

THE INFLUENCE OF SOCIAL-CLASS ORIGINS ON
THE CHOICE OF COURSE, CAREER PREFERENCES, AND ENTRY
TO EMPLOYMENT OF CNAА GRADUATES

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By

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North Staffordshire Polytechnic, in collaboration with the *HELM* Project at the CNAА and Bulmershe College of Higher Education. Although originally based at Bulmershe College, the *HELM* Project was moved to South Bank Polytechnic whilst the present writer was undertaking his research.

August 1988

DEDICATION

To
The Memory
of
Catherine Gatley
1843 - 1879

DECLARATION

While registered for the degree of Doctor of Philosophy, for which the present submission is made, the author has not been a registered candidate for any other awards, either of the CNAA or any university.

The work was carried out in the Department of Sociology at North Staffordshire Polytechnic between September 1984 and August 1988, as a part of a wider CNAA funded project into Higher Education and the Labour Market (HELM). The present study is based upon a class analysis of the HELM data, for which the present writer was solely responsible. The work is believed to be wholly original, except where due reference is made.

Advanced courses of study in educational sociology and the principles of sociological research were undertaken in partial fulfilment of the requirements of this degree.

David Alan Gatley

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ABSTRACT

THE INFLUENCE OF SOCIAL-CLASS ORIGINS ON THE CHOICE OF COURSE, CAREER PREFERENCES, AND ENTRY TO EMPLOYMENT OF CNAA GRADUATES

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The aim of the thesis is to explore the social-class origins and destinations of CNAA graduates. The thesis begins with a discussion of social class, its meaning and conceptualization, and social-class schemas are devised for analysing the origins and destinations of graduates. Social class, however, is defined in a broad sense to include the dimensions of gender and ethnicity.

Polytechnics and colleges are shown to have a higher proportion of working-class and black students than the universities. But despite their commitment to expanding educational opportunities public sector institutions remain socially exclusive in so far as they draw the bulk of their students from more middle-class backgrounds. Likewise, although public sector institutions appear to have expanded opportunities for women, female students are found to be concentrated in a limited number of courses.

The career destinations of graduates are examined next. Significant differences were found relating to social-class origins with a tendency for men from manual backgrounds, women and black graduates to enter lower-status occupations. These differences appear only partly to arise from differences in career aspirations. It is suggested that black and women graduates may be subject to some discrimination.

Significant differences are found in the destinations of graduates according to their courses of study, and once allowance is made for this, the existing relationship between the social-class origins and destinations of graduates becomes much less marked. An attempt is made to explain the relationship between the social-class origins and destinations of graduates and their courses of study using the models of contest and sponsored mobility devised by Turner.

Using a four-fold categorization of school curriculums, it was shown that those graduates who had undertaken a 'utilitarian' school curriculum were constrained as regards their choice of course, whilst those who had undertaken an 'academic' curriculum and had been sponsored through secondary education enjoyed a greater choice of degree subject. Graduates from working-class origins were found to be more likely than their middle-class peers to have undertaken a 'utilitarian' curriculum.

CHAPTER ONE: SOCIAL CLASS, SOCIAL MOBILITY AND HIGHER EDUCATION

This thesis examines the relationship which exists between the social-class origins of graduates, the courses which they undertake and their transition from higher education to the graduate labour market. As such, it can be regarded as a study of social mobility in so far as its principal concern lies in examining the extent to which public sector institutions of higher education act as an avenue of social mobility for those from lower-class backgrounds. This, in turn, involves a consideration of two matters: access, that is the extent to which these institutions are providing places for young people from lower-class backgrounds, and destinations, that is the extent to which such graduates are successful in the labour market after graduation.

This chapter is divided into four Parts. Part One looks at theoretical approaches to social stratification and social class, and an attempt is made to define the lower classes which are the principal concern of this study. Part Two looks at social mobility and education. Part Three briefly reviews the nature of the HELM (Higher Education and the Labour Market) data set which formed the basis of this piece of work. Finally, in Part Four, the aims of the thesis are discussed in relation to previous studies in the subject area.

Part One: Social Stratification and Social Class

Studies of social mobility have tended to conceptualize social class in terms of constructed scales which often bear little relation to sociological theory. The various ways in which these scales are constructed are discussed more fully in Chapter Three and need not concern us here. Suffice it to say, however, that they have been constructed on the premise that occupations can be arranged in a series of social classes, which are alike in their degrees of status or general desirability, on a hierarchical scale possessing ordinal properties, such that occupations at the top of the scale are considered to be more socially desirable than those in the middle, which, in turn, have more desirability than those at the bottom of the scale. In these schemas the meaning of 'desirability' and 'status' is rarely spelt out, although they are generally seen as referring to matters such as 'prestige', 'income' and 'power', which are closely related to one another but are not equivalent. Using such scales, intergenerational social mobility can be said to have occurred in those instances in which the son or daughter occupies a different social-class position to that of their family of origin.

Such social-class schemas have yielded much useful information as regards the degree of openness of the social structure and the accessibility of 'elite' positions, and have drawn attention to a number of factors - social-class origins, race, gender, age, etc - which have a bearing on how well people are likely to perform in the labour market. However, they tend to be descriptive in orientation and examine disadvantage in terms of specific attributes which

differ between social classes (see Byrne et al., 1975). With some notable exceptions (1) they have also tended to ignore the relationship which exists between social classes and the extent to which their 'interests' may conflict with one another. This is important to the extent to which members of some social classes are able to use their position to the advantage of themselves and/or their social class at the expense of others.

Following the works of Marx and Weber there are two main theoretical approaches to the study of social class. In Marxian approaches social classes are defined primarily in terms of the individual's relationship to the means of production. In his major work *Capital*, Marx developed an ideal-type model of capitalism in which there are two basic social classes: the bourgeoisie who own and control the means of production, and the proletariat who are employed by the bourgeoisie and from whom a surplus is expropriated in the process of production (Abercrombie and Urry, 1983: 50-2; Carter, 1985: 54-5). As a result of the exploitation process the interest of these two social classes conflict with one another, giving each social class a common identity. Marx's schema is essentially an evolutionary one, in which social classes from earlier era - the petit bourgeoisie and the peasantry - are gradually merged into one of the other social classes.

The main problem with the approach taken by Marx is that since he developed only a simplified model of capitalism he paid little attention to people such as managers, administrators, professionals and other non-manual workers who constitute neither a section of the bourgeoisie nor the proletariat. As Goldthorpe (1980) shows us, it

is interesting that Marx was aware of the existence of these groups and foresaw that the absolute number of people employed within such occupations would increase with time (Abercrombie and Urry, 1983:50-2; Carter, 1985: 54-5). Modern Marxists attribute the growth of such occupations to the development of monopoly capitalism (Braverman, 1974): as industrial enterprises have grown, so the functions of control and ownership (formally undertaken by the bourgeoisie) have become separated and capitalists have been forced to employ managers and administrators to attend to the day-to-day administration of their enterprises. Moreover, other developments within capitalism - the growth of compulsory education and the welfare state, the increase in the number of working women, and the break up of the traditional working-class family and community - have led to a tremendous increase in the numbers of professional and routine service workers.

Marxists differ in their treatment of these intermediate or middle classes. Poulantzas (1975) argues that these intermediate groups constitute a middle class whose interests diverge from both the other two classes. They do not form a section of the bourgeoisie because they do not own the means of production. They do not form a part of the proletariat because: a) they do not produce surplus value; b) they exercise political control over the proletariat in the production process; and c) they have expert (ideological) knowledge of the labour process which the proletariat do not have. Poulantzas's approach has, however, been criticised. Firstly, he implies that the political and ideological dimensions of his schema are at least as important as the economic one, while others (see

Carter, 1985: 77) argue that this is contrary to Marx's schema which is rooted in the material basis of society. More importantly, however, Poulantzas links together diverse and distinct groups. It is to be doubted if they share the same relationship to both capital and labour, and their interests possibly diverge. Braverman (1974) argues that owing to a process of deskilling many lower-grade clerical and routine non-manual workers should be more correctly placed within the proletariat. Braverman's position is accepted by Ehrenreich and Ehrenreich (1979) who nevertheless argue that a professional-managerial class (PMC) exists composed of those 'who do not own the means of production and whose major function in the social division of labour may be described broadly as the reproduction of capitalist culture and capitalist class relations' (1979: 12).

In contrast to Marx, Weber saw social stratification as having three main components: class, status and party. In Weber's view, classes arose within the market place such that the forces of supply and demand determine the level of reward paid to individual workers which in turn determines the distribution of income. Workers with special skills in short supply have an advantage over other people and thus receive higher rewards. In this approach 'social class' refers to groups of workers who through virtue of having similar skills undertake similar types of work, receive similar rewards, and hence have similar life-chances.

Such an approach, however, shares much in common with that of Marx, in so far as Weber saw the possession of property as placing people in an advantageous position within the market place vis-a-vis those

without property, and he wrote "property" and lack of "property" are, therefore, the basic categories of all class situations' (quoted from Salaman, 1972: 19). Unlike Marx, however, Weber believed that the propertyless might be divided into a number of social classes differentiated according to the skills and special attributes which they possess and are able to negotiate with in the labour market (Giddens, 1980: 103).

Status refers to the differentiation of people and groups according to life-styles, patterns of consumption and social honour. Often groups of people sharing a similar life-style and pattern of consumption form distinct communities which can become caste-like. Status and class are usually linked together with a particular occupation, and economic wealth can allow people to buy their way into particular status groups. The tie between the two is not, however, always perfect and factors such as skin colour, ethnicity and gender can, under some circumstances, also be important.

Parties, to Weber, were groups which sought political power in a broad sense of the term to improve the power and position of their members. Like status, party is closely related to class, although it is not necessarily the same and parties may also represent particular status groups.

Parkin (1979) has attempted a redefinition of Weber's basic approach based upon the Weberian concept of social closure. This refers to the ability which some groups possess to maximize rewards by restricting access to the market place to a limited number of eligibles. Two strategies of social closure exist: a) exclusion,

which tends to be applied in a downward direction and leads to the creation of subordinate classes; and b) usurpation, which relates to the collective power of disadvantaged social classes which is typically applied in an upward direction. Parkin, argues that almost any distinguishing feature (qualifications, race, gender, religion, language, etc) might be used as a basis of social closure but is in agreement with both Marx and Weber that possession and lack of property is the most important determinant of class position.

The main problem with the Weberian approach, however, is that it is possible to differentiate many social classes and the boundaries which exist between them are often blurred. One solution to this 'boundary problem' is that proposed by the Weberian Giddens (1980: 107) who argues that there are three social classes within capitalist society based upon differences in their market capacities: 'Ownership of property in the means of production; possession of educational and technical qualifications; and possession of manual labour-power'. Stated in this form many social classes might still exist but Giddens argues that the unity of each social class is structured through both mediate and proximate sources of structuration. Mediate structuration refers to the extent to which each social class is closed in the sense that others are excluded from it. Proximate structuration refers to: a) the division of labour within industrial enterprises (the extent to which members of the three social classes perform different functions); b) authority relationships within enterprises; and c) the influence of 'distributive groupings' which relates to the extent to which the social classes form distinct status groups with different

life-styles and consumption patterns. Abercrombie and Urry (1983: 22-6) criticize Giddens' trichotomous social-class schema because Giddens does not make it clear why capitalism should evolve a three-class rather than multi-class system, and like Braverman (1974), they are sceptical about placing routine white-collar workers within the middle rather than the working class.

Finally, before concluding this section, it should be mentioned that both Marxists and Weberians have attempted to expand the concept of social class in such a way as to include within it both the dimensions of ethnicity and gender. Since these approaches are discussed in some detail in later chapters they need not concern us further here. Suffice it to say that we shall throughout this study be treating both ethnicity and gender as separate dimensions of social class.

Even though Marxists and Weberians differ in their basic approaches they share much in common. Firstly, they are agreed that the primary division between social classes is that which exists between those who own and those who do not own the means of production. Secondly, they are agreed that the propertyless do not constitute a unified social class, but can be divided in a number of distinct social classes or class segments: a) a middle class which, in a Marxian sense, can be distinguished from the working class according to the functions which it performs for capital, and in a Weberian sense, has an advantageous position in the labour market as a result of its possession of educational and technical qualifications; b) a working class which is exploited in the productive process and has few formal qualifications; c) gender classes - that is men and women;

and d) race or ethnic classes. Finally, both Marxists and Weberian theorists define social class in terms of a power relationship in which those in a dominant class position have certain advantages which stem from their ability to exploit and/or exclude others. Thus, for example, the possession of property gives the bourgeoisie the ability to exploit those whom they employ and possession of particular attributes (educational qualifications, skin colour, gender, etc) give some groups an advantageous position in the labour market to the exclusion (or detriment) of those who do not possess them.

We are now in a position to define the lower classes which will be the principal focus of this study. These are the working class as defined in the previous paragraph, women and ethnic minorities. It should be mentioned, however, that these three groups are not mutually exclusive of one another and many graduates whilst being disadvantaged members of one class will be advantaged members of another class. Thus, for example, the majority of women and some of the black graduates (both disadvantaged social classes) originate from middle-class families.

Part Two: Social Mobility

Studies of social mobility using constructed scales of social class suggest that around two-thirds of men in Britain occupy a different social-class position to those of their fathers, which in turn suggests that Britain is an open society (Richardson, 1977: 19). However, most of the movement which occurs is comparatively short

range and involves movement between one or two adjacent social classes. Thus research undertaken in the late 1940s by Glass and Hall (1954: 183) found that whilst 47.3% of the sons of skilled manual workers were employed in similar occupations, 29.6% were employed in other manual work and 12.3% were in routine non-manual occupations. Similarly Goldthorpe and Llewellyn (1980: 48) in their review of the Oxford mobility study undertaken in the early 1970s found that whilst 30% of the sons of skilled manual workers were themselves employed in skilled manual work, 25.6% were employed in other unskilled or semi-skilled manual occupations and 12.3% were low-grade technicians or foremen. Moreover, although studies show that around one-third of sons have jobs on the opposite side of the manual/non-manual division to those of their fathers, most of the movement in both directions appears to occur between skilled manual jobs and routine non-manual work (Richardson, 1977: 19).

Movement between the 'top' and 'bottom' of the social-class hierarchy is much less common. Thus Glass (1954) found that 48.5% of professional workers had fathers who were also professionals and only 13.6% had fathers employed in manual occupations, whilst, at the other extreme, under 0.5% of men employed in unskilled work had fathers employed in professional occupations and 86.3% had fathers employed in manual work (Glass and Hall, 1954: 183).

Although the methodology of Glass's work has been criticized (Heath, 1981: 47-8), broadly similar conclusions were reached by Goldthorpe and Llewellyn (1977), who found that whilst 25.3% of senior professionals and managers had fathers employed in a similar occupation, only 12.1% had fathers employed in other (semi-skilled

and unskilled) manual occupations, and, at the other extreme, whilst 36.6% of other manual workers had fathers employed in similar work, only 2.4% had fathers employed in senior professional and managerial occupations (see also Heath, 1981: 63).

Other research suggests that not only do men from working-class origins tend to be employed in lower-status jobs than those from more middle-class origins, but women tend to be employed in lower-status jobs than men, and black people tend to be employed in lower-status jobs than white people.

In regard to Britain's black population, a recent PSI study (Brown, 1984) found that unemployment amongst the West Indian and Asian minorities was far higher than that amongst white people (p. 195), and black people were found to be more likely to be employed in manual and less likely to be employed in non-manual occupations than white people (p. 197).

Using OPCS data, Arber et al. (1986) show us that, although women as a whole are more likely than men to be employed in non-manual occupations, most women in such jobs tend to be employed in low-level clerical occupations (which are often less well paid than skilled manual jobs) and they are far less likely than men to be employed in senior professional and managerial positions. Moreover, those women employed in manual occupations tend to be employed in lower-status (semi-skilled and unskilled) jobs than men.

Looking first at the relationship which exists between the social-class origins and destinations of men, several reasons can be

advanced to account for the lack of long-range mobility between the two extremes of the social-class hierarchy. In some societies where roles are 'ascribed', men tend to enter their fathers' occupations as a matter of course (Hoselitz, 1960), and even in Britain many people originating from middle-class families benefit directly from the inheritance of wealth, and many self-employed people have inherited their businesses from their fathers (Heath, 1981: 67-8).

In Britain, however, most occupational roles tend to be 'achieved' rather than 'ascribed', in so far as entry to the more prestigious occupations is only possible with the possession of some form of qualification (academic or vocational) or experience where people have entered an occupation at a comparatively low level and have worked their way up to more senior positions.

Table 1.1, taken from Hall and Glass (1954), illustrates the relationship which exists between school attended and the occupational destinations of respondents. From this we see that whilst only 4.6% of respondents had attended private-elementary and grammar schools and 9.7% had attended state-elementary and grammar schools, 31.3% and 32.0% respectively of those employed within professional, high administrative and managerial occupations had done so. However, the 'fit' between education and occupation is far from perfect, and thus we see that more than a third (36.7%) of those in the 'top' social class had attended elementary school - most of these people having presumably worked their way up to more senior positions.

Table 1.1: Social Class Destinations by School Attended

Social Class Row%	Elem'y	Elem'y Grammar	Private Grammar	Total
Professional, high admin. & managers	36.7	32.0	31.3	259
Inspectional, etc.	74.0	18.2	7.8	319
Non-manual	84.2	11.1	4.7	451
Skilled Manual	90.6	7.8	1.6	1400
Other Manual	96.4	3.0	0.6	1001
Total	86.6	9.7	4.6	3430

Hall & Glass, 1954: 285

Analysing data from the Oxford mobility study, Heath (1981: 24-9) has examined the education of senior managers, senior professionals and large proprietors - who together constitute an 'elite' class (see Chapter Three). From Table 1.2 we see that people in all five groups were far more likely than all respondents to have attended a selective (grammar or private) school, and, with the exception of large proprietors, were also more likely to have a degree. Again, however, we see that sizeable proportions of four of these groups (over 50% in the case of industrial managers and large proprietors) had begun their careers in manual occupations and had entered their occupations either through the direct inheritance of wealth (in the case of large proprietors) or through promotion from the ranks - which for many may have involved a period of full-time or part-time study.

Table 1.2: Channels of Mobility into Elite Occupations

School	Self emp prof'l	Sal'd prof	Snr Mgrs	Indus'l Mgrs	Lrg Prp'rs	All
Private	31.9	14.5	19.3	14.3	26.5	6.5
Grammar	46.8	44.7	36.5	33.7	8.8	16.9
Technical	3.2	15.0	13.6	13.6	11.8	11.7
Non-selective	18.1	25.7	30.6	38.2	52.9	64.9
Has Degree	26.6	28.2	10.6	9.0	5.9	5.1
Apprentice- ship	10.6	25.1	14.0	38.7	26.5	22.0
First Job						
Class I	61.7	40.9	9.9	15.5	14.6	25.9
Class II-IV	22.3	28.2	55.5	27.6	32.4	38.2
Class V-VII	16.0	30.9	34.6	56.8	52.9	35.9
Number	94	447	472	199	34	1246

Sources: Heath, 1981: 249
Halsey et al., 1980

Recent years, however, have seen many changes in Britain's system of higher education. The number of universities has grown and the establishment of the polytechnics and CNAAs in the late 1960s has contributed to a dramatic increase in the number of graduates. Degree courses have become more relevant to the needs of industry and commerce, and the graduate labour market and the relationship which exists between degree course and entry to employment have changed considerably in recent years. Thus, whilst in the early 1960s graduates tended to enter a rather restricted range of occupations, increasingly possession of a degree is necessary for entry into careers as varied as accountancy, law, librarianship, engineering and nursing. In consequence, it is becoming increasingly difficult for qualified school leavers (with five GCE O-levels or two A-levels) to enter many professions (see Dore, 1976: 22-8; Turner and Rushton, 1976; Hirsch, 1977: 47-50).

