigencies. The dominant context in which they think about social events, personal or societal, is their own psychological reactions.

Specific criterion: Money is freely available. Money transactions are a simple exchange of money or an empty ritual without precise meaning. Change received after payment for goods is considered a primary source for obtaining money. (Furth, 1980: 49)

While the specific criteria enable a child to be placed in a particular stage, it is still possible to imagine a child who has a good understanding of shop transactions, but whose understanding in other areas is less advanced. Lea *et al.* (1987) suggested that Harris and Heelas's (1979) theory of 'local constructivism' may be useful in this context; this envisages the child 'working simultaneously in a number of relatively autonomous cognitive valleys' (1987: 219). Progress within each of these, Harris and Heelas argue, has a stage-like character, but there is little communication between valleys.

A further problem with the identification of stages of economic understanding is that in every study these have been arrived at through a cross-sectional approach; there is no evidence that every child will pass through each stage in turn as s/he develops towards a mature understanding (which is the basis of Piaget's stages). While the various studies have arrived at broadly consistent sequences of explanation of economic phenomena (Berti and Bombi, 1988), the number of stages identified shows considerable variation (Lewis *et al.*, 1995). Webley (1983) suggested that this broadly consistent result may be because similar questions and procedures were used in each study (though Stacey, 1983, disagreed with this interpretation, arguing that the research had taken place in different countries and had used a variety of methods). Lea *et al.* (1989) argued that researchers have found similarities between development in economic thinking and other aspects of children's thought because that is what they were looking for.

The notion of stages based on intellectual development has also been used by career theorists. Ginzberg *et al.* (1951) identified three stages: the latency or fantasy period in which the child is unable to assess either capacities or opportunities and limitations of reality; the tentative period, in which the child recognises in turn interests, capacities and values; and the realistic period in which the young person recognises that a compromise must be reached between aspirations and opportunities available. Children up to age eleven were considered

to be in the fantasy stage; however, very few children in this age group were interviewed.

Development towards an 'adult' level of thought

Progression through Piagetian stages involves development towards the achievement of mature, rational thought (Wood, 1988). This idea has been contested: young children have been shown to be more logical thinkers than Piaget suggested, and adults to be less logical (e.g. by Donaldson, 1978).

Meadows suggests that:

perhaps here Piaget was using himself as a prototype and forgetting that the rest of us are, probably, sloppier thinkers, content with localised understanding, not pushing its limits outwards, and quite capable of believing contradictory things? (1993: 201)

Just as Piaget envisaged formal operations as the highest, and adult, stage of thought, Piagetian theorists investigating children's economic and social understanding assume progression through stages to reach a level of understanding which is variously described in terms of classical economics (e.g. Linton, 1990), or the ideas of non-specialist adults (e.g. Berti and Bombi, 1988).

The use of classical economics has the advantage that it incorporates the notion of rationality, and thus is clearly related to other goals of development. However, the economic behaviour of individual adults does not generally conform to the economists' model. Rational Economic Man would behave in such a way as to maximise individual income (Lea *et al.*, 1987), but in reality people do not do this: they may compartmentalise their finances, using different accounts for different purposes, and not transferring money to keep them all in credit (Lewis *et al.*, 1995), or may be motivated by moral values and not simply by self-interest (Etzioni, 1988). Webley (1983) questioned this use of the economists' view as a 'correct' one when considering children's ideas, arguing that money is not simply an economic concept, but has a wide range of connotations. Similarly Blyth, commenting on the Basic Economics Test (Walstad and Robson, 1990; Walstad, 1992), pointed out that the classical model of perfect competition which

it embodies is that of 'the pure case of any subject' (1992: 194), whereas in reality we meet only impure cases; the real world does not function in the same way as the economists' model. This is why comparison of children's responses with those suggested by classical economics has resulted in some bizarre interpretations. For example, Linton asked children: 'If I wanted to buy a suede coat more cheaply, would I be better to buy it in the winter or summer?' (1990: 89). This was designed to test understanding of supply and demand; the 'correct' answer was that suede coats would be cheaper in summer because the demand would be less and therefore the price would fall. However, in reality prices of winter clothing are reduced in the January sales to dispose of stock.

Berti and Bombi explicitly rejected the notion of using classical economics as the adult stage:

Our research ... is concerned with the ideas of young children, so we have generally taken the common sense of adults rather than scientific economics as our reference point. We propose to demonstrate how the child comes to possess the ideas which non-specialist adults hold about various facts relevant to economics ... or about those aspects of social organisations which it is necessary to understand in order at least to 'place' economic phenomena ... (1988: 25)

However, they did not indicate what these ideas are or say how they identified them. Possibly they are referring to their own ideas, but one could question whether most adults have the same economic ideas as professors of psychology. Furnham and Lewis (1986) queried whether most adults do in fact have a reasonably comprehensive and thorough economic understanding.

Furth attempted to be more explicit about his notion of an adult level of thinking. He suggested that adults have an 'adequate framework' (1980: 4) for making sense of societal events, and listed twelve statements which he says seem true to any adult in this society; for example:

Acquiring a societal role, such as an occupation, implies a constellation of various societal and personal prerequisites.

Not all societal customs are law, nor are personal morality and societal law synonymous.

Two principal ways of acquiring money are paid work and buying and selling. (1980: 4-5)

Furth explained:

Naturally these statements are not known to adults in an explicit manner, nor is it likely that they would be listed even after some effort and reflection. But what is important for consideration is that the adult's acting, thinking and talking on everyday societal issues is in accordance with these statements. (1980: 5)

He asserted that five to six year old children do not hold any of the conceptions he listed, believing instead, for example, that societal roles are achieved through the personal wish of the individual; that events happen according to known rules; and that money is freely available. 'Development' occurs when childish conceptions give way to an understanding of the adult statements.

All these theorists appear to see children as proceeding up a single ladder of understanding to an 'adult' level. However, it is at least possible that adults do not all arrive at the same understandings of the social and economic world, since experience is so varied. This is the point on which Dahlberg *et al.* (1987) depart from the mainstream developmental view. While they accepted some themes of the developmental approach (that there is development in children's capacity for making abstractions from the immediate concrete setting, and for handling more and increasingly complex information), they rejected the idea that there is a 'correct' adult view of social relations. Thus they did not accept the notion of a single course of development in which some children or groups have less developed understanding than others.

The notion of an 'adult' level of economic understanding is somewhat ironic when historically the notion of development went hand in hand with a reconceptualisation of childhood which removed children from work and placed them in the protected setting of education which would lead them to rationality (Walkerdine, 1993; see also Chapter 1). In this view, the child who engages in economic activity is inevitably seen as less rational and less developed than the child who attends school, plays, and learns to be rational. However, it seems self-evident that those who engage in economic activity are likely to develop greater economic skill and understanding than those who attend school. For example,

street children in Brazil carry out calculations to ensure a profit as a matter of economic necessity (Carraher, Carraher and Schliemann, 1985; Walkerdine 1993, 1994). Similarly, in this country a higher proportion of working class children (seen as less rational and less developed than their middle class counterparts) work illegally when they are under the statutory age (Walkerdine, 1993). But by setting up an adult level of economic understanding as the pinnacle of development, theorists have set themselves a problem. How can they explain the more advanced understanding of groups which developmental theory has generally seen as reaching a lower level? This question has generally been avoided, and one way in which this has been done is through an emphasis on norms and 'normality'.

Emphasis on norms and 'normality'

Developmental psychology tends to emphasise what Ingleby called 'spurious norms of development' (1986: 299), including 'the child' and 'the family'. Burman (1994) shows how this emphasis is used to pathologise all those who do not fit the 'correct' patterns, that is, single parent families, working mothers, minority cultural groups, and so on. Psychology has tended to take the behaviour of the white middle class man as a measure of 'normality'; the poor, women and non-Europeans are seen as deviant and abnormal (Venn, 1984). Thus, as Rose argued:

Normality is not an observation but a valuation. It contains not only a judgement about what is desirable, but an injunction as to a goal to be achieved. (1989: 131)

Venn pointed out that while 'psychological explanation attempts to account for deviations, it does not address the normality of the norm' (1984: 131). An example of this is that intelligence is defined as that which is measured in IQ tests, and normal intelligence is the mean score in such tests. In the same way the normal course of economic understanding is seen as being reflected in the responses given by the majority of children. However, this conceals the way in

which the norm has been very carefully constructed through the topics investigated, samples selected, questions asked, and analysis of data.

This has generally involved an emphasis on 'normal' work arrangements: that is, fathers are considered to be in paid employment, and mothers are housewives. Some theorists begin by identifying the characteristics of work; Burris (1976) made it clear that he is assessing children's ideas about work against the characteristics of labour in a modern capitalist society, which he identified as follows:

- labour is organised and directed under hierarchical relations of authority;
 - labour is complexly divided into specialised tasks which are stratified in terms of their relative value and status;
 - work roles are unlikely to express the personal needs or interests of the worker;
 - work is (at least partially) motivated by something extrinsic to itself, the payment of a wage;
 - work involves a greater degree of external coercion and a lesser degree of individual autonomy than leisure activities;
 - work is isolated from and opposed to other spheres of everyday life in which the worker feels more fully himself (leisure, family, private life).
- (extracts from Burris, 1976: 162-4)

Moreover, Burris argued that:

these characteristics of work are simply taken for granted by most adults as elementary 'facts of life'. Common sense dictates that one must have money to survive, that money is obtained by getting a job (i.e. by selling one's labour) and that jobs are by definition, at least minimally unpleasant and confining. (Burris, 1976: 164)

Thus he eliminates from consideration unemployment, housework, and voluntary work, and, and by his emphasis on wage labour, all forms of self-employment. This emphasis on full-time paid employment is reflected in many studies: it is only among adolescents that understanding of unemployment has been investigated (e.g. by Webley and Wrigley, 1983).

A second way in which the norm has been constructed is in the choice of sample: children whose family economic arrangements do not conform to an expected norm have often been explicitly omitted. For example, Dahlberg *et al.*

(1987) excluded children from one parent families and those who were not indigenous English speakers; such families were labelled 'atypical' by Tizard and Hughes (1984: 25). Berti and Bombi (1988), in their investigation of ideas about payment for work, used a middle class sample attending private school; Berti, Bombi and Lis (1982), investigating production, used a working class sample who all had fathers working at the Fiat factory and mothers who were housewives. If samples are selected to reflect 'normal' work arrangements, it is hardly surprising that the researchers find that these children develop an understanding of such arrangements. Moreover, many children who are economically active in this country have self-employed parents and work in family businesses; such children have often been ruled out by the criteria for sample selection. Similarly some career theorists have used limited samples: Ginzberg *et al.*'s theory was based almost entirely on investigation of career choices of middle class boys. Some supplementary investigations of girls and of lower class children were made, but it was recognised that future research should include 'such radically different groups as sons of farmers or of the economically and socially handicapped such as Negroes' (1951: 193).

The wording of some of the questions which have been asked implies that society is organised in certain ways. For example, Goldstein and Oldham (1979) asked 'how do people get jobs?'. The presupposition here is that adults are in paid employment. However, this will not accord with the experience of some children, for whom work may not involve getting a job, but rather, setting up a business, or cultivating land owned by the family. Similarly, the way the data has been analysed in many research projects privileges 'normal' responses; in Berti and Bombi's study of children's ideas about the source of money the highest level identified was 'money comes only from working' (1988: 64), yet for many children money is not related to jobs, but rather to collecting benefits from an office. Such children would be considered to have deficient understanding (as would those whose families have inherited wealth).

While this picture of society in which paid employment is the norm may have been more accurate in the nineteen fifties, it has considerable limitations in a

post-industrial society, ignoring both unemployment and the increasing variety of work arrangements. Pahl (1984) drew attention to the decrease in formal employment and increase in informal arrangements including self-provisioning and self-employment.

These various ways in which 'normality' has been emphasised all tend to militate against any consideration of the variety of experiences of work which children may have. The next section will review the ways in which experience has been analysed in developmental studies.

Children's experience in developmental studies

I have shown why followers of Piaget tend not to be concerned with experience: they claim that they are interested in the framework rather than the content of thought; and in the 'normal' course of development of the epistemic subject. However, as I have indicated, some researchers in this field have distanced themselves from Piaget's ideas. Thus a variety of approaches to experience can be identified:

- a) experience not seen as relevant;
- b) relevance of experience is inferred from a 'lag' in understanding certain concepts;
- c) relevance of experience is inferred from comparisons of level of understanding of groups of children differing in gender, social class, cultural background, or economic environment.

Each of these approaches is discussed in turn.

a) experience not seen as relevant

Furth's (1978, 1980) identification of a framework of thought which can be distinguished from its content has already been discussed. While environmental experiences were seen as indispensable in providing particular content, Furth's interest was in the framework, not the content. However, when discussing his data, he occasionally referred to the experiences children may have been drawing

on. His argument was that, in comparison with adults drawing on the same experiences, the children's thinking is qualitatively different. Thus he did not see experience as a factor in determining level of understanding. For example, a seven year old girl explained that the headmistress might have started the school by asking ten builders she had seen building another school to come and build one for her. Furth asserted that even if adults had no knowledge of the origins of the school, they would not refer to seeing and asking ten builders:

The children understand the question in a somewhat different sense and consequently their answers are due to a different understanding and not merely a knowing less or not enough, as may be the case with adults.
(1980: 76)

Linton (1990) examined the relative importance of cognitive growth and experiential learning in the development of children's understanding of supply and demand, profit, interest and income differentiation. He found that:

Children's experience if anything tended to impede rather than promote economic understanding, with eight year old children regarding the store's till as the terminal part of the process. (1990: 100)

Thus the older children's greater understanding was not 'a product of their greater experiential involvement' (1990:101) but rather resulted from cognitive development. However, Linton does not appear to have investigated children's experience.

Ajello *et al.* (1987) argued, like Linton, that everyday familiarity does not in itself constitute an advantage, and that the vividness of direct experience in some cases may make it more difficult to understand. They concluded that it is the cognitive complexity of certain concepts, rather than children's lack of experience, which limits understanding.

b) relevance of experience is inferred from a 'lag' in understanding certain concepts

In contrast with Ajello *et al.*, several researchers argue that the economic ideas which are generally understood earliest by children are those of which they have

had greater experience. For example, Danziger (1958) pointed out that children's understanding of exchange develops much earlier than understanding of production. He suggested that the lower level of understanding of production is due to the children's lack of first-hand experience in this area; they generally have more experience of shops which allows understanding of exchange to develop earlier. Similarly, Schug pointed out that ideas of value are slow to emerge in comparison to price and other concepts, and suggested that this variability might be attributable to 'general economic experience' (1983: 145); advanced reasoning about concepts that are within children's immediate concrete experience emerges earlier than about concepts that are more remote (Schug, 1987, 1990). He argued that this implies that young children's economic reasoning can be enhanced by provision of experiences such as workplace visits and classroom simulations of shop, bank or production line (Schug and Birkey, 1985). However, this idea is absent in later papers (1987, 1990), which emphasised that teachers should explain the difference between scientific ideas and the children's misconceptions; a more recent analysis of children's ideas about international trade (Schug and Lephardt, 1992) did not suggest that first grade children's 'superficial' responses might result from limited experience of exchange, money and other nations.

c) relevance of experience is inferred from comparisons of levels of understanding of groups of children

This approach is typical of those whose aim is to see how far Piaget's theory can be applied to social cognition. Four aspects of group experience have been considered: gender, social class, culture, and economic environment.

Gender: Burris (1976) attributed differences in girls' and boys' responses to gender-specific experience. He found that boys tended to give greater emphasis to production while girls were more oriented towards a consumer perspective, and that boys represented the social order in a more authoritarian way compared with the girls' emphasis on empathy. He suggested that these differences resulted from socialisation, for example, in terms of parental discipline, and that they reflected

men's traditional responsibility for production and women's domestic role. However, he did not investigate the particular experiences of children in his sample. Other studies have not reported significant differences in understanding between girls and boys. (However, while gender has not been found to be a major influence on understanding of work, it is a central factor in determining how children envisage themselves participating in work; this will be discussed in Chapter 6 in the context of occupational preferences.)

Social class: A number of investigators have analysed their results by social class, and have generally found some differences between the pattern of responses of middle class and working class children. Four main interpretations of such differences can be found:

- a) working class children's understanding lags behind that of middle class children because membership of a lower social class is a 'retarding influence' (Berti and Bombi 1988: 22);
- b) working class children's less developed understanding reflects their different experiences (e.g. Burris 1976);
- c) working class and middle class children have different understandings which reflect their different experiences (e.g. Dahlberg *et al.*, 1987);
- d) middle class children understand some economic issues less well than working class children (Tizard and Hughes, 1984; Walkerdine and Lucey, 1989).

Berti and Bombi did not themselves investigate class as a variable, but in their discussion of previous research they criticised Emler and Dickinson, who took the third position set out above; Berti and Bombi pointed out that the working class children's ideas (supporting egalitarianism in payment for work) were those which are found in younger children, and the data should therefore be seen as showing 'the effect of class as a retarding influence' (1988: 22) rather than the effect of different experiences. They did not indicate *how* class membership retards development; the developmental superiority of the middle classes was seen as a fact of nature. The 'lag' in concept development of children from lower

socio-economic classes has been widely reported in Piagetian studies (Dasen, 1972).

The second position, which offers more explanation, is the one taken by Burris (1976). He investigated understanding of a wide range of economic concepts, and analysed these by social class of child. He found that, after controlling for level of intelligence, children from middle class backgrounds showed a more advanced level of understanding of property, occupational status and hierarchy. Burris related this to the economic realities faced by children and their families depending on their position within the class structure, and to social class patterns of parental discipline and moral education. Both these explanations pathologise the working class; the former identifies a 'problem' which could be seen to be beyond their control, while the latter directly blames working class parents for their children's relatively limited understanding. Similarly Jahoda (1981) argued that certain forms of social knowledge are heavily information dependent, and that middle class children have a more sophisticated understanding because they inhabit a society which is richer in the relevant information. Working class parents are once again seen as failing to provide what their children need, in this case information.

The third position, that working class and middle class children develop different ideas because each group assimilates ideas that are current in their communities, is illustrated by Dahlberg *et al.* (1987). They found that middle class eight year olds had a stronger classification between manual and non-manual work than working class children of the same age, and that they valued non-manual work more highly whereas the working class children placed a greater value on manual work. Dahlberg *et al.* suggested that this contributed to the social reproduction of class relations 'in that working class children by valuing manual labour become socialised into accepting their place within it' (1987: 91). They commented that the middle class children's views related more closely to those of the dominant groups in society (which seems hardly surprising); however, they avoided suggesting that this is therefore a more 'advanced' understanding.

Other researchers have carried out similar investigations and found similar patterns of responses. For example, Emler and Dickinson (1985) asked children aged seven to twelve years to estimate the income of people in different occupations, and to comment on the fairness of the predicted income differentials. They found very few differences relating to age, but considerable differences by class, with middle class children making greater income differentials and being more likely to argue that these were fair. Emler and Dickinson pointed to Tajfel's (1972) intergroup theory which predicts that members of high status groups will emphasise their distinctiveness in comparison to low status groups. However, like Jahoda, their main explanation was the uneven social distribution of knowledge. They argued that middle class children have more detailed and extensive knowledge about work available to them in the context in which they live. Thus Emler and Dickinson, while attempting to distance themselves from developmentalism, characterised the understanding of working class children as less detailed, extensive and salient than that of middle class children. Like Dahlberg *et al.*, they suggested that the working class children's limited knowledge may contribute to the reproduction of class distinctions in that they see little difference between the economic rewards received for manual and non-manual work, and thus do not have sufficient knowledge on which to base vital educational decisions which will restrict their later choices. Simmons and Rosenberg, in their investigation of children's perceptions of the stratification system in the USA, made a similar point:

It is apparent that those children who are penalised by the stratification order today and whose prospects are least good are less conscious of its nature than those who at present benefit most from the system and whose prospects are brighter. (1971: 246)

These studies demonstrate the difficulty of maintaining a position which characterises working class experience as 'different but equally valid' (Walkerdine and Lucey, 1989: 37).

The fourth position set out above, that middle class children understand some economic issues less well than working class children, is found in Tizard and

Hughes' (1984) analysis of transcripts of four year old girls talking with their mothers at home. Tizard and Hughes pointed out that the middle class children were more often confused about the relationship between work, money and goods; they referred to a conversation between a middle class girl and her mother in which the girl is puzzled by her mother's reference to paying the window cleaner, and a conversation in which a working class girl very clearly understands the relationship between her father's work, payment, and ability to purchase goods. They suggested that this difference resulted from experience:

Perhaps because their fathers' work was more clearly related to money, rather than the interest of his job, or because with a more limited income the arrival of the weekly pay packet was a more important event, the relationship between money and work was more often discussed in working class families. (1984: 123)

Walkerdine and Lucey, discussing the same transcripts, commented that Tizard and Hughes had interpreted the middle class child's questioning as demonstrating 'intellectual search' or 'the power of the puzzling mind' (1984: 123); that is, it demonstrates that four year olds have more advanced powers of thinking than Piaget had credited children of this age with. It is assumed that thought develops from concrete to abstract, and the middle class child's 'puzzling mind' is an attempt to deal with ideas which for her are abstracted from her everyday reality, and is therefore construed as advanced thinking. Walkerdine and Lucey pointed out that Tizard and Hughes did not suggest that the working class child who understood the relationship between work and money had reached a higher developmental level; her understanding of waged labour was simply part of her concrete everyday reality and did not involve advanced abstract thought. This example demonstrates the contradictions between two different pinnacles of development: abstract rational thought and an adult level of economic understanding, and shows how those children with greater economic understanding can be categorised as less developed.

Culture: Many cross-cultural investigations of Piaget's stages have been carried out; such studies have been designed to see whether the sequence and

rhythm of development of economic understanding are affected by different cultural experience, or whether they are universal. Such studies have generally found that the level of development of logico-mathematical thinking among people in traditional societies lags behind that of those in modern industrialised societies (see Dasen, 1972; Dasen and Heron, 1981). In this way ideas of cognitive development in individuals have been linked to ideas of development of the human race. This was in line with Piaget's own ideas, which Burman characterises as 'cultural chauvinism' (1994: 160):

If we begin to lose faith in humanity, in the possibilities of progress of which mankind is capable, there is nothing that will so reassure us as to look back at the past and compare society today with those so-called primitive peoples We will realise in fact that the primitive is intellectually and morally even more the slave of self-centredness and social coercion than we are liable to be. (1933: 21, quoted in Burman, 1994: 160)

However, cross-cultural investigations of children's economic understanding have produced rather different results, in some cases demonstrating a more advanced understanding in the less 'developed' country. These results have been interpreted as indicating that experience in a particular aspect of economics may lead to a far earlier understanding of concepts in that area. For example, Jahoda (1983) investigated children's understanding of profit in Scotland and Zimbabwe, and found that whereas the sample of children in Scotland understood profit by about age eleven, the sample in Zimbabwe grasped this concept at about age nine; he characterised this as a European 'lag' in development. Those children in Zimbabwe who had personal experience of trading had the most advanced understanding, but even if they are discounted, the rest of the sample still had understanding significantly in advance of that of the Scottish children. Jahoda suggested that the earlier understanding of profit could result from peer communication and from living in a society where trading was widespread and important.

Similarly Hong Kwang and Stacey (1981) found that Chinese children in Malaysia achieved understanding of the concept of profit a little earlier than

Western children, and also understood gambling from a young age; they related this to differences in child-rearing and the popularity of gambling in that society. Understanding of the bank has been another focus for cross-cultural studies. Jahoda and Woerdenbagch (1982) compared Scottish and Dutch children; they attributed the Dutch children's more advanced understanding to greater availability of information about banks in the Netherlands. Ng (1983) showed that children in Hong Kong had a more advanced knowledge of banks than Jahoda's Scottish sample; and Wong (1989) found that children in Hong Kong were more advanced than those in the United States. Both Ng and Wong attributed this to the business ethos characteristic of Hong Kong society, and Wong offered a detailed analysis of this ethos and of the educational system to explain the advanced understanding of the Hong Kong sample. In all these studies the suggestion has been that variations in experience in contrasting cultural and economic contexts will affect the speed of progress through the different stages.

However, Berti and Bombi (1988) expressed reservations about the claims made in cross-cultural studies. They pointed out that the samples used are small, and it is not possible to generalise from them, as Jahoda did, to speak of European 'lag' in relation to Africa. These comments seem somewhat perverse, as Berti and Bombi themselves had labelled differences found by Emler and Dickinson as social class retardation, yet samples were of a similar size in both studies. However, their views concur with those of most developmental theorists: working class and 'primitive' peoples are not seen as reaching such a high level of understanding as the middle classes in the West.

Dahlberg *et al.* who, as I have indicated, do not accept that there is a single course of development, found that there were differences in response by children in different countries: for example, the meritocratic ideology (that ability and effort will lead to justified social and economic rewards) was strongest among English children, whereas the Swedish children put more emphasis on equality. They interpreted this as different understandings rather than different levels of development, in accord with their rejection of the idea of a single adult stage.

Economic environment: Berti and Bombi (1988) suggested that a more useful approach would be to compare children's understanding in environments which were similar in culture, and differed only in one particular economic dimension. To this end they replicated some of their investigations of aspects of children's economic understanding in contrasting economic environments within Italy. For example, they repeated their investigation of middle class urban children's knowledge of the origin of goods using a sample of children living in a forested area where wood was the principal product. They wanted to find out how far these children's greater knowledge (based on experience) of the production of wood products would transfer to the production of other products (e.g. peaches, glass). They found that the children living in the forest showed greater knowledge than city children of the production of chairs, though they did not have a clear concept of the whole chain of production, but tended to focus on a single figure making and selling wooden objects. They found no evidence of transfer of ideas to the production of other goods, but did find that the forest children were aware that they did *not* know the origins of other products (e.g. glass), whereas many urban children had been prepared to put forward some sort of explanation, however fantastic. From this study Berti and Bombi concluded that it is more appropriate to talk of qualitative differences rather than any differences in developmental tempi between the two samples.

Berti and Bombi based this investigation on the assumption that living in an area where it was possible to observe the entire cycle of production of wooden objects, meant that children had indeed observed this; they concluded that 'a knowledge of the work of woodcutters, sawmen, hauliers or artisans is not in itself sufficient to generate a clear concept of the production chain' (1988: 193). However, they also commented that the possibility of observing a process or activity does not mean in itself that children will either understand it or transfer their understanding to similar phenomena; they suggested that what a child in fact perceives will relate to the child's level of cognitive development. It is noticeable that in this study Berti and Bombi did not consider the role of social interaction,

despite their earlier comments that much economic information is acquired through conversation with adults.

Discussion

While those following most closely the Piagetian model have tended to discount the effects of experience, there is a growing body of evidence to suggest that children's experience does affect their social and economic understanding, and many theorists have called for more attention to be paid to variations in experience. For example, Furnham and Thomas (1984) argued that studies of children's economic understanding are interesting, but have failed to explain the large variations in the development of understanding; they suggested that to explain such variations will involve investigating experience and identifying factors which contribute to understanding. Stacey (1982) pointed to the need to examine the extent to which children's constructs are determined by their own socio-economic backgrounds and experiences. Webley (1983) expressed regret that no attempts had been made to produce a characterisation of the environment which would allow for variations in the development of thought other than those resulting from social class distinctions. The focus on the structure of thought has been questioned by Lea *et al.*:

by looking at economic cognition as another instance of a general process of cognitive development, we may be paying inadequate attention to the variations in thought that are brought about by content.
(1987: 376)

They also emphasised the need to pay more attention to differences between individuals, commenting that 'individual differences may be important; it is through the creative leaps of individuals that collective representations are modified' (1987: 378).

As I have shown, the rather limited consideration of children's social and economic experience relates to the developmental framework in which the research has been conducted. I have identified a number of problems with this framework. These include conceptual limitations, such as very limited attention

given to social interaction, the ways in which structure and function of thought have been distinguished, and the definition of an adult level of economic understanding. There are also problems of a moral/political nature: the assumption of a single course of development through stages with 'the vectorial quality of being "stages towards adult mastery"' (Harré, 1974: 245), and the emphasis on norms and normality. These have led to pathologising of those groups and individuals whose understandings do not match this model: in particular the working class. To label differences as developmental 'lag' or 'retardation' also seems to be, in colloquial terms, a 'cop out', since no further explanation need be sought for the differences found; or in the words of Morss: 'the appeal to development as an explanation causes other potential accounts to remain unconsidered' (1996: 50).

This results in part from developmental psychology's emphasis on the individual rather than on society:

psychology tended to treat only the properties of the individual as variables; the culture became in effect, a constant. Social inequalities tended to be explained in terms of psychological ones ('blaming the victim'). (Ingleby, 1986: 299).

Henriques *et al.* (1984) argued that one effect of this has been that responsibility for problems such as unemployment has been located in the individual, characterised as 'unemployable'; psychologists have not viewed this as an economic or political problem to do with power and exploitation. Similarly Young (1980) argued that 'stress' has been located at the level of the individual who suffers (and can be assessed against the norm by variety of stress scales), rather than at a corporate structural level.

In order to move beyond developmentalism it is necessary to view it as a construction which emerged in specific historical circumstances, rather than seeing it as 'truth'. Thus Walkerdine argues that:

The very idea of development is not natural and universal, but extremely specific, and in its specificity occludes other marginalised stories, subsumed as they are within the bigger story. The big story is a European patriarchal story, a story from the centre which describes the

periphery in terms of the abnormal, difference as deficiency. (1993: 455)

The most worrying feature of developmentalism is precisely that it 'occludes other marginalised stories'; Morss argues that it is hegemonic, and 'must be seen as violently suppressing alternative ways of thinking and being' (1996: 51). For this reason he maintains that 'it is not enough to be non-developmental' (1996: 48); this approach fails to take seriously the problems with developmentalism. For even in ostensibly non-developmental approaches, developmentalism tends to recur. What is needed is an anti-developmental approach. This involves a critical scrutiny of developmentalism and the search for systematic alternatives to developmental explanation. The next chapter will explore alternative theoretical frameworks which make it possible to focus on children's experience and the social contexts of their lives, and which are anti-developmental.

CHAPTER 3

Alternative theoretical perspectives

In the previous chapter I concluded that, in view of the conceptual and moral/political problems identified in developmental accounts of children's understanding of work, I should adopt an anti-developmental stance (Morss, 1996) in this analysis. By using a different theoretical approach, we are able to ask and answer different questions, and become aware of other aspects of the situation (Meadows, 1986). Ingleby (1986) pointed out that, in the 1960s and 70s, the realisation that cognitive psychology did not pay enough attention to the varieties of development and to individual differences led to a new interest in the role of culture and experience, and that this tended to result in a return to social learning ideas in which environmental factors were given primacy. Thus the concept of socialisation has often been posed as an alternative to developmental theories (McGurk, 1978). I will discuss the characteristics and limitations of this concept, and show how it shares many of the same problems as developmentalism, including biological limits to socialisation, identification of norms, and pathologising of those who fail to provide a 'successful' socialisation.

I then turn to social constructionism, which can be seen as an attempt to resolve some of the problems presented by developmentalism and by the concept of socialisation. In this thesis I adopt a broadly social constructionist perspective, since it has many characteristics which can be seen as helpful for my investigation. I will discuss three of the ways in which social constructionism has been developed in relation to specific endeavours; discourse analysis (e.g. Parker, 1992; Potter and Wetherell, 1987); narrative construction (e.g. Sarbin, 1986; Nelson, 1989), and situated learning (Lave and Wenger, 1991). I will consider the extent to which social constructionism can be seen as anti-developmental. Finally the implications of these ideas for my investigation are noted.

Socialisation

The word 'socialisation' describes the processes through which children become members of society. It is an umbrella term that has been given various meanings, both in different social science disciplines (anthropology, sociology, psychology), and also within each discipline; Schaffer and Crook (1978) argued that the changes in meaning reflect prevalent theories of child development. Thus the term has been used to describe the way in which the child is shaped by external forces in social learning theory, and also to refer to cognitive development. In this section I use it to refer only to the view that changes in children's ideas and behaviour result from their social environment. I will examine the characteristics and limitations of the concept of socialisation, and show how it has been used to discuss learning about work; I will draw particularly on the accounts of socialisation by Berger and Luckmann (1966) and Berger and Berger (1972) as these are more sophisticated than many, and 'avoid the pitfalls inherent in overly simplified presentations' (Waksler, 1991).

Many studies of children growing up start from an assumption (implicit or explicit) that the social environment will influence the child. Berger and Berger defined socialisation as 'the process through which an individual learns to be a member of society' or 'the imposition of social patterns on behaviour' (1972: 62). The notion that ways of behaving are imposed is a common one: Schaffer and Crook (1978) described socialisation as:

... a kind of clay-moulding process: the child ... arrives in the world as a formless lump of clay and society, as represented by mothers, teachers and other authority figures, proceeds to mould him into whatever shape it desires. The end product would thus be wholly explicable in terms of the external forces which the child encountered ... (1978: 57)

Similarly, Richards described socialisation as imposed on the child, who is 'mere putty to be worked on by external forces' (1974: 4). This metaphor of a shaping or moulding process might be seen as an exaggerated characterisation by critics of the concept of socialisation, but the same metaphor was used by Berger and

Berger: 'the child is shaped by society, moulded in such a way that he can be a recognised and participant member of it' (1972: 64). However, they also emphasised that the child is not a passive victim, but rather participates and collaborates in varying degrees, and that socialisation is a two-way process in that parents are also affected by it. But while they introduced the idea of reciprocity, they focused entirely on the child, and did not offer examples of children affecting adults (Waksler, 1991).

Now, if children are moulded by socialisation, then their early constructions of adult work will also be determined by their social environment. Berger and Luckmann (1966) offered an account of how this happens. They distinguished between primary socialisation, in which the child internalises the world of his/her significant others (usually immediate family members) as 'the only existent and conceivable world' (1966: 154), and secondary socialisation, in which the young person identifies with the occupational sub-culture and acquires role-specific knowledge. Secondary socialisation differs from primary in that it is possible to remain detached from the role-specific situation and the people within it, whereas primary socialisation always involves emotionally charged identification. Thus secondary socialisation produces a 'a brittle and unreliable subjective reality' (1966: 164) and in some cases special techniques are used to produce a greater sense of identification and inevitability; this might apply, for example, to the socialisation of an army officer or a monk. Berger and Luckmann suggested that secondary socialisation is likely to be most successful in societies with very simple division of labour, in which occupational identities are pre-defined (i.e. children are likely to follow the same occupation as their parents), and there is thus likely to be less conflict between primary and secondary socialisation.

Socialisation to specific occupations determines the extent of our knowledge of different sectors of work: Berger and Luckmann pointed out that we have the most complex and detailed knowledge of those sectors of everyday life with which we most often deal; thus 'my knowledge of my own occupation and its world is very rich and specific, while I have only very sketchy knowledge of the occupational worlds of others' (1966: 57). Knowledge of other occupations is

structured in terms of relevance; we need to know which individuals have the types of knowledge that we may need, but we do not need detailed knowledge of their occupations. It follows that different people will have different knowledge and understandings of the occupational world; it is not possible to identify a single adult understanding as developmentalists have attempted to do.

A number of criticisms of the concept of socialisation have been made. One relates to the lack of specificity about the processes involved. MacKay considered socialisation to be 'a gloss which precludes the explication of the phenomenon it glosses, i.e. the interaction between adults and children' (1973: 28); similarly James points out that 'many writers have remained strangely coy when detailing its precise mechanisms' (1993: 76). By using the term socialisation sociologists avoid being specific about what is actually taking place. For example, the activities through which parents socialise children are not generally discussed; Waksler (1991) pointed out that it is not clear whether the concept of socialisation includes all the activities of a parent which may affect their child, or only those intended as socialisation, and whether activities which do not result in successful socialisation should be included. Similarly, the ways in which children participate, collaborate or resist are rarely spelled out. The child tends to be seen as an 'empty bucket' which will readily contain anything that is poured in (Wrong, 1961). The notion of 'internalisation' is used to indicate how the bucket is filled; Berger and Berger explain it like this:

the social world, with its multitude of meanings, becomes internalised in the child's own consciousness. What previously was experienced as something outside himself can now become experienced within himself as well. (1972: 68)

It is rarely made clear exactly how this happens, and internalisation is often seen as an unproblematic process in which knowledge is transmitted and assimilated (Lave and Wenger, 1991). Henriques *et al.* (1984) pointed out that when theorists do attempt to be more specific they rely on a variety of *ad hoc* formulations to explain how content is brought to the individual. As an example, they referred to Weinreich's (1978) list of four processes: learning through reward and

punishment; imitating models; identification with parents; and the child's own attempts to structure and make sense of the world. Henriques *et al.* commented that each of these processes is drawn from a different theoretical perspective, and that the fourth represents an attempt to bring ideas from mainstream psychology into a primarily sociological concept. Other criticisms centre around the fact that children do not automatically internalise the ideas and values which parents attempt to impose; Wrong (1961) argued that we need to discover why, of those things that a person is brought up to do, only some are adopted. Socialisation cannot offer a satisfactory answer to this because, as MacKay indicated, it glosses the processes involved.

A second set of critiques relate to the notions of society and of the individual. This is problematic because the young child is seen as being distinct from, and not a part of, society:

The individual ... is not born a member of society ... Primary socialisation is the first socialisation an individual undergoes in childhood, through which he becomes a member of society. (Berger and Luckmann, 1966: 149-50)

Henriques *et al.* (1984) argued that this dualism is untenable; they deconstructed the individual - society dichotomy, demonstrating the theoretical inadequacy of concepts of a pre-social individual and a pre-formed social world.

In many accounts of socialisation society is viewed as harmonious and homogeneous (Waksler, 1991). The child's ideas about growing up are seen as congruent with those of their parents and society at large (James, 1993), and parents, as the main agents of socialisation, are seen as having the same interests as society:

Usually parents succeed to a greater or lesser degree in shaping their children in accordance with the overall patterns established by society and desired by themselves. (Berger and Berger, 1972: 64)

This ignores the possibilities of pluralism, or of conflict between groups in society. For example, Cummings and Taebel (1978), investigating how economic socialisation functions as a mechanism to legitimate capitalist economic thinking

and general inequality of US life, claimed that as children get older, they become progressively more favourable to capitalism, and appear to develop explicitly anti-collective, anti-union and anti-socialist sentiments. This is clearly not true of all children. While Cummings and Taebel mentioned alternative ways of thinking, they failed to identify or discuss them.

The monolithic view of society also ignores the possibility of parents deliberately encouraging behaviour which others regard as unacceptable. For example, Adler and Adler (1978) drew attention to children who were participating in marijuana smoking under the supervision of their parents. They argued that while this practice illustrates the roles of imitation and identification, it must be considered as 'deviant' socialisation, because, although acceptable and normal in the values of the parents' subculture, it is considered aberrant and classified as illegal in wider society. As Rogoff pointed out:

People have a propensity to assume that the perspective on reality provided by their own community is the only proper and sensible one ... and to view the practices of others as barbaric. (1990: 43)

Thus socialisation is regarded as being 'successful' only if it enables the child to fit unproblematically into society, and 'unsuccessful' if it produces an adult who is eccentric or deviant (Schildkrout, 1978).

Socialisation has also been criticised for its determinism (for example, by Wrong, 1961, and Waksler, 1991). Some accounts of socialisation attempt to avoid a totally deterministic model and to give some agency to the child: for example, Berger and Berger (1972) suggested that the child can resist. However, they did not consider this to be particularly effective, arguing that, as adults have greater power, they usually win any conflict, and citing the success of most socialisation as evidence to support this statement. But this notion of 'success' is problematic; as Waksler commented, very few parents would claim, 'My children turned out just the way I wanted them to' (1991: 17).

While McGurk (1978) posed the concept of socialisation as an alternative to developmental theories, there are certain similarities between the two. Just as developmentalism assumes a 'normal' course of development, so socialisation

tends to assume that there is one 'normal' course of socialisation. If the product of socialisation turns out to be undesirable, responsibility is seen to lie with the socialising agents (Schaffer and Crook, 1978), and groups and individuals who do not conform to norms may be pathologised. In this way the concept of socialisation can be seen as sharing the moral/political problems of developmentalism. Moreover, while socialisation is ostensibly concerned with the child's experience, Prout and James (1990) pointed out that most theorists also draw on psychological models of development, for example by assuming a process of maturational development in the child. This sets limits to socialisation by preventing it from succeeding if it is attempted before the child has reached an appropriate stage (e.g. Berger and Berger, 1972).

Thus, while socialisation is a concept which emphasises the child's experience, its lack of specificity about the processes involved, its determinism, and its emphasis on a single 'normal' course of socialisation make it inappropriate for an investigation focusing on the variety of children's experiences in relation to adult work. I therefore turn to a more recent perspective: social constructionism. This perspective draws, to some extent, on the ideas of Berger and Luckmann, presented in *The Social Construction of Reality* (1966), which I have been discussing in this section. However, while Burr (1995) sees their work as the major social constructionist contribution from sociology, showing how the world can be constructed subjectively through social practices but at the same time be experienced as objective, Morss (1996) points out that little of the detailed argument of their book was adopted by those concerned with social construction of development, since it presents a conventional view of development as socialisation; the title was enough in that it legitimised the term 'social construction'.

Social constructionism

Social constructionism emerged during the 1970s and 1980s from a range of ideas put forward by writers in North America, Britain and continental Europe (Burr,

1995). It arose partly from dissatisfactions with both cognitive developmentalism and with the behaviourist concept of socialisation. Realisation of their inadequacies led to a wide range of alternative ideas, which have inspired talk of a 'paradigm shift' (Ingleby, 1986: 297). Gergen and Shotter, in their editorial comments in the Sage series, 'Inquiries in Social Construction', make similar claims when they describe social constructionism as:

... an emergent dialogue within the social sciences which many believe presages a major shift in western intellectual tradition ... a dialogue which involves profound challenges to many existing ideas about, for example, the person, selfhood, scientific method and the nature of social and everyday knowledge. (1987: inside front cover)

The common feature of all the various schools of thought which can be identified as social constructionist, according to Ingleby (1986), is an approach which breaks down the individual - society dichotomy by asserting that mind is a social phenomenon, and that as the science of the mind, psychology should be concerned not with individuals, but with 'what goes on in the space between them' (1986: 305). This emphasis is in sharp contrast to cognitive developmentalism, which is concerned with the development of structures in the mind, and socialisation with its emphasis on the internalisation of society by the individual. Shotter, in an epilogue to *Conversational Realities*, takes a similar view:

Common to all versions of social constructionism is the central assumption that - instead of the inner dynamics of the individual psyche ... or the already determined characteristics of the external world ... it is the contingent really vague (that is, lacking any completely determinate character) flow of continuous communicative activity between human beings that we must study. (1993a: 179)

There are various approaches with this common thread of interest in what happens between people, and not all theorists using such an approach identify themselves as social constructionists (Ingleby, 1986; Burr, 1995). I will draw on a range of writers who take a broadly social constructionist approach. In this section I focus on what they have in common; the following sections will examine different ways in which social constructionist ideas have been developed.

Interaction between people inevitably takes place in specific contexts. Thus a second feature of social constructionism is a concern with the situated nature of all activity. This includes the specific setting, the participants and their purposes, as well as the culture, period of history and social and economic arrangements (Burr, 1995). The focus with what goes on between people has been investigated by some theorists entirely in terms of talk, but many also emphasise the role of action. Foucault (1972) emphasised that discourses and practices should be treated as if they were the same thing, since material practices (for example, the practices involved in a medical examination) are always invested with meaning and thus have the same status as spoken or written communications.

Through talk and action people are said to be *constructing* versions of the world. Potter and Wetherell considered that that the term 'construction' is apposite because:

First, it reminds us that accounts of events are built out of a variety of pre-existing linguistic resources, almost as a house is constructed from bricks, beams and so on. Second, construction implies active selection: some resources are selected, some omitted. Finally, the notion of construction emphasises the potent, consequential nature of accounts. Much of social interaction is based around dealings with events and people which are experienced *only* in terms of specific linguistic versions. In a profound sense, accounts 'construct' reality. (1987: 33-4)

The final point is particularly relevant in considering children's constructions of adult work, which may to a large extent draw on talk and other media because children are separated from many forms of work (see Chapter 1).

An essential feature of social constructionism is the notion that meaning is jointly constructed in talk with co-participants. This is common to all versions, but is more central to some. For Shotter it is an essential feature; he points out that joint construction of meaning is not easily achieved:

As people co-ordinate their activity with the activities of others and 'respond' to them in what they do, what they as individuals desire and what actually results in their exchanges are two very different things. In short, joint action produces unintended and unpredictable outcomes. (1993a: 39)

For other theorists the notion of joint construction is less central. While Potter and Wetherell stated that in interviews the researcher's questions form a part of the construction and should be just as much a topic for analysis as the interviewee's responses, they themselves frequently present only the responses (e.g. when discussing interviews about controversial issues in New Zealand society), and omit the questions asked. The importance of considering the variety of meanings which may be part of the interviewee's reading of the interviewer is stressed by Michael (1996); the interviewer is not simply a generalised 'other', but may also be seen as a representative of some other audience or entity such as the legal system. Talk is performative, and speakers construct their audiences in their talk.

Theorists taking social constructionist approaches have emphasised different aspects of this process of construction. The emphasis on talk has led to the creation of fields of enquiry such as discourse analysis (e.g. Potter and Wetherell, 1987; Parker, 1992) and the related area of discursive psychology (e.g. Edwards and Potter, 1992; Harré and Gillett, 1994); and narrative psychology (Sarbin, 1986). Others have focused on the social construction of learning (Lave and Wenger 1991); these ideas have not been so central in social constructionist thought but are of particular interest for the questions I am investigating. I will consider each of these aspects in turn, and review the ways in which they have dealt with some of the issues which are common to all versions: realism, relativism and truth; and the view of the person. These are issues which are of concern to all the theories discussed in this thesis; however for developmentalism the solutions are clear cut: rational thought is able to represent reality accurately; the individual person is seen as striving to make sense of the world, and has agency to direct their own activities within the limits set by maturation. Society does not feature in this view. The concept of socialisation problematises each of these areas: its concern is with the way that attitudes and beliefs are passed on, and in Berger and Luckmann's account this involves a distinction between objective and subjective reality. The individual starts outside society and is moulded by it; thus agency lies mainly with society, though some have attempted to accord some agency to the individual as well. Social constructionists

deconstruct many of these assumptions; their arguments will be discussed in the three sections which follow.

I am not intending to adopt any of these approaches wholesale, but rather, to draw on those ideas which seem most useful. Davies suggested that it is a mistake for researchers to strain to fit in with a particular theoretical ideas; they should not feel bound by any paradigm which emphasises one of the things they wish to investigate to the exclusion of any others:

You look for a position which most closely resembles what you want and you feel good if you find someone who does in fact closely approximate what you want. The danger at that point is that you reduce your own perspective to a mere echo of the respectable people who have foreshadowed you. This is to do yourself a disservice and make your own statements less clear. (1982: 186-7)

At the end of the chapter I will consider the implications for my investigation which arise from the various social constructionist views I consider.

Discourse analysis

There are two main approaches to discourse analysis within social psychology: one drawing on the ideas of post-structuralism, focuses on issues of power (Foucault, 1972; Parker, 1992). The other is concerned with analysing and explaining variability in accounts (Potter and Wetherell, 1987).

Parker (1992), drawing on the ideas of Foucault, started from the assumption that there are a number of discourses available on which we can draw when we speak. Parker defined a discourse as 'a system of statements which constructs an object' (1992: 5) and 'a coherent system of meanings' (1992:10); in his view discourses support institutions; reproduce power relations, and have ideological effects. Thus they shape the way that people experience the world and behave in it (Burman and Parker, 1993). This follows from the view that the categories available to us in language limit and determine the ways in which we can perceive (the Sapir-Whorf hypothesis: Sapir, 1947). In any culture we have common-sense

ways of seeing the world, and Foucault argued that these are inevitably bound up with power:

An essential aspect of the operation of the power of discourses is that it is not wholly recognised by those who are being controlled: its success is proportional to its ability to hide its own mechanisms. (1976/78: 86).

So, for example, the discourse of romantic love could be seen as a common-sense interpretation of the world which hides the realities of women's economic oppression (Burr, 1985). Similarly, the counter-school culture described by Willis (1977) could be seen as a common sense discourse, but its effect was that the boys ended up in low level occupational positions. Liberal democratic ideas of equal opportunities can also be seen as a discourse which disguises the ways in which schooling reproduces existing power relations (Bowles and Gintis, 1976). This notion of discourse has been particularly useful for critics of developmentalism, enabling them to look at it as a very powerful discourse and to identify the ways in which it marginalises and pathologises certain groups (Walkerdine 1993, 1994; Burman, 1994; Morss, 1996). However, in line with Lyotard's (1984) claim that postmodernism involves incredulity towards the grand narratives and truth claims of modern enlightenment culture, social constructionism must be seen as one of the little stories of the postmodern condition. Thus it does not claim to provide 'the one true view ... a privileged voice in the conversation of humankind', but rather expects to be 'in critical dialogue with others' (Shotter, 1993a: 183).

A second form of discourse analysis starts from a concern with variability within accounts. Potter and Wetherell (1987) stressed that this is a universal feature of all talk, but that it has often been suppressed by conventional methods of investigation and analysis. They argued that, whereas in previous research what people say had been treated as an expression of an internal state or underlying process, what is of interest is what people *do* with their talk, and their purposes in the specific conversational context. Thus Edwards and Potter analysed politicians' event representations and causal explanations to show how versions of events are 'constructed in an occasioned manner to accomplish social actions' (1992: 8). The focus of interest for social constructionists is not whether one version is better

than another (either in representing the 'real world' or in representing the contents of the mind), but rather, the variation between them.

Potter and Wetherell used the notion of the 'interpretative repertoire', which they described as 'a lexicon or register of terms and metaphors drawn upon to characterise and evaluate actions and events' (1987: 138). Burr (1995) suggests that interpretative repertoires differ from the Foucauldian notion of discourses in that repertoires have flexibility in use and can be put together in different ways to suit the occasion, whereas discourses are seen as coherent organised sets of statements. Wetherell and Potter (1992) used the notion of interpretative repertoires in their analysis of racist talk; they concluded that people cannot be described as racist or not racist; rather they draw on different repertoires depending on their specific purposes within the conversation. The crucial point here is that attitudes are not seen as fixed properties of the individual, but as residing in the interpretative repertoires on which the individual draws.

The idea of interpretative repertoires has been applied to the study of occupational career choice by Moir (1993) in an analysis of interviews with students on vocational courses. He identifies a number of repertoires including a 'family influence repertoire' (drawing on the jobs of family members), and a 'standard membership category repertoire' (relating specific personality traits, interests and talents to careers: Holland, 1973). Moir emphasises that the responses should not be viewed as revealing the respondents' 'real' reasons for choosing particular careers, but rather, as showing how they interpreted the interviewer's questions, and what they understood the interviewer to be looking for. He found each respondent used a variety of repertoires, in some cases including 'fantasy' stage responses which developmental accounts see as characteristic of younger children as well as 'realistic' accounts. This challenges the notion of developmental stages of career choice (Ginzberg *et al.*, 1951). He also found that the interviewer, drawing on unexplicated notions of what should be asked about career choice, made it clear that 'standard membership category' responses were the most acceptable by continuing to press interviewees until they

responded in this way. The 'joint' nature of construction in interviews is very clearly demonstrated in this study.

Realism, relativism and truth

One of the issues that concerns social constructionists is the debate about reality. Whereas for the developmental psychologist language *represents* reality, for the social constructionist, it *constructs* reality. If everything is socially constructed, then how is it possible to evaluate whether one account is better than another, to determine what is 'true'?

one of the major objections to the whole social constructionist movement is as follows. Its claim that there is no independent reality to which claims of truth may be compared or referred ... means that there are no independent standards to which to appeal in their adjudication; thus "anything goes!", and we slide into relativistic nihilism. (Shotter, 1993b: 89)

Edwards, Ashmore and Potter (1995) point out that there are no longer any 'naive realists' in the social sciences; what we have is a continuum of acceptance of relativist ideas, and people vary in the distance along that continuum they are prepared to travel. While some accept a relativist position (e.g. Potter, Shotter, the Stainton Rogers), others see it as problematic, asking how we can justify advancing one view rather than another. For example, Burr asks:

How can we say ... that certain groups are oppressed, if these 'groups' and their 'oppression' are constructions which can have no greater claim to truth than any other? (Burr, 1996: 2)

Collier (1994, 1996), Bhaskar (1986) and Walkerdine (1993) all refer to the reality of economic oppression. Walkerdine points out that the discursive practices in which people are positioned are produced by the reality in which they live; it is economic necessity which produces practices of calculation used by the Brazilian street child (Carragher *et al.*, 1985). I agree with Walkerdine that we should not allow the relativism of discourse to blind us to the realities of poverty, exploitation and oppression. While it is undoubtedly true that incomes vary, and some people's needs are unmet, there is also a discourse which should be

distinguished from this reality: I have friends whose incomes range from £60,000 to the job-seeker's allowance, yet all use the same discourse of not being able to afford things. The wide use of such a discourse tends to disguise the reality of poverty. Similarly Henriques *et al.* (1984) argue that the discourses around the definition and quantification of unemployment do not create (or lessen) the reality of not having work. However, discourses of oppression and exploitation may perhaps make us less sensitive to the very real exploitation and oppression of some groups.

The Curt collective notes that approaches based on the reality of oppression are adopted by some psychologists 'well-versed in the language of textuality', for strategic and political purposes.

Marxist, feminist and even neo-psychoanalytical discourse[s] have for some time now been used as powerful ways of envisioning and promoting alternative, *better* ways of 'being'. Such approaches *require* recourse to a positive conception of reality in order to ground their utopian politics and thereby give political voice to subjugated and oppressed groups. (Curt, 1994: 20)

For such authors realism is a deliberate choice made for explicit purposes. They consider that taking a relativist stance removes the foundation for critique or change (Burman, 1990); therefore they have developed forms of social constructionism which draw on post-structuralism and Marxism in order to address ideological questions and to open up possibilities for change (Spears and Parker, 1996). However, Curt considers that as the number of conflicting versions of the truth increases, it becomes less plausible and politically useful to claim a special truth status for any one voice.

Discursive views of the person

As I have indicated, social constructionism is not primarily concerned with the workings of the mind. Potter and Wetherell (1987) emphasised that their concern is with what is said. Thus they argued that:

the researcher should bracket off the whole issue of *quality* of accounts as *accurate* or *inaccurate* descriptions of mental states. The problem is

being construed at entirely the wrong level. Our focus is exclusively on discourse itself: how it is constructed, its functions, and the consequences which arise from different discursive organisation. In this sense, discourse analysis is a radically non-cognitive form of social psychology. (1987: 178)

Shotter (1993a) rejects the 'natural' way of thinking of ourselves as possessing minds, and the notion that these minds have principles of operation which can be discovered by psychologists. He argues that the conception of mind is a myth, and that 'there is no such underlying reality to be found' (1993a: 22). He sees the notion of a mind, working on systematic principles, as an example of the '*ex post facto* fact' fallacy (Ossorio, 1981), which Shotter describes as 'the fallacious retrospective claim that, for present events to be as they are, their causes must have been of a certain kind' (1993a: 25). Similarly Potter (1996) argues that:

inner representations are inferred from various representational practices involving talk and writing, and such inferences tend to circularity with the inner representations being used, in turn, to explain those representational practices. (1996: 103)

Thus, in the context of the argument of this thesis, we could say that cognitive developmentalists have attributed differences between people to differences in the (presumed) stage of development of their (invisible) minds. Stages of development are then used to account for differences in understanding. If no mind is assumed, this 'cop-out' solution cannot be used.

The social constructionist approach has been to focus on the person's own account. Shotter (1975) distinguished between people's actions (caused by their own agency) and their behaviour (things that happen outside their agency). He argued that actions are not to be explained by their causes, but by the reasons that people give for doing them. This, he pointed out, is an assumption of everyday life; being able to give clear reasons for action is part of being an autonomous responsible person. Thus Edwards and Potter (1992) examined the accounts which certain politicians gave of their actions, and the ways in which they constructed their accounts to be credible. Gergen (1989) suggested there are conventions of warrant which enable people to argue that their own account

should be seen as superior; for example, they may claim to have observed or experienced an event, or to possess certain characteristics of mind, or superior morals. However, this still leaves the question of why people choose particular actions or accounts.

Wetherell and Potter (1992) implied that a person will deliberately construct a specific account in order to put him or herself in a good light, or to construct the self as morally justifiable. But elsewhere Potter and Wetherell stated that they:

... do not want to make the process seem necessarily deliberate or intentional. It may be that the person may be just 'doing what comes naturally' rather than intentionally deciding what form of language is appropriate. (1987: 34)

They suggested that this would be the more common situation. One way of explaining why certain actions or words 'come naturally' is to draw on the Foucauldian notion of discourses. The accounts that it is possible for any individual to give are limited by the discourses available to that person, and the ways that they themselves have been positioned as subjects in discursive practices (Henriques *et al.*, 1984). For example, Walkerdine (1984a) shows that the developing child is produced by particular pedagogical practices. Each individual is positioned in a variety of discourses, has multiple subjectivities: e.g. as wife, mother, worker, consumer. Within any one of these, the options open to them are limited. An extreme version of this idea is that it offers no agency to the person:

It is assumed ... that people are the puppets of their ideas, and their actions are determined not by choice and decision but are the outcome of the underlying structure of ideas, the logic of these ideas. (Craib, 1984: 109)

In this view it is an illusion to think that we can plan our lives or change the world. However, Sawicki (1991) argued that Foucault's notion of a person does allow some kind of agency, in that, although people are constituted by discourse, they are also seen as capable of critical historical reflection, and able to make some choices about discourses (for example, opening up marginal and repressed discourses). Moreover, while discourses are seen as invested with power,

Henriques *et al.* argued that this power is exercised in relation to resistance, by which they meant both conscious opposition and 'the mute automatic resistance of that which is being shaped' (1984: 115).

Children (and adults) occupy many different subject positions, sometimes powerful and sometimes powerless (Davies, 1989). In relation to adults they are often positioned as powerless and protected, though their resistance to this can involve positioning themselves as powerful through adopting particular discourses (e.g. sexist talk, Walkerdine, 1981; violence, Walkerdine and Lucey, 1989). They may also position themselves as independent and powerful in fantasies and daydreams. Thus children's stereotypical ambitions are those which offer a more powerful vision of themselves: train drivers and spacemen control large and powerful vehicles; ballerinas are applauded and admired. Such fantasies of being powerful may be acted out in play: Walkerdine (1981), observing play in a nursery setting, described how a girl who had been allocated a relatively powerless role as a nurse changed the scenario to home, so that she could boss her 'husband' about. Similarly Francis (1996a, 1997) gives examples of children's constructions of adult power in role plays based on adult occupations. Equally it is conceivable that from the 'protected' world of childhood, entry to the adult world may seem somewhat daunting, and children may fantasise that they can remain for ever as children, like Peter Pan. Thus discursive positioning goes some way to explaining the desires and fantasies of individuals.

However, Henriques *et al.* (1984) argued that this is not an adequate explanation. It does not explain how the individual, who is positioned in multiple and contradictory subject positions, has a subjective experience of identity. Nor, they considered, does it offer an adequate explanation of motives, wishes and desires. For these reasons they selectively employed some aspects of psychoanalytic theory, in particular, the work of Lacan. They argued that his ideas are particularly useful because he assumed that the person is non-unitary and non-rational, but offered an explanation for the subjective experience of a unitary identity through his account of the mirror stage. They were also attracted by his use of semiotics to provide a bridge between the social and the

unconscious. In particular all those who have turned to psychoanalytic concepts have emphasised the role of the unconscious in relation to desire. Mitchell saw the unconscious as a solution to 'the evident lack of continuity in psychic conscious life' (1984: 25); Walkerdine saw it as a way of theorising 'how we come to want what we want' (1984b: 164); and Henriques *et al.* argued that 'the examination of the unconscious is an essential precondition for understanding our resistances as well as the possibilities for change' (1984: 225).