Even though participation in higher education and the possession of a degree is now increasingly necessary for entry into many of the more prestigious occupations, little is known about the processes by which people pass through secondary and higher education and enter the labour market (see Roizen & Jepson, (1985) Kogan and Boys, 1984 Brennan and McGeevor, 1986). Moreover, the role of higher education in providing a channel of social mobility for young people from lower-class origins has been largely ignored. The *First Destination Statistics* published yearly by AGCAS only give details of the employment destinations of graduates six months after leaving college and it is only possible to disaggregate the figures by gender, subject and institution attended (Bourner, 1984). The career paths of graduates over a longer time period are not examined, and the relationship which might exist between home and social-class background, ethnicity, secondary education and employment is ignored.

Kelsall et al. (1972) looked at the employment destinations of a sample of 1960 graduates six years after they had left university. This work will be reviewed in much more detail in later chapters: suffice it to say here that their work is interesting because it suggested that not only were graduates from working-class origins grossly under-represented in the universities, but such graduates also tended to be employed in lower-status occupations (mainly teaching) than their peers from more middle-class backgrounds, a finding which they believed was related to the lower aspirations of such graduates.

Kelsall et al.'s work is now rather dated. The graduate labour

market has changed, and they undertook their work before the establishment of the polytechnics. As we shall see in Chapter Four, the polytechnics were, in part, originally conceived as a vehicle for expanding the educational and employment opportunities available to mature people and young people from disadvantaged backgrounds. Yet the role of such institutions in providing such an avenue of social mobility has not, as yet, been examined. This neglect of public-sector institutions is all the more surprising when one considers not only the high proportion of people graduating from them, but also because there is some evidence that employers have a preference for university over public sector graduates (see Roizen and Jepson, 1985; Kogan and Boys, 1984; *First Destination Statistics*). This thesis aims to help 'plug' this gap in our knowledge, in so far as it examines the social-class origins and destinations of public-sector graduates.

Part Three: The HELM Project

Data for the Ph.D came from a three-year longitudinal panel survey of public sector (polytechnic and college of higher education) graduates funded by the CNAA Development Services Unit. The broad aim of the project was to examine the relationship which might exist between the types of courses undertaken by graduates and their entry into the labour market, and for this reason respondents were asked questions relating to their courses of study, attitudes towards higher education, their economic and employment status and the 'quality' of their work. In the formulation of the original project, however, account was taken of the possibility of looking at a variety of other factors which might influence how well graduates

perform in the labour market, and for this reason a series of further questions of potential value to us were also included in the study. These included the occupations of respondents' parents, their ethnic origins, gender, secondary education and personality traits (see Appendix A).

Over 4,000 graduates, who had undertaken 122 different courses, grouped for analytical purposes into 31 course types, at 33 public sector institutions, were included in the study. Use was made of three highly-structured questionnaires which were sent to respondents in three separate waves. The Wave I questionnaire was sent to graduates in 1983, one year after graduation, and the Wave II and Wave III questionnaires were distributed in 1984 and 1985 respectively.

In addition to the HELM data set, the author also had recourse to a related data set arising from a study undertaken by the CNAA on behalf of the CRE (Commission for Racial Equality). The CRE study also made use of a highly-structured questionnaire which was distributed to graduates in the summer of 1987. In total some 884 respondents who had undertaken six types of course took part in the study. The principal aim of the CRE study was to examine the early employment histories of black graduates. University graduates were also sampled in this study and this has made it possible to draw comparisons between the origins and destinations of graduates on both sides of the binary divide (see Lyon and Gatley, 1988).

Part Four: Aims of the Study

In this section the major aims of the study are discussed in relationship to existing literature in the field. It will be recalled from our brief discussion in the introduction to this chapter that this will involve a consideration of two related matters: a) access to higher education; and b) the destinations of graduates. These two matters are dealt with in the following sections. First, however, it should be stressed that the process by which these aims were formulated was a complex one, as can be seen from the discussion of the research timetable in Appendix A.

a) Access

The question of access to higher education will involve a consideration of the following matters:-

- a) the extent to which public sector institutions of higher education provide places for those originating from working-class and ethnic-minority backgrounds, and women.
- b) the extent to which graduates originating from the lower classes are typical or atypical of their class of origin.
- c) the process by which students enter higher education, their motivations on entry and the nature of any constraints which may have limited their choice of which course to follow.

Since the 1950s, research has consistently shown that children and young people from working-class origins tend to be less successful academically than those from more middle-class backgrounds, and this in turn, accounts for much of the absence of long range social mobility discussed earlier.

Douglas (1964), and Douglas and Simpson (1968) looked at the experiences of 5,362 children born one week in March 1946 (1968: 8). Using a four-point scale of social class they found that at the age of eight children originating from the two non-manual groups performed better than those from the two manual groups on a series of five standardized tests devised to measure reading, vocabulary, verbal, non-verbal and mathematical ability. Between the ages of eight and fifteen, differences were found to increase as regards reading, vocabulary and mathematical ability, although the differences narrowed on the remaining two tests (1968: 18).

Another longitudinal study of nearly 16,000 children born in March 1958 reached broadly similar conclusions to those of Douglas and Simpson (Davie et al., 1972: 1). Using the registrar-general's classification of occupations Davie et al. concluded that, whilst 7% of seven year olds originating from social class I were 'poor' readers, nearly 50% of those from social class V were (p. 104). A similar distribution of replies was found for arithmetic, and whilst 13% of those from social class I obtained a 'poor' score on the set test over 40% of those from social class V did (p. 103).

Other work undertaken in the 1950s and 1960s suggested that children from working-class origins were less likely to attend grammar schools than those from middle-class backgrounds. For example, Floud et al. (1956) looked at 11+ selection in Hertfordshire and Middlesbrough, and concluded that the son of a professional or businessman had seven times the chance of attending a grammar school than the son of an unskilled worker (quoted in Mortimore and Blackstone, 1982: 12).

Partly as a result of these trends, young people from working-class origins were less likely to be entered for public examinations (High-School Certificate and GCEs) and, in their study of Huddersfield schools undertaken in the early 1950s, Jackson and Marsden (1986: 23-4) found that whilst 78% of Huddersfield's male population were employed in manual occupations their children formed only 36% of those who were successful at HSC and/or GCE A-level.

Similar conclusions were reached by Douglas and Simpson (1968: 204), who found that those from more middle-class backgrounds were more likely than those from working-class backgrounds both to stay on at school after reaching the school-leaving age and to obtain one or more GCE O-levels. Moreover, these differences remained even when allowance had been made for the intelligence of the pupils. Thus whilst 77% of those from upper middle-class backgrounds in the 'top' ability range obtained good certificate passes only 37% of those from lower-manual backgrounds of the same ability range did, and whilst 20% of those from upper middle-class backgrounds in the lowest ability range obtained a certificate pass, none of those from the two manual groups did.

Similar differences were also found to exist in the social-class origins of university students, and thus Kelsall et al. (1972: 180) found that whilst 64.9% of males were employed in manual occupations in 1961 only 28.1% of their sample of 1960 graduates had fathers in such occupations.

More recent research suggests that even though most LEAs now operate

a comprehensive system of education and the number of students entering higher education has increased, the relative position of young people from working-class backgrounds has not improved (see DES 12/83; Mortimore and Blackstone, 1982: 20-1). Moreover, work by Edwards (1982) and Williamson (1981; 1986: 72-3) suggests that the proportion of students from working-class origins attending universities and public sector institutions has not increased and may actually have declined in recent years.

Research into the education of Britain's ethnic minorities suggests that whilst young men from West Indian backgrounds fare less well at school than white children those from Asian origins fare slightly better. Thus Brown (1984: 147), in his review of the third PSI study, found that 12% of young white men aged 16-24 had A-level qualifications (or a degree) compared with under 7% of West Indians and 19% of Asians. However, at the other extreme 27% of white boys, but 35% of West Indian and Asian boys left school without a qualification. Amongst the girls the situation was somewhat different in so far as whilst 22% of white and 21% of West Indian girls had no qualification this compared with 50% of Asian girls. However, 9% of Asian and 11% of white, but only 5% of West Indian women possessed an A-level pass (or better).

A similar pattern has been found to exist in the proportions of young people from different ethnic groups entering higher education. The Rampton Committee (1981) found that whilst 9% of all school leavers went onto undertake a degree-level qualification, the comparable figures for West Indian school-leavers was only 2% and 8% for Asians (Little and Robbins, 1981: 58).

Although girls tend to achieve as well, if not better, than boys at school (Douglas and Simpson, 1968: 75; OECD, 1986: 10-21) women are less likely to enter higher education than men. However, recent years have seen a marked increase in the proportion of women entering higher education: thus in 1953-4 just over one-quarter (25.2%) of new graduates were women, but this figure had risen to almost 40% (39.6%) in 1982. If this trend continues women may well form a majority of the student body by the year 2000.

Chapter Four looks at the participation of students in public-sector institutions of higher education and, in particular, examines the extent to which these are providing an avenue of social mobility for those from working-class origins. In an attempt to unravel some of the factors which might help us to understand why they have been educationally successful, Chapter Four also looks at the extent to which graduates from working-class backgrounds are typical or atypical of their class of origin. The same questions are examined in relationship to women in Chapter Eight and black graduates in Chapter Nine.

Three broad explanations have been advanced to explain why young people from working-class and ethnic-minority backgrounds are less successful in education and thus the labour market: the genetic, socio-cultural and educational. It should be said, however, that the three approaches are not mutually exclusive, rather theorists tend to adhere to one basic approach whilst stressing that the other two are also important.

In recent times the genetic approach is associated with Jencks (1972) and Eysenck (1973). The proponents of this view frequently claim that differences in the attainment of children from different ethnic groups and social classes are inherited and that since individuals tend to marry people of the same ethnic group/social class as themselves inequalities in intelligence and hence educational attainment are perpetuated from generation to generation. It should, however, be stressed that these claims are not made by Eysenck and Jencks themselves but by their 'supporters' who have fundamentally misinterpreted their work (Tyler, 1977: 82-95).

It is probably true that a person's genotype explains a certain amount of variance in intelligence, although the actual amount is uncertain (Tyler, 1977: 82). For example, a problem with Jencks' work is that it was conducted amongst white people in the United States and was concerned with individual and not group differences. What constitutes 'intelligence' is also a problem. Eysenck believes that there is a common factor 'g' which intelligence tests measure but which cannot be directly observed. Whether such a factor exists is not, however, our principal consideration, rather, our concern lies in the extent to which intelligence tests tend to favour members of some groups (social classes, ethnic groups, etc) where they contain questions which are beyond the socio-cultural experiences of some people: eg where questions implicitly assume the existence of a stable home background or contain words and phrases which may be 'foreign' to some groups. Evidence suggests that the construction of tests in this way has, in the past, contributed to

relatively low 'scores' being achieved by black and working-class youngsters (Heim, 1970: 104-6). Eysenck (1973) has also argued that group differences will tend to disappear over time as differences in intelligence regress towards a common mean. This means that whilst differences in intelligence may help us to account for why some individuals are less successful than others, they are less likely to be able to explain group differences. Furthermore, the genotype can be influenced by a number of factors which are socially and culturally determined. Thus research by Davie et al. (1972) suggests that where a woman smokes, her children are likely to be less intelligent than those of a non-smoking mother. In addition, research by Jencks (1972: 82) in the United States also suggests that the mean IQ of the population has increased somewhat in the last fifty or so years as a result of a better diet and improved antenatal care.

In view of these complexities, it is highly unlikely that genetic factors alone can account for much of the variation in the attainment of people from different social classes and ethnic groups, although it may account for some of the variation in the attainment of different individuals. Moreover, as was mentioned earlier, there is evidence which suggests that people from working-class and ethnic-minority backgrounds tend to underachieve even when controls are introduced for intelligence. Halsey et al. (1980: 186), for example, have found that the mean IQ of people in further and higher education varied between social classes, being highest for those from working-class origins (127.4) and lowest for those from service-class origins (120.8).

The second explanation for the under-achievement of children and young people from working-class and ethnic-minority backgrounds sees differences resulting from socio-cultural influences. In these approaches some children are seen to be disadvantaged because they are brought up in deprived households. As was mentioned earlier, a number of these factors can be expected to affect the intelligence of children indirectly where the mother smokes heavily or is in ill health during pregnancy, although other factors are likely to be important during their formative years. Firstly, evidence suggests that where children are brought up in large and/or single-parent families and live in poor quality housing they are likely to be less successful academically at school than other children (Douglas, 1964; Davie et al., 1972). This is important to the extent that such disadvantages are more likely to be suffered by those from working-class (Townsend, 1979) and ethnic-minority (Brown, 1984) backgrounds.

Moreover, work by Bernstein (1973) and the 1982 PSI study (Brown, 1984) suggests that children from working-class and ethnic-minority backgrounds may be disadvantaged as a result of their language. Bernstein (1973) suggests that whilst middle-class children learn to use an elaborated form of communication which is relatively independent of context, some working-class children learn to use a more restricted form of communication rooted in working-class culture which is more context bound, and less transferable across social situations. The same may also be true of some children from West Indian backgrounds and Brown (1984: 128-9) suggests that many Asian children, and Asian girls in particular, may have a poor command of the English language. Also important are

parental attitudes towards education. Although much of the evidence is contradictory, it seems likely that children, relative to others within their social class, will tend to perform better in those instances where they are encouraged to take an interest in their school work by their parents. This in turn appears to benefit those from middle- rather than working-class origins (2).

The third set of explanations advanced to account for the underachievement of children from working-class and ethnic-minority backgrounds sees the school as contributing to their lack of success. Several factors may be important: type of school attended, differences in the formal curriculum taught to children and the 'hidden' curriculum. One obvious way in which more middle-class children are advantaged in this respect is where their parents are rich enough to be able to send them to fee-paying or public schools where they tend to benefit from smaller classes and better facilities. The tendency for children from more middle-class families, under the old tripartite system, to attend grammar schools has already been discussed. Suffice it to say here that any material disadvantages which adversely affected the academic performance of children from working-class homes were likely to have been exacerbated in those instances where the children progressed to secondary-modern schools. Few LEAs now operate the tripartite system of education, yet there is some evidence which suggests that the way in which comprehensive schools are organized may still be disadvantaging children from working-class origins.

Much of the evidence is, however, difficult to interpret (see Tyler, 1977; Mortimore and Blackstone, 1982). Writing of the

situation in the United States, Jencks (1972) has concluded that the type of school which children attend makes little difference to how well they perform, and he writes, 'eliminating differences between elementary schools would reduce cognitive inequality by 3% or less' (1972: 91), and the Plowden Committee on primary education in Britain reached very similar conclusions (Peaker, 1967). The approach taken by Plowden has, however, been criticized by Bryne et al. (1975: 25-6) who argue that it was far too psychological in orientation and there were methodological deficiencies in the study in so far as the measures employed appear to have assumed a priori that parental attitudes and not the school attended were of major importance. More fundamentally, they continue (p. 34-5), social class was used as an explanatory variable rather than as a relationship (p. 7). This is of prime importance to Bryne et al. in so far as the parents of more middle-class children have more power and control over educational resources and are able to manipulate the educational system to their own and their children's advantage. Thus Byrne et al. (1975) argue that within the state sector children from more middle-class backgrounds attend better schools as measured by staff-pupil ratios and the provision of various facilities. This situation arises because of differences in the geographical spread of people within LEAs, such that children from working-class origins tend to live in poorer inner-city areas and council estates on the outskirts of Britain's towns and cities which tend to have poorer schools and educational facilities. In contrast to this, children from more middle-class backgrounds tend to live on private estates near to schools which have better staff and other resources. Similarly, Rex and Tomlinson (1979: 19-24) show us that black people tend to live in distinct communities in

inner-city areas, and their children are likely to attend the poorer schools.

The process by which resources come to be unequally distributed between schools is much more difficult to explain, and several factors are probably important. Firstly, because of the predominantly middle-class composition of their student body schools serving private estates tend to achieve better examination results which in turn means they tend to attract the best teachers. Secondly, the parents of their children are likely both to be more articulate and to take an interest in the running of the schools, and as such they are more likely to put pressure on governors and local authorities to provide resources, help with fund raising and may even make monetary gifts to the school. Finally, within the inner-cities schools often lack adequate resources, teaching is likely to take place in older, unsuitable buildings, and, because of falling rolls, a rather restricted range of subjects may be taught.

Other writers (for example Lawton, 1975; Nash, 1973) point to differences in the curriculum taught to children in school and the way in which teachers expectations of how children will perform and of how intelligent they are determines what they are taught. Thus, and especially within streamed comprehensive schools, those children perceived as 'bright' tend to be taught a distinctly traditional or 'academic' curriculum in many ways similar to that taught in the old grammar schools, whilst those perceived as less bright are taught a more practical or 'utilitarian' curriculum in many ways similar to that taught in the old secondary modern schools. One effect of this is that children initially labelled as intelligent tend to succeed

and those labelled as less intelligent tend to fare much less well (Cicourel and Kitsuse, 1963; Rosenthal and Jacobson, 1968).

Differences have also been noted in the curriculums taught to girls and boys, and whilst boys tend to study mathematics and science subjects, girls tend to study languages and the humanities (see Kelly, 1981; Arnot, 1986; OECD, 1986). These differences in the school curriculum are unlikely to limit the chances of women entering higher education, but they are likely to constrain the range of subjects which women are able to study which, as will be argued later in this chapter, is likely to limit the opportunities open to them in the labour market.

Differences may also exist, according to both social class and gender, in the 'hidden' curriculum taught to children in school. Writing from a Marxian perspective, Bowles and Gintis (1976) in the United States and Harris (1982) in Australia argue that a 'hidden' curriculum exists in schools which aims to produce a servile workforce for industry which will work for relatively low wages and accept unquestioningly the decisions of the management of the firms which will eventually employ them. In this approach the basic organization of the school with its hierarchy of headmaster, teacher and pupil is seen to mirror the basic structure of industrial firms and various disciplinary measures are employed to keep children in check. The brighter children are, however, subjected to less stringent forms of teaching and are encouraged to develop social relations which emphasize autonomy, independence and creativity.

Reference should also be made to the work of Willis (1977) who

argues that for many working-class boys education involves a clash of culture with the academically-orientated middle-class culture of the school, which many reject and adopt in an exaggerated form the more 'masculine' culture of the working-class home. The result is that many working-class boys drop out of education as soon as they can.

Moreover, feminist writers such as Clarricoats (1980) have argued that schools instil into their children stereotyped images of 'masculinity' and 'femininity' which differ according to the social class of the child. To take the two extremes, Okely (1978) has argued that whilst the public schools attempt to instil into boys traits of initiative, independence and leadership, girls are taught to be passive, conformist and obedient, and encouraged to be submissive and to accept society - which is predominantly male-dominated - the way it is. Following the work of Willis (1977) cited earlier, Arnot (1986: 136-7) argues that the education of girls within state schools often involves a clash between the 'feminine' culture of the working-class home and the more middle-class culture of the school, one result of which is that some girls reject the culture of the school and come to accept the culture of the home in exaggerated form. Thus they become excessively 'feminine' and exaggerate traits of romance, marriage and sexuality, and leave school as soon as they can.

Although these approaches have been questioned (see Mortimore and Blackstone, 1982: 92-4) and the arguments are still in a state of flux, one would logically expect those children taught non-academic subjects to fare less well in their examinations - when, that is,

they are entered for them - whilst, if Bowles and Gintis and feminist writers are correct concerning the influence of the 'hidden' curriculum, this would help to account for the underachievement of lower-class youngsters and the under-representation of women in higher education. Moreover, as we shall see in the next section, it may also handicap these groups where they lack those personal qualities which employers value (3).