However, the use of psychoanalytic concepts in a social constructionist context is questionable for two main reasons. First, it is clearly problematic to insert ideas that involve the unconscious into accounts which are deliberately non-cognitive. Burr (1995) questions whether psychoanalytic ideas can be legitimately combined with social constructionist ideas; she points out that the psychoanalyst's assumption of pre-existing motives, drives and needs is counter to social constructionist principles. On the other hand, she concedes that by drawing on psychoanalytic ideas it is possible to attempt to deal with issues which social constructionism leaves unresolved. A second problem with drawing on psychoanalytic concepts is that these tend to involve normative sequences and developmental forms of explanation, particularly in relation to gender. Morss (1996) argues that, while psychoanalysis offers both developmental and anti-developmental possibilities, the ways in which both Urwin (1984) and Walkerdine (1984b, 1988) have drawn on the ideas of Lacan has allowed developmentalism to creep back into accounts which otherwise explicitly reject notions of development. For these reasons, I have chosen not to draw on psychoanalytic concepts in this thesis, but rather to attempt to account for desire and fantasies in terms of discursive positioning, as discussed above.

Narrative construction

Many theorists subscribe to the view that the ways in which we both perceive and construct experience can be described in terms of narrative. This perspective has been particularly helpful in offering insights into *how* construction takes place. In

this section I will examine various ideas about narrative construction and consider their implications for this investigation. However, I first consider the various meanings that have been attributed to the word narrative.

What is a narrative?

The word narrative is sometimes used in a way which is almost interchangeable with discourse. For example, developmentalism has been referred to as a discourse (e.g. Morss, 1996) and as a narrative (Gergen and Gergen, 1986; Freeman, 1993). It has also been described as a metanarrative (Walkerdine, 1993) a story (Walkerdine, 1993, Stainton Rogers and Stainton Rogers, 1992; Morss, 1996) and a fiction (Freeman, 1993; Morss, 1996). These words are selected quite deliberately to indicate linked but distinct ideas. However, while it is possible to use these words in linked senses, they have rather different individual connotations. Discourses are seen as shared patterns of meaning existing in the world and available for people to draw on (Burman and Parker, 1993), whereas narrative is often used to describe the personal constructions of individuals. This is the sense that I want to focus on here.

Most definitions of narrative emphasise that events in a narrative are organised in a time sequence (e.g. Labov and Waletzky, 1967). Others are concerned to emphasise structure or coherence (Gergen and Gergen, 1986). However, narratives are not simply lists of events (Robinson and Hawpe, 1986); Sarbin (1986) pointed out that the narrative also allows for the inclusion of causes of events and of the actor's reasons for their actions. Freeman argues that narration involves the imposition of some kind of order on events by both selection and interpretation. Thus 'the process of narrating the past ... has a markedly fictive dimension'. He links this to developmentalism: 'if narratives are ultimately to be regarded as fictions ... then the concept of development itself may be too' (1993: 9).

Narrative has been contrasted with argument (Andrews, 1989), paradigmatic thinking (Bruner, 1986) and scientific thinking (Robinson and Hawpe, 1986);

each mode attempts to explain, but while argument attempts to formulate context-free general principles, narrative involves specific contexts and individuals; points of view and feelings. Labov (1972, 1982) identified several components of a complete narrative: among these was 'evaluation', that is, the narrator's own stance on what happened, which adds colour and emphasis to the story told. As Fox points out:

a model of a story which confines itself to events narrated is a referential model, a Gradgrindish model, rejecting those very elements to do with expression and affects which may have a profound effect on the listener and condition what is recalled. (1993: 70)

Narratives are not only polished stories; they are also constructed collaboratively in everyday conversation (Wells, 1986). Engel (1995) points out that young children's narratives are generally 'co-constructed'; their parents supplying appropriate framing questions and interpretations to move the narrative on. Similarly all conversational narratives are to some extent co-constructed with the conversational partner, if only by their attentive listening and appreciative expression.

The meaning of narrative has been extended from written and spoken narratives to narratives in the mind. Bruner considered that all humans have a predisposition to think in narrative terms, a 'push to narrate' (1990: 138); he saw narrative as a cultural universal. Likewise Hardy claimed that narrative is a 'primary act of mind' (1986: 12):

For we dream in narrative, daydream in narrative, remember, anticipate, hope, despair, believe, doubt, plan, revise, criticise, construct, gossip, learn, hate and love by narrative. In order really to live, we make up stories about ourselves and others, about the personal as well as the social past and future. (Hardy, 1986: 13)

Similarly Rosen argued that narrative is an explicit resource in all intellectual activity (1984: 17), and Sarbin treated narrative as an organising principle for human action. He proposed 'the narratory principle: that humans think, perceive, imagine and make moral choices according to narrative structures' (1986: 8). He supported his ideas by referring to experiments by Heider and Simmel (1943) in

which people who were asked to describe the movements of geometrical shapes in an animated film were found to ascribe meaning to the shapes, and to describe their movements in a narrative.

This wide range of meanings has led to the criticism that the notion of narrative has been over-extended. For example, Russell and Luciarello (1992) asked:

Are all acts of uttering acts of narration? Are all texts narrative texts? Are all cognitive processes narrative processes? We see little reason to answer these questions in the affirmative. Why would one want to constrain the mind's activities to narrative and narrative alone? (1989: 671)

Construction in narrative

The broad notion of narrative is particularly helpful in that it links the way experience is perceived with the way it is used. Wells argued that every act of perception involves 'inner storytelling':

Rarely, if ever, do we have all the necessary visual or other sensory information to decide unambiguously what it is we are seeing, hearing, or touching. Instead we draw on our mental model of the world to construct a story that would be plausible in the context and use that data to check the data of sense against the predictions that the story makes possible. (1986: 195)

The suggestion here is that even as we perceive something, we are already fitting it into a narrative. Crites (1986) put forward a rather different notion, suggesting that those things which are perceived are only 'experienced' at the point that they can be fitted into a narrative:

Many ... things register in my consciousness, are perceived but not experienced, heard but not listened to. Here I must acknowledge a terminological quibble. I think it is useful to reserve the word 'experience' for what one has incorporated into one's story and thus owned, owned up to, appropriated. It will follow from this usage that many things are experienced retroactively ... It is common to use the word 'experience' for all ... sensations. But then we would need another word to signify conscious appropriation, since the distinction is too crucial to be left muddled. I prefer to say that most of the things that are sensed are never experienced, and that only those that are

attended to are experienced, some things only slowly clarifying themselves as I become aware of their significance for my story. (1986: 160-1)

Thus only a fraction of what is available is actually experienced, and what is experienced depends not simply on the attention paid to it, but on how it fits into the stories we are constructing. In this light, Berti and Bombi's (1988) assumption that children living in a forested area would have experienced the whole process of production becomes absurd (see discussion in Chapter 2).

We tell stories to ourselves 'to "make sense" of what we are encountering in the course of living' (Bruner and Lucariello, 1989: 79), and to explain, interpret and solve problems (Feldman, 1989). To Robinson and Hawpe, this was the most important aspect: 'the stories we make are accounts, attempts to explain and understand events' (1986: 111). To do this, we inevitably go 'beyond the information given' (Bruner, 1974). Sarbin emphasised this aspect of narrative construction:

I want to accent that all stories ... are compounds of happenings and imaginings ... When there are no firm connections between empirical events, the individual organises them into an imaginative formulation that meets one or more tests of coherence. (Sarbin, 1986: 12)

The way that narratives are constructed by drawing on, and going beyond, what has been experienced, is particularly evident in young children, whose constructions of everyday events often differ markedly from those of adults.

Tizard and Hughes comment that young children are enormously ignorant, but 'because they are such active thinkers, [they] usually construct their own theories to fill the gaps in their knowledge'. (1984: 128). Such processes of construction were observed by Nelson (1989) in her analysis of recordings of the 'crib-speech' of one child, Emily, who was recorded over a period of fifteen months ending when she was just three years old. 'Crib speech' included both dialogues with parents at bedtime and Emily's monologues after her parents had left the room. These recordings give a fascinating insight into the way Emily drew on, and went beyond, experiential resources. Emily talked about things that she had seen and

done, and in her monologues, often drew substantially on the preceding dialogue with one of her parents. However, she also added her own theories; for example, one day her father had talked to her about a forthcoming trip to the ocean, and had mentioned eating hot dogs. Emily's subsequent monologue included this passage:

the hot dogs will be in a fridge, and the fridge would be in the water over by a shore, and then we could go in and get a hot dog and bring it out to the river (Nelson, 1989: 66)

Emily had at that time never eaten hot dogs, and her father had not referred to fridges; Emily appears to be theorising from her knowledge of where food is kept. In her narratives Emily also drew on, and inserted herself into, fictional stories which she had been told. (See also Fox, 1993, for an account of children's use of fictional narratives in their own story-telling).

The literature concerning children's social and economic understanding includes many examples of such imaginative narrative constructions; here children are explaining the origins of various goods:

[milk] you have to get bottle and then you get butter and powder and then you stir it all up and then it'll get all white (6 year old)
[apples] they make them in a machine. When it's five minutes it comes all red, when it comes out of the machine it's green (5 year old)
(quoted in Hutchings, 1989: 13)

These children did not know the origins of the goods in question, but they constructed origins from previous talk or experience (possibly of mixing powdered milk and of talk linking butter to milk; of food changing colour when it is cooked).

Children's narratives have various functions: Engel (1995) lists: ordering and making sense of experience; making emotional sense of the world; solving problems; becoming part of a culture; making and keeping friends; and constructing a self. This list echoes the ideas referred to above of Hardy and Sarbin.

Narrative views of the person

There is disagreement about whether the need to construct narratives is innate as Hardy and Sarbin seem to suggest, or whether it is acquired through experience of living in a world of narrative-constructing people and hearing conversational narratives and stories (Wells, 1986). Sutton-Smith (1986) argues that social play with parents or older peers is also a pre-cursor of narrative construction.

It is widely agreed that narrative is an important way in which we construct identities; Gergen and Gergen link this to the ideas explored above about making sense:

The fact that people believe they possess identities fundamentally depends on their capacity to relate fragmentary occurrences across temporal boundaries. (1983: 255)

This idea has been explored by Freeman (1993) and by many of the contributors to *Texts of Identity* (edited by Shotter and Gergen, 1989), notably Young and Murray. In constructing our past lives, we inevitably select, and do so in such a way as to tell a particular story or give a particular impression; Mishler (1986) saw the story as a form of self-presentation, in which a particular personal and social identity is claimed. It is also possible for a person to reconstruct their past story; this is one aspect of psychotherapy (Shotter, 1993a).

We cannot tell ourselves and other people who we are, who we have been, who we will be, and so on without narrative ... I am suggesting that it is through the medium of narrative that we relate to others, and construct ourselves as meaningful, knowable, accountable subjects. In a sense, we are made real by stories. (Curt, 1994: 55)

Constructing an identity is not limited to the past; Neisser (1988) discussed the idea of an extended self constructed from both past experiences and imagination about the future. Engel suggests that 'we project ourselves into different experiences as a way of exploring who we are and who we are not' (1995: 55). The stories we tell ourselves about the future need not be limited by the constraints of our current lives. Walkerdine pointed out that children do not necessarily enjoy 'realist' stories in which they can recognise their everyday lives;

they often prefer both comics and fairy stories in which they can engage with 'what might be', and their 'desires to have and to be something and somebody different' (1984b: 168). Thus the process of construction of the future is rather different from that of the past:

The story of the past, of what *has been*, is so to speak archaeologically available, while the future, *not yet*, unknown, calls for a different narrative strategy. ... With respect to the past the artful act is to reshape what has been. With respect to the future, there is the possibility, nourished precisely by possibility, of running toward the open arms of the widest horizon, which dissolves all things and makes all things new, including the self. (Crites, 1986: 164, 166)

There is a range of possibilities for the future, from things we think will certainly happen (usually in the immediate future, and of course eventual death), through those things which may happen, but are perhaps plans and hopes rather than expectations, to the wildest imaginations. As adults we know that some of our wild imaginings will certainly never come true; however, for children the possibilities are far more open.

The fantasy element in young children's career choices was used by Ginzberg *et al.* (1951) to characterise the stage of career choice of children under eleven years old. I have already discussed children's fantasies about the future which involve being powerful. While it is easy to label some ambitions as 'mere' fantasies, it is possible to turn fantasy into reality. This was demonstrated on the television programme *Seven Up*, which has filmed particular individuals once every seven years. One working class boy living in a city said, at age seven, that he would like to be a jockey. In his circumstances it seemed an extremely improbable future and could easily have been dismissed as 'mere' fantasy; however, subsequent films showed that he did indeed achieve this ambition.

Narrative and reality

It is clear from the discussion above that narratives may incorporate both 'factual' and 'fictional' elements, and that it may not be possible to distinguish between the two; rather, there is a spectrum at one end of which we are drawing on what we

perceive to be fact, and at the other we are not. Those concerned with narrative construction have generally been less exercised than the discourse analysts discussed earlier about the issue of realism, perhaps because they are focusing on constructions which they see as inevitably to some extent fictional. However, the arguments about realism discussed in the previous section must be of equal relevance here.

Situated learning

Situated learning (Lave and Wenger, 1991; Lave, 1992; Mercer, 1992) or situated cognition (Butterworth, 1992) starts from the assumption that context must be seen as central to the study of learning rather than as an add-on extra. This follows from the recognition that people's capacities and skills are specific to particular contexts (Rogoff, 1984).

All learning is situated, because any task or activity does not exist independently of the ways in which participants ... contextualise it ... The study of learning, especially in educational settings, must treat context and culture as part of what is being studied, not variables to be partialled out. (Mercer, 1992: 33)

This perspective is less closely implicated in the mainstream of social constructionism than those I have already discussed, and the writers do not label themselves social constructionists. However, I include them here because their main interest is in what happens between people in specific contexts, and because they have frequently focused on learning in work contexts. Hanks wrote in the Foreword to *Situated Learning: Legitimate Peripheral Participation* (Lave and Wenger, 1991):

Rather than asking what kinds of cognitive processes and conceptual structures are involved, [Lave and Wenger] ask what kinds of social engagements provide the proper context for learning to take place (1991:14)

Lave and Wenger's interest is participation, and they argued that this is always based on negotiation of meaning, and should be seen neither in terms of

internalised knowledge structures, nor simply in terms of external activity. They emphasise:

... the significance of shifting the analytic focus from the individual as learner to learning as participation in the social world, and from the concept of cognitive process to the more encompassing view of social practice. (1991: 43)

In contrast with many social constructionist analyses which centre around talk, this perspective also emphasises activity in the world, focusing on problem-solving (Rogoff, 1990) or social practices such as shopping or dieting (Lave, 1988). Children's activities are considered important; Rogoff pointed out that in some societies there is very little talk between adults and children, and drew attention to the role of adults in structuring children's lives by providing access to certain social settings. Children learn, not only through their own talk and activity, but also through listening to adult conversation which is not directed at (or structured for) them, and observing the activities which take place around them.

The perspective of situated learning is of interest in the present investigation because theorists working within it have been concerned with learning which takes place outside the school, and many of their studies focus on learning and practice in relation to work (e.g. an industrial plant: Scribner, 1984; supermarket shopping: Lave, Murtaugh and de la Rocha, 1984; Lave, 1988; apprentice midwives, tailors, quartermasters and butchers: Lave and Wenger, 1991). Of particular interest is the analytical perspective of 'legitimate peripheral participation' (Lave and Wenger, 1991). They used this term:

to draw attention to the fact that learners inevitably participate in communities of practitioners, and that the mastery of knowledge and skill require newcomers to move towards full participation in the socio-cultural practices of the community. (1991: 29)

Their accounts of apprenticeships indicate how work knowledge and identity is developed in situations where the learner is able to participate peripherally, and learn through observing, listening and taking part in the situation they are placed in. These accounts could equally apply to children in traditional societies;

however, it is less clear how they could be applied to children in industrialised societies. Lave and Wenger argued that ‘children are ... quintessentially legitimate peripheral participants in adult social worlds’ (1991: 32), but they chose to avoid issues of schooling, because at school children are separated from the adult social world; in learning at school they are becoming part of the community of schooled adults, rather than learning to be members of any specific communities of practice (such as physicists, geographers, cooks, etc.).

The person in situated learning

The person in situated learning invariably has a mind, and for many theorists the main interest has been to conceptualise the development of the mind in socio-cultural context (e.g. Rogoff, 1990; Roazzi and Bryant, 1992; Hatano and Inagaki, 1992). Walkerdine comments that ‘attempts to understand thinking as situated are far too cognitivist’ (1993: 464). Thus this perspective remains open to the moral and political problems of developmentalism. However, Lave and Wenger’s view, as indicated above, is less concerned with cognitive processes than most versions of situated learning.

Lave and Wenger emphasised that ‘learning involves the construction of identities’ which they defined as ‘long-term living relations between persons and their place and participation in communities of practice’ (1991: 53). They related this to motivation to learn, suggesting that while there may be intrinsic rewards in successfully completing a task, the longer term motivation is to become a full member of the community of practice with a sense of identity as a ‘master practitioner’ (1991: 111).

This is described as though it were unproblematic; the apprentice, it appears, *wants* to become a member of the community of practice. The only conflict, in this account, results from the fact that the newcomers will eventually replace the present masters. The newcomers, able to see the practice with fresh eyes but with the knowledge of participants, reflect on and question the on-going activity, and this may be resented by old-timers. However, it may also lead to changes in

practice, and gradual transformation of the community of practice. Thus, Lave and Wenger claimed, the notion of legitimate peripheral participation is intended as a 'conceptual bridge' (1991: 55), in that it involves both the production of skilled practitioners, and the reproduction and transformation of communities of practice.

However, the conceptualisations of community of practice, development of identities and conflict are all somewhat limited, as Lave and Wenger themselves recognised. The newcomer is seen as wanting to be, and as potentially able to become, a full member of the community of practice. There is no room here for resistance or for unwilling recruits or failed apprentices. Nor is there any notion that many people do not go on to become 'masters' in their community of practice, but rather remain as alienated members of an exploited labour force. Lave and Wenger acknowledged that:

unequal relations of power must be included more systematically in our analysis. Hegemony over resources for learning and alienation from full participation are inherent in the shaping of the legitimacy and peripherality of participation in its historical realisations. It would be useful to understand better how these relations generate characteristically interstitial communities of practice and truncate possibilities for identities of mastery. (1991: 42)

Another perspective which is limited in Lave and Wenger's account is that of plurality of ideas. Goodnow and Warton pointed out that:

accounts often proceed as if the individual encounters *a* culture or *a* context, as if cultures or contexts provide a single message, a single explanation of events or unequivocal pieces of information. They also proceed as if the outcome of cognitive development were the acquisition of a single understanding of events, a single way of defining a task or looking at the world. (1992: 157)

They go on to say that while some contexts may be fairly characterised as having singular messages, in others there are many messages, some at odds with others. As I discussed in the previous chapter, the notion of 'a single understanding of events' is one of the problems with developmental accounts of economic understanding. Lave and Wenger avoided this by envisaging many different

communities of practice, but though they stated their assumption that ‘members have different interests, make diverse contributions to activity, and hold varied viewpoints’ (1991: 98), this assumption was not used to inform their analyses of the construction of identity.

Goodnow and Warton used the notion of plurality to refer both to the multiplicity of views within any single context, and to indicate that an individual may take on board more than one view ‘sometimes resolving them to generate a new blend, and sometimes simply flipping from one to the other without a sense of conflict’ (1992: 158). Sarchielli (1984), analysing the process of becoming a member of an occupational group, pointed out that any work setting contains a number of social groups: co-workers, subordinates, managers; thus the newcomer is exposed to a variety of messages. This variety, Sarchielli suggests, may lead the individual to adopt a ‘questioning and critically active stance to the organisation setting and ... to the influencing pressures exerted within the working environment’ (1984: 283). Thus Goodnow and Warton suggested that it is necessary to think in terms of selective appropriation and resistance, rather than absorption of a prevailing view. They used this pluralist perspective in their analysis of parents’ views about pocket money in relation to household jobs, pointing out that very few parents adopted one ideological position (e.g. that children should never be paid for household work) and held firmly to it. The vast majority made complex distinctions relating to the specific job, the age of the child, the particular circumstances. Children meet a range of shifting and conflicting messages even in the earliest work setting they encounter.

Thus while Lave and Wenger acknowledged many of the complexities that are involved in learning through legitimate peripheral participation, their account remains a rather simple one which does not take on the complexity of thinking or the power relations within society. There are many similarities between Lave and Wenger’s ideas and the account of secondary socialisation put forward by Berger and Luckmann. Both emphasised the idea of becoming a member of a group, society or community. Both stressed that this involves identification or constructing an identity, though Berger and Luckmann argued that this is less

inevitable than in primary socialisation. Whereas socialisation has been criticised for the dualism in which the individual becomes a member of society, Lave and Wenger used the notion of peripheral participation in which the newcomer is a participant from the start, but moves to being a full member. However, in their account duality arises with the notion of children as legitimate peripheral participants in an adult social world; it would seem that they cannot become full members of this society until they have grown up, and until such time, they must remain outsiders. Both Berger and Luckmann's and Lave and Wenger's accounts can be criticised for the very limited consideration they give to conflict and resistance.

Generalisation and transfer of learning

One of the strongest themes of situated learning has been the context-bound nature of learning. Conventional wisdom, as well as cognitive theory, assume that context-free knowledge acquired in school can be applied in real life contexts. However, research conducted in out-of-school settings has found that competence is much more tied to setting than had been supposed, and has challenged the centrality accorded to learning transfer (e.g. Carraher *et al.*, 1985; Lave, 1977; Scribner and Cole, 1981; Lave 1988). Thus one aspect of studies of situated learning has been a concern with the ways in which knowledge may, or may not, be transferred from one context to another, either through analogy or generalisation (e.g. Lave 1988; Hatano and Inagaki 1992). Lave and Wenger emphasised the limited value of generalisations and the specificity of both acquiring and using knowledge:

Generality is often associated with abstract representations, with decontextualisation. But abstract representations are meaningless unless they can be made specific to the situation in hand. ... Knowing a general rule by itself in no way assures that any generality it may carry is enabled in the specific circumstances in which it is relevant. ... What is called 'general knowledge' is not privileged with respect to other kinds of knowledge. It too can be gained only in specific circumstances. And it too must be brought to play in specific circumstances. (1991: 33-4)

The whole issue of transfer of learning will be considered in depth in Chapter 9.

Social constructionism and developmentalism

At the outset of this chapter I argued that I should take an anti-developmental stance in this research. Social constructionism clearly has considerable potential for a critique of development, drawing on the notions of discourse and narrative. The focus on interaction rather than on the properties of the mind is also helpful in getting away from developmental assumptions. Similarly the emphasis on social, historical and cultural specificity is useful in that it militates against asserting a single course of development and defining norms. However, as most social constructionists have not been concerned with children's learning, the question of developmentalism has generally not been relevant and has not been discussed.

An exception was Harré. He has repeatedly argued against developmentalism, pointing out (1983) that any hierarchical account of children's development can be turned on its side and a set of stages seen as a set of alternative ways of thinking which are not necessary sequential; thus he argued that Kohlberg's (1976) stages of moral development are alternative moral theories which all involve the same cognitive capacities. Similarly he has challenged Piaget's account of stages which he considered to be 'a reflection of an ethnocentric view of the relative *worth* of different forms of higher mental functioning' (1983: 223). Nevertheless, Harré's own account of childhood is still essentially developmental; he suggested that 'There is a cognitive capacity that does change. This is the ability to deal with more complex tasks and to handle greater masses of material' (1983: 225).

In his search for an anti-developmental formulation, Morss (1996) rejects social constructionism as he concludes that it incorporates some elements of developmental thinking. However, he uses a rather more narrow view of social constructionism than I have in this chapter, focusing on the work of Harré, Shotter and Gergen, whom he describes as the 'Old Guard'. He emphasises that

Harré, Shotter and Gergen have all been writing over a long period, and that their views have changed. Shotter and Gergen have both taken on the move to postmodernism. Shotter (1992) argued that postmodern psychology should focus on local and personal narratives, concerned with social identity in practical daily social life. Gergen and Gergen (1986) suggested that such narratives might be evaluated by their rhetorical power, generative potential, and ideological, political and social implications. They chose to examine the dramatic impact of developmentalism, and argued that the Piagetian narrative carries rhetorical conviction in its clearly defined end-point and elaborate account of the events leading up to this. Thus developmentalism is presented as one narrative among many others. Morss suggests two reasons why these writers have not been more active in writing against development; he points out that their interests in psychology are far wider than simply development, and concludes that they 'do not see development itself as enough of a problem' (1996: 47).

I have included a rather wider spectrum of writers in my discussion of social constructionism than Morss did. Some of these have not been concerned with children or development (e.g. Potter and Wetherell, Parker). Many of those whose interest is situated learning start from developmental theory, often drawing specifically on the ideas of Piaget or Vygotsky (e.g. Rogoff, 1990; Mercer, 1992). They criticise developmentalism for its lack of concern with social context, and rather than introducing context as an extra variable, they attempt to modify the theory so as to put context into a central position. But they still assume that there is something which develops.

However, others have offered a more forceful rejection of developmentalism. The group who have been concerned with situated activity among adults (e.g. Scribner, 1984; Lave, 1988; Lave and Wenger, 1991) to some extent side-step issues of development by choosing to focus on adult problem-solving in everyday contexts. This stance has been adopted by Lave as a result of her rejection of the normative view of the person as a rational scientist and problem-solver, and of the distinction commonly drawn between everyday thinking (seen as primitive or non-rational) and scientific, rational thought. In particular she challenged

psychology's context-free characterisation of cognition. In order to move away from these conceptions, she argued that persons, culture, social world and everyday must be treated as objects of analysis, in an attempt to develop a theory of practice. Her arguments can then be seen as anti-developmental.

I have also included the post-structuralist work of Henriques *et al.* and Walkerdine in my broad category of social construction. Morss considers that Walkerdine's (1984a) use of a Foucauldian viewpoint is 'one of the best examples yet available of an anti-developmental formulation' (1996: 134). However, as I have indicated, he argues that when both Walkerdine and Urwin draw on Lacan they incorporate some developmental notions into their accounts.

Another perspective which strongly rejects developmentalism is the 'critical polytextualism' of Stainton Rogers and Stainton Rogers (1992) and Curt (1994). I have drawn on their views in my discussion of narrative; however, they go rather further than most of those discussed in that section in that they accept that there are a multiplicity of interpretations of any social practice. They accept the relativistic implications of post-structuralism, arguing that there are no absolute grounds for any particular moral stance. However, they consider that it matters what stories are told, and why. Developmental explanations are for them a cause for concern in that they suppress alternative accounts:

We are not interested in trying to improve developmentalism by correcting its errors. What we are arguing ... is that the whole enterprise of developmentalism needs to be abandoned altogether! (1992: 42)

I have argued that one of the problems with both developmentalism and with the concept of socialisation is that both lead to the identification of norms, and the consequent pathologising of certain groups. Morss points out that Bradley (in preparation) considers that even social constructionist accounts which describe subjectivity as produced by discourse have this same tendency to create norms by appealing to 'universal and regular processes of transformation' (1996: 151). Similarly Lock (1994: 2, quoted in Morss 1996: 151) claims that social constructionism posits 'ordering principles to the temporal course of construction'.

The difficulty here is perhaps unavoidable. The nature of language is that we talk and think in categories or concepts rather than particular instances. All our concepts are based on the typical or normal instance - of a tree, cat, bus driver, factory or whatever. Other examples are recognisable, but unlike our notion of the typical instance. This is fine, so long as we do not then pathologise them, for example, by identifying a black woman bus driver as a problem. In the context of research, the focus should perhaps be on diversity rather than the typical case; thus in this research the interest becomes the variety of children's constructions of work, rather than identifying a single developmental course. However, in examining diversity, it is difficult to avoid also constructing a norm. While trying to take an anti-developmental stance in this research, I do not claim to have resolved these problems, and as I indicated in the Introduction, became aware of them only at a late stage in the research process.

Implications of social constructionism for investigation of children's constructions of work

Finally I consider the implications for my investigation of the various ideas discussed in this chapter. Firstly, in taking a social constructionist view, I should avoid the idea that there is something in the child's mind which can be accessed, and simply focus on what is said or done in a particular context.

In designing my research, I need to recognise that all constructions are jointly made with other participants, rather than individual. I should be aware of my own contribution as both initiator and audience (which would apply even in solitary constructions such as individual pieces of writing). I also need to bear in mind that the context of construction cannot be neutral, and must affect the nature of the construction. It may be more useful to investigate children's constructions of specific work contexts than to look for generalised understandings and abstractions, since this reflects more closely the ways in which we normally construct ideas. Constructions may be of past, present, future or unfamiliar work; construction involves a combination of fact, imagination and desire in each case.

A possible approach might be to get the child to insert her/himself imaginatively in a particular context and to tell a story, rather than to attempt to check up on their factual knowledge. (This approach is very clearly different from the developmental one which rejects both imaginative elaborations and repetitions of what others have said: Furth, 1980.) The focus should not be the accuracy of children's constructions, but rather, how they are constructed, and what they draw on; it is pointless to compare children's constructions with some supposed view of reality such as my own constructions, or those of the average adult (Berti and Bombi, 1988).

In analysing children's constructions, I need to be aware of the various discursive practices in which they are positioned. They are children attending school and living in a society which generally positions children as powerless, innocent and in need of protection. As I have discussed, this discursive positioning may produce particular fantasies and desires. However, this particular construction of childhood is culturally specific, and will not necessarily represent the discursive positioning of all children. I also need to be aware of the economic realities of life for the children and their families.

I should note that children may draw on discourses or interpretative repertoires, as well as on observations and memories. They may also draw on their own participation in social practice as a resource. My research involves a consideration of transfer of learning, since I am interested in how children draw on resources which were acquired in specific circumstances and how they use them in new constructions. While my main interest is not in generalisation, it will be of interest to consider whether children appear to be making links between different work contexts, and whether they draw on or construct generalisations.

Finally, I must avoid the temptation to oversimplify in order to create a model; the world is messy and complex, and the complexities are an essential aspect of all thinking and interaction, not a superficial phenomenon.

CHAPTER 4

Methodology

This chapter explains how the research was carried out. Drawing on the discussion in the previous chapter, the implications of adopting a social constructionist perspective are considered. I then outline various ways in which relevant data could be collected and discuss the chosen method, semi-structured interviews. The design of the interview and that of the sample are explained, and I discuss analysis of the data.

Epistemology and research design

In Chapter 3, I pointed out that some theorists have termed the move to social constructionism a paradigm shift. Kuhn (1970) defined a paradigm as, ‘the entire constellation of beliefs, values, techniques shared by members of a given scientific community’, which indicate what problems can be researched and how the research can be carried out (1970: 75). Thus both the specific focus of investigation and the research design must reflect the paradigm within which I am working.

An investigation which starts from a social constructionist post-structural perspective will inevitably have a different focus from the developmental positivist research discussed in Chapter 2. This is evident in the title of this thesis: children’s *constructions* of work. While developmental research focuses on understanding (assumed to exist in the mind), social constructionist research examines constructions made between people (what is said or done). These constructions are seen as historically, culturally and socially specific, in contrast with the developmentalists’ epistemic subject and universal course of understanding. Thus my research must be concerned with the historical context of

the early 1990s, the specific socio-economic context (community and family) in which each child lives, and the resources this affords for the child to draw on.

In Chapter 3 I considered the implications of various versions of social constructionism for this research. I concluded that I should investigate children's constructions of specific work contexts (present, future and unfamiliar), rather than their generalisations about work. By looking at one child's constructions of several different work contexts, I may be able to determine whether the child constructs work in similar ways and draws on the same resources in each context, or whether resources and constructions are context-specific. This will offer some insight into transfer of learning and generalisation across such contexts.

Just as different paradigms allow different research questions to be asked, they also embody different assumptions about the research process. Developmentalism lies in the positivist/empiricist paradigm; thus research is seen as a neutral process of finding out in which the researcher attempts to identify laws governing the universal processes of development. These are generalisations which can be applied in other contexts. In contrast, social constructionist research is interpretive and often explicitly postmodernist; it 'challenges the powerful view that there is a determinate world which can be definitively known and explained' (Usher, 1996a: 25). All knowledge is seen as partial, contingent and perspectival, and complexity and uncertainty are accepted. Research is concerned with what is said and done in specific contexts, and is seen as creating a narrative or telling a story which offers one way of looking at the world: 'research is not simply a matter of representing, reflecting or reporting the world, but of creating it through a representation' (Usher 1996b: 35). This perspective extends the spotlight from the subject matter to the researcher:

The research process itself must be seen as socially constructing a world or worlds, with the researcher included in, rather than outside, the body of their own research. (Steier, 1991: 1-2)

Traditionally, in the positivist/empiricist paradigm, the researcher is seen as objective and value neutral, and aims to eliminate all sources of bias; 'methodology is taken to be the guarantee that the knowing activities of the

researcher will not leave a “dirty footprint” on what is known’ (Usher, 1996b: 40). In contrast, postmodern research assumes that the researcher is centrally involved, because, as Steier explains: ‘what I describe in my research is in no way existent apart from my involvement in it - it is not “out there”’ (1991: 1). The researcher’s contribution is not to reveal, but rather to construct the world. This process of construction inevitably involves using categories which are themselves socially constructed, and thus involves the notion of ‘reflexivity’, a bending back on itself (Steier, 1991). What is needed is a ‘continuous critical examination of the practice/process of research to reveal its assumptions, values and biases’ (Wilkinson, 1988: 495). This is not done in order to eliminate and discount bias, as in positivist research, a process which Woolgar termed ‘benign introspection’ (1991: 22), arguing that while appearing to question positivist thinking, such introspection actually strengthens it. Rather the intention is to ‘reveal, understand and analyse not only the product of knowledge, but its production and therefore its producer’ (Aldridge, 1993: 53-4).

An important aspect of reflexivity is to examine the researcher’s contribution. One step towards this is to make the author a part of the text by using the first rather than the third person:

The traditional academic text deliberately excludes the author. The authorial ‘I’ is muffled, and the text now seems to represent unproblematically that segment of reality to which it refers. (Scott, 1996a: 153)

Scott also points out that creating a ‘transparent text’ allows the reader to understand how it has been constructed, whereas opaque texts cloud the processes of construction and give the impression of neutrality. A second aspect is to acknowledge the personal interests and values which have motivated the research; Usher argues that: ‘Nowadays there is a general scepticism about the very possibility of value neutrality and a disinterested stance’ (1996b: 36). In this research one starting point is my concern about the reproduction of social and economic disadvantage; this particular project tends towards consciousness raising rather than action, but in its long-term aims could be seen as

emancipatory. A problem that dogs all research with emancipatory aims is that researchers end up speaking on behalf of those they see as oppressed, and making sense of their lives 'in terms which do not in fact make sense to "them"' (Parker and Shotter, 1990: 12); Usher points out that this is a characteristic of educational research: 'education is full of people who speak for others in the name of doing good by them' (1996b: 49). It is inevitably patronising to assume that you can represent the voice of others, and it is therefore important to include the voices of the participants in the research report. However, it would be simplistic to view emancipation as the sole aim of a research project; in most cases (including this study) curiosity is a factor; moreover, the researcher also has a variety of personal concerns such as earning a living, making a career, or, as in this case, gaining a qualification. These concerns, while not generally acknowledged in research reports, lead to a tendency towards closure and definite findings.

While research questions and the research process are conceptualised very differently depending on the paradigm adopted, Bryman (1988) argued that there is no necessary linkage between epistemology and method of data collection. Scott (1996a) agrees that different frameworks may use the same method, but argues that the precise way in which the method is used, and thus the data collected, must relate to the epistemological assumptions. So while interviews can be used by positivist, interpretive and postmodern researchers, in each case they will be used in different ways, resulting in different kinds of data. I will return to this issue later in the chapter, but first will discuss possible contexts for my investigation.

Contexts for investigating children's constructions of work

Talk is the most commonly used medium for construction, and is the way in which most children communicate most fluently: hence this investigation focuses on spoken constructions. I considered the possibility of combining these with constructions in some other medium such as drawing or writing, but decided

against this: children in the early years of primary education express ideas more fluently and in more detail in talk than they do on paper. Moreover, drawings tend to show more stereotyped ideas than are constructed in conversation because of the need to make the picture clearly recognisable: for example, people at work are generally drawn with tools, equipment, or clothing specifically connected with work, or in a background of other workers. They are not usually depicted walking along the street, or in conversation over coffee, yet both these activities could be work. Thus a requirement to draw may limit constructions of work put forward (Hutchings and Sims, 1993).

Children's talk about work could be recorded in a variety of contexts and with a range of conversational partners. Constructions range from those that occur naturally in conversations with family and friends, where the researcher 'eavesdrops' on conversations which, it is hoped, are unaffected by recording and/or researcher's presence (e.g. Tizard and Hughes, 1984), to those which are entirely contrived by the researcher (e.g. interviews). Between these two poles lie a variety of conversations which are partially contrived: for example, the researcher could ask a teacher to hold a discussion on a particular topic with a class. Psychological research has increasingly turned to the study of natural transactions rather than laboratory-based investigations, following Bronfenbrenner's (1979) arguments for ecological validity. However, Hammersley (1992) maintained that there are degrees of artificiality in all methods of data collection; an observer in a 'natural' setting renders it artificial. Scott points out that the researcher's values are centrally implicated in any method of data collection, but that 'the more artificial the data collection method is, the less valid it is' (1996b: 62).

Several possible contexts for recording children talking about work were considered, and the relative advantages and disadvantages of each are considered below.

a) Talk in the home

As children have only limited opportunities to observe adults at work, talk in the home is probably a major source of their knowledge and ideas. Recordings made of families talking at home offer insights into the sorts of talk which take place, and show how parent and child contribute to the meanings constructed. Tizard and Hughes' (1984) transcripts of mothers and their four year old daughters talking at home include conversations about people at work in the community (e.g. a window cleaner) and family work. In this example, aspects of the father's work are discussed:

- Mother: I can't sit here for long.
Child: Why?
Mother: Because your father'll be in soon.
Child: It's not dinner time yet.
Mother: It's gone dinner time, doesn't come here for lunch does he?
Not now. Works too far away.
Child: Why don't he come up here for lunch?
Mother: 'Cause it takes too long for him to get home and back to work again.
Child: And he's not allowed to?
Mother: No.
Child: Or he get, or he won't get lots of money?
Mother: No, he won't get lots of money, and then you won't get no new slippers.
Child: No, or new shoes?
Mother: Won't get them both this week, love. (1984: 167)

A study of such conversations in the home in which ideas about work are jointly constructed would hold considerable interest. However, this possibility was rejected on practical grounds: work may occur only very occasionally in conversation at home, and thus many hours of talk would have to be recorded to obtain sufficient data.

b) Talk in the classroom

A second possible context for investigation of children's constructions of work is talk with other children and/or teachers in the classroom. However, there are few

opportunities for children to bring their experiences of adult work to bear in most subjects. Even where it is seen as desirable to relate learning to a real life context, as it is in mathematics (*The Cockcroft Report*: DES, 1982), the situations contrived tend to be far from children's experience, or are not, in fact, the ones that would be found in real life. Mathematical problems frequently distort questions that would be posed in real life, in order either to provide practice in a particular mathematical operation (for examples, see Hutchings, 1992), or to make the numbers small enough for children to cope with (Walkerdine, 1988). While Walkerdine recorded children commenting on the contrast between prices at school and in real life ('She's buying a basket 2p, isn't it cheap. My mum's shopping bag was six pounds', 1988: 155), the gap between school and real life experience is so great that many children do not relate the two.

The development of industrial links affords greater opportunities for children to draw on their out-of-school experiences. In the example below, recorded by Ross (1983), a class of 10-11 year olds who have visited a bottle stopper factory discuss gender issues:

- Barry: If women want to work in the toolroom they shouldn't work in the toolroom. They shouldn't go to work, they should stay at home, and do the work at home. ...
- Girls: Why / Why should they / No / Why stay at home?
- Barry: Because they've always done it and they should always do it.
- Jane: My next door neighbour, they were both teachers, but the man stopped being a teacher and so the woman went to work and the man stayed at home.
- Teacher: And did you think that was OK?
- Jane: Yes, he got on very well. I'd really like it if I was his wife, having a nice meal cooked for me when I got home. He done all the cleaning, looked after the baby. ...
- Ian: If the ladies want to work in the toolroom, they should have a law that any dangerous jobs - like my dad he's a scaffolder and he's had a few accidents, so if he fell, he'd probably just go 'Argh' like that, you know, and ladies, they'd start crying and that. (1983: 17-18)

This recording suggests that, like talk in the home, classroom discussion has considerable potential for research in this area. It allows the researcher to analyse

the resources the children draw on: in this case parents' and neighbours' work, and at other points in the same discussion, television. The disadvantages are that such discussion is infrequent, and would need to be contrived. Moreover, each child's contribution is brief, and some say nothing.

c) Role play

Role play is another way of getting children to talk. The advantage of this is that children generally enjoy the activity, and are well-motivated. It can be set up so that all the children have a role, and thus contribute (unlike class discussion, above). It has been used effectively in an investigation of children's constructions of gender in relation to adult work by Francis (1996a). However, it also has limitations: just as drawing tends to elicit stereotypes, so does acting. Moreover, one child may dominate so that their construction prevails, or may intimidate others (Francis, 1996b). Both these issues occurred in a role play described by Francis in which an eleven year old boy, taking on the role of hotel manager, accused the girl acting as cleaner of improper behaviour because he said that her bra was found on a guest's bed (1997).

d) Interviews

Interviews are the method which has been most commonly used in research into children's social and economic understanding. The disadvantage lies in the artificial nature of the situation; the child's construction has no real purpose except to respond to the interviewer. Moreover, it is an unnatural social setting, as Ball pointed out:

the interviewee is asked to elaborate, illustrate, reiterate, define, summarise, exemplify and confirm matters in his talk in ways that would be unacceptable in other talk situations. The interviewer controls the specification of topics and maintains a verbal monitoring of the speech situation ... The rules of conversational discourse are flagrantly disregarded in the name of social science ... The interviewer comes to 'know' his subjects without ever necessarily having to engage in a reciprocal process of 'social striptease'. (1983: 93-5)

While this description is a fair representation of many research interviews, it is also a fair description of much interaction between teachers and children. In schools children expect to be asked questions about their own understanding and knowledge; Donaldson and Elliot (1990) pointed out that this is one of the characteristics which distinguishes interaction in the school from that in other settings. Child-teacher interaction generally consists of the teacher asking questions and the child responding (Tizard and Hughes, 1985; Wells 1983). Thus while interviews may, as Ball suggested, flagrantly disregard the rules of most conversational discourse, they are more similar to classroom discourse.

The advantage of interviewing, in comparison with the contexts for talk discussed above, is that each child has the opportunity to speak at length, and the interviewer is able to decide areas of questioning and to ask follow-up questions. These considerations led to the decision to interview children in this research.

The possibility of interviewing children in groups was considered. This has advantages: the situation may be less intimidating, and children may interact with each other (Buckingham, 1993). Group interviews were tried out in the pilot stage, but I found that either one child's construction dominated and others hardly contributed, or each child talked about their particular construction with little reference to the others. This perhaps resulted from the questions asked (involving imaginative constructions of particular contexts, as discussed in the previous chapter), which perhaps invited individual response rather than debate. I therefore decided to use only individual interviews in the main study, despite the perceived disadvantage that some children might find it intimidating to be asked to talk to an unfamiliar adult by themselves.

Interviewing

I pointed out that Scott (1996b) argues that the way any research method is used must relate to the epistemological assumptions made. Here I discuss various conceptions of the interview, and review interview questions asked in previous research.

Conceptions of the interview

The positivist view assumes that interviews can provide access to the mind:

By providing access to what is 'inside a person's head', [interviews] make it possible to measure what a person knows (knowledge or information), what a person likes and dislikes (values and preferences), and what a person thinks (attitudes and beliefs). (Tuckman, 1977: 173)

This conception of the interview can be seen as 'pure information transfer' (Cohen and Manion, 1980: 244). The positivist aims to collect data which is valid regardless of the interview context or the interviewer (Silverman, 1993), and therefore considers that it is important to recognise and control for bias by building controls into the research design. Thus Selltiz *et al.* (1964) advised that interviewers should ask the questions exactly as they are worded, and in the same order as the schedule; they should not express surprise or disapproval at responses, explain or re-word questions, or suggest possible replies. Other researchers have seen bias as inevitable since it arises from the inherent features of interpersonal interactions such as desire to impress, or to appear in a good light; such human characteristics are thus regarded as 'potential obstacles to sound research' (Cohen and Manion, 1980: 245), and data is checked by triangulation (e.g. by using different methods to collect data about the same phenomenon).

Piagetian studies also regard the interview as a means of accessing the child's mental representations of the world. However, the style of interview Piaget used is completely different from the positivists' structured interview described above. He used the 'clinical' interview, which he described as the method used by psychiatrists in clinical examinations: the interviewer should allow the child to talk freely, but must also have a working hypothesis to test against the reactions stimulated in conversation. This enables the exploration of convictions which are the product of the child's own thought. He explained:

The real problem is to know how he [the subject] frames the question to himself or if he frames it at all. The skill of the practitioner consists not in making him answer questions but in making him talk freely and thus encouraging the flow of his spontaneous tendencies instead of

diverting it into the artificial channels of set question and answer.
(1929: 4)

The assertion that interviews provide access to what is inside a person's head is completely at odds with social constructionist ideas, as I have shown in Chapter 3. For example, Potter and Wetherell (1987) state that:

Discourse analysts ... are not trying to recover, events, beliefs and cognitive processes from participants' discourse, or treat language as an indicator or signpost to some other state of affairs, but looking at the analytically prior question of how discourse or accounts of these things are manufactured. (1987: 35)

In this view, then, children's knowledge, understandings and attitudes in relation to adult work are not fixed, but will be constructed in specific conversational contexts. This view may seem rather discouraging to the researcher, since claims that can be made are limited: the child may say something completely different in a different context. However, the focus changes from content to the processes involved in construction: why do people say what they do? what resources are they drawing on? how are they trying to present themselves and to position their conversational partners?

A social constructionist view of talk also casts doubt on the idea of the neutral, uninvolved interviewer whose role is to elicit responses without comment or judgement. Bakhtin (1986) argued it is not possible to listen dispassionately: the listener cannot simply hear and understand what the speaker says, but inevitably reacts to what is heard. This is borne out in Walkerdine's (1988) observation that in listening to recordings of herself working with children she noted that her tone of voice made it very clear which answers she considered to be right or wrong. She argued that this does not mean that the interview is invalid, but rather that we need to examine it as discursive practice and consider what is actually going on, and how meanings are jointly constructed. Burr concludes that:

Objectivity is an impossibility, since each of us, of necessity, must encounter the world from some perspective or other (from where we stand) and the questions we come to ask about that world, our theories and hypotheses, must also of necessity arise from the assumptions embedded in that perspective. No human being can step outside of her

or his humanity and view the world from no position at all ...
Researchers must view the research as necessarily a co-production between themselves and the people they are researching. For example, in an interview it can readily be seen how the researcher's own assumptions must inform what questions are asked and how, and the interviewer as a human being cannot be seen as an inanimate writing pad or machine that records the interviewee's responses uncontaminated by human interaction. (1995: 160)

As I indicated in the previous chapter, all constructions are jointly made with conversational partners (or in the case of writing, assumed audience). It is vital that I examine my own role in interviews as well as that of the children.

Interview Questions

It is perhaps impossible to design interview questions that do not embody some assumptions about the way in which people think. The problem is, however, that the responses given are then said to validate the initial assumptions. For example, attitude scales widely used in market research involve the assumption that people have fixed attitudes which can be represented on such scales, and the responses obtained are then seen as confirmation that fixed attitudes do exist. Similarly questions asked in interviews about children's social and economic understanding have also reflected the theoretical framework chosen by the researchers, and the results have been used to confirm that the framework is a valid model of children's thinking.

Developmentalism views children's thinking as deficient in comparison with that of adults; questions asked in interviews have therefore tended to be framed with a particular 'adult' understanding in mind. One way in which this is evident is in the language of questions asked: for example, Kourilsky asked five and six year olds this question:

When father washes the dishes and brother dries them, are they:
a) dividing the labour;
b) producing a good; or
c) wasting valuable time? (1977: 187)

She claimed that the responses showed that division of labour is too complex an idea for children to grasp at this age, or that they are already showing sexist assumptions. However if, as I suspect, the children did not understand the question, their answers reveal nothing about their conceptual understanding. A notion of what adults understand about work is also evident in Burris's (1976) question about why people doing different jobs receive different pay. In order to answer this children needed to be aware that there are many types of work, that adults are paid for doing some of these, and that pay rates vary. The four and five year olds to whom this question was addressed lacked much of this knowledge, and their responses shed no light on what they actually did know about adult work.

These questions, and many others in developmental research, were designed with a particular 'correct' answer in mind. While it is easy to criticise an approach which focuses on deficiencies in the child's knowledge and understanding, it has to be acknowledged that there is a real difficulty in framing interview questions which do *not* pre-suppose a particular view of economics and adult work; the constructions of the interviewer cannot be ignored, and will inevitably influence the ways in which we receive children's answers, and thus the nature of the interaction. An adult brings to any discussion of adult work their own particular experience and knowledge of specific work contexts and lack of experience of others; this inevitably affects both questions asked and responses as listeners.

While many of the questions which have been used pre-suppose one 'correct' answer, others assume a particular form of thinking: they see generalisation as the usual way in which ideas created in one context are transferred to another (see Chapter 3). This is evidenced in the context-free and rather abstract questions which have often been used. Examples include:

What is work? (Goldstein and Oldham, 1979: 40)

How do people get jobs? (Goldstein and Oldham, 1979: 49)

Are some jobs better than others? (Burris, 1976: 183)

Why are there rich people and poor people? (Berti and Bombi, 1988: 73)

How do people get rich? (Burris, 1976: 199)

Such questions certainly elicit responses, but it is questionable whether they match the ways in which children (and adults) normally think. The question, 'How do people get rich?' implies that there is a single answer. Burris's analysis shows that the majority of children responded in terms of working hard. However, if they had been asked how specific people such as the Queen, Princess Diana, Naomi Campbell, and last week's lottery winner got rich, a much wider range of responses might have emerged; it is unlikely that any general rule would have been applied in these specific contexts. As I showed in Chapter 3, Lave and Wenger (1991) contested notions of transfer of learning by generalisation, arguing that knowledge is gained, and is applied, in specific contexts. And if, as Donaldson (1978) claimed, children think best in situations which make human sense, questions set in meaningful contexts are more likely to get full responses.

Even when questions asked have embodied problematic assumptions about vocabulary, background knowledge and ways of thinking, children have responded and researchers have had material to analyse. The positivist view of the interview assumes that responses will reflect the state of knowledge and understanding of the interviewee. However, Hughes and Grieve (1983) pointed out that five year olds will respond to questions even when they are so conceptually ill-formed as to be unanswerable; they suggested that this was because children have a general tendency to try to make sense of what is said to them, however bizarre it may seem. Campbell and Macdonald (1983) took this further; they felt that alongside the desire to make sense, there was also a certain capacity to accept and tolerate the nonsensical. Similarly Donaldson (1978) noted that young children rarely asked about the meaning of words in stories. Thus children are unlikely to comment if the questions they are asked in interviews seem meaningless or nonsensical. As Donaldson comments, all developmental psychologists should take note and beware!

The issues discussed in this section have considerable implications for researchers using interviews, and become even more significant when the interview schedule is designed to be used across the primary age range, with children from four to eleven years old, as is the case in many investigations of

children's economic and industrial understanding. The questions used may present particular difficulties to younger children in relation to the background knowledge assumed, the degree of abstraction and the vocabulary used. In the next section I indicate how I have attempted to avoid some of the problems discussed in this section in designing my own research.

Interview design

The issues discussed in the previous section were taken into consideration in designing the interview. The format chosen was a semi-structured interview. The main areas to be covered were identified, and a number of prompting questions were listed. However, the responses of the children determined the order in which questions were asked and the way in which they were phrased. Questions were set in specific contexts; the child played a part in deciding what these contexts were. I aimed to use the vocabulary introduced by the child rather than suggesting words which might not be familiar to her/him.

Three main contexts were chosen, with which children would have varying degrees of familiarity. These were:

- the child's experience of work, at school and at home (past and present work);
- work the child might do as an adult (future work);
- setting up a factory to make an item of the child's choice (unfamiliar work).

The first context draws on children's immediate experience: they work themselves, at school and often at home; they would know about at least some aspects of work carried out in the home, and may have visited or talked about parents' workplaces outside the home. They would have seen adults working in the school, though they may not recognise these activities as work. Children were asked to talk about work they do themselves, at school and at home; work done by adults in the school; and work family members do, at home and elsewhere. These constructions relate to the meaning of work in children's present lives; they may also be drawn on as resources for constructions of work in other contexts.

The second context is the work children might do as adults. I expected that children might have fewer resources to draw on here, as these occupations are not part of their everyday lives. However, as they could choose what to talk about, I hoped that they would feel some sense of control and ownership. Career choice has been investigated by many researchers, but questioning has generally been limited to identification of a job title. In this case, children were asked to talk about how they might get to do this work, and what it would be like doing it. In the light of suggestions that children's occupational aspirations at this age are often unrealistic fantasies (e.g. Ginzberg *et al.*, 1951), children were asked if they really expected to do the work they first described, and invited to suggest and talk about alternatives.

The section about setting up and running a factory is the most innovative aspect of the interview design, and was devised during pilot interviews. Manufacturing was chosen as a context which would be unlikely to be within the direct experience of most of the children, and therefore may involve different resources from the other contexts. It may contrast with children's occupational preferences in that it generally takes place in large and complex organisations. The child is empowered in two ways: first, through the choice of product, and secondly, by being put in the role of boss. This meant that they could take decisions, for example about how much to pay their various workers, without being constrained by focusing on the reality of pay differentials. However, this particular context potentially posed problems in interviewing the youngest children. Some might not be aware of the word factory, or that some goods are made (see Berti and Bombi, 1988). The topic was therefore introduced carefully; first I asked children about shops, and the origins of goods in them. If they responded that some goods were made, they were asked to talk about 'a place where you will make something to put in the shops'. My intention was to use the word factory only if the child introduced it, though sometimes I gave way to a 'teacherly' urge to introduce the word to those who had not used it themselves.

In relation to each of the contexts discussed, I asked children about the sources of their ideas. I also asked some general questions about leisure time and

holidays; responses to these questions, together with those about the child's experience of work, suggest further resources children may have drawn on. The interview guide is included as Appendix A.

I decided to carry out the interviews in schools. Since a major interest is in the experience which children will bring to school, this is an obvious setting for the research, and as I have argued above, is a setting in which children are accustomed to being asked questions. However, one potential difficulty is that school interaction often involves a 'test' situation where 'right' answers are required (Simons, 1981). Wells (1983) found that in a large sample of recorded interaction in schools, teachers rarely used open-ended questions with a genuine desire to hear about the children's experiences and ideas; most teacher-initiated conversations were aimed at getting the child to produce the answer the teacher had in mind. Thus, children's expectations may be of particular types of question and answers. I aimed to avoid such a 'test' situation by giving children control over the work contexts they chose to talk about and by welcoming imaginative responses.

The sample

In making decisions about how many, and which, children to interview I was torn between wanting a large number which would include children with a wide range of experiences of work, or choosing to have only a smaller number to focus on in greater depth. My decision was to have a large number; the range of experience seemed the more attractive option. Thus I planned to interview thirty-six children.

The main criterion for selection was that I wanted a group of children whose experiences of work varied. In order to achieve this four factors were considered: age, gender, ethnicity, social class and parental occupation.

Age: The Introduction explained why this investigation focuses on children in the primary age range. Within that range, it seems likely that older children will in general have different, and probably wider, experiences of work than younger children; they have access to a wider range of social contexts. Moreover,

as I suggested in Chapter 1, adults construct the world for children in relation to notions of childhood innocence and levels of development, so are likely to offer older children different resources of talk and activities. For this reason children across the primary age range were included: they were selected from the Reception class (4-5 years old), Year Three (7-8 years) and Year Six (10-11 years).

Gender: Previous investigations have suggested that there are some differences in boys' and girls' constructions of work (e.g. Burris, 1976), and studies of career choice all suggest that children see adult work as being strongly categorised by gender. For these reasons I planned to interview equal numbers of boys and girls in each age group.

Ethnicity: Children from different ethnic groups are also likely to have different social and economic experiences, and therefore I aimed to include them in the sample in approximately the same proportion as in the school populations. This approach contrasts with the focus on 'normality' of many developmental researchers, which was discussed in Chapter 2. Their aim was to draw conclusions about class backgrounds and they did not want factors which might muddy the picture. The intention here is quite different; I wanted to maximise variety of experience in the sample. However, bilingual children who were not able to communicate fluently in English were not included. While I would expect their constructions in their mother-tongue to be as rich and varied as those of children who speak English fluently, we would not have been able to communicate well with each other.

Social class and parental occupation: While many previous studies have compared the economic ideas of children in different social classes, the notion of class as a dichotomy dividing society into two groups has been questioned. Wells argued that in practice 'the population is not really divided in this way, even in Britain' (1986: 133). Reasons he put forward for this include the shift in employment from heavy manual to secondary industry and service occupations; the trend to more extended education; and the number of families in which parents come from different sides of the notional divide. Therefore he argued that

'class must be thought of as at least a continuum, and individual families recognised as being likely to change their places on the continuum over a limited time span' (1986: 133). Saunders (1990) also emphasised changes in the class system, including the expansion of the middle class, more widespread ownership of capital, increasing prosperity of the working class, and the development of an 'underclass' made up of people who are permanently marginalised: this would include those in irregular employment or long-term unemployment who are poor and lack qualifications, and a high proportion of some ethnic minorities (particularly Afro-Caribbeans), single parent families and those living in run-down inner cities. The polarity between 'work-rich' and 'work-starved' households (Pahl, 1988: 603) is of particular relevance in this research. Work-rich households are those with multiple sources of income, who engage in self-provisioning (such as decorating, gardening etc.) and are able to employ others to do some household tasks, thus potentially providing their children with rich experiences of work. Work-starved families are those with no income other than social security payments, who are unable to afford either to employ others, or to engage in much self-provisioning.

My aim was to select a sample with varied socio-economic backgrounds across the class continuum. Emler and Dickinson (1985) suggested that selecting children who attend schools in contrasting socio-economic environments is a more effective way of investigating social class differences than simply using fathers' occupations as the only criterion. I therefore decided to select the sample from two schools, one in a predominantly 'middle class' area, and one in a predominantly 'working class' area. However, in each case the area selected was one of mixed employment; thus I hoped to include children whose parents were members of the 'underclass', and self-employed as well as those in employment. With this range, I hoped that it would be possible to select children whose parents' occupations varied.

The sample selected

The considerations outlined above acted as guidelines in choosing the sample. Two primary schools in London were selected; these are referred to as School A and School B. School A is situated in a run down inner-city council estate; School B in a prosperous area of owner-occupied housing. While the children in these schools could be seen as broadly 'working class' and 'middle class' respectively, within these broad categories there was considerable variety. The intake of School A included children with both parents in full-time employment, and children from families which fitted Saunders' description of the underclass: long-term unemployed or doing occasional casual work. Employment of the parents of children in School B included professions and business as well as the arts and skilled crafts; they worked in organisations ranging from multi-national to small business and self-employment.

The schools were ones which I visited regularly as a teacher trainer. In both schools children were used to going out of the classroom for small group or individual sessions (for example, with voluntary reading helpers). Thus coming out to be interviewed was not seen as an exceptional event. Interviews took place in a variety of rooms which are normally used for small group and individual help.

Within each class the teacher was asked to select the sample. S/he was asked to suggest a group who had varied family social and economic experience, and children who s/he thought would be happy to take part; unwilling children would be likely to give limited and brief responses. The children selected were also asked if they were willing to be interviewed; all those asked expressed enthusiasm (as did other children who were not asked to take part). Letters seeking parental permission were sent out only in School B, where the Headteacher asked that this should be done (see Appendix B). At this stage interviews in School A had already been completed without parental permission, as the Head did not consider it to be necessary.

While the original intention was to interview three girls and three boys from each class (resulting in a sample of thirty-six children), extra interviews were carried out where there was concern that the quality of the recording might not be clear (either because a child spoke very softly, or because there was outside noise). As these extra interviews added variety to the sample, all the recordings which could be transcribed have been analysed; only one was found to be unusable. The sample thus consisted of forty-three children, made up as shown on Table 4.1.

Table 4.1 The sample

	School A		School B		
	girls	boys	girls	boys	total
age					
4-5 years	4	4	4	4	16
7-8 years	3	3	4	3	13
10-11 years	3	4	4	3	14
total	10	11	12	10	43

Limitations of the sample

All the children lived in London. Further variety could have been introduced by including children from areas dominated by manufacturing industry, and from rural areas. These possibilities were rejected on grounds of practicability.

While School A and School B had been selected because of their very contrasting intakes, which were taken to be ‘working’ and ‘middle’ class respectively, in each school a small minority of parents of children in the sample had jobs which would not be categorised as belonging to this class. In School A one child had parents with professional jobs; in School B parents included a plumber and a painter decorator. Their residence in this particular area suggests that they were prosperous, and they may well have been self-employed or employers of other workers; this did not become clear during the course of the research.

My intention had been to include children with varied experiences of work, and I relied on the teachers' knowledge of the children in their classes. This was not entirely successful: three out of four of the 10-11 year old girls selected in School B had a parent teaching in the same secondary school. It might have been better to use school records as a basis for selection.

Ethical considerations

Scott (1996a) suggests that there are three models of ethical relationship between researcher and researched: covert research, in which the aims and purposes of the research are concealed from the subjects; democratic research in which participants have the right to decide what data is collected, are included in negotiations about what should be included in the final report, and are given rights of veto; and open autocratic research in which the researcher communicates aims and purposes but reserves the right to decide what is reported, and thus has an obligation to protect the interests of the participants. Scott points out that in research with children the latter is the most common procedure as negotiation would involve unequal power relations. In this case I told the children that I was interested in their ideas about work, and asked them (and in School B, their parents) if they were willing to take part. I also asked their permission to tape record what they said.

Although the interview touched on subjects that were personal (home and family arrangements) I tried to make it possible for children to avoid talking about these if they wished to. However, there are clearly difficulties in this due to the unequal power relations involved.

I have protected the identity of schools and children by changing their names. Each child is referred to by a name with similar gender and ethnic connotations.

Analysis of data

All the data was transcribed: one complete transcript is included as Appendix C. In keeping with the theoretical framework used, analysis of data was largely qualitative. This approach has been criticised:

There is a tendency towards an anecdotal approach in the use of 'data' in relation to conclusions or explanations in qualitative research. Brief conversations, snippets from unstructured interviews, or examples of a particular activity are used to provide evidence for a particular contention. There are grounds for disquiet in that the representativeness or generality of these fragments is rarely addressed. (Bryman, 1988: 77)

Silverman (1993) identifies two tendencies in qualitative research: selection of data to fit a particular preconception, and data which are conspicuous at the expense of less dramatic, but possibly more indicative data. He points out that some qualitative researchers avoid the issue of validity by stressing that they are generating, rather than testing, hypotheses, while others reject validity as an appropriate issue for social research, emphasising instead the value of experience (e.g. Stanley and Wise, 1983). Hammersley (1990) suggested that knowledge claims can be assessed in terms of their plausibility in relation to our existing knowledge, and their credibility in relation to the nature of the phenomena and the research; if there are doubts on either of these grounds, he suggested that claims could be assessed by the plausibility and credibility of the evidence. Silverman argues that the first two of these are problematic: they privilege common sense knowledge and the reproduction of existing models of the world; therefore claims to validity must rely on the data. He suggests that:

simple counting techniques can offer a means to survey the whole corpus of data ordinarily lost in intensive qualitative research. Instead of taking the researcher's word for it, the reader has a chance to gain a sense of the flavour of the data as a whole. (1993: 163)

To this end, tables have been drawn up indicating numbers of children giving particular responses or drawing on particular resources. While this sets out the variety of responses offered, it could also result in the construction of the most

frequent responses as 'norms'; this is not my intention, but is clearly a risk of this procedure.

Drawing up tables involves 'translation' from what the child said to the category it is placed in, which may be problematic; therefore many extracts from interview transcripts are provided to indicate what children actually said (and where possible to indicate the questions which I asked; however, to do this in every case would have involved including much more substantial extracts from transcripts than seemed necessary). The categories in each case have been formed by examining what the children said, rather than by imposing any externally formed categories. This means that categories used in discussing different parts of the data are not identical.

Discussion of research design

In retrospect it was I think a mistake to work with such a large sample. I have pointed out in the Introduction that much of the reading which has contributed to my ideas post-dates the data collection. Looking back at what I did, I feel that in the light of more recent reading, my research design was a compromise. I was still to some extent thinking in positivist terms, and while I was not attempting to pick a sample which was representative of the population as a whole, I did feel that it should represent a wide range of backgrounds. This has resulted in data which I have found interesting, but I feel that in my analysis I have not been able to do justice to all the children. In my attempts to represent the whole range I have used tables, as indicated above, and included extracts of transcript. However, in order to analyse each child's constructions in depth it might have been better to concentrate on fewer children, and perhaps record constructions made in different contexts and with different conversational partners (e.g. at home, in the classroom, in talk with parents, siblings, peers, and so on), and to have investigated parents' and teachers' constructions of the children's present and future work.

Another possible involvement for parents was in explaining some of their children's references to experience which were obscure to me. Fox (1993) used parents in this way to help identify children's references in her research into stories told by children; however, the children had generally told the stories when their parents were present, and so they were a part of the intended audience. I would have had to ask children's permission to talk to their parents about what they had said, and I feel that this extra, unseen, audience would have made it more difficult for a child to talk to me.

I feel that it was probably a mistake to use the same interview schedule for children of such different ages. The schedule was appropriate for the older children, but less so for some of the youngest. A few of the 4-5 year olds found it too long, and made this clear by asking to return to their classes. Also, the section of the interview where children were asked to imagine a factory was not appropriate for some of this age group; this is discussed fully in Chapter 8.

I also have some reservations about my decision to use individual interviews. While all the children volunteered to take part, it seemed that some felt much less confident than others in talking to a strange adult, and this in turn affected my behaviour in the interview. This is discussed in more detail in the next chapter.

Structure of the data analysis chapters

The analysis of data is organised in five chapters. Chapter 5 discusses the manner of the children's response, and considers the expectations which both children and interviewer brought to the situation. Chapter 6 focuses on children's constructions of the work they do themselves, both at home and at school; Chapter 7 on constructions of future occupations, and Chapter 8 on constructions of work in a factory. In each of these chapters I consider the range of resources the children drew on, and illustrate the variety of their constructions. In Chapter 9, I return to the question of how children construct narratives from different resources. Finally I consider the implications of this research for practice in schools and future research.

Note on transcription conventions and presentation of data

In excerpts from interview transcripts, words spoken by the child are always presented in italic script.

Words in square brackets are those which I have added, either to explain the child's actions, or to clarify what was said.

Passages omitted in quoting transcripts are indicated by three dots (...).

Children's pseudonyms are followed by a code which indicates gender (m or f); age (in years and months); and school (A or B): e.g. Eleanor (f/11.06/B): a girl aged eleven years six months attending School B.

On tables the total figure (N) indicates the number of children who had the opportunity to talk about that particular issue. The data reflect the process of a semi-structured interview. The interview guide outlined areas to be covered, but specific questions varied in that children's responses were followed up: when a child put forward a lot of ideas, more probing questions were asked, but when a child was obviously finding the task very difficult (long pauses, many 'don't know' answers, answers lacking detail) not all the areas were necessarily covered.

Appendix D provides a summary of each child's responses about different contexts, thus enabling the reader to relate any construction to the child's family work context.

CHAPTER 5

How the children responded

This chapter examines the *manner* in which the children responded in the interviews. Traditionally the main focus in analysing interview material has been content: the knowledge, understanding and attitudes which it has been assumed can be inferred from the responses. However, in a social constructionist view there is no fixed content of the mind which can be accessed through interview; instead the focus becomes to examine what is said in particular contexts, and how it is said. This chapter focuses on the latter; it examines differences between children in the style or manner of response, and considers reasons for these in relation to both the children's and my own expectations and assessment of the situation. Many of the examples of children's talk discussed in this chapter are of the oldest children (10-11 years old). This age group is represented so strongly because it is among these children that the greatest contrasts in the volume and fluency of talk were found.

There are several possible ways of accounting for these differences. They could be reflections of the resources of experience which the children had to draw on; it is natural to talk fluently and confidently about a topic with which one is familiar. If this were the only reason for differences in manner of response, the content of the interview would be the only concern. However, the interviewee's perception of the interview situation can also have an enormous effect on the content and style of response (Labov, 1969; Buckingham, 1993), and similarly the interviewer's expectations may affect both specific questions asked in a semi-structured interview, and responses given. These issues are considered in this chapter. It is also possible that children's contributions reflect their resources of narrative construction: skills and experience of narrating, imagining, theorising,

speculating, solving problems. These are touched on in this chapter, but will be considered in depth in Chapter 9.

The variety of manner of response

The variety of manner of response will be illustrated first by some extracts from interviews, and secondly by an analysis of particular features of the children's talk. While all the children had said that they wanted to be interviewed, some responded briefly, and a few appeared ill at ease and left long pauses. At the opposite end of the spectrum, others appeared confident and enthusiastic, and talked at considerable length, elaborating on their responses. In order to demonstrate these differences, here are substantial extracts from two contrasting interviews with 10-11 year old girls; these are taken from a point early in the interview when I asked about work done at home. Each extract is typical of that child's response throughout. Tracy (f/10.07/A) appeared composed, and answered questions without hesitation, but briefly:

Do you do any work at home?

Sometimes.

What sort of work do you do at home?

Sometimes we have homework.

What about work around the house, housework, do you do any of that?

I do the washing up sometimes, polishing and cleaning.

Do you do that because your mum asks you or because you want to?

Want to.

But it's still work, yes?

Yes.

When you say sometimes, how often would that be, every week or every day?

Every weekend.

Just once a week?

Sometimes.

Does your mum ever ask you to?

Sometimes she asks me to take things up.

Take things?

Take things upstairs and put them away.

Do you get paid for the work you do?

No.

Do you get pocket money?

Mm.

But that's not for doing work?

No.

Here Eleanor (f/11.06/B) responds on the same topics:

Do you do any work at home?

Well, apart from homework yeh, 'cos mum and dad they, like, do children's books and they were testing me on their ideas and stuff. And all these puzzles and stuff so I do that and I'm always writing books and stuff so you might count that as work. Often I enjoy doing it but we do that at school as well. I might write a story at school and come home and do another story at home 'cos you get to choose exactly what you want to do. Miss S. just does things like, you have to write a book about Germany, and I just can't think of anything, but when I get home I've got all these ideas about, really interesting things about other subjects.

So if you were writing a story at home it isn't really work? well, not work in the same way?

No.

What about things like helping round the house, that sort of work?

I don't really enjoy that but in the house my mum always asks me to do things and wash the car and stuff, and she pays me money for it sometimes but not very much, but we don't like have a job list where we have to do things. When I see my bedroom I just think I gotta tidy, and it's all messy and my mum shouts tidy your room. One look at it, so I sort of shovel up everything under my bed so I don't really do much. If your mum pays you money to do a job, do you know before you do the job that she is going to pay you money, or is it a just surprise afterwards when you happen to get some money?

Well I ask her, I say, I'm only gonna do it if you pay me.

Oh I see. How long have you been getting paid money to do work?

Well, I don't always get paid, usually I do things for her just because, but if it's a big job like washing the car then usually 'cos I just do washing the table and stuff I do that anyway.

Right, but some jobs you've been getting paid for just recently?

Yes, like washing the car.

And that's 'cos you thought of asking for money rather than because she offered?

Yeh.

What put the idea into your head that you might get paid?

Well, I saw it advertised on TV, saying wash your car at cheap prices and I thought why can't I do it.

In response to the same main questions, Eleanor said very much more than Tracy did. This could partly have been a reflection of the resources she had to draw on: her parents worked at home and she joined in, and she was sometimes paid for work, which provided more material for discussion. However, Tracy also did homework and housework, so it seems unlikely that the differences in manner of response were related only to the resources the two girls had to draw on. Eleanor appeared to be very much more enthusiastic to talk than Tracy did. These examples come from opposite ends of a spectrum; most children were less talkative than Eleanor, but more talkative than Tracy. It was of course possible to answer these specific questions very much more briefly than Tracy did. Here is Chloe (f/4.11/B), one of the youngest children:

Do you ever do any work at home?

No.

Not any. What about work like helping round the house?

No.

You don't help?

No.

While Chloe had nothing to say in response to these questions, she was much more voluble in other parts of the interview, whereas the extract given above was typical of Tracy's responses throughout.

Since these differences in manner of response are central to the analysis of children's constructions, I have attempted to find ways to demonstrate the variety. I feel that the quantitative methods I have used to make these comparisons are somewhat unsatisfactory in the light of my commitment to a social constructionist perspective. While Hammersley (1992) argued that quantitative and qualitative methods are not distinct and opposed approaches to looking at the social world, and that they can sensibly be used in the same investigation, I feel that the counting methods I have used are very crude, and an unsatisfactory way of trying to represent the complexities of talk. However, as I suggested at the end of the previous chapter, the number of children I interviewed was perhaps too large, and it is this that has led me to resort to these crude methods of analysis. The alternative would have been to focus only on the analysis of a small sub-set of the interviews. But then I would have lost the potential offered by the varied experiences of children across the sample. Research must involve decisions that are compromises; here I have decided to present my quantitative analysis, though I am aware of its limitations.

My starting point was simply to count the number of words spoken by each child. They were all asked to talk about the same contexts (with the exception of a few of the youngest children who, as I have indicated, either did not know that goods were produced, or simply got tired and asked to return to class). Differences in number of words spoken therefore generally reflect differences in detail and elaboration of responses. Eleanor said 4961 words, the second highest total of any child interviewed, while Tracy said 1115, one of the lowest totals in her age group. Table 5.1 and Figure 5.1 show the total number of words spoken

by each child. This is a very basic way of representing the children's talk; one obvious limitation is that I asked some children more questions than others, and so they are likely to have said more.

My next attempt to represent differences in the manner of the children's responses was therefore to calculate the average length of each child's turns in the conversation. The average length of Eleanor's turns in the whole interview was 31.4 words; this was the longest of any child interviewed. Her longest turn was 145 words. In contrast, the average length of Tracy's turns was 4.9 words and her longest turn only 24 words. (Over the whole interview Chloe's responses were longer than Tracy's, with an average length of turn of 5.6 and longest turn 66 words.)

In general the more talkative children's volubility may be underestimated, as my interjections of 'mm', 'yes' and 'I see' have been counted as separate turns, thus breaking what were in effect monologues into sections which have been separately counted. Nevertheless, differences found in length of turn were substantial: Table 5.2 and Figure 5.2 show the length of turn for each child interviewed together with the mean for each age group in each school. The pattern is generally one of increasing length of turn with age. For all the 4-5 year olds interviewed the mean is 6.3 words, for 7-8 year olds 9.9 words, and for 10-11 year olds 12.5 words. This pattern of increasing turn length with age is also found in the mean figures for School B.

However, in School A the pattern is less clear-cut. The difference between the mean for 4-5 year olds (5.9 words) and the mean for 10-11 year olds (6.9 words) is small, but there were some particularly talkative children among the 7-8 year olds (mean 10.8 words). In fact the two most talkative 7-8 year olds (average length of turns 12.8 and 13.7) and the most talkative 10-11 year old (average length of turn 12.0) were all Bangladeshi children. (Two other Bangladeshi children were interviewed, one of whom was also among the more talkative.)

Table 5.1 Total number of words spoken by children during interviews by school and age group

		<i>age in years</i>					
		4-5		7-8		10-11	
<i>School A</i>	Clark	279		Mei	1006	Nicky	1114
	Halima	281		Gary	1211	Tracy	1115
	Julie	401		Samantha	1811	Sharon	1168
	Juan	512		Enrico	2225	Joseph	1207
	Leila	694		Sitara	4220	Jackie	1523
	Darren	735		Hassan	4531	Shuel	1693
	Elsa	797				Mahmud	3610
	Jimmy	1581					
	<i>mean - School A</i>	<i>660</i>		<i>2501</i>		<i>1633</i>	
<i>School B</i>	Annabel	540		Lucy	1247	Louis	2141
	Claire	735		Charlotte	1543	Rosie	2213
	Chloe	858		Marcus	2162	Jade	3209
	Tarquin	895		Tom	2605	Morwenna	3520
	Abdul	950		Natalie	2685	Andrew	4320
	Sinead	1706		Heidi	2872	Eleanor	4961
	Daniel	2059		Joel	3019	Chris	5462
	Toby	2130					
	<i>mean - School B</i>	<i>1234</i>		<i>2305</i>		<i>3689</i>	

Figure 5.1 Total number of words spoken by children during interviews by school and age group

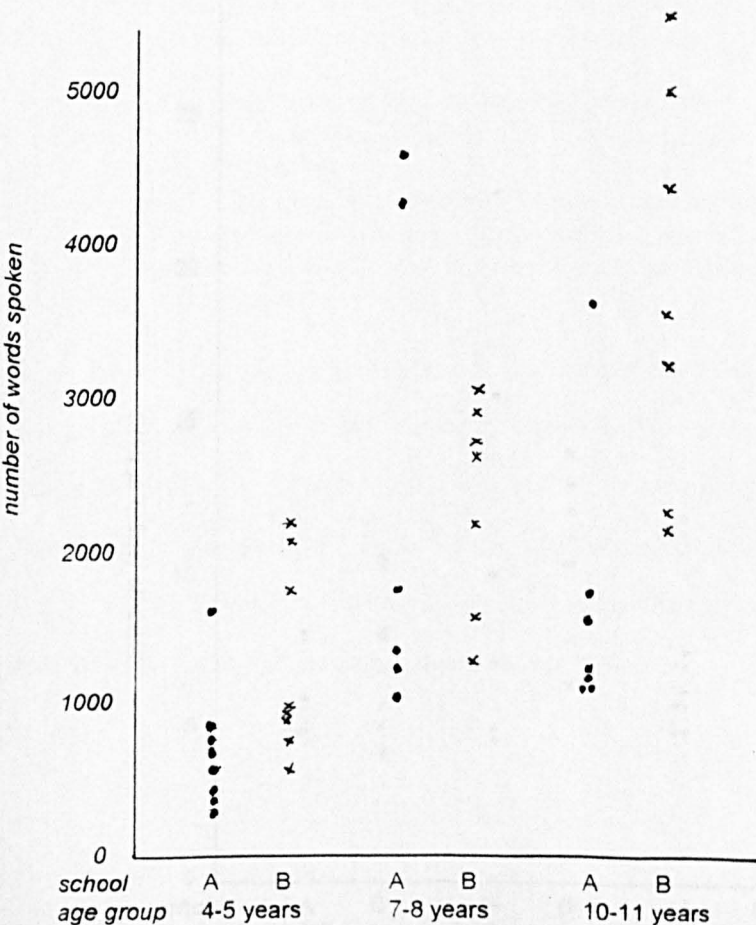
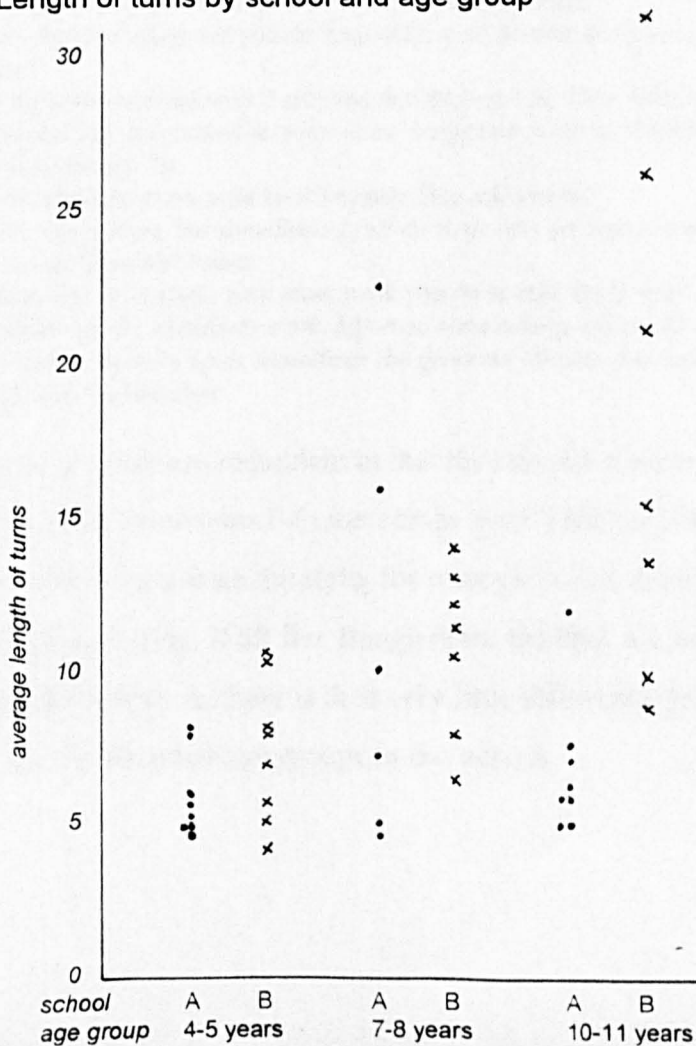


Table 5.2 Length of turns by school and age group

		<i>age in years</i>					
		4-5		7-8		10-11	
School A	Darren	4.5		Gary	4.5	Tracy	4.9
	Clark	4.8		Mei	4.9	Joseph	4.9
	Julie	4.8		Samantha	7.2	Sharon	5.8
	Halima	5.2		Enrico	10.0	Nicky	6.2
	Leila	5.6		Hassan	15.8	Shuel	6.9
	Juan	6.1		Sitara	22.4	Jackie	7.5
	Jimmy	7.9				Mahmud	12.0
	Elsa	8.1					
	<i>mean - School A</i>	5.9		10.8		6.9	
School B	Annabel	3.8		Lucy	6.4	Louis	8.9
	Tarquin	5.2		Charlotte	7.7	Rosie	9.9
	Claire	5.2		Marcus	10.5	Jade	13.5
	Chloe	5.7		Joel	11.3	Morwenna	15.6
	Abdul	6.8		Natalie	12.1	Andrew	21.0
	Sinead	8.0		Tom	10.8	Chris	26.5
	Toby	8.1		Heidi	13.7	Eleanor	31.4
	Daniel	10.6					
	<i>mean - School B</i>	6.7		9.2		18.1	
	<i>mean - both schools</i>	6.3		9.9		12.5	

Figure 5.2 Length of turns by school and age group



There seemed to be two reasons for this. Sometimes they had difficulty in expressing themselves, and so used a lot of words where a more fluent English speaker would have been more concise. But they also seemed to particularly enjoy the interview as a drama, and did their best to entertain the audience. This may be related to characteristics of speech in oral cultures identified by Ong (1982). Here is an extract from Sitara's (f/8.00/A) responses to questions about work at home:

[Reading] It's not work if you do it at home?

No, that's easy. If you can't do all right you can just do thingy.

You can just do?

You can, no-one's going to help you at home right and so you can just sit and try and try, and if you can't do it and you feel sad right and you say, oh no-one's gonna help me, please someone come and help me and you can ask your brother, you can ask your mum and dad and if your mum or dad doesn't know English you can ask your brother.

So when you read at home, you just read for fun do you?

Mm.

Not for work. Do you do any work at home?

Sometimes I write, copy the books out, or write. Sometimes I do maths in my home.

Sometimes I do work, hard work that I can't, that I didn't do before.

Do you do any other sort of work around the house?

Yeh. I do cleaning up. I always do hoovering. No-one does the hoovering, now I've stopped doing the hoovering 'cos I'm so tired and I'm so bored when I've got the big thing on, it really hurts my back so I'd rather quick do it right and just quick put the Hoover back and quick go upstairs to bed and go to sleep.

So you do the hoovering and you do it quickly, yes? So why do you do the hoovering?

Because my mum and dad won't get enough time to get my little baby brother to eat, and clean and buy things and do what more things like clean up the floor and things and so I help them a bit.

Do you do it because you want to or because they ask you to?

Sometimes they ask me but sometimes I just do it, in case persons come in the house.

So they see all beautiful house.

So you like it to look good. Any other work you do around the house?

Well sometimes I do sometimes work. My mum sometimes gives me all the clothes to me and I just hang them up or sometimes she gives me already dry and I can just put the thingy with the drawers.

Some of Sitara's words are redundant in that they do not contribute to her meaning (e.g. '*Well sometimes I do sometimes work*') but the majority contribute to telling her stories in a dramatic style, for example when she talked about homework and hoovering. If all five Bangladeshi children are excluded from the mean figures for School A, there is then very little difference between mean lengths of turn for the three age groups in this school.

A third way in which I have attempted to quantify the differences in manner of talking is to examine those turns which tended to stop the conversation in that they were limited to 'yes', 'no' or 'don't know' (or equivalent brief responses) without any qualification or addition. The percentage of such turns varied enormously. The child who used the highest proportion (55%) was Annabel (f/5.04/B). The lowest proportions (about 14%) were used by Tom (m/8.08/B), Eleanor (f/11.06/B) and Chris (m/11.06/B). In School A use of such turns was similar in all age groups (averaging around 30% of turns). But in School B there was a clear pattern of decrease with age, with 4-5 year olds averaging 38%; 7-8 year olds 25% and 10-11 year olds only 20%.

The majority of these turns consisted of 'yes' and 'no', which varied from 14% to 50% of children's responses. All the children used yes and no answers; these were needed particularly in response to questions which were recapping, or were attempting to clarify the child's meaning. However, while children often stopped after saying yes or no, they sometimes added an explanation, qualification or elaboration. This was more common in School B:

Do you do any work at home?

Yes, we get homework sometimes and sometimes he gives us work that we haven't finished that needs finishing. But we don't usually get homework.

What about working round the house, like clearing things up, do you do any of that?

Oh yes. My mum doesn't let me do the washing up when I want to. (Natalie: f/8.00/B)

'I don't know' and similar phrases, without further elaboration or speculation, accounted for a rather smaller percentage of responses, ranging from 0% to 13%. Table 5.3 shows the mean percentage in each age group and school; while the proportion was similar among the 4-5 year olds in both schools, generally the two older groups in School B used fewer such responses. Jackie (f/11.01/A) and Nicky (m/11.00/A) used the highest proportion. Jackie used a variety of formulas in her 36 answers of this kind: 'I don't know', 'I'm not too sure', 'I'm not too sure myself', 'I wouldn't know myself', 'I can't say', 'I don't know myself', and 'I wouldn't know'.

Table 5.3 Mean percentage of 'I don't know' responses without further speculation

	School A %	School B %
4-5 years	5.0	5.2
7-8 years	4.4	1.5
10-11 years	6.9	2.2

In the same way as some children tended to add a qualification or explanation to their 'yes' and 'no' answers, some also added to answers which began '*I don't know*'. This usage flags that the response given is speculation. It was more common among the older children and those in School B; among the 10-11 year olds in School B this became the main way of using '*I don't know*'. Andrew (m/11.08/B) used the phrase exclusively in this way:

How would they [the factory workers] feel about doing a job like that [working on a machine]?

I don't know. They might find it boring and then they might leave and say, I want to do something that's more interesting and that has more to it instead of just sitting here for six hours a day.

So what could you do about that?

I don't know. I might change the system and ask them if they want to actually make it [chocolate] from scratch with all the ingredients instead of having to put it through a machine and the machine doing it.

Now, if one of your people who worked on a machine came to you and said, I'm sick of working the machine, I want to go and do deliveries instead, would you let them?

I don't know. It would probably depend if they were a good enough worker and they could drive properly.

This tendency of middle class children to be concerned about the certainty/uncertainty status of their responses was noted by Turner and Pickvance (1971).

There was, then, wide variation in the style of the children's responses. While these have been described in terms of age group and school, they were not clear-cut differences between the children in School A (which had a working class intake) and School B (which was predominantly middle class). Rather, there was a considerable degree of overlap between the schools. However, in general those children who talked most, and were most likely to elaborate and speculate were in

School B, (or were Bangladeshi children in School A), while those who talked least and were least likely to elaborate and speculate were in School A.

Various theories have been put forward to account for differences between the talk of working and middle class children. In the next section I will examine these to see whether they can shed light on differences between the children in School A and School B.

Possible reasons for differences in manner of response

Differences in children's talk in relation to social class have been the focus of a great deal of research and theorising in the last forty years. The reason for this interest is that working class children's supposedly deficient language has been used to explain their limited educational success. A variety of explanations have been put forward to account for the differences in talk; these are considered here because they might shed light on the differences observed in interviews.

One explanation for observed differences is that children's experience of language in the home varies with class. The stereotypical middle class mother points things out to her child, gives full explanations in answer to questions, and encourages the child to express ideas. The stereotypical working class mother is more concerned with behaviour, and turns questions aside. The stereotypical middle class child is thus far more likely than the working class child to engage in, and enjoy, speculation of the type the interviews about work demanded. This is the picture put forward by Tough (1976). She gave examples of conversation between mothers and children in a launderette to argue that the differences in kinds of talk the children experience are:

directing attention differently to the world around them, giving them a different view of it, as well as influencing the way in which they will come to use language with other people, reflect on their own behaviour, and consider other people's feelings. (1976: 23)

She concluded from a study of children's talk that it is not that disadvantaged children have an inadequate knowledge of language, but rather that they use it for

fewer purposes. They are less likely to use it for more complex purposes: for logical reasoning, making comparisons, anticipating and predicting the outcome of events, recalling the past, offering explanations or looking for differences. Tough argued that these differences result from the models of language use available to children, which she claimed are related to social class.

In these arguments, Tough drew on the ideas of Bernstein (1965), who identified two 'linguistic codes': restricted and elaborated; in a restricted code meanings are implicit and particularistic because they are tied to the immediate context, or because the conversation involves shared interests, history or assumptions, whereas in an elaborated code meanings are explicit, universalistic and independent of context. Bernstein considered that children socialised in the middle class would have access to both codes, whilst children from the lower working classes would be limited to the restricted code. This, he felt, accounted for the 'relative backwardness of lower working class children' (1965: 136); the different systems of communication at home and at school amounted to a 'cultural discontinuity' (1971: 144). In his later writings (1970, 1971), Bernstein related codes to the type of relationship within the family, which he identified as 'positional' or 'person-centred'. He defined 'positional' families as those in which authority structures are clear and social identity relates to status in terms of age and sex; he suggested that such families are more common in the working class, and would generally use a restricted code. 'Person-centred' families were defined as those in which roles are continuously being negotiated and adjusted, and are more likely to be middle class; they would more often use elaborated code.

Ideas that working class children bring to school a language which is less effective for learning than that of middle class children have been attacked by researchers who have investigated language in non-school settings. Labov (1969) argued that the limitations of the speech of lower and working class children in inner city ghetto areas in the United States had been greatly overestimated (e.g. by Bereiter *et al.*, 1966; Bereiter and Engelmann, 1966). One reason for this, he suggested, was that non-standard English had been seen as an inferior variety which did not allow complex meanings to be discussed. Labov demonstrated that

non-standard English can be used incisively and effectively in argument. In contrast, he argued, middle class speech often involves verbosity which can give a misleading appearance of rationality and logical argument. Thus he suggested that Bernstein's elaborated code would be better described as an elaborated *style*. A second reason for the overestimation of verbal deprivation was that the very limited speech reported in some working class children was in fact an effect of context: when the interview context was changed, the apparent verbal deprivation disappeared. He reported the responses of one child in two different situations. In a typical one-to-one interview carried out in school, the boy's responses were very brief (single words, yes/no answers) and defensive. In a subsequent interview the context was changed: the boy's best friend also took part; all participants sat on the floor thus reducing the height imbalance; they ate potato chips; and taboo words and topics were introduced. In this interview the boy talked enthusiastically, competing to get his voice heard. Thus Labov concluded that the typical school setting and inbuilt power relations of an interview cause some children to react in a defensive monosyllabic way.

Other evidence that the stereotypes of differences in talk between social classes are over-stated comes from two investigations of young children and their families talking in the home. Tizard and Hughes (1984) recorded working and middle class girls aged about four at home with their mothers, and at their nursery classes. They found that differences in talk were small: all the mothers and daughters used language for complex purposes, and gave some explicit and full explanations. They found that some usages were slightly more common in middle class homes, but did not find evidence to support the notion of working class language deficit. Similarly, the Bristol Language Development Project (Wells, 1985, 1986), a longitudinal study which made recordings of children from about fifteen months to five years, found that there were no clear differences by social class in the range of meanings expressed or the range of functions for which language was used. Differences in children's conversational experience (the amount, and the extent to which parents sustained and extended children's conversational contributions) were enormous, but were not linked with family

background. Wells found that in all homes most conversation was highly dependent on context and was generally restricted to familiar everyday experiences. Those occasions when language was disembedded from context (talk about general principles, or imaginary or hypothetical situations) occurred throughout the social class continuum. He concluded that there is no evidence for continuing to hold the stereotyped belief that there are strongly class-associated differences in way parents talked to children.

However, both Wells and Tizard and Hughes noted that class-related differences in language did become apparent when the children attended school. Both attributed these differences partly to teacher expectations; teachers adjusted their conversational demands to their perception of the children's abilities (based on father's occupation or type of neighbourhood), and thus did not provide some children with the opportunities they needed. Wells (1986) found that low expectations led to teachers' use of a more strongly eliciting style of talk in which children had few opportunities to initiate or sustain conversation. However, where teachers had high expectations of children they were more likely to allow them to express their ideas spontaneously and at length. Thus children were given different opportunities to express themselves, and therefore produced different performances, which served to reinforce the teacher's initial expectations. It is not clear whether Wells believed that teachers' expectations affect children's performance only in their talk with teachers, or whether he was arguing that these ways of talking become habituated. However, if, as he argued, some children are not offered opportunities to talk spontaneously and at length with teachers at school, while other children are, then it is possible that these experiences will have produced expectations of teacher-child discourse which may have been brought to the interviews with me.

While teacher expectations clearly had an effect on children's talk when they started school, Wells found that a further factor was more significant in relation to long term educational achievement. Some parents had read stories to their children regularly, while others had not. The number of experiences with books and stories by age five varied from around six thousand to none at all. Wells

claimed that those children who had been read to were better able to narrate an event, describe a scene, or follow instructions, and seemed better able to understand the teacher's language. He pointed out that whereas talk in the home generally focuses on the immediate context, talk at school is often about things which are not physically present in the classroom. In order to understand the teacher, the child has to be able to pay attention to the linguistic message and use that as a basis for reconstructing the teacher's meaning. Children who have listened to stories are experienced in paying attention to the linguistic message, and develop a richer vocabulary. Through listening to stories 'the child is beginning to discover the symbolic potential of language: its power to create possible or imaginary worlds through words' (1986: 156). Wells found that the frequency of listening to stories was the best predictor of subsequent educational success. He suggested that this is because schools are concerned with development of skills in symbol manipulation, or, as Donaldson (1978) argued, thinking which is disembedded from the immediate context. Wells' argument that greater educational success results from having access to a context-free form of language in which meanings are explicit echoes Bernstein's elaborated code. Both theorists argue that differences in children's language arise, at least in part, from the language they hear in their homes. But whereas Bernstein believed that middle class children had access to an elaborated code because it was the habitual form of talk in their homes, Wells argued that talk in all homes is generally tied to context, and that access to context-free explicit language comes from listening to stories. Both Bernstein and Wells saw this as a socially transmitted cycle of educational disadvantage, something which is passed on from one generation to the next. But for Wells, lower class linguistic disadvantage lies in the relatively low value placed on literacy, evidenced by parents' limited use of literacy skills, absence of books in the home, and lack of reading stories to children.

These accounts of the possible reasons for differences in talk are relevant in considering why there was so much variation in the manner of children's response in interviews about work in the present study:

1. Some children may well have found the interview more threatening than others in the way that Labov describes, and may thus have answered briefly and defensively.
2. It is also possible that, just as Wells found that teachers' expectations of children affect the demands they make on them, so my expectations (based on school attended and first impressions of the children) may have influenced the precise questions I asked in the semi-structured interview. Some children may have been offered questions which encouraged them to express their ideas at greater length, while others may have been offered more closed questions.
3. Wells' ideas about the importance of stories and narrative suggest that in those parts of the interview which demanded a speculative response, children may have had very different resources to draw on.

In the remainder of this chapter I discuss the first two possibilities above; the third will be considered in Chapter 9 as part of a wider discussion of the processes of construction.

The interview context

Labov's (1969) concern was that some children's brief and defensive responses in interview had been wrongly interpreted as evidence of verbal deprivation. In a different research context, however, such answers could be taken as evidence of lack of the particular knowledge or understanding under investigation.

Buckingham pointed out that 'researchers have tended to take data at face value: what people say is generally seen as evidence of what they think' (1993: 42).

Thus the developmentalists' conclusion that working class children's understanding lags behind that of middle class children could simply be an effect of their reaction to the interview situation. And just as Labov found that in a context which the child found less threatening, responses were more forthcoming, and no longer suggested verbal deprivation, it is likely that in a different context,

some of the children I interviewed may well have talked more confidently and at greater length, and drawn on different resources of knowledge and experience.

In the interviews I carried out, all the children were more forthcoming than the boy Labov describes, but some answered more briefly and defensively than others. Labov ascribed such differences to the context of the interview. Specific aspects of this will now be analysed: the school setting and power relations between adult interviewer and child; the children's perceptions of my motivations; the subject matter of the interview; and the specific physical context in which interviews took place. This discussion of context draws heavily on ideas put forward by Buckingham (1993) in his analysis of group interviews about television.

a) The school setting and power relations between interviewer and child

As I explained in Chapter 4, the interviews took place in schools. In both schools children were used to going out of their classrooms individually or in groups with teachers, parents or helpers. This was particularly common in School A which had a policy of recruiting volunteers from the local community to work with individuals. Thus it was probable that I would be seen as a teacher or volunteer, and that the interview would be construed as being an educational event.

As Buckingham (1993) pointed out, adults are in a subject position which is inevitably pre-defined as one in which adults hold power in relation to children. Interviewing groups of children in a school setting, he noted that the children he worked with seemed to accept his right to ask questions of them, and that while some asked to hear the tape played back, they did not generally ask what it would be used for. He suggested that most children seemed to regard the interview as a chance to get out of lessons. These comments apply equally well to these interviews about adult work. The 4-5 year olds liked to hear themselves on tape, and some of them asked, and were allowed, to listen to themselves more than once during the interview. None of the children queried my right to ask them questions. Most expressed enthusiasm about taking part, though often this seemed

to be related to pleasure in avoiding other activities; a few commented that they were glad to abandon their current task, and others indicated that they were in no hurry to return to class, prolonging the interview so that they would miss assembly, playtime, or particular lessons.

While as adult and teacher I was positioned powerfully in relation to the children, it is difficult to tell how they construed the situation. Some children asked questions or made jokes, thus asserting some control; I interpreted these as signs of confidence. Tizard and Hughes (1984) found that children asked fewer questions in school than at home, but that the middle class girls asked many more than the working class girls; they explained this in terms of the greater confidence of the middle class girls and their mothers in relation to school. Similarly I found that the children in School B asked many more questions. Most of these were to check the meanings of my questions:

First of all, do you do any work?
How do you mean?
In any way, I mean anything you call work.
What, school work? (Jade: f/11.02/B)

Most of the older children in school B asked questions of this kind: they were rare in School A. Chris (m/11.06/B) asked the most: five to check the meaning of the question: e.g. *'what do you mean, how much they get paid?'* *'You're talking about the shopkeeper?'*; two to check that I understood his explanations: e.g. *'Do you know the NBA?'*; one about vocabulary: *'...on the, you know, what do you call the thing that goes round?'*. He also asked questions about the topics under discussion: e.g. *'Aren't most factories in the country?'*.

Making jokes, or teasing the interviewer, could be seen as a way of deflating adult power, and was also much more common among the children in School B. Here is Annabel (f/5.04/B):

When you go home from school, what do you do?
I don't know.
Do you turn the television on?
No.
No. Do you watch any television?
No.
Do you not have a television?
No.
No?

[shouting and jumping forward] *Yes I do!*

This data suggests that generally children in School B felt more confident and relaxed during the interview than children in School A, since they were much more likely to joke and to ask questions, both of which to some extent challenged my power as interviewer.

b) The children's perceptions of my motivation

What the conversation is, how it is to be read, reflects on the assumptions made by the analysis about how the interviewer has been interpreted as an audience by the interviewee. In other words, within the interview, the addressee is an audience of a particular or multifarious sort. (Michael, 1996: 26)

I introduced the interview by explaining that I was interested in children's ideas about work, and asking the child to help me. None of the children questioned this. (In School B, as I explained in Chapter 4, letters asking permission had been sent to parents; some children referred to these.) It was difficult to tell to what extent the children were giving the responses that they thought an adult in a school setting would like to hear. Davies (1982) explained the problem facing the researcher:

a strong element in the teacher-pupil communication system is the capacity of the pupil to figure out what he *should* say and do in relation to adults. An important question for me as adult researcher, working with children, then becomes to what extent does this teacher-pupil communication system carry over to the conversations I had with the children? (1982: 33)

However, Buckingham pointed out that the way in which individuals perceive a particular context is neither constant nor predictable. Some children 'may choose to play what they perceive to be the game, while others may actively refuse to do so' (1993: 45). He observed that in group interviews about television, some children adopted a 'critical' 'adult' discourse, which they might have seen as audience-pleasing, while others seemed to delight in describing horror films and violence, apparently with intent to shock.

While some at least of what [the children] said might be seen to be for the interviewer's benefit - whatever they perceived that to be - much of it was not. In some contexts, children may indeed seek to please, by telling us what they think we want to hear: but equally, for a whole variety of reasons, they may not. (1993: 45)

In discussing adult work, there are fewer opportunities for adult-pleasing or displeasing discourses. However, the same tendencies were evident; here Joel (m/7.11/B), talking about what he might do when he grew up, seemed to be looking for a shocked reaction:

Anything else you might do?

Yeh, well there's not that very interesting. [pause] Some of the people in my class don't like this so I think you might not like this. [pause]

Well, try me anyway.

[pause, he grins] Wrestling

While he was aiming to shock, he was also undoubtedly teasing, and taking control in the way discussed above.

c) The subject matter of the interview

Buckingham commented that asking questions about television in a school setting 'crossed the boundaries between public and private, the school and home, adults and children'; it was ambiguous to invite children to talk about 'their private out-of-school pleasures' in a school context (1993: 63). In the same way the interview about adult work was carried out in school, but drew on knowledge and experience acquired, for the most part, at home.

In designing the interview, questions about the child's experience as a worker, and work in the family, had been deliberately placed at the beginning; this was done to encourage all the children to talk about familiar experiences before going on to the aspects involving projection into the future and speculation, which, in the pilot interviews, children appeared to find more difficult to answer. In general this appeared to work well; all the children said that they worked, and many talked confidently about this. However, it is possible that some children may have found the questions about work at home and in the family intrusive, and this may have inhibited later responses. After children had

talked about their own work at home, they were asked, 'Who else in your house does any work?'. Phrasing the question in this way was intended to avoid awkwardness about who did live in the child's home, and the majority of children seemed happy to tell me about work done by members of their families (regardless of the family set-up). Here Rosie (f/11.08/B) talks about the two households she lives in, telling far more than she had been asked:

No because you see there's six of us living in one house and me and my sister go and live there 'cos my parents are divorced, and my dad lives with his girlfriend and his two children as well and so it's hard work at my dad's house and we have to make the, set the table and clean up a lot ... I live in two houses. Me and my sister always live together ... My mum's house, she has a boyfriend but she doesn't live with him all the time ... And we live with her sometimes and we have our own rooms, and we go over to my dad's house and there's him, his girlfriend and their son and daughter ... And me and my sister have to share a room.

But some other children appeared to be less at ease talking about their families. For example, Louis (m/11.07/B) started off confidently talking about the work he did at home, which included, 'go to the shops and get my dad's paper', and later said that 'my mum and dad' live in the house. But he quickly altered this: 'No just my mum and me, not my mum and dad I don't mean. Just my mum'. It is difficult to tell how much this affected his subsequent contributions to the interview. It was noticeable that he replied, 'I don't know' to several questions in the next few minutes, but after this seemed to recover, and was more forthcoming. It is impossible to tell to what extent these questions about the family may have resulted in some children being less confident and forthcoming.

A second concern about the interview design relates to the section where children were asked to imagine that they set up and ran a factory making something of their own choice. The intention here was that being positioned as 'boss' would give a sense of ownership, and might free children from the constraints of their lack of certain knowledge, and allow them to speculate imaginatively. In many interviews this appeared to be the case, and children apparently enjoyed making decisions from a position of power:

*I think some of [the workers] would work and some of them would be all right, but I think some would just be lazy you know, and I'd always be telling them to do something. I think some of them would work and enjoy it. I think the managers would quite enjoy it being in charge.
What would you do if they were being lazy?*

Well, I'd probably tell them if they carried on being lazy I'd write a letter to them. I don't really want to sack anyone but if they were really really terrible and they just did nothing I would probably sack them.

... anything else you'd be doing?

Well, I'd make sure the people were working, that would be the job, I'd have to say give them the sack, and I'd have to give them the jobs and I'd be the person who would tell them, you've got the job. (Eleanor: f/11.06/B)

However a few children in School A seemed to find it difficult to take on the role of boss: Enrico (m/7.08/A) was one of these:

How would you get workers to come and work in your factory?

Some of them might be there before I'm there and some of them I think they just come, just start, how they get their job and then they come.

So they'd come to the factory and say, can I work here?

Yeh, but not to me cos I'm not the one who owns it, the boss.

So you're not going to be the boss?

No. I'll never be a boss.

Thus the strategy designed to give children a sense of ownership and control may have been inappropriate for some of those children whose lives and experience to date made it more difficult to imagine themselves in a commanding role.

d) The specific physical context in which interviews took place

Interviews took place in various rooms depending on the presence or absence of part-time teachers. Generally two chairs were placed on adjacent sides of a child-sized table, and the microphone on the table. These rooms were familiar to the older children, and did not cause any comment. However, the 4-5 year old children were in some cases quite excited about going into an unfamiliar room, and their interest in the room and its contents distracted them from the questions asked. This is evident in three of the transcripts. Here Leila (f/5.03/A) had been asked about the people who work in the school:

And who else earns money for working in the school?

Err, Mrs C. Is it broken? [pointing at a cardboard model house]

I don't know. Who else besides the teachers?

Other distractions were provided by teachers coming into the room to collect resources. Half the interviews with 7-8 year olds at School B took place against considerable background noise from a school concert rehearsal, which was extremely intrusive. This undoubtedly affected me as interviewer: I found it very

hard to focus on what the child was saying and ask appropriate follow-up questions. It seems likely that the children's concentration was similarly affected.

There is evidence then that some aspects of the context of the interview and of the questions limited children's responses. In a different context the responses might have been different. One obvious lesson from this is that interviewers should be cautious in their assumptions about the questions children do not answer; lack of answer should not be assumed to mean lack of knowledge or relevant experience, as is the case in many developmental accounts.

The interviewer's expectations of the children

The interviews were semi-structured; children were asked the same 'starter' questions, but supplementary questions varied depending on the child's response; this can be seen in the extracts from interviews with Tracy, Eleanor and Sitara at the start of this chapter. Some questions I asked elicited very brief responses, and it seemed that the form of these questions may have been responsible. Other questions enabled children to talk at length. It may be that I directed fewer open-ended questions at some of the children. This possibility has been raised in the light of Wells' suggestion (discussed earlier) that teachers' expectations of children entering school affect the conversational demands which they make of them. I had not met any of the children beforehand, but I was familiar with the schools and their intake, and had inevitably formed some general expectations.

After I had carried out the interviews I felt that it had been much harder work to get the children in School A to talk: I had had to ask many more follow-up questions. Certainly where the children answered more briefly I ended up talking for a much higher proportion of the time. To investigate the nature of the questions I asked, the transcripts of 10-11 year olds have been analysed in detail. This age group was chosen because it was among these children that the largest contrasts occurred. First, my turns in each interview were divided into those which posed a question, and those which did not (consisting instead of encouragement, comment or recapitulation).

Table 5.4 sets out the proportions of turns which did not pose questions: the difference between the figures for School A and School B is striking. Every interview in School B included a higher proportion of non-question turns. These are made up of comments on what the child was saying, responses to the child's questions, and many more turns which were encouragement in what was really the child's monologue: e.g. 'mm', 'yes', 'right'.

Table 5.4 Percentage of interviewer's turns which were not questions in interviews with 10-11 year olds

<i>School A</i>		<i>School B</i>	
	%		%
Tracy	3.6	Louis	11.3
Shuel	3.7	Jade	14.0
Jackie	4.0	Eleanor	15.6
Joseph	5.4	Rosie	18.6
Nicky	6.9	Chris	20.9
Mahmud	9.2	Andrew	29.0
Sharon	9.6	Morwenna	29.5
mean	6.1		19.8

One reason for this contrast may be that interviews in School B took place almost a year after those in School A. It is also possible that I felt more at ease with middle class children. However, the difference between the two schools also relates to the children's responses; the interviews where the child answered at length (e.g. Andrew, Chris, Morwenna: see Figures 5.1 and 5.2) are also those which include most non-question turns. There was no need for me to ask questions to encourage such children to continue talking. In contrast, the interviews with children in School A whose turns were the shortest (e.g. Tracy, Joseph) had the highest proportion of question turns. This does not mean that I made no encouraging comments during such interviews, but rather that any encouragement or comment was immediately followed by a question. While this variation in style of interviewing seemed to me at the time to result from the children's styles of response, it is likely that it also contributed to these; some School A children may have experienced the interview in terms of an inquisition rather than a conversation, and this may have led them to reply more briefly. My

intention was to encourage children to talk more by offering them specific questions to respond to, but this tactic may have had the opposite result.

The next step in analysing variation in my contribution as interviewer involved dividing the questions asked into those which could be answered ‘yes’ or ‘no’; those which presented children with alternatives; and open-ended questions. It seemed possible that I might have asked more yes-no and choice questions of those who seemed most reluctant to contribute, thus inadvertently reducing their opportunities to talk at length. The percentages of each type of question are shown in Table 5.5.

Table 5.5 Percentage of questions of different types asked to 10-11 year old children

		<i>yes-no questions %</i>	<i>choice questions %</i>	<i>open-ended questions %</i>	<i>total no of questions</i>
School A	Jackie	54	7	38	193
	Joseph	47	7	46	226
	Mahmud	50	4	46	248
	Nick	49	8	43	162
	Sharon	49	8	43	179
	Shuel	51	11	38	233
	Tracy	48	10	42	216
School B	Andrew	47	7	46	144
	Chris	58	6	35	159
	Eleanor	40	10	50	130
	Jade	48	9	43	202
	Louis	50	9	41	212
	Morwenna	38	8	54	155
	Rosie	37	10	53	180
mean for School A		50	7	42	208
mean for School B		45	8	46	169

The children in School A were, on average, asked more questions than the children in School B. However, while School A children were asked a slightly higher proportion of yes-no questions, and a slightly lower proportion of open-ended questions, these differences are not large or statistically significant. Moreover, a detailed examination of the figures shows that the children who were asked the highest proportion of yes-no questions were not necessarily those who

said the least in their interviews. For example, Rosie (f/11.08/B) was asked only 37% of yes-no questions, compared with 58% directed at Chris (m/11.06/B). Yet of the two, Chris was very much the more talkative (average length of turns 26.5, total number of words 5462 compared with Rosie: 9.9, and 2213). Thus there is no obvious direct relationship between the proportion of yes-no questions directed at children and the amount they said during the interview. As Stubbs (1983) pointed out, yes-no questions can be followed by any response; they do not necessarily limit the respondee to one word answers.

A next step, then, is to examine how many of the yes-no questions asked did actually receive answers limited to 'yes', 'no' and 'I don't know'. Table 5.6 shows the percentage of the yes-no questions directed at each child which received such responses.

Table 5.6 The percentage of yes-no questions asked which received a response limited to 'yes', 'no' or 'I don't know'.

<i>School A</i>	%	<i>School B</i>	%
Jackie	56	Andrew	44
Joseph	60	Chris	22
Mahmud	41	Eleanor	31
Nick	52	Jade	48
Sharon	53	Louis	44
Shuel	49	Morwenna	27
Tracy	63	Rosie	50
mean	53		38

While there is considerable individual variation, children in School A used these brief responses to yes-no questions far more often than those from School B (and this difference is statistically significant: $t = 3.06$, $p < 0.01$).

At this point I will return to Tracy and Eleanor. The figures in this section show that 48% of the questions that I directed at Tracy were closed questions which could have been adequately answered with a simple yes or no; in the extract at the start of this chapter, I asked her seven such questions. Tracy tended to answer briefly wherever it was possible; she answered 63% of these yes-no questions with 'yes', 'no' or 'I don't know'. In contrast, only 40% of the

questions I asked Eleanor were yes-no questions, and of these, she answered only 31% in this way. Note, too, the differences between Chris and Rosie, who were discussed above.

From these figures I conclude that, while I did ask the children in School A slightly more closed questions, the main difference was in their responses rather than my questions. However, it is still possible that the exact wording of the questions directed at some children, or the way in which I asked them, may have been particularly inhibiting. Davies demonstrated the way in which the interviewer's words can affect the child's style of response. She noted that in some interviews her use of 'typical teacher phrases' (for example, 'Just think a minute') tended to steer the conversation into the teacher-pupil communication system in which the children tried to figure out what she wanted to hear (1982: 33). She also noted that by repeating a question, she was implying that the child's answer was not what she wanted, and thus inadvertently signalling that she wanted specific answers, in exactly the way that teachers do. I did this when interviewing Joseph (m/11.00/A):

Why do you want to be a footballer?
'Cos I'm good at it and that's my favourite sport.
Any other reasons?
No

Joseph had supplied two reasons; by asking if there were others I implied that these were not adequate. From the sequence which followed, it is clear that I was thinking of high pay, and wanted to know if this was shared by Joseph. In the extract below my probing question results in Nicky expressing lack of confidence:

How would you know there was a job going as a bank manager?
Look at the papers like, and then [pause]
What, it would be in the newspaper? Is that what you mean?
I don't know. I'm not very good at this.

Reviewing the interviews in this way, it is very easy to construe such instances as failures in interviewing, and to feel that if I had only done it better, I would have 'better' results. However, from a social constructionist perspective, whatever I did would have contributed to the joint construction of meaning. If my contribution

had been different, a different meaning could have been constructed, but it would still have been a meaning that I shared in constructing.

Summary

The arguments considered in this chapter suggest several reasons why some children's narratives might have been less full and detailed than others. The context of the interview may have intimidated some children. In particular, questions related to the child's family experience may have been intimidating for some, and the demand that the child take on the role of a boss may have been further from the experience and expectations of some children than others. In interviews with School B children, more of my turns consisted entirely of comment and/or encouragement. In contrast, some interviews in School A consisted of one question after another. In particular, repeated or probing questions may have resulted in children believing I wanted to hear specific answers, rather than imaginative constructions. Thus, both through my action, and possibly through the children's expectations of a middle class visitor, it seemed that children in School A were more likely to regard me as a teacher and try to give 'correct' answers.

It is also possible that some children may have had fewer resources relating to work to draw on than others; this will be one focus of the next three chapters. I have also suggested that there may be differences in the resources of narrative construction which children brought to the interview; these differences will be examined in Chapter 9.

CHAPTER 6

Children's constructions of the work they do themselves

In this chapter I examine children's constructions of the work they do themselves, both at school and at home. As I indicated in the Introduction, I include both household work and school work within the category work. James and Prout (1990) pointed out that while adult work is normally distinguished from children's 'work' at school, there are many similarities between the two (see discussion of hidden curriculum in Chapter 2). They argued that children's 'work' can be seen both as preparation for the future, and as having meaning located in their present lives. The link between present and future work is conceptualised in Lave and Wenger's (1991) notion of legitimate peripheral participation; at school and at home children are not simply learning about work, but are participating, and taking on the identity of 'worker'. Burris (1976) reported that children said that going to school was like having a job, in that both are forms of work.

In the first section of this chapter I consider the various contexts in which children said they worked. In subsequent sections the nature and characteristics of the work reported at school and at home are reviewed, and the resources drawn upon by the children are examined.

Contexts in which children work

At the start of the interview the children were asked whether they did any work, and what it was. After they had talked about the work context they initially identified, I asked them whether they also worked in other contexts.

All the children said that they worked, and the majority replied immediately in terms of school work (see Table 6.1). Natalie's (f/8.00/B) reply is typical of these:

Do you do any work?

Yeh, lots of it.

What work do you do?

Maths and handwriting and lots of history. We haven't done much geography, but lots of science. We've done some work about the weather, and we're working about the sea and Anglo-Saxons and Vikings now.

As the interviews took place in a school setting, it might be expected that school work would be uppermost in children's minds; they came to the interview straight from classrooms where they had been working. If the interviews had been carried out in children's homes a different pattern of response may have resulted. Moreover, in view of the similarities between school and adult workplaces pointed out by Bowles and Gintis (1976) (see Chapter 1) it might be expected that children would think of school tasks as their main work. However, as Table 6.1 shows, not all children did reply in this way.

Table 6.1 Initial response to 'Do you do any work?'

		age in years			
		4-5	7-8	10-11	total
initial response					
school	- academic work	10	12	6	28
	- domestic (e.g. tidying)	1	0	0	1
home	- academic work	3	0	0	3
	- domestic work	0	0	1	1
both school and home mentioned		0	1	2	3
child asked for clarification		0	0	5	5
N		14	13	14	41

There was a marked contrast between the younger children and the 10-11 year olds. Table 6.1 shows that nearly all the younger children responded in terms of academic, and generally school, work. Clark (m/4.09/A) was the exception:

What sort of work do you do?

Umm, tidy up and then I get all that tidy up so it's clear then I sit on the mat.

This was clearly tidying up in a school context. He said that he also tidied his bedroom. Even with prompting, he did not agree that other school activities were work:

What about things like number work that you were doing this morning, is that work?
No.

He was the youngest child interviewed, and had attended school for less than a term. It seemed that he had internalised the school routine of tidying up and sitting on the mat, but had not taken on the idea of school work. King (1978) pointed out that reception class teachers felt that some of the younger children needed to spend more time playing before they would be ready to 'work'; thus it is possible that Clark's teacher had not yet asked him to take part in organised learning, or had not referred to his activities as work. Similarly Apple and King (1990) found that, when children starting at kindergarten were asked what they would do there, no child responded 'work', but in the second month half said that they worked.

Three 4-5 year old children responded in terms of academic work done at home. Toby (m/5.07/B) talked about his diaries:

I do work when I go on holiday and I do diaries, done a diary about Paris, I went there for three days. I done a lot of pages of America.