From the previous discussion it would appear that graduates from lower-class backgrounds are atypical of their class of origin in so far as they have been academically successful and have continued in education for a prolonged period of time. Why they, rather than other members of their class, should have entered higher education is a question which is discussed more fully in Chapter Four.

Chapter Seven examines the process by which graduates enter higher education, their motivations on entry, secondary education and the nature of any factors which might have constrained them in their choice of which course of study to undertake.

b) Destinations

The second main question to be examined concerns the relationship which might exist between the origins and destinations of graduates, that is, the extent to which the social-class origins of graduates exerts an influence (if any) on their future employment. There are three main matters which need to be discussed here:-

- a) the occupations and social-class destinations of graduates, and the differences, if any, which might exist according to social-class origins.
- b) the aspirations of graduates.
- c) the courses which graduates undertook as students and the links, if any, which exist between the social-class origins of graduates, their secondary education and entry into the labour market.

Earlier in this chapter, the work of Kelsall et al. (1972) was mentioned who found that women and men from working-class origins were more likely to be employed in lower-status occupations than men from more middle-class origins. The HELM data set is interesting because it allows us to test a number of their ideas, and it is worthwhile briefly examining their approach here. Using occupational choice theory, they argued that women as a whole and men from working-class backgrounds had lower aspirations than men from middle-class backgrounds (pp. 68-78).

Occupational-choice theorists believe that occupational choice is essentially a process which gradually unfolds during the individuals life-cycle (Ginzberg et al., 1951; Super, 1953; Williams, ed., 1974). Various factors can be identified as acting upon each individual, ranging from their sex, race and 'inborn' abilities through to factors such as social class and school/higher education institution attended. In these approaches the labour market is seen as a sort of 'matching machine' in which the aspirations and career preferences of individuals are matched with the needs and preferences of employers in determining the 'level' at which the individual enters the job market.

In general one can identify a number of key points at which social

class can be said to intervene in influencing the occupational preferences and employment outcomes of graduates in particular and people in general. Social class can be expected to have already exerted a strong influence on the career preferences of future graduates by the time they enter secondary school. Through identification with the father's and mother's occupational roles the young child can be expected to form a vague notion as to the type of work which he or she wants to do. Such notions, however, are likely to be very vague, and may involve for instance simply working 'in a factory', 'on the land', 'in an office', or (in the case of many young girls) becoming a mother and housewife. Evidence from the *Granada Television* longitudinal study suggested that children born into upper-class families had far clearer notions than those born into working-class families regarding their future employment and the need to obtain the 'right' qualifications. Because of these differences in the early-life socialization of children across the social classes one would expect those from manual backgrounds to have lower aspirations than those from more middle-class backgrounds, and the aspirations of those from middle-class backgrounds to be fairly similar to those of their parents.

The role which secondary schools might play in constraining the educational opportunities available to women and young people from working-class origins has already been discussed. Suffice it to add here that similarly one might expect the curriculum taught to children to have a direct influence upon how they come to view the occupational structure and the type of career which they can realistically hope to enter when they leave school. For example, writing in 1962 Liversidge found that children attending

secondary-modern and grammar schools made a '... startlingly accurate appraisal of their life chances ..., and (had) a shrewd appreciation of the social and economic implications of their placing within the educational system' (p. 74). Today one might expect to find similar differences to exist between fee-paying and state schools, between comprehensive schools in 'rich' and 'poor' areas and between the 'top' and 'bottom' streams of individual comprehensive schools. Willis (1977: 102-3), for example, found that the boys included in his study had a dislike of 'mental work' and aspired towards employment within manual occupations.

Reference should also be made to the works of both Levin (1976) and Kelley (1978) who point out that graduates from high-status backgrounds can be expected to benefit from the direct inheritance of wealth and from family connections which make it easier for them to find suitable employment. This they term the *lagged effect* in so far as it is likely to exert an influence on the employment destinations of graduates sometime (and perhaps many years) after graduation.

Other reasons for believing that women and graduates from working-class and ethnic-minority backgrounds might be disadvantaged in the labour market stem from the nature of the graduate labour market itself, and the process by which employers reach their recruitment decisions.

The nature of the graduate labour market is discussed more fully in Chapter Six, so suffice it to say here that occupational choice theory can be criticized in so far as it tends to treat the graduate

labour market as being relatively homogenous in which perfect competition exists, people are undifferentiated in their skills and the laws of supply and demand determine wage rates. This view has not gone unchallenged and it is to be doubted if such a state of affairs corresponds with reality. In particular, it ignores constraints which limit the employers' choice of whom to employ. Prime amongst these constraints is the level of skill needed to undertake a particular job. Many of the jobs traditionally undertaken by graduates are of such a nature that specific skills and a high degree of training are needed to undertake them: for example medicine, the law and engineering. The growth in recent years in the numbers of courses leading to vocational qualifications has led to attempts to develop a typology of courses based upon their vocational specificity (Brennan, 1984; Brennan and McGeevor, 1986), such that where complex skills are required to undertake a particular job and suitable applicants are in short supply graduates with degrees in these subjects tend to perform better in the labour market than others (Brennan and McGeevor, 1986; *First Destination Statistics*). This is important to us since the influence which gender and the social class origins of graduates exert on employment outcomes will be mediated to a large extent by the courses of study which they have undertaken. We saw earlier that there are major differences in the school curriculums taught to boys and girls, and thus one might expect women to be constrained in their choice of which subject to undertake in higher education, which, in turn, might constrain their choice of career.

Similarly it was argued earlier that children from more lower-class origins were more likely than others to undertake a 'utilitarian'

rather than 'academic' curriculum. Because of the lack of stress which the 'utilitarian' curriculum places on academically-orientated subjects one might expect such people to be constrained in their choice of which course to follow. Should this mean that graduates from manual backgrounds have a tendency to undertake the more generalist (or non-vocationally-orientated) courses, one would expect them to be less successful in the labour market than they would have been had they taken more vocationally-orientated subjects.

Evidence collected by Kogan and Boys (1984) and Roizen and Jepson (1985) suggest that employers often put less stress on the individual graduate's degree than they do on other educational factors. Other things being equal, employers had a preference for those candidates who had attended universities rather than polytechnics, attended selective (public and academic) rather than comprehensive schools, who had obtained high rather than low A-level scores and had undertaken an academic rather than utilitarian (or practical) school curriculum. On each of these factors one might reasonably expect graduates from working-class backgrounds to be disadvantaged: they are more likely to have attended comprehensive schools and public sector institutions of higher education, they are less likely to have undertaken an academic school curriculum, and tend to have lower A-level scores.

Educational factors are not, however, the only ones which employers take into account in their recruitment strategies. The works of Kogan and Boys (1984) and Roizen and Jepson (1985) suggest that employers often put less stress on the actual degree course

undertaken than on personality factors and have a preference for graduates with a proven record of management and communication skills, such that graduates who obtained such skills in, say, cricket or rugby union captaincy were preferred to those without such experience. A similar approach is taken by Buley (1972) who argues that employers value graduates for three main reasons: their general intelligence and personal qualities; their experience of the higher educational process (as opposed to their specific education) which is believed to contribute to their intellectual development; and, lastly, their vocational and related skills gained during the higher educational process. As was mentioned earlier, there is some evidence that because of their early socialization and secondary education women and graduates from ethnic-minority and working-class backgrounds might be lacking in those personality factors which employers value. If this is so, then one would expect them to be further disadvantaged in the labour market.

Finally, the traditional employment strategies adopted by employers and their sheer conservatism may be important to the extent that employers have a fixed stereotype image of the ideal employee. Although this factor is, arguably, unlikely to disadvantage graduates from working-class backgrounds, it may disadvantage women and black graduates seeking employment in some occupations which traditionally have been undertaken by white men.

To summarize, there are several reasons for believing that that our three lower classes might be disadvantaged in the graduate labour market: a) following occupational choice theory they may have rather restricted aspirations; b) they may be disadvantaged in the basic

recruitment process where they lack the academic qualifications, personal qualities and other factors which employers value; and c) those from more middle-class backgrounds can be expected to benefit from the direct inheritance of wealth.

In Chapter Five the experiences of graduate men and women in the labour market is examined in terms of their social-class origins. In Chapter Six this analysis is repeated making allowance for the types of course which graduates had undertaken, and the aspirations and personality traits of graduates are examined. In Chapter Seven the thesis looks at the secondary education of graduates, the type of curriculum which they undertook at school and the extent to which it correlated with their social-class origins, on the one hand, and constrained their choice of which subject to follow at college on the other. Chapter Eight looks at the employment destinations of graduate men and women in terms of feminist approaches which argue that gender can be regarded as a dimension of social class. In Chapter Nine the experiences of black and white graduates are examined. Finally, in Chapter Ten the major findings of the study are reviewed in relationship to the major aims of the thesis outlined earlier.

The next chapter looks in detail at the HELM and CRE projects data sets which have been used as bases for this study. Lastly, Chapter Three looks at the major concepts used in the study, and in particular focuses upon the problems encountered in constructing a social-class schema for use in it.

CHAPTER TWO: RESEARCH METHODOLOGY

Data for the Ph.D have come from a three-year longitudinal study of public sector graduates - the HELM (Higher Education and the Labour Market) project - directed by John Brennan of the CNAA with the assistance of Dr. Philip McGeevor of Bulmurshe College of Higher Education. Full details of this project, its background, aims, methodology and a summary of its findings are presented in their book *Graduates at Work: Degree Courses and the Labour Market* (1988).

Background to the Study

In 1987 the CNAA awarded over 40% of new U.K. degrees and it is now the largest degree awarding body in Britain, yet little is known about the origins and destinations of its students. The Further Education Statistics published yearly by the DES only provides a detailed breakdown of the student population by age, sex and institution attended. Separate figures are not given relating specifically to those studying for first and higher degrees, and no statistics are given on the educational, social-class and ethnic origins of students. Similarly the CNAA, in its Annual Report only gives details of the numbers of students studying for degrees broken down by year of study, subject and faculty grouping, and of the total number of degrees awarded.

Information on the employment destinations of both university and public-sector graduates is, however, collected annually by the Association of Graduate Careers Advisory Services (AGCAS) who publish the *First Destination Statistics*. These show the employment

destinations of graduates six months after leaving college broken down by gender, course of study, class of degree and institution attended. Originally this information was collected to help the careers service guide students into appropriate careers, although in recent years it is being increasingly used as a guide to manpower planning and course development. The *First Destination Statistics* are, however, of limited value in so far as they only give details of the destinations of graduates six months after graduation. They give little indication of the quality of people's work, no attempt is made to 'follow-up' graduates and examine the paths which their careers have subsequently taken, and no analysis is performed to show how graduates differentiated according to their social-class and ethnic origins have fared in the labour market.

The absence of adequate descriptive data on the composition of the student body attending public sector institutions is hard to understand when one considers the reasons for their establishment. In Chapter Four the role envisaged for the polytechnics in providing an avenue of social mobility for disadvantaged groups is briefly discussed and it is argued that although the 1966 White Paper *A Plan for Polytechnics and Other Colleges* (Cmnd. 3006) did not specifically say that the polytechnics were intended to expand opportunities for working-class youngsters, this is how it has generally been interpreted. Thus it is rather strange that the polytechnics, and later the Colleges of Higher Education, have not attempted to monitor the social-class and ethnic composition of their student intake, and - unlike UCCA - the PCAS application form does not require students to state their father's occupation. Similarly, given the stress which was placed on the role which the polytechnics might play in providing trained manpower for industry

and commerce it is odd that more detailed statistics have not been kept of the destinations of graduates and of the links which might exist between course of study and the labour market.

Aims of the HELM Project

The main aim of the HELM project was to help to try to overcome these deficiencies by collecting detailed information on the origins and destinations of a 10% sample of CNAA graduates. In their Final Report on the HELM study Brennan and McGeevor (1986: 2) tell us that:-

We were interested in the characteristics of their (graduate) employment and their relationship to previous education and training. We were interested in the expectations and opinions of the graduates themselves - towards current and future jobs, towards the value of higher education. We were interested in the transition between higher education and employment, the different routes between courses and jobs and the role played by postgraduate study, short-term or part-time employment and other experiences following graduation. Above all, we were interested in differences between degree courses, differences reflected in course objectives which seek to prepare students for employment in very different ways. Thus, we were interested in the range of employment outcomes from different kinds of course, in the different rates of securing employment, in the qualities of jobs eventually obtained.

In other words, the main concern of their research lay in understanding the role of higher education in allocating highly qualified personnel to positions within the labour market, and in particular they were concerned with examining the links which might exist between course of study and employment.

However, Brennan and McGeevor present only a preliminary analysis of the HELM data set. They have little to say about the origins of graduates, and they do not examine in any great depth how the

destinations of graduates might differ as regards their gender, ethnicity and social-class origins. Both gender and ethnicity have, however, been examined in other HELM publications (see Brennan and McGeevor (1985) and Lyon and Gatley (1988) on ethnicity, and Chapman (1986) on gender). These studies are, however, mainly atheoretical in orientation, in so far as they present the data and do not attempt to analyse it in terms of theoretical approaches to social class, social stratification, gender and ethnicity.

This Ph.D can be differentiated from these other works originating from the HELM study in so far as its main concern has lain in examining the role of public sector institutions in providing an avenue of social mobility for disadvantaged groups: principally those from working-class backgrounds, but including ethnic minorities and women. As was mentioned in Chapter One this has two main dimensions: a) access, that is the extent to which public-sector institutions are catering for the needs of working-class, black and women students, and b) destinations, that is the relative success of such graduates in the labour market. The process, however, by which the aims of the project were formulated was a complex one as can be seen from the discussion in Appendix A.

How the Study was Undertaken

The HELM study was undertaken by means of a panel survey of more than 4,000 students who graduated from public sector institutions in June 1982 and who were contacted one year, two years and three years after graduation.

The sample was not a random one, but instead was deliberately chosen

in order to test the major hypotheses of the study which, as we have seen, were concerned with understanding more fully the relationship which exists between course of study and entry into the labour market. To quote Brennan and McGeevor (1988: 9):-

Course types were selected in order to explore different forms of relationships between degree qualifications and jobs. The criteria used were subject field, curriculum organization (eg single subject/multidisciplinary), course objectives (eg liberal/professional), and size of enrolments. Individual courses were selected (i) as being typical of the course type following inspection of prospectuses and consultation with CNA board secretaries and members and (ii) to obtain a good geographical and institutional spread.

Thus the resulting sample consisted of all those graduates who had studied 122 different courses, grouped for analytical purposes into 31 course types, at 33 public sector institutions. Table 2.1 shows how these graduates were distributed between courses. From this Table we see the total number of graduates included in the initial sample varied from 73 for Mathematics to 246 for Humanities. Overall a 66% response rate was achieved to the first wave: the actual response varying from 43% for Law to 88% for Nursing.

There were a number of advantages in using the HELM data set to undertake this study. Firstly, the large number of respondents to the survey has made it possible not only to undertake a detailed analysis of how all graduates have fared in the labour market, but to look in depth at some sub-samples. Thus, for example, it has been possible to examine both gender and social-class differences in the employment destinations of graduates undertaking different types of courses. Moreover, even though the number of participants to the HELM study declined from 2,635 in the Wave I survey to 1,451 in the Wave III survey, there were still enough respondents to make such an analysis possible.

Table 2.1: Sample Size and Response Rate by Type of Course

	1983 Response % Original		1984 Response % Original		1985 Response % Original		% Response 83 to 85	
	A	B	C	D	E	F	G	H
Humanities	246	164	67%	117	48%	95	39%	58%
English Literature	89	56	63	32	36	29	33	52
Geography	114	89	78	63	55	66	58	74
Modern Language	111	85	77	61	55	50	45	59
Librarianship	141	101	72	84	60	64	45	63
Communication Studies	133	96	72	60	45	41	31	43
Accountancy	99	52	53	34	34	30	30	58
Business Studies	153	105	69	76	50	50	33	48
Economics	101	54	53	33	33	27	27	50
Law	133	57	43	33	25	23	17	40
Psychology	119	83	70	65	55	48	40	58
Social Studies	187	122	84	45	65	55	35	53
Environ Planning	94	63	67	50	53	37	39	59
Urban Estate Management	115	82	71	47	41	45	39	55
Civil Engineering	106	66	62	53	50	42	40	64
Electrical Engineering	78	53	68	31	40	17	22	32
Production Engineering	102	55	54	42	41	35	34	64
Mathematics	73	54	74	33	45	35	48	65
Hotel Administration	113	72	64	59	52	45	40	63
Science	251	143	57	99	39	68	27	48
Applied Chemistry	106	73	69	52	49	43	41	59
Applied Biology	173	135	78	99	57	74	43	55
Pharmacy	123	83	67	46	37	33	27	40
Nursing	74	65	88	49	66	52	70	80
Computer Science	89	54	61	41	46	38	43	70
Environmental Science	108	85	79	54	50	49	45	58
Fine Art	123	72	59	44	36	37	30	51
Graphic Design	172	95	55	67	39	45	26	47
Textile & Fashion Design	141	87	62	44	31	45	32	52
3D Design	134	83	62	54	40	32	24	39
Interfaculty	231	151	65	119	52	78	34	52
All Courses	4016	2535	66	1826	45	1451	36	55

A: Original list of graduates.

B: Number of replies to the 1983 questionnaire.

C: B as a percentage of A.

D: Number of replies to the 1984 questionnaire.

E: D as a percentage of A.

F: Number of replies to the 1985 questionnaire.

G: F as a percentage of A.

H: F as a percentage of B.

Source: Brennan and McGeevor, 1988: 7

Secondly, because the HELM survey made use of three large questionnaires, each of which ran to more than twenty sides, the resulting data set contains a rich variety of data on areas of interest to us. These include data on the social-class, ethnic and educational origins of graduates, their employment destinations and quality of their work, aspirations, major personality traits and their attitudes towards secondary, further and higher education, employment, and sexual and racial disadvantage. (Further details of these questionnaires and of the use which was made of them are given in Appendix A).

Thirdly, since the study was longitudinal in nature it was possible to study entry into the labour market as a process rather than at one point in time. Unfortunately, as some of the key information from the Wave II questionnaire was not coded it was not possible to exploit this facility fully. Nevertheless, it was possible to examine the employment destinations of graduates at two points in time (one year and three years after graduation), and to look at how the attitudes, aspirations and experiences of graduates during their first year in the labour market influenced their subsequent employment.

Finally, the data set is unique and has a certain 'pioneering quality' about it, in so far as it is concerned with what is to a large extent 'unexplored territory'. With a few notable exceptions (Donaldson, 1975; Whitburn et al., 1976, Williamson, 1981b) previous studies have tended either to ignore public-sector institutions, or have concentrated their attention on the universities and made only passing reference to the polytechnics and colleges of higher

education.

A number of technical and methodological problems were encountered in using the HELM data set for the present study. The technical problems related mainly to the coding and computer analysis of the data, since these are discussed in Appendix A they need not detain us here. Rather we are concerned here with the methodological problems which were encountered. Firstly, because a non-random sample was used it is impossible to calculate the extent to which the sample is representative of all graduates. The result is that it is not possible to draw strict inferences from our findings to the graduate labour market as a whole. Several sources of bias can be identified which mitigate against such direct inferences. Since courses rather than individuals were sampled, this will have biased the composition of the final sample if, as is suggested in Chapter Seven, graduates from working-class origins tend to undertake certain courses with the result that they may be under- or over-represented in the sample. Moreover, since a full range of courses was not sampled its composition may have been unduly influenced by the 'quirks' of individual admissions tutors, who may give preference to certain types of candidates such as mature students.

Luckily there is some evidence which strongly suggests that these problems are not unduly serious and that HELM respondents are broadly representative of CNAAs graduates as a whole. Table 2.2 shows the extent to which Wave I respondents were broadly representative of all CNAAs students enrolled in 1982, excluding those undertaking education. From this it can be seen that - with the exception of Business and Management who were under-represented in the Wave I

sample - the distribution of respondents between the faculties was almost identical to that of all students.

Table 2.2: Faculties of all Students and HELM Graduates

	HELM	Enrolments	Difference
Art and Design	12.8	13.1	-0.3
Arts & Social Science	34.8	31.4	3.4
Business and Management	4.9	10.4	-5.5
Science and Technology	41.9	41.7	0.2
Inter- disciplinary	5.7	3.4	2.3
Total	4016	136890	

Source: CNAA Annual Report, 1982: Table 5.

Another indication that the replies to the questionnaires, were representative of the total population under study comes from an examination of the *First Destination Statistics* which show the occupational status of polytechnic and university graduates in the December of their year of graduation. Using the CNAA transbinary data base Brennan and McGeevor (1988: 11) matched the destinations of those graduates who had undertaken 21 of the 31 HELM courses for which a comparison with *First Destination Statistics* was possible. Table 2.3 shows the results and from this it can be seen that the two sets of figures are almost identical. It should, however, be pointed out that the *First Destination Statistics* were compiled six months before the HELM survey.

Table 2.3: HELM Graduates and First Destination Statistics Compared

	First Destination Statistics	HELM Survey	Difference
Full-time employ- ment	53.9	54.3	-0.4
Further Study	21.6	20.6	1.0
Unemployed/not avail- able for work	24.6	23.8	-0.4

Source: Brennan and McGeevor, 1988: 13

A related problem which we face is the purely mechanical one of the response rate (see Cicourel, 1964; Erdos and Morgan, 1970; Crimp, 1981). A declining response rate is a particular problem with panel surveys, such as the HELM study, in which respondents are sent a number of questionnaires over a period of several years. Looking again at Table 2.1 it can be seen here that a 66% response was achieved to the first questionnaire, a 45% response to the second and a 36% response to the third. The response to the first two waves of the questionnaire was quite respectable for a study such as this. The relatively low response to the third wave of the questionnaire is unfortunate and appears to be due as much to the high mobility of the group under study - which made it difficult to keep track of their addresses - as to lack of interest. Both Moser (1958: 246-53) and Hyman (1955) point out that the main problem here is knowing to what extent the replies given to the questionnaire are representative of the total population under study.

However, when the the replies given by all respondents to the Wave I questionnaire were compared with replies given to the same questions by those respondents who completed the Wave III questionnaire they were found to be virtually identical, which strongly suggests that the Wave III respondents are broadly representative of all those who

replied to the Wave I questionnaire. This point is illustrated in Table 2.4, which shows the social-class origins of graduates, and Table 2.5, which shows their Wave I destinations. Thus from Table 2.4 it can be seen that in no instance did the difference in the percentage of people replying to the Wave III questionnaire vary by more than 1.3 percentage points from the Wave I figure. Table 2.5 shows us that there is more variation in the social-class destinations of graduates, but even so in no instance is the difference greater than 2.4 percentage points.

Table 2.4: Social-Class Origins: Waves I and III

	Wave I	Wave III*	Difference
Senior Professional	18.7	18.9	0.2
Senior Managerial	11.1	12.3	1.2
Semiprofessional	13.8	13.4	-0.4
Junior Managerial	9.5	9.5	0.0
White Collar	8.8	8.5	-0.3
Self Employed	12.2	11.9	-0.3
Low-grade Technician	5.8	6.5	0.7
Manual	20.3	19.0	-1.3
Total	2400	1246	

* Relates to replies to the Wave I questionnaire.

Table 2.5: Social-Class Destinations: Waves I and III

	Wave I	Wave III*	Difference
Senior Professional	9.7	8.6	-1.1
Engineering	8.9	9.8	0.9
Semiprofessional	8.7	10.0	1.3
High-grade Technicians	10.4	11.7	1.3
Managerial	6.4	7.0	0.6
Clerks	6.8	7.0	0.2
Lower Class	12.1	12.2	0.1
Postgraduate Course	17.7	17.0	-0.7
Unemployed	19.2	16.8	-2.4
Total	2474	1292	

* Relates to replies to the Wave I questionnaire.

There are thus sufficient grounds for believing that the sample of graduates is broadly representative of public sector graduates in general, and that the problems arising from using a non-random

sample is not serious, but, owing to the declining response rate, the Wave III replies should be treated with some caution (4).

A more fundamental problem occurs because the sample of graduates was drawn from the public sector only, university graduates being ignored. This raises two kinds of problem. Concerning the first problem, studies of the recruitment practices of employers (reviewed in Chapter Six) strongly suggest that many have a preference for university rather than public sector graduates. This view is reinforced in the *First Destination Statistics* which show that the rate of unemployment amongst university graduates tends to be only about half that for polytechnic graduates six months after graduation. Moreover, Pearson (1976) suggests that university graduates tend to achieve higher-status positions than public sector ones. The net effect of this could be to 'compress' the range of jobs within which public sector graduates are employed with the result that both CNAA graduates and those from working-class backgrounds might tend to be employed in lower-status occupations than their university and more middle-class counterparts. If this is so then it is likely to affect the nature of the relationship which might exist between the origins and destinations of CNAA graduates which could be less marked than that which might exist for all, including university, graduates.

Concerning the second problem, a number of studies (see Chapter Four) have shown that young people from manual backgrounds are more likely to attend public sector institutions than their middle class peers who are more likely to attend the universities (although students from middle-class backgrounds are in the majority in both types of institution). Because of this it can be argued that

working-class and middle-class students attending public sector institutions are atypical of their class of origin. Working-class students being a 'success', in so far as they are attending an institution of higher education, and middle-class students being a 'failure' in so far as they have failed to get into a university. To the extent that this reflects differences in the aspirations and motivations of the two groups, one might expect this to be reflected in how well they perform in the labour market after graduation. Thus it is possible that graduates from working-class origins who attended public sector institutions might perform as well as their university counterparts, whilst those from more middle-class origins who attended public sector institutions might perhaps perform somewhat worse than their university counterparts. If this is so it is likely to confuse even further the relationship which exists between the origins and destinations of graduates.

Fortunately, a recent study by Boys and Kirkland (1987) - reviewed in Chapter Six - has looked at the early career histories of CNAA and university graduates, and their work suggests that although university graduates as a whole tended to be more successful in the labour market than CNAA graduates, much of the variance could be explained by differences in the performance of Oxbridge graduates, on the one hand, who fared best in the labour market, and college of higher education graduates, on the other, who fared worst. In contrast, few differences were found in the performance of 'other' university and polytechnic graduates. Since only a relatively small proportion of graduates have Oxbridge degrees and only 15% of HELM respondents had attended a college of higher education, the Boys and Kirkland study would tend to support the contention that the failure of the HELM study to examine university graduates is not a serious

problem (5).

Another set of problems which were encountered in undertaking this study arose from secondary analysis - that is having to use a data set which had been collected for another purpose. This problem occurs because the ideal way in which to undertake a research project is to begin by first defining the problem under investigation, and then operationalizing the concepts in such a way that they can be researched using a methodological approach which has been specifically devised to answer the questions in which we are interested. Since secondary analysis, by definition, implies using data which has been collected by someone else for another purpose this approach is simply not possible. The researcher usually has no control over the questions asked and has little control over coding: he is therefore unable to operationalize the concepts in which he is interested. Moreover, the data set may be old and may not reflect present conditions. Finally, the researcher often has no control over how the sample was taken and may not be aware of biases (sampling errors) within it (see Hyman, 1972; Hakim, 1982). Luckily, owing to the way in which the HELM project was undertaken most of these are not serious problems.

Firstly, when the three panel questionnaires were being formulated account was taken of the possibility of undertaking a social-class analysis, and respondents were asked a series of questions about their parents' occupations and qualifications. The questionnaires also contained a rich variety of questions on areas of potential interest to us, including job 'quality', attitudes towards work, and secondary and higher education. The author was also allowed a limited input into the project at the questionnaire design stage and

a number of potentially useful questions were included on the Wave III questionnaire. Moreover, the author had full control over the coding of occupations, social class and educational qualifications (see Appendix A). The question on parental occupations was, however, poorly worded (6), and a number of questions of potential interest were omitted from the questionnaires. No questions, for example, were asked on the motives of respondents for entering higher education and their career preferences were not examined. Respondents were not asked to say where they were born, and only a limited amount of information was collected on the families of origin of respondents. No questions were included on respondents' brothers and sisters, their order of birth and educational attainments. To a large extent, however, the omission of these questions was compensated for by the longitudinal nature of the data set.

The second problem often encountered in secondary analysis is that of the age of the data set: researchers often have to use data which is old and of only historical interest. Because the HELM data set relates to a sample of graduates who left college in 1982 we did not have this problem. The problem which we faced arose because there are grounds for believing that the influence of the social-class origins of graduates on their eventual employment destinations will not become fully apparent until after they have been in the labour market for some considerable time. The graduate's early years in the labour market may be characterized by a period of experimentation in which he/she moves from job to job until something is found to which he/she is suited. Moreover, Levin (1976) points to the importance of inheritance in the transference of wealth across generations, which

may be expected to benefit graduates from more middle-class and upper-class backgrounds relatively late in life. Partly because of this problem Kelsall et al. (1972) looked at graduates some six years after graduation. Our problem is that in looking at graduates one, two and three years after graduation, we may be viewing them at a point in time in which the influence of social-class origins on their employment destinations has not yet fully manifested itself.

The final problem which was encountered related to the fact that 1982 was a particularly difficult year for new graduates. First Destination Statistics for 1982, published in Brennan and McGeevor (1988: 12-3), suggest that unemployment amongst new graduates with degrees in the 21 types of course for which direct comparisons with HELM data are possible reached a peak of 24.6% for polytechnic and 16.1% for university graduates. Since this date the employment situation facing new graduates has improved markedly. It is hard to calculate how this factor may have affected the HELM sample and the extent to which it is representative of other years. Brennan and McGeevor (1988: 13) appear to be reasonably confident that it has not unduly affected the validity of the findings. As they point out, the state of the labour market is one of many factors which affect the long-term career development of graduates. In Chapter Six the relationship which exists between the social-class origins and destinations of graduates is examined by means of a matched sample in which graduates from working-class origins are matched with those from more middle-class backgrounds who are alike as regards their course of study, institution attended, class of degree and gender. It seems reasonable to argue that such a procedure should also have had the affect of controlling for the depressed state of the labour market.

The CRE Study

In addition to the HELM study, the present writer also had access to a related study commissioned by the CRE (Commission for Racial Equality) into the employment destinations of graduates who completed their degrees in 1984. The main aim of this study was to examine how well graduates from different ethnic groups had fared in the labour market. The results are reviewed in Chapter Nine of this thesis (see also Lyon and Gatley, 1988).

The CRE study was undertaken by means of a highly structured postal questionnaire which was distributed to graduates in 1987, three years after graduation. All graduates (apart from those domiciled overseas) who had undertaken six courses of study at nine universities and 17 public-sector institutions were sampled. Institutions were chosen for inclusion in this study which were situated within areas known to have large black populations (eg London, Bradford and Wolverhampton). Several courses were also sampled because they were known to attract a high proportion of black applicants.

Distribution of the questionnaires was left to individual universities and colleges. Table 2.6 shows the courses sampled and the number of respondents.

Table 2.6: Sample Size and Response Rate to the CRE
Study by Course

Course & Sector	Distributed	Replies	Response Rate
CNAA			
Humanities	301	80	26.6
Electronic Engineering	218	80	36.7
Law	264	78	29.5
Pharmacy	305	126	41.3
Social Science	253	91	36.0
Business Studies	300	107	35.7
Total Public Sector	1641	562	34.2
University			
Pharmacy	191	67	35.1
English/History	142	50	35.2
Social Science	66	25	37.9
Electronic Engineering	251	108	43.0
Total University	650	250	38.5

Conclusion

In conclusion, this chapter has examined the relationship which exists between this study and the wider HELM project. It has been shown that whilst the wider project was primarily concerned with examining the relationship which exists between course of study and the labour market, this Ph.D has been concerned with the role of public sector institutions in providing an avenue of social mobility for disadvantaged groups. The chapter also looked at the nature of the HELM data set, and at the advantages and disadvantages involved in using it to undertake this study. The principle advantages relate to the large number of respondents and the exceptionally 'rich' and longitudinal nature of the data set. On the debit side a non-random sample was used to undertake the study and the sample is

'incomplete' in so far as the university dimension is missing. These problems do not appear to be particular serious, however.

CHAPTER THREE: DERIVATION OF A SOCIAL-CLASS SCHEMA

This chapter looks at the way in which a social-class schema was derived for the analysis of the occupations of graduates and of their parents. Firstly, however, it is necessary to say something about the methodological problems which confront the social scientist in constructing and interpreting variables.

The problems facing the researcher in undertaking a sociological study are discussed by Cicourel (1964) who makes two points of importance to us: the concepts used in a study should be adequately defined beforehand, and the data should only be interpreted within a methodology which is firmly rooted in its environment and is not divorced from its own context.

Cicourel's first point relates to the problem of defining and developing concepts. Concepts in the social sciences are of two basic types - 'observables' and 'constructs'. The difference between these is that whereas the former can be observed (eg age, gender and ethnicity) the latter are abstract formulations which cannot be observed (Willer and Webster, 1969; Lin, 1976). For example, one may wish to measure differences in the standard of living in different countries. The problem here is that 'standard of living' is an abstract formulation which cannot be studied directly. To study it one must operationalize it and try to measure it in terms of some 'shadow' measure such as average income or the number of telephones in each country. Cicourel's concern lies in the extent to which the measures used to operationalize a construct are actual measures of

it. This is important since the degree to which an hypothesis can be tested is directly related to the extent to which the measures employed are adequate representations of the construct under investigation.

Lin (1976: 39-40) suggests that one way to overcome this problem is to use several measures of each construct in which we are interested. In this way, if multiple relationships are found to exist between each of these and the causal or independent variable we can be reasonably confident about the direction and nature of any relationship which might exist.

Cicourel's second point is that survey questionnaire and other data can only be interpreted within its own environment and cannot be divorced from its context. A biblical example will serve to illustrate his point. One often hears accounts of the 'poverty of Christ's birth', which is a reference to his birth in a stable. Such a statement, however, confuses the conditions under which women in Western nations give birth today with those pertaining in first century Palestine. Christ's birth being, in fact, fairly typical of births at that time. Similarly, just to describe the education, job characteristics, incomes and attitudes of our graduates would be a fruitless exercise without first saying something about the labour market. For only by doing so is it possible to interpret our data. For example, the finding that most graduates are in high-status occupations is meaningless without a knowledge and understanding of the role which education plays in the allocation of jobs within the labour market. For this reason Chapter Six of this thesis looks at the nature and major characteristics of the graduate labour market

and at the types of jobs which graduates do.

Social Class

There are a number of 'social-class' scales in use today: those of Hall and Jones, Reiss, Duncan, OPCS and Stewart et al. (see Armstrong, 1972; Stewart et al., 1980; Marsh, 1986). Although these scales differ in detail, they are all based upon the premise that it is possible to arrange occupations which share similar market as well as work and status situations into distinct social classes (see Lockwood, 1958). Because these scales were devised for specific studies, the differences which exist between them need not unduly concern us here. Suffice it to say that most scales have been constructed in one of four different ways: intuitive, relational, constructed and reputational (Stewart et al., 1980: 20-7). In intuitive approaches (the main example of which is the Registrar General's Classification devised in 1911 (Armstrong, 1972: 203-4)), the researcher simply ranks the occupations on the basis of his own subjective assessment of their 'standing' in the community. In relational approaches (for example, the Cambridge scale devised by Stewart et al. (1980: 27-34)) occupations are ranked on the assumption that people interact (marry, make friends and associate) with people of broadly similar social standing as themselves. In constructed approaches (for example, the NORC scale devised by Duncan in the United States (Stewart et al., 1980: 27)) a number of different factors, such as income and levels of education, are used to rank occupations.

Our main interest lies in the reputational approach taken by Hope

and Goldthorpe (1974), and Goldthorpe and Llewellyn (1977; 1980: 39-42), whose scale, in modified form, is used in this study. In this approach a group of people (chosen at random) are asked to rank occupations (1, 2, 3, 4, etc.) according to their perceived standing in the community, and the social ranking of each occupation is then calculated on the basis of its mean score. The reputational approach has been criticized on the grounds that it is to be doubted that there is common agreement as to what constitutes a 'good' and 'bad' job, and because for such a procedure to work respondents must have perfect knowledge of all occupations, which is very unlikely (see Stewart et al., 1980: 25-30).

Because of these criticisms Hope and Goldthorpe (1974) prefer not to refer to their scale as one of occupational prestige, rather it purports to measure the 'general desirability of occupations' (p. 12). Their scale is multi-dimensional in character, being based upon standard of living, power and influence over other people, qualifications and value to society (p. 14). In the full Hope-Goldthorpe scale there are 124 distinct categories, formulated in such a way as to differentiate large and small proprietors, the self-employed, professionals, managers, supervisors, foreman and employees (pp. 22-3).

Hope and Goldthorpe believe that their scale has ordinal properties because the relative status given to an occupation can be obtained from its position in the scale, such that a lower score on the scale indicates a high level of general desirability and a higher score a low level of desirability. Thus individuals located in their Category 1 (self-employed professionals eg doctors) have more status

than those in Category 27 (high-grade technicians) who in turn have more status than those in Category 124 (street vendors and jobbing gardeners). The main advantage of using this scale in the present study lies in the ability to collapse the 124 categories into a smaller number of categories. This Hope and Goldthorpe do to arrive at their thirty-six point scale (1974: 131).

For the purposes of this study the occupations of respondents and their parents were coded according to the collapsed thirty-six point schema, except that Category 6 (high-grade technicians) was sub-divided into self-employed and salaried positions and Category 28 (service workers intermediate grade) was divided into shop workers and secretaries in order to make the scale, originally devised for men, more applicable to women.

The Hope-Goldthorpe scale is not a scale of social class: rather it is a measure of the 'general desirability of occupations'. However, in a later work Goldthorpe, in collaboration with Llewellyn (1977; 1980: 39), followed Lockwood (1958) in developing a Weberian-type social class schema by amalgamating together the thirty-six categories into seven distinct social class groupings of 'occupations whose incumbents will typically share in broadly similar market and work situations', viz:-

That is to say, we combine occupational categories whose members would appear in the light of available evidence, to be typically comparable, on the one hand, in terms of their sources and levels of income, their degree of economic security and chances of economic advancement; and on the other, in their location within the systems of authority and control governing the process of production in which they are engaged, and hence in their degree of autonomy in performing their work-tasks and roles.

Goldthorpe and Llewellyn, 1980: 39

Thus they arrive at the following seven social classes:-

- Class I: high-grade professionals, administrators and officials, managers in large establishments and large proprietors.
- Class II: lower-grade professionals and higher-grade technicians, lower-grade administrators and officials, managers in small businesses, industrial establishments and services, and supervisors of non-manual employees.
- Class III: routine non-manual employees in clerical and secretarial work, administration, commerce and sales.
- Class IV: small proprietors, including farmers, smallholders, self-employed artisans and other self-employed people.
- Class V: lower-grade technicians whose work is to some extent of a manual character, foremen and supervisors of manual workers.
- Class VI: skilled manual workers.
- Class VII: all semi-skilled and unskilled manual workers.

Although this scale was sufficient for the studies undertaken by Goldthorpe and Llewellyn (1980: 41-3) who looked at social mobility in post-war Britain, and, in slightly modified form, for those undertaken by Halsey et al. (1980: 17-9), there are two main problems - one practical and one theoretical - with this schema. Table 3.1 illustrates the practical problems.