Elsa (f/5.01/A) said that she did mathematics papers at home, and Daniel (m/5.05/B) said he did homework. A common factor here is that Toby, Daniel and Elsa all said that one of their parents spent time working at home (illustrating books, writing, and writing a book). Thus each had a parent modelling desk work. It is possible that these children regarded their activities in the same way as their parents' activities. Indeed, parents might have encouraged this: 'you do your work and I'll do mine'. Another possible explanation is that these were all middle class children, whose expectations of work at school had perhaps not yet fully been met. Elsa, for example, said that she did '*mathematics papers*' at home, but at school '*we do numbers*'. Toby talked about the diaries he wrote, but his work at school on the day of the interview was colouring in a photocopied picture.

Of the 7-8 year old children, only Tom (m/8.08/B) did not immediately reply in terms of school work; he said that he did not do much work, and the examples he gave did not include academic work:

Well sometimes at school I help out, and at home sometimes I do a bit of working out, and just first of all I helped unload some things for a stall. I must admit I don't do much work at all.

Tom's mother and brother both worked from home (dress-making and gardening), so he appeared to be drawing on family models of practical work.

Only six of the fourteen 10-11 year old children responded immediately in terms of school work. Of the remaining eight, five checked the meaning of the question:

Do you do any work?

Yes

What sort of work do you do?

In school, or outside? (Mahmud: m/11.00/A)

Two children included both school work and household work:

Homework and working in school, but my older sister is thirteen and my dad's had two other children who are two and one and they're hard work and I have to do the dishes at home and keep my room tidy. (Rosie: f/11.08/B)

and one responded entirely in terms of domestic work:

Yes, I do work at home, like washing up and sometimes do the hoovering, clean up the bedroom, lay the knives and forks, lay table, ummm, go to the shops get my dad's paper, go to the bottle bank. (Louis: m/11.07/B)

These eight children included four who had regular work responsibilities outside school, and five who were sometimes paid for work. Mahmud worked in his father's launderette each day after school, and was paid on a regular basis. Rosie, as she described above, had regular housework responsibilities at her father's house. Louis had a number of regular jobs, which he was expected to do without reminder, and for which he was paid. In contrast, of the six children in this age group who responded in terms of school work, not one received pay for their household work, and only two had regular household responsibilities. Thus the more diverse responses of children in this age group appear to be linked to their experiences of work.

The range and variety of work children did at home will be examined later in the chapter; the next section analyses responses concerning work in school.

Work in school

The questions I asked about work in school were 'What work do you do at school?'; 'Do you do anything at school that is not work?' and 'How do you know which activities are work and which are not work?' My intention was not so much to find out which activities were considered to be work, but to examine the characteristics children attribute to work. In this section I will discuss the work children said they did; the hierarchy of work; the criteria by which work was defined; and the resources children appeared to draw on.

Work children said they did at school

In talking about work in school children described the curriculum in four distinct ways: traditional subjects (e.g. mathematics); generic activities (e.g. reading); organisational strategies (e.g. choosing); and content labels (e.g. pollution). The first three correspond to those which Alexander (1992) noted that primary school teachers used. Most children used a mixture of these types of description.

Table 6.2 Number of children using subject names in describing work at school

	<i>age in years</i>			<i>school</i>		<i>total</i>
	4-5	7-8	10-11	A	B	
Mathematics	4	13	14	16	15	31
Science	0	5	7	1	11	12
English	0	4	8	7	5	12
Geography	0	2	6	0	8	8
History	0	2	3	1	4	5
Technology	0	0	4	4	0	4
Art	0	0	3	1	2	3
Music	0	1	1	0	2	2
PE	0	0	2	2	0	2
<i>N</i>	14	13	14	19	22	41

Table 6.2 sets out the school subjects which children referred to: in this and subsequent tables the subjects and activities listed are those spontaneously mentioned by the children: any prompted by me have been omitted. This table, and Tables 6.3 and 6.4, list every mention of activities which some children identified as work (i.e. even mentions by children who expressed doubt about whether they were work are included). Table 6.5 indicates which activities were not considered to be work by all children or in all contexts.

The youngest children (4-5 year olds) used very few subject names, whereas the oldest referred to their work almost entirely in these terms (see Table 6.2). The only subject name mentioned by 4-5 year old children was mathematics. The 7-8 year olds used far more subject names. All thirteen children referred to mathematics, and smaller numbers mentioned English, science, geography, history and music. Heidi (f/8.05/B) used only subject names in her initial list:

What sort of work do you do?

Maths and science and history and geography - I don't know what geography is - and music.

Her subject-based definition of her work may have been influenced by conversation at home; her two older brothers had both completed secondary education. However, most of the children in this age group used a mixture of subject names and generic activities to describe their work. The 10-11 year old children described their work mainly in terms of subjects.

Generic activities were identified mainly by the younger children. Bennett and Kell (1989) point out that teachers' descriptions of activities do not make it easy for children to focus on the learning involved; the child sees the activity as 'colouring in' while the teacher thinks of it as, say, 'number concepts'. Generic labels were used in all age groups for activities in the English curriculum: e.g. reading, writing, spelling, listening, handwriting, proof-reading; and for art activities: painting, drawing, making things, colouring in (though clearly in both cases these activities could also fall in other curriculum areas).

Table 6.3 Number of children naming generic activities in describing work at school

	age in years			school		total
	4-5	7-8	10-11	A	B	
reading	4	5	1	5	10	15
writing	6	4	3	8	5	13
drawing	7	4	2	6	7	13
making things	3	3	1	6	1	7
handwriting	0	4	1	3	2	5
colouring in	4	0	0	1	3	4
painting	1	1	1	3	0	3
playing on computer	0	3	0	1	2	3
copying	0	2	0	2	0	2
proof reading	0	2	0	0	2	2
listening	0	1	1	1	1	2
spelling	1	0	1	0	2	2
<i>N</i>	14	13	14	19	22	41

Note: This table includes only activities named by two or more children. Activities mentioned by one child include: sticking, watching TV, learning, adding, equals, experimenting.

Organisational strategies (see Table 6.4) were used to describe work by children in all age groups. Many of these appeared to involve some element of choice for those who had finished set tasks (choosing, options, casual work, busy book). While the youngest children contrasted choosing with work, many of the older children recognised that one could choose to work:

And sometimes when we've finished our work and we've got nothing to do, Mr M. says we can choose, like choose things to do. So we can choose to do work what we haven't finished, or we can do some things like playing with the Lego or drawing pictures. (Natalie: f/8.00/B)

Table 6.4 Number of children referring to organisational strategies in describing work at school

	age in years			school		total
	4-5	7-8	10-11	A	B	
choosing	5	6	2	7	6	13
homework	2	3	4	1	8	9
options	0	0	3	3	0	3
project work	0	0	2	2	0	2
topic	0	0	2	0	2	2
tests	0	1	1	1	1	2
casual work	0	0	1	1	0	1
finishing off	0	0	1	0	1	1
group work	0	0	1	1	0	1
<i>N</i>	14	13	14	19	22	41

Content labels were mainly used by younger children: the most common was 'number work' used by three 4-5 year olds and two 7-8 year olds. Content labels were used to describe specific activities by the 4-5 year olds: 'wibble wobble work' (Darren: m/5.07/A); 'butterfly work' (Annabel: f/5.04/B); and to describe project work by both 4-5 and 7-8 year olds: 'frogspawn, tadpoles and frogs' (Toby: m/5.07/B); 'the weather ... the sea and Anglo-Saxons and Vikings' (Natalie: f/8.00/B). They were not used by the oldest children, who talked about topic or project work rather than the content.

The work hierarchy

While some school activities are seen as 'work', and some as 'not work', this is not a clear-cut distinction; children appear to construct a hierarchy of activities, some of which are 'more work' than others. Several children touched on this in their responses:

You can sometimes do some work but it's not that work ... it's things sort of like Lego to play with (Sinead: f/5.03/B)

Is drawing work or not work?
Umm, not so much. (Marcus: m/8.06/B)

The hierarchy was clearly described by a six year old girl in the pilot interviews:

maths is real work ... writing, that's work, sort of ... reading's work sometimes ... painting isn't work ... PE? no that's not work.

Table 6.5 draws on interview data to categorise school activities: activities in the first column were uncontroversially seen as work by all those who mentioned them; those in the fourth column were universally considered not to be work. Those listed in the two middle columns are activities which some children defined as work but others did not, and activities which individual children suggested could be seen as work or not work depending on the context.

Another indication of the relative status of various work activities is the order in which children named them. In response to the question, 'What sort of work do you do?' most children listed several activities, and it could be hypothesised that those listed first were those which most clearly fitted the label 'work'. Table 6.6

shows the order in which children listed the most frequently mentioned subjects and activities; those generic activities which fit under a particular subject heading have been grouped with the subject.

Table 6.5 The work status of school activities

<i>activities said to be work in all contexts by all children who mentioned them</i>	<i>activities said to be work by some children, but not by others</i>	<i>activities said to be work in some contexts but not in others (by the same child)</i>	<i>activities said to be NOT work by all children who mentioned them</i>
mathematics	number work	reading	playtime
times tables	mathematics games	drawing	playing
investigative maths	reading	painting	home corner
sums	spelling	colouring in	games (hangman, I-spy, board games)
English	technology	Lego	cooking
Haydn Richards (text book English)	making things	drama	talking
handwriting	drawing	computer	canoeing
listening	painting	choosing	
history	colouring in	watching television	
geography	recorder	art	
topic/project	playing outdoor games		
homework	PE		
	swimming		
	computer		
	assembly		
	tidying up		

Table 6.6 The order in which work activities were mentioned by children in different age groups

		<i>rank order of mention</i>		
		1st	2nd	3rd
<i>subject or activity</i>				
<i>4-5 year olds</i>	mathematics /number/sums	8	2	0
	English/writing/reading	2	5	0
	drawing	2	1	1
	butterfly work	2	1	0
<i>7-8 year olds</i>	mathematics	13	0	0
	English/writing	0	6	4
	science	0	4	0
	projects	0	1	3
<i>10-11 year olds</i>	mathematics	7	4	2
	English/writing/ Haydn Richards	5	2	3
	science	1	3	0
	geography	0	1	3

Notes: Butterfly work was the activity taking place in the Reception class of School B on the day some children were interviewed. Haydn Richards was the English text book used in School A.

Tables 6.5 and 6.6, together with Table 6.2, show the importance accorded to mathematics as school work. It was the only subject mentioned by 4-5 year olds, and was the first work activity named by *every* 7-8 year old, and half the 10-11 year olds. English, including generic activities writing, reading, handwriting and spelling, ranks next in importance. However, while English itself was said to be work by all those who mentioned it, reading was not seen as work in all contexts. Talk was mentioned by only one child, and was 'not work'; two children mentioned listening, and Mahmud (m/11.00/A) considered carefully before he decided it was work:

... assembly, is that work?

It's not work but we learn things at it, so you could say it's work in some things.

Well, why might it not be work?

'Cos you're only sitting down and listening.

You don't actually have to do anything?

Mmm, apart from listening.

Yes, so listening isn't quite as much work as, maths?

It's more actually, because you're learning more.

It seemed to be the lack of active participation in both reading and listening which made children see English as less work than mathematics. Science was mentioned only by the older children, and almost exclusively by those in School B, where more children talked about science than English. Similarly geography was mentioned only in School B and technology only in School A.

The overall hierarchy of work, then, seemed to go like this: mathematics; writing and English exercises; science (School B) ; geography (School B), history and projects; technology (School A); reading; listening and talking; PE and outdoor games; drawing and painting. Butorac (1988, 1989) reported a similar emphasis on mathematics and writing as work among Australian children; they saw these as the most constrained and teacher-directed curriculum areas.

Criteria for defining work

This section will consider the criteria children used in deciding which activities were work. For the youngest children the distinction between work and non-work activities was a clear-cut one, but almost all the 7-8 and 10-11 year old children

suggested that the same activity could be seen as 'work' or 'not work' depending on the context.

The youngest children could not all explain how they identified work, though they were clear that play came after work:

we just finish work then we go and choose (Juan: m/4.11/A)

Two children said they just knew what was work:

How do you know whether it's work or whether it isn't work?

I just know it.

How do you know?

Because I have a good brain. (David: m/5.05/B)

Those in this age group who put forward an explanation of the distinction between work and non-work activities tended to rely on a single criterion. In contrast all the oldest age group offered explanations of the distinctions they made, and they used a far wider range of ways of defining work than did younger children.

The various criteria children put forward were listed, sorted and grouped; they are set out in Table 6.7. I have grouped them in four main categories:

- work is defined and made compulsory by the teacher;
- some activities are intrinsically work;
- the child's response determines whether an activity is 'work' or 'not work';
- the potential outcome determines whether an activity is work.

These categories offer four dimensions of any work activity which are much broader than school work: authority, compulsion and autonomy; the nature of the task; the worker's attitude/response; and productivity.

The next few pages review the children's responses in each of the categories listed in Table 6.7. Children in all age groups said that school work could be distinguished from non-work activities because **work is defined and made compulsory by the teacher**. This was by far the most common explanation among the 4-5 year old children, and bears out Apple and King's observation that in kindergarten, 'To work is to do what one is told to do, no matter the nature of the activity involved' (1990: 55). However, it contrasts with Burris's (1976)

finding that kindergarten children distinguished work by the intrinsic qualities of the action (hard, not fun) and considered certain activities to be intrinsically work (e.g. writing).

Table 6.7 Criteria used for defining work at school

criteria	age in years		
	4-5	7-8	10-11
<i>defined by teacher</i>			
teacher tells you it is work	3	0	1
teacher tells you to do it; it is compulsory	3	5	5
teacher tells you to be quiet	0	0	1
teacher says it must be correct	1	1	0
teacher praises you if you do it	0	2	0
location makes it work	1	0	1
total children			
- responding in this category	7	5	8
- not responding in this category	7	8	6
<i>Intrinsic to activity</i>			
nature of task	1	3	1
task is active not passive	0	4	2
task is hard	2	3	3
total children			
- responding in this category	2	7	5
- not responding in this category	12	6	9
<i>defined by child's response</i>			
not enjoyable	0	1	10
not about fun	0	0	1
you treat it as important/serious	0	2	1
you take care	1	0	0
you make an effort	0	1	1
you get tired	0	1	0
total children			
- responding in this category	1	5	12
- not responding in this category	13	8	2
<i>defined by outcome</i>			
learning	0	2	5
a piece of work	0	1	3
competence in adult life	0	0	1
total children			
- responding in this category	0	3	8
- not responding in this category	14	10	6

Note: some children used several criteria; hence figures in columns do not add up to total number of children.

I found that many 4-5 year olds suggested that the teacher simply told them which activities count as work:

She [the teacher] says if it's work or not. (Claire: f/5.02/B)

Some added an element of direction:

Work is what the teacher tells you to do. (Leila: f/5.03/A)

or even compulsion:

I have to do everything that Miss T. tells me. (Annabel: f/5.03/B)

Many 7-8 and 10-11 year old children also suggested that the teacher defines what is work; for them this generally involved compulsion: work is what you have to do and not what you choose to do.

[explaining how she knows an activity is work] 'Cos like Mr M. says, we're gonna do a picture on our Anglo-Saxon things, we have to draw a map or something, and if it isn't work then he says, like, today there's gonna be choosing and you can do pictures or something like that. (Heidi: f/8.05/B)

Similarly Jackie (f/11.01/A) argued that Options are not work because:

you can't get told what to do really, it's your decision

Activities which a child would voluntarily undertake at home become work in a school context because they are compulsory:

If I was doing a wordsearch at home, then I don't think that would be work, because I chose to do it because it was fun to do; but if I did it at school I would say that was work, because somebody had told me to do it because they thought it would be good for me. (10 year old girl in pilot interviews)

Work tasks are initiated by the teacher, and may be defined as work by the manner of presentation; Chloe (f/4.11/B) observed that:

The work isn't from us because it's been printed by the teacher and it's always been printed.

The teacher also defines at what point the activity is completed:

[explaining why he considers drawing to be work] It's hard because if you try your best, it's hard, Sir makes [you] do it again ... and you gotta write a book about it, the picture, you see. (Hassan: m/8.05/A)

and may provide incentive in the form of public praise:

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you do it ... to show to the teachers and ... most of the time Sir gives a clap, doing that, hard work (Hassan: m/8.05/A)

sometimes you can go in the Brill book and then you can stand up in the hall (Sitara: f/8.00/A)

Once the teacher defines an activity as work, it retains that status even if it is done in choosing time:

If once he tells us to do something like he goes, do these maths, yeh, and we don't finish them, then another day he says, you can do whatever you want, if you go back to those maths they're your work because he told you before. (Tom: m/8.08/B)

Children also infer what teachers consider to be work from their actions. Toby (m/5.07/B) knew which activities were work because '*we have work on our tables*'. This refers to a practice common in infant classes whereby resources for tasks which have to be completed are laid out on the tables by the teacher at the beginning of the day, whereas the child has to get out resources for 'choosing' activities.

Mahmud (m/11.00/A) noted that you can tell whether something is work because '*our teacher asks us to be quiet while we do it*', whereas the class did not have to be quiet when it was not work '*unless our teacher has had a bad day*'. The observation that teachers expected children to carry out work quietly was also central to concern expressed about a teacher's definition of work:

When I was in Mrs W.'s class she would let us talk more in art than in other lessons. It makes other subjects more important than art, but maybe art could be very important if you had a talent for it. Art is work; Mrs W. thought it wasn't, not as much work as maths. (10 year old girl in pilot interviews)

A number of children said that **certain activities are intrinsically work**. These included worksheets, proof reading, and reading information books. The latter two arose in discussions with me about whether reading was always work: Natalie (f/8.00/B) and Charlotte (f/8.08/B) argued that proof reading was work, and Morwenna (f/11.04/B) said that reading fiction is '*like watching a film in your mind, kind of*', and is therefore not work, whereas, '*if you were reading like fact books, or reading information, that's work*'.

Many children argued that work involves activity. According to Samantha (f/7.10/A), reading is not work '*cos you're reading it, you don't do like writing or*

something like that'. This line of thinking led children to question whether attending assembly, listening, reading and watching schools' television were work.

Children of all ages commented that work is hard. The hardness is partly intrinsic to the activity, but is also defined by the teacher who set the task, and who decides when it is completed. Sitara's (f/8.00/A) description was particularly vivid:

How do you know that drawing isn't work and writing is work?
'Cos writing is much more harder 'cos you have to go all the way writing down to the paper. It's much more harder, get another paper and you have to write and write and write till you hand starts shaking and you go, Miss I can't do any more, and Miss go, try one more...

Some children pointed out that the hardness of a task also involves a relationship between the child's skills and the task:

I'm not a very good reader so it's hard work for me (Joel: m/7.11/B)

Is reading work or not work?
It's a bit of work 'cos I'm a bit dyslexic (Rosie: f/11.08/A)

This emphasis on effort was also found by Butorac (1988), who pointed out that reading generally ceases to be seen as work in the third grade when, for most children, it involves less effort.

Another set of ideas proposed that **work is defined by the child's response to the activity**. One set of responses in this category concerns taking work seriously; it requires care and effort. Tarquin (m/5.07/B) was the only 4-5 year old child to respond in this category, suggesting that work involved '*taking care*'. Louis (m/11.07/B) explained that sports were work because '*you have to put a lot of effort into it*'. Andrew (m/11.08/B) related effort put in to result achieved:

If you really wanted to do work and you put your mind to it and you achieve something I'd call that a good piece of work, but if you just rushed a poem or something, just wrote some quick thing, I wouldn't call that working very hard.

A second set of responses in this category were those which related work to lack of enjoyment; such responses were given by eleven out of the fourteen 10-11 year olds. Some activities (e.g. drawing, making things, outdoor games, and using the computer) were said to be 'not work' because they were enjoyable. Lack of

enjoyment was frequently associated with lack of choice, for example, Chris (m/11.07/B) said about a wordsearch:

if you have to do it then it's not a pleasure 'cos you've got no choice

Cullingford, interviewing eleven and twelve year old children, found that they tended to 'separate pleasure and work as if work were always some kind of drudgery' (1991: 120). However, while the 10-11 year old children interviewed referred to lack of enjoyment as a criterion for distinguishing work, in practice this was often over-ridden by other contradictory criteria:

But if your teacher tells you to draw something for your project, is that work or not work?

Well it is work, but I don't think of it as work.

How do you decide what's work and what's not work?

Well it's fun. I know it's work but it don't seem like work.

Right, so how do you know it's work?

'Cos my teacher, she tells us it's work. (Rosie: f/11.08/B)

Shuel (m/11.00/A) struggled with the contradiction between his enjoyment of some tasks and the discourse which labels work as not enjoyable:

Work is kind of hard working, it's not about fun, not about fun. But if you like it it's quite fun to do.

This relationship between work and lack of enjoyment was discussed almost exclusively by 10-11 year old children. However, Tizard *et al.* (1988) found that some seven year olds identified work, or particular aspects of work, as the things they did not like about school. The question I asked may not have encouraged the younger children to think in terms of enjoyment.

Finally, several children said that **work is defined by the outcome of the activity**. For example, Holly talked about watching television:

Is there anything you do in class that isn't work?

Sometimes we watch a programme but I think ... it is part of work because we have a sheet afterwards and we have to fill in things. (Holly: f/7.10/B)

Similarly reading became work when the outcome was a book review, or information for a project (Morwenna: f/11.04/B). Three 7-8 year olds and six 10-11 year olds discussed the relationship between work and learning, though with varying conclusions. Some talked about work and learning as synonymous: for example, Jade (f/11.02/B):

What about if you read a book at home, is that work?

Yeh

So reading is always work?

Yeh, because it's learning, and it's learning more about English, so being able to write.

Andrew (m/11.08/B) separated the notions of work and learning:

Well reading I think extends your vocabulary and it can be very helpful at times if you want to use complicated words....

So if you're reading at school in silent reading time, is that work?

No not really I wouldn't call it work.

Both Cullingford (1986, 1991) and King (1989) found that many junior children believe that the purpose of working in school is to gain credentials or skills which will enable them to get jobs; Eleanor's (f/11.06/B) similar argument was that, in contrast with art and music which were rewarding in themselves because they were enjoyable, mathematics was work because *'the only reason I'm doing this, so ... I could go to a supermarket'*.

Thus the children used a set of interrelated, and at times contradictory, criteria to distinguish between work and non-work activities. The youngest tended to rely on the teacher's definition, and the way in which the activity was presented to them. The 7-8 year olds emphasised the compulsory nature of work; many of them saw particular activities as intrinsically work; some identified that serious effort was required. The oldest children were more likely to use a number of criteria which involved the teacher's definition of the activity (compulsory); the nature of the task (involving activity, and hard); the child's response (involving care and effort, and generally not enjoyable); and the outcome (an immediate product, learning, or more general competence in adult life). The specific social context in which the activity was carried out was often an important factor (cf. Pahl, 1984): it was work because it was a compulsory task in a school setting. These criteria are similar to those identified by Butorac (1988, 1989) which she characterised by the term 'constraint'.

Resources drawn on

The children's ideas about which subjects and activities were 'most work', and the various criteria they used in distinguishing 'work' and 'not work' could have been drawn from a range of experiences and interactions with parents, siblings, peers and older children, and teachers. As I explained in Chapter 4, none of these people were interviewed. Instead this section relies on curriculum statements and on research which has explored teachers' views in general, and suggests the discourses which may have been available to children.

First, what resources did children draw on in identifying particular activities as 'most work'? The subjects and activities at the top of the children's work hierarchy are those which have been referred to as 'the basics'. Alexander (1984) pointed out that some subjects, notably mathematics and English, are seen as basics; at the time he was writing he saw science as being at an interim point in the process of becoming a basic. Since then the National Curriculum has been introduced; mathematics, English and science have been identified as core subjects; and national tests in core subjects have been carried out, thus reinforcing the importance of these subjects. The differences between schools in mentions and ranking of some subjects, and in particular the number of mentions of science and geography in School B, can partly be explained in terms of the timetable for the introduction of the National Curriculum. In School A interviews took place in spring 1992, in School B, in summer 1993. Thus the School B children had had a longer period under the National Curriculum. In particular, they were interviewed two years after the geography curriculum was introduced, whereas the School A children were interviewed only six months after its introduction.

The importance of the basic or core subjects is made explicit in schools in a variety of ways, for example: through classroom structures and references by individual teachers (Sharp and Green, 1975); and through aspects of school organisation such as creation of posts with responsibility for these areas. Alexander (1992) found that in Leeds mathematics was more commonly taught as a separate subject than any other, and that post-holders in mathematics were

disproportionately male, and involved a high proportion of senior staff in leadership roles. School A and School B fit this pattern. Responsibility for mathematics in School A was held by the female deputy Head, and in School B by the only male member of the senior management team. Alexander found that while English was accorded more time than any other subject, curriculum leaders for English in most schools were not the most senior staff; a similar pattern was found in School A and School B. Both schools had teachers with responsibility for science. In School B, where eleven children mentioned science, this teacher was a member of the senior management team; the school staff had produced their own curriculum document for science before the National Curriculum science document was published, and had for several years been focusing INSET and equipment buying in this direction. In School A only one child mentioned science; the teacher with responsibility had been teaching for only two years, and had responsibility for both science and technology. One room in the school had been set aside for technology, and was frequently referred to (e.g. as a possible space for interviewing). Technology was part of the Options scheme which took place on Friday afternoons; children could choose from a range of activities such as cookery, canoeing and technology. Although four children referred to technology, three of them did not consider it to be work, because it was part of the Options programme. It would appear, then, that the subjects and activities identified by the children as most work were those given priority in the discourse and practice of staff at their schools.

The second question addressed in this section relates to the children's criteria for defining work; what resources were children drawing on in identifying these? Some of these criteria were common to all three age groups, while others were more prevalent among older children. These differences could result from older children having had more experience (simple accumulation) or different experience (e.g. teachers for different age groups give different messages).

A number of classroom observation studies offer support for the second of these options. Many researchers have commented on the ways in which teachers distinguish work activities and activities which are not work (e.g. Sharp and

Green, 1975; King, 1978, 1989; Cleave *et al.*, 1982; Pollard, 1985; Apple and Green, 1990; Cullingford, 1991). Such studies suggest that there are differences between infant and junior classes in the way that work is talked about by teachers. In infant schools Cleave *et al.* observed that:

the notions of 'work' and 'play' are distinguished. There are set periods called 'playtime' and periods of doing number 'work' or English 'work'. Exercise books are called 'workbooks' and the phrases 'Get on with your work' and 'I've finished my work' are commonly heard. (1982: 55)

They argued that the distinction between work and play is not simply a semantic one; in classrooms in which they observed:

- play came after work is completed;
- play was a reward for finishing work;
- work involved the notion of getting it right, or of failing to do so;
- work was compulsory (even though it could be introduced with phrases such as 'would you like to?' or 'I would like you to');
- work was important and 'grown-up'.

The first four ideas listed were among those articulated by the 4-5 year old children I interviewed; however, only the older children suggested that work was important. King (1978) produced a similar list of teacher's operational definitions of work and play, and noted that while infant teachers valued play as a form of learning, the children did not share this perception. These studies took place some years ago: a decade later, Bennett and Kell (1989) reported that although teachers in Reception classes said that they valued play, in practice it was used as a time filler.

Even in kindergarten Apple and King found that the teacher referred to preparation for elementary school and adulthood as justifications for the way she presented work. She believed that work should be compulsory, and she valued diligence, obedience and perseverance more highly than academic excellence: 'the content of specific lessons is relatively less important than the experience of being a worker' (1990: 57).

In junior classes, observers have noted that even more priority is accorded to work:

The education of children moving from infants to juniors undergoes an ideological shift. Their teachers no longer regard play as learning and work is given primacy. (King, 1989: 12)

He quoted a comment from a teacher to a child using cubes for mathematics: 'I'm watching you laddie. I didn't give you cubes to play with. You're here to work.' (1989: 12). This shift in attitude was also noted by Newson and Newson (1977). They pointed out that when children move from infant to junior classes, parents report a more formal teaching situation and greater pressure exerted on the child to work, and work persistently. King found that the infant school teachers had said very little about future classes; it was the junior teachers, parents and older children who had emphasised work.

This change of emphasis from infants to juniors is to some extent demonstrated by the current study. Some 7-8 year old children commented that work is hard and teachers are demanding, echoing Burris's (1976) observation that 2nd and 5th grade children described work as forced, externally imposed and demanding. However, the difference between infants' and juniors' responses was less dramatic than that indicated by King and Newson and Newson. This seems to be partly because in Reception classes children are already beginning to learn that work is hard, and that play is comparatively unimportant, as Bennett and Kell pointed out. This tendency may have been exacerbated by the introduction of the National Curriculum. It could also relate to a greater attempt by schools to make children's experience coherent and minimise the disruption of transitions. Both schools were 5-11 primary schools with nursery classes, and had developed whole school policies.

While the transition to the junior school was not marked by major changes in ideas about work, a greater shift occurred between 7-8 and 10-11 year olds; the majority of the older children associated work with lack of enjoyment. This is perhaps related to junior teachers' active encouragement of appropriate working attitudes. Pollard (1985) showed how teachers encourage productivity and

efficiency through their comments about effort, perseverance, neatness, regularity and speed, referred to in Chapter 1. Pollard claimed that these concerns are also articulated by government and industry at a national level. He identified a second set of social values promoted through teacher's talk, which, he argued, could be said to meet industrial needs in terms of preparing a productive and compliant workforce (self-control, obedience, politeness, quietness, respect for authority, truth). Finally, he identified a set of comments which stress individualism and competitiveness (achievement, individualism, hierarchy, self-reliance). Thus he argued that teachers, while reinforcing values which make sense in terms of day-to-day classroom life, also take part in the reproduction of the dominant hegemony.

Further evidence of teachers' ideas about school work is found in Ashton *et al.*'s (1975) study of teachers' opinions about the aims of primary education. While this survey took place over twenty years ago, it is of interest in that it is a large-scale survey of teachers' opinions, in contrast to the detailed classroom observations which have been referred to so far. Fifteen hundred teachers were asked to rate the importance of seventy-two aims of primary education which had been identified by groups of teachers. These included several aims relating to working habits and attitudes, which are listed below, together with the rank order given by the sample.

<i>rank order</i>	<i>aim</i>
5th	The child should find enjoyment in a variety of aspects of school work and gain satisfaction from his own achievements.
10th =	The child should be enthusiastic and eager and put his best into all activities
17th	The child should be generally obedient to parents, teachers and all reasonable authority.
32nd	The child should be developing the ability to plan independent work and organise his time.
36th	The child should be industrious, persistent and conscientious.

(compiled from Ashton *et al.*, 1975: 58-59 and 177-183)

These aims were all ranked in the top half of the list, which indicates the importance teachers attach to the development of good attitudes to work and work

habits. However, the working habits which Pollard found to be encouraged in practice were those ranked comparatively lower on this table: 17th, 32nd and 36th. Much higher than these the teachers ranked positive work attitudes, and gaining satisfaction and enjoyment from work. This contrasts markedly with the evidence I found that, in the last year of primary school, many children related work to lack of enjoyment. One reason for this may be that much of what teachers have to say about working habits is conveyed as negative comment. Pollard's list of examples of teacher talk includes the following:

You're not trying at all
That's very poor
Don't be so careless
You'll have to do it again
Your writing's a mess
No, that's wrong
Don't help each other
That's not so good as Neil's (1985: 108-110)

These comments illustrate the fact that at least a part of the way teachers teach children about work is by negative and critical comment, which is unlikely to lead to positive feelings about work. Sharp and Green (1975) found that even among teachers who espoused the progressive, child-centred ideal, there was a feeling that children could not be motivated entirely by the intrinsic satisfaction of work; they summed up one teacher's views:

Work ... is hard, it requires effort. Children ... don't naturally incline to work. Generally they won't do it unless they are made to. They don't find it intrinsically satisfying, at least in the early stages when they get very little satisfaction from the end product, yet it is important because society demands it. (1975: 111)

The children interviewed appear to have been drawing on views similar to this in the criteria they used in talking about work.

Household and paid work

In this section I discuss work that children said they carried out at home: household work, and paid work within the family context. Academic work carried

out at home is not discussed, as little would be added to the analysis in the previous section. While it is illegal for children below the age of thirteen to do paid work outside their own household, the Low Pay Unit reported that surveys carried out in 1983, 1985 and 1990 indicated that about 40% of eleven year olds had paid jobs outside their households other than baby-sitting and running errands (Pond and Searle: no date); however, none of the children interviewed reported such work.

A considerable body of research exists examining both parents' and children's accounts of household work carried out by children. The many aspects of this topic deserve, and have received, far more detailed investigation than I have attempted here (e.g. children's work as a site for family relationships: Propper, 1972, Berman, 1977, Goodnow, 1989; Goodnow and Delaney, 1989; changing concepts of children: Zelizer, 1985; development of a sense of responsibility: Elder, 1974, Solberg, 1990; altruism: Grusec, Goodnow and Cohen, 1996, Rheingold, 1982; work in relation to gender issues: White and Brinkerhoff, 1981a, Berk, 1985); such studies are reviewed by Goodnow (1988). My interest is in children's constructions of household work, and the resources they draw on in these. Unlike school work, which is separated from adult life, household work affords opportunities to participate with adults (cf. Lave and Wenger, 1991); Elder pointed out that there is a strong belief that household work is a 'valuable apprenticeship for the realities of adult life' (1974: 71).

Previous investigation of children's household work have often used parents' rather than children's accounts; where children have been asked what they do this has usually involved selection from a list of tasks, and commenting on fictional scenarios (e.g. Warton and Goodnow, 1991). In contrast, I asked children to tell me what work they did; whether they were asked to do the work or whether they chose to; and whether they were paid for any of their work. These questions were different from those asked about school work. In discussing school work, distinguishing between activities which were work and those which were not was seen as a device to get children to talk about the characteristics of work; this approach did not seem so useful for household work. The terminology used to

describe it varies (e.g. chores, jobs around the house) and was not what I was interested in; thus asking how children came to do household work seemed to offer a more useful way of getting them to talk about its characteristics. This difference in the questions asked has resulted in categories for analysis which are not directly comparable with those used in discussing school work.

As I indicated in the first section of this chapter, most of the children did not initially describe their work as household work, and several said that they did not consider household tasks to be 'real' work: Shuel (m/11.00/A) said it was not work because he liked helping, and Heidi (f/8.05/B) explained:

Well, it's kind of work, but not school work. It's funner, and you don't have to do it, but I like helping at home.

Blackwell (1992) found that 86% of 6-7 year olds surveyed did not recognise housework as work, while older children tended to be dismissive with comments such as 'it's just housework'. This applies not simply to tasks done by children, but also to adults' household work; Goldstein and Oldham found that 'many children do not conceive of being a housewife or mother as "work"' (1979: 67). Chris (m/11.06/B) demonstrated this in his comments about his mother's occupation:

Other people in your house, do they do any work?
What, you mean like proper work, housework, or -
Both.
... my mum, no she doesn't ...
When you say your mum doesn't do any work, what does she do, housework?
Yeh, housework.
And that's not work?
Well it is, but it's not what most people would call work.
Why, what's the difference?
'Cos usually if someone says are you working, then you'd say, yeh, as in, I'm getting paid to work, I'm working at a company or something like that, but -
Right, so you don't get paid to do housework?
No, not unless you're going to another house and doing it.

However, whether they considered it to be work or not, most of the children did make some contribution to household work. It is discussed in three sections: tasks children said they did; the characteristics of this work; and resources on which children may have drawn.

Work undertaken in the household

Household tasks the children said they carried out are listed by age, gender and school attended in Table 6.8. Children were asked whether they did any household work and what it was; only activities they mentioned are listed, and not any which I prompted. This table does not indicate the frequency of undertaking these tasks, which varied from daily to only occasionally. A few of the youngest children said that they did not help in the house, or did not identify specific tasks. Thus four 4-5 year olds and one 7-8 year old are not included on this table.

While many of the tasks were mentioned by children from all age groups, in general the older children reported taking a larger share of responsibility for the task. For example, while Daniel (m/5.05/B) said that he helped his daddy make cakes and Jimmy (m/5.10/A) reported that he sometimes cooked toast, Mei (f/8.02/A) and Jade (f/11.02/B) both said that they sometimes cooked dinner for their families. Similarly while some 4-5 year olds said that they sometimes helped wash up, several 10-11 year olds said that they regularly did the dishes, usually taking turns with their siblings. Similar findings were reported from the USA by White and Brinkerhoff (1981b), who found that most 10 year olds do work which benefits their families, and Zill and Peterson (1982) who analysed activities which children did entirely by themselves, and found a marked increase with age, especially at around 9-11 years old.

Table 6.8 Household tasks reported by three or more children

	<i>age in years</i>			<i>gender</i>		<i>school</i>		<i>total</i>
	4-5	7-8	10-11	girls	boys	A	B	
tidying own room	3	7	7	9	8	7	10	17
washing up	4	2	10	10	6	7	9	16
cleaning and tidying	4	7	4	9	6	8	7	15
hoovering	2	2	4	4	4	4	4	8
cooking	3	2	2	4	3	4	3	7
setting the table	1	1	2	2	2	0	4	4
laundry	1	1	2	2	2	3	1	4
shopping	0	1	2	0	3	2	1	3
gardening	0	2	1	1	2	0	3	3
car wash	0	0	0	3	0	0	3	3
<i>N</i>	11	12	14	18	19	18	19	37

In contrast to previous research which found that household work is strongly categorised by gender (e.g. White and Brinkerhoff, 1981a; Zill and Peterson, 1982), Table 6.8 shows rather fewer gender differences. More girls reported washing up and general cleaning and tidying; however, car washing, which has generally been found to be a boys' job, was reported only by girls. Shopping was reported only by boys: Louis (m/11.07/B) bought the paper each morning and others said they helped to carry the shopping.

Differences by school were more noticeable: only children in School B (with a predominantly middle class intake) reported setting the table, gardening or washing cars. This was probably because these were the families which owned cars and gardens, and sat down for family meals. Similarly more children in School B said that they tidied their bedrooms, possibly because more of them had rooms to themselves.

The nature of household and other paid work

Children talked about household work using two main dimensions, whether it was voluntary or compulsory, and the forms of satisfaction (or occasionally dissatisfaction) it afforded. These responses are set out on Table 6.9.

In comparison with surveys of children's household work at other times and in other countries (White and Brinkerhoff, 1981b; Goodnow *et al.* 1984; Solberg, 1990), these children appeared to do rather less, and fewer of them reported having regular responsibilities. There were few references to household work as a source of contention (Eleanor's comments on tidying her room reported in Chapter 5 were among these), and the vast majority of the children reported that at least some of their contributions to household work were either entirely voluntary, or were a voluntary response to a parent's request. This appeared to be because parents' demands were limited. Goodnow and Delaney (1989) categorised mother's styles of involving children in household work as 'firm delegation', 'inconsistent delegation', 'low overt demand' and 'let the tide rise' (i.e. let the work slide until it is unbearable then the whole family joins in a blitz).

I found very few children reporting 'firm delegation'; the majority seemed to fall in one of the last two categories. However, I recognise that this may be partly an effect of the context within the interview; having talked about school work as compulsory and not enjoyable, children may have wanted to depict household work as a contrast. Moreover, they may have wanted to impress me with their voluntary contributions.

Table 6.9 Dimensions of household work

	age in years			gender		school		total
	4-5	7-8	10-11	girls	boys	A	B	
<i>Voluntary - compulsory</i>								
done voluntarily	9	5	9	12	11	11	12	23
done because child is asked by parent	3	8	7	8	10	10	8	18
is compulsory, child is told to do it	0	1	4	2	3	3	2	5
is a regular responsibility	0	0	4	2	2	2	2	4
<i>Work satisfaction - dissatisfaction</i>								
is necessary to make household function	0	5	3	6	2	3	5	8
achieves desirable outcome (e.g. clean room)	0	5	1	6	0	3	3	6
contributes to well being of others	0	2	2	2	2	3	1	4
is enjoyable to do (intrinsic satisfaction)	0	4	3	3	4	2	5	7
shared activity with parent	8	0	0	3	5	3	5	8
may be rewarded (extrinsic satisfaction)	2	5	6	6	7	3	10	13
is not enjoyable	0	2	1	3	0	1	2	3
is hard work	0	1	0	1	0	1	0	1
<i>N</i>	11	13	14	19	19	18	20	38

A few children, particularly, but not exclusively, the Afro-Caribbean 10-11 year olds (i.e. Louis, m/11.07/B; Joseph, m/11.00/A; Sharon, f/10.08/A), reported their parents as delegating firmly. However, whether work was voluntary or in response to demands varied not only between children, but also between tasks carried out by a single child. For example, Sharon (f/10.08/A) said that her mother had to remind her to tidy her own bedroom every day; and had to tell her to wash the dishes every alternate week (i.e. remind her of regular responsibilities). However, Sharon also chose to clean and tidy her mother's bedroom once in a while. Regular and compulsory tasks were mainly reported by the 10-11 year olds, ranging from a regular turn at washing up to paid work in the family business. The degree to which Louis (m/11.07/B) felt himself to be responsible became clear when I asked him whether he worked because he wanted

to or because he was told to; he replied '*Well sometimes I forget and they tell me to remind me*'. Children with regular responsibilities all implied that their work was a fair contribution to the work of the household. For example, Jade (f/11.02/B) said that she and her brother took it in turns to wash up the breakfast dishes, and regularly tidied their own rooms. She explained that everyone worked in her house, and that her parents did considerably more work than she did, as they washed up in the evenings, cooked, did the washing, ironed, kept the rest of the house tidy and did the shopping.

Some children, mainly girls, reported the outcome of their work simply in terms of the household continuing to function: Samantha (f/7.10/A) explained that the social worker visited every Friday and:

if our house is not tidy we might be moving and me mum don't wanna move from that house where we're living

Work was not always considered to be enjoyable: some girls said they did it when they would have preferred to be doing something else. Heidi (f/8.05/B) said that she did not always want to set the table, but that she did it anyway. However, many children expressed satisfaction or enjoyment in household tasks. Six girls spoke of their pleasure in the visible outcome of the work. Heidi (f/8.05/B) liked her room to be tidy, and Sitara (f/8.00/A) said that she cleaned up at home:

in case persons come in the house, so they see all beautiful house

Some suggested that part of the satisfaction lay in helping their parents. Mahmud (m/11.00/A) said of the help he gave his mother with cooking: '*it's my opportunity*', while Chris (m/11.06/B) commented that he did very little household work, but occasionally volunteered:

sometimes if my mum wants to get ready for something or my dad wants to go out, then I'll tidy up and things like that

Many children said doing housework could be fun. This may be related to the limited demands made by parents; Butorac (1989) found that household work was not seen as fun because, like school work, it was compulsory. Joel (m/7.11/B) liked hoovering because he enjoyed the noise the hoover makes when it '*crunches*

up things'. Some children expressed frustration that they were not allowed to do all the tasks they wanted to.

my mum doesn't let me do the washing up when I want to, because she thinks I'll break things. I won't. I've done it before and I didn't break a glass (Natalie: f/8.00/B)

For the youngest children, household tasks were shared activity with parents, in which children probably made a minimal contribution but learned and enjoyed themselves:

I help daddy making cakes (Daniel: m/5.05/B)

I help my mummy - we cook potatoes, we cook mince meat (Elsa: f/5.01/A)

Others reported that they helped round the house because they were bored:

I could go and play but there's nothing to do outside (Mahmud: m/11.00/A)

I do it 'cos you know I want to, bored, it's something to do (Morwenna: f/11.04 /B)

A number of children said that they were sometimes paid or rewarded for the work they did, though generally they reported that the reward was not given consistently and that it did not provide the main motivation. For example, Leila (f/5.03/A) said that she was sometimes given a sweet when she tidied her room. A few of the older children, mostly in School B, where parents could presumably better afford to pay, did specific jobs which involved payment, as well as making an unpaid contribution to the work of the household. For example, Marcus (m/8.06/B) was paid 20 pence for cleaning the bathroom, though he commented:

I'm not allowed to do it every day 'cos that wouldn't be worth it 'cos it would still be clean

Eleanor (f/11.06/B) had negotiated payment for washing the car after seeing advertisements for the local car-wash, which had made her realise that her labour was valuable (see her account in Chapter 5).

Only two children in the sample did regular paid work. Mahmud (m/11.00/A) worked every day after school in his father's launderette, keeping an eye on things while his father did the paper-work. Louis (m/11.07/B) listed a number of household jobs for which he was paid on a regular basis. In contrast,

two of the 7-8 year old girls at School B commented that they did not want payment:

because some people make such a fuss over it (Natalie: f/8.00/B)

because I don't really need any money yet (Heidi: f/8.05/B).

Resources the children drew on

Children's doubts about whether household tasks really count as work appear to draw on a discourse which, despite the efforts of feminist sociologists, is prevalent in society: housework is not considered in the same framework as paid employment because it is not paid, there is no boss and no time regulation. Carried out mainly by women, it is not serious work (Oakley, 1974a, 1974b). This discourse is represented in some television programmes, for example. However, the main source of children's ideas is likely to have been parents' talk and practices regarding household work.

Goodnow and her colleagues in Australia have done extensive research around the question of how ideas about household work are passed on from parents to children. This has involved separate studies of parents' ideas (e.g. Goodnow *et al.*, 1984; Goodnow and Delaney, 1989; Goodnow and Warton, 1991; Warton and Goodnow, 1995) and of children's ideas (e.g. Goodnow and Burns, 1985; Warton and Goodnow, 1991); they have not investigated the extent of agreement between parents and children in the same families.

They have identified several ways in which parents think about children's involvement in household work (Goodnow and Delaney, 1989; Goodnow and Warton, 1991). They found that parents saw the value mainly in terms of developing the child's skills and character, and of belonging to a family. Only a minority reported that the value of the child's work lay in what was achieved. Parents placed considerable emphasis on household work as an action expressive of caring; this was borne out in sayings such as 'This is a house not a hotel', and in reluctance to pay children for their regular involvement, but only for special or extra tasks (such as car washing). Thus they often regarded it as more important

that children showed that they cared than that their work actually contributed. In contrast, children perceived their work as being helpful (Goodnow and Burns, 1985). Similarly it appeared that many of the children I interviewed believed that they were making a real contribution; parents presumably encourage children to do household tasks by persuading them that their contribution is valuable.

Goodnow and Delaney found that what counts as work varied enormously in different households. Some mothers felt that it was their role to ensure that their children were not spoilt, and therefore to assign tasks to them; others felt that a good mother takes care of everything. However, in both these types of household children appeared to be doing similar tasks whether or not they were labelled 'work'. Parents distinguished between self-care tasks (making one's bed, picking up one's own clothes, tidying up one's own toys) and family work which contributed to the household as a whole. Children were expected to undertake self-care tasks from a much earlier age, and these were regarded as jobs which were not 'movable': that is, if the child did not do them, it was not reasonable to expect siblings to undertake them. In contrast, family work could be reassigned to other family members. Fewer than half the children I interviewed mentioned self-care tasks (tidying their own rooms, toys etc.); it is possible that they did not consider these to fall into the category of household work.

Summary

In this chapter I have examined what the children said about the work that they do themselves at school and at home. A majority of the children saw school work as their main or only work, in some cases calling household work by another name, or indicating that it was not really work. However, a minority who had regular work responsibilities at home described household work as their main work. The resources children drew on can be described in terms of prevalent discourses. These are drawn both from what parents and teachers said (the activities they termed work; the vocabulary used, etc.) and from their practices (time allocated to various activities, school, classroom and household routines, etc.).

Children's constructions of school work appeared to be responsive to changes in teacher discourses resulting from the introduction of the National Curriculum. Only among the youngest children was the definition of work simple and clear-cut (work is what the teacher tells you to do); the older children all talked about work in ways which were both complex and contradictory, and which involved the context in which the task took place. There were many common threads running through the children's constructions of school work, perhaps because they were to a large extent drawing on the discursive practices in their schools. Many children reported that school work was defined and imposed by teacher, and associated it with compulsion, being hard and lack of enjoyment (though several commented that they nevertheless enjoyed some of their school work). Such discourses may also become part of children's culture, and be passed on by older siblings and peers.

In contrast, children had more varied experiences and constructions of household work. A common theme was that it was not 'real' work; in contrast to school work, it was often described as voluntary. Children reported satisfactions ranging from pleasure in a job well done and satisfaction of helping other people, to concrete rewards. Payment was generally seen as a welcome bonus, and some children were beginning to realise, with some pleasure, the economic value of their labour. However, for the vast majority of these children the demands of household work were as yet minimal, and they did not find the tasks onerous.

In the next chapter I will consider the extent to which children draw on these constructions of school and household work in talking about work they might do when they grow up.

CHAPTER 7

Children's constructions of their future work

In this chapter I turn to children's constructions of the work they say they may do when they are grown up, and in so doing, draw together two aspects of children's thinking about work which have often been considered separately: their occupational preferences and their constructions of work.

The phrase 'occupational preferences' is used in this chapter to refer to the occupations identified by children in response to the question: 'What sort of work do you think you might do when you grow up?'. Occupation is used rather than 'job' or 'career', since the work mentioned may not constitute a job or a career. The use of the word 'preferences' follows Kidd (1984) and Kelly (1989), but is not entirely satisfactory in that it implies that children had considered a range of occupations and made a rational decision about which they would prefer. The process seemed rather different from this. Many children gave what appeared to be a habitual response to inquisitive adults; others seemed to be naming the only occupations they knew anything about. However, while use of the word 'preference' has limitations, other words which have been used such as choice, ambition or aspiration, tend to imply even more definite decisions or plans.

Previous research into occupational preferences, and my own interaction with children, suggests that children generally respond readily to questions about what they might do when they are grown up, though not necessarily with clear or definite plans. However, the status and meaning of these occupational preferences has been debated. Developmental theorists see them as representing stages in a prolonged process of occupational choice during which factors such as gender, class, interests, capacities and availability of jobs are successively taken into account, and the range of occupations under consideration is gradually narrowed down (Ginzberg *et al.* 1951; Ginzberg 1972; Havighurst, 1964; Super *et al.* 1957;

Super, 1957, 1963; Gottfredson, 1981). This notion of occupational foreclosure was discussed in Chapter 1. In contrast, K. Roberts (1968, 1975) argued that career entry is determined almost entirely by situational factors (the opportunity structure) and that earlier choices have no relevance or interest. For R. J. Roberts (1980) occupational choice is often a matter of picking a label, a job title which can be used to answer the question 'What will you do when you grow up?'. But, he argues, this label does then create a vision of the future, a place in the social structure, which may influence present behaviour and choices. My concern is with the ways in which children's views of the potentialities of the future affect their present lives and choices.

I am also interested in the resources children draw on in constructing their occupational preferences. It has been pointed out that schools socialise children for work (e.g. by Bowles and Gintis, 1976; Pollard, 1985) and that children see the purpose of schooling as preparation for adult work (Burris, 1976; Cullingford, 1986, 1991). I suggested in Chapter 6, drawing on Lave and Wenger's (1991) notion of legitimate peripheral participation, that children are participating in work at school and at home, and thus taking on the identity of 'workers'. In the light of these arguments, I am interested to see whether children's constructions of their own future occupations resemble those of school work or household work discussed in Chapter 6.

Children were able to select the work context to be talked about (see discussion in Chapter 3), thus taking some control of the interview. They could choose to talk about occupations which they were aware of, had thought about, and which interested them. It seemed likely that the occupations selected would involve a variety of work arrangements, rather than only the 'norm' of paid employment emphasised by developmental researchers (discussed in Chapter 2). However, this wide range of occupations presents difficulties for analysis; the interviews produced a great deal of data about a wide variety of occupations, and it is not possible to present it all here. Moreover, it is extremely difficult to evaluate children's constructions in comparison with each other because the salient points in relation to each occupation will be different. The day to day work

of some occupations lies within children's experience, or is obvious from the job title. Thus one would expect any child to be able to explain something of the work of a writer, a teacher, or a school crossing patrol, and a high level of knowledge might involve explaining how a writer gets paid for their work, the sorts of planning and record-keeping involved in teaching, or the part-time nature of the crossing patrol. But other occupations are generally less accessible (e.g. stockbroker, solicitor, pathologist) and an explanation of what the person actually does might be seen as a high level of knowledge. Thus it is not possible to make comparisons of the extent of children's knowledge of diverse occupations. Moreover, as I pointed out in the Introduction, my own experience of work inevitably influenced both the questions I asked and my reactions to children's responses. In asking questions about being a primary school teacher I was placed in a teacherly 'testing' role, whereas I was genuinely curious about work in the music business or as an Arabic teacher in a mosque.

However, despite the difficulties of comparing constructions of such dissimilar jobs, I do not want to ignore the factual detail of children's constructions; it is interesting both in the light of resources drawn on (do some resources produce more detailed or different types of knowledge?) and of Lave and Wenger's assertion that knowledge and identity are related, which I return to at the end of the chapter. For these reasons a selection of data relating to children's constructions of their future occupations is included as Appendix E. I have included a range of constructions of 10-11 year old children from both schools. These have been reorganised under headings such as occupational entry, payment, nature of work, and so on in order to make it easier to locate what a child had to say on any topic.

This chapter has four sections. In the first, the occupations children said they might pursue are set out. This is followed by an analysis of some aspects of the children's constructions (authority and autonomy; and the intrinsic and extrinsic satisfactions) which are compared with constructions of work at school and at home. The resources which children explicitly referred to are analysed, and finally I discuss the extent to which occupational preferences provide an identity.

Occupational preferences

Tables 7.1 and 7.2 show all the occupations children mentioned as desirable futures, and Table 7.3 lists the occupations most frequently mentioned. Children were encouraged to talk about more than one type of work, and most did so; the largest number mentioned was five:

I'll be a pilot, spaceman, err, or a architect and a, mountain climber ... or a basketballer (Toby: m/5.07/B)

All the occupations which children mentioned as possible futures have been included in this analysis (though not those which they explicitly rejected).

These tables are all categorised by gender; previous researchers have commented on the vast differences between girls' and boys' aspirations (e.g. Nemerowicz, 1979; Adams and Walkerdine, 1986; Kelly, 1989), and that is also apparent here. However, eight occupations appear on both lists: parent, businessman/woman, shop worker, police officer, doctor, actor, musician and writer. Moreover, a number of the other occupations identified by the girls are ones which are not stereotypically female (e.g. lawyer, restaurant work, painter/decorator, psychiatrist, vet). Gender stereotyping of work will be discussed later in this chapter in relation to resources children drew on.

Table 7.1 Girls' occupational preferences listed by age and by school attended

		age		
		4-5 years	7-8 years	10-11 years
school	A	ballerina mummy musician nurse photographer restaurant live with mummy	barmaid doctor lawyer nurse teacher (2)	air hostess hairdresser lawyer police shop owner writer
	B	ballerina earn money mummy (2) teacher live with mummy	artist (2) businesswoman dress designer hairdresser nurse painter/decorator shop assistant teacher (2)	actress (2) music teacher photographer psychiatrist teacher (2) vet work with disabled children writer/illustrator (3)

The dominance of teaching and nursing in girls' occupational preferences was noted by Nemerowicz (1979), Holland (1987), Kelly (1989) and Francis (1996a, 1996b). Findings reported here differ from theirs in the large number of girls who talked about careers in the arts. Two-thirds of the girls in School B chose such occupations, perhaps reflecting the artistic and media community living in that area. A notable absentee from these lists is secretary, a job opted for by 12% of the eleven year old girls in Kelly's sample, making it the third most popular job after teaching and nursing.

Table 7.2 Boys' occupational preferences listed by age and by school attended

	age		
	4-5 years	7-8 years	10-11 years
school			
A	attend school daddy make trains money shop police pop star shop work	doctor service engineer footballer security guard shop assistant window cleaner workman (builder) writer	Arabic teacher athlete bank manager businessman car mechanic footballer pilot
B	architect basketball player bank daddy gladiator mountaineer pilot potter spaceman (2)	actor athlete basketball coach fish expert gardener police therapist wrestler	athlete basketball player footballer motor racing music business musician pilot shop assistant snooker

The occupations most frequently named by boys were those in sport (identified by 38% of boys); this echoes the findings of Nemerowicz and Kelly (23% of eleven year old boys in her sample hoped for careers in sport). However, this pattern was not reported by Goldstein and Oldham; they found that boys opted for what they called adventurous occupations such as fireman, policeman, soldier. This perhaps represents a change in the last twenty years, or a difference between the US and this country. Jobs which might have been expected to feature in boys' choices on the basis of previous research include lorry driver, computing (though it is among fourteen year olds that Kelly found this to be particularly popular) and armed

forces, which was the second most popular choice in Kelly's sample of eleven year olds. Only one boy mentioned the forces but his preference has been categorised as pilot since his main emphasis was on flying rather than fighting.

Table 7.3 Occupations identified by two or more girls or boys

<i>Girls</i>		<i>Boys</i>	
teacher	8	athlete	3
writer/illustrator	4	basketball	3
mummy	3	footballer	3
nurse	3	pilot	3
actress	2	bank	2
artist	2	daddy	2
ballerina	2	engineer/mechanic	2
hairstylist	2	police	2
lawyer	2	shop work	2
live with mummy	2	spaceman	2
photographer	2		
shop work	2		

Children's constructions of autonomy and work satisfaction

In this section responses concerning autonomy and authority, and satisfactions and dissatisfactions of future occupations are analysed. While some children identified three or four occupational preferences, only one or two were discussed in detail; I focus on these.

Autonomy and authority at work

Many of the children described a considerable degree of autonomy in their future occupations. I have categorised their constructions into three groups:

- high autonomy: here I include constructions of self-employment, and those in which no boss or higher authority was included. 54% of the children constructed occupations in this category;
- partial autonomy: working independently and physically separated from the boss. 40% of the children constructed occupations in this category;
- low autonomy: constructions in which a boss was physically present and supervised work. 30% of the children constructed occupations in this category.

Each child talked about more than one possible future occupation, and for about a quarter of the children these involved different degrees of autonomy; hence the figures above total over 100%.

This categorisation is inevitably somewhat subjective; I have tried to follow children's accounts but these were not always entirely clear; those which were not clear enough to categorise have been omitted. Six of the 4-5 year olds did not construct any occupation in enough detail to assess autonomy; they are not included in these figures. Moreover, the degree of autonomy that children expected did not always coincide with my own constructions of the conditions of various occupations, or with expectations created by the job title. For example, Darren (m/5.07/A) described a policeman as having complete autonomy; nobody would tell him what to do, and he could become a policeman simply by putting on the appropriate clothing. Similarly, while the word 'manager' might be thought to imply some degree of autonomy, Nicky's (m/11.00/A) construction of a bank manager has been placed in the low autonomy category because he did not talk about any 'managerial' functions, and said that there would be a boss in the same building who would tell him what to do; thus his expectation was apparently of supervised employment.

Occupations described in terms of high autonomy included writer, artist, potter, headteacher, teacher, hairdresser, shop owner, therapist, fish expert, doctor (in general practice), vet, psychiatrist, Arabic teacher in a mosque, policeman and gardener. Some children imagined that at first they would work for someone else, but later set up independently:

Gardener: I'd work for someone then I would see how good I do and if I get really good I would probably try and make up my own business (Tom: m/8.08/B)

Vet: I think at the beginning there'd be someone who tells me what to do. But later on when I get more used to it I'd probably do it by myself. ... make my own vet (Jade: f/11.02/B)

Eleanor (f/11.06/B) said that she would be a self-employed writer and illustrator of children's books right from the time she left college:

I'd try and find a publisher and sell my ideas ... I'd think of an idea and I'd probably ask my mum if she knew any good publishers that would like that kind of work, and I'd send it off to them and I'd see what they thought of it basically.

Many of these children explained how they would get money from their clients or customers.

The second group of occupations are those which involved partial autonomy and in many cases physical separation from the boss: for example, pilot, teacher, lawyer, service engineer, police officer, businessman, painter/decorator, and window cleaner.

Do you think [the Headteacher] tells the teachers what to do?

Some of the time but not all the time, not most of the time. (Lucy f/8.06/B)

I'm hoping to be a travelling businessman, make loads of money and travel the world. ... I'd sell them [products], at first I'd put them, I'd send them to some shops and then I'd make adverts on TV and on posters and when people buy the products, and if they like it, they'll keep buying more and so then the shops would order some more and we make more. ... It would be the company's money not mine. (Mahmud: m/11.00/A)

Occupations which were described as having a boss present and supervising included barmaid, nurse, worker on a building site, shop assistant, hairdresser, air hostess, bank manager, and the music business. Even in these jobs, many children expressed some uncertainty about the presence of a boss; here Enrico (m/7.08/A) describes working on a building site:

We're doing the same job but different kinds of things ...

How will you know which bit you should do?

I don't know. I think they'll just tell me, or we can do any bit.

So who would tell you?

The boss. ... Or we just do something that we want.

Chris (m/11.06/B) expressed the view that in every job there is a boss somewhere:

Would you have a boss or somebody telling you what to do?

Oh yeh, I think you'd definitely have that unless you became the boss ... I think that however high, even if you get to like Head of Radio One, Dad's still got like John Birt as his boss and so on and so on. You'd always have one ahead of you I think.

Bosses, when they were mentioned, were generally male; the doctor (always a man) tells the nurse what to do in a hospital (Leila: f/5.03/A); the pilot tells the air hostess what to do (Tracy: f/10.07/A).

The youngest children were more likely to describe their chosen occupations as having a high level of autonomy, whereas among 10-11 year olds the majority talked about partial autonomy and only a few described high autonomy; these were almost all girls who talked about becoming writers and/or illustrators. This

group also accounted for the higher proportions of girls and of children in School B describing high autonomy. However, of the children who only described occupations with low autonomy, five out of six attended School A.

Intrinsic and extrinsic satisfactions

Table 7.4 shows the job satisfactions and dissatisfactions which the children talked about. The 4-5 year olds have not been included on this table because they did not generally articulate reasons for their occupational choices; in the extract below I asked Darren (m/5.07/A) why he wanted to be a policeman:

Why would it be a good job?
'Cos I want it to be a good job
But why would it be better being a policeman than cleaning windows, say? [his grandfather's job]
'Cos it's really good
How is it really good? What's good about it?
By working.
But you're working if you're cleaning windows. Why is it better being a policeman?
'Cos it is.

The most common reason for wanting to do a job, put forward by 81% of the children, was that it would be **fun or enjoyable**; this was also the most common reason found by Nemerowicz (1979).

Gardening: *I like it and it's fun* (Tom: m/8.08/B)

Arabic teacher: *I like it. I like teaching children.* (Shuel: m/11.00/A)

Nurse: *because I like fixing people's arms and things like that* (Samantha: f/7.10/A)

Artist: *I like it, it's fun drawing* (Heidi: f/8.05/B)

Motor racing: *Just for the fun.* (Louis: m/11.07/B)

Jobs in the arts and sports featured strongly in this category. Some jobs were rejected because they were perceived as boring:

I wouldn't want a boring job like working in an office. (Eleanor: f/11.06/B)

However, a few of the oldest children suggested that even a job which was 'fun' could have some boring elements: Morwenna (f/11.04/B) talked about all the waiting around at rehearsals as an actress.

Table 7.4 Job satisfactions and dissatisfactions: number of children responding in each category

	age in years		gender		school	
	7-8	10-11	girls	boys	A	B
<i>intrinsic satisfaction</i>						
fun/enjoyable	8	14	11	11	10	12
helping	4	5	8	1	4	5
sociable	3	2	3	2	1	4
uses my skills/talents	2	3	1	4	3	2
location of work	2	0	1	1	1	1
interesting	2	0	0	2	0	2
active work	2	0	0	2	1	1
exciting	1	1	0	2	0	2
being in charge	1	0	1	0	1	0
opportunity to travel	0	1	0	1	1	0
<i>intrinsic dissatisfaction</i>						
boring	0	3	2	1	0	3
too demanding	1	2	1	2	0	3
too much travel	1	2	2	1	0	3
location of work	0	1	1	0	0	1
<i>extrinsic satisfaction</i>						
pay	3	7	5	5	6	4
<i>extrinsic dissatisfaction</i>						
not enough pay	0	2	1	1	0	2
<i>N</i>	13	14	14	13	13	14

Nine children (33%), all but one of them girls, said that a reason for choosing that occupation was that it involved **helping others**. Walkerdine and Lucey (1989) drew attention to girls' concern to help, both in school and by joining the caring professions; they position themselves as sensible and selfless (Francis, 1997). In every case the girls were concerned with helping individual people, often in jobs which are traditionally seen as caring (nurse, doctor) or in other people-focused jobs:

Work with disabled children: I like children and I like to help them and I think the nicest way to help them would be to work with disabled children (Rosie: f/11.08/B)

Hairdresser: it's just something where you could help people (Jackie: f/11.01/A)

Lawyer: helps people when they get caught, split up, and when they're in prison (Tracy: f/10.07/A)

Police officer: you would be helping innocent people and saving the innocent (Jackie: f/11.01/A)

Louis (m/11.07/B) was the only boy whose response is included in this category; he said that he wanted to be a pilot in the air force because:

I'd just be thinking that I was helping my country

Several other boys spoke about jobs which might be construed as helping (e.g. doctor, therapist), but this was not the aspect that they emphasised: for example, Marcus (m/8.06/B) said that being a therapist would be interesting, and you would get to talk a lot.

Five children mentioned the **social** possibilities of occupations: Morwenna (f/11.04/B) said that an advantage of acting was that you would meet lots of people, and Samantha (f/7.10/A) said it would be good to work in a pub:

you can sometimes talk to a person that wants a drink ... cos you can get to talk and laugh

Five children explicitly talked about **using their skills and talents** in their jobs, though this was also implicit in many more choices. Joel (m/7.11/B) described two different jobs as using his talents:

athlete: I'm quite fast ... I'm the fastest in the class .. I'm quite strong, so I could run a long time.

actress (sic): I'm quite funny and I'm the third funniest in the class

Mahmud (m/11.00/A) had had a go on a flight simulator, and said: '*I done some quite good landing actually*'. Natalie (f/8.00/B) said she wanted to be a dress designer because: '*I'm a very good drawer on dresses*'.

The **location of the work** could be a consideration:

Workman on building site: better outside ... you get more air and, just better
(Enrico: m/7.08/A)

Careers which involved working at home were also seen to have limitations: Jade (f/7.11/B) said of being an artist:

There might be some other things I want to do apart from staying stuck at home drawing ... even though I really love doing it I just wanna be sort of out, going to work.

Excitement was a reason given by two boys for choosing 'action' jobs in the police and air force. Louis preferred the prospect of life in the air force to being a civilian pilot:

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Your life's in danger, there's a bit of excitement, but when you know that you are going to the same place all the time, like you would be in the airline, there it gets boring after a while.

Some boys also stressed the **active** nature of their chosen occupations:

Police: it's quite exciting, you get to do a lot, it's not like you sit there like in a Post Office and wait until a parcel comes in or something (Marcus: m/8.06/B)

Mahmud (m/11.00/A) relished the **opportunity to travel**, either as a pilot or as a salesman. However, travel was also identified as a disadvantage: Lucy (f/8.06/B) had decided not to be an acrobat in a circus because:

you'd have to move villages all the time and I don't wanna travel everywhere on different places.

Similarly Andrew (m/11.08/B) said he had decided against being a ski instructor:

I thought, no, it would be quite a rough life, like going everywhere, travelling everywhere with skis.

Morwenna (f/11.04/B) said that a disadvantage of acting, her preferred career, was that:

If you were off doing a film in Australia, and, or America or whatever, or another part of the world, and you've got someone at home who's ill, then you can't go to see them. If you have children you've gotta put them to a nanny, get them a nanny.

While liking the job and having fun were the main work satisfactions mentioned, over a third of the children also mentioned **extrinsic rewards**.

I like painting and I like decorating. ... And if I had children then I'd have to get some money so that I could look after them (Natalie: f/8.00/B)

My cousin's a hairdresser and she makes quite a bit for it (Jackie: f/11.01/A)

[Working in a shop] if you want some sweets you can just take them without paying. (Jimmy: m/5.10/A)

Similarly, Sharon (f/10.08/A) said that an advantage of owning a shop would be that you could get goods from the shop for your own use at a lower price than you would have to pay in other shops. A few children described money as the major attraction:

I'm gonna be a pilot or a businessman, make lots of money every way (Mahmud: m/11.00/A)

A few children expressed concern that their chosen occupation might not pay enough: Andrew (m/11.08/B) said that he might have to work in a shop to supplement his income as a footballer in a minor team, and Jade (f/11.02/B) suggested that writing and art might have to be pursued as hobbies rather than as paying occupations.

As Table 7.4 shows, it was generally children from School B who identified disadvantages of some forms of work, and talked about career possibilities that they had now rejected. These references were spontaneous rather than resulting directly from my questions, and suggested that children may have been drawing on previous discussions of the advantages and disadvantages of particular occupations.

Constructions of work at school, at home and in future occupations

There was very little in common between children's constructions of school work and those of their future occupations. School work was said to be compulsory, hard, not subject to personal choice; and therefore, for many of the 10-11 year olds, not enjoyable. But children expected their future occupations to be enjoyable, and to involve considerable autonomy. Thus it seems that in describing future occupations, children were not drawing on experience of work at school. The descriptions of fun and of helping seemed to be more closely related to what they had said about household work, though a very much higher proportion of children saw future occupations as enjoyable than described housework in these terms.

Alternatively these constructions might reflect the children's constructions of adulthood rather than those of work, in the way that I suggested in Chapter 3. Adults are more powerful than children, in that they exert control over children; they appear to be less constrained by rules and more able to make their own decisions. Ginzberg *et al.* (1951) labelled the occupational preferences of children under eleven as the fantasy stage, and said that there was little to be gained from studying them because they are 'characterised by fantasy in which the individual

tries to “will” himself into an adult situation’ (1951: 122). However, discourses of adulthood involve contradictions; Goldstein and Oldham (1979) found that children consider that being an adult involves taking on responsibilities such as paying bills and caring for children.

Another factor which may be of relevance here is the way in which adults construct work for children. They are not generally trying disinterestedly to pass on accurate information, but rather to present a view which is, in the adult’s eyes, appropriate for children of that age. In Chapter 1 I linked the modern western view of childhood as protected and innocent to the view of work presented in school projects such as ‘People that help us’. This view of childhood is also evident in many books, comics and television programmes aimed at younger children which present a rather ‘sanitised’ and ‘cosy’ view of work. Examples are *Postman Pat*, *Fireman Sam* and *Bertha*, (BBC Children’s Television) all of which emphasise helping and enjoying work (see Appendix F). While none of the children explicitly referred to these resources in their constructions, it seems worth noting the widespread availability to children of resources which convey these ideas. In the next section I turn to the resources which the children explicitly drew on.

Resources drawn upon in constructing occupational preferences

Career theorists have identified a number of influences on children’s occupational preferences. Law (1981), in his community interaction model, drew these together into a theory which encompasses a spectrum ranging from concepts of self, through immediate family, neighbourhood, peer group, school, to ethnic and class groupings and economic structure. Drawing on R. J. Roberts (1980) he stressed the importance of social interaction in constructing occupational preferences. He suggested that each of these influences operates in a number of ways: through expectations, feedback, support, modelling and information. In a similar list, Kidd (1984) also emphasised the role of other people in facilitating the acquisition of work experience.

Lave and Wenger (1991), whose ideas were discussed in Chapter 3, argued that it is through legitimate peripheral participation in communities of social practice that both learning and the construction of identities take place. In their account of how apprentices develop identity and knowledge, it is possible to distinguish two factors which relate to the ideas of Law and Kidd above:

- models provided by more experienced practitioners (which may involve both talk and opportunities to observe practice and behaviour);
- participation in everyday practice.

As I showed in Chapter 6, very few of the children interviewed participated regularly in adult work (other than housework), but they may have been developing work identities through interactions with practitioners, and through non-work activities in which they participated. In Lave and Wenger's account the models and participation relate to the same context; this may not be true for children. Butorac (1989) found that the knowledge of the children she interviewed in a rural area of Western Australia was very closely related to the work of adults in their immediate community, and to their own participation in family businesses and farms. Predictions about their own futures were based on this restricted knowledge base. In London a much wider range of work is potentially available to children.

In this section I analyse children's responses to questions about the sources of the occupational preferences they talked about: what made them think of doing that particular job; whether they had met anyone who did it, or seen anyone doing it. Many children pointed to specific models: family members, people in the school or community, or seen on television. While such models were the main resources children referred to, some occupational preferences derived from the activities in which children currently participated (such as gardening, writing, football and ballet).

Only two children (both 10-11 years old) did not identify any resources from which they had constructed their ideas about particular jobs: bank manager (Nicky: m/11.00/A); vet and psychiatrist (Jade: f/11.02/B). They said they had not met people who did these jobs, visited premises where they were carried out, or

seen them on television. Nicky said that he talked about a bank manager because this was what he had prepared: it seems that one of the children interviewed earlier had told him what I was asking about, and possibly someone had suggested bank manager. One other response did not relate to models or participation: Hassan (m/8.05/A) said that his father had told him to be a doctor or an engineer, and would take him to the university, and then organise him a place to work. Hassan is Bangladeshi and his parents are unemployed; their aspirations for his future can be linked to Kelly's finding that occupations such as doctor, engineer and lawyer were prominent among the choices of Asian boys at eleven and fourteen, from which she concluded that 'the stereotypically high job aspirations of Asian youth do have some basis in fact' (1989: 189). She also found that perceived parental wishes had a strong influence on young people's career plans; fourteen year olds' perceptions of the sort of job their parents wanted them to get were much more strongly predictive of their aspirations at seventeen than the child's own wishes at an earlier age. However, this may not be true of younger children; Birk and Blimline (1984) found that very few eight and ten year olds had discussed their career aspirations with their parents.

Table 7.5 Number of children drawing each category of resource in constructions of their future occupations.

	<i>age</i>			<i>gender</i>		<i>school</i>		
	4-5	7-8	10-11	girls	boys	A	B	total
MODELS								
family member	9	7	6	11	11	8	14	22
school	1	4	2	7	0	2	5	7
community	3	6	6	7	8	11	4	15
television	6	4	8	6	12	9	9	18
ACTIVITIES	5	7	7	11	10	7	14	21
<i>N</i>	13	13	14	20	20	19	21	40

Note: three of the 4-5 year old children (Julie, Juan and Annabel) did not talk about any adult occupations, but said they would continue to live with their parents, attend school etc; they are not included on this table.

Table 7.5 shows the number of children drawing on each category of resource in constructions of their future occupations. Some children referred to

more than one type of resource in describing a single occupation (e.g. models in the community and on television, and their own activities); all the resources explicitly referred to have been included here. I will discuss each of these categories of resource in turn, but first discuss gender in relation to occupational models.

Gender and occupational models

The majority of girls referred to female occupational models, and boys to males. This is predictable from research showing that gender identity is learned; children from an early age are aware of gender marking, and actively affirm their own gender in their choices of toys, clothes, activities etc. Adherence to gender-marked traits has been found to be most rigid around six years of age; older children show more flexibility (e.g. Kohlberg, 1966; Damon 1977; Davies, 1989; Lloyd and Duveen, 1992). This awareness of the gender marking of activities and interests has been shown to extend to adult occupations (e.g. Nemerowicz, 1979; Robb, 1981; Tremaine, Schau and Busch, 1982; Adams and Walkerdine, 1986). Huston (1983) found that children as young as three years old can identify the typical occupations of men and women, and that by the time children begin formal schooling they voice occupational preferences in line with adult gender stereotypes.

While children generally referred to models of the same sex, a small number drew on the work of a parent or sibling of the opposite sex. Three girls said they might do the same job as their father or a male sibling (restaurant, shop work, painter/decorator, business person), and four boys talked about doing the same work as their mothers (shop assistant, gardener, potter, doctor). Two other children said they would like to take up an occupation which both their parents currently pursued. These were the only cases where children drew on models of the opposite gender, and one could speculate that their familiarity with the work in question (and possibly lack of familiarity with other forms of work) was stronger than the need to maintain gender marking.

Family members as models

Over half the children suggested that they might do the same work as family members. Piotrkowski and Stark (1987) found that knowledge of parental employment comes both from visits to parents' workplaces and from conversation in the family. However, these resources are not available to all children (see Table 7.6); five reported that both their parents were unemployed, and four said they did not know whether their parents had jobs or not. The latter were all 10-11 years old so I found their response somewhat surprising; this is reflected in my repeated questioning in the extract below. It may be that they had not been told about their parents' work, or had been told not to talk about it, because of social security regulations.

And does [your mum] have a job of work as well [as housework]?
I don't know.
I mean, does she go out to work?
I don't know.
What does she do all day?
I'm at school so I don't know. (Louis: m/11.07/B)

Table 7.6 Children's reports of their parents' employment status

	<i>age in years</i>		
	4-5	7-8	10-11
at least one parent employed or self-employed: child knew job	13	10	8
parent works: child does not know what job	Annabel B Claire B	Mei A	0
both parents unemployed	Julie A	Sitara A Hassan A	Nicky A Shuel A
child said that s/he did not know whether parent has job	0	0	Sharon A Joseph A Tracy A Louis B
<i>N</i>	16	13	14

Three other children could only draw on family models to a very limited extent because, while they said that their parents worked, they did not know what work

they did; Rogoff pointed out that lack of knowledge of parental occupations is common:

In the US middle class, many school age children do not even know what their parents' occupations are, much less how their parents carry out adult work. (1990: 124)

School records revealed that one father was a computer consultant, perhaps a hard job to explain to a five year old, and one worked in a night club, something he might prefer not to tell his daughter. The third was a journalist.

Nine of the twelve children named on Table 7.6 attended School A; this may be reflected in the lower proportion of children in that school drawing on family models. Although they lacked parental models of paid workers, such children almost all said that they expected to have jobs when they were grown up. However, in many cases their ideas about adult work were less detailed than those of other children of the same age who were interviewed, to the extent that Tables 5.1 and 5.2 show that, with the exception of the three Bangladeshi children, those without family models of workers were among the children who said least in their age groups during the interview. Tracy (f/10.07/A) and Mei (f/8.02/A) both talked about working as lawyers, and Nicky (m/11.00/A) said he would be a bank manager, but in each case the child knew very little about what that occupation involved. Mei's only suggestion was that a lawyer helps people '*by saying things*', but she did not know what sorts of problems were involved, while Tracy thought that the people who were helped might be getting divorced or be in prison, but had no idea what the lawyer would do to help. Nicky thought a bank manager would sit at a desk and deal with paperwork, but as I mentioned earlier, did not describe any of the functions which might be expected of a manager.

The suggestion of doing the same work as a family member was particularly common among the youngest children: nine out of thirteen 4-5 year olds said that they might do the same work as their parents do now. Some of these knew very little about what was involved; possibly this was the only job they had heard of. Halima (f/5.10/A) seemed to have no idea of the function of a restaurant or the nature of work carried out there:

So when you're grown up you'll go to the shops. What else do you think you'll do?
Um .. go to the restaurant. The restaurant is a working place for ladies and mans.
What sort of work would you do?
I don't know.
What sort of work do ladies and men do there?
I don't know.
How do you know that people go there to work?
'Cos my Dad goes there.
Do you know what he does when he's there?
Work.
But you don't know what he actually does?
One day he taked his drill from the home to do his work there.

Clark (m/4.09/A) reported that every day his father *'goes to a very special shop and he gets some money'*, and he said that when he was grown up he would do the same. This description may have reflected his parents' deliberate simplification of complex work, or of work they considered unsuitable for discussion with a child of his age.

Abdul (m/4.11/B) saw the bank which his father went to every day as very similar to school. He said he would go there:

when I'm ten years old or eleven years old and ... they will ask me to do something to, for important work about policemen or fire engines or a fire.

Possibly these ideas reflect what has happened when he has visited the bank with his father.

Claire (f/5.02/B) said that her parents worked to earn money, and that she too would have a job and earn money when she was grown up. But she said she did not know the specific work her parents did, or that she might do. Several children in this age group mentioned household work rather than job work. Three girls said that they would be *'a mummy'* and talked about the work a mummy does; similarly two boys said they would be *'a daddy'* as well as having jobs. Jimmy (m/5.10/A) foresaw a lot of housework:

I'd do homework cleaning up ... because if my children make a mess I'll clean it up ... I'll tell the children to help me ... tell them to put away their toys and I'll do the sweeping the floor and things, and I'll do the washing.

Seven out of thirteen 7-8 year old children and six out of fourteen 10-11 year olds said they might do the same work as their parents or siblings, though in some cases this was a second choice to a more glamorous occupation. For example,

Gary (m/7.10/A) said that if he couldn't be a footballer or an author he might '*be a window cleaner with my dad*'. Each of these children gave a detailed account of the work done by the parent or sibling in question, and in most cases said they had had opportunities to observe or take part. The work was in every case something a child could comprehend (house decorator, gardener, shop assistant, book illustrator) or something which had apparently been carefully explained to the child. For example, Marcus (m/8.06/B) said he would be a therapist like both his parents. He explained what therapy is about:

When you've got a problem and you don't think you can sort it out with yourself ... Sometimes it gets a bit out of control because they get so angry and you have to tell them to let it out on you so you can see what's happening.

Among the 7-8 and 10-11 year olds, those children who knew only the title of a parent's job expressed no desire to do similar work (e.g. stockbroker, oil trader).

Some of the older children appeared to be giving serious and realistic consideration to following in family footsteps; they talked in considerable detail about what that occupation involved, and recognised that their family connections could be useful to them. Eleanor (f/11.06/B) wanted to write and illustrate children's books, as her parents did. She said that after art school:

I'd think of an idea and I'd probably ask my mum if she knew any good publishers who would like that kind of work, and I'd send it off to them.

Chris's (m/11.06/B) father and brother worked in the music business (at a radio station and in a record company). He identified this as a possible career for himself, and recognised that his connections gave him advantages:

I think a lot of the people who I know now, I'd know probably in eight years' time when I'm looking for a job, and I'd know the people who I could go into an interview for, if you see what I mean. I could go to interview and I hope I'd get a job there ... What I mean is, I'd know more places to go rather than have more of a chance at the actual interview.

Others had considered jobs done by parents and decided that they did not want to do them. Andrew's (m/11.08/B) mother was an eye surgeon. He said:

My mum wanted me to become a doctor. And I said, I don't know, I don't think I would really like that. 'Cos I think it's a hard job, and like you have to be alert at, like you might get called in the night and you might have to quickly rush and see someone's eye, or maybe see someone's tooth if you were a dentist or something. So I don't think I'd like that.

Older siblings and cousins also served as models, and it seemed that children had sometimes heard more from them about their jobs than they had from their parents. This could have been because they were currently engaged in the process of career choice, or had just started new jobs which were still seen as interesting topics of conversation. Jackie (f/11.01/A) said that she had got the idea of hairdressing from her cousin, and Heidi (f/8.05/B) said she expected to work in the health food shop where her student brothers currently work.

While twenty-two children talked about doing the same work as family members, as shown on Table 7.5, others appeared to draw on family work in more tenuous ways; a number of children proposed occupations which had the same work arrangements as those of family members. Children of self-employed parents often opted for self-employment, and several of those whose parents worked at or from home suggested that they would do the same (see Appendix D). One such was Tom (m/8.08/B): his mother did dress-making and gardening, and his father had invented an 'adult' toy which he produced in small quantities and sold. Tom said that he might take up gardening like his mother, but his preferred option was to be a self-employed fish consultant.

It might be expected that the social class of the family would have some influence on children's career aspirations, and Kelly (1989) found that at age eleven, the top ten most popular jobs for middle class and working class children were broadly similar, though middle class children were slightly more likely than working class children to aspire to professional, managerial and intermediate occupations, and less likely to aspire to manual jobs. In my sample, jobs named by working class (School A) and middle class children (School B) were broadly similar (see Tables 7.1 and 7.2), generally because children in School A chose jobs of a higher social class status than those of their parents. When preferences were based directly on family models School A children generally chose working class jobs: e.g. security guard (Enrico: m/7.08/A); window cleaner (Gary: m/7.10/A); barmaid (Samantha: f/7.10/A). However, this was not necessarily so: they sometimes opted for the same area of work as their parents but constructed themselves as more important. Thus Jimmy (m/5.10/A), whose father mended

train brakes, said that when he grew up he would employ others and make trains; similarly Mahmud (m/11.00/A), whose father managed a launderette, saw himself as an international jet-setting businessman. Working class children who did not have family models of employment tended to opt for professional jobs: e.g. headteacher (Sitara: f/8.00/A); lawyer, doctor or teacher (Mei: f/8.02/A); doctor or engineer (Hassan: m/8.05/A); bank manager (Nicky: m/11.00/A); lawyer (Tracy: f/10.07/A). Thus many working class children aspired to high status jobs. However, only a few middle class children aspired to low status jobs. In some cases this happened when the child did not understand the nature of a parent's high status job: for example, Charlotte, whose father was a stockbroker, said that she might be a hairdresser. The choice of a low status job could also result from concern about the nature of the work; the demanding nature of medical careers was a factor in Andrew's (m/11.08/B) stated preference to be a shop assistant (discussed above).

Models provided by the school

While all the children could list a number of different workers in the school (teachers, headteacher, caretaker, secretary, cooks, helpers) only teachers were put forward as occupational models. Seven girls talked about teaching in school as a possible career. Only one of these had a parent who was a teacher, and she saw teaching very much as a fall-back position if she did not make it as an actress:

If I can't be an actor, I'll ... teach I suppose, all my family have been teachers.
(Morwenna: f/11.04/B)

Four other children had parents who were teachers, but did not suggest teaching for their own future careers. Two of the 7-8 year old girls who wanted to be teachers were among those who did not have models of parents who worked. Ideas about entry to teaching and the work involved were often more vague than for some other jobs put forward, and perceptions of the advantages of teaching as a career were very much from the child's angle: for example, '*you could sit in the staffroom on a cold day*' (Lucy: f/8.06/B). This could perhaps be attributed to the

nature of children's contact with teachers; the job of teaching is not generally an issue for classroom discussion.

A second way in which school could provide occupational models is through curriculum input about the world of work, such as visits to local workplaces, or workers visiting the school. Some of the 10-11 year old children in School A had visited a magazine distribution centre, and 4-5 year old children in School B had recently visited a farm. However, it seemed that both visits had focused on production processes rather than workers, and none of the children suggested careers related to these visits.

Models in the community

Models in the community were referred to by 58% of children in School A but only 19% in School B; this may be related to the smaller number of family models of employment available to children in School A. Models included shop workers, hairdressers, doctors and a service engineer. Both of the children who said they would like to join the police had had personal contact with police officers, at a summer play scheme run by the police and at a neighbourhood festival. Similarly girls opting to be nurses spoke of particular encounters with nurses (a stay in hospital, and the nurse at the local surgery). One of the boys who said he wanted to be a pilot described a long distance flight during which he had seen the pilot, and visited the flight deck.

Some occupational preferences had arisen simply from observing people at work, without necessarily having the opportunity to talk with them. Enrico (m/7.08/A) said that he wanted to be a workman because:

Every time we come back from the library we stop and watch someone building ... making big offices ... they put the metal up, they're putting all the metal up. So when they've done that they're gonna put the bricks on.

Models on television

Almost half the children referred to occupations seen on television. In some cases television appeared to be the main or only source of the idea. For example, Louis

(m/11.07/B) said he would like to be a Formula One driver, Joel (m/7.11/B) an actor, and Tarquin (m/5.07/B) a gladiator (character in a popular television show who competes using physical strength). More often television was put forward as an extra source of information about an occupation which had been encountered elsewhere. The children referred to above who said they wanted to join the police and become nurses spoke of their personal encounters as the main impetus which had initiated their interest, but most said they had gained additional information from television drama series with relevant settings (*The Bill* and *Casualty*).

The boys' enthusiasm for careers in sport (see Tables 7.2 and 7.3) drew heavily on television viewing; this was reflected in the higher proportion of boys shown on Table 7.5 as drawing on television models. Several of the boys talked about particular individuals whom they wanted to emulate. Joel (m/7.11/B) explained:

I want to learn to run fast like Linford Christie 'cos I see him on TV and I want to run as fast as him so I just want to shake out my legs and start running. On London Tonight I saw Linford Christie running up and down at the Centre and he had to keep going.

It seems that it is the promotion of particular individuals as personalities that catches children's imaginations. They feel that they know them as people, and see them as models in the same way that family and friends may be. None of the children referred to models in books, though two boys said that they had gained factual information from books about occupations they were already interested in.

Children's current activities

Half of the children interviewed put forward occupational preferences which could be seen as a continuation of their present activities, at school, at home, and at out-of-school classes. School activities were cited by only three children; two School A children wanted to become writers, saying that they enjoyed writing stories in school, though neither of them wrote at home. Eleanor (f/11.06/B) linked her interest in teaching to practical experience in school:

In school when we do reading workshop we each have this sort of little child that we have to go and practise teaching with and I really enjoy that. I enjoy telling them

off, and when they've done something right at last ... I enjoy that so I might try to be a teacher.

Only two children referred to work activities outside school: in both cases these involved helping parents with their work. Tom (m/8.08/B), whose mother was a gardener, occasionally helped her, and said he too might become a gardener; and Eleanor (f/11.06/B) helped her writer/illustrator parents by testing out materials for them, and said she would like to do the same work when she grew up.

Leisure activities at home and out-of-school classes were far more frequently drawn on (and were referred to by both Tom and Eleanor in relation to other occupations). Children's hobbies can be used in their thinking about possible future careers in two ways. Firstly, the hobby appears to be an important part of the child's self-perception; the child now thinks of him/herself as an actress, a potter, a basketball player, and so on. Secondly, people who make that particular hobby into full-time work (e.g. ballet teachers) can serve as models.

Two-thirds of the children from School B (in a middle-class area) saw possibilities for a future career based on a present hobby. These ranged from Tarquin (m/5.07/B) who attended pottery classes and said that he would be a 'potterer', to 10-11 year old children who had considerable knowledge about how it would be possible to make a career from their hobby. Chris (m/11.06/B) said that he played basketball every day after school, and explained that he would need to go to an American college:

What you do, I think, is you can actually study the sport of basketball but you can also study, you've got to study another proper one like history or something like that, and then you play basketball at college and then if you show, each year all the managers from the NBA teams come and they look at the players and then there's one big day when they all get drafted, the same with American football as well ... But you've got to be amazingly good and I don't know if I'd ever get to be that good.

Similarly other children outlined possibilities for making money from the musical instruments they played (gigs with a band, teaching), from art, ballet, acting and sports.

In contrast, in School A (generally working class) about one third of the children mentioned the possibility of pursuing a career related to current hobbies. Elsa (f/5.01/A) had ballet lessons and said she would like to be a ballerina.

However, her family lived outside the school catchment area, and her parents were a teacher and a social worker: thus she was not part of the working class social community. The economic situation of the average inner-city working class family does not allow for extras such as ballet lessons. Nevertheless, children in this school did refer to such out of school activities as they had; for example, Samantha (f/7.10/A) played doctors and nurses with her brother and had a nurse's uniform; this seemed to be an important aspect of her enthusiasm for nursing as a career, but had provided her with very little information about what nurses do or where they work (she had not related nurses to hospitals). Jimmy (m/5.10/A) talked about his guitar and microphone in the context of his ambition to '*go on telly ... to be a pop star like Michael Jackson*'. The boys who said they wanted to be footballers referred to their experience of playing football in the playground, but television was also a major source of information which they drew on.

Discussion

In the previous section I suggested that the resources used in constructing occupational preferences were not equally available to all children. In particular, some children lacked models of employment in the family (either because parents were unemployed or because they had not talked about their work with their children). Even where family models did exist, some children had limited access to them in that parents worked away from home, or children had not visited parental workplaces, or the work was not easily comprehensible by children. Similarly the leisure activities from which some children constructed occupational preferences were not equally available to all, largely because of cost.

Other resources are more generally available. However, while children referred to models in the community and on television, these resources offer information about a limited range of occupations; many jobs are not visible in the community and rarely feature on television. Television may lead to children having aspirations they are unlikely to achieve, in that it over-represents male, adventurous and prestigious occupations (Signorielli, 1993). Obviously there are

people who become top athletes and Formula One drivers but the opportunities are very limited.

Despite the limited availability of resources to some of the children, they all gave a response to the question 'What work will you do when you are grown up?', and all the 7-8 and 10-11 year olds identified paid occupations. However, there seemed to be considerable variation in the extent to which these occupations formed part of the child's current identity. Work provides a sense of self and social identity (Fyfe, 1989), and, as I showed at the start of this chapter, Roberts (1980) argued that having identified a future occupation can provide the child with a similar sense of identity and direction.

Children's occupational identities have two distinctive characteristics: they are temporary, in that they are assumed, tried out, and then may be discarded, and they are often partial, in that they may not possess all the characteristics normally involved in identity. For the youngest children occupational identities may be assumed for very short lengths of time: the duration of a game such as doctors and nurses. The same identity may be repeatedly assumed. More than one identity may be tried out concurrently: Toby's (m/5.07/B) five possible occupations were listed earlier. Some children talked about both a glamorous and a mundane occupation (footballer and window cleaner; artist and shop worker). Several of the children talked about occupational preferences which they had now rejected, in two cases because they involved too much travel. Marcus (m/8.06/B) also talked about an idea he had abandoned:

When I was younger I was thinking about saving the world, or joining a gang who does it.

Other children could see that rejected occupational ideas could still be pursued as hobbies. Eleanor (f/11.06/B) explained:

I'm not sure about acting cos I don't know if I'd be all that good but I could do like join an amateur club where you act not for the money just for fun.

However, while children's occupational identities can generally be seen as transient, it appeared that some of the older children (e.g. Mahmud: m/11.00/A, Morwenna: f/11.04/B, Eleanor: f/11.06/B, Chris: m/11.06/B, Louis: m/11.07/B)

had sustained the same ambitions over considerable periods of time, and had developed substantial knowledge of their chosen occupations.

I will examine the depth of occupational identity by drawing together four interlinked aspects of identity: self-image, behaviour, recognition by others, and acquisition of knowledge. Self-image can be maintained without the other aspects: for example, the man who sees himself as a great novelist, but does not actually have time to write. However, a stronger identity is achieved when the man behaves as a novelist (that is, spends time writing); when his identity as a novelist is recognised by others (who publish, buy and read his works); and when he acquires knowledge as a writer (of plot and structure, and of publishing and promotional processes).

Self-image involves the ideas a person has about him or herself. It can encompass both the past and the future in the narratives we construct for ourselves about our own lives. The children's occupational preferences all involved self-image, though for some this was both limited and of very brief duration, whereas for others their proposed career appeared to be a central part of their self-construction.

Behaviour is influenced by self-image; people behave in accord with their own self-image and restrain behaviour which is inconsistent with it (Argyle 1972). How far did the children's behaviour relate to their occupational preferences? In many cases there appeared to be no link to behaviour: this was the case for occupations which the child knew very little about, such as lawyer, air hostess, vet, bank manager. The youngest children were likely to try out their occupational ideas in play, taking on roles such as gladiator, spaceman, mummy, and nurse. Where occupational preferences related to hobbies, it was not possible to tell whether the hobby had preceded the occupational preference, or vice versa: did Morwenna (f/11.04/B) want to be an actress because she went to drama classes, or did she choose to attend the classes because she wanted to be an actress? R. J. Roberts' (1980) suggestion (see the beginning of this chapter) would be that the formation of an occupational preference, which he saw as almost random, affects behaviour. Chris's (m/11.06/B) ambition to be a basketball player

was reflected not only in the hours he spent each day playing basketball, but also in the television programmes he chose to watch and the books he read:

I think about what I want to be when I'm older and say I want to be a basketball player which I really do, I've got to find the right way of going about it.

Recognition by others is a third aspect of identity. While it is possible for an individual to deliberately construct an identity, that identity can only become real to the individual holding it if it is also recognised and confirmed by other people (Berger and Berger, 1972). The reverse is also true: it is possible to construct an identity which is based on other people's views of us. This is presumably the case when parents have strong ambitions for a child's future and structure the child's activities accordingly. There was little evidence that the children's occupational preferences were seen as part of their identity by other people, except where their choices related to hobbies which they were actively encouraged to pursue. Morwenna's (f/11.04/B) construction of herself as an actress was boosted by participation in drama lessons, selection for the star role in the school play, and the audience's applause.

The development of knowledge and identity go hand in hand, according to Lave and Wenger (1991). There was enormous variation in children's knowledge of their chosen occupations (see Appendix E). This was partly related to age: the older children in general gave more detailed accounts than younger ones. The nature of the occupation was significant: it is easier to grasp the nature of practical work than paper work, for example. The circumstances in which the children gained the knowledge were important: those children who were able to interact or participate regularly with adults engaged in that occupation (parents or people in the community) generally gave the most detailed accounts (e.g. Chris talking about the music business; Eleanor talking about becoming a writer/illustrator). However, access to the adults involved in an occupation did not ensure interaction; the nature of talk in the family is clearly crucial.

Children's occupational identities are, then, transient and incomplete. The identity rests mainly in their self-image, and for most children is reflected occasionally in appropriate behaviour and recognition by others. Occupational knowledge is generally limited, and this seems to be a result of the circumstances in which children acquire such knowledge. Identities were most strongly developed when children had opportunities to observe and participate in the work in question, and to interact with practitioners who served as models.

These factors combine to benefit some children and to disadvantage others. Most of the 10-11 year olds in School B (mainly middle class) put forward very detailed ideas about their future careers, and were actively engaged in trying out different occupational identities and acquiring relevant knowledge. For example, Chris (m/11.06/B) talked in detail about two possibilities: he said that he wanted to be a basketball player in the USA; he had found out about this through playing basketball, talking with older players, reading and watching television. He knew how this ambition could be achieved. If he was not good enough to do this, he said he might go into the music business like his father, brother and brother's girlfriend, working either at a radio station or for a recording company. He knew about a variety of jobs in these organisations; he had spent time in each, had 'played' with the equipment, and had talked with his father and brother. Again, he had a clear idea how such a career could be achieved, drawing on his brother's experience.

In contrast, more than half of the oldest children interviewed in School A (inner city working class) had very limited knowledge of adult occupations, and had developed little occupational identity. In each case these children lacked parental models of workers (either through unemployment, or through not knowing whether parents worked or not). Nicky (m/11.00/A) is an example (albeit an extreme one) of a child in this group. His parents had not worked since he could remember. He said he went out very little, even within the neighbourhood, presumably because money was very limited; he had not been on holiday, and had no hobbies. He could suggest only one job he might do: bank manager. He said he had never visited a bank, met a bank manager, or seen one

on television. He appeared to lack even the most basic information about the job (for example, that the manager is the person in charge).

Summary

While all the children gave accounts of possible future work, there was considerable variation in the resources the children were able to draw on, and in the depth of their occupational identities. Constructions of future work were markedly different from those of school work, in that children talked about enjoyment and often a high degree of autonomy. I have suggested that this might relate to the child's construction of being an adult, and to the ways in which adults construct work for children, offering a cosy and sanitised view in line with their constructions of childhood.

In the next chapter I will discuss the children's constructions of factory work, and examine whether in that context they describe work in terms of autonomy and enjoyment, or whether it is only personal futures which are seen in these terms. I will also consider the range of resources drawn on in this rather different area of work.

CHAPTER 8

Constructions of work in manufacturing industry

This chapter examines children's constructions of work in manufacturing industry. It draws on data from the section of the interview in which I asked children to imagine and talk about starting up and running a factory to make any item of their choice. I then asked how they knew about factories (e.g. from visits, family or friends, books, television etc.)

There were several reasons for asking about factories. Firstly, this was selected as an area of work which was unlikely to have personal interest for the children in terms either of family work or their own aspirations. The communities in which they live are predominantly involved in service industries rather than manufacturing, though there are a few small workshops in the area around School A. Thus accounts of factories might differ from those of children's current and possible future work in that more distant and fragmentary resources would be used, and speculation and imagination would play a larger part, offering insights into the processes of construction. Secondly, constructions of work in factories may involve large and complex organisations, and may therefore contrast with those of occupational preferences, in that the latter are often of work carried out alone or with very few others. Thirdly, this area is interesting in the light of concerns about negative attitudes to industry (see Chapter 1).

Just as children's constructions of their future work varied in relation to the child's individual experiences, so I would expect constructions of work in manufacturing industry to vary, reflecting the individual's social class (Emler and Dickinson, 1985; Dahlberg *et al.*, 1987: see Chapter 2) and specific experience. Berger and Luckmann's (1966) analysis of the distribution of knowledge suggests that each individual will have different knowledge of the world, and that the

selection of what is relevant will result from that particular individual's roles (see Chapter 3). Similarly, Lave and Wenger's (1991) analysis of the process of learning involved in legitimate peripheral participation would suggest that people learn to look at the rest of the world in a similar way to more experienced members of the community of practice which they are entering. Thus while a politician, an unskilled labourer and a housewife will all have some knowledge of work in a factory, this knowledge will reflect the experience of the particular groups of which they are members, as well as their individual experiences. This idea is evident in the Marxist view that economic modes of production determine consciousness; however, Morss (1996) points out that:

Marxist psychologists have been reluctant to treat the thinking of children as socially determined in the same sense as that of adults. ... Marxist analysis of consciousness has sometimes been thought to apply only to the inhabitants of the factory - not to their children, and sometimes not to their wives. (1996: 57)

It is inevitable that in this chapter I can only include a small selection of the data concerning factories. My main concerns here are the children's constructions of the nature of factory work in comparison with work in other contexts discussed, and the way in which experiential resources are drawn on to produce these constructions. However, it would not have been possible to collect data addressing these concerns without asking children to describe their factories in considerable detail. To give a more rounded picture of their constructions I have included six transcripts of this section of the interview in Appendix G. I have also included an analysis of children's constructions of the factory as part of an economic system in Appendix H; this has some bearing on how the children constructed the roles of manager and worker in the factory.

In the first section of this chapter the resources which children explicitly drew on in their factory constructions are reviewed. Subsequent sections examine responses concerning the origin of goods, factory labour, and factory management. These sections include further illustrations of explicit use of resources and also suggest ways in which children were implicitly drawing on

their everyday experiences. Differences by age, gender, socio-economic context (indicated by school attended), and family work arrangements are indicated, and possible reasons for these are discussed. Finally, I will compare constructions of work in factories with those of work in present and future occupations.

Resources which children explicitly drew on in their constructions of factories

Many of the children pointed out that they had very little, if any, experience of factories:

I don't even know what a factory looks like so I don't know if I have ever seen one.
(Enrico: m/7.08/A)

I don't know much about what a real factory looks like. That was just my imagination. (Tom: m/8.08/B)

Table 8.1 summarises the resources which children explicitly referred to in describing their factories.

Table 8.1 Number of children explicitly referring to each type of resource in their constructions of factories

	age in years			school		total	
	4-5	7-8	10-11	A	B		
personal experience							
: factory visit	3	4	5	6	6	12]	17
: other experience - e.g. making things, everyday observation	3	2	1	1	5	6]	
talk: family and friends	0	2	6	3	5		8
school curriculum	0	3	6	1	8		9
media: television/video/theatre	4	8	12	7	17	24]	27
: books/newspapers	0	6	5	4	7	11]	
no resources suggested by child	3	1	1	3	2		5
N	10	13	14	16	21		37

Tracing the origins of general knowledge or long-held ideas is clearly problematic. Most children identified resources for only some parts of their

accounts; Sinead (f/5.03/B) explained that she knew about factories because: *'I'm just getting older, that's why'*.

This section illustrates the types of resources children referred to: further examples are included throughout the chapter.

Personal experience

Thirteen children said that they had visited a factory, and of these, six based their description very closely on that visit, choosing the same product, and describing what they could remember. For example, Elsa (f/5.01/A) described the toy factory she had visited in Sweden, and three of the 10-11 year old children in School A based their imaginary factories on a school visit to a magazine distribution centre. Other children had visited factories, but did not base their accounts on these: for example, Mahmud (m/11.00/A) said he had visited a rubber factory in Bangladesh and a chocolate factory in the UK, but chose to talk about a recycling factory. The visits referred to were not necessarily guided tours; Mei (f/8.02/A) talked about a paper factory near the school: *'sometimes me and my sister and my sister's friend ask for something, they give us'*.

Five children drew on their experiences of making things, such as cooking and knitting, and Daniel (m/5.05/B) referred to everyday observations, for example, of delivery of goods to a shop.

Talk with family and friends

Two children in School A who had not been among the party to visit the magazine distribution centre based their factories on what they had heard about it from their friends. Samantha (f/7.10/A) said her uncle had told her about the factory he worked in which made sinks, and she drew on this, rather confusingly, in her interview. We had been talking about making chocolate:

We have to use it with sort of like wax first.

Which? Is this the chocolate?

No, sinks, we have to use it with wax first, because before you put the white thing over it, well inside, how's it gonna hold it?

I don't know. You tell me?

It might be the wax.

How did you find that out?

Because my uncle used to work there and he used to tell me things but he used to get them wrong 'cos he started working there.

Other information from relatives contributed only to specific aspects of children's accounts: for example, Chris referred to investors as a source of factory income because he knew that his grandma had shares in a petrol company.

School

Most of the children said that they had learned very little specifically about factories at school. Chris (m/11.06/B) commented that the curriculum did not include information about specific processes of manufacturing:

We've learnt, like, you don't look at one particular factory, you might see say a video about how things are made, but it would be focusing more on the one thing going to, maybe not going through the exact process of the factory, but how they'd be shipped off to somewhere, something like that. You'd learn more about that and where they're sold and which different countries. 'Cos I'm sure the education board would think that was more educating than thinking how the machines screw on the toothpaste tops.

So you have actually seen videos at school about how things are made?

I think I've seen one when I was younger at school which was about how chocolates are made. But they only showed you a tiny bit, I can remember, they showed you a tiny bit about the machines. Most of it was driving along in a lorry or whatever and wherever it got to then you would have the person buying it or whatever, and then you'd see them at home eating it.

I have already mentioned the school visit to the magazine distribution centre.

Mahmud (m/11.00/A) referred to activities with a student teacher about the hierarchy of workers in school. In School B, both 7-8 and 10-11 year old children referred to projects about pollution, machinery and Victorian times; the way children drew on these will be discussed in detail in the context of their constructions of factories in the next section.

The media

Television was the major source of information which children identified. *'I've seen loads of programmes with factories in'* (Tarquin: m/5.07/B). Some children claimed to have seen factories on a wide range of programmes, and in many cases had very clear memories of what they had seen. Eleanor (f/11.06/B) said:

I've watched TV programmes where there's been a manager and he lives in a little office and he comes out and says, you're sacked.

Are they factual programmes, or?

Comedy. I watched this one, I forget what it was called, but it was this programme he was a manager in a flowerpot factory. They were all women, it was really sexist 'cos he was the only man in the whole building and he was the boss, and he was like saying, you're sacked, and stuff, but he never talked about transport or anything like that ... And that was basically his role in the whole play.

Seven children said they had seen factories on news programmes. Mahmud (m/11.00/A) mentioned the Soviet bomb factories which had been shown the evening before his interview. Children also referred to documentaries:

I've seen car factories ... I saw problems that have come up about building cars and how they've gone wrong and how people had been, how accidents have happened because they've done something wrong making the cars.

So what was that, a sort of documentary programme?

Yes. It was meant for grown-ups but I turned it on by accident. (Tom: m/8.08/B)

Altogether six boys (and no girls) said they had seen car factories. Chris (m/11.06/B) commented:

that's one of the things you see a lot of the time with the welding on the doors and stuff like that.

It was generally in adult programmes that children reported seeing factories; however, a few were on children's television. Marcus (m/8.06/B) said that he had seen a teapot factory and trumpet factory on *Sesame Street*. Claire (f/5.02/B) said that her *Playbus* video showed how various things were made. Jade (f/11.02/B) thought that watching '*that Santa Claus on Christmas Eve film*' might have contributed to her knowledge of factories: '*it's got these people working with all these toys and machines in a factory*'. Mahmud (m/11.00/A) said there was a factory in a *Goofy* cartoon. While many children said they had seen factories on television, others claimed they had not, despite watching up to six hours each evening (e.g. Enrico: m/7.08/A; Jackie: f/11.01/A; Nicky: m/11.00/A). I will discuss possible reasons for this in Chapter 9.

Books were less frequently referred to: four children mentioned *Charlie and the Chocolate Factory* by Roald Dahl, though Tom (m/8.08/B) commented that it did not tell you much about factories. Factual books were a more common

source, including those about pollution, transport and jobs. Chris (m/11.06/B) talked about cartoon style books:

it might just have one centre page where it's all going round and it shows you what's going where.

Two 10-11 year old girls mentioned information in newspapers. Daniel (m/5.05/B) had been to a local children's theatre where they had a story, *'about a factory and it was spoiling a beach'*.

Comparison of resources drawn on in constructions of future work and of factories

It is tempting to make a comparison between the resources drawn on in constructions of future work and of factories, drawing on Tables 7.5 and 8.1. Table 8.2 is an attempt to do this. It gives a general indication that in constructions of factories more children drew upon the media, and fewer on family experiences.

However, as the categories were defined rather differently in each case, these figures should be treated with caution. For example, while visits to parental workplaces were included under family models of work, and are thus shown here as 'family members and friends', visits to factories have been categorised as 'personal experience/ activity'. And factory visits were in every case one-off events, whereas some children had had many opportunities to visit family workplaces. Moreover, one of the categories discussed in relation to children's constructions of their future work was models in the community: this category does not apply to constructions of work in factories and has been omitted here.

Table 8.2 Number of children referring to different types of resource in discussion of their own future work and of factories

context	own future work	imaginary factory
personal experience/activity	21	17
family members and friends	22	8
media	18	27
school	7	9
N	40	37

Constructions of the origin and manufacture of goods

This section provides a background to children’s constructions of work in production, and in particular, shows how the youngest children frequently did not envisage large-scale manufacture. It also illustrates the difficulties children have in determining the origins of goods in shops and of raw materials for their factories.

Origin of goods in shops

As I explained in Chapter 4, the questions about factories were introduced by asking children where the goods in shops come from (using specific examples such as chocolate and toys). All the 10-11 year olds and most of the 7-8 year olds said that goods came to shops from the factories where they are made; some also mentioned the intermediate warehouse or wholesaler. Two 7-8 year olds did not volunteer the word factory, but said that they recognised it. The responses of the 4-5 year olds were more diverse, and are set out in Table 8.3. I will discuss these in detail as they suggest how children combine experience and theorising.

Table 8.3 Responses of 4-5 year olds to the question, ‘Where does the shopkeeper get the goods in the shop from?’

child's name	school	no suggestion	shopkeeper gets from another shop	made in shop, or grown by shopkeeper	produced elsewhere	volunteered word 'factory'
Juan	A	✓				
Clark	A		✓			
Leila	A		✓	✓		
Annabel	B		✓	✓		
Jimmy	A			✓		
Darren	A			✓		
Julie	A			✓		
Abdul	B			✓		
Sinead	B			✓	✓	
Claire	B			✓	✓	
Toby	B			✓	✓	✓
Daniel	B				✓	✓
Anna	A				✓	✓
Tarquin	B				✓	✓
Chloe	B				✓	✓

Note: several children put forward different ideas as the interview progressed, and are thus shown with ticks in two or more columns.

Previous research has shown that young children often lack accurate knowledge about the origin of everyday items and make up theories (Berti and Bombi, 1988; Hutchings, 1989). The idea that each shop gets goods from another shop has often been noted (e.g. by Strauss, 1952):

Where does he get those things from, the things to put in the shop?

Gets it from other shops

So he'd go to another shop and buy the sweets to put in his shop?

Yeh

Where would the other shop get it from?

Another shop

And where would they get it from?

Another shop

(Annabel: f/5.04/B)

Nine of the 4-5 year olds said that the shopkeeper produces goods in the shop (an idea also reported by Goldstein and Oldham, 1979, and Berti and Bombi, 1988). For example, Jimmy (m/5.10/A) described making sweets at the back of a sweet shop. Children's main experiences of making are of small scale production: helping or observing parents engaged in cookery, knitting or dress-making at home, and making things themselves at home or at school. Thus it is hardly surprising that they suggest that other making takes place in the same way. Jimmy's account of making sweets at the back of the shop appears to draw on experiences of cooking (breaking the ingredients down, mixing them, dough rising, baking):

Like you get the sugar first, then you open it up and then you get the marshmallow, you screw them up to bits, you tear them off into bits yeh, and then you put some sugar on them and then you put jelly on them. You mix them together in a box and it gets bigger. Yeh. Then when you cook it it goes littler and then you get these sweets.

Other children said that the shopkeeper grows and picks fruit and vegetables that are for sale in the shop. Daniel (m/5.05/B) knew that apples grow on trees:

how can I explain - apples - they don't come from the factory, they come from apple trees. Our apple tree's cut down.

When children had suggested that the shopkeeper makes or grows goods for the shop, they frequently generalised to include products which shopkeepers in this country are very unlikely to grow or make, as Toby (m/5.07/B) does here:

Where does the shopkeeper get the things in the shop from?

Umm, he has to make them, and if they have fish there they can fish.

So the shopkeeper would go fishing?

Yes, and then it's ready to sell.

What about oranges? Where would oranges come from?

From... You have to get the seeds first and the tree grows and then you get the oranges from the tree.

Do oranges grow in England?

Yeh, everywhere.

So the shopkeeper grows all the oranges?

Yes, I think so.

So if I go to the shops up the road here, do they grow oranges?

Yes.

What about toys? Where do toys come from?

From shops.

But where does the shopkeeper get the toys from?

Makes them.

The shopkeeper makes all the toys?

Yes.

Three of the children who followed this line of argument, including Toby, eventually said that not all goods could be produced in shops, and suggested factories as an alternative source.

It is not easy to identify the correct source for goods: *which* things are grown? *which* are made in factories? *which* are dug up out of the ground? (Berti and Bombi, 1988; Hutchings, 1989). Thus both Samantha (f/7.10/A) and Sinead (f/5.03/B) explained that apples are made in factories. While such ideas may seem bizarre to adults for whom this is familiar knowledge, this is a matter of knowledge rather than of thinking skills. Adults find it equally hard to identify the origins of some goods (as was demonstrated by the success of a BBC television April Fool's Day item some years ago which showed spaghetti trees in Italy). The skill with which children theorise about this area is demonstrated by responses such as that of a four year old in the pilot interviews who suggested that '*bananas come on trees, then they go to the factory to be put in skins*'. It seemed that this girl knew that some foods grow and may then be packaged in factories, but did not know the precise details of banana production.

Of the seven 4-5 year old children who talked about factories or special places where goods were produced, six attended School B, and the seventh, though attending School A, came from a middle class family. It is tempting to speculate, as Tough (1976) does, that middle class parents are more likely to draw their children's attention to their environment (see Chapter 5). However, a more likely explanation lies in the children's experience: five of them referred to

particular experiences of factories, such as visits. The comparative affluence of the middle class families seemed to be pertinent here; experiences referred to included visits to factories in Sweden, Germany and the USA and a theatre visit.

Raw materials for production

Table 8.4 shows the children's responses about obtaining raw materials for their factories. Some children were presented with more difficult problems than others owing to the particular products they had chosen to make (e.g. computer games, basketballs). Most children partially avoided the problem of origins by suggesting that they would buy ready-made materials such as plastic and metal. Joel (m/7.11/B) planned to use Perrier water and blackcurrants to make fizzy blackcurrant drinks. Marcus (m/8.06.B) planned to make Nintendos:

I reckon there are places where there are spare bits for Nintendo so you could take some of those and you could buy some in like science shops and things.

The younger children assumed that such materials would be bought from a shop; older children suggested that factories were more likely to buy in bulk from other factories or warehouses (see Table 8.4).

A second solution to the problem of origins is to propose that existing materials should be recycled (Berti and Bombi, 1988). Thus in pilot interviews, a seven year old suggested that a bicycle would be made by collecting old cookers and using the metal, and a four year old said glasses would be made by collecting pieces of broken glass in the street. Several children used this idea in their imaginary factories. Samantha (f/7.10/A) described how people could use old red clothes to make red apple skins. Gary (m/7.10/A) planned to use aluminium cans to make cars:

*Smash all the cans up and just stick the pieces of metal and just put all the cars ...
[get seats from] the junk place where you get the junk.*

This was generally proposed by younger children; the only 10-11 year old proposing to recycle materials was describing a recycling factory and so by definition all his materials were recycled.

Six children proposed obtaining materials from natural sources, generally from farms, either in this country or abroad. Annabel (f/5.04/B) said that she would make ice cream using ice *'from the mountain'*.

Table 8.4 Children's responses about obtaining the raw materials

	age in years			school		total
	4-5	7-8	10-11	A	B	
obtain from shops	7	4	0	2	9	11
obtain from warehouse or factory	1	2	9	6	6	12
collect used materials and recycle	1	3	1	5	0	5
from natural source (e.g. fruit tree)	3	1	2	0	6	6
don't know	1	1	0	1	1	2
N	11	11	11	15	18	33

Manufacturing processes

Most children made it clear that they knew very little about the process of manufacturing their chosen product, though only a few suggested ways of finding out how to do it. Andrew (m/11.08/B) said that to make sweets he would need to buy a recipe book. Marcus (m/8.06/B) said he would take his Nintendo to pieces in order to see how it was made, and Sitara (f/8.00/A) emphasised the importance of examining a sample:

First I'd get one of my jumpers and put it and look at it and turn it round and look at bits, the edges, really easy bits like that.

Children referred to various experiences of making things: Sinead (f/5.03/B) talked about how tagliatelle was cooked, and Heidi (f/8.05/B) thought that her experience in making pottery would be useful in a chocolate factory:

You put it all in balls or you'd make a little kind of round base and with sides on it, make two of them. ... And if the people.. well they'd have orange stuff which sometimes goes inside, or strawberry stuff. ... Put the stuff inside and then put the other one on top of it. ... And I'd, you know, when you put the chocolate down over the gaps, with your fingers.

Constructions of factory labour

The children's constructions of labour in a factory are reported in the order in which they occurred in most interviews: having established whether the child would employ workers, I asked how they would recruit workers, and what jobs would be carried out. This led to a discussion of division of labour, hierarchical structure, and the use of technology. Other issues discussed included gender of workers, and whether they would be differentially rewarded. Extrinsic and intrinsic satisfactions and dissatisfactions of factory labour were identified. Throughout this discussion the child was positioned as factory manager, rather than as a worker, and this is reflected in their responses.

Recruiting the workers

Most children said that they would employ between thirty and one hundred workers (though in some cases one hundred was apparently used simply as a very large number). Smaller numbers of employees were suggested by younger children describing production in a shop or at home, and by a few of the 10-11 year old children: Andrew (m/11.08/B) said that he would start on a small scale (ten to fifteen workers) and possibly expand later.

Table 8.5 shows the children's ideas about recruiting workers. Whereas the older children said they would advertise, the younger ones proposed methods which relied on word of mouth (asking people if they wanted jobs; waiting for people to come and offer). Children said that they would ask relatives and friends (including those in Bangladesh), people in the street, factory customers, and workers on local building sites. Samantha (f/7.10/A) suggested that if people had seen the factory being built they would come and ask for jobs.

There was some contrast between responses in the two schools. In School A the 7-8 year old children all suggested methods of recruitment similar to the 4-5 year olds, whereas in School B all the 7-8 year olds said, like the 10-11 year olds, that they would advertise.

Table 8.5 Children's suggestions of ways of recruiting workers

	school	age in years						total
		4-5		7-8		10-11		
		A	B	A	B	A	B	
ask friends and family		3	0	2	1	0	1	7
ask other people (e.g. in street)		1	1	1	1	0	0	4
people will ask for jobs		0	0	3	0	0	0	3
advertise		0	0	0	7	6	7	20
N		4	1	6	7	6	7	31

Note: some children suggested more than one strategy.