Table 3.1: Occupational Class of Respondents' Fathers

Class	Goldthorpe-Llewellyn	HELM Fathers	Ratio
I	7.9	29.8	3.8
II	6.4	23.2	3.6
III	8.0	8.8	1.1
IV	10.3	12.2	1.2
V	12.5	8.3	0.7
VI	30.0	8.3	0.3
VII	24.8	9.5	0.4

Source: Goldthorpe & Llewellyn, 1980: 44

From Table 3.1 we see that the HELM figures are almost a virtual reverse image of those obtained by Goldthorpe and Llewellyn in their Oxford mobility study. Thus we see that whilst only 7.9% of Goldthorpe-Llewellyn fathers were in Class I and 6.4% were in Class II, 29.8% of HELM fathers were in Class I and 23.2% were in Class II. Similarly whilst 30% of Goldthorpe-Llewellyn fathers were in Class VI and 24.8% were in Class VII only 8.3% and 9.5% of HELM fathers were. Because of the large numbers of people in Classes I and II a case exists on purely practical grounds for breaking them down into a larger number of social classes.

More fundamentally, however, from a theoretical point of view the homogeneity of Class I and Class II can be questioned. Goldthorpe and Llewellyn (1980) lean heavily on the work of Dahrendorf (1964) in defining Class I in terms, 'of those exercising power and expertise on behalf of corporate bodies - plus such elements of the classic bourgeoisie (independent businessmen and "free" professionals) as are not yet assimilated into this new formation' (p. 40). Dahrendorf's approach has, however, been criticized (Abercrombie and Urry, 1983: 17-20). Thus, in our discussion of theoretical approaches to social class in Chapter One it was mentioned that most Weberian and Marxist writers are agreed that a distinction can be drawn between those who own and those who manage the means of production. Goldthorpe and Llewellyn, however, move away from this position in so far as Class I groups together large proprietors with both senior managers and senior professionals. This procedure can be objected to on the grounds that it combines both employed (managers) and self-employed people (proprietors). However, Goldthorpe and Llewellyn (p. 40) point out that only 8% of the total

Class I membership were large proprietors, and the distinction between them and senior managers is often blurred both because many large proprietors undertake managerial functions and because many senior managers are substantial share owners.

A central difficulty is that Class I and also Class II combine within them people from both professional and managerial occupations. As such this corresponds to the position taken by the Poulantzas (1975), Ehrenreich and Ehrenreich (1979), and Giddens (1980) in their discussions of the middle class. Nevertheless this approach can be objected to for several reasons: a) their functions and work situations differ; b) there are differences in the patterns of recruitment into these occupations; c) their 'interests' possibly diverge; and d) they differ in how they transfer wealth across generations. By definition managers and administrators are concerned with the management of productive enterprises, and they have control over and direction of a workforce. The independent, self-employed or specialist professional worker, in contrast, performs a service function for a clientele (be it in teaching, medicine, law, religion, etc).

As we saw in Chapter One, entry into the professions tends increasingly to be by the possession of qualifications. Such people, therefore, tend to begin their careers with professional status, or if not, at a lower (usually clerical) level with the intention of qualifying over a number of years after a period of part-time study. In contrast, many managers begin their careers in relatively low-level (clerical) positions and generally rise in company hierarchies to more senior positions. However, unlike the

professional employee, they usually have a much less clear idea as to how their careers are likely to develop (Heath, 1981: 61-5).

Thirdly, both Marxist and Weberian approaches to social class see members of each class as having a common interest. It can, however, be doubted that this is so in the case of professional and managerial workers. Many professionals, and more especially semiprofessionals, are employed within the state sector where they serve a specific clientele, whilst most managers work within the private sector. This creates a potential for conflict which arises from differences in how they view the role of the state. Thus, in order to benefit both themselves and their clients professionals tend to advocate high-levels of state expenditure, whilst managers in serving the needs of themselves and their employers tend to favour low-levels of state expenditure and taxation. Differences in the interests of these two groups should not, however, be exaggerated, and whilst many professionals (eg accountants and engineers) work in commerce and industry, many civil servants perform administrative and managerial functions within the state sector.

Finally, Heath (1981: 61-4) points out that large proprietors, managers and professionals differ in how they transfer wealth across generations, which in turn affects the occupational destinations of their children and the character of social mobility. The children of large proprietors tend to benefit from the direct inheritance of wealth. Very often they begin their careers in low-level clerical positions and gradually rise within the company hierarchy before taking over control on the deaths of their parents. The children of

professionals and senior managers, in contrast, tend to benefit from the inheritance of what Bourdieu and Passeron (1977) have termed cultural capital. Moreover, occupational choice theory leads one to expect children from managerial and professional backgrounds to differ in their choice of career.

Another problem facing us is that of how the working class is to be defined. It is generally agreed that employed people undertaking work of a distinctly manual character should be included within the working class and indeed this was the approach taken by Goldthorpe and Llewellyn. However, other theorists define the working class in such a way as to include groups such as foremen, low-grade technicians, low-grade service workers and shop and routine office workers (see Roberts et al., 1977; Braverman, 1974; Westergaard and Resler, 1975: 72-3).

Looking firstly at foreman and low-grade technicians, these are included within a separate class (V) by Goldthorpe and Llewellyn on the grounds that although their work is to some extent manual in character, they are, '... typically involved to some degree in the exercise of authority and/or direction ...' (p. 41). However, whilst such a categorization may well have suited the needs of Goldthorpe and Llewellyn it does pose a problem for us. In undertaking the Oxford mobility study, Goldthorpe began with the premise that the father's occupation during the respondents' formative years gave a better indication of social mobility than their last occupation. For this reason the occupations of his respondents were compared with those of their fathers when they, the respondents, were aged fourteen. Unfortunately the HELM questionnaire merely asked

respondents to state their fathers' occupations: that is when the respondents were in their early twenties or older. This creates a problem for us because most foremen are promoted from the ranks of shop-floor workers. Since many foremen within the HELM sample would have been manual workers during their children's formative years a case can, therefore, be made for including them within the working class. Moreover, foremen and low-grade technicians differ from one another in the character and nature of the training and qualifications needed for entry. Low-grade technicians (electricians, firemen, etc) generally need a few GCE O-levels, ONCs, etc for entry into their occupation, but since foreman tend to be appointed from the ranks of manual workers formal qualifications are not necessary. This, in turn, may well have an influence on the stress which the parents of these two groups place on education during their children's formative years.

Let us move on to a consideration of the social-class position of clerical and routine-service workers. As was briefly mentioned in the last chapter, owing to the introduction of new technologies the level of skill required to undertake many such jobs may have fallen in recent years along with their rates of pay relative to manual workers, and this has led some (Braverman, 1974) to argue that they should be more properly regarded as a section of the working class. Against this, Lockwood (1958: 14), King and Raynor (1981: 128) have argued that office work has not become as deskilled as is sometimes suggested, qualifications are often needed to undertake many such jobs, and they can be differentiated from manual workers in terms of their market and work situations. Moreover, most men (but not women) in such occupations are young, they have reasonably good promotion

prospects, and many can expect to be employed within a managerial role after a period of a few years. This is not the time to go into the ins and outs of this debate, suffice it to say here that in view of this difference of opinion it was decided to keep the two groups separate so that they can be combined at a later stage of the analysis should the need arise.

It is now possible to describe the social-class schema which will be used to analysis the occupations of respondents' fathers, viz:-

Class A (Hope-Goldthorpe Categories 1 and 2) Senior professionals, both self-employed and salaried, including doctors, lawyers, university lecturers, engineers and accountants.

Class B (Hope-Goldthorpe Categories 3, 4 and 7) Senior managers and administrators, company directors, senior civil servants and large proprietors employing 25 or more people.

Together social classes A and B correspond to Class I of the Goldthorpe-Llewellyn schema. The principal advantage of the revised schema lies in the ability to draw comparisons between how the children of professional and managerial workers perform in the labour market.

Class C (Hope-Goldthorpe Categories 6, 9 and 10) Semiprofessionals and high-grade technicians. Included here are school teachers, ministers of religion, nurses, executive officers in the civil service, computer programmers and draughtsmen.

Class D (Hope-Goldthorpe Categories 5, 8, 12, 14 and 16) Junior managers and low-level administrators, including bank managers, shop and office managers and supervisors of non-manual workers.

Classes C and D combined correspond to Class II of the Goldthorpe-Llewellyn schema.

Class E (Hope-Goldthorpe Categories 21, 25, 28 and 34) Routine non-manual (clerical and service) workers. Included here are clerks, shop and office assistants, cooks, doormen and porters. This corresponds to Class III of the Goldthorpe-Llewellyn schema.

Class F (Hope-Goldthorpe Categories 11, 13, 19, 24, 29 and 36) Small proprietors and all own-account workers apart from professionals. Included here are farmers, small-employers of less than 25 employees, owners of small shops and street hawkers. This is the same as Class IV of the Goldthorpe-Llewellyn schema.

Class G (Hope-Goldthorpe Category 15) low-grade technicians, mainly electricians and firemen.

Class G corresponds to Class V of the Goldthorpe-Llewellyn schema except that foremen are excluded and included within Class H.

Class H (Hope-Goldthorpe Categories 17, 18, 20, 22, 23, 26, 27, 30, 31, 32, 33 and 35) All manual workers including foremen, but excluding low-grade technicians. This corresponds to Goldthorpe-Llewellyn Classes VI and VII and part of Class V.

Table 3.2 shows the proportions of graduate fathers falling into each of these social classes.

Table 3.2: The Social-Class Origins of Graduates

Social Class	Number	Percent
A. Senior Professionals	448	18.7%
B. Senior Managers	266	11.1
C. Semiprofessionals	331	13.8
D. Junior Managers	227	9.4
E. Clerical and Routine- Service Workers	211	8.8
F. Own Account	293	12.2
G. Low-grade Technicians	138	5.8
H. Manual (Working Class)	486	20.2
Missing, not classifiable, etc.	135	-
Total (excluding 'missing' cases)	2400	
Foreman	61	2.5
Skilled Manual	198	8.3
Other Manual	227	9.5

In most studies of social mobility the occupations of respondents

and their parents are coded according to the same scale of social class. Unfortunately, for a number of reasons, it was not feasible to adopt this approach in this study, and a different social-class schema (although derived from the thirty-six point Hope-Goldthorpe schema) was used to analyse graduate occupations. The first problem arose because over 40% of male graduates were employed in senior professional (Class A) occupations, and it was felt necessary to disaggregate this group in some way. Secondly, there is the problem of vertical mobility which will be discussed shortly. Finally, only a small number of respondents were employed in routine white-collar and manual occupations. The solution adopted to these problems was to draw a distinction between three types of occupation: a) professional, b) managers and administrators and c) low status.

Firstly, since professionals (eg teachers, engineers, pharmacists, etc) and high-grade technicians (computer programmers, laboratory technicians, etc) tend to remain in the same kind of work for long periods of time, these occupations were broken down into four groups: senior professionals in engineering and technical occupations, senior professional not in engineering (Hope-Goldthorpe 1 & 2), semiprofessionals (Hope-Goldthorpe 9 and 10) and high-grade technicians (Hope-Goldthorpe 6).

Problems occur in dealing with managers and supervisors (Hope-Goldthorpe 4, 8, 12, 14 and 17), administrators and officials (Hope-Goldthorpe 3 and 5) and clerks (Hope-Goldthorpe 21). Vertical mobility is a characteristic of such occupations in so far as people tend to enter them in comparatively low-level positions (clerks or junior managers) and through a process of internal promotion

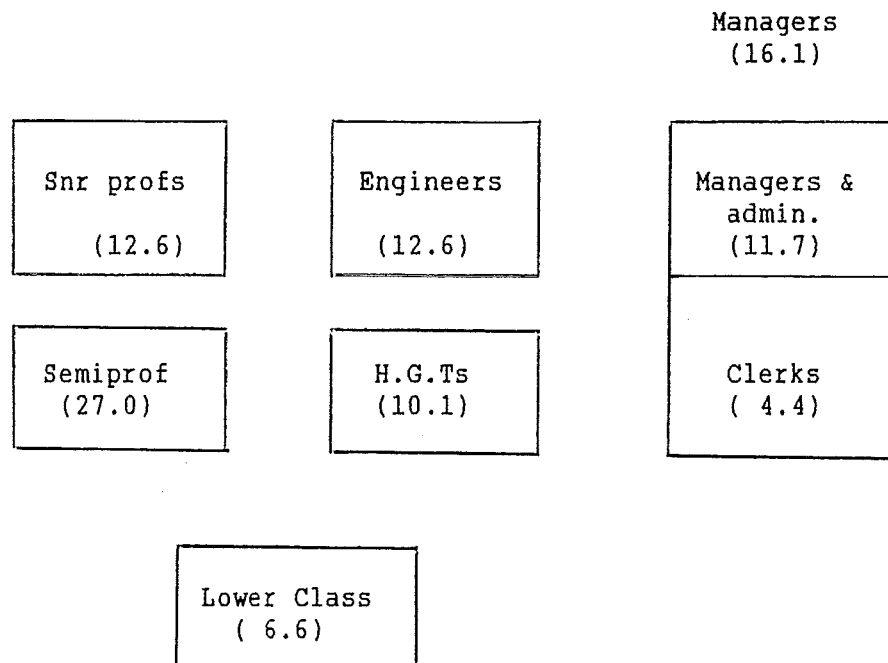
gradually rise to more senior posts. Because the study is looking at graduates at an early point in their careers (three years after graduation) it was decided to treat all these people as members of the same group on the grounds that many of them are likely to be promoted to more senior positions. However, in doing so we have lumped together people performing different functions in different work and market situations and there is no guarantee that a particular individual employed within a low-level post will ever achieve a more senior position. Because of this it should be stressed that this group taken together *should not* be regarded as a social class and for this reason we shall, from now on, refer to it as the *managerial trajectory*.

Finally a lower class can be distinguished by amalgamating together those graduates (7.6% of the total) in comparatively low-status occupations: manual workers, low-grade technicians and service workers (excluding clerks (Hope-Goldthorpe 21)) and the self-employed (Hope-Goldthorpe categories 11, 13, 15, 17 to 20, and 22 to 36).

Thus we arrive at five basic social classes and a managerial trajectory. Figure 3.1 shows how these classes and trajectory relate to one another. From this it can be seen that, three years after graduation, 12.6% of respondents were senior professionals, 12.6% were engineers, 27.0% were semiprofessionals, 10.1% were high-grade technicians, 16.1% were managers, administrators or clerks, and 6.6% were lower class. Non-managerial social classes are relatively independent of one another - in general movement between these classes is difficult but not impossible and some of those within the

lower class may be qualified to enter them. The situation within the managerial trajectory is markedly different and movement between categories is common.

Figure 3.1 Graduate Social Classes



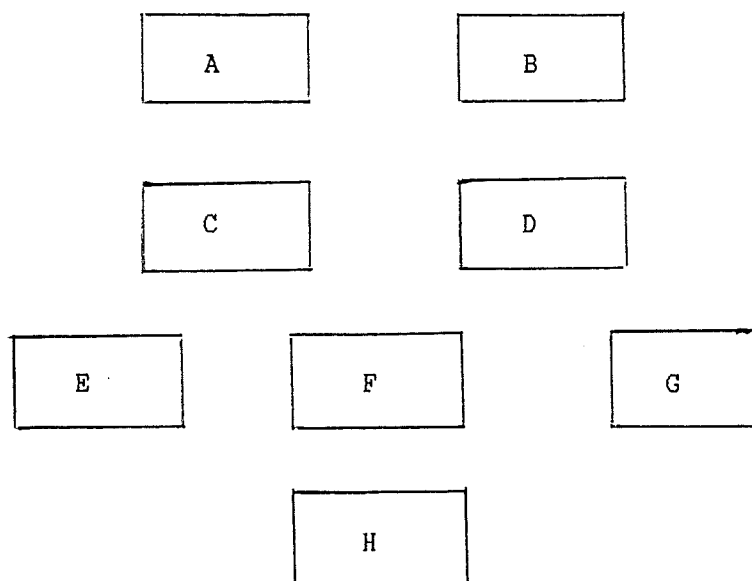
(Figures in brackets show the percentage of graduates in each social class)

Goldthorpe and Llewellyn argue that since their seven-point social-class schema was constructed without reference to the 'general desirability of occupations' and there is considerable overlap between categories it does not possess ordinal properties (1980: 42). This means, for example, that a change in one's class position from, say, Class V to Class III does not necessarily indicate 'upward' mobility because some Class V occupations have a higher level of 'general desirability' than some Class III occupations. In Goldthorpe and Llewellyn's view people in Classes I and II occupy the highest class positions. People in Classes III, IV

and V occupy an equal and intermediate position below those in Classes I and II and above those in Classes VI and VII, although there is considerable 'overlap' between those in Classes III and IV on the one hand and Classes VI and VII on the other. Because of this Goldthorpe and Llewellyn consider 'upward' mobility to have occurred only in the case of movement into Classes I and II, and 'downward' mobility to have occurred only in the case of movement out of these two classes (1980: 42).

In a similar fashion, our two social class schemas have been constructed without reference to the 'general desirability of occupations', and neither schema has strictly ordinal properties. Nevertheless, looking at the fathers' class schema one can regard Classes A and B as being equally placed at the top of the class schema, with Classes C and D occupying an equal position just below them, and above Classes E, F and G which occupy an equal position above Class H.

Figure 3.2: Fathers' Social Class Schema



Comparing Figures 3.1 and 3.2, Classes A and B are on a par with senior professionals and engineers, and Classes C and D are on a par with semiprofessionals and high-grade technicians. 'Upward' mobility can be regarded as having occurred in those instances in which the respondent's father is employed in Classes E to H and the respondent is employed in any one of the four graduate classes, and when the respondent's father is employed in Classes C or D and the respondent is a senior professional or engineer. Conversely, 'downward' mobility can be regarded as having occurred in those instances in which the respondent's father is employed in classes Classes A to D and the respondent is employed within the lower class, and, arguably, when the respondent's father is employed in Class A or B and the respondent is a semiprofessional or high-grade technician. Our main problem is that it is difficulty to measure social mobility amongst those employed within the managerial trajectory, because it includes within it occupations which have widely different levels of 'general desirability'.

Fathers, Mothers and Households

In Chapter One the works of Glass (1954) and Goldthorpe and Llewellyn (1980) were discussed and it will be recalled that they examined social mobility in terms of the relationship which exists between the occupations of male respondents and their fathers. Women in general, and mothers in particular were neglected in these and most other studies of social mobility. Until recently, such an approach has tended to be adopted on the grounds that the household rather than the individual was the proper unit of analysis. Since

few married women were in employment, and those who were tended to be employed in comparatively low-status jobs and often worked only part-time, the occupation of the male head was generally taken to be the best indicator of a household's social-class position (Goldthorpe, 1983; 1984; Dex, 1985: 143). In recent years this approach has been questioned. The number of married women in employment has risen, the number of single-parent families without a male head has increased (Dex, 1985: 143-51), and Britten and Heath (1983: 46-60) point out that many married women are employed in white-collar jobs and occupy a higher class position than their partners. In contradiction to this, Goldthorpe (1984) argues that many white-collar jobs undertaken by women are of a routine-clerical or sales nature, are often only part-time, tend to be less well paid than many skilled manual jobs and have only poor promotion prospects. In reply, Heath and Britten (1984) accept much of Goldthorpe's argument yet they quote empirical work which suggests that in itself a woman's class position is a good indicator of voting behaviour and fertility, and helps to account for some social mobility. Moreover, they also point to the existence of a few 'cross-class' families in which the male head was employed in manual work and his partner in a professional or managerial capacity.

Table 3.3 shows the social-class position of respondents' mothers using the eight-point scale of social class developed earlier in this chapter.

Table 3.3: Social Class Position of Respondents' Mothers

Class	Number	Percent (Employed)	Percent (All Mothers)
A. Senior Professionals	52	3.3%	2.2%
B. Senior Managers	9	0.6	0.4
C. Semiprofessionals	505	32.5	21.3
D. Junior Managers	79	5.1	3.3
E. Clerical and Routine Service Workers	664	42.8	28.0
F. Own Account	77	5.0	3.2
G. Low-grade Technicians	1	0.1	0.0
H. Manual (Working Class)	166	10.7	7.0
Not in Employment	821		34.6

From this Table it can be seen that only 34.6% of mothers were not employed. Looked at another way, this means that nearly two-thirds of them were employed and of these 41.5% were employed in a managerial or professional capacity (Classes A to D). Moreover, as Table 4.10 (in Chapter Four) shows, there are a large number of cross-class families in which the mother and father occupy different social-class positions.

Given the number of HELM mothers employed within professional and managerial positions and the large number of cross-class families, a case exists for examining social mobility in terms of the mothers', as well as the fathers', social class. One way in which this might be done would be to reclassify the social-class origins of respondents in those instances in which the mother occupies a higher social-class position than the father. Following Goldthorpe (1984) in classifying mothers in routine non-manual work (Class E) as working class, this would mean reclassifying the social-class origins of around one-sixth of those in the two manual classes ('G' and 'H'), 16.1% of those in Class F (self-employed) and 22.2% of

those in Class E (white-collar). To adopt this approach, however, would drastically reduce the size of the two manual classes and make it very difficult to draw comparisons between this and related studies which have used social-class schemas based purely upon the father's occupation. Because of these two problems, it was decided to examine social mobility in terms primarily of the occupations of respondents and their fathers, and to introduce the mothers occupation into the analysis as an explanatory or supplementary variable when the need arises.

Measures of Job Quality

Earlier in this chapter it was suggested that one way in which the researcher can be more certain of the validity of his or her findings is by making use of several measures of each construct. One way in which we can do this, when looking at graduate occupations, is by making use of a series of questions included in the three HELM questionnaires to measure differences in the quality of graduate jobs. Brennan and McGeevor (1988) made use of several such measures in their book on the HELM project. The measures which they used were of two basic kinds: 'objective' measures such as income and 'subjective' measures based upon questions which asked graduates to say how they felt about their jobs (p. 34). In order to obtain a more complete picture of the nature of graduate occupations similar measures of job quality are employed in this study.

Table 3.4: Measures of Job Quality By Social Class

Men	-A- %	-B- %	-C- Mn*	-D- Mn*	-E- Mn*	-F- Mn
Snr Prof	69	9	77	41	70	10,736
Engineers	67	17	74	50	64	10,332
Semiprofs	63	29	81	52	69	8,975
H.G.Ts	61	26	66	54	63	9,564
Mangt Tra'y	50	45	74	47	51	9,213
Low class	52	60	72	57	42	6,396
All	61	28	74	49	64	9,471
Prob'y	0.05	.001	.01	0.1	.001	0.001
Women	-A- %	-B- %	-C- Mn*	-D- Mn*	-E- Mn*	-F- Mn
Snr Prof	68	12	74	41	63	8,896
Engineers	63	11	74	51	75	9,926
Semiprofs	66	27	75	51	73	7,810
H.G.Ts	56	28	66	58	64	8,340
Mangt Traj'y	47	51	72	45	54	8,559
Low class	41	72	53	51	43	5,644
All	59	34	71	49	63	8,003
Prob'y	.001	.001	.05	.001	.001	0.001

-A- Percentage in preferred job.

-B- Percentage feeling over-qualified.

-C- Job involves autonomy (mean).

-D- Works within clearly defined rules and regulations (mean).

-E- Quality of work benefits from having a degree (mean).

-F- Annual income (mean).

* Mean converted to a percentage for ease of comparison.

These measures of job quality also provide us with a means by which to examine the effectiveness of our social class schema to measure differences in the status of graduate occupations. Table 3.4 shows the replies given by graduates to six such questions. From this we see that - with the exception of point D ('works within clearly defined rules and regulations') - the scale does, indeed, appear to be measuring differences in the quality of people's work. However, on four of the measures of job quality the statistical differences

are almost entirely due to differences in the results for those in the managerial trajectory and lower-class jobs. These measures are less efficient at differentiating senior professionals from engineers, semiprofessionals and high-grade technicians.

That these measures are only weakly able to differentiate the 'quality' of work undertaken by senior professionals, engineers, semiprofessionals and high-grade technicians is not as surprising as might be thought. As Goldthorpe and Llewellyn (1980) point out the market and work situations of such people share much in common and they can be clearly differentiated from most other employees. They tend to earn relatively high incomes, have staff status and enjoy a great deal of autonomy at work. The differences between those employed in Classes I and II tend to be those of degree rather than kind and Goldthorpe and Llewellyn write (1980: 40):-

Typically, Class II positions guarantee income levels that rank directly below those of Class I, and also carry 'staff' status and conditions of employment. The occupational roles of Class II members tend to be located in the middle and lower ranges of bureaucratic hierarchies ..., so that they exercise some degree of authority and discretion in the performance of their work-tasks while ... being subject to more or less systematic, if not particularly close, control from above. Class II could ... be seen as complementary to Class I of our schema in representing the subaltern or cadet levels of the service class (their emphasis).

In consequence, although people in Class II tend to be employed within less prestigious occupations than those in Class I, they are nevertheless employed within reasonably high-status occupations. Thus it is not surprising that our measures of job quality are only able to weakly differentiate semiprofessionals and high-grade technicians from senior professionals and engineers.

This does not mean that the measures of job quality, employed by Brennan and McGeevor are of no use to us. By definition they provide us with measures which - amongst other things - allow us to examine the extent to which graduates are: a) satisfied with their jobs; b) are in graduate-level employment; c) are using the special skills and other attributes which they learnt during their undergraduate studies; and d) allow us to examine a number of other matters of potential interest to us such as promotion prospects and the degree to which graduates are seeking alternative employment.

Conclusion

Using the Hope-Goldthorpe (1974) and Goldthorpe and Llewellyn (1977; 1980) schemas as a starting point, this chapter has been concerned with the development of two social-class schemas for the analysis of the occupations of graduates and their parents. The approach taken by Goldthorpe and Llewellyn (1977; 1980), who developed a seven-point schema, was rejected on the grounds that the homogeneity of their social classes I and II can be questioned from a theoretical point of view. Eventually an eight-point social-class schema was developed for analysing the occupations of respondents' parents in such a way as to draw a sharp distinction between those employed in managerial and those employed within professional positions. To analyse graduate occupations, a social-class schema was developed which has five basic social classes and a managerial trajectory.

CHAPTER FOUR: THE SOCIAL-CLASS ORIGINS OF CNAA GRADUATES

This chapter examines the role of public sector institutions in widening educational opportunities for the three lower classes identified in Chapter One: the working class, women and ethnic minorities. It is divided into three parts. Part One looks at the role envisaged for polytechnics and colleges in expanding opportunities for our disadvantaged groups. Part Two looks at the origins of HELM respondents. Finally, Part Three examines the major characteristics of graduates from working-class origins in an attempt to discover how they may differ from those from more middle-class backgrounds.

Part One: Higher Education in Britain Today

Higher education in Britain is organized into two distinct sectors, the autonomous or university sector and the public sector. The universities are independent bodies which receive their finance from the University Grants Committee (UGC), they have full control over their teaching, research and day-to-day administration, and they award their own degrees.

In contrast, public sector institutions have been under the joint financial control of the National Advisory Board (NAB) and individual local authorities (LEAs). They teach a broader range of subjects than the universities (including Education and Art and Design, HNDs and various Foundation Courses) and have many part-time and block-release students. Unlike the universities, they do not

have the right to award degrees, rather they award CNAAB degrees and qualifications set by other outside bodies such as B/TEC.

Public sector institutions themselves, in England and Wales, can be divided into the polytechnics and colleges of higher education (CHEs). The polytechnics were set up in the late 1960s following the publication, in 1966, of the White Paper *A Plan for Polytechnics and Other Colleges* (Cmnd. 3006), which sought to rationalize higher education outside the universities. In the main, the polytechnics were formed from the old regional colleges and colleges of technology. The CHEs were formed in the mid 1970s, many being based upon the old teacher training colleges. In form and functions the polytechnics and CHEs are very similar to one another. The polytechnics do, however, tend to teach a broader range of subjects and have more students. The CHEs tend to concentrate more on the humanities and social sciences, although some are specialist colleges teaching only one main subject. Some CHEs have strong links with particular universities and in addition to CNAAB degrees also teach external university degrees. Finally, Scotland has its own public sector institutions (Institutes) some of which are virtually monotechnics and like the polytechnics and CHEs they award CNAAB degrees (see Matterson, 1981). Figure 4.1 illustrates these points.

Figure 4.1: Higher Education in Great Britain

Sector	Institution	Degree Awarding Body	Finance
Autonomous	Universities	Own Degrees	UGC
Public Sector	Polytechnics	CNAA	LEA/NAB
	Colleges of Higher Edcn	CNAA/Univer- sities	do
	Scottish Institutes	CNAA	Centrally Funded

UGC: University Grants Committee.

LEA: Local Education Authority.

NAB: National Advisory Board.

Part Two: The Origins of Public Sector Graduates

In Chapter One reference was made to research, undertaken in the 1960s, which suggested that children and young people from working-class backgrounds tended to be less successful academically and to drop out of education at an earlier age than their peers from more middle-class backgrounds.

It was against this background that the polytechnics were established in the mid 1960s, and it was widely believed at that time that one of the primary functions envisaged for the 'new' polytechnics was to help widen educational opportunities available to working-class students. In fact, as Pratt and Burgess (1974: 4-5) and Donaldson (1975: 19) show, at no point does the 1966 White Paper, *A Plan for Polytechnics and Other Colleges* (Cmnd 3006), specifically say this. Rather, the White Paper stressed the role

which the polytechnics might play in providing places for those '... who have ability to take full-time or sandwich courses of degree standard; ... are seeking a qualification that requires a course of higher education; ... (and for those who) can find time only for part-time day and/or evening courses, whether they lead to a degree or to a qualification below degree level standard' (cl. 3).

Indeed, Pratt and Burgess (1974: 5-6) point out that one must refer to a speech made by Anthony Crosland (the then Secretary of State for Education) in Lancaster in January 1966 for an official statement of the role which the polytechnics might play in widening educational opportunities. In this speech Crosland described the kinds of students he believed had benefitted from Britain's system of technical education and whom it was hoped would be served by the new polytechnics. 'Perhaps they left school early, perhaps they were late developers, perhaps they were first generation aspirants to higher education who were too modest at the right moment to apply to a university, perhaps they had started a career and thought that a technical college course would directly improve their qualifications for doing it'.

This statement is generally seen by writers to be, in the words of Pratt and Burgess (p. 6), an 'extended circumlocution for 'working class''. It should, however, be stressed that there has been no official statement that the polytechnics were established to expand educational opportunities for working-class people. Nevertheless this was how Crosland's remarks were widely interpreted at the time (Scott, 1984: 185-6).

There is unfortunately little published material available on the composition of the student population attending public sector institutions. The DES's Further Education Statistics (published yearly), although giving details of the ages, gender, countries of origin and courses of study of students do not make a distinction between those doing degrees and other advanced-level subjects and separate figures are not available for individual institutions. Nor are details of entrance qualifications given. Moreover, even though PCAS now collects data on applicants to the polytechnics, comparable information is, as yet, not available for the colleges of higher education, and unlike the UCCA application form the PCAS form does not include a question on father's occupation and, in consequence, the social-class origins of applicants are not known.

A number of studies have, however, been undertaken on the origins of public sector graduates. Donaldson (1975) has looked at the social origins of polytechnic students in some detail, examining not only their social class origins but also their age, geographical and educational origins. His work suggested that whilst the polytechnics had a higher proportion of working-class, mature, local and non-standard entrants than the universities, the differences were not particularly striking and there was some evidence which suggested that the proportion of working-class students attending the polytechnics might actually have been declining. Donaldson's sample sizes were unfortunately rather small, but other studies have given considerable support to his findings. Probably the most detailed study on the social origins of polytechnic students undertaken prior to 1980 was that undertaken in 1972/3 by Whitburn et al. (1976). This study was mainly descriptive in nature

and contains a considerable amount of information on the demographic characteristics of polytechnic students: their ages, gender, entrance qualifications and social-class origins. In total some 4,122 full-time students attending twenty-eight polytechnics participated in their study. Their work suggested that the polytechnics draw their students from a wider social base than the universities, although, like Donaldson, they concluded that students from working-class origins were significantly under-represented in the polytechnics. Thus they found (p. 75) that, at a time when approximately 60% of adult males were employed in manual occupations, only 36% of polytechnic students came from working-class backgrounds in comparison with 27% of university students.

Whitburn et al. did, however, find that polytechnic students were more than ten times more likely than university students to have non-standard entry qualifications, and thus 26% of polytechnic but only 2.1% of university students were non-standard entrants. Similarly only 19% of polytechnic, and 37% of university, students had attended an independent or direct grant school (p. 68; see also Neave, 1976: 85).

Their data also revealed that a smaller proportion of polytechnic than university students were female (21% as opposed to 32%). Polytechnic students were also more likely to be mature, and thus 11% of their sample were aged 25 or over and 12% were married. In comparison only 5.8% of university students were aged 25 or over in 1973, the year in which Whitburn et al. conducted their research.

In the rest of this section the social origins of HELM graduates are examined. The analysis will, in addition, draw a distinction between the polytechnics on the one hand, and the colleges of higher education and Scottish institutions on the other. Where possible, comparisons will be drawn with the universities.

It is interesting that even though the polytechnics were created at a time when women were less likely to participate in higher education than men, neither the White Paper nor the Secretary of State suggested that they should aim to encourage more women to do so. It is not possible to give exact figures on the changing proportions of men and women participating in higher education because the CNAA did not publish such statistics in its Annual Report until the late 1970s, and the DES figures for polytechnics and colleges do not distinguish between men and women studying for degrees and other qualifications. However, the published figures which do exist suggest that the numbers of women participating in higher education have increased in recent years, and Table 4.1 shows the proportion of men and women attending polytechnics and universities in 1979 - the year in which HELM graduates began their degree courses. From this we see that the proportions of men and women attending the two types of institution are almost identical, the proportion of women students attending the polytechnics having risen quite markedly from the 21% recorded by Whitburn et al. six years earlier.

Table 4.1: Attendance at Universities and Polytechnics by Gender

Row%	Male	Female	Number
Polytechnics	63.1	36.9	120,383
Universities	63.9	36.1	249,453
Total	63.7	36.3	369,836

Source: Further Education and University Statistics: 1979.

It is interesting that these figures differ markedly from those for HELM graduates, and thus it can be seen, from Table 4.2, that 47% of overall respondents were women and 53% were men. The proportion of women varied from 44.8% for the polytechnics to 57.5% for the CHes. Discrepancies in these two sets of figures can be explained by the way in which the HELM sample was chosen, which included a number of courses (such as Nursing and Humanities) which attract very few males (see Chapter Eight).

Table 4.2: Institution Attended by Gender

Row%	Male	Female	Number
Polytechnics	55.2	44.8	1,952
CHes	42.5	57.5	388
Scottish	53.2	46.8	284
Total	53.1	46.9	2,624

Table 4.3 shows the social-class origins of HELM graduates, using the Registrar General's occupational classification. From this Table we see that polytechnics and colleges are predominantly middle-class institutions. Thus, whilst 55% of household heads were enumerated as working in manual occupations at the time of the 1981 census and 6% were senior professionals, only 26% of HELM graduates came from working-class and 19% from senior professional backgrounds.

Table 4.3: Social-Class Origins of HELM Graduates by Institution

Col%	Poly- technics	CHEs	Scot- tish	Public Sector	Univer- sities	1981 Census
Snr Prof	19	21	15	19	22	6
Snr Magt	11	15	5	11		
Semiprof	13	17	14	14		
Jnr Magt	10	8	9	10		
Interm'ate	(34)	(40)	(28)	(35)	48	26
WhtCollar	9	8	8	9		
Selfempld	12	10	12	12		
Nonmanual	(21)	(18)	(20)	(21)	10	14
LGT	5	5	10	6		
OthManual	20	16	27	20		
Manual	(26)	(21)	(37)	(26)	19	55
Number	1770	346	249	2365		

Sources: UCCA Statistics: 1981
Census: 1981

However, the polytechnics do appear to draw their students from a wider social base than the universities, only 19% of whose students originated from working-class backgrounds. Even so it is clear that public sector institutions are predominantly middle-class in composition, and when we draw comparisons with the findings of Donaldson and Whitburn et al. from the early 1970s the suggestion is that public sector institutions are more middle class today than they were then. Differences do, however, exist in the social-class composition of the three types of public sector institutions. Colleges of higher education tend to be more socially exclusive than polytechnics, and Scottish institutions are the least so. However, it must be remembered that there are proportionately more people in manual occupations in Scotland than in the rest of Great Britain. Public sector institutions in general do, however, appear to draw

their students from a wider social base than the universities (7).

HELM graduates were, however, highly likely to have been first generation students, in so far as less than 16% of them had fathers with degrees. Differences between institutions in this study are not particularly marked (see Table 4.4).

Table 4.4: Father's Highest Qualification by Institution

Col%	Poly- technic	CHes	Scottish	All
None	35.9	30.3	43.1	35.8
O-level	18.3	19.2	12.7	17.8
A-level	8.1	5.7	8.5	7.8
Subdegree	12.9	16.8	15.8	13.8
Degree	15.9	18.6	10.4	15.8
Other	8.9	9.5	9.6	9.1
Total	1831	370	260	2461

Table 4.5 shows the type of school attended by graduates broken down by institution attended, and for comparison replies to a similar question in Boys's study (1984: 10) are also shown. The most interesting thing to emerge from this Table is the high proportion who attended grammar schools. However, analysis of replies to the same and supplementary questions in a study undertaken by the author at North Staffordshire Polytechnic suggests that some confusion may have existed amongst respondents as regards the difference between independent (fee-paying) and grammar (selective LEA) schools such that some of the HELM respondents had probably attended fee-paying grammar schools. Combining these two categories, it was found that almost half of those graduating in England and Wales had attended a selective school (46.1% for the polytechnics and 48% for the CHes). Polytechnic and CHE students were, however, more likely to have attended a maintained school and less likely to have attended an

independent school than university students. Looking at Boys's figures, it can be seen that university students were more likely to have attended an independent/grammar school than polytechnic and college students and were less likely to have attended a secondary modern school. This again suggests that public sector institutions draw their students from a wider social base than the universities.

Table 4.5: School Attended by Institution+

Col%	Poly's	CHEs	Scottish	All	Univty
Sec'd Modern	7.8 (9)	10.7 (12)	2.5	7.6	(4)
Comprehensive	36.6 (39)	27.9 (34)	4.6	31.8	(33)
Grammar	33.2 (32)	32.9 (31)	3.5	29.9	(32)
Independent*	12.9 (13)	15.1 (19)	1.4	12.0	(28)
Scottish	0.7	0.8	86.2	10.0	
Other	8.9 (8)	12.5 (3)	1.8	6.8	(4)
Number	1920	383	282	2585	1368

* Includes direct grant schools.

+ Figures in brackets refers to Boys's Study (1984: 10).

Taken together the data presented in the previous three Tables strongly suggests that public sector institutions, at least in England and Wales, are exclusive in so far as they draw the bulk of their students from middle-class backgrounds and almost half had attended a selective school. Their intake is, however, highly likely to be composed of first generation students and roughly one-third of their fathers were unqualified. Public sector institutions (especially in Scotland) do, however, appear to draw their students from a wider social base than the universities (8).

The next thing to be considered is the age of graduates on entry to higher education. This is important in so far as the polytechnics were intended as 'second-chance' routes into higher education for those who had left school with few formal qualifications.