It would be easy to interpret this as a developmental difference, younger and working class children offering less developed ideas than older and middle class children. However, while word-of-mouth methods sound rather haphazard, Wallace (1989) found that young people on the Isle of Sheppey generally looked for work by going round workplaces and asking about vacancies; work in factories and shops was not advertised. It may be that unskilled jobs are less likely to be advertised than skilled and professional jobs. Several 7-8 year old children in School A reported that their parents looked for work by going round workplaces: Samantha (f/7.10/A) said that her mother was going to get a job on Saturday, and that she would go to pubs and ask for work. Similarly Sitara (f/8.00/A) reported of her unemployed father:

he didn't really stay at home ... he looked for new work ... he went all around the shops on his bike... but everyone said we haven't got no more space.

If the 7-8 year olds in School A were accurately reporting the arrangements through which adults in their socio-economic environment obtain work, the puzzle then becomes why the older children in School A suggested advertising. However, it seems likely that in the socio-economic environment of School A both advertisements and word-of-mouth were involved in the job-seeking process; the school is in a large city with diverse employment opportunities. It is possible that while the 7-8 year old children happened to have parents who sought work by asking, the 10-11 year olds may have had different experience. The only child in

this group to talk about job-hunting was Mahmud (m/11.00/A); his sister had left college and was looking for work:

*if you gave her one p for every application form she'd be a millionaire by now....
she looks in the newspaper or in Exchange and Mart*

There is then some slight evidence to suggest that these children may be drawing on the practices in their immediate environment. However, much more would be needed to reach a firm conclusion.

Table 8.6 Methods of advertising for workers

	age in years			total
	7-8	10-11		
school	B	A	B	
newspaper	4	2	6	12
Job Centre	1	2	0	3
newsagents	0	2	0	2
large notice	1	0	1	2
walls/trees	1	1	0	2
other	2	1	2	4
N	7	6	7	20

Other suggestions each made by one child: Yellow Pages, magazines, television, phone boxes, letters.

The 10-11 year olds in both schools and 7-8 year olds in School B suggested advertising for workers in various ways, set out in Table 8.6. Here children were apparently drawing on observations of notices in phone boxes and on trees and walls. Charlotte (f/8.08/B) said that she would put her notices '*all over like if you've lost something you can put it up*'. Newspapers, the most common suggestion, were mentioned by twelve children, and it would be easy to assume that this also reflected observation. However, Eleanor (f/11.06/B) indicated that her suggestion was speculation:

If you put an advertisement in the newspaper, but I never see advertisements like saying, new factory, if you want a job. Why not? I never see those, I'm not sure but I think you might send out letters to all the people in that particular area and say there was a new factory opening if you haven't got a job.

Several of the 7-8 year old and 10-11 year old children, especially in School B, said that they would operate some sort of selection procedure. Their ideas are

shown in Table 8.7. The most frequent suggestion was to test prospective employees; this demonstrated children's concern to employ workers who could do the jobs, and may reflect limited experience of the use of credentials such as qualifications and references in assessing prospective workers. Others proposed interviews: Enrico (m/7.08/A) said he would want to know: *'how old they are, if they're big enough, where they live, phone number'*. Heidi (f/8.05/B) had rather different concerns:

I wouldn't really want them to tell me their address because some people don't have a home and they can't get a home 'cos they don't have a job. So I wouldn't do that straight away, but like in about a month I would ask them if they had a home or where they lived. ... I wouldn't mind if they were homeless and I wouldn't mind if they didn't have experience 'cos they could learn a lot of things ... I would choose people because some people like, they want money money money and that's all they want and I wouldn't like greedy people ... and not people with second jobs or things like that 'cos they don't really need a job.

These concerns may have drawn on talk at home; Heidi said that both her parents worked actively for charities, in paid and voluntary capacities.

Table 8.7 Selection of workers

school	age in years		10-11		total
	7-8		A	B	
	A	B			
test/trial to see if can do job	0	2	1	5	8
interview	1	2	0	3	6
work record - experience	0	0	1	2	3
- qualifications	0	0	1	1	2
- skills	0	1	1	0	2
N	1	4	3	7	15

Note: none of the 4-5 year old children talked about selection.

Technical division of labour

When children talked about the jobs that their workers would do, two very different patterns of organisation emerged. While some children said that each worker would make one item from start to finish, others described a production line process in which each worker contributed a small part to the making of each

individual item, that is, technical division of labour: see Table 8.8. This did not relate to the nature of the product.

Table 8.8 Children's constructions of division of labour

school	age in years						total
	4-5		7-8		10-11		
	A	B	A	B	A	B	
each person makes one product from start to finish	1	2	5	0	0	0	8
as above, but distinct packers and deliverers	0	0	0	2	1	0	3
each person contributes a small part to each item	0	1	1	5	5	7	19
unclear	2	3	0	0	1	0	6
<i>N</i>	3	6	6	7	7	7	36

This is the distinction which Adam Smith (1776/1970) made between the traditional individual making pins, who carried out all the processes involved, and the division of pin-making into eighteen distinct operations each carried out by a different person. The contrast is illustrated in two imaginary chocolate factories: Charlotte (f/8.08/B) suggested that each worker would be involved in making a different kind of chocolate (milk, dark, Galaxy) while her class mate Heidi (f/8.05/B) identified jobs for different workers crushing the cocoa beans, making sugar, mixing, icing, putting the filling in, tasting, packing, and checking the final product.

Many of the younger children, especially in School A, said that each worker was responsible for making a whole product. Thus Enrico (m/7.08/A) explained that some people would make chairs while others made curtains, cupboards or computers; a worker making a chair would do the job from start to finish, though someone else might finish it if the first worker had time off.

The proposed use of machinery sometimes led children to talk in terms of technical division of labour as each machine was described as performing one small specialised task, such as putting the filling in the chocolates. However,

Sitara (f/8.00/A) described a machine which only carried out a single task, making collars, but nevertheless suggested that each worker make a whole garment, arguing that everyone in her factory should take a turn on the collar machine, in order to be fair.

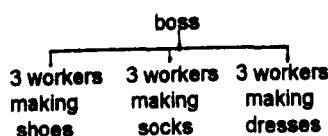
Most of the 7-8 year olds in School B and the majority of 10-11 year olds in both schools described technical division of labour. In contrast, five of the 7-8 year olds in School A proposed each worker make a whole product. The factor distinguishing this group is that none of them claimed to have visited a factory, and only one to have seen one on television (in a Superman film in which the story appears to have been of greater interest than the factory); in contrast, those children who proposed technical division of labour all said they had seen factories, either in reality or in the media.

Hierarchical structure

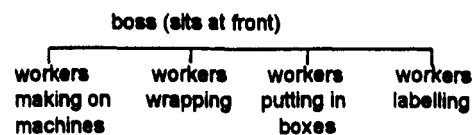
As well as a dividing up the tasks of manufacture, most children proposed some sort of hierarchical structure. Examples are shown on Figure 8.1. The design of the interview tended to lead children towards proposing a hierarchy with at least two levels; they were positioned as in charge of the factory and were responsible for making the decisions. Not surprisingly then, just over half the children described two level hierarchies: boss and workers.

Figure 8.1: Children's constructions of factory hierarchies

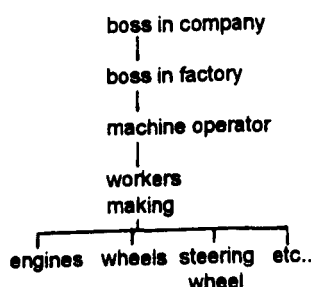
Claire: f/5.02/B)



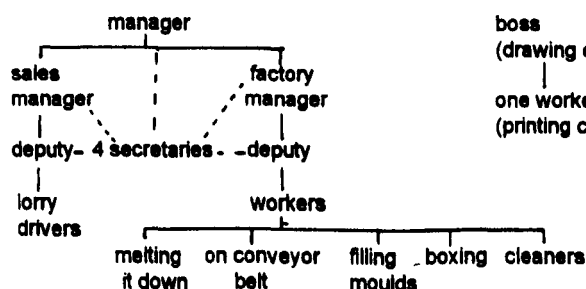
Tarquin: m/5.07/B



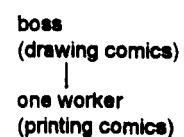
Gary: m/7.10/A



Mahmud: m/11.00/A



Neil: m/11.00/A)



Organisations in which there was no hierarchy were described by five of the 4-5 year olds, either because they thought they would work alone (e.g. Leila: f/5.03/A) or because they did not take any of the possible roles of a boss (e.g. recruiting and paying workers, giving orders and checking work). Very limited hierarchies were proposed by a further seven children across the age groups who said that they would pay the workers, but in all other respects would do the same tasks as they did. Of these, the 10-11 year olds were both children whose parents were unemployed.

Hierarchies with more than two levels were constructed by seven children (two 7-8 year olds and five 10-11 year olds, including children from each school). Most of them proposed deputy or departmental managers. Two boys talked of a boss outside the factory, thus creating four level hierarchies: Gary (m/7.10/A) said his car factory would be part of a large firm which also ran salesrooms; thus he would have a manager elsewhere. Chris (m/11.06/B) described himself as owner rather than manager:

Although I'd be the owner of the factory, I wouldn't particularly like to sit there all day so I'd get a person to be the head of the factory ... to just decide how many they're gonna make... to check up on and see what they're doing ... I might come in say for a bit and see how it's going and tell, if the head of it .. if he's doing something which isn't slightly right I might say, no, I want this ...

Of these seven children proposing more complex hierarchies, two had parents working in large organisations (an oil company, the BBC), and another two had parents who ran their own businesses.

The organisation of work in the school may have served as a model for the hierarchies proposed. Mahmud (m/11.00/A) referred to sessions with a student teacher about adult work in the school in relation to the complex hierarchy he described (see Figure 8.1). Emler, Ohana and Moscovici (1987) found that eleven year olds recognised that there is a hierarchy in the school and that teachers are subject to the authority of others.

Technology

The vast majority of children said that there would be tools or machinery in their factories. The younger children either suggested using familiar tools: for example, a stapler to make dolls (Julie f/5.01/A), a hammer to make chairs (Darren m/5.07/A), a potato masher to smash up the cocoa beans (Heidi f/8.05/B); or proposed that machines could be brought in to do jobs which they could not see any way to do: for example, make the moulded sole of a shoe (Claire f/5.02/B), or make sausages and tagliatelle (Sinead f/5.03/B). A few children talked about machines with multiple functions:

a machine that could do chocolates and bricks and put the tables together
(Samantha: f/7.10/A)

Machines were said to save effort, time and possibly money. Tom (m/8.08/B), who had decided to mass produce a kind of fibre optic toy which his father had invented, said that machines were needed: *'cos I couldn't have my dad making thousands of them every day'*. Marcus (m/8.06/B) also said that using machines is quicker than working by hand, but he thought that the machines would be more costly than employing people. Chris (m/11.06/B), in contrast, argued that it would be cheaper to use machines:

There are lots of people out of work but I'd try to get a lot less people to work. I'd try to get more machines working 'cos they cost less and they're more efficient. They could probably do the job quicker.

All the children said that people were needed to work with machines, to turn them on and off, and make sure they were operating correctly; no-one suggested a factory run entirely by robots. In discussing the relationship between what the machine did and what the person did, children came up with two distinct patterns. Some had the idea of a production belt transporting the product to locations where specific work was carried out by workers. This idea often seemed to be based on car factories on television: Gary (m/8.10/A) explained that:

[you] put the cars on a sort of railway and you use it [machinery] to make the car go along ... some [workers] will put in the wheels, some will put in the engine.

Daniel (m/5.05/B) had a similar idea:

put them on the thing that runs along and runs them out the other end ...you know what I mean, when me and daddy go to the airport we have a something when they have a screen and they have an X-ray of your luggage.

An alternative scenario was proposed by Marcus (m/8.06/B) and Chris (m/11.06/B): they both said that machines would do the work, while the workers would move the product from one machine or moving belt to the next.

While the majority of children said that there would be some machinery, some also saw technology as having drawbacks. This was particularly common among the girls in School B, three of whom said they would prefer not to have machines. If a machine were to break down, *'you're in trouble 'cos it stops the whole working process'* (Morwenna f/11.04/B). Heidi (f/8.05/B) implied that machines would reduce the quality of the end product when she rejected them saying, *'I like real chocolate'*. Four children associated machinery with danger:

You have to be choosy with your machines 'cos some machines have different things in 'em and it could be quite lethal. (Jackie f/11.01/A)

... all machines are dangerous and like you could get your hand caught in the machine or you could, ugh, it's really disgusting. (Jade f/11.02/B):

It's dangerous ... 'cos I don't know how to stop it. It could hurt you. ... It's too noisy ... It's boring. (Rosie f/11.08/B)

they can get out of control ... they break things and they burst you'd get a damp cloth and put it over as it might go on fire (Joel: m/7.11/B)

One possible source of information about the dangers of machinery was a project about Victorian life referred to by 10-11 year olds in School B; books about the Industrial Revolution generally mention the accidents which occurred with unguarded machinery. Rosie's ideas about danger might have resulted from talk with her father, a lecturer in health and safety, who regularly visited factories.

Pollution was also identified as a problem created by the technology of production; it was mentioned by seven of the thirteen 7-8 and 10-11 year olds in School B.

I wouldn't want my factory to be a pollution. Most pollution books have pictures of factories in them because of the steam and smoke that comes out of them. (Heidi: f/8.05/B)

We'd seen some [factories] on video ... about factories and smoke and wild life and smoke going up in the air and chemicals and acid rain falling down ... It will kill wild life. (Joel: m/7.11/B)

It's doubtful I'd want to work in a factory 'cos I think they're dirty and smelly places and smoke coming out. (Andrew: m/11.08/B)

I daren't go near one ... it's polluting the air and I don't like it (Jade: f/11.02/B)

It seemed that the children's ideas about pollution resulted from projects done in school. Children in School B claimed that pollution was the main way in which manufacturing industry had been discussed in class. The combination of projects about pollution and Victorian life appears to have offered these children a particularly negative view of manufacturing industry; however, these topics had not been given such prominence in School A. This can be related to Wiener's (1981) argument that in this country an anti-industrial culture has been encouraged by the curriculum offered to the élite.

Gender of workers

When asked whether the workers would be men or women, twenty-two children (out of twenty-nine asked) said that all jobs would be open to both sexes. This contrasts with the previous findings that children's ideas about jobs are heavily gender-stereotyped (e.g. Nemerowicz, 1979). However, this may result from differences in research methods. Previous studies have asked children to categorise familiar job titles as 'man's job', 'woman's job', or 'can be done by either' (e.g. Adams and Walkerdine, 1986), suggesting that children should say which sex *normally* does each job. In imagining a factory, children were considering the nature of the work rather than job titles. This may have contributed to the more egalitarian responses. Many children supported their decisions by explicitly referring to fairness or equality of opportunity:

I think I'd mix men and women together because it's not fair if I just have men and it's not fair if I just have women. (Natalie: f/8.00/B)

I think that's sexist [having jobs open to only one sex] and there would be black and white people because I think that's racist if people say, oh no you're black you can't come and work here. (Heidi: f/8.05/B)

it would be sexist if you don't have it for both, so have a mix. (Mahmud: /11.00/A)

Three of the 10-11 year old children at School B said that while all jobs would be open to either sex, in practice there would be distinctions. Eleanor (f/11.06/B) argued that some jobs were likely to attract more applicants from one sex:

I don't think women would usually even offer to do like pressing the buttons and stuff [operating machines], some would. Some women would but I think I'd get mostly men working the machines and stacking the boxes and probably the women would want to be the managers.

Morwenna (f/11.04/B) argued that in reality some jobs are dominated by one sex:

My dad's secretary I think is a woman but if men want to do the job they can, I mean I've never actually met a man secretary but -

She also felt that men's physique was better suited for jobs requiring strength:

I suppose for deliveries I'd give it to a man, perhaps ... because they might need to lift them in. If a woman wanted to do it of course they could, but this might sound sexist but they might have to lift heavy things and women could do that but you know - .

Chris (m/11.06/B) was also concerned with the issue of aptitude:

Whoever's best suited for the job. It doesn't matter whether they're men or women. ... But I don't think, if say all the women were best for the job, I don't think I could have all men or all women. I'd have to have - I might have say more women than men, or more men than women, but no way all men or women. Are there particular jobs that men can do better than women or women can do better than men? Oh yeh, I think - I don't know about women. I don't know, they can do knitting I suppose. Sounds really sexist but I can't think of much. But I think one of the things - I can't think of much things that men are better at apart from sports 'cos they're better built for it so - I don't know about women though. ... well I suppose when you've got to be really muscular and things like that when I think men are better, but I think with things that are more perhaps detailed and need more thinking into it and more, like, I think women would probably be better.

Seven of the twenty-nine children who talked about the gender of workers said that they would prefer one sex for particular jobs. For two children this was simply personal preference: Toby (m/5.07/B) preferred men and Sinead (f/5.03/B) women: '*because I do like boys but I like women*'. Sitara (f/8.00/A) said that she would have mostly men because:

Womans have to look after babies so if they haven't got no babies I'd rather take them, but if they have, they have got it, oh no, we wouldn't be taking them.

Enrico (m/7.08/A) and Lucy (f/8.06/B) both said they would prefer women for sewing (curtains and teddy bears). Tracy (f/10.07/A) said she would want only women as cleaners, and Shuel (m/11.00/A) said:

the women should stay in the office ... mostly there's women in offices

These ideas reflect the children's real life experiences in which women are more likely to sew, work in offices and clean. The responses do not show any pattern by school or gender of child. However, a slightly higher proportion of those specifying one sex for certain jobs had mothers doing full-time household work; this may be related to the suggestion that those whose mothers are in employment are less rigid in sex-stereotyping (Robb, 1981; Urberg, 1982; Zuckerman and Sayre, 1982; Davies, 1987).

Pay differentials

All the 7-8 and 10-11 year old children who proposed to have workers expected to pay them. Most 4-5 year olds either failed to mention pay or described an individual enterprise; only two children said that they would pay workers, and another two said they would not do so. Many of the children had difficulty in seeing where the money to pay the workers would come from; Appendix H analyses their constructions of the flow of money between institutions. Here I will focus on children's constructions of pay differentials.

Of the 7-8 and 10-11 year olds, five children said that all workers would receive the same rate of pay (on grounds of fairness or preventing arguments), while eighteen proposed pay differentials. The most complex arrangements were described by Mahmud (m/11.00/A):

I'd pay the cleaners the least, and then the people that work the conveyor belts second least, and then the people that do the moulds, pay the same as the people that work the conveyor belts, and then pay the same for people that box up, pay more money to the managers, more to the one that's in charge of the factory and less to the one that's in charge of the trucks, and the people that drive the trucks I'd pay them third least. Deputy manager I'd pay fourth least and anyone that's left, well, I'd pay -

Chris (m/11.06/B) implied that existing pay differentials should be maintained if he was to attract workers:

I'd have a look at some other factories and see what they did then take an average from all of them

Table 8.9 Pay differentials in an imaginary factory

	age in years		school		total
	7-8	10-11	A	B	
same pay for all	3	2	2	3	5
different pay depending on:					
* effort put in or output achieved	3	0	1	2	3
* how much work job involves or complexity of work	4	6	3	7	10
* how boring job is (more boring = more pay)	0	1	0	1	1
* degree of responsibility for end-product	0	4	2	2	4
* position in hierarchy	1	5	3	3	6
N	11	12	9	14	23

Note: none of the 4-5 year olds talked about pay differentials.

The reasons given for paying some workers more than others are set out in Table 8.9 by age and by school attended. The older children emphasised hierarchy and responsibility for the end-product more than the younger children, mainly because they had created factories in which there were hierarchies and more responsible positions. Only six children suggested that the managers should be paid more for being in charge; this reflects the number of children who proposed three level hierarchies, and therefore had to consider whether to pay departmental managers and deputies more than other workers. Workers said to be responsible for the end-product are those whose mistakes could ruin the whole product:

They get paid differently for the different jobs ... the person who puts them [toy cars] in the first machine for the base, they have to put them in the right order so if they put them in the wrong order then the car would end up in this sort of completely weird position, so that would be quite important that all the little bits have got to be in the right order. (Jade: f/11.02/B)

Dahlberg *et al.* (1987) found that middle class children were more likely to refer to hierarchy as justification for higher pay, while working class children referred to more work, longer hours etc.; this was not evident in these interviews.

However, this may be to some extent related to research methods used; Dahlberg

et al. asked children to arrange a list of job titles in order of pay, whereas in this study children were asked to make a decision, as manager, about which work deserved more money.

The most frequent reason for pay differentials was that some jobs were harder than others: this was a particularly common explanation among the children at School B. Harder jobs included:

the packing ones because they have to do a lot of jobs because they come quickly and they have to keep packing and packing and packing. (Tom: m/8.08/B)

curtains are hard 'cos you've got to sew for a long time (Enrico: m/7.08/A)

mixing would get more because all the wrapper has to do - the machine does the wrapping - all they've gotta do is check. (Morwenna: f/11.04/B)

Another 'easier' job which deserved less pay was colouring in the cartoons in comics (Sharon: f/10.08/A); this follows logically from the view that colouring in at school was probably not work (see Chapter 6).

The nature of factory work

Here I will consider responses concerning skills needed and the satisfactions of working in a factory. Children's ideas about the nature of work related to the sort of division of labour they envisaged (see earlier discussion). Eleven of the children suggested workers might exchange jobs, which indicates that they did not think factory jobs required specialised skills, or believe these are easily acquired. Similarly, Dahlberg *et al.* (1987) found that eight year olds consider that interchange is possible even between skilled jobs, and those at very different levels in the hierarchy. In their imaginary factories, eight children suggested that workers could exchange roles when they became bored, so long as permission was given, and/or there was another worker willing to exchange; Shuel (m/11.00/A) went further, saying that workers could choose each week which job they would prefer. Only three children (all 10-11 year olds in School B) said that it would be necessary to review the workers' qualifications or skills before allowing an exchange to take place, while Eleanor (f/11.06/B) was the only one to rule out the idea of workers exchanging jobs:

No, 'cos they have to get special training and stuff for that particular job ... they can't just swap jobs, they have to keep on with their job or leave because they've got their qualifications in their area.

I asked a variety of questions about the work satisfactions (or otherwise) of the factory workers depending on the immediate context in the conversation: 'Do you think the workers will enjoy working with machines?' 'Will the workers get along with each other?' 'Will they enjoy working in your factory?'. These questions were different from those concerning work satisfactions in other contexts, in that the children were positioned as boss of the factory rather than as workers:

I don't know [whether the workers will like it] 'cos it's not me (Lucy: f/8.06/B)

Some positioned themselves as 'hard' bosses; others as rather more kindly; this was to some extent (but not exclusively) a male/female dichotomy:

They better like it ... I'd just say, tough. If you want to quit you can quit, I'll get another worker. (Mahmud: m/11.00/A).

I hope they would [like it]. I'll try and be nice to them. (Heidi: f/8.05/B)

Table 8.10 Job satisfactions and dissatisfactions for workers in a factory

	age in years		school		total
	7-8	10-11	A	B	
<i>satisfactions</i>					
pay	4	0	3	1	4
fun	3	3	4	2	6
freedom to change jobs	0	2	2	0	2
social	1	0	0	1	1
machines make it less hard	0	1	0	1	1
total mentioning work satisfactions	7	6	8	5	13
<i>dissatisfactions</i>					
boring work	1	5	1	5	6
dangerous	0	4	0	4	4
dirty	0	4	1	3	4
workers may quarrel	3	0	1	2	3
smelly	0	2	0	2	2
tiring	2	0	2	0	2
noisy	0	1	0	1	1
being told what to do	0	1	1	0	1
total mentioning work dissatisfactions	4	11	4	11	15
<i>N</i>	9	13	9	13	22

Table 8.10 shows the various work satisfactions and dissatisfactions which children mentioned. It shows that older children and those in School B were far more likely to identify dissatisfactions. Most striking was the difference between schools: of those who talked about satisfactions/dissatisfactions of working in a factory, 89% of children in School A (working class) identified satisfactions, and only 38% in School B (middle class). But dissatisfactions were identified by only 44% in School A, but by 85% in School B.

Work satisfactions included pay, though children generally saw this as a compensation for the more negative aspects of factory work:

Yeh, yeh, they would be happy, but they'll only be happy if they are getting the money (Hassan: m/8.05/A)

Sitara (f/8.00/A) said that if workers were unhappy, she would comfort them by reminding them of their pay:

If they were sad and have got some problems and that they hate that man and don't want to marry them and her mum and dad say you have to marry it ... well don't cry, I'm going to say, it doesn't matter, at least you are working and you can get more money then you can be rich. If you are tired you can buy shoes, you can buy lots of more things.

Samantha (f/7.10/A) drew on talk with her uncle about his factory work: *'he told me what fun it was'*. Sharon (f/10.08/A) said that most people like working with machines, and Mei (f/8.02/A) thought that it would be fun.

Negative aspects of working in a factory included smell, noise, pollution and danger, and working for long hours, doing tiring and repetitive work:

you've got to go whole day making this ... till it's dark and you can eat. When it's dinner time you can eat but you have to carry on afterwards and finish (Sitara: f/8.00/A)

it's not very fun just putting things in machines (Jade: f/11.02/B)

Although the people who just move one things to another, it doesn't seem like very hard work, but really it must be very boring just moving one thing to another so it would be quite hard work really. It's not hard work in, like you're not using ... you're not really trying at anything, you just move it, but it'd get quite boring.
(Chris: m/11.06/B)

Three children in School B suggested that people do factory work because they do not have any alternative (i.e. they have an instrumental orientation to work:

Goldthorpe *et al.*, 1968):

they might have just done it 'cos they might not have been able to get another job, and this might have been the job they were most likely to get. (Chris: m/11.06/B)

I think that people just do it 'cos they can't find another job ... they haven't got qualifications. (Eleanor: f/11.06/B)

There was thus a tendency for the middle class children to be more concerned that the work did not offer intrinsic satisfaction, while the working class children either thought it was intrinsically satisfying, or saw the extrinsic rewards as adequate compensation.

Constructions of factory management

In Chapter 5 it was suggested that that some working class children may have found the role of boss harder to take on than middle class children, as it lay further from their experience. Here I examine what they actually said they would do as boss. While I did not ask directly about work satisfactions and dissatisfactions for the boss, some children referred to these: for example, Eleanor (f/11.06/B) said:

I think the managers would quite enjoy it, being in charge.

Table 8.11 Work roles of the boss in the factory (roles suggested by 5 or more children)

	age in years			school		total
	4-5	7-8	10-11	A	B	
finance	1	5	10	3	13	16
checking	1	7	7	4	11	15
tell workers what to do	2	4	8	7	7	14
sack people	0	3	10	6	7	13
same as workers	3	4	3	4	6	10
paperwork, lists	0	3	3	4	2	6
N	7	13	14	14	20	34

During the interview, children were asked what work they would do, as factory manager. Table 8.11 shows the different roles suggested; it does not include hiring and paying workers, obtaining raw materials, and advertising and selling

products as these were generally prompted by me. However, this was not always the case: Toby's (m/5.07/B) first suggestion for his water pistol factory was:

you'd have to get it on the telly first 'cos people know where to buy it and how much it costs

Table 8.11 shows that older children identified many more functions of a boss than younger ones, and children in School B more than children in School A. Children in School B were more likely to emphasise **dealing with money**. A high proportion of these children had parents who were self-employed, or had management roles (though I do not have equivalent information for all parents):

I'd be sorting out the money and looking for, umm, seeing the work that they've done, seeing how much they could get paid in a week. (Joel: m/7.11/B)

I'd like to sort out all the bills, well my secretary will do that, but if I don't have a secretary I'd sort out all the bills, make deals with other companies and things like that. (Louis: m/11.07/B)

Checking the quality of the product and/or the workers' input was frequently suggested: again this was much more common in School B:

I'd have to look at all the people that are making it ... see if they do it wrong or right (Elsa: f/5.01/A)

I'd be doing like, let me taste that chocolate I just need to see, or, look there's a gap in that chocolate you can push it down a bit, and stuff like that. And I'd be at the end where all the chocolates come out and I'd look at the chocolates to see if there were any gaps. (Heidi: f/8.05/B)

The boss was also said to **tell the workers what to do**:

I'll say, start to work. (Chloe: f/4.11/B)

I'll tell the secretary to tell them [what to do] (Tracy: f/10.07/A)

I think I might give the orders for them what to do and where to deliver them. (Shuel: m/11.00/A)

It seemed that the workers were to be offered very little autonomy. The phrase 'tell someone what to do' is ambiguous; it can mean 'give orders' or it can mean 'instruct' or 'teach'. In schools the latter meaning is common. Some of the children used it to mean that they would train workers:

How are the workers going to know what to do?
I'll just tell them.
So, say I've come to work in your factory, what will you say to me?
I'll tell you how to make, work on the machines. (Enrico: m/7.08/A)

Dahlberg *et al.* (1987) distinguished between 'telling what to do', or the hierarchical function of a boss, and training, or the meritocratic function of the boss. They assumed that 'tell what to do' always implies 'give orders'; this seems a doubtful interpretation. Thus they distinguished between children who said that the boss tells workers what to do and those who said that the boss trains workers, yet these two functions are not incompatible. Only one child in these interviews used the word 'training':

well I wouldn't give them training personally, I would get people who already had trained for that particular job. I don't think I'd train them to do something but I would like, give them a sort of crash course before they started the job to make sure they were all right at it. (Eleanor: f/11.06/B)

Children in both schools mentioned **sacking workers**. Dahlberg *et al.* found that this suggestion was made more often by working class children: I found no difference between schools. Reasons for sacking included stealing, violence, poor work, absenteeism and demanding more pay:

sometimes I have to sack them and not pay them ... sometimes they do find out where people keep their money and they nick money ... or they're not very good at making things or they don't wear gloves. (Heidi: f/8.05/B)

[I'd] probably have to be polite to them and not shout at them, and say, [shouts] do this now. I wouldn't speak like that, I'd be, you know, a proper way. If they kept making mistakes or squashing the chocolate or sweets I'd probably tell them off and might give them the sack. Or if they don't turn up I'd probably give them the sack and give the job to someone else who can turn up. (Andrew: m/11.08/B)

Jade argued that workers might want to be sacked:

*if they get bored and they really don't want to do it and they just had to do it because they needed the money they probably wouldn't do it very well 'cos they'd be bored of it.
So what would you do about that?
sack them ... they probably want to be sacked anyway if they didn't really like it*

Few of the children expected to have any difficulty filling the vacancies created by sacking workers; Tracy (f/10.07/A) suggested recruiting in other countries where there are more people.

Children listed on Table 8.11 as saying that the boss would **do the same as the workers** included three who identified no specific functions for the boss. The others said that while part of their time would be occupied with managerial functions, they would also make things.

The boss has to **keep lists** of things needed (Hassan: m/8.05/A); things being made (Lucy: f/8.06/B); and work to be done (Gary: m/7.10/A). Mahmud's (m/11.00/A) ideas about paperwork reflected his earlier comments about his father's work running a launderette:

I'd have to do all the paperwork. Filling in the forms on how much I'd got. Making sure that all of them get the right money.

Two girls mentioned **dealing with complaints**:

the people who buy the toys and they complain to the shop and the shopkeeper complain to me (Rosie: f/11.08/B)

In describing the role of a boss, several of the younger children in both schools seemed to be drawing on their experience of authority figures in the school:

You would be at the front ... you would sit in a big chair and you wouldn't help (Tarquin: m/5.07/B)

My job is to sort things out, like if they had sort of fights and things like that (Natalie: f/8.00/B)

Tell them when they gotta have their lunch break (Enrico: m/7.08/A)

Natalie (f/8.00/B) and Sitara (f/8.00/A) both said they would stop fights; Sitara also planned to keep a list of the workers who had had their turn on the collar machine, so that there would not be disputes about whose turn was next. Tracy (f/10.07/A) planned to sit in her office at her desk and wait, while her secretary would deal with orders and despatch, tell workers what to do, and deal with the money. Here she was perhaps drawing on her perceptions of the roles of Headteacher and secretary; School A's secretary appeared so prominent that Sitara (f/8.00/A) described her as '*a second head teacher*'.

Thus it could be argued that children saw the role of the boss as 'adult' (autonomous, controlling, powerful) in contrast with the workers, who were seen as 'children' (controlled, alienated from their work, not having fun). Emler (1992) found that children's representations of formal authority were linked to the particular form of school organisation that they had experienced. Children in traditional schools described a rigid hierarchy in which social relations are based on obedience to those higher up in the hierarchy. But children in experimental

schools claimed that influence could also be exerted by those at the bottom of the hierarchy, and that the functioning of the organisation involved consensus achieved through negotiation. In my interviews, few children suggested that the factory workers could have any influence on the running of the factory; exceptions were those children referred to earlier who said that it might be possible for workers to swap jobs or to choose which job to do each week.

Discussion

In comparison with future jobs, factory workers were seen as having much less autonomy, and fewer intrinsic rewards. Constructions of factory work resembled those of school work: it was seen as alienated, controlled by others, hard, and generally not much fun.

Children used a wide range of resources in their accounts of imaginary factories. These included both the resources they specifically identified: information about factories taken from visits and from family talk, television, books, and the school curriculum; and the resources of everyday knowledge in their communities, schools and homes. Among these latter adults in school often seemed to be a model for children's accounts of hierarchy and the role of a boss; children's own work at school may also have served as a model from which ideas about compulsion and lack of autonomy in factory work were drawn. The family work arrangements may have been used in children's ideas about how people get jobs. It is clear that talk in the home must be an important resource, but extremely difficult to demonstrate how it was used. There appeared to be considerable differences in general knowledge of production and employment which may have derived from talk in the home.

The most striking differences between children were between those of different ages. It appeared that the youngest children had very limited information on which to draw, and that as they grow older they accumulate a wider range of experiences. However, there were also differences between the constructions of children of the same ages. Some of the differences found were between the

children in the two schools, with intakes from different social class backgrounds. Developmental theorists have interpreted such differences as a developmental lag by working class children in comparison with middle class children. I have argued that such differences can be explained by examining the resources that they were able to draw on.

While children drew on a wide range of resources, their accounts also demonstrated a considerable amount of speculation and imaginative thinking. Some children seemed to be much more willing to engage in such speculation than others. This aspect of construction will be considered in the next chapter.

CHAPTER 9

Processes of construction

In the last three chapters I have examined the children's constructions of work in various contexts and pointed out differences in construction and in resources drawn on in each context. In this chapter I consider the processes involved. Some children explained how they had constructed imaginary factories:

So how do you know all this about factories?

Well, I don't really, I'm sort of guessing, basically.

Good guessing though.

Well, I've watched TV programmes ... and books, and maybe the newspaper ... we've done sort of projects like machinery ... I visited a cotton factory ...

So, a bit from school, a bit from books, a bit from television?

Yes, bits from everything I think, and the rest was sort of thinking what you would do.

(Eleanor: 11.06/B)

So how do you know all this about factories?

I don't, that's what I said. I don't. I just, like with the shares bit I was thinking about it and I was taking it, because I know my grandma, she's got shares in a petrol station or whatever, and I know what happens there, so I just take a bit from each thing that I know and put it all together. (Chris: 11.06/B)

The focus of this chapter is then, how children '*take a bit from each thing ... and put it all together*'; that is, the way experiential resources are drawn on and used in constructions. I will argue that the process of construction should not be viewed simply in terms of logical thought, but also in terms of imagination, fantasy and desire.

Resources

I have already categorised and illustrated resources drawn on in constructions of each context; here I consider the totality of resources drawn on by particular individuals in constructing adult work. The range of resources children referred to varied enormously. Table 9.1 sets out the resources explicitly referred to by six children. These children cannot be regarded as typical, or as representative of the

whole group. They have been chosen across schools, age groups and genders, and include children whose parents had differing work arrangements. Jimmy (m/5.10/A), David (m/5.05/B), Heidi (f/8.05/B) and Chris (m/11.06/B) each had at least one parent in employment. Heidi's father was self-employed; both her parents did voluntary work, as did Chris's mother. Both adults in Samantha's (f/7.10/A) house did casual work from time to time, but were often not working. David's father was a student. Both Nicky's (m/11.00/A) parents were unemployed. I have presented this data as comparisons between pairs of children in the same age group merely for convenience as it was not possible to include all the data on a single table.

Table 9.1 Resources explicitly drawn on by individual in constructions of adult work

a) 4-5 year olds

	<i>Jimmy (School A)</i>	<i>Daniel (School B)</i>
<u>own activities</u> <i>hobbies, work, etc.</i>	<ul style="list-style-type: none">• going to Kentucky Fried Chicken;• having a bank account;• use of Superglue;• shopping;• playing at being a pop star with his microphone and guitar;• cooking toast;• visit to nanny in Newcastle;• boat trip to London Bridge.	<ul style="list-style-type: none">• cooking with father;• buying things and getting change;• visit to a mint? in Germany;• unwrapping and eating Opal Fruits.
<u>family work</u> <i>visit</i>	<ul style="list-style-type: none">• father's work as a daddy, parents' housework.	<ul style="list-style-type: none">• father's work as a daddy;• visit to school where mother teaches;• visit to college where father is a student;• seeing both parents working at home.
<i>talk</i>	<ul style="list-style-type: none">• talk with father about his work fixing brakes on trains;• father's working hours.	
<u>community</u>	<ul style="list-style-type: none">• observing builders.	<ul style="list-style-type: none">• delivery vans and arrangement of goods in shop;• fresh pasta shops;• X-ray machine in airport.
<u>media</u>	<ul style="list-style-type: none">• pop stars - Michael Jackson.	<ul style="list-style-type: none">• Tricycle Theatre - play about pollution;• story book about robots fixing things.
<u>other</u>		<ul style="list-style-type: none">• apple tree in garden;• talk about payment for work.

b) 7-8 year olds

	<i>Samantha (School A)</i>	<i>Heidi (School B)</i>
<u>own activities</u> <i>hobbies, work, etc.</i>	<ul style="list-style-type: none"> • playing doctors and nurses, having a nurse's outfit; • getting pocket money. 	<ul style="list-style-type: none"> • savings in bank and PO; • painting, drawing, art classes; • jumble sales; • cooking; • making pottery at classes; • shopping and change.
<u>family work</u> <i>visit</i>	<ul style="list-style-type: none"> • spending time in back of pub where mother worked in bar; • visiting factory where uncle worked (a long time ago); 	<ul style="list-style-type: none"> • visits to brother's workplace (health food shop); • seeing father work at home on his computer;
<i>talk</i>	<ul style="list-style-type: none"> • talk with uncle re his factory work; • mother's talk re plans to get another job in a pub in order to save up for a family holiday; • talk re mother's boyfriend's occasional work as a house painter. 	<ul style="list-style-type: none"> • talk about brother's work in health food shop; • talk re brothers' careers after University; • talk with father re his work as a self-employed business consultant; • talk with mother re her work for a charity; • parents' voluntary work as school governors; • father going to do voluntary work at local Community Centre.
<u>community</u>	<ul style="list-style-type: none"> • nurse at doctor's surgery handing out the medicines 	<ul style="list-style-type: none"> • shops where paintings are sold; • uniform worn by Macdonalds' workers.
<u>school</u> <i>curriculum</i> <i>teacher's work</i>		<ul style="list-style-type: none"> • project on pollution; • teacher's discipline style (I'll give you three chances; being fair to avoid fights).
<u>media</u>		<ul style="list-style-type: none"> • Yellow Pages; • advertisements in magazines; • books, fact and fiction, about factories and pollution; • television news items about pollution
<u>other</u>		<ul style="list-style-type: none"> • friends of parents who make a living as artists; • talk about Council; • family talk about homelessness and problems of getting a job if you are homeless; • talk about sexism and racism; • talk about water charges; • giving to charity.

c) 10-11 year olds

	Nicky (School A)	Chris (School B)
<u>own activities</u> <i>hobbies etc.</i>		<ul style="list-style-type: none"> • experience of playing basketball almost every day; • talk with other basketball players, specifically those who were older and play for clubs; • knowledge of popular music; • visits to United States where more information re careers in basketball is available.
<u>family work</u> <i>visit</i>		<ul style="list-style-type: none"> • regular visits to father's and brother's workplaces (a radio station and a record company); • talk with other people in father's and brother's workplaces;
<i>talk</i>		<ul style="list-style-type: none"> • what other people (unspecified) say re household work; • talk with father and brother re their activities at work; • talk with brother's girlfriend about her job in the record company; • talk re hierarchy/promotion at father's work • memory and/or talk re father's hours of work and how they have changed; • talk over several years about brother's education, job-seeking and interviews; • talk with mother re her voluntary work; • experience of 'messing around' with equipment in brother's recording studio;
<i>participation</i>		
<u>school</u> <i>curriculum</i>	<ul style="list-style-type: none"> • talk with other children in the class who had visited a magazine distribution warehouse; 	<ul style="list-style-type: none"> • video about chocolate production;
<i>teacher's work</i>		<ul style="list-style-type: none"> • hierarchy and division of labour in the school;
<u>media</u>	<ul style="list-style-type: none"> • newspapers containing job advertisements; 	<ul style="list-style-type: none"> • television and books re basketball; • American football cards; • books, fact and fiction, re production processes; • television news re factories, unemployment, technology etc.; • television and newspaper advertisements;
<u>other</u>	<ul style="list-style-type: none"> • possible talk with someone about being a bank manager. 	<ul style="list-style-type: none"> • talk with grandmother re her investments; • experience of, and probably family talk about advertisements, copyright, company names etc.; • possible family talk re factories, unemployment, technology, mortgages etc.

Older children, having lived longer, might be expected to have a wider range of experiential resources to draw on, and this was generally so. However, the range and variety of resources drawn on did not necessarily relate to age, as can be seen by comparing Jimmy (m/5.10/A) and Nicky (m/11.00/A). Younger children often made very ingenious use of the experiences they had had: for example, Jimmy's suggestion of using '*loads of packets of Superglue*' to stick bricks together and David's recall of the moving belt through the X ray machine in the airport in his account of factory production.

There was also a contrast between resources drawn on by children in the two schools; those in School B generally referred more extensively to hobbies and places visited on outings and holidays, to the school, the media, and to talk. There seem to be a number of factors involved here. The first relates to Pahl's contrast between work-rich and work-starved households (see Chapter 4). I want to focus particularly on the contrast between Chris and Nicky here, not because they are typical, but rather because they represent the extremes of the spectrum of experience which I am considering. Using Pahl's (1988) terms (see Chapter 4 for his definitions), Chris's household could be described as 'work-rich'; he lived with four adults, three of whom were employed full-time, and one who did household and voluntary work. In contrast Nicky lived in a household which was 'work-starved', consisting of two adults who had not been in employment for many years, and three children at school. In my sample, work-rich households (those with at least two adults working) were far more common in School B; 79% of the 7-8 and 10-11 year olds in School B came from work-rich households, but only 31% in School A. (I have not included the 4-5 year olds as their reports about their parents' work were not always entirely clear.) The contrast between the experience of children in work-rich and work-starved households relates not only to their experiences of work (such as family members' employment, DIY, and employment of workers by the household), but also to opportunities to observe work in the local community and beyond. It is likely to be the child in a work-rich household who will go more often to the shops to spend pocket money;

will visit a wider range of shops with parents; go to museums, on outings and holidays; and pursue hobbies and out-of-school classes.

However, these activities are not simply products of being work-rich; they also relate to total family income. Even where School A children had two parents in employment, their opportunities to see work other than that of their parents were limited by the lower incomes received, and possibly also by the council flats in which they lived (offering, for example, limited opportunities for gardening in contrast with the owner occupied houses of School B families).

Both these factors affected Chris and Nicky; Chris lived in a high-income work-rich family, and Nicky in a low-income work-starved family. Thus Chris talked about activities such as visiting various family workplaces, playing basketball, going on holiday to the USA and to France and visiting museums. In contrast, Nicky said that on Saturdays he went to his nan's, and on Sundays he sat at home and played. Other children in School A reported similar patterns of activity. While these patterns of activity relate in part to income, they can also be seen in terms of the particular cultures of the middle class and working class groups. Walkerdine and Lucey (1989), commenting on transcripts of children and mothers talking at home, showed how the middle class mothers felt that they had to exploit educational opportunities wherever possible, turning household activities such as shopping and laundry into educational play. In contrast the working class mothers drew clear guidelines between their work, which took priority, and the time they could then spend playing with their children. Walkerdine and Lucey commented that these differences relate to the social and economic circumstances of the women, but also to 'the way in which these things are cross-cut by their understanding and familiarity with modern accounts of child development' (1989: 83). While I did not observe children and parents together, children's accounts of their leisure time show similar contrasts. It seemed that middle class families in my research felt an obligation to provide educational activities for their children:

when I'm on half term my mum always wants to take me to museums. So I might go to a few museums or galleries or whatever, and come back and say, for a couple of

days and play basketball [with friends in local playground], go to a gallery another couple of days (Chris: m/11.06/B)

The working class culture, on the other hand, prioritised visits to family members. Many of these lived nearby, but others reported that they had travelled to, for example, Newcastle and Birmingham. However, it seemed that the priority was to spend time in the relative's house, rather than to go sight-seeing.

Just as the children's out-of-school time was to some extent structured in terms of their parents' views of development, it was also structured by notions of the need to protect children from the evils of the adult world. This emphasis appears to have become very much more dominant in the last two decades, fuelled by media reports of child abductions. Medrich *et al.* (1982), carrying out large scale research into the out-of-school activities of eleven year olds in the USA nearly twenty years ago, found that most children spent large amounts of time playing with friends in public open spaces; the minority, whose parents were concerned about neighbourhood safety, spent very much more time watching television. Far fewer parents now feel confident to let their children play outside. School A is situated in a notoriously crime-ridden area; so much so that Jimmy (m/5.10/A) had once appeared on the television news talking in a very matter-of-fact way about drug addicts, and the needles and condoms which littered the staircase area of the flats he lived in. It is hardly surprising that many of the children in both schools spent much of their leisure time in their households. But for School A children these were small crowded flats, which were often what Medrich *et al.* called 'total-television households' (1982: 238); that is, the set was turned on whenever people were at home. In contrast, most School B children lived in houses with gardens, and had their own rooms (though these might also be occupied by a television or computer).

These factors, then, combined to offer Chris a wider range of experiential resources on which to draw than Nicky had. However, a second contrast between the two boys is that, even when it appeared that they had had similar experiences (for example, of school or of watching television) Chris drew on these to a greater extent than Nicky did. The same point can also be made about Heidi and

Samantha. Both Heidi and Chris referred to curriculum input and other aspects of school, and to a range of information from television (see Table 9.1). But Samantha and Nicky made few references to school, and none to television. Nicky claimed that he had never seen a factory on television, yet, from what he said, it seemed that he watched a great deal more television than Chris did; he said that when he arrived home from school it was already on, and it stayed on until his parents went to sleep. Samantha, too, apparently watched television for several hours each night; however, she reported:

I just don't watch it [television]. I watch Neighbours and Home and Away, EastEnders and a film, then I go to bed.

It is of course possible that it was only on as background noise and was not watched; however, both children described the programmes they had watched the previous night. It is also possible that the programmes watched by Nicky and Samantha included no work-related content; however, the soaps which Samantha talked about have featured stories about work. In constructions of factories, seventeen children in School B, but only seven in School A, referred to television (see Table 8.1). There are a number of possible explanations for the lack of reference to television:

- Nicky may have been less comfortable and forthcoming in the interview situation;
- Chris may have perceived, or taken in and remembered, more of what went on around him;
- Chris may have seen the relevance of a wider range of experiences to the topic under discussion, transferring learning more effectively by making analogies and applying generalisations.

These are not necessarily alternatives; all these explanations could apply. The interview situation was discussed in Chapter 5; in this chapter I will consider perception and transfer of learning.

Perception

Perception presents a problem to the social constructionist, since the most common way of theorising it involves the assumption that meanings are made in the individual mind. This contrasts with the social constructionist view that meanings are constructed between people. Moreover, it is a process which cannot be observed since it involves input; however, the only *observable* aspect of learning is output or performance (behaviour and talk). Thus it is clearly problematic to suggest that there may be differences between individuals in relation to what they perceive since this can only be demonstrated in relation to what they say or do.

Perception has been investigated and theorised by many philosophers and psychologists. Here I can only briefly draw attention to some of the debates which may be of relevance to the arguments in this thesis. Most theorists have assumed that previous experience determines what we actually perceive in any situation, and that perception involves not simply sensing, but also making sense of what is perceived by fitting it into categories or concepts, or into a narrative (see, for example, comments by Sarbin, 1986; Wells, 1986; and Crites, 1986 discussed in Chapter 3). Willig sums up this view of perception:

it is the memory store that dictates the stimuli we attend to and those we ignore. It governs what we perceive and determines our interpretation of the objects and events observed. (1990: 20).

The implication of assuming that perception involves drawing on the memory-store is that a person with considerable previous experience concerning a particular aspect of the world tends to perceive more in relation to that aspect. This is apparent for example, when I go for a walk with a geologist or a bird watcher who points out a vast array of things which I have totally failed to notice. And as they consistently perceive more than I do in relation to that specific aspect of the world, they build up even more knowledge. The same argument can be applied to children's experiences of work; those children who have already had a wide range of experiences may notice more phenomena relating to work - on

television, in the community, at school, and in conversation. Those who have very little previous experience may be less likely to perceive what is available.

However, as I indicated above, such accounts of perception are problematic for social constructionists. An alternative account used by both Parker (1992) and Shotter (1984) is Gibson's (1979) 'ecological perception'. Gibson suggested that we directly perceive the affordances offered for action by our environments, and claimed that 'one does not need to have ideas about the environment in order to perceive it' (1979: 304). The difficulty with this, according to Harré and Gillett (1994) is that we perceive objects as having certain meanings or significance for us. They draw on the work of Neisser (1976), who suggested that anticipation plays a major role in perception; we anticipate what we will perceive. However, this appears to return to the idea that perception involves a thought process.

While it may be that different children perceive different aspects of their environments, this must remain a matter of speculation; an examination of what they say cannot provide evidence to contribute to this debate.

Transfer of learning

Of more direct concern here is the issue of how previous experience is used, not in perception, but in joint constructions in conversation. This process of bringing previous experience to bear has been referred to as transfer of learning. It can involve both skills and understandings.

I distinguish here between two mechanisms for learning transfer: I will refer to these as analogy and generalisation. Both terms have been used in a variety of senses: De Jong (1989) pointed out that analogy is a 'fuzzy concept'. In this chapter, I use *analogy* to refer to the recognition that certain features of a specific previously experienced situation are similar to a new situation, and the use of this in structuring thinking about the new situation. By *generalisation* I refer to the formation of a general rule which is abstracted from any immediate context (is decontextualised), and applied in specific circumstances. Blyth (1990a, 1990b) refers to these processes as cognate transfer and general transfer.

In Chapter 3, I discussed Lave and Wenger's (1991) assertion that generalisations have limited value in that they can only be formed and used in specific circumstances. In this chapter I consider how the children used analogy and generalisation in their constructions. I will also discuss concept development, another way of describing the process of going beyond the immediate specific situation.

Analogy

This is the type of transfer discussed by Thorndike (1913) where two situations share specific components. According to Meadows (1993), making an analogy involves finding an appropriate source in the memory-store and mapping this on to the current situation, thus producing a new representation of the situation (and possibly, in the process, reconstructing the source or previous experience). Making an analogy may be a step towards forming a general rule.

While Piagetian theory suggests that children cannot use analogy until they reach the formal operations stage and can reason about higher order relations, recent research has shown that children as young as three years can solve analogical problems so long as they have adequate knowledge of the causal principles (Goswami, 1991). Research into analogical thinking has generally involved test items of the form: a is to b as c is to ?. To answer such puzzles correctly only involves a part of the everyday process of analogy: the child has to recognise the similarities in the two situations but is not required to identify previous experience which could be analogous. There has been rather less research into children's spontaneous use of analogy. Hatano and Inagaki (1992) examined the ways in which children who raised goldfish transferred their conceptual learning to other animals; however, the source was assumed to be experience with goldfish. I have not located any research which examines the sources children draw on in creating analogies. Yet, according to Meadows, the effectiveness of children's use of past experience in considering new situations

depends on 'whether that prior experience is thought of, and seen as relevant, at the right moment' (1993: 84).

Analogy seemed to be the most common way in which children drew on their previous experiences during the interviews about work. Some analogies drew on situations which could be seen as almost identical to as the one being discussed: for example, in constructing a factory, Elsa (f/5.01/A) drew almost entirely on a factory she had visited. However, this process was not simply one of recalling and describing, since in the interview she was positioned as factory manager rather than as an observer and thus her experience had to be transformed. Very few children drew on a single experience of a factory in this way; more often they made analogies using experiences which were similar in a particular dimension: e.g. drawing on a car factory in constructing a basketball factory; drawing on cooking at home in constructing a food factory. Some analogies brought together experiences from domains which seemed less closely related: e.g. moving belts in an airport X-ray machine and in a factory, or the processes involved in making pottery and chocolates.

Another type of analogy involved drawing on another text, or intertextuality. Fox's (1993) account of children's story-telling shows how children often draw on other stories which they have heard. Sitara did this several times in her account of a factory. I have already discussed her tendency to make her accounts more dramatic (see Chapter 5). Here she is explaining what happens after the jumpers made in the factory have been sold, and draws on the action of *The Three Pirates* (Griffin Readers: McCullagh, 1959):

Would you pay them to make the jumpers?

Well. First we weren't paying them, and say that we have to give the selling and then you can have how much money you like, like after we have sold them and we get lots of money right, and then put them in sacks and ran and ran and then maybe some and each of them gets the same size, even me, I get the same size. Each of them gets a sack right, three pirates getting the sack, black three pirates ... [tape unclear]...

This analogy, and many others the children made, were acknowledged to be fiction or speculation: '*I just guessed*' (Enrico: m/7.08/A); '*that was just my imagination*' (Tom: m/8.08/B).

Generalisation

This is the type of transfer proposed by Judd (1908): he suggested that learning transfer depended on generality of understanding. The more general the principle, the more likely he thought it that it could be applied to a new problem.

Generalisations may be abstracted from a whole range of previous experience, or may be taught as abstract rules (e.g. in mathematics).

Generalisation is a process which happens all the time in language; labelling phenomena involves the formation of categories, and deciding whether a new example fits a particular category involves application of general rules (e.g. a dog is a small hairy animal that barks). Gick and Holyoak (1987) point out that both overgeneralisation and undergeneralisation are transfer mistakes made by young children. Overgeneralisation involves creating a category which has insufficient restrictions in the rules (e.g. including cats in the category 'dog', perhaps because barking was not included in the original rules). Undergeneralisation involves having an inappropriate restriction in the initial rule (thus the definition of dog set out above might not include Great Danes, which are not small). One might say that the children who thought that apples were made in factories were over-generalising from their knowledge that some goods are manufactured. This type of category formation is a continuing process through adult life; we continually redefine our categories.

Ideas about transfer of learning in the form of generalisation are particularly important in the context of school learning: this has been assumed as 'the central mechanism for bringing school-taught knowledge to bear in life after school' (Lave, 1988: 23). Schools teach skills and understandings which are disembedded from situational contexts (Donaldson, 1978), and children are expected to apply them to out-of-school situations. A number of theorists have cast doubt on whether learning transfer involving generalisation does in fact take place in real life contexts (and specifically, whether the abstract rules/ideas encountered in school are applied in real life settings). Research in this area has largely been concerned with use of mathematical skills, for example, by street children in

Brazil (Carraher *et al*, 1985), by adults shopping in supermarkets (Lave, 1988), or by employees in a dairy (Scribner, 1984). In general it has been found that the mathematical methods taught in school have not been used in everyday settings, and it has been argued that this may be because the desired end-product and the constraints are different. However, this does not necessarily imply that general rules are not used in other aspects of life; transfer of mathematics strategies is very different from categorisation of experiences.

As I showed in Chapter 4, generalisation has been implicitly assumed in many investigations of children's economic understanding. However, questions asked in a generalised form (e.g. Why do people work?') are likely to receive generalised answers (e.g. to earn money) which do not necessarily represent habitual constructions. As I sit at my computer on a Bank Holiday, this answer appears very far from the truth! While the current research was designed to investigate children's constructions of specific contexts and to avoid the elicitation of generalisations, there may be indications in the data that children were or were not drawing on general rules. One way of examining this is to examine constructions in different work contexts; here I examine constructions of payment for work.

I did not attempt to elicit a generalisation; rather the questions relating to payment arose in different contexts which were widely separated in the interview:

- Were the child's parents paid for their work?
- Were adults working in the school paid?
- Did the child expect to be paid for work s/he hoped to do when grown up?
- In setting up an imaginary factory, did the child expect to pay the factory workers or the builders who built the factory?

A limitation of this approach is that payment for work was only discussed in contexts where it does actually occur: I did not introduce any discussion of voluntary work, and did not raise the question of payment for household work. I asked children whether they themselves were paid for their household work but, as all the children recognised, payment in this case is optional. As I have already shown, these questions were not all discussed by every child (particularly among

the 4-5 year olds) but in every interview payment for work arose in more than one context.

Table 9.2 Children's responses concerning payment for work

	age in years			school		total
	4-5	7-8	10-11	A	B	
no connection made between money and work	3	0	0	2	1	3
linked work and pay in some contexts	10	8	4	13	9	22
linked work and pay in all contexts discussed	3	5	10	6	12	18
N	16	13	14	21	22	43

Table 9.2 shows that only three of the youngest children made no links between work and money. Just over half the children stated that work was paid in some, but not all the contexts discussed, and the remainder stated that payment was made in every case. Children in School B (middle class) were more likely to assume payment than those in School A (working class). This contrasts with Tizard and Hughes' (1984) and Walkerdine and Lucey's (1989) conclusions that payment is understood earlier by working class children because it is in their immediate experience. However, my sample includes children from the 'underclass' for whom the relationship between work and money is *not* a part of everyday experience. Those who most readily linked work and pay were the children of self-employed parents, while those least likely to make this connection in all contexts discussed were those whose parents were unemployed or who did not know what work their parents did.

Twenty-two children thought that some areas of work were paid, but were unsure about others. Thus it seems that these children, at least, were not applying a single rule that people are paid for work. However, it did appear that that they were applying a variety of rules or guidelines rather than considering each situation entirely separately.

One rule which some children appeared to operate is that where money visibly changed hands, the worker was paid. Such a rule is evident in the

statement that busdrivers are paid by the passengers (Furth, 1980; Berti and Bombi, 1988), and the belief that while shopkeepers are paid for their work, teachers and doctors are not (Shields and Duveen, 1983). Sitara (f/8.00/A) appeared to be using this rule when she said that as Headteacher, she would attract staff by saying:

Please can you come and we work, you work, we can make tuck shop and play centre and then we'll get more money.

However, where money does not change hands visibly, some children claimed that no payment took place. Thus Sitara explained that her class teacher, who was not involved with the tuck shop or play centre money, was not paid for working in the school, and therefore must have other work outside school:

Mr F, does he work?

Yeh, he sometimes has to go to work because he left school, right, he goes to work, cos he hasn't got no time to do the thingy, school work, so he has to go to do his own work, because he's got two works, so Miss W comes and takes over us.

So what does he do when he goes to his own work?

Well he goes to his own work, I think he does, like, cleaning up, something like that.

Does he get paid for the work he does in this school?

I don't know about that.

What about his other work, does he get paid for that do you think?

Yes.

An extension of this was the assumption that people were only paid when the source of the payment could be identified. Marcus (m/8.06/B) had a clear grasp of payment for work when there was a visible exchange of money, or a known source, but was uncertain whether all the forms of work discussed were paid. He was paid by his parents for cleaning the bath; his parents, both therapists, were paid by their clients. The shopkeeper used the money from the till for his living as well as for change. He was also confident that as factory manager, he would pay the workers, using money acquired from sales. However, when the source of payment was not visible or easy to infer, he was uncertain whether the worker was paid or not (e.g. teachers and policemen).

As children learn more about possible sources of money it appears that they recognise more paid forms of work. Furth indicates the growing attribution of payment to agencies such as the council and the government, mentioned here by Chris (m/11.06/B):

The teachers definitely get paid. The teachers, full-time teachers, deputy head, head. I think they are paid by the governors of London, West Borough of Camden whatever.

While some children recognised payment only when they could identify the source, others who had claimed that particular groups of workers were paid, then constructed theories to explain where the money came from: thus Mei (f/8.02/A) claimed that *'some people say God make them [money] ... he drop it all down'* and Samantha (f/7.10/A) said that she would pay the workers with *'the money they [the workers] gave me to work there'*.

A second guideline which some children appeared to apply related to the nature of the activity. Many children claimed that activities which are pursued as hobbies cannot be paid work. Thus footballers and ballerinas were said not to be paid. While Sinead (f/5.03/B) recognised that most grown-ups are paid for working, and planned to pay the workers in her factory, she said that ballerinas (her occupational preference) were not paid. Similarly some children who wanted to do jobs such as athlete, writer and footballer were unclear about whether these jobs were paid. Even those who said that they were paid occupations were sometimes uncertain about details; for example, are footballers paid when they have lost the match? These difficulties are understandable. The borderline between amateur and professional status varies from one activity to another. These are activities which children and adults pursue as hobbies, and only a few people are paid for doing them. There are also differences in style of payment: an actor may be paid as a member of a company or simply for playing a particular role; sports-people may be paid regularly or paid only when they win; in some cases money is paid into a trust fund.

The nature of the activity also appeared to be a factor in some children's assertions that teachers are not paid; they explained that the majority of teachers' activities are not work. Joseph (m/11.00/A) could only think of one thing his teacher did which he considered to be work: marking. This difficulty in recognising that teachers work may be linked to the idea that working involves

activity (see Chapter 6); teachers frequently sit, read, talk and listen; showing little activity.

Another activity which was distinguished from work by some children was helping; while Tarquin (m/5.07/B) recognised payment for work in several contexts, he said that his factory workers would not be paid because they had come to help him.

It seemed, then, that the children were not forming generalisations as sweeping as those implicit in the developmentalists' questions (see Chapter 4), but were drawing on a range of rules and guidelines which were at times contradictory. It would be interesting to present adults with a range of occupations which may or may not be paid and see how they responded. Possibly they would be more tentative in their decisions, stating where they needed further information. However, the structure of the interview meant that this option was not always open to children; in the factory I had positioned them as decision makers.

Concept development

Concept development is another way of describing the process of going beyond the immediate specific situation; Taba (1967) viewed this as the basic form of cognition, and claimed that all other cognitive processes depend on concept development. Concepts 'allow us to classify and to process incoming information by drawing on our past experiences' (Willig, 1990: 11).

It has been widely suggested by educationalists concerned with the social sciences that it is part of the role of the school to develop children's concepts (e.g. Bruner, 1966; Taba, 1969; Blyth *et al.*, 1976; Elliott, 1976; ILEA, 1980; Wilson, 1984; Ross, 1988b; Willig, 1990). Ross links concept development to transfer of learning:

the proof that the concept has been successfully grasped by the child lies in the way that they use it to help them organise new information. The notion of transferability is important here: the concept is only fully understood if the child can independently recognise the concept's application in a different context. (1988b: 33)

He explains that concepts develop through a process during which children draw on their own experiences to produce a definition of the concept, and then go through a process of examining more and more examples (from their peers and from other groups through direct contact or through the media) and repeatedly redefining the concept to encompass the new information. This is then a process in which a series of analogies produce a generalisation, which is regarded as tentative and is altered in the light of further analogies. Thus if concepts are to develop, children need to have a range of experiences. Concepts may also develop when children encounter situations which challenge or disturb the ideas they already hold (Willig, 1990). This has been particularly influential in science education (Driver, 1983; Osborne and Freyberg, 1985).

An important aspect of concepts is that they include exceptions and boundaries. Thus a concept of payment for work would include unpaid work; contract work; payment by results, and so on. In this way it is rather more complex than a generalisation.

Ross emphasises that:

The concept cannot be acquired through learning a definition; it has to be encountered through a series of examples, and the common threads that help to broaden and define the category have to be noticed, explored and brought together in some discrete statement.' (1988b: 32)

However, many US educators have advocated that economic teaching should start from definitions of concepts (e.g. Laughlin and Odorzynski, 1992; Reinke, 1992; Schug and Lephardt, 1992). Their claims for the success of this procedure lie with the definition of success: being able to provide a 'correct' definition of the concept.

Since concept development involves a process of drawing analogies and generalising, it is not possible to say that a child is drawing on a concept rather than an analogy or generalisation. However, there was one instance when a child referred to a deliberate attempt on the part of a teacher to develop a concept; Mahmud (m/11.00/B) said that one way he knew about factories was from:

Miss McCree, she's a teacher, and she talked to us about the hierarchy and stuff

He was referring here to a student teacher whom I had supervised, so I was able to fill in some of the details. The project was about the school as a workplace; children interviewed adults in the school, and as a result drew diagrams of and wrote about the hierarchical organisation of work. This was a project undertaken with a small group of children; as far as I know, none of the other children interviewed had been in the group.

What sort of thinking is involved in construction?

I have considered the various ways in which the process of bringing experience to bear in a new construction have been described, and how children appeared to be using these processes in their accounts: making analogies, creating and applying rules, drawing on concepts such as hierarchy. In this section I want to consider the nature of the thinking processes involved in doing this.

This may seem somewhat perverse in the light of the arguments presented in Chapter 3 that emphasise the need to focus on interaction and behaviour, and bracket off processes in the mind (e.g. by Potter and Wetherell, 1987; Shotter, 1993a; Potter, 1996). However, Parker (1992) argued that a consequence of the refusal to speculate about what goes on inside the mind is that discourse analysts could be accused of behaviourism (as in Neisser's claim that Potter and his colleagues are 'classic behaviourists': 1992: 451); or alternatively that the undefined space of the mind could be colonised by cognitive conceptions of the individual emphasising rationality.

The question here is not whether it is *accurate* to describe the thinking in children's constructions as rational, but rather, *what sort of reality this produces*. Walkerdine (1984a) argued that it is the discursive practices of developmentalism, with its emphasis on rationality, which produce the developing child and her/his teacher. A discourse which privileged non-rational forms of thinking would, I suggest, produce different curricula and pedagogical practices, and different children and teachers.

However, as Walkerdine pointed out, it is not easy to change discursive practices:

the fixing and sedimentation of [developmental] discursive practices is assured by the administrative practices which produce particular forms of organisation and sociality (1984a: 195)

Davies' (1989) suggestion (made in relation to the dualism of gender categories) that change can be produced by introducing new discourses (which offer different ways of positioning ourselves) is perhaps over-optimistic in view of the complexity of the operation of discourses, and the way in which their power is hidden. Developmental discourse regulates and normalises, but it does not function through overt repression (Walkerdine, 1984a: 196). While it has resulted in the pathologising of certain groups, it has also produced the child-centred pedagogy which has been widely seen as offering possibilities for liberation and change.

Changing discursive practices is particularly difficult in that, as Morss (1996) argues, discourses of the development of rational thinking are hegemonic and suppress alternatives. The focus has been so much on rational thinking that limited attention has been accorded to other kinds of thought; for example, Meadows (1993) acknowledges that her book *The Child as Thinker* is biased towards 'systematic, analytic, evaluative and deliberate cognitive effort', and neglects imaginative and creative thinking, but claims that this reflects both the bias of the literature and the concerns of educational policy makers. Moreover, other modes of thinking have been contrasted unfavourably with rationality; for example, Meadows points out that in both psychology and education imagination has been seen either as 'free and poetic' or as 'irrational, merely fanciful, a pale shadow of reality, deceiving, trivial, useless, something which children do but should be educated out of' (1993: 361), and Donaldson (1992) argued that emotions have been seen as a source of bias and distortion.

One difficulty in considering alternative forms of thinking is that while there are a great many ways of describing thinking (e.g. imagination, feeling, lateral thinking, creativity, narrative thinking, problem solving, desire, fantasy) there are

no generally accepted definitions of these. For example, Barrow (1988) points out that imaginative can be used as a synonym for sensitive, creative, inventive, reflective or whimsical.

Nevertheless, despite all these difficulties, I believe it is worth adding my voice to those which have emphasised modes of thought other than the rational (e.g. Warnock, 1976; Bruner, 1986; Egan, 1986, 1990; Hanson, 1988; Fisher, 1990; Egan and Nadamer, 1992).

In this analysis I start from the idea, discussed in Chapter 3, that narrative thinking can be contrasted with argument and scientific context-free thinking; thus here I will focus on two main dimensions of narrative thinking. Firstly, it is seen as necessarily involving a fictive dimension (Freeman, 1993) which could be described as *imaginative, creative or speculative thinking*. This may be based on experience; Robinson and Hawpe (1986) considered that narratives integrate that which is known and that which is conjectural, thus creating a story which is a 'coherent and plausible account of how and why something happened' (1986: 111). They distinguish this type of context-bound causal thinking in narrative construction from abstract rational thinking. Secondly, narratives involve feelings and *emotions, fantasy and desire*; Labov and Waletzky (1972, 1982) saw the narrator's personal stance as an essential aspect of narrative which they described as 'evaluation'. While these two dimensions are not separate and distinct, I will consider them separately here. These are vast subjects; I can only draw attention to some of the arguments which seem relevant in the context of this thesis.

Imagination, creativity, speculation

Cohen and MacKeith (1991) drew attention to the limited attention paid to imagination by psychologists; they pointed out that neither the *Handbook of Developmental Psychology* (Wolman, 1982) nor *The Oxford Companion to the Mind* (Gregory 1987) have entries under imagination. They argued that one reason for this is that psychology has been anxious to establish itself as a scientific discipline, and that it is very difficult, perhaps impossible, to carry out a

scientific investigation of imagination. This is because of the difficulty of both defining and measuring it. This is illustrated by activities designed to test the overlapping concept of creativity, such as listing different uses for an object such as a brick. While the number of different uses can be measured, questions of which suggestion is the most creative or imaginative are subject to debate: 'unusualness' can be assessed but may rate highly some very bizarre suggestions; appropriateness is hard to assess and tends to revert to rationality (Meadows, 1993). Barrow (1988) argued that imagination must involve both unusualness and effectiveness.

In contrast, philosophers have written much more about imagination. Warnock (1976) has traced some of their debates: for example, she showed how Hume distinguished between perception, which creates 'impressions' in the mind, and a subsequent calling up of related but weaker 'images', which he described as image-making and therefore imaginative. Kant believed that the mind brings ordering principles or concepts to sensory experience, and that imagination is a necessary ingredient of perception. In contrast the phenomenologists (e.g. Merleau-Ponty) believed that perception was a single process not involving imagination; when we perceive an object we perceive it as falling under a concept and having a label. Warnock argues that in the phenomenologists' view, and in Wittgenstein's, there is a thought element which is simultaneous with sensation and involves the relationship between what is seen and previous experience, and that it is:

... both plausible and convenient to give the name 'imagination' to what allows us to go beyond the barely sensory into the intellectual or thought-imbued territory of perception. (1976: 195)

She considers Sartre's insistence that the label imagination should be reserved only for 'the conceiving of the non-existent' (Warnock, 1976: 181), but argues that in his descriptions of perception and memory there is a thought-element which is the same as the one other theorists have called imagination; thus for Warnock:

Forming mental pictures, creating or understanding works of art, understanding the real world in which we live, are all of them to some extent dependent on the *same* mode of thought.' (1976: 183)

In this view it is imagination, rather than a rational search of the memory store, which enables us to make sense of information from the senses, by fitting it into categories or concepts, and by drawing on past experience to create analogies or rules. It is the process by which ideas or images 'leap' into the mind, and, Warnock argued, necessarily involves feelings. From these arguments she concluded that 'the cultivation of imagination should be the chief aim of education' (1976: 9).

This is undoubtedly an unusual view of imagination and one which has been criticised. For example, Egan (1992) rejected it because he considered that imagination involves intentional thought; for him, day-dreams do not involve imagination. Both Egan and Hanson (1988) disagreed with Warnock's assertion that imagination is involved in perception. Hanson (1988) argued that if imagination is a necessary ingredient of all perception, and of all experience, then it is unnecessary to call on education to develop this faculty, since we all perceive and experience the world, and therefore all imagine. However, in the light of the data discussed in this chapter, I tend to agree with Warnock, rather than Hanson. We do all perceive and experience, but some perceive and experience a lot more than others.

Hanson, like Warnock, argued that education should be concerned to develop imagination, but does so on rather different grounds. She drew on the ideas of Sartre, and his claim that imagination is a key to freedom. Thus she claimed that 'imagination is what allows us to envision possibilities in or beyond the actualities in which we are immersed ... it can be a path to personal and social freedom' (1988: 138). However, in her view, imagination can become too detached from reality and cease to be useful; it must be grounded by 'a strong focus on the world and its relevant actual circumstances' (1988: 139). Only then can new possibilities that are *genuinely* possible be imagined.

Here I agree with Hanson; if children are to have a vision of the potentialities of the future which can offer an identity and motivation for current activities, this vision needs to be grounded in an informed and critical understanding of their present worlds. But, like Warnock, I believe that such an understanding can be developed by encouraging imaginative and speculative thinking.

In my research interviews, children were asked to imagine and speculate. Those who did so constructed more complex pictures of work. For White (1990), an imaginative person is one who see 'lots of possibilities ... with some richness of detail'. These detailed constructions of work offered the children insights into the adult world, and could then become a resource to enable them to move on to more complex constructions. It also provided some of the children with visions of the potentiality of the future which formed a part of their identity, and influenced their current behaviour (see Chapter 7). In addition, the narratives constructed by these children provided them with a great deal of satisfaction, particularly when they created a plausible solution to a problem. Chris (m/11.06/B) struggled with the problem of obtaining factory finance; he initially suggested that he would have to get a job and save up, but did not consider this to be a satisfactory solution. He then suggested obtaining a grant from the Prince's Trust, and, later in the interview, drew on knowledge of his grandmother's investments to propose that he would have get investors; he was very pleased when he worked out how investors would benefit themselves and the company (see Appendix G). The children's speculations and solutions would not all be considered to be 'accurate' representations of the world, but as the arguments in Chapter 3 indicated, if the way we understand the world is inevitably a construction not a representation, then we should avoid questions of accuracy and 'truth'. (In this view Bruner's (1986) distinction between paradigmatic imagination, in which speculations can be checked, and narrative imagination, in which they cannot, becomes hard to sustain.)

However, in interview, some children did not take the risks involved in speculation and confined themselves to what they thought they knew, or did not

know. Their responses ('I don't know') may have been accurate, but did not lead the children anywhere.

Why, then, did some children use imaginative thought more than others? I have suggested some reasons in earlier chapters. First, children are used to a discourse in school in which they are required to produce right answers (Simon, 1981: see Chapter 4); some children may not have recognised that they were being invited to switch into a speculative mode. Secondly, some children may have been more used to being involved in talk which involved speculation and imagination. This could be related to Wells' (1996) discussion of the role of stories in encouraging thinking which goes beyond the immediate context (see Chapter 5). And finally, some children, as I have shown, had very much more experience than others on which to draw. As Hanson (1988) and Robinson and Hawpe (1986) argued, imaginative thinking is grounded in experience.

Emotions and desire

In studies of economic thinking, the child has often been seen as a dispassionate observer of economic activity inferring economic laws in the same way as scientific laws might be inferred from observation of the physical world (Meadows, 1993).

There are a number of problems with this view. Firstly, it has been questioned whether it is possible to observe anything dispassionately. Even scientists, traditionally viewed as doing so, have been shown to be influenced by emotional commitment to particular results. Potter and Wetherell (1987) draw on work by Gilbert and Mulkay (1982, 1984; Mulkay and Gilbert, 1983, 1985) which shows that scientists employ two repertoires: an empiricist repertoire which involves observation and application of logical thought, and a contingent repertoire which emphasises that scientists' actions and beliefs depend both on speculative insight and prior commitment.

Moreover, as I have discussed in earlier chapters, it is impossible for anyone to take a rational and dispassionate view of social and economic relations when

we are all positioned in various ways in terms of class, wealth and power. Thus we inevitably have strong emotions about social and economic realities, whatever our position in the system, whether we count ourselves among the privileged or the oppressed.

Donaldson (1992) argued that emotions are implicated even in so-called dispassionate thinking; if we did not care about whether we solved a problem or discovered the truth we would not put much effort into the enterprise. However, prior emotional commitment to belief has also been seen as a cause of bias and distortion which may prevent recognition of the 'truth'.

Some of the children appeared to be emotionally involved in their constructions, particularly of their own futures. An interesting example of this is Heidi's (f/8.05/B) construction of a factory (see Appendix G). Her repeated references to disadvantage may be seen as a form of self-presentation. However, her concerns about unemployment, homelessness and pollution may also have blinkered her from taking on some aspects of the economic world such as the nature of a profit-making enterprise. Equally, it appears to be this emotional commitment which drove her on to elaborate her narrative, thus resulting in a richer and fuller construction than might otherwise have been produced.

Summary

I have argued in this chapter that there were vast contrasts in the resources that children had available to them. It appeared that those children who already had a wide range of resources to draw on were the most likely to perceive and draw on further resources.

I have also argued that the thinking involved in constructing the world is not necessarily always rational thinking; imagination and emotions are also necessarily involved. This point is particularly important in relation to an anti-developmental stance; if we challenge the notion that rationality is the end-point of development, we also need to challenge the hegemony accorded to rational thinking by those involved in education.

Summary and implications

In this final section I return to the arguments presented and the questions posed in Chapter 1 where I suggested that, in order to plan a curriculum which could offer children broader views of work and more equal opportunities in this area, we needed first to know more about children's experience, and how they draw on experiential resources to construct work. Having considered this question throughout the thesis, I will summarise my findings, and conclude with a discussion of the implications of the narrative presented in this thesis for education and for future research.

I was tempted here to follow the example of the Curt collective (1994), and label this final section, 'Inconclusion'. They do this to draw attention to the oversimplistic and facile conclusions which have frequently been drawn by those adopting modernist approaches to research. While it seems appropriate to include a section which draws together some of the arguments of this thesis, I am all too aware that in analysing the data I have already simplified the complexity of the children's constructions, and that each time I try to sum up what I have been saying (at the ends of sections and chapters, and here) I tend towards closure and over-simplistic conclusions.

Summary

I have found, firstly, that children's constructions of work vary in relation to the specific work context that is being discussed. While I found considerable variation between individuals (which will be discussed below) I also found that children appeared to be drawing on some common discourses in relation to work. Each of these discourses was complex and included contradictory strands.

1. A discourse of school work appeared to be derived from the talk and the practices of teachers in the children's schools, and to a lesser extent from parents, siblings and peers. This discourse characterises school work as compulsory, defined by the teacher, productive, involving effort, and not about enjoyment. It seemed that a version of this discourse was also used in relation to the factory workers, whose work was seen as imposed and boring.
2. A variety of discourses were found in relation to household work; these included ideas of responsibility, contribution to the household, helping, intrinsic satisfaction and financial reward.
3. A discourse of adulthood was used in children's constructions of their own future work. The children, who are often positioned as powerless and in need of protection in relation to adults, appeared to draw on a discourse in which adults are free from constraint, independent and autonomous, and, because they are able to make choices, can have fun.
4. A rather different discourse of adulthood was found in the children's constructions of factories. Positioned as boss of the factory, they seemed to be drawing on the adult hierarchy within the school, and on the practices of teachers and Headteachers. Work for those in positions of authority involved being powerful and controlling others; telling people what to do; defining and checking their activities; and providing financial rewards, discipline and punishment. This discourse included only very limited notions that those at the bottom of the hierarchy could influence decisions or practice, or that those at the top had responsibilities towards those lower down.

While these were the main discourses many children drew on, there were also others, in some cases drawn on by particular groups of children:

5. A discourse of equality of opportunity relating to gender, and occasionally to race, occurred in some factory constructions.
6. A discourse of helping was used, most notably by some of the girls in relation to future occupations; it was also used in relation to household work and, less often, factories.

7. There were indications of an anti-industrial discourse among the middle class children; this seemed to be derived from specific aspects of the school curriculum (projects on pollution and Victorian life).

While constructions of work varied with the context constructed, they also varied between children in relation to age, gender, cultural background, and the socio-economic context of their family.

The greatest differences were those which related to **age**. I have argued that these differences can be accounted for in terms of two factors: firstly that older children have had more experience than younger ones, and secondly that their experience is different. I have suggested that this is because adults construct children's activities and interactions in line with their own notions of childhood, which generally involve both developmental ideas and constructions of children as innocent and in need of protection from the unpleasantness of the adult world. Thus older children are offered a different range of activities from younger ones (more often outside the family; participating in different work and hobbies). They are also provided with different information and explanations (both in the media and in social interaction). Young children are given views of work which adults (parents and teachers) think are appropriate for their age; as they become older, notions of what is appropriate change.

I have argued throughout this thesis that differences in children's constructions in relation to age can be accounted for in terms of the experiential resources the children draw on, and see no reason to call on theories of mental development. Nevertheless, as I indicate above, it appeared that adult views of childhood are constructed in accordance with developmental ideas. Thus, just as Walkerdine (1984a) has argued that the pedagogical practices *produce* the developing child in the classroom, I would argue that parents, teachers and the media produce the child's developing understanding of work.

There were also noticeable differences between the constructions of children in the two schools which related to the **social class** continuum. There appeared to be two main factors in these differences: children's experiences of work, and their activities.

- a) Children's experiences of work varied in relation to models of adult work they had available to them, as I have shown in Chapter 7. While some children had had opportunities to observe parents at work and even to participate, others relied only on talk, and some did not know what work their parents did. In particular, there was a contrast between children in work-rich and work-poor households. As I indicated in Chapter 9, this contrast related not only to family models of work available to the children, but also to opportunities to engage in self-provisioning such as gardening and DIY, and to observe workers employed by the household.
- b) The second major factor contributing to differences in children's constructions of work was the activities in which they participated. As I showed in Chapter 7, children in School B participated in a wide range of hobbies and out-of-school classes. These formed the basis of many occupational preferences. In contrast children in School A took part in fewer such activities. While they referred to their leisure activities in their constructions of their future activities, these had often offered them little information. There also appeared to be wider differences in the ways in which children spent their out-of-school time, and these appeared to offer children in School B more opportunities to observe and experience work, as I have suggested in Chapter 9; however, my investigation of this was very limited.

These differences in the children's experiences offered them very different resources to draw on in their constructions, and it was this which created the greatest contrasts. However, I have also suggested a number of other possibilities:

- c) the working class children may have found the context of the interview more intimidating;
- d) my expectations of the children in the two schools may have resulted in some differences in questions asked, or the specific ways in which I reacted in the interview;
- e) there may have been differences in what children perceived; I have suggested that those children who already have considerable experience of work are

more likely to notice and remember work-related ideas and information from their environments;

- f) there may have been differences in the way children transferred learning either through forming analogies or generalising. One factor in this appeared to be the extent of the child's previous experience of work, and thus the resources they could draw on;
- g) there appeared to be some differences in willingness to speculate; I have suggested that these may be related to children's expectations of the interview, or to their experience of stories, as well as to the range of resources they had to draw on.

There were fewer differences in relation to **gender**. Boys' and girls' constructions of school and factory work were similar. It was only in relation to occupational preferences that there were striking contrasts; girls and boys generally opted for different occupations. The most popular careers for the girls were in the arts, and for the boys in sport. I have discussed the reasons for these differences in terms of gender identity and gender role maintenance. While gender differences are obviously important and interesting, they are not my main concern in this thesis.

There were five Bangladeshi and five Afro-Caribbean children in the sample, as well as individuals from other ethnic minority groups. These numbers are small, and I found very few differences which could be related to their **cultural background**. I have drawn attention to the voluble and often dramatic style of the Bangladeshi children's talk, and to the Bangladeshi boys' high career aspirations. I have also mentioned that the older Afro-Caribbean children generally reported more substantial and regular responsibilities in relation to household work. However, while these differences were evident in my sample, I cannot tell whether they are related to the children's cultural backgrounds.

Implications

Stainton Rogers and Stainton Rogers argued that modernist approaches have tended to:

adopt a naive pathology model, ... assume there is a problem to be solved - that there are self-evident, concrete and particular issues to be tackled' (1992: 190)

This, they claimed, has led to attempts to identify and blame the 'villains'. However, this strategy does not solve the problems. In relation to the present research, there have been many attempts to analyse the ways in which social and economic inequalities are reproduced and some groups remain disadvantaged. These analyses have identified a variety of 'villains'. Working class parents have been said to provide their children with the wrong forms of language and with inadequate information (e.g. Tough, 1976). Those working in education have frequently been blamed; Margaret Thatcher (then Prime Minister) claimed that in the inner cities 'opportunity is all too often snatched from [children] by hard-left educational authorities and extremist teachers' (speech at 1987 Conservative Party Conference, quoted by Ball, 1990:49). Teacher training departments have also been blamed; Sexton asserted that some were 'so unacceptable as to be worthy of closure' (1987: 20). Alternatively it has been pointed out that government policies in relation to poverty and unemployment have resulted in a widening of the gap between rich and poor, and an unacceptable level of poverty on many inner city estates (Archbishop of Canterbury's Commission on Urban Priority Areas, 1985).

In contrast, a postmodern 'critical polytextual scrutiny does not seek to "solve problems" but to engage critically with them' (Curt, 1994: 218). Curt denies the possibility of simple solutions, but also warns against reducing problems to mere social construction. The narrative I have constructed does not lead to any simple solutions; any course of action which suggests itself appears to raise new problems.

Implications for education

It would be possible for schools to offer children very much wider views of work by arranging more visits to workplaces, inviting more workers into school, and so on. This could also be done through mentoring schemes (*Evening Standard*, 1996). Such experiences could include opportunities for children to encounter a wide range of perspectives, and should not be limited to 'cosy' views; Midwinter claimed that:

teachers in urban areas who continue to teach about avuncular policemen under the heading of 'people who help us' are doing no kindness to the children, the police or themselves. (1972; 245)

Experiences should be provided throughout the primary school age range; I have argued that it is the lack of an experiential base which has resulted in some children apparently failing to use the resources that are available to them.

It is not enough simply to provide experiences; children also need opportunities to talk about their experiences. If, as the social constructionists suggest, meanings are constructed between people in conversation, then the role of talk in education becomes central. In particular, I have suggested that children should be given opportunities to talk in a more speculative way, and that there should be less emphasis on right answers, and more on imagination and emotions. While a number of people have argued that imaginative thinking should be encouraged in schools, this is by no means straightforward; Reddiford (1980) discusses the problems implicit in the idea of teaching a child to be imaginative.

To offer substantial experience of work would require the adoption of a rather different set of curriculum priorities; it is clear that as optional extras, careers education and education for economic and industrial understanding have had little impact. Work would need to be a much more central element in the curriculum. Dewey's occupational curriculum is a possible model here. In his laboratory school in Chicago the curriculum was based around a selection of fundamental human occupations (e.g. carpentry, textiles, cooking); thus children cooked, observed cooks, and learned about cooking in other times and places (Dewey, 1900). Rather than having schools in which children are separated from

society, we should perhaps try to develop a much closer relationship between children's education and everyday life; the Parkway Program in Philadelphia provided one such model, though for older children (Farrington, Pritchard and Raynor, 1973).

The provision of greater experience might be a first step; however, it seems likely that children from middle class work-rich households who already have greater experience in this area would gain disproportionately from this experience because they would be able to relate it to a much wider range of other experiences. Thus the same groups would be likely to remain relatively disadvantaged. While children's home lives are so different, offering the same experience to every child in school cannot provide greater equality of outcome (in this case, equal opportunities to enter occupations across the whole spectrum of work available).

Thus I suggest that we need to reconsider the range of arguments put forward in the 1960s and 1970s in relation to different notions of equality (equal provision or equal outcome) (e.g. Coleman, 1968); the extent to which schools can or should compensate for the differences which result from economic and social disadvantage (CACE, 1967; Bernstein, 1970; Halsey, 1972); and in particular to review how these arguments relate to the children of long-term unemployed parents.

So far I have focused on the curriculum; a second issue relates to the structure and organisation of schooling. I have suggested that the hierarchical structure of schools and the relationships of power within them appeared to be models for children's constructions of factories, and were used to construct a picture of alienated work, controlled from above (cf. Bowles and Gintis, 1976; Jeffs, 1988). We need to consider whether this is a desirable model to offer children. Possible alternative models are provided by experimental schools. However, many of these have been attended by children of the élite rather than the disadvantaged (e.g. Summerhill: Neill, 1962). Children in such experimental schools were found by Emler to have very different constructions of relations of authority (see Chapter 8).

While it might be possible (though difficult) for teachers to implement some of the suggestions I have made in this section, to provide wider experience of work, to encourage talk and speculation, to offer different models of authority and relationships, and so on, such actions may raise children's hopes and aspirations, but cannot change the work opportunities available, or the stratified nature of society. These inequalities cannot be laid at the door of any one group, but can be seen as consequences of the capitalist economic structure of society, in which some people have very limited opportunities:

Poverty is at the root of powerlessness. Poor people ... lack the means and opportunity - which so many of us take for granted - of making choices in their lives. (Archbishop of Canterbury's Commission on Urban Priority Areas, 1985: xv).

While equal opportunities policies seek to ensure that those at the bottom have an equal opportunity to compete with those at the top, the economic and social advantages of the more affluent ensure that they remain ahead. This relationship was made much more explicit in the nineteenth century. For example, in an address to the committee for the Royal Lancasterian system for the education of the poor it was claimed that 'reading, writing and accounting render the lower orders more useful ... to us on those occasions in which we stand in need of their services' (Goldstrom, 1972: 46). Nowadays politicians and industrialists are rather less outspoken in their support for a strongly stratified society, but nevertheless support measures which have increased rather than decreased the gap between the advantaged and the disadvantaged.

While many teachers are motivated by liberal ideals, the notion that education can change society has been shown to be over-simplistic in that it tends to reflect uncritically the structures of capitalist society, to the despair of some teachers (Cole, 1988). Ross proposed that the only course is:

... to encourage children to analyse the social and economic relationships, to ask why the current structures prevail, and to question orthodoxy ... and to become critically aware of the multifaceted and complex forms of contemporary economic life. (1992a: 59-60)

Similarly, Midwinter suggested that teachers 'take on the function of equipping the parents and citizens of the future with well-defined powers of social criticism and action' (1972: 250) though he acknowledged the difficulty of doing this in view of teachers' own upbringing and training. Perhaps what is needed is a deliberate attempt to teach children about other sectors of society than their own.

The National Curriculum emphasises that primary school children should learn about the area local to the school (e.g. NCC 199a, 199b; SCAA 1995), and in Geography, should also study a contrasting area (DfE, 1995); this is usually taken as a rural/urban contrast. Possibly there also needs to be a deliberate attempt to teach about other social class cultures. The arguments discussed in Chapter 2 in relation to the uneven distribution of social knowledge, and the way this perpetuates working class disadvantage, are relevant here. To teach children about those who are more or less advantaged than themselves is obviously not an easy thing to do, in that it involves all the difficulties and possibilities of being patronising that have been identified in discussions of multicultural education. But without any real grasp of the nature of our society, it is unlikely that people will fight for change.

In order to produce changes on a scale which would result in greater equality of opportunity, I believe it would also be essential to increase the elements of political education in schools. As I write this during an election campaign the media are regularly drawing attention to the fact that many people believe that politics has no relevance for their lives, and to levels of ignorance about what the issues are and where the political parties stand on them. Changing the organisation of schools towards a more democratic and less authoritarian structure could contribute to the development of political understanding (Cohen, 1981; Strike, 1982; Jeffs, 1988).

Clearly the sort of social critique and political education which I am suggesting would not be to the advantage of the affluent and powerful; greater equality of opportunity for all across the spectrum of jobs available would mean that their relative advantage would decrease. But if teachers are serious in their commitment to equality of opportunities then this is perhaps the only route.

Future research

This investigation suggests a number of possibilities for future research, many of which relate to the notion of becoming aware of the variety of narratives through which people construct the world, and their consequences.

First I would like to develop the investigation of children's constructions of work by making a much more detailed study of a smaller number of children, as Pollard with Filer (1996) did in relation to children's learning. I would collect a wider range of data, including talk between parents and children, teachers and children, and talk between peers. In Chapter 4, I discussed some of the problems of collecting data in other conversational contexts, but I feel that it is worth pursuing the attempt to tackle these.

In particular it seems important to investigate the constructions of work of children of the long-term unemployed, and particularly those living in work-starved communities. While it seems entirely predictable that they will have few work-related resources to draw on in constructing their own futures, and such research raises ethical problems, it seems important to amass evidence of the adverse effects of unemployment so that it is no longer possible for politicians to accept 'the fashionable view that a modern technological society, competing in the global economy, must accept that many of its citizens will live in permanent idleness' (*The Guardian*, 1997: 7).

In relation to this, I would like to map out children's everyday experiences. My data suggested that some children's activities are more limited than previous research has shown, and that this may be related to both long-term unemployment, and parents' anxieties about allowing their children to go out without adult supervision. I started this research from Blyth's (1984a) suggestion that we need to know more about children's out-of-school experience, and while I have investigated the resources they draw on in talk about work, I investigated their activities only through very limited reports which may have exaggerated the trends I have picked out.

Other projects which arise from my analysis include investigations of children's constructions of adults, and adults' constructions of children. I have identified two contrasting discourses of adulthood; Goldstein and Oldham (1979) proposed a third, relating to responsibility. Research in this area would inform any consideration of children's constructions of the potentialities of the future. Adults' constructions of childhood are of interest in the light of the way that these inform their behaviour in relation to children. Goodnow and Collins (1990) reviewed work in this area in relation to parenting practices, but did not examine the information parents consider to be suitable for children of different ages.

Another possible direction for future research relates to the suggestions I made for broadening children's views of work. This would include evaluation of projects involving workplace visits and workers in school; monitoring of inner city mentoring schemes for primary school children; and experimenting with approaches to teaching which focused much more on imagination.

It might seem that these suggestions would simply add to the mass of research papers and books, and have little impact in producing changes in society. However, from my experience of carrying out this research, I would argue that value should be attached not simply to the products of research, but also to the processes involved. In constructing this narrative about children's constructions of work, I have listened to children, and read the work and ideas of a wide range of previous researchers. I feel that in the course of attempting to use social constructionist ideas to consider children's accounts, I have had opportunities to see and hear from different perspectives. It may be that the narrative I have constructed resonates with some readers and offers them new/different insights. However, constructing a research narrative is akin to pulling threads from candy-floss; each thread has many other threads attached to it, and in order to create a linear narrative you have to break connections, order, prioritise. If the end-product tells a clear story, you have represented only some aspects of this complexity adequately. Thus I believe the main beneficiary must always be the researcher, who is enabled to see the world differently.

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Appendices

Appendix A	The interview guide
Appendix B	Letter requesting parental permission
Appendix C	One complete interview transcript
Appendix D	Summary of children's responses
Appendix E	Constructions of future occupations
Appendix F	Representations of work in young children's comics
Appendix G	Constructions of factories: excerpts from transcripts
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APPENDIX A

The interview guide

A Work child and family do

Do you do any work?
at school, at home, outside the family, paid

Why do you work?
in each context

How can you tell which of the things you do are work and which are not work?
take something the child has mentioned as an example - is it always work? what do you do that is not work? how do you know it isn't?

Does everybody work?
unemployment, domestic work

Who else works in your family?
parents, siblings, at home, outside the home, reasons for working

B Adult work in the school

You've talked about the work that you do at school. Who else works in the school?
What about ____? Does s/he work? What sort of work? Why does s/he do it? Is s/he paid for doing this work?

Is anyone in charge of the school? What do they do?

C Occupational preferences

What sort of work do you think you will be doing when you are grown up?
job work, household work

Tell me what you think it will be like doing that work.
Prompts (to be used only when child runs out of ideas)

- *place - where will you do it?*
- *hours*
- *nature of work*
- *what exactly will you be doing?*

- *social/isolated* - will you work with other people? how many? what will they be doing?
- *technology* - will you use tools or machines? what? why? how will you feel about this?
- *materials* - what materials will you use?
- *management* - how will you know what to do? is there someone in charge? what do they do?
- *entry to occupation* - how do you get to be a ...? qualifications, skills, application

Why would you like to be a ____?
rewards, job satisfaction, pay, perks

How do you know all this? Do you know anybody who does this job?
Have you visited place where people do ____? or seen it on television?

Do you really think you will be a ____?
If not, ask about other possible occupations and repeat questions above for one or more of these.

D Imagine a factory

Establish that the child knows that some things are made, and find out if they know what places that manufacture things are called.

Imagine you are going to set up your own factory.

What would you like to make? Why?

How would you set about it? What would you do first?
Prompts (to be used only when child runs out of ideas)

- *finance* - from where? used for what?
- *building* - how obtained? what will it be like?
- *workers* - how obtained? why needed?
- *raw materials* - what? from where?

Describe your factory.

Prompts (to be used only when child runs out of ideas)

- *workers* - doing what? pay? differential rates? sex?
- *technology* - what? why? workers reaction to it?
- *end-product* - sales, marketing, advertising?
- *management* - is there anyone in charge? what does the boss/manager do?
- *industrial relations* - will the workers be contented? why/why not? what will the manager do about this?

Have you ever: visited a place where ____ is made? (or any other factory?)
seen one on television?

Do you know anyone who works in one?

Other experiences which may be relevant

Television watching

Weekends, holidays

***Letter requesting
parental permission***

July 8th 1993

Dear Parent,

I am a Senior Lecturer in the School of Teaching Studies at this University. I have worked in Beckford supervising students on teaching practice, and I was a School Governor for two years.

I am writing to tell you about a research project which I am hoping to carry out with some of the children at Beckford Primary School. I am investigating the way children learn about the economic and social world, and looking at how their ideas relate to their experience. This research is of interest at the present time as Economic and Industrial Understanding has been identified as a cross-curricular theme of the National Curriculum; however, we know very little about children's thinking in this area.

I would like to interview children individually about aspects of their economic experience and understanding. Each interview will last approximately twenty minutes.

The resultant information will be used in my PhD thesis and in articles. However, nothing that I write or say will in any way identify individual children or the school. I will provide general feedback to the school which may help them with curriculum planning in this area, but will not report on what individual children say.

The Headteacher and class teachers involved are happy for me to do this research in Beckford, but I also need the consent of the parent or guardian of each child involved. If you are willing for your child to take part, please could you complete and return the slip below. Thank you very much.

You may wish to discuss the project with me; I will be available in the ground floor hall at 3.30pm on Monday 12th July, and I will be happy to talk with you.

Yours sincerely,

Merryn Hutchings

.....
Children's economic experience and ideas

I give permission for my child _____ to be interviewed
for the above project.

signed _____

Date _____

please return this slip to the class teacher by TUESDAY 13th JULY

APPENDIX C

Complete Transcript

While only one complete transcript is included, other substantial extracts from transcripts will be found in Appendix E and Appendix G.

Tarquin (m/5.07/B)

Right now what I want to ask you about is work. Do you do any work?

Yes.

What sort of work do you do?

Loads.

Give me some examples?

Sums, letters, I play.

Is playing work?

No.

So what else do you do that's work?

Err I read

That's work is it?

And that's it.

Do you do some things at school that aren't work? You're doing lots of not work today aren't you? Having a very playful day. How can you tell whether you're working or playing?

Because when you're playing you're not taking care.

So you take care when it's work?

Yeh.

Do you do any work at home?

Err, no, yes.

What do you do at home?

We had a homework sheet once and we had to get a cup, fill the water up, and had to guess how many spoons and things it would take and then get a little cup and fill it up with water and guess how many thingies it had to take.

But you don't often have homework?

No.

Do you do any other sort of work at home, like helping round the house?

Yes.

What do you do?

I help my mummy clear up and wash and wash around.

Oh, that's helpful of you. Do you do that because your mummy asks you to or 'cos you want to?

I want to.

Oh. Do you ever get paid for doing work at home?

No. [laughs]

Do you get pocket money?

Yeh.

But that's not for working?

No.

That's just pocket money. What about other people in your house? Do they do any work?

Yes, *that's only my mum and dad.*

And they do work?

Yeh.

What sort of work do they do?

My daddy's a social worker, my mummy's a student.

What's she studying?

She's at Kilburn College.

What's she learning?

Study.

Does she write essays, or?

No, *she's got a lot of homework though.*

But you don't know what it is?

It's assignments.

When she's finished studying, what will she be then, do you know?

No.

And your daddy's a social worker. What does that mean? What does he do?

He works in an office and that's it I think.

Does he work with other people or by himself?

He works with other people.

And what does he do when he sees them?

He asks them questions.

About what?

I don't know.

Why does he do that job?

Because he's a social worker.

Yes, but why do grown-ups have jobs?

To get money.

So he gets money for being a social worker. Now when you're grown up what sort of work do you think you might do?

I might do loads of things.

Like what?

I'll be a potterer and be-

A potter?

Uh huh, and be a gladiator and I can't remember what else things I will do.

So a potter or a gladiator. Those are quite different. How would you get to be a potter?

I don't know.

What would you do if you were a potter?

Make things out of clay.

What sort of things do you make?

Lions, pots, jugs, cups, bowls and that's it.

And would you get paid for doing that?

Umm, I don't know.

What would happen to the jugs and cups and bowls and lions that you made?

They might get broken.

What would you do with them?

I would put them on my shelf.

So you would just keep them for you would you?

And share them.

Who would you share them with?

My mum and dad.

Do you know anyone who is a potter?

My mummy.

Your mummy is. Is that what she is learning about or is it just something she does for fun?

Just something she does for fun.

Does she do it at home?

No, I think she might. I don't know, she isn't actually.

She goes out somewhere to do it?

Yeh, she goes to Warlington College to do it.

Oh, right yes. Have you been there and seen her doing it?

Yes, I've done it too.

Oh, you've done it too. So do you need any particular tools or machines to be a potter?

Yes you need a kiln.

What does a kiln do?

It does, you put, it's got shelves and you put your pot on it, what heat you want it on, and you leave it then and then when you want to take it out, you take it out.

And is it different when you take it out from when you put it in?

Yeh. How is it different?

I don't know. If you're a potter, does somebody tell you what to do, or do you just know?

I know and my mummy tells me a bit.

But if you were going to do it for a job when you were grown up you would have to learn to do it properly would you?

Yeh.

Where would you learn how to do it?

Warlington College.

Right so you would go to college too. So that was one job and the other job you thought of was to be a gladiator. Tell me about that.

I don't know about gladiators very much, only a bit.

Tell me the bit, because I don't know anything.

Umm, you have to be very strong and eat loads of vegetables. And there's a big stage and people are sitting on it and then you have to fight with people and you have to win things.

And are you on television?

Yeh.

And do you get paid for that job?

Err, I don't know.

It's interesting because you know that people need to get money from work and you've chosen two jobs that you don't know whether they're paid or not. Do you think there's any other jobs that you might do?

Err, no.

That's all you've thought of so far. Right, I want to ask you about something else. Do you ever go to the shops?

Yeh.

Do you go by yourself or with somebody else?

I go with my mummy. An do you spend your pocket money there?

Yeh. What do you buy?

I buy an ice lolly, crisps, food, err, I buy vegetables, I buy drinks, I buy wine, I buy, umm

You buy wine?

Yes, umm and I buy yoghurt.

When you give the money to the shop person, what happens to the money?

It goes in the counter and the counter person gives money to you.

And what happens to the money you gave?

It gets sent to the boss.

The boss of the shop?

Yes. And what does the boss do with it?

He keeps it.

Doesn't he ever do anything with it?

He buys things with it.

What things are those?

His food.

Things for him to eat?

Yeh. Anything else he has to buy with it?

I don't know. Food, the same things I've probably said.

What about the things in the shop? the yoghurts and the sweets and the lollies.

Where do they come from?

They come from factories.

How do they get from the factory to the shop?

By a lorry.

Does the factory just give them to the shop, or does the shop have to buy them from the factory?

The shop has to buy them.

And what money does the shop use to buy things?

I don't know.

Right, what I want you to imagine now is that you're grown up and you're going to have your own factory. What would you like to make in your factory?

Anything.

Choose something special for today.

Umm, I will like to make food.

What sort of food shall we have?

Yoghurts, sweets, lollipops, ice-lollies, crisps.

Let's say a lollipop factory then.

I want it to be a, yeh.

And sweets maybe?

Yeh, a sweet shop.

OK. Now if you're going to start up a factory that's going to make lollipops and sweets and crisps, what would you have to do?

You would have to pay the person who owned it.

So you'd have to buy the factory from someone else?

Yes.

Where would you get the money from to do that?

When you work.

So you'd have to get a job first?

Yeh.

And earn some money and you could use that money to buy a factory. What would be inside your factory?

Err, umm, you would have machines.

Yes, and what would those machines do?

They would help you. They would send them to the people who wrap them and then it goes to another machine, then another machine, then another machine.

Right. So do the machines do the work all by themselves, or do you need people as well as machines?

You need people as well as machines.

So you'd have to have some people who'd work for you?

Yes.

Would those people like working with a machine?

Yes.

They would, what would be good about working with a machine?

'Cos it would go more quicklier in the factory.

That's right. That's why they have machines isn't it? Now how would you get those people who are going to work for you?

You would have to find them.

How would you do that?

Err, you would have to go and ask some people, would you like to help me at a factory?

So you'd just go and ask people in the street?

Yeh.

What sorts of jobs would they be doing in your factory?

They would be doing different things.

What would some of those things be?

Wrapping the things, putting them in boxes, and that's it I think.

And some people with the machines maybe?

And then they'd put labels on them.

Oh yeh. What about actually making the sweets and things?

I don't know how to make the things.

But you might have some people doing that if that's what your factory is. What would you be doing if you were in charge of the factory?

You would be the boss then.

Yes, so what do you do?

Err, I don't know. You would be at the front and then you would give them to the lorry, then you would have to pay the, the lorry would have to pay you.

Right, so the lorry comes from the shops does it? and it pays you for the sweets.

What would you do with the money?

Umm, I can't remember.

Would you have to pay the people that work for you?

Yep, no. They just come and help.

Would you have men or women working for you?

Men and women.

Would there be any jobs that you'd just want men?

Err, no.

Or any jobs you'd just want women?

No.

No. No both.

So you'd sort the money out. You'd get the money from the shops. Is there anything else you'd do if you were boss?

Err, you'd, I don't know.

Have a little think, see if anything else will come up.

You would sit in a big chair and you wouldn't help.

Right, so you wouldn't work like other people?

No.

You'd just be an important person. Sounds OK. How would the people in your factory know what to do?

I don't know.

Would you have to tell them?

Umm

I think you might. What do you need to make sweets?

I don't know. Sugar.

Yes, you do know, that's quite right.

And food colouring.

Where would you get those from?

The boss would have to buy them from a shop.

So that's you, that's something you have to do. Which money would you use for that?

Your pocket money.

Your pocket money. How would the shops know that you had a sweet factory and they could come and send their lorries to get things from you?

You could tell them.

So you'd go all round the different sweet shops and say, I've got a sweet factory?
Would all the people who work in your factory like working in your factory?

You said that before.

I said would they like working with machines? I just meant now, would they like working for you at all?

Yes.

What would be good about it?

I don't know.

Mmm. you're getting a bit tired.

I want to hear myself talk

Right, so you've heard yourself talk. Is there anything else about your factory you can think of now you've listened to yourself?

Err, yeh, the people would like working for you.

Oh good. Have you ever been to a factory?

No.

Have you seen a factory on television?

Yeh.

I thought you must have done, because you knew about the packing and the machines that move things, didn't you?

Yeh.

What factory did you see on television?

Loads of factories.

Do you know what programme that was on?

No.

Do you watch a lot of television?

Yes, but not now because my television's broken down.

Oh dear, but you used to?

Yeh.

Do you watch just children's programmes, or do you watch grown-up programmes as well?

I watch grown-up programmes as well.

So when you saw the factories, do you think they were on children's programmes or grown-up programmes?

Grown-up programmes.

Things like the news?

No I think they were just ordinary adult programmes. I've seen loads of programmes with factories in.

What were they making ? Can you remember?

Fish fingers.

Oh, fish fingers. Anything else, have you ever seen a car factory?

No.

When you go home, when your television's working, do you turn it on as soon as you get in?

Yes. No, I make a snack before I do.

And then you turn the television on. And does it stay on until you go to bed?

Yes.

What about books, have you seen factories in books?

No.

Right. the last thing I wanted to ask you, well nearly the last thing, is about this school. Who gets paid for working in this school?

The teachers.

Who pays them?

The boss.

Who's the boss?

I don't know.

I mean, is there a boss in this school, or is the boss somebody outside?

The boss is somebody else outside.

Is there anybody in the school who's in charge?

Err, no.

Nobody at all?

No.

Is there anybody else besides the teachers who gets paid.

Yes, Brian. And the cooks.

Yes I think they do. What do you do at weekends, do you stay at home or do you go out?

I sometimes go out and I sometimes stay in.

If you go out, where would you go?

Anywhere.

With your mum and dad?

Yeh.

What about in the holidays, do you go on holiday?

I go to Brighton sometimes.

Is that where you're going this holiday?

I don't know, maybe.

Have you ever been to other countries?

Yes.

Where have you been?

I have been to Bolton.

Oh, that's up in Yorkshire isn't it?

And I've been to Sheffield.

So you've travelled round England quite a lot.

And I've been to Brighton.

And that's by the sea. That was all I wanted to ask you, thank you.

Can I hear myself talk again?

APPENDIX D

Summary of children's responses

SCHOOL A: 4-5 year olds

Julie: f/5.01

ethnicity: white British

parents: father: long-term unemployed (ill); mother: household work

siblings: two at primary school, one pre-school

occupational preferences: photographer (photos to put on my shelf), live with mummy

factory: make toys at home with sisters, put them in shop

Halima: f/ 5.10

ethnicity: black Asian (Bangladeshi)

parents: father: work in restaurant; mother: household work.

siblings: one pre-school

occupational preferences: work in restaurant, be a mummy

factory: did not ask - child had had enough

Leila: f/5.03

ethnicity: Moroccan

parents: father: student; mother: works in jeweller's

siblings: one pre-school

occupational preferences: nurse

factory: make sweets all by myself and eat them

Elsa: f/5.01

ethnicity: white British/ Swedish

parents: father: ? social worker or therapist; mother: Alexander teacher and writing a book about Alexander technique

siblings: one at school in Sweden

occupational preferences: musician, ballerina (has flute and ballet lessons)

factory: toy factory based on visit to a toy factory in Sweden

Darren: m/5.07

ethnicity: white British

parents: grandfather: window cleaner; mother and grandmother: household work

siblings: four? - at school and pre-school

occupational preferences: policeman

factory: making chairs and tables with my friends - deliver them to houses

Jimmy: m/5.10

ethnicity: white British

parents: father: mends brakes on trains; mother: household work

siblings: one pre-school

occupational preferences: build a station

factory: make sweets in a sweet shop, at the back

Clark: m/4.09

ethnicity: white British

parents: father: goes to money shop and gets money; mother: barmaid in pub

siblings: one pre-school

occupational preferences: go to money shop

factory: shopkeeper gets sweets from another shop - no manufacture

Juan: m/4.11

ethnicity: Colombian

parents: father: work in restaurant; mother: goes to work (unclear)

siblings: one at college?? (aged 'about twenty' at a 'bigger school')

occupational preferences: go to a bigger school

factory: no suggestions for origin of goods in shop

SCHOOL A: 7-8 year olds

Sitara: f/8.00

ethnicity: black Asian (Bangladeshi)

parents: father: unemployed - used to work in restaurant; mother: household work

siblings: four - three at primary and secondary school, one baby

occupational preferences: teacher/Headteacher

factory: making jumpers and selling in market, employing workers to knit and to make collars on a machine

Mei: f/8.02

ethnicity: black Asian (Vietnamese)

parents: father: goes out to work, does not know what he does; mother :
household work

siblings: three older -two at school? one working?

occupational preferences: lawyer, doctor, teacher

factory: making crisps - workers making different flavours

Samantha: f/7.10

ethnicity: white British

parents: mother's partner: house decorator; mother: barmaid (not employed at time of interview)

siblings: two, at primary school

occupational preferences: nurse, barmaid
factory: making chairs and tables (drawing on uncle's account of work in a sink factory)

Hassan: m/8.05

ethnicity: black Asian (Bangladeshi)
parents: father: unemployed, mother: household work
siblings: two, primary and pre-school
occupational preferences: doctor, service engineer
factory: clothes: T shirts, track suits, slippers, shoes, food. loads of workers (100)

Enrico: m/7.08

ethnicity: white Portuguese
parents: father: security guard, (works nights) mother: works in large shop
siblings: brother aged 13; sister aged 9
occupational preferences: workman (builder), security guard, shop assistant
factory: chairs, bookshelves, lots more people, about 50

Gary: m/7.10

ethnicity: white British
parents: father: window cleaner; mother: shoe shop
siblings: none
occupational preferences: footballer, writer, window cleaner
factory: cars, drawing on car factories seen on TV. Millions of workers, a production line.

SCHOOL A: 10-11 year olds

Tracy: f/10.07

ethnicity: white British
parents: mum's boyfriend: chef (not in work??); mother: used to work for surgical instruments, now Tracy is not sure whether she works or not
siblings: brother aged 6
occupational preferences: lawyer, air hostess
factory: started as comic factory based on class visit to magazine distribution centre, but changed into food (spaghetti, beans)

Sharon: f/10.08

ethnicity: black Afro-Caribbean
parents: mother: don't know whether she has a job
siblings: sister aged 5
occupational preferences: shop owner, writer
factory: comic factory based on class visit to magazine distribution centre

Jackie: f/11.01

ethnicity: white British

parents: father: carpet layer; mother: cleaner

siblings: brother at secondary school

occupational preferences: police officer, hairdresser

factory: money, would need a licence from the court, money goes to the banks

Shuel: m/11.00

ethnicity: black Asian (Bangladeshi)

parents: father: unemployed, used to work in a restaurant a long time ago;
mother: housework

siblings: sister aged 14, sister aged 9

occupational preferences: Arabic teacher in a mosque

factory: books and comics, 100 workers, based on class visit to magazine
distribution centre

Mahmud: m/11.00

ethnicity: black Asian (Bangladeshi)

parents: father: owns a launderette and employs staff; mother: household work

siblings: three brothers, one younger, two older (one at college, one at school and
works part-time in restaurant); two sisters (one at college and works part-
time in a surgery; one at school works part-time in shop and market)

occupational preferences: pilot, business man (salesman)

factory: recycling plastic; very complex hierarchy and pay differentials

Joseph: m/11.00

ethnicity: black Afro-Caribbean

parents: mother: household work; uncle: don't know whether he goes out to work
or not

siblings: two younger brothers

occupational preferences: footballer, athlete, car mechanic

factory: papers, loads of workers, based on class visit to magazine distribution
centre

Nicky: m/11.00

ethnicity: white British

parents: father: unemployed (long-term illness), mother: household work

siblings: three all younger

occupational preferences: bank manager

factory: comics, one other worker, based on class visit to magazine distribution
centre, though he did not go on the visit

SCHOOL B: 4-5 year olds

Claire: f/5.02

ethnicity: white British

parents: father: goes to work in his new car; mother: household work

siblings: brother aged 2

occupational preferences: have a job and earn money

factory: dresses and skirts, two other people (or nine?), each making a separate garment, in the street, machine to make plastic soles for shoes

Sinead: f/5.03

ethnicity: white British

parents: father: college, and work in theatre box office; mother: 'does posters and envelopes', and household work

siblings:

occupational preferences: ballerina, mummy, teacher

factory: tagliatelle, crisps, sausages, ham, chicken and fish, 100 workers, have it outside

Chloe: f/4.11

ethnicity: white British

parents: father: does theatre lighting; mother: 'does her bank work' from home, and does other people's gardens

siblings: sister aged 10

occupational preferences: mummy

factory: big, with machines, makes bread and rice, has a shop

Annabel: f/ 5.04

ethnicity: white British

parents: father: goes to work; mother: student, has to write her exams

siblings: sister aged 10

occupational preferences: stay at home and live with mummy

factory: sweets in a shop by myself

Daniel: m/5.05

ethnicity: white British

parents: father: student; mother: teaches at school; both bring work home

siblings: none

occupational preferences: daddy, spaceman

factory: sweets, lots and lots of workers (about 10), production belt like at airport, lots of detail about wrapping and packing

Tarquin: m/5.07

ethnicity: mixed?

parents: father: social worker; mother: student

siblings: none

occupational preferences: potter, gladiator

factory: lollipops, sweets, crisps; machines and workers (not paid); T. would sit in a big chair and not help

Toby: m/ 5.07

ethnicity: white British

parents: father: architect; mother: illustrates children's books

siblings: none

occupational preferences: basketball player, pilot, mountaineer, architect, spaceman

factory: toys, water pistols, advertise on TV, 100 workers

Abdul: m/4.11

ethnicity: Egyptian

parents: father: works in bank; mother: household work

siblings:

occupational preferences: bank

factory: cake, by himself at home (and he would eat them)

SCHOOL B: 7-8 year olds

Heidi: f/8.05

ethnicity: white British

parents: father: self-employed business consultant, works at home and does some voluntary work at community centre; mother: works for a charity

siblings: two brothers at college, work part-time in a health food shop

occupational preferences: artist, shop assistant in health food shop, businesswoman

factory: sweets, chocolate; lots of emphasis on employing homeless people and not creating pollution

Natalie: f/8.00

ethnicity: black Afro-Caribbean

parents: father: paints houses; mother: school cleaner

siblings: one brother, two sisters

occupational preferences: dress designer, painter/decorator, teacher

factory: sweets

Lucy: f/8.06

ethnicity: white British

parents: father: plumber; mother: household work

siblings: brother aged 5

occupational preferences: artist, teacher

factory: toys, loads of workers (100)

Charlotte: f/8.08

ethnicity: white British

parents: father: stockbroker; mother: photocopying

siblings: brother aged 6

occupational preferences: nurse, hairdresser

factory: chocolates, 20 workers

Tom: m/8.08

ethnicity: white British

parents: father: makes fibre optic toys; mother: dress-making and gardening

siblings: brother aged 18, has finished A levels and does gardening; sister has left home, living in Greece; sister aged 11

occupational preferences: fish expert, basketball coach, gardener

factory: fibre optic toys like the ones his father makes

Marcus: m/8.06

ethnicity: white German

parents: both parents: therapists working at home; father is also studying at college

siblings: sister aged 3

occupational preferences: therapist, police

factory: Nintendos, 30 workers

Joel: m/7.11

ethnicity: black Afro-Caribbean

parents: father: repairing washing machines (he is the boss); mother: works in home for the elderly

siblings: brother aged 16, sister aged 14

occupational preferences: athlete, wrestler, actress

factory: food: chocolate, drinks, baby food, crisps, spaghetti; 15 workers

SCHOOL B: 10-11 year olds

Morwenna: f/11.04

ethnicity: white British

parents: father: oil trader travels to Africa; mother: history teacher in secondary school

siblings: brother aged 13

occupational preferences: actress, writer, teacher

factory: chocolate

Jade: f/11.02

ethnicity: white British

parents: father: secondary teacher; mother: primary teacher

siblings: brother aged 13

occupational preferences: writer/illustrator, vet, psychiatrist

factory: toy cars, thinks factories are polluting and disgusting

Eleanor: f/11.06

ethnicity: white British

parents: father: magazine designer; mother: writer/illustrators; both parents self-employed, work at home, sometimes together

siblings: brother aged 13

occupational preferences: writer/illustrator, actress, teacher

factory: breakfast cereal

Rosie: f/11.08

ethnicity: white British

parents: father: lecturer in health and safety at Polytechnic; father's girlfriend: household work, used to work with disabled children; mother: secondary teacher; mother's boyfriend: architect

siblings: sister aged 14; younger brother and sister pre-school

occupational preferences: work with disabled children, teach drums, photographer

factory: toy factory; considers factories noisy and dangerous

Louis: m/11.07

ethnicity: black Afro-Caribbean

parents: mother: household work; does not know whether she has a job

siblings: none

occupational preferences: pilot (RAF), motor racing, athlete

factory: computer games

Chris: m/11.06

ethnicity: white British

parents: father: Head of a radio station; mother: household and voluntary work

siblings: brother aged 21: promotions for a record company

occupational preferences: basketball player, music business

factory: making basketballs, 10-15 employees

Andrew: m/11.08

ethnicity: white British

parents: father: deputy head in primary school; mother: eye surgeon

siblings: sister aged 4

occupational preferences: footballer, play tuba in a band, shop work

factory: sweets, 10-15 employees

APPENDIX E

Constructions of future occupations

Appendix E includes the most detailed occupational preference from six of the 10-11 year olds in each school. This age group has been chosen because it is amongst these children that the greatest contrasts occurred. The way this data has been organised allows some direct comparisons of constructions of the same occupations (e.g. footballer, writer).