Table 4.6: Age of Graduates on Entry to Higher Education by Institution

Row%	18-20	21-24	25 plus	Number
Polytechnics	75.7	16.4	8.0	1911
CHES	62.8	14.4	22.8	382
Scottish	83.6	11.4	5.0	280
Total	74.6	15.5	9.8	2573

From Table 4.6 we see that nearly 75% of public sector graduates were aged under 21 on entry to higher education and less than 10% were aged 25 or over. Scottish institutions had the highest proportion of 18-20 year olds and the lowest proportion of mature students. CHES had a much higher proportion of mature students than polytechnics. In so far as the *White Paper* failed to say what proportion of mature students polytechnics should recruit, it is not possible to say how successful the polytechnics have been in this respect. Table 4.6, however, relates to the ages of graduates on entry to higher education whilst those of Whitburn et al. cited earlier and statistics published by the polytechnics and universities show the ages of all students. When we compare these and draw comparisons with the universities, we find that whilst 11% of Whitburn et al.'s sample were aged 25 or over, nearly 19% of polytechnic's advanced students were in this age group in 1979. Although this figure includes those studying HNDs and higher degrees, the overall impression is that the proportion of mature students grew between 1973 and 1979. Finally, public sector institutions appear to have more mature students than the universities, only 5.9% of whose undergraduate students were aged 25 or over in 1979.

A related question concerns the numbers of graduates with

non-standard entry qualifications. From Table 4.7 we see that almost 80% of graduates possessed standard entry qualifications (that is two or more GCE A-level passes or Scottish equivalents) and an additional 7% had technical qualifications (ONCs, HNCs, etc). In contrast less than 8% were non-standard entrants. These figures are, however, little different to those obtained by Whitburn et al.. Comparing these figures with those obtained by Boys (1984) for the universities, we again find that public sector institutions draw their students from a wider social base in so far as 95% of university students had standard entry qualifications.

Table 4.7: Entrance Qualifications by Institution

Row%	Non-Standard	Standard Entry	Tech'l	Other	Number
Poly's	7.6	79.6	7.5	5.3	1944
CHES	14.5	71.8	7.5	6.2	387
Scottish	0.7	90.8	4.2	4.2	285
All	7.9	79.6	7.1	5.4	2616
University+	*	95	2	2	1368

+ Boys (1984: 9) * less than 1%.

Non-Standard: CSEs, O-levels, One A-level, etc.
Standard Entry: Two A-levels or Scottish Highers.
Technical: ONCs, HNCs, etc.

Finally, less than 10% of graduates were not of UK European origin, 4.7% were Asian, 0.8% were African, 0.9% were Caribbean, 2.1% were other European and 1.2% were Other. These figures are far too small to make comparisons between institutions worthwhile, although the proportion of non-UK Europeans attending Scottish institutions (3.4%) was somewhat lower than the figures for Polytechnics (10.7%) and CHES (9.4%).

We can conclude this section by saying that public sector

institutions are predominantly middle-class in composition, in so far as they draw the bulk of their students from white-collar, professional and managerial backgrounds. They do, however, appear to draw their students from a wider social base than the universities. They have more mature, working-class and non-standard entrants than the universities and most of their students appear to be first-generation students, in so far as only a minority of their parents possessed a degree-level qualification. When, however, comparisons are drawn with the work of Whitburn et al. conducted in 1972/3 the overall impression is that, although the proportion of non-standard entrants and mature students has remained almost constant, a decline has occurred in the proportion of students from working-class origins attending the polytechnics.

Part Three: Graduates from Working-Class Origins

Given research (reviewed in Chapter One) and our own findings, which strongly suggest that they are far more likely than their more middle-class counterparts to drop out of education at an early age, it should be clear that students and graduates from working-class origins are strongly atypical of their social class in so far as they have been successful academically. In this section their main characteristics are examined in an attempt to discover how they may differ both from other graduates and from others of their class of origin.

Our first clue as to how graduates from manual origins might differ from other graduates comes from an examination of the works of Pratt

and Burgess (1974: 4-6) and Donaldson (1975: 10-13). From the earlier discussion of their work it will be recalled that at the time of their establishment it was widely believed that one of the primary functions of the polytechnics was to increase educational opportunities for those students from working-class origins. In support of this contention, Pratt and Burgess (1974: 5-6) make reference to Crosland's Lancaster speech which identified certain groups of people whom he hoped would benefit from the establishment of the polytechnics: late developers, mature students and first generation students. If Pratt and Burgess are right in their contention that this was code for 'working class', then one might expect these groups of students to be drawn predominantly from working-class origins. However, when the ages of graduates on entry to higher education were broken down according to social-class origin (see Table 4.8) only weak support was found for this view, and it can be seen that, although a higher proportion of graduates from manual backgrounds were aged 25 or over on entry, the differences are not particularly great and the proportion of mature students from LGT (low-grade technician) backgrounds is lower than that for all other graduates.

Table 4.8: Social Class Origins by Age

Row%	18-20	21-24	25 plus	-N-
Snr Professional	81.2	14.1	5.7	439
Snr Managerial	74.3	15.6	10.1	257
Semiprofessional	80.4	11.5	8.1	322
Jnr Managerial	75.8	15.2	9.0	223
White Collar	71.6	18.1	10.3	204
Selfemployed	70.4	17.5	12.1	280
LGTs	77.4	13.9	8.8	137
Manual	70.1	17.8	12.1	471
Total	75.0	15.5	9.5	2333

CHI SQR p=ns

It has already been demonstrated that women, along with those originating from working-class backgrounds, are less likely to participate in higher education than men and those originating from more middle-class backgrounds. To the extent that this is so, it seems reasonable to argue that women originating from working-class backgrounds will be doubly disadvantaged, such that one might expect them to be less likely to participate in higher education than those originating from more middle-class backgrounds. From Table 4.9 it can be seen that this does appear to be the case. The differences, however, are not particularly marked and whilst 28.1% of men came from manual origins and 27.7% came from senior professional or senior managerial origins, the comparable figures for women are 23.6% and 32.0% respectively.

Table 4.9: Social Class Origins by Gender

Col%	Male	Female	All
Snr Professional	18.4	19.0	18.7
Snr Managerial	9.3 (27.7)	13.0 (32.0)	11.1
Semiprofessional	12.3	15.4	13.8
Jnr Managerial	10.0 (22.3)	8.8 (24.2)	9.5
White Collar	9.2	8.4	8.8
Selfemployed	12.7 (21.9)	11.7 (20.1)	12.2
LGTs	5.9	5.6	5.8
Manual	22.2 (28.1)	18.0 (23.6)	20.3
Total	1264	1136	2400

CHI SQR $p < 0.01$

A number of writers (most notably Jackson and Marsden, 1986: 67-70, but also Kelsall et al., 1972: 46) have argued that the more academically minded members of the working class may really belong to the *sunken middle class* in so far as they share a number of features in common with the middle class which might help to account for their educational success. Amongst these factors are the social-class position and educational attainments of the mother, the

educational attainments of siblings and family size.

Table 4.10 shows the social-class position of respondents' mothers whose husbands occupy white-collar, self-employed, LGT and manual class positions.

Table 4.10: Fathers' by Mothers' Social-Class Position

Row%	Prof/ Mang'l	White- collar	Self- employed	Manual	Unwaged	-N-
Father/	Mother...					
Whitec'lr	22.2	32.7	2.8	10.8	34.1	211
Self-emp'd	16.1	21.2	13.3	4.1	45.4	293
LGT	15.9	33.3	0.7	10.9	39.1	138
Manual	13.4	30.5	1.0	17.7	37.4	486

From this Table it can be seen that there are a large number of 'cross-class' families in which the mothers and fathers of respondents occupy different social-class positions. If those mothers not in employment (unwaged) are included within their husband's social class then 13.4% of respondents from manual origins came from cross-class families in which the mother was employed in a professional or managerial capacity, and this was also true of 15.9% of the children of LGTs, 16.1% of the children of the self-employed and 22.2% of the children of white-collar workers. If the parents of such people are more supportive of them than the parents of others (a not unreasonable contention), then one might expect them to be more successful academically. Moreover, over 30% of those originating from manual and LGT origins had mothers employed in a routine non-manual (white-collar) occupation. Even though theorists such as Goldthorpe (1983; 1984) have argued that such women are better categorized within the working class, the fact remains that many of them are reasonably well educated (see below), come into

contact with people in a wide variety of more middle-class occupations and are more likely to be aware of the potential benefits which might flow from a 'good' education.

A closely-related question concerns the level of education of respondents' mothers and their siblings. Where mothers are well educated it seems reasonable to argue that they are likely to place great stress on their children's education, and one might expect this to be reflected in the educational attainments of HELM mothers. A casual glance at Table 4.11 might lead one to dismiss this argument, because over two-thirds of HELM mothers with working-class husbands lacked a formal educational qualification. However, over 25% of them had a qualification at GCE O-level standard or beyond and when their ages are taken into account it is highly likely that the majority of these women had attended a selective (grammar) school. This, in turn, might be expected to have had a major influence on the importance which they attach to their children's education.

Table 4.11: Fathers' Social-Class Position by Mother's Highest Educational Attainment

Row%	None	O-level	A-level	HND/ Degree*	Other	-N-
Snr Prof	19.5	28.1	11.7	30.2	10.5	420
Snr Magm't	25.7	30.4	13.8	24.5	5.5	253
Semiprof'l	22.8	31.3	7.8	31.3	3.8	320
Jnr Magm't	36.7	41.0	6.7	10.4	5.2	210
White-col'r	53.7	27.9	4.5	9.5	4.5	201
Self-emp'd	52.7	22.0	6.1	16.1	4.0	277
LGTs	46.2	36.4	5.3	8.4	3.8	132
Manual	67.8	20.0	3.2	3.8	5.1	469
All	41.3	28.4	7.2	17.4	5.6	2472

* Includes teaching certificate.

CHI SQR p<0.0000

Unfortunately the HELM study did not look at the education of respondents' brothers and sisters, although it is possible to make a few comments on this topic from a study undertaken by the author at North Staffordshire Polytechnic (NSP). Table 4.12 shows the proportion of respondents' immediate families who had participated in some form of higher education (including teacher training).

Table 4.12: Family Participation in Higher Education by Social-Class Origins (NSP)

No%	Father	Mother	Brother	Sister	Partner	Child	-N-
Snr Mngrs	40.4	21.2	28.8	17.3	5.8	1.9	52
Snr Prf'l	71.4	33.3	42.9	31.0	2.4	-	42
Semiprof/ Jnr Mngrs	37.3	22.7	16.0	24.0	4.0	-	75
Self-Emp- loyed	12.5	12.5	35.0	22.5	10.0	2.5	40
Foreman/non- manual	6.5	6.5	19.6	23.9	8.7	-	46
Manual	-	8.2	18.0	16.4	6.6	3.3	61
All	27.5	17.4	25.0	22.2	6.0	1.3	316

Although the social-class schema used in the NSP study was different to that used in the HELM study, it can be seen from this Table that a sizeable proportion of respondents from working-class origins came from families in which one or more of their immediate relatives had participated in higher education. In turn this can be taken as an indication that they had been brought up in families which placed great stress on the importance of having a good education.

Another factor which has been found to correlate highly with academic success is family size, such that children and young people from small families tend to be more academically successful than those from large families (Douglas, 1964: 169-71). Nationally it has been found that working-class families tend to be larger than more middle-class ones, although recent years have seen some narrowing of

the gap (Westergaard and Resler, 1975: 289-91). Even so, it does seem reasonable to argue that the more academically successful amongst the working class will tend to come from smaller families. This question was examined in the NSP study cited earlier, and Table 4.13 shows the median family size by social-class origins. From this it can be seen that the median size was just under two and only small and insignificant differences existed between the different social classes.

Table 4.13: Median Family Size by Social-Class Origins (NSP)

	Median	-N-
Senior Managers	1.70	52
Senior Professionals	2.22	42
Semiprof & Jnr Mangr's	1.87	75
Self-employed	1.92	40
Foremen & white collar	1.87	46
Manual workers	1.93	61
All	1.93	339

Another factor which Kelsall et al. believed to be important was the extent to which graduates from working-class origins have fathers employed within the more prestigious and highly-skilled occupations of their social class. Table 4.14 shows the figures for HELM graduates. In order to draw comparisons with the work of Halsey et al. (1980), the working class has been redefined to include smallholders, and foremen have been reclassified along with low-grade technicians.

Table 4.14: Graduates From Manual Origins

	Oxford Study*	HELM Study	Ratio
LGTs & Foremen	11.3%	8.3%	0.73
Skilled Manual	27.2	8.3	0.31
Semi- & unskilled	22.6	8.9	0.39
Agricultural Wrkrs	5.1	0.8	0.16

* Relates to Great Britain as a whole.

Kelsall et al.'s view is only partially born out by this Table in so far as the children of LGTs and foremen were the most likely of those from working-class origins to enter public sector institutions (ratio: 0.73) and the children of agricultural workers (including smallholders) were the least likely to do so. However, the differences between the two other manual groups are rather small and if anything the children of semi- and unskilled manual workers were marginally more likely to attend public sector institutions than the children of skilled manual workers.

Taken together these data add a great deal of support to the contention that public sector graduates from manual origins share a great deal in common with those from more middle-class origins. To some extent their fathers occupy the more prestigious positions within the working class, their mothers often work in white-collar, managerial or professional occupations and many mothers must have had a selective (grammar) school education. Working-class graduates tended to come from small families and many had close relatives who had also participated in higher education.

The next thing to consider is the secondary education of HELM graduates. This question is, however, discussed more fully in

Chapter Seven in relationship to Turner's models of sponsored and contest mobility, and will be discussed here only briefly. Table 4.15 shows the type of school attended by graduates broken down according to their social-class origins. From this Table it can be seen that the type of school attended by graduates from working-class origins was not markedly different to that of other graduates. The former were, however, far less likely to have attended an independent school and far more likely to have attended a secondary modern school.

Also of interest here is the importance of independent schools to those from the most middle-class backgrounds. Over a fifth of those from senior managerial and senior professional backgrounds had attended such a school. One-in-eight graduates with self-employed fathers had also attended independent schools.

Table 4.15: Social-Class Origins by School Attended

Col%	Modern	Compr	Gramr	Indp't	Scotld	Other	-N-
Snr Prof	4.8	26.3	31.3	20.9	8.4	8.4	441
Snr Mangt	4.7	27.1	28.2	25.3	5.8	8.9	258
Semiprof	5.6	32.8	30.3	11.9	10.3	9.1	320
Jnr Mangt	7.6	36.9	29.8	8.4	8.9	8.4	225
Whitecolr	9.8	40.0	28.3	4.9	8.8	8.3	205
Selfempd	7.4	31.1	29.7	12.4	8.1	11.3	283
L.G.T.	5.8	31.4	34.3	7.3	16.1	5.1	137
Manual	13.3	34.9	28.4	3.8	12.6	6.9	475
ALL	7.7	32.1	29.8	12.2	9.7	8.4	2344

CHI SQR P<0.001

Table 4.16 shows the qualifications of graduates on entry to higher education, and it can be seen that the majority of graduates from each social class possessed standard entry qualifications (ie two or more GCE A-level passes). Those from manual origins were, however, somewhat less likely to be standard entrants and were far more

likely than others to possess a technical qualification.

Table 4.16: Social-Class Origins by Entry Qualifications

Row%	Non- Standard	Standard	Technical	Other	-N-
Snr Prof	5.9	83.9	5.6	4.7	447
Snr Mangt	4.9	85.7	4.9	4.5	265
Semiprof	7.6	79.4	8.2	4.8	330
Jnr Mangt	9.3	79.3	6.6	4.8	227
Whitecollar	10.0	75.4	8.1	6.6	211
Selfempd	6.1	80.9	6.1	6.8	293
L.G.T.s	8.0	79.7	5.8	6.5	138
Manual	9.7	73.4	10.9	6.0	485
All	7.6	79.5	7.3	5.5	2395

CHI SQR p.<0.05

Conclusion

In conclusion, this chapter has discussed the role of public sector institutions in providing an avenue of social mobility for those from working-class origins. It has been argued that polytechnics and colleges of higher education are predominantly middle-class institutions which draw only a relatively small proportion of their students from working-class origins. Public sector institutions do, however, appear to draw their students from a wider social base than the universities. Graduates from working-class backgrounds were found to share many features with their more middle-class peers, and in many ways they appear to be strongly atypical of their social class. Many of their mothers were employed in non-manual (including professional and managerial) occupations and many were also reasonably well-educated. They tended to come from small families and many had a close relative (mother, partner, sibling, etc.) who had also participated in higher education. Several matters of interest to us have not, as yet, been discussed in any depth.

Discussion of the secondary education of graduates, their courses of study and motives for entering higher education has been held over to Chapter Seven. Gender differences in the origins and employment destinations of graduates are examined in Chapter Eight and Chapter Nine looks at ethnicity.

CHAPTER FIVE: THE OCCUPATIONAL AND SOCIAL-CLASS DESTINATIONS OF CNAA GRADUATES

This chapter examines the relationship which exists between the social-class origins of CNAA graduates and their occupational and social-class destinations. In Part One the work of Kelsall et al. (1972) is examined in order to set the scene for the HELM data which is discussed in Part Two. Finally, the implications of our findings are examined in Part Three.

Part One: Kelsall et al.'s Study

In Chapter One reference was made to the work of Kelsall et al. (1972), who discovered that graduates from working-class backgrounds tended to be less successful in the labour market than those from more middle-class backgrounds. Table 5.1, taken from Kelsall et al. (1972: 193), illustrates this point. From this we see that six years after graduation 40% of the sons of professional workers were themselves professionals and 57% were employed in intermediate occupations. In comparison only 21% of the sons of unskilled manual workers were professionals and 77% were in intermediate occupations. When the first jobs undertaken by women were examined a much weaker relationship was found to exist between their social-class origins and destinations, and we see (Table 5.1) that whilst 11% of the daughters of professional workers were themselves professionals only 6% of the daughters of semiskilled and unskilled manual workers were.

Table 5.1: Origins & Destinations of University Graduates

Column%	I	II	IIIN	IIIM	IV	VI
Graduate Men/ Fathers						
Professional	40	35	31	31	29	21
Intermediate	57	62	67	67	69	77
Other	3	3	2	2	2	2
Number	1132	3160	1316	1738	580	104

Column%	I	II	IIIN	IIIM	IV	VI
Graduate Women/ Fathers						
Professional	11	10	7	7	6	6
Intermediate	77	80	83	86	85	88
Other	12	10	10	7	9	6
Number	537	1407	473	507	192	18

Source: Kelsall et al. 1972: 193

I: Professionals.
 II: Intermediate occupations.
 IIIN: Routine non-manual.
 IIIM: Skilled manual.
 IV: Semiskilled manual.
 V: Unskilled manual.

Further analysis of Kelsall et al.'s work suggested that men from professional backgrounds were more likely than others to enter the legal profession, general management and the administrative class of the civil service, whilst those from manual backgrounds tended to enter teaching and research. Thus it can be seen from Table 5.2 that whilst 28% of those from professional backgrounds were employed in education, 44% of those from manual backgrounds were, and (Table 5.3) those from professional and administrative backgrounds were far more likely than others to be employed in more 'prestigious' occupations within the legal profession, general management and the Administrative Class of the Home Civil Service.

Table 5.2: Employment Sector in 1966 by Social-Class Origins*

Column%	Profes- sional	Inter- mediate	Routine Non-Manual	Manual
Public Administration	10	9	11	11
Education	28	29	40	44
Industry	27	30	27	29
Commerce	6	8	5	3
Private Practice	12	7	5	4
Churches and others	12	12	8	6
Not employed on 01/10/1966 or no details given	4	4	3	3
All Sectors	100	100	100	100

* Graduate men only.