Air hostess	Tracy (f/10.07/A)	E1
Writer	Sharon (f/10.08/A)	E2
Hairdresser	Jackie (f/ 11.01/A)	E2
Arabic teacher	Shuel (m/11.00/A)	E3
Footballer	Joseph (m/11.00/A)	E4
Bank manager	Nicky (m/11.00/A)	E4
Actress	Morwenna (f/11.04/B)	E5
Vet	Jade (f/11.02/B)	E6
Writer /illustrator	Eleanor (f/11.06/B)	E7
Pilot	Louis (m/11.07/B)	E8
Music business	Chris (m/11.06/B)	E9
Footballer	Andrew (m/11.08/B)	E10

AIR HOSTESS: Tracy (f/10.07/A)

Training/qualification

you have to pass a test and you have to know a lot of languages
you're not allowed to be afraid of aeroplanes

How to get a job

you have to apply for a job [how would you know there was a job going?] you'd have to go and ask ... say you want a job, and you have to pass a test then

Nature of work

you go round making sure people are OK and serving food

Social context of work

more than one hostess

Hierarchical structure

I don't sure - maybe the pilot

Tools, equipment

you need a suit and a key to carry round with you

Pay

WRITER: Sharon (f/10.08/A)

Training/qualification

I like writing stories

How to get a job and Nature of work

write a story, give it to someone and they publish it ... if they like it

Social context of work

at home

Hierarchical structure

Tools, equipment

Pay

don't know - money customer pays goes to shopkeeper

HAIRDRESSER: Jackie (f/ 11.01/A)

Training/qualification

learn before start, when they think you're good enough they let you go into a shop, like a policing academy - taught by professional hairdresser - start off with a model

How to get a job

think they'd find a shop for you

Nature of work

in a shop - ask them what type of thing they would like and anything they ask you have to do it

Social context of work

at least four or five others[work in the shop]

Hierarchical structure

whoever's available does hair - don't know if anyone is in charge

Tools, equipment

normal stuff like hairdryer and combs and things like shampoos and things ...
come from the shop's business

Pay

[money from customer] goes to the till
hairdressers get paid - don't know who by
[is it the same money?] no too sure

ARABIC TEACHER: Shuel (m/11.00/A)

Training/qualification

go to boarding school [how old?] about twelve or thirteen. I'd learn everything a teacher should learn... to teach the children all the stuff, like maths and how to make them work

How to get a job

you ask - the children's parents ask you have to

Nature of work

teach children Arabic in mosques - five days a week

Social context of work

do it in a special room in the mosque - children - little up to eleven years old
other teachers in same mosque but not all in the same area

Hierarchical structure

not sure actually - children's parents would tell you what they wanted you to teach their children
[would you have to ask to use room?] don't know

Tools, equipment

a little table or some cushions to sit on the floor. I might need a stick because we have to slap them with a stick if they get it wrong. Cos that's what the children's parents tell to him.

Pay

five pound a week - money from the children's parents -

FOOTBALLER: Joseph (m/11.00/A)

Training/qualification

I'm good at it

[would you be on the team straight away or would you just be training for a bit.

Training. [How long before you got in the team?] About a week.

How to get a job

at Old Trafford ... you'll just sign up. I don't know yet

ask, could I join? [and what would they say?] they'd probably test to see how good I am first

Nature of work

train .. like jogging, practising football, that kind of stuff

Social context of work

[training] with other people [how many?] three or four

[how many other people work at Old Trafford?] about five or more

Hierarchical structure

the manager yells us. when the coach tells us, he tells us to do and we just do it.

[is manager same as coach?] different

coach tells them what to do when they're training

Tools, equipment

Pay

I think it's a well paid job. [How much?] About a thousand or a million a year. ... all of them get a lot of money for like, when they've won something they give them money for it

[what about a club that loses, would the players get any money then? I suppose so yeh.

BANK MANAGER: Nicky (m/11.00/A)

Training/qualification

working really hard ... at school because they teach you a lot

How to get a job

by apply for it

[how would you know there was a job] look at the papers

[how do you apply?] you ask if there's a job going ... and then they give you a test

Nature of work

work out accounts and how much put in the bank
sort out all of the stuff - the account bits

Social context of work

in an office with other people - ten, about that many I think
the other people just sort out paperwork
they are called officers - a manager is more important than officers.. cos he has to
make sure the people get their money in the bank - the people who come to the
bank

Hierarchical structure

boss tells you what to do - he works in the same building in an office with an
officer

Tools, equipment

none

Pay

ACTRESS: Morwenna (f/11.04/B)

Training/qualification

go to some sort of stage school [instead of normal school] you only learn stuff
there in the mornings or afternoons. If you don't make it in acting then you have
to have something else
or ordinary school: do drama, and if they had a drama club after school I could do
that. I don't know if they do English cos that's what Shakespeare is, quite
then theatre studies at college of dramatic art - learning how different people live
and how acting's different to normal life
don't know how long course is - perhaps a month

How to get a job

go to auditions - (how do you know when?) if you get an agent or something they
know, or if you go to [stage school] they could get it for you, and they get like
people into adverts
agent - they kind of get you involved and introduce you and take you places and
make sure you know what you're doing - they get money - either you pay them,
or from the taxes - I don't know

Nature of work

read through the part - got to get to know the character - got to know yourself as
Portia not Morwenna

rehearse, probably morning and afternoon - have to wait for ages and ages before they get the scene fully correct - when they told you the rehearsal is twenty past four it could be twenty past five
stage you have to be loud and make your expressions more clear - if someone's right at the back they've still got to see you under all the lighting and stuff, but in films, you know, they can zoom in zoom out

Social context of work

the company - you'd get to meet people

Hierarchical structure

Director tells you what to do, where to stand etc.

Tools, equipment

[costumes, props] theatres generally have, but if there's a little production and say there's a wedding scene and you had a bridesmaid dress at home, you could say, I have one, you could use mine if you like - if there's a big production they'll have it

Pay

I suppose you get paid by, well the wages would get paid in from the people coming to see it ... and then you'd probably get a division out of that and some of it goes to the director, some goes to you, some goes to the props and some goes to the company .. or the government. I don't know actually.
if you don't have a part they're not gonna pay you
it's quite good pay - a moderate amount if you've got a part - you'd get paid a lot if you were top, I'm not sure.

VET: Jade (f/11.02/B)

Training/qualification

like a doctor but not learning about people, you have to learn about the animals and their health and things about them
don't know what subjects for A level
special school after secondary - two or three years -
watch other people who are vets and maybe have like a testing day and then they can decide maybe if I'm qualified to be a vet. I don't know.

How to get a job

I don't know [not just allocated because] some other people would want to have the job and you've got to sort of like make sure that the best person gets it [so would you apply. be interviewed or tested?] something like that

[how would you know whether there was a job going?] I'd have to ask [ring up the vets and say have you got a job?] no I don't think so
[other ways] unless I make my own job ... I'd have to buy a place

Nature of work

be like a doctor but look after animals ... animals come to you

Social context of work

probably with other people

Hierarchical structure

at the beginning there'd be someone who tells me what to do. But later on I'd get more used to it I'd probably do it by myself

Tools, equipment

yes, no idea what

Pay

I don't know. Would it be like the RSPCA or something? I'm not sure.

WRITER/ ILLUSTRATOR: Eleanor (f/11.06/B)

Training/qualification

I want to carry on with secondary school, I'm not gonna miss the last year like some people .. carry on and get a good education if I can cos there's hardly any jobs around now so you'd need to be really good

I'd have to do GCSEs. Well it's best if you took science and maths but I think you have to take them anyway and English, but I also want to take art and drama but you have to choose one or the other. ... you can do one of them out of school so I'll probably do that.

[A levels?] I'd definitely do art and drama if I was allowed to do both of them and I'd do English and maths and science cos they'd be the ones that you need to get a good education

art school after secondary school - several years - they'd teach me how to do like express art and make work better

[qualification?] I'm pretty sure they have like tests and stuff and I would probably get the qualifications

How to get a job

I'd start to try to think of ideas and advertising stuff while doing the art work and ... I'd try and find a publisher that would like that kind of work, and I'd send it off to them and see what they thought of it basically

Nature of work

writing and drawing

Social context of work

do it at home - I wouldn't live with my parents I'd move somewhere different

Hierarchical structure

don't work for somebody but show ideas to a publisher - like ... own boss

Tools, equipment

Pay

the publisher will print it out and it's whoever buys that book is the money [that you] get paid - only a bit of it

PILOT: Louis (m/11.07/B)

Training/qualification

study like reading compasses, reading about aeroplanes and its engine so if I have a fault I know how to do it. [where?] I'd study them at school. Go to the library, at home.

[at school] we might be taught the subjects because I think we get to choose our own subjects. [What subjects would you choose?] I'm not quite sure.

go to college - study engineering and flight and aeroplanes. the history of aeroplanes. [how long?] it depends how well I do. Maybe half a year or a year.

Then qualify as pilot.

Go to flying school so I learned how to fly a basic aeroplane.

How to get a job

show my applications to see if I got the right degrees to become a pilot. ... the Air Force

they look at applications and maybe test them to see how good they are.

Nature of work

they might teach me some more , like tactics of like what you're gonna use if you're gonna be in war

fly around bombing or something like that if they sent me out on a mission

practise tactics in the sky or practise reading a compass or have tests or like not a real run a simulation

helping my country

Social context of work

there's someone in the back of the plane to tell you if you're being followed
we would go in a group

Hierarchical structure

the flight school, the General or the person who lets you know what's happening

Tools, equipment

plane

Pay

THE MUSIC BUSINESS: Chris (m/11.06/B)

Training/qualification

get A levels - just a range, I don't think it really matters
I might like to [go to college] I think I'd rather go straight into music
you'd have to know, like, what people would want say if you wanted to go into
something like promotion, and you'd have to know about what you wanted to tell
the DJ... you've got to know a good track and you've got to know what all the
beats are if you want to work in a studio
listen to a lot of music

How to get a job

I think a lot of people who I know now, like, I'd probably know in about 8 years
time when I'm looking for a job, and I'd go and I'd know people who I could get
an interview.. and I hope I'd get a job there
I'd know more places to go rather than have more chances at the actual interview

Nature of work

first of all I'd start of in the studios mixing and then I might like to go on to
something like promotions, and then I'd like to eventually ... write songs and
stuff.

[hours] depends what sort of job it was [gave examples: if radio, which
programme]

Social context of work

in a radio station, promotions people come to speak to you about what records
they think you should play, you've got to speak to the DJ to tell him what records
he's gonna play and when the news is gonna be. ... I'm not too sure but I think
you have more than one producer.

Hierarchical structure

you'd definitely have [a boss] unless you become the boss I think that however high, even if you get to be head of radio one, [you've] got like John Birt .. you'd always have one ahead of you I think

Tools, equipment

in a producer yes, cos you'd have to like work out how high you want the bass or whatever, you've got to make it sound exactly right so when it's going out to the audience it's gotta sound good so it won't be sound distorted or anything... you'd have to know what was going on

Pay

start off pretty low ... and like climb a ladder ... then you get paid more

FOOTBALLER: Andrew (m/11.08/B)

Training/qualification

[not specifically asked - but see below]

How to get a job

I might go on trial with a team, and some man who manages, like a local team that I would play with, he might come and see me play in a football match and he might ask me

[can you apply to a club?] if someone wanted a new player for their team I might go to that trial and ask the man if I could play for them and show them what I could do

... but it's usually when a woman or man they see you play and they ask you if you want to go and play for them or go on trial with their club

if I was just a comer on trial I'd probably try for the youth team just cos there's not many people watching and play against different clubs, their youth teams, and then if the manager thought you were better he'd put you up to the reserve team and in the reserve team you play like other teams with their reserve teams and then if he thought you were really good you'd have to try and get first team placing in the full team and play against the really big clubs

Nature of work

[at first] I wouldn't just play football all the time, I might get some part-time job. you could maybe go and train every day but you might get a few days off every two weeks or something like that

Social context of work

[at Arsenal] there's three different teams there's a youth team, a reserve team and a full team

Hierarchical structure

coach and manager train you

Tools, equipment

the club provide that but I think you have to bring say your track suit bottoms, but they provide you with your kit and your football boots so it's all right. But you might have to have your own football boots if you come training, and if you want to go and play with some of your friends as well.

Pay

[you'd earn a lot of money] if you played for a big club like Liverpool or Arsenal but if I played for a smaller club like Chester I probably get another job as well ... I think I'd only get about £5 a week if I went to Chester as a beginning for the first three weeks ... but if the club got better and they earned a bit more money or the manager got paid a bit more money by the chairman I think then I would make a bit more money
if you're playing for the full team I think you get paid more cos the teams you play are probably harder than the reserve teams or the youth team

APPENDIX G

Constructions of factories: excerpts from transcripts

Leila: f/5.03/A	G1
Sinead: f/5.03/B	G2
Enrico: m/7.08/A	G5
Heidi: f/8.05/B	G11
Nicky: m/11.00/A	G16
Chris: m/11.06/B	G18

Leila (f/5.03/A)

Note: this is one of the interviews where I introduced the word factory. Leila said that things were made, but did not volunteer or recognise the word factory.

What they do is they make sweets in a factory. Have you heard that word?

No.

No, that's a new word. The sweets that are in the shop are made in factories. I want you to imagine that you're going to have a factory and make lots of sweets. Where do you think you might do that?

I don't know.

Could you do it at home or would you need a special place?

A special place.

Yes, I think you would. So how would you get that building to make sweets in?

I don't know. I would get it from another shop.

You'd buy a building?

Yes.

Where would you get the money to buy the building?

I would get the money from my mummy.

Right. Now would you make the sweets all by yourself, or would you need other people to make them with you?

I would make them all by myself.

And when you'd made those sweets, what would you do with them?

Eat them.

Sounds sensible. What would you need to make sweets with?

Err sugar, Err

You're right there. Anything else?

I don't know.

Sinead (f/5.03/B)

What sort of things would you like to make?

Tagliatelle 'cos that's my favourite thing to eat.

Tagliatelle, right, so you're going to have a tagliatelle factory. What do you make tagliatelle from?

I don't know.

No, nor do I, you've got me fooled there. What do you think you might make it from?

It has got little bits of ham in. It's like spaghetti and you put some more fatter and it's not spaghetti. It's got something you have to put over and it's very nice.

I think they make it from flour the same as you make bread from. Do you know where flour comes from?

Garden maybe.

Yes, you actually grow it, it's wheat from the farm. You might see wheat growing on the farm you're going to.

Yes.

So, in your factory you're going to need some flour and some ham.

Yes.

Anything else?

Yes, crisps and sausages.

You're going to make those as well are you?

And ham and chicken and fish, chips all that sort of things.

So it's a food factory is it? Where would the chickens come from?

From their mummy's eggs and then they grow up.

So they'd come from a farm too would they?

Yes.

Right let's think about the tagliatelle. In your factory will you have other people working or will you do all the work?

I'll have other people working.

How many will you have do you think?

One hundred.

A lot of people. What sort of things would they do, what jobs would they have?

I don't know.

Well, think about this tagliatelle. How might they make it? Let's use our imaginations.

Ham, spaghetti bolognaise.

You might have somebody who'd chop the ham up wouldn't you?

Yes, and they make it into little pieces about that size. They mix it with the tagliatelle and you eat it.

So someone would have to be mixing it wouldn't they? And then do they put it in packets? When you buy it, does it come in a packet?

I'm not quite sure. It comes in a sort of tin and then it puts the thing over it. You know those things, it's like a box and they got that silver thing over it.

Oh yes, I know. So these hundred people, would you have some people who would cut up the ham and some people who would mix it and some people who put it in boxes, or would each person do everything?

Each person would do all different things. One making tagliatelle, one making crisps, one making chips and fish.

OK, so if it was my job to make crisps and I got bored with it, and I came to you and said could I make tagliatelle instead, would you let me?

Yes.

Would you have men or women working in your factory?

Women.

All women?

Yes.

No men at all?

No.

Why would you have women?

Because I do like boys, but I like women.

Right. Would there be any machines in your factory?

To make sausages and tagliatelle.

Yes, it might be handy to have a tagliatelle machine mightn't it? Makes it a bit easier. Do the machines do it all by themselves, or do you need people to work with the machines?

You need people to work the machines.

An what do the people actually do?

They switch it on, and it comes out and then they can get all things out and switch it off.

Right. If you're in charge of the factory, what will you do?

Sometimes, I don't know, I would do the tagliatelle.

You'd just choose a job and do it?

Yes, and they could make apples and bananas.

How would they make apples or bananas?

I don't know.

Have a think.

I don't know.

Do apples and bananas get made in factories?

I don't know.

Oh.

Milk comes from cows.

Yes it does. [tape unclear]

Where would you get the things you need from?

I don't know. From the factory where they make them.

Would you need to pay for them?

Yes.

So where would you get the money from?

I'd go to banks and jobs to get money.

If you go to a bank and say, I want some money, will they just give it to you?

No. You have to do something and I don't know if they give you any money at all.

No, I don't think they do on the whole. So you'd have to have a job, wouldn't you, and earn some money? Would you need a building for your factory?

Yes.

A place to have it?

Well, I'd be thinking about having it outside.

Oh. It might get wet when it rains.

Yes, I'm thinking if the factory's outside.

Now when you've made all this tagliatelle and crisps and chicken and chips, what will you do with them?

I'll give them to other shops and then they can people can buy them.

So do you just give them to the shops?

Yes, I would.

So, if people were working for you, do you have to pay them?

Yes.

And where are you going to get the money for that?

Bank.

Yes, but we've just said that the bank won't give you the money.

Oh, I don't know actually.

Enrico (m/7.08/A)

If you go to a sweet shop and you see lots of chocolate there, where does the sweet shop person get the chocolate from?

He'd get them from delivery trucks.

And where does the delivery truck get it from?

The factories.

The factory, OK. So what I want you to do is to imagine that when you are grown up you decide to start up a factory making something. What would you like to make in your factory?

Chocolates.

You don't have to say chocolate because I said chocolate. I mean, there's lots of things you can make.

Just chairs, bookshelves, tables.

Chairs and bookshelves, OK. Would you make chairs and bookshelves and tables all in one factory do you think?

Yeh, in one factory.

That sounds reasonable enough, I think you probably would. So you're sitting at home and you think, I'd like to have a factory that makes chairs and tables and bookshelves. What would you have to do to make it happen?

Get the machines and make 'em all, get wood and things.

Where would you do it? Where would you get the factory from?

I don't know. Umm, the one that owns it.

So would you have to go and buy a factory from somebody else?

Uh uh, I'd never do that, it'd be too much money.

But is that how one gets a factory, buying it from someone else?

I don't know.

Or do you think you could start up a new factory?

The builders could make a new factory.

Would that cost money?

Well they would get paid, buy we won't - that won't cost -

Would you have to pay them, though, if you were getting them to build the factory for you?

I suppose so.

So whether you bought the factory or whether you have it built it's going to cost quite a lot isn't it? How do people get the money to start factories?

I don't know. I don't know how they get the money.

Where can you get money from? Where does money come from?

Shops.

Shops. How do you get money from shops?

A boss gets it from somewhere and then they give it, when you need more money you can get some more.

Right, so when you go to the shops you can get some more money?

If you give them like a tenner or something, and you want a fiver out of it then you can get five pounds.

So, do you get back as much as you gave them or more or less?

Say you gave a ten pound note you can just get a ten in all coins.

So you only get back the same money or a bit less money.

Yeh, but if you want it in coins then -

But that's not going to help you if you want money to build your factory with, is it? You've got to have something to start with. Where else can you get money from?

Building. If you're a workman first then you can get paid and you can stop being a workman, buy the factory.

OK, so you could save up a lot from the job you had in the first place, yeh?

Yeh.

Any other ways you can get money?

I don't know no other ways, you can't nick it.

No, you can't do that. OK so you've saved up and you've either bought your factory or you've got someone to build you a factory, right. Then you were telling me about the machines you'd need and the wood.

Yes.

What sort of machines do you need?

Special sort of machines but I don't know what kind 'cos I've never been in a factory.

You said you needed wood, this is for making chairs and tables is it?

Yeh, and for the buggies. Like some light wood and then paint it.

So in your factory you've got machines and you've got wood, anything else you need in your factory?

A lot of stuff, really a lot. Legs, chairs, I mean those kind of things that are on lights, tables that are made already, just leave 'em in the factory. Don't know.

Would there be other people or just you?

Lots more people 'cos I can't be by myself to make it.

How many people would you need? How many people in the factory?

About fifty or something, or more.

So what are all these people going to do?

Make, but not what I'm making. Somebody might do what I'm doing but not everything.

So what would you be doing?

Umm, making chairs and tables, bookshelves.

So what would they be doing then?

Some of them might be doing what I'm doing but some of them might be making curtains and cupboards, computers, chairs, umm, I said chairs, umm, lights.

So if you were making a chair -

Yeh

Do you make the whole chair?

Some of the machines make it but not just. When I'm off then it's not finished, some other people does the next bit.

So somebody else might finish it off for you?

Yeh.

But if you were there all day you might finish it?

I might finish it.

And you'd have a machine to help?

Yeh. That's only if I needed it.

How would you get these workers to come and work in your factory?

Some of them might be there before I'm there and some of them I think they can just come, just start, how they get their job and then they come.

So they'd see the factory and then they'd say, can I come and work there?

Yeh, but not just me, 'cos I'm not the one who owns it, the boss.

So you're not going to be the boss?

No.

No?

I'll never be a boss.

Do you think that's just because you wouldn't ever get to be a boss, or you don't want to be a boss?

'Cos if I was after somebody there might be a boss first before me, first time before I am a boss. If there was two bosses and there was only one I'd be [unclear], I'd be it.

So if there was only one boss you'll be it?

Mm.

OK, so if you're the boss you've got to get hold of these workers. What if not enough people come and ask you?

Huh?

What if not enough people come and ask? Say only four people come and say can I have a job in your factory?

I don't know, I'll just do four and I'll get some more people, ask if they wanna come and work in my factory.

What, so you'd go out and ask the people?

No, I would just ask, would you like a job first, if they have one I won't ask them.

So if you keep asking [interruption] So you'd go out in the streets and you'd say to people, have you got a job, would you like to work in my factory?

Yes, I would do who's come in to look at tables and ask if they would like to work.

Uh huh, do you think you would get enough workers that way?

Yeh.

Would you take just anybody who asked? If somebody came and said, yes, I want to work in your factory, would you take them?

Not straight away. Not if they just said yes. I wouldn't just let them work here, I'd get some details.

What sort of details would you need?

How old they are, if they're big enough, where you live, phone number. I don't know what else. Something.

How are the workers going to know what they have to do?

I'll just tell them. In the details I tell them what they gotta do, where they gotta sit and things.

So say I've come to work in your factory, what will you say to me?

I'll tell you how to make - work on the machines and -

So it wouldn't matter if I'd never made a chair or table before?

No.

You could tell me how to do it?

Yeh.

And then I'd be able to do it?

Yep.

Would the workers like working with machines?

Some will like, some of them might not.

Why do you think some people like machines?

They've got to do a lot. I mean they've gotta do a lot of stuff like I mean they've gotta do a lot of stuff, some people might not like doing a lot of stuff.

What do you mean, the machine makes it quicker so you can do more, is that what you're saying?

Yeh.

Why do you think some people wouldn't like machines?

Because they probably don't like machines taking so long. They probably don't like them taking long.

So what are you saying, machines are quick or machines are slow? I'm confused.

Some are fast, some of the machines are quite fast, some of them are slow.

And so people would just be fussy about whether they're fast or slow would they?

Yes.

And if it was a fast machine you would like it?

Yeh. And if it was slow I wouldn't like it.

There's no other reason people might not like machines?

I don't know.

That's OK, you don't have to. So if you were the boss, what would you have to do? You'd find the workers and tell them what to do - anything else you'd have to do?

Well, tell them when they've gotta have their lunch break. I don't know.

What's going to happen to those chairs and tables and things when you've made them?

I'd put 'em in the delivery truck and then I'd take them to a shop; where they belong to, where they gotta go.

Has the shop asked you for them or do you just send them to the shop?

No. I think they tell can I have some more chairs and stuff if they ain't got none.

So they'd ask you. How would they know you made chairs and tables?

Err, just phone up then we might make some, or we would probably have some.

How would they know your phone number?

'cos they've got it, in a phone book or something.

But when you're a new factory how are they going to know that you exist?

I don't know.

Makes it difficult doesn't it. When the shops have the chairs and tables, they're going to sell them are they?

Yes.

What happens to the money from them?

Umm.

Shops get money.

Yeh, well they, their boss out of the shop gives them, like gets it from a shop, the factories, and they make, they get sent it in a truck, then they give it out the back where all the foods are, but in a money place, and then they give them their change when they need some, for paper money.

Sorry, I got lost in all that. The boss from the factory, sorry, start again, it's my fault I lost track. Start again.

The boss from the shop phones up and asks for money at the factory, and the factory brings it, and you put it at the back where all the foods are and then when they want change the people who works at the tills they ask the boss then the boss goes and gets it.

So the factory has to give the shop the money?

Yeh.

Where would you get the money from?

Umm. [long pause] I don't know where the factory gets it from.

Do you have to pay your workers if you're the boss of the factory?

I don't know. Yeh, I think you do, or the council.

If you had to pay them, would you give them all the same amounts of money, the ones who were making chairs and the ones who were making tables and the ones who were making curtains?

I might give them the same, but if one's harder I might give them more, but if it's a bit easy then I wouldn't give them so much.

So out of all the things you've said, which do you think is hard and which is easy?

The computer's hard.

So they'd get more money?

The curtains are hard 'cos you've got to sew up for a long time. Chairs are sometimes hard.

Now, what if you'd got one worker who's making tables and one who's making computers, and they said, we're bored with doing what we're doing, can we change jobs, can I make computers and can you make tables?

I'd just say if the other one, man, would like to make a computer, that other man like to make a chair, I'd let them change, but if the other man wanted to stay on his job then I'd just keep 'em where they are.

So they could only swap if they both wanted to?

Yeh.

Would they be able to do the other person's job?

No. Only if they asked me and they wanted to.

Would your workers like working for you?

I think so.

What if they came and said, you're not giving us enough money?

I'd just not, umm, just they won't work for me no more. I won't let 'em work for me.

You'd sack them? Do you think you could find another worker instead?

Yeh.

Would they be men or women, your workers?

They could be men or women, I don't really care.

So any of the jobs, I mean what about sewing curtains?

I think that would be a woman.

What about making tables?

Men and women.

What about computers?

I don't know who should make computers.

What if you had a man who came and said, I want to sew curtains?

[laughs] I'd ask if there was another lady doing it, I would just ask the lady, do you want to do something else. Or if the man wanted to do curtains I'd just let him make another lot of curtains then the lady come in with the ones that she's making.

So you'd let the man do it if he wanted?

Yeh.

Heidi (f/8.05/B)

What would you like to make in your factory?

I wouldn't like to make anything which makes smoke because I wouldn't like to pollute the world.

Mm.

I'd like to make sweets and chocolate.

OK, so a sweet factory or chocolate, or maybe both. How would you set about this - you're sitting at home and you think, I'd like to have a chocolate factory or sweet factory. What would you have to do?

I'd send a letter to the council if there was a space in the area where I could build a factory.

Mm.

I'd just ring up and send a letter to the council and if they didn't reply then I'd give up but if they did reply then I would ask some friends to help me or I'd ring up and look up the Yellow Pages and telephone everyone. Not to everyone, but to see if there are any builders at a cheap price.

Mm.

And if the council said yes then I'd get them to build me a factory, but I wouldn't like it to be too big because I wouldn't like to get all snooty and posh.

Right.

And I wouldn't like to take it for granted. I'd like to work hard.

Mm.

And make it worth it.

Right, so you've got a building. Some land and a building and yourself. What do you do next?

I'd put an ad. in the magazines and Yellow Pages and books like that. well not books but things like that and people who need a job - lots of people need jobs - I wouldn't like, 'cos I, it's like I wouldn't really want them all to tell me their address because some people don't have a home 'cos they don't have a job. So I wouldn't do that straight away but like in about a month I would ask them if they had a home or where they lived.

Mm.

But I wouldn't mind if they were homeless because I know lots of homeless people need homes and need a job, so I wouldn't mind if they were homeless and I wouldn't mind if they didn't have any experience 'cos they could learn. A lot of things.

So, would you just take anybody to do your jobs or would you choose?

I would choose people because some people like, they want money money money and that's all they want and I wouldn't like greedy people.

So you'd choose the deserving ones?

Yeh, the people who really need it, and not people with second jobs or things like that 'cos they don't really need a job.

Right, so you've got some workers. Now you've talked about the builders and a cheap price, and you've talked about paying some workers, where's this money going to come from?

Well, I'm saving in my bank 'cos you know you save money for when you're older, and I save. I've got a hundred and something pounds in my bank so I'm saving up there and I'm only eight so that's quite a lot.

So you'd keep saving until you had enough?

Yeh. And if I couldn't have it straight away then I wouldn't like to say, oh God I want it straight away or give it to me now! I'd be patient.

So how would you get more money to save?

I would have a jumble sale 'cos I've got lots and lots and lots of things that I don't need.

Mm.

And I know that some people really need those things, so I'd have a jumble sale or I'd bring things to the jumble sale.

Mm.

With my friend K., my best friend K., because she goes to lots of jumble sales with her mum. So I'd bring my things there and I'd get things like tools, and things like that from the jumble sale.

Sorry, tools for the factory?

Yeh.

What sort of tools would you need?

I don't know. I've never been to a chocolate factory.

Well you'll have to use your imagination.

Umm.

Do you think you'd have any machines in your factory?

No.

No?

I like real chocolate, real chocolate with sugar, lots of sugar, and, how do you make chocolate?

Cocoa, cocoa beans.

Yes, I'd crush the cocoa beans with those potato mashers, you know, those potato smashers. And then some people would make sugar. I don't know how you make sugar but some people say that honey is just like sugar so I might put honey instead of sugar sometimes. 'Cos sugar's quite expensive.

Where would you get the sugar and the cocoa beans from?

From the people who sell them.

In a shop?

No, not in a shop because we wouldn't have enough of them ones. But there are people who sell things.

Right, so you've started describing some of the jobs. You said some people would mash the cocoa beans and some people'd do things with sugar. What other jobs would there be?

There would be sticking it all together, do you know what I mean, with water. You have to get the cocoa beans which are all mashed up now, and you get some water and you get the honey or the sugar and you put it all in balls or you'd make a little kind of round base and with sides on it, make two of them. And if the people, you know, icing -

Mm.

There's icing things which you put on, well they'd have orange stuff which you put inside or the strawberry stuff.

Yes I see, squidgy stuff that you put inside.

Put the stuff inside and then put the other one on the top of it.

So some people would be doing that?

Yeh, 'cos I've been to pottery so I know kind of how to make pots and stuff.

Right, so you'd use your experience from pottery. Yes?

And I'd, you know when you put the chocolate down over the gaps with your fingers?

Yes.

And some people would taste them. Taste them to see if they were all right at the beginning and if they tasted all right then you would go on making them. Or if they were poisonous then you couldn't make them any more.

Any other jobs?

Err

Would you just sell them loose or?

No, I'd get people to make boxes, boxes and those little tea cup things that they put the chocolates in and then into the boxes. Do that. And I'll sell them to shops and stuff like that.

How will you do that, the selling them to the shops?

I'd put them in a magazine and then -

Advertise them?

Yeh.

Right. What would you be doing if you were in charge?

I'd be doing like, let me taste that chocolate I just need to see, or, look there's a gap in that chocolate you can push it down a bit, and stuff like that. And I'd be at the end where all the chocolates come out and I'd look at the chocolates to see if there were any gaps.

So you'd be doing some checking?

Yeh.

Anything else you'd have to do?

Pay the workers.

Mm.

Umm, sometimes I have to sack them not pay them.

Oh, really?

Because sometimes they nick the money from the tills and well there wouldn't be tills would there? No but sometimes they do find where people keep their money and they nick the money.

Mm.

Or they're not very good at making things or they don't wear their gloves.

Yes. So if they didn't do it right you'd sack them?

Yeh.

Yes?

Well, I'd give them three chances.

Yes that sounds fair.

And then -

So you'd be sort of in charge of discipline?

Yeh.

Now, would you be working just with all the other workers or would you have a special place?

Have a special place because I'm the boss. I'd be, I'd have a office.

Yes. Anybody else work in the office?

No.

No. Right. So would you pay all your workers the same amount or different amounts?

Umm

Doing all those different jobs.

I'd pay them all the same amount otherwise they might have fights about the money. Oh no, that's my money, no we have to share this money, and stuff like that, and if they all got the same money, amount of money, then they wouldn't fight over it.

Now, if the person who was doing the packing wanted to change and do mashing the cocoa beans, could they do that?

Well, if there's a person who's mashing up the cocoa beans who wanted to do boxing then they could, they could swap.

So if they both agreed they could swap?

Yeh.

Would you have men or women? Are there any jobs that would be just for women or any jobs that would be just for men?

No, I think that's sexist, and there would be white and black people because I think that's racist if people say, oh no, you're black, you can't come and work here.

Right. Will your workers enjoy working for you?

Well, I hope they would. I'll try and be nice to them.

Now you said you're going to sell the chocolates to shops?

Yeh.

What are you going to do with that money that comes from selling the chocolates to shops?

Give the workers their money and some I'd give to charity. And some we need for those things which move and make and bring the chocolates through.

For the machines?

Yeh [doubtfully]

Well they would be sort of machines wouldn't they?

Yeh.

I know you weren't having real machines, but a production belt?

Yeh, that belt type of thing.

What, to buy it or to make it run?

To buy it, and if it breaks down and fix it.

Mm.

And to buy gloves and to get proper toilets because people need the toilet sometimes.

Yes.

And by then all the money would be gone, so -

What about buying the cocoa beans and the sugar?

Oh yeh, and buying that.

So you'd need some for that as well wouldn't you?

Yeh. But at the beginning I would make the toilets with the thing and, but I'd have to pay rent for the toilets flushing and the toilet paper and the loo paper and umm-

When you say rent, is that water charges or something?

Yeh. But I have a lot of friends so I think friends would help me out. My mum and dad.

So, anything else about your factory?

No.

Nicky (m/11.00/A)

What would you like to make in your factory, anything you like.

I don't know.

Well, start thinking, what would you like to make. I told you there's no right answers, so just choose something you'd like to make.

Comics I think.

Comics. OK. So you're going to have a comic factory. What would you have to do to set up your factory?

Err

I mean, you're sitting at home and you think, right, I'll have a comic factory, so what's the first thing you have to do?

You'll [unclear] the place, your own place.

What, the factory, you design the building?

Then you get the work, you have to build the payment work, how much it's gonna cost, like the shop, how much the buildings can earn [?? unclear]

So you work out how much the building will cost. And where would you get the money from?

I don't know,.

Well have a think.

I don't know.

OK, well I'll give you the money then. So you've got lots of money, and you've designed the building. Would you build it yourself or would you get other people to build it?

Other people.

Do you have to pay them to do the building?

Yes.

So that's where some of the money goes, and presumably some of the money goes on bricks and things?

Yeh.

OK, so you've got a building now. What's the next thing you need to make it into a comic factory?

Get loads of comics, like the [tape unclear]

Where would you get the comics from?

Comic factory.

But I thought you were going to be a comic factory. I thought what you were going to do was make comics.

Yeh.

OK. so how are you going to make them?

I'll design them.

You're going to design the comics. So you'll sit at your desk and you'll design comics?

Yeh.

Will there be anybody else in your factory or will you do it all by yourself?

Get one like us.

What, one other besides you?

Yeh.

And what would that person do?

Sort out all the comics where they go and that.

So who's going to actually make the comics? You or the other person?

Me.

Right. So how will you make a comic?

I don't know. I ain't thought about that.

Well, what might you do. What do you need to make a comic?

You need lots of things, lots of paper.

Paper right.

And, imagination.

Yes. So then you sit and draw it, do you?

Yeh, and print it.

Ah, now how are you going to print it?

Umm.

Are you going to do the printing?

No the other person.

The other person could do the printing. Are you going to be partners, or is one of you going to be in charge?

One of us is going to be in charge and it's going to be me.

If you're going to be in charge, what do you have to do?

Huh?

What does it mean to be in charge?

Be boss.

So, you'll be boss. You'll tell the other person what to do will you?

[nods]

I did not persist with asking Nicky about the factory, as he was clearly not happy.

Chris (m/11.06/B)

What would you like to make in your factory?

Oooh, basketball equipment.

OK, a basketball equipment factory. So you're sitting at home and you think, well. I'd really like to run a factory selling basketball equipment.

You can't get away from the stuff -

So how would you set about doing this?

What, if I wanted to start up a factory?

Yeh.

And I had all the money to do it with?

Well do you have the money to do it with?

Oh no.

Well, where would you get the money from then?

Umm, let me think about this now. I think first of all I'd have to get a normal job first, like which would be, or perhaps even work in a factory, but I wouldn't. I dunno but I wouldn't have thought you get paid that much for working in a factory, so I'd get another job and be quite, wait until I'm about thirty and if I've got enough money then to start up, like a really really small business or something like that. Then I'd go on to making it a bigger business then a bigger one and eventually I'd make a factory.

Right. Any other ways you could get money?

I'll tell you what my mum does, sometimes she does voluntary work for the Prince's Trust. That's what I could do, I'll ask for a grant.

OK, so you would ask for a grant from somebody so you could get started?

Yeh.

Right, so if you've got some money, now what are you going to do?

I'm going to start off with getting some builders to build the structure of the factory. Then I'd get machinery fitted in. Then I'd get all the stuff like the plastic that you would need to make basketballs. Then I'd get people to work there. But I'd try to get, there are quite a lot of people out of work, but I'd try to get a lot less people to work. I'd try to get more machines working 'cos they cost less and they'd be more efficient. They could probably do the job quicker.

Can the machines do the work all by themselves or do they need people to work them?

Oh no, you'd need people, 'cos the machines can't do everything but you need people to just show them what to do and move them around and type in orders and stuff.

How would you get the people?

I don't know 'cos I don't know any people who work in a factory. Umm, first of all I'd probably put an advertisement in the paper, or something like that, and then if they came to see me then it depends, if there were a lot of them then I'd have to choose quite carefully, but if there were only a few of them and they were all right, they weren't amazing, but if they're only two of them like and they, say you only needed about ten, and there were only ten of them in half a year then I

would, yeh, but maybe less 'cos they might have found a job by then. Or I'd hire them.

Sorry, I got a bit lost there. You'd put an advertisement somewhere, is that what you said?

Yes, I'd put an advertisement in the paper.

Yes, and some people would come?

Yeh, say ten people came in two months.

Yes.

And they were all right, they weren't amazing, but -

So how are you going to check whether they're amazing or not?

'Cos you would interview them and give them a test run or whatever.

OK, right.

Now you see what I'd do is. if there were loads of people, like twenty or thirty and I only needed ten, I'd check really carefully.

Yes.

If there were only ten then I'd have to take that ten.

Yes, I'm with you, sorry. What different jobs would there be in your factory?

I think there'd probably be a job to put the plastic or whatever with the basketball on the, you know, what do you call it the thing that goes round?

Production belt, or?

Yeh, yeh, the production belt. And then the, I don't know how basketballs are made, but then say the machine takes over and does a bit, and then you get the woman at the other end or the man at the other end to put it into the next bit and the next bit and the next bit. Then eventually the machine covers it in leather or whatever say, and you get a man to put it into the box, which then goes to the shop which then gets sold.

So you've got some people just moving things from one machine to another?

Yeh. You've got some people putting things in boxes.

Yeh. Any other different jobs?

I think machines would put it into boxes. Oh, I think I'd probably need, although I'd be the owner of the factory, I wouldn't particularly like to sit there all day, so I'd get a person to be the head of the factory to see what to check up on and see what they'd be doing, and I'd get the sales person to see how many they're selling each year, and see if it's good or if it's not good, and try to sell more and so on, and make less and make more and so on.

Any other people?

I don't know 'cos I don't know much about factories. I'd get drivers, lorry drivers and lorries, to take it to the shops all over Britain and say if it's in America, all over America and I'd try to get people to sell it to the shops and say our one's the best because -

Oh, right, so you'd have some sales people as well?

Yeh.

OK. Would you pay all these people the same amounts of money or would you pay them different amounts?

I'd pay the people who did harder work more.

Well, what's harder work in your terms?

I don't know because although the people who just move one things to another, it doesn't seem like very hard work, but really it must be really boring just moving one thing to another so it would be quite hard work really. It's not hard work as in - like you're not really using - you're not really trying at anything, you just move it so it'd get quite boring. I thin I'd probably give the sales person and the manager more money then the factory workers or the lorry people. I don't know. I'd have a look at some other factories and see what they did and take an average from all of them.

That sounds fair enough. So the people who work in your factory, how will they feel about the job?

What, you mean how much they'll get paid?

Well, will they enjoy their work?

Well I would have thought so 'cos they went in for it, but they might have just done it 'cos they might not have been able to get another job and this might have been the job they were most likely to get.

Do you think they would work really hard all the time, or?

I think it would be like most jobs. One day you would, one day you might have a really good day and you might work and get through loads and loads of work and do it really quickly or whatever, and another day you might be, obviously you'd still be doing it but you might not be doing it so well, you might be making some mistakes or whatever.

But if you're working with a machine and the machine works at a set rate, then you couldn't do that could you?

Yeh, I suppose so. I don't know, I suppose you might be ill one day, that might be your bad day.

What would happen if they made mistakes?

What the machines or the people?

The people.

Well it depends. If they were only small mistakes and maybe if they were slightly big but quite small still, and they did it by accident, then it'd be all right, I wouldn't - I would just tell them off and then say nothing else. But if it was quite a big one, and they did it on purpose then I'd probably fire them. But I'd have to work out whether I could get someone else to do the job first.

Yes.

So I'd get someone to fill their place.

Apart from the making mistakes, do you think you'd have any other sort of problems with the workers?

Oh yeh, they might, like if they were ill a lot of the time and say they had hay fever every day or something like that, I'd have to say - if they had hay fever I'd say don't come during the summer but if they were ill a lot and they were always ill, then I'd say I'm sorry you can't work here because they would never be in here and they're getting paid. It's either that or I'd give them the decision to either be ill and not get paid for the days that you don't do it, or, but I'd need the work anyway, so -

Now you were planning to be the owner and sit at home while you had a manager to run it for you?

Not completely, I wouldn't sit at home, I just wouldn't like to stay in the factory all day. I might come in say for a bit and then see how it's going and tell, if the head of it or whatever right, or whoever I'd hired, if he's doing something which isn't slightly right I might say, no I want this, I want the prices of basketballs going slightly up, but I'd have to talk to the sales person about that.

So as owner, your job would be to have conferences with the manager and sales person?

Yeh, have meetings, that sort of thing.

And make sure everything's OK?

Yeh.

OK.

And then I'd start to get, to have people, I've forgotten, is it investors, I think. You know how you can invest in Shell or whatever.

Yes.

I would get investors who would give me money and I might even get sponsors or something like that, I don't know, I don't know much about making basketballs.

Right, so if you get some investors and they give you money, what are they getting out of it?

They, what happens is, they put some money in. Now if the business works and it sells millions and millions and millions and millions, then if they want - the money that they put in will have gone up, they will have more money when they take it out.

How will it go up?

Well what they're doing is using your money

Or you're using their money, or something?

Yes well, you're using, they're using - no wait - the factory are using, say the public's money to make more basketballs. Now if they make basketballs but they sell loads, yeh? They keep on selling, then you'll get more, they'll give you a bit of the profits as well.

Right.

I think that's right.

That's exactly what it is, you're quite right. So you would be able to expand your factory if you got investors, wouldn't you, 'cos you're talking about starting very small but if you got people to invest in you then you could make it bigger.

Yeh, I would make it bigger and I would do an advert. and I might say join up with a company like Nike or something like that so I could have, say I could do Cotack balls, then I might say something like Cotack and Nike or something which would have something with Nike, which would think, people would think, oh, Nike, they're a good name, we trust them. And so it would be more likely that Cotack will, say that was the company, they'd sell more than more 'cos people know the name Nike.

So would you just be taking Nike's name or would you actually have business links with them?

Yeh, oh yeh, I'd link with them 'cos you can't take their name and just use it 'cos you wouldn't have the copyright. You would call it something. You could call it Nik and hope people misread it.

Yes, you could cheat! Sounds quite a good idea. Did I ask you whether the workers were men or women or both, I can't remember.

No.

Well, would they be?

Whoever's best suited for the job. It doesn't matter whether they're men or women.

What about the manager and sales manager?

It's whoever's best for the job. But I don't think, if say all the women were best for the job, I don't think I could have all men or all women. I'd have to have - I might have say more women than men, or more men than women, but no way all men or women.

You think you ought to have both?

Yeh, but I doubt that would happen, that all one sex would be best.

Do you think there's any particular job that one sex would be better at?

Any, I think -

I mean, are there particular jobs that men can do better than women or women can do better than men?

Oh yeh, I think - I don't know about women. I don't know, they can do knitting I suppose. Sounds really sexist but I can't think of much.

[laughs] Yes.

But I think one of the things - I can't think of much things that men are better at apart from sports 'cos they're better built for it so - I don't know about women though. Apart from sports, I think they can, and apart from things where, well I suppose when you've got to be really muscular and things like that when I think men are better, but I think with things that are more perhaps detailed and need more thinking into it and more, like, I think women would probably be better.

APPENDIX H

Children's ideas about the flow of money and goods between producers, shops and consumers

The description of an imaginary factory allowed some insight into children's ideas about the flow of goods and money between different social and economic institutions. This may seem somewhat distant from the focus of this thesis, children's thinking about work. However, paid work takes place within an economic system, and payments to workers form a part of this wider network of exchanges. An examination of the whole system proposed by each child offers insight into their ideas about the role of labour as an economic commodity.

A number of researchers have examined children's ideas about the flow of money between different economic institutions. These investigations have generally started with the shop; children have been asked about payment in shops, and what the shopkeeper does with the money received (e.g. Strauss, 1952; Burris, 1976; Furth, 1980; Jahoda, 1984). Other research has focused on the role of the bank (e.g. Jahoda 1981; Ng, 1982; Berti and Bombi, 1988). Most of the research has been based on the ideas of Piaget and has described children's ideas in a series of developmental stages or levels of understanding (see Chapter 2). The details of the stages identified differs, but the sequence of development is generally agreed.

Jahoda (1984) suggested why the economic links between institutions are difficult for children to detect. He pointed out that the economic rules which govern these exchanges are implicit, are taken for granted by adults, and are not generally pointed out to children. In the absence of specific information, children apply rules governing home and family life to economic exchanges. They form theories about what happens, and these theories may make it difficult for the child

to move to more realistic thinking. For example, fairness is an important aspect of rules about social interaction between individuals. But when it is applied to financial exchanges it hinders understanding of profit.

The interviews about factories were not specifically designed to investigate the flow of money between institutions, but this featured in most children's accounts. The approach differed from previous investigations in that the starting point was the factory rather than the shop, and financial issues were set in a specific context of which the child had a sense of ownership. However, the wide range of the interviews meant that the details of children's thinking about finance were not always pursued in depth because there was so much else to talk about, and because the order and direction of each interview was partly controlled by the child, hence a systematic approach to this particular issue was not always possible.

Many of the children introduced financial issues spontaneously: Eleanor (f/11.06/B) did so at the start of her factory account:

Well the first thing I'd have to do is to get hold of somewhere that I'd be able to put my factory. So I'd find a space that kind of like an old factory that was on sale and then secondly, I'd have to make sure it was all safe and pay for all the materials and machines, and I'd have to get a designer to work out where everything went, it costs a lot, and I'd have to get some builders to build all the machinery that I'd need.

Data in this section is organised in three parts: case studies of economic systems described by six children; factory expenditure; and factory income.

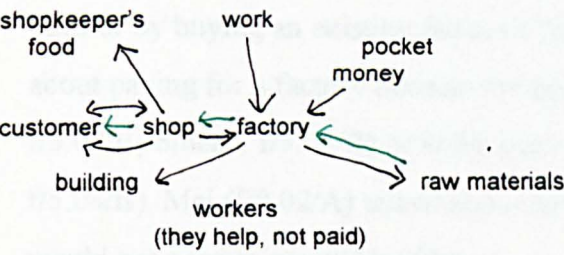
i) Case studies of economic systems

Figure H.1 sets out the economic systems described by six of the children. These six have been chosen to give some indication of the variety of systems put forward and of theories which acted to inhibit further understanding.

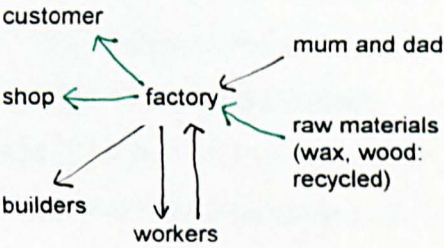
Figure H.1: Flow of goods and money in relation to factories

money →
goods →

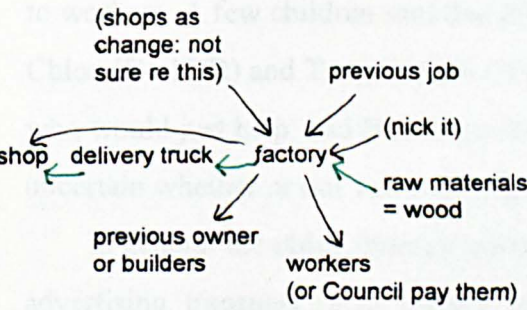
Tarquin: m/5.07/B



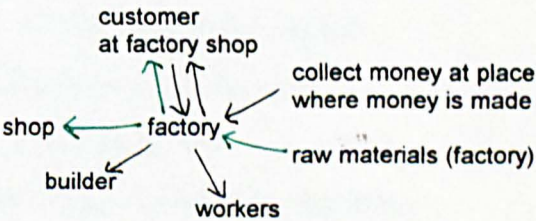
Samantha: f/7.10/A



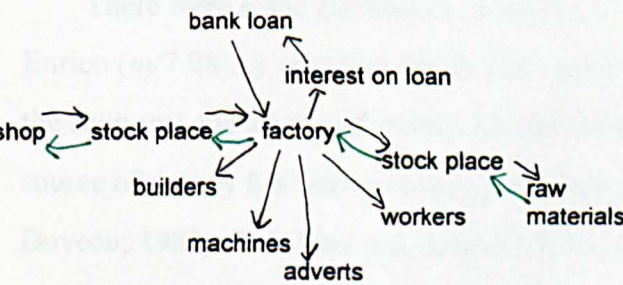
Enrico: m/7.08/B



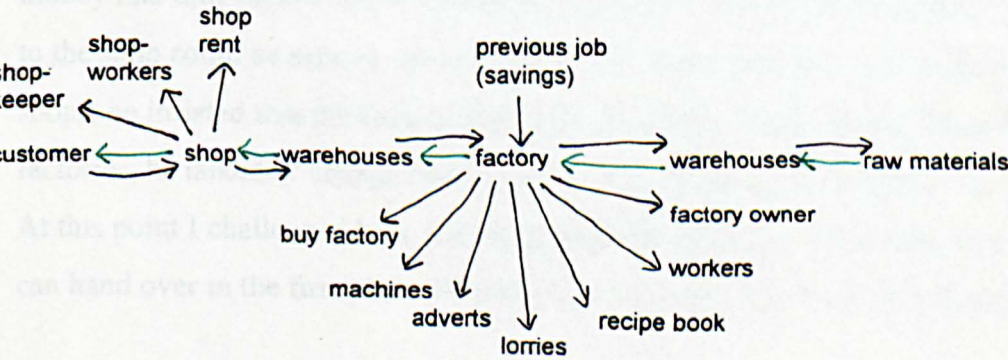
Hassan: m/8.05/A



Tracy: f/10.07/A



Andrew: m/11.08/B



ii) Factory expenditure

Expenditure is discussed first because children found it far easier to see how a factory manager could spend money than how it could be acquired. Setting up a new factory was generally seen to be an expensive business. Most children thought they would have to pay for a factory and machinery (either by getting one built or by buying an existing factory). Several 4-5 year old children did not talk about paying for a factory because the product would be made outside (Claire: f/5.02/B; Sinead: f/5.03/B) or at the back of the shop (Jimmy: m/5.10/A; Annabel: f/5.04/B). Mei (f/8.02/A) talked about having a factory built, but thought that she would not need to pay the builders.

Running costs were generally seen as the cost of raw materials and payments to workers. A few children said that they would not have to pay these basic costs; Chloe (f/4.11/B) and Tarquin (m/5.07/B) said they would not pay the workers, who would just help, and Hassan (m/8.05/A) and Shuel (m/11.00/A) were uncertain whether or not you would have to pay for raw materials.

In general the older children identified a wider range of outgoings, including advertising, transport, taxes, repairs, electricity, oil, rent, phone bill, contributions to charity.

There were some confusions about the direction of flow of the money: Enrico (m/7.08/A) said that the factory would deliver money to the shop, and that the shop was the source of money for the customers. The idea that shops are a source of money has been noted (e.g. by Strauss, 1952; Burris, 1976; Shields and Duveen, 1983). This idea may arise from the observation that coins are generally obtained from shops, and for young children coins rather than notes are the money that they handle. Enrico's suggestion that the factory had to supply money to the shop could be seen as an extension of this idea. When he talked about shops, he insisted that the factory sent them the money. Later, when discussing factories, he talked of change from shops as a possible source of factory income. At this point I challenged him, and he agreed that change is less money than you can hand over in the first place. However, later he returned to the idea that the

factory would have to supply the shop with money. Part of this discussion is in Appendix G.

iii) Shop and factory income

Children had much more difficulty in identifying sources of income for the factory. There were two separate problems here: they needed capital to start up the factory, and a regular income to run it. The sources that they suggested for each of these are set out in Table H.1

Table H.1 Factory income

a) Start-up capital

	<i>age in years</i>			<i>school</i>	
	4-5	7-8	10-11	A	B
bank loan/mortgage	0	0	6	3	3
bank/Post Office (freely given)	1	1	1	1	2
grant from council or other trust	1	1	1	2	1
savings from previous job	2	6	5	2	11
savings - source not specified	1	3	2	3	3
sell something	0	1	1	0	2
steal	0	1	0	1	0
money factory	0	1	0	1	0
parents	1	2	2	3	2
shops as change	1	2	0	1	2
no capital needed	0	1	1	2	0
don't know	0	0	2	2	0
<i>N</i>	7	12	14	15	18

b) Regular income

shops as payment for goods	0	4	8	1	11
maybe shops as payment for goods	1	3	2	2	4
direct sales to public	0	2	0	2	0
family/friend	1	2	0	1	2
God	0	1	0	1	0
money factory	1	1	0	1	1
payments from workers	1	2	0	2	1
personal income from other job	2	0	1	1	2
council	1	1	0	2	0
bank	2	0	1	1	2
cheques	0	1	0	0	1
<i>N</i>	7	13	12	13	19

Children in School B generally had more ideas about possible sources of factory income; Chris (m/1.05/B) produced a range of ideas:

How would you set about doing this (starting up a factory)?

What, if I wanted to start a factory?

Yes.

And I had all the money to do it with?

Well do you have the money to do it with?

Oh no.

Well where would you get the money from?

Um, let me think about this now. I think first of all I'd have to get a normal job first, like which would be, or perhaps even work in a factory but I wouldn't, I dunno but I wouldn't have thought you get paid that much for working in a factory so I'd get another job and be quite, wait till I'm about thirty and if I've got enough money then to start up, like a really really small business or something like that. Then I'd go on to making it a bigger business then a bigger one and eventually I'd make a factory.

Right. Any other ways you can get money?

I'll tell you what my mum does, sometimes she does voluntary work for the Prince's Trust. That's what I could do, I'll ask for a grant.

The solution Chris has worked out here is a reasonable one. However, he returns to the topic of financing the factory later in the interview and really struggles to work out the principles of investment:

And then I'd start to get, to have people, I've forgotten, is it investors, I think. You know you can invest in Shell or whatever?

Yes.

I would get investors who would give me money and I might even get sponsors or something like that, I don't know, I don't know much about making basketballs.

Right, so if you get some investors and they give you money, what are they getting out of it?

They, what happens is, they put some money in. Now if the business works and it sells millions and millions and millions and millions, then if they want - the money that they put in will have gone up, they will have more money when they take it out. How will it go up?

Well what they're doing is using your money

Or you're using their money, or something?

Yes well, you're using, they're using - no wait - the factory are using, say the public's money to make more basketballs. Now if they make basketballs but they sell loads, yeh? They keep on selling, then you'll get more, they'll give you a bit of the profits as well.

Only one child in School A explained that the main source of regular income for a factory comes from sales to shops, though a further two suggested this might happen, and two suggested that the factory could sell directly to the public. It is difficult to see why the working class children were less aware of this essential link in the financial network. Furth (1980) interpreted it as a lower stage of

thinking; however, the children who did know that shops buy goods from factories may well have heard this talked about in their families.

If shops are not seen as the source of factory income, then some other source had to be identified: this financial problem was solved in a variety of ingenious ways. Both Hassan (m/8.05/A) and Daniel (m/5.05/B) said they would get money from the factory that makes it, where they suggested it was freely available. Mei (f/8.02/A) suggested that it might come from God:

Where would you get the money to pay them?

I don't know

Where can one get money?

Some people, oh, some people say God make them and some people say they find them.

So which do you think?

God make them

So if God makes the money, where would you get it from?

He drop it all down

Another possible solution is to assume that the workers also have to pay the manager. This appears to be a development of other ideas of reverse flow: that the source of personal money is the shop, or that the source of shop money is the factory. A number of children interviewed used this idea. Jimmy (m/5.10/A) described building a station (the job he wanted to do when he was grown up). He planned to get some workmen to help him.

Do you have to pay them for working?

Well they have to pay me

They have to pay you. why do they pay you?

Because they came to help me so they pay me

When he was asked why people would want to work if they had to pay to do it, he decided that he would also pay the workmen. He would pay them 'four quid' and they would pay him 'the same, four quid'. He also talked about working in a shop:

Do you get paid for doing that?

No, you never get paid, it's not fair.

Why is that not fair?

Because you always have to pay them but they never pay you

Jimmy's understanding, then, seemed to be that the worker has to pay the employer. Other children were clear that payment was given for work in all the contexts discussed, but also believed that the workers had to pay their employers

in some contexts. This was seen by Samantha (f/7.10/A) as a useful source of money for employers:

If you're in charge of the factory do you have to pay the people that work there?

Yeh

Where would you get the money for that?

(pause) *Well, the money they gave me to work there, I could give that to them.*

A similar explanation was offered by Joel (m/7.11/B). Gary (m/7.10/A) used ideas of reverse flow in a rather different context. He thought that some grown ups were unemployed because they could not afford to get a job, because they hadn't got enough money to pay for the job. Since he believed that you could only get money from the bank if you worked and put money in, the outlook for the unemployed was bleak.