Source Kelsall et al., 1972: 212

Table 5.3: Social-Class Origins of Men In 'Prestigious'
Occupations in 1966

Column%	Legal Profession	General Management	Administrative Class of C.S.	All Men
I and II	64	56	45	46
IIIN	11	9	14	14
Manual	11	19	14	26
Other/not Known	14	15	26	14
All Classes	100	100	100	100
Number	414	618	84	9404

Source Kelsall et al., 1972: 214

In seeking an explanation for their findings, Kelsall et al. looked to the work of occupational choice theorists (Ginzberg et al., 1951; Super, 1963; Williams, ed., 1974), who, as was mentioned, in Chapter One, see occupational choice as a rational process which gradually unfolds during each individual's life-cycle. Occupational choice, however, does not take place in isolation, but is strongly constrained by one's knowledge of the social structure and job opportunities, which in turn are, in large measure, determined by the basic socialization process and early-life experiences. Thus

Kelsall et al. wrote (p. 73):-

... the possibilities of rational choice are clearly confined within the bounds of experience and knowledge, these being limited in turn by social background factors only marginally related to personal aptitudes and ability.

Moreover, Kelsall et al. go on to argue that the images which people hold of society tend to vary according to their social class. In this respect research in the 1950s and 1960s (during which time most of Kelsall et al.'s respondents would have been in their formative years) painted a picture of working-class communities centered upon a few terraced streets located close to the principal place of work. The men tended to work together, undertaking similar work and sharing in similar leisure pursuits, and the women's lives centered upon the home and the terraced street. These communities were often closely-knit in that there was a high degree of 'camaraderie' amongst the men, and several generations of a family might live on the same street (Clarke, 1946; Dennis et al. 1956; Willmott & Young, 1957; Bott, 1957; Cohen, 1972). Children and young people brought up in such communities were likely to have limited aspirations. Sons would almost always take up the same trades as their fathers, and daughters would have few if any vocational aspirations. Parents tended to have a limited knowledge of the range of occupations which their children might enter and similarly they had a limited view of the role which education (and higher education in particular) might play in improving the employment prospects of their children (Jackson and Marsden, 1986: 153-4).

Thus Kelsall et al. argued that the aspirations of graduates from working-class origins were somewhat limited and they had only a limited view of the range of occupations which they could follow.

Part Two: Origins and Destinations of HELM Graduates

Having in the last section examined the social-class origins and destinations of Kelsall et al.'s graduates, this section repeats their analysis using the HELM data.

The first things to be considered here are the occupations of HELM graduates, differentiated according to their social-class origins. Our analysis of their social-class destinations will be left until later. Table 5.4 shows the occupations of graduates three years after leaving college.

It is difficult to interpret this Table because of the small numbers in some cells. However, looking first at the men we find (as did Kelsall et al.) that the those from manual backgrounds were far more likely than others to be employed in teaching and research (including laboratory work), and they were also over-represented within social work, art and design and computer programming. In contrast, they were under-represented amongst pharmacists, accountants and librarians, and fewer were employed within the legal profession. Owing to the small numbers involved it would be fruitless to analyse the rest of the data in detail. However, it can be seen that the sons of senior professionals are over-represented amongst the engineers and pharmacists, the sons of senior managers amongst librarians and artists and designers, and the sons of semiprofessionals amongst pharmacists and librarians.

Table 5.4: Occupations of Graduates by Social-Class Origins: Wave III.

Men Row%	Snr Prof	Snr Mangt	Semi prof	Jnr Mangt	White- collar	Self- employed	LGTs	Manual	Number
Engineering	21.1	9.8	12.8	11.3	3.8	13.5	8.3	19.5	133
Teaching	16.7	4.2	10.4	8.3	10.4	10.4	4.2	35.4	48
Research	10.4	2.1	6.3	16.7	10.4	6.3	6.3	37.5	48
Pharmacy	31.8	-	22.7	9.1	4.5	9.1	9.1	13.6	22
Computing	16.9	11.9	6.8	18.6	6.8	5.1	8.5	25.4	59
Accounts	14.3	12.9	17.1	11.4	7.1	14.3	8.6	14.3	70
Libr'ship	10.5	15.8	21.1	-	21.1	15.8	5.3	10.5	19
Social Wrk	-	7.7	15.4	7.7	7.7	23.1	7.7	30.8	13
Law	-	11.1	22.2	11.1	11.1	33.3	-	11.1	9
Other P&M	17.1	13.8	13.2	7.9	8.6	15.1	5.3	19.1	152
Other	14.6	12.2	17.1	12.2	17.1	9.8	2.4	14.6	41
Total	16.7	10.6	12.7	10.8	7.8	12.7	6.5	22.1	100.0
Number	109	69	83	70	51	83	42	144	651

Women Row%	Snr Prof	Snr Mangt	Semi prof	Jnr Mangt	White- collar	Self- employed	LGTs	Manual	Number
Engineering	8.3	33.3	16.7	8.3	8.3	8.3	8.3	8.3	12
Teaching	27.7	10.8	13.3	8.4	13.3	14.5	2.4	9.6	83
Research	15.8	13.2	7.9	13.2	13.2	10.5	7.9	18.4	38
Nursing	33.3	8.9	15.6	8.9	4.4	4.4	4.4	20.0	45
Pharmacy	23.5	5.9	17.6	-	5.9	17.6	-	29.4	17
Computing	12.0	12.0	20.0	8.0	8.0	16.0	4.0	20.0	25
Accounts	19.6	30.4	10.9	10.9	4.3	8.7	6.5	8.7	46
Libr'ship	16.0	16.0	28.0	4.0	12.0	12.0	-	12.0	25
Social Wrk	15.0	-	5.0	10.0	10.0	20.0	10.0	30.0	20
Law	44.4	11.1	-	-	22.2	-	-	22.2	9
Other P&M	18.5	17.4	13.5	7.9	7.9	10.7	9.0	15.2	178
Other	18.6	6.8	15.3	5.1	8.5	10.2	13.6	22.0	59
Total	21.5	13.9	14.2	7.9	9.4	10.8	6.5	15.7	100.0
Number	130	84	86	48	57	65	39	95	604

Moving on to a consideration of the occupations of graduate women three years after leaving college, we see from Table 5.4 that the daughters of manual workers were over-represented amongst nurses, pharmacists, computer programmers, social workers and those employed in other jobs. In contrast, the daughters of senior professionals were over-represented in teaching, nursing and art and

design, and under-represented within engineering and computing. The daughters of senior managers were over-represented within engineering and accountancy and under-represented in nursing, pharmacy and art and design.

These data add some support to the contention that the occupations which graduates enter will differ according to their social-class origins. However, the categories into which the occupations have been coded are rather broad and the replies give little indication of job quality. Table 5.5 shows the social-class origins and destinations of graduates one year after graduation.

Table 5.5: Social-Class Origins & Destinations: Wave I.

Men Row%	Snr Prof	Eng	Semi prof	HGT's	Mangs clerks	Lower class	Pgrad	Unemp	-N-
Fathers/ Graduate Men ...									
S.Prof	11.9	19.4	4.4	7.9	13.2	7.0	13.7	22.5	227
S.Mgnt	7.9	12.3	5.3	10.5	16.7	14.0	14.9	18.4	114
Smiprf	11.8	12.5	3.9	13.8	13.8	7.2	17.8	19.1	152
J.Mgnt	11.6	12.4	3.3	16.5	14.0	8.3	19.0	14.9	121
Whtcol	12.3	10.5	3.5	13.2	9.6	13.2	14.9	22.8	114
Slfemp	13.4	11.5	3.8	8.9	9.6	8.9	18.5	25.5	157
LGT	16.2	17.6	4.1	13.5	9.5	13.5	8.1	17.6	74
Manual	7.3	13.2	5.9	16.8	7.0	7.0	17.6	25.3	273
Total	11.0	13.9	4.5	12.7	11.3	9.0	16.1	21.7	1232
Women Row%	Snr Prof	Eng	Semi prof	HGT's	Mangs clerks	Lower class	Pgrad	Unemp	-N-
Fathers/ Graduate Women...									
S.Prof	10.4	1.0	17.8	5.9	11.8	13.9	22.3	16.8	202
S.Mgnt	6.4	5.7	10.7	9.3	18.6	13.6	21.4	14.3	140
Smiprf	10.9	3.6	10.9	5.5	10.9	15.8	21.2	21.2	165
J.Mgnt	10.3	3.1	7.2	11.3	17.5	16.5	22.7	11.3	97
Whtcol	4.5	1.1	14.6	12.4	18.0	11.2	14.6	23.6	89
Slfemp	7.2	4.0	10.4	10.4	20.0	13.6	18.4	16.0	125
LGT	9.8	4.9	6.6	9.8	19.7	6.6	19.7	23.0	61
Manual	5.3	2.6	13.2	10.6	16.4	16.9	20.6	13.8	189
Total	8.1	3.1	12.3	8.9	15.9	14.2	20.5	16.9	1068

CHI SQR Men p.=ns Women p.=ns

From these tables it can be seen that one year after graduation there is little evidence to support the contention that graduates from working-class origins have fared less well in the labour market than those from more middle-class backgrounds. Unemployment was, however, particularly high amongst those from manual backgrounds and this group was also the least likely to be employed as senior professionals and engineers and the most likely to be high-grade technicians (HGTs). However, men from LGT backgrounds appear to have performed better than the other groups in so far as nearly a third of them, but only a quarter of all graduates, were employed as either senior professionals or engineers. The situation amongst the women is more confused, although those from manual backgrounds were the most likely to be in lower-class jobs and the least likely to be senior professionals and engineers.

These figures, then, appear at first sight to give only weak support to the hypothesis that graduates from working-class backgrounds will tend to be less successful in the labour market than others. However, the first year after graduation is for many graduates a transitional period - 16% of men and 20% of women went on to undertake further study and unemployment was also particularly high. Moreover, it is likely that many graduates had taken only temporary jobs whilst waiting for something better to come along. Finally, Levin (1976) and Kelley (1978) have argued that graduates from middle-class backgrounds are likely to benefit from the inheritance of wealth and managerial roles some years after graduation. As a result the relationship which might exist between the social-class origins and destinations of graduates might be expected to grow

with time, and indeed Kelsall et al. (1972) looked at the employment of graduates some six years after they had left university.

When we examine the social-class destinations of graduates three years after graduation we do indeed find a stronger relationship to exist between the social-class origins and destinations of graduate men. Thus from Table 5.6 we see that men from manual backgrounds were more likely than others to be employed as semiprofessionals and high-grade technicians and the least likely to be employed as senior professionals and managers. Moreover, it will be recalled from our discussion in Chapter Three that some writers define the working class in such a way as to include many white-collar and routine non-manual workers, and when we examine the social-class destinations of their sons it can be seen that in some ways they appear to have fared less well than the sons of manual workers. We note, in particular, that 18.8% (nearly one in five) were employed in lower-class occupations. However, these differences, although statistically significant, are not particularly marked, and must be set alongside the observation that the sons of low-grade technicians have performed particularly well in the labour market as can be seen from the proportion employed as senior engineers. Amongst the women the relationship between their social-class origins and destinations is not statistically significant, although those from manual and LGT origins were amongst the most likely to be employed in lower-class occupations and the managerial trajectory.

Table 5.6 Social-Class Origins and Destinations: Wave III

Men Row%	Snr Profs	Snr Engin	Semi- profs	HGTs	Mger &admin	Lower class	-N-
Father/	Graduate Men...						
Snr Prof	16.3	29.6	20.4	10.2	17.3	6.1	98
Snr Mangt	6.3	20.6	19.0	9.5	31.7	12.7	63
Semiprof	18.9	24.3	16.2	10.8	20.3	9.5	74
Jnr Mangt	16.1	32.3	14.5	22.6	11.3	3.2	62
Whitecolr	16.7	16.7	12.5	10.4	25.0	18.8	48
Selfempd	19.4	26.4	22.2	5.6	12.5	13.9	72
LGTs	18.9	32.4	13.5	18.9	13.5	2.7	37
Manual	7.8	24.8	27.1	20.2	13.2	7.0	129
All	14.2	25.9	19.7	13.7	17.5	8.9	583

CHI SQR P<0.01

Women Row%	Snr Profs	Snr Engin	Semi- profs	HGTs	Mger &admin	Lower class	-N-
Father/	Graduate Women...						
Snr Prof	13.8	1.7	52.6	6.9	13.8	11.2	116
Snr Mangt	17.4	7.2	33.3	10.1	26.1	5.8	69
Semiprof	16.7	2.8	43.1	9.7	20.8	6.9	72
Jnr Mangt	11.4	9.1	38.6	6.8	25.0	9.1	44
Whitecolr	11.5	1.9	48.1	13.5	17.3	7.7	52
Selfempd	13.0	-	37.0	14.8	16.7	18.5	54
LGTs	3.7	3.7	33.3	14.8	29.6	14.8	27
Manual	13.1	2.4	35.7	14.3	21.4	13.1	84
All	13.5	3.3	41.7	10.8	20.1	10.6	518

CHI SQR P=ns

The impression that there is only a weak relationship between the social-class origins and destinations of graduates is supported by the data presented in Table 5.7, which shows the mean income of graduates three years after leaving college. Although the differences in the mean income of men are not statistically significant, we again note that the sons of LGTs appear to have fared particularly well and were by far the highest paid, whilst the sons of white-collar workers were the lowest paid. Amongst the women there is a closer relationship between social-class origins and

income, although the daughters of senior professionals were actually earning £90 a year less than the mean income for all women.

Table 5.7: Mean Income of Graduates by Social-Class Origins

Mean for Males	Mean Income	Deviation from Mean	Number
Snr professional	10,184	812	95
Snr managerial	9,510	138	61
Semiprofessional	9,116	-256	72
Junior managerial	9,626	254	61
White collar	8,369	-1003	45
Self employed	9,232	-140	69
Low-grade tech'n	10,698	1326	36
Working class	8,781	-591	128
All	9,372	-	567

ANOVA p.=ns

Mean for Females	Mean Income	Deviation from Mean	Number
Snr professional	7,942	-90	112
Snr managerial	8,861	829	66
Semiprofessional	8,950	918	71
Junior managerial	8,257	225	44
White collar	8,285	253	51
Self employed	7,511	-521	50
Low-grade tech'n	6,939	-1093	27
Working class	7,084	-948	81
All	8,032	-	502

ANOVA p.<0.1

As was mentioned in Chapter Three, the Wave III HELM questionnaire also included a series of questions designed to examine job quality. Although replies to these questions have been shown to be only weakly correlated with the social-class destinations of graduates, it does seem reasonable to argue that should graduates from working-class origins have a tendency to achieve lower-status jobs than those from middle-class backgrounds then this would be reflected in their replies to these questions. However, as Table 5.8 shows us, this does not appear to be the case. Looking first at the

men, we see that 62% of men from working-class backgrounds but 61% of all graduates were in their preferred job, 25% of those from manual backgrounds and 28% of all male graduates felt over-qualified for their jobs, and so on. The relationship between quality of work and social-class origins is a little stronger amongst the women (51% of those from manual origins and 59% of all females were in their preferred job, and 39% of women from manual backgrounds and 34% of all women felt over-qualified), but in no case are these differences significant at the 5% level of confidence.

To summarize, analysis of the social-class origins and destinations of men suggests that those from manual and routine non-manual origins tend to achieve lower-status jobs than those from more middle-class backgrounds. However, the differences (although statistically significant) are not particularly marked, and in many ways the sons of low-grade technicians appear to have performed best of all. Analysis of their yearly incomes confirms this general pattern - the sons of LGTs were the highest paid and the sons of routine white-collar workers were the worst paid. Finally an analysis of those questions relating to job quality failed to find any significant differences according to social-class origins.

Amongst women no statistically significant relationship was found between social-class origins and destinations, although the daughters of manual workers and LGTs were amongst the most likely to be employed in lower-class occupations. A closer relationship was, however, found to exist between social-class origins and yearly income, and between social-class and job quality. However, these differences are not significant at the 5% level of confidence.

Table 5.8: Measures of Job Quality by Social-Class Origins

Men	-A- %	-B- %	-C- Mn*	-D- Mn*	-E- Mn*
Snr prof	63	29	73	51	65
Snr mangt	62	28	73	45	61
Semiprof	58	33	72	51	61
Jnr mangt	65	25	71	58	68
White collar	60	32	79	50	63
Self empl'd	57	31	74	50	62
LGT	62	24	76	51	75
Manual	62	25	79	47	65
Total	61	28	75	50	65
Sign.	ns	ns	ns	ns	ns
Women	-A- %	-B- %	-C- Mn*	-D- Mn*	-E- Mn*
Snr prof	56	35	71	53	69
Snr mangt	67	19	81	45	65
Semiprof	59	40	72	52	59
Jnr mangt	71	32	77	43	68
White collar	65	25	68	52	64
Self empl'd	54	43	66	45	61
LGT	54	46	63	58	57
Manual	51	39	67	58	58
Total	59	34	71	51	63
Sign.	p=0.1	p<0.1	p<0.1	ns	p<0.1

* For ease of comparison mean replies to questions have been converted into percentages.

- A- Percentage in preferred job.
- B- Percentage feeling over-qualified.
- C- Job involves autonomy (mean).
- D- Works within clearly defined rules and regulation (mean).
- E- Work benefits from possession of degree (mean).

To conclude this section, our findings, in sharp contradiction to those of Kelsall et al. discussed earlier, would tend to suggest that only a weak correlation exists between the social-class origins and destinations of graduates. Just why our findings should be so much at variance with those of Kelsall et al. is the subject of the next section.

Part Three: The Social-Class Origins and Destinations of Graduates Reconsidered

Several factors might account for the differences between our findings and those of Kelsall et al..

The first point which needs to be stressed is that whilst Kelsall et al. looked at university graduates, the HELM project looked at public sector ones. How this might have affected our findings is discussed more fully in the next chapter, which looks at the fragmented labour market for graduates. Suffice it to say here that one might expect this factor to bias our findings if it can be shown that public sector graduates tend to be employed within lower-status occupations than university ones. If this is so, then both public sector graduates and those from working-class backgrounds might be employed in a similar range of low-status occupations, and a stronger relationship between the social-class origins and destinations of graduates might have been found had university graduates been included in the HELM sample. Recent research by Boys and Kirkland (1987), discussed more fully in Chapter Six, would, however, tend to suggest that this factor has not seriously affected our findings.

Secondly, during the last thirty years there have been major changes in the nature of the working class and the traditional working-class community has been radically transformed. In particular the 1950s and 1960s were marked by urban redevelopment programmes on a massive scale. Long-established working-class housing areas in many of Britain's inner-city areas were demolished either because they were judged unfit to live-in and/or to make way for urban motorways

(Dennis, 1970). Their populations were moved to Britain's new towns and to new housing estates on the outskirts of towns and cities (Dennis, 1970; Hudson and Johnson, 1976; Gatley, 1984). Social relations on these new estates are vastly different from those which had existed in the older communities. The link which had existed between the workplace and the local community was broken and people were more likely to commute to work. People were also less likely to live near to their kith and kin, and women were more likely to have jobs. Allied to this process has been the growth of the mass media and television which have widened people's horizons. In consequence, the 'camaraderie' characteristic of the older working-class communities was lost, neighbours were unlikely to be related, work together or share in similar leisure pursuits, and women living on the same street were less likely to mix together socially. A number of writers (Zweig, 1961; Turner, 1963; Westley and Westley, 1972) have argued that this process has widened the aspirations and expectations of working-class people and they are now more attuned to the role which education might play in improving their children's social status.

However, even though the working-class community has been radically transformed in recent years, it is clear from many studies (Westergaard and Resler, 1975; Reid, 1977) that people from working-class origins continue to be disadvantaged in many ways in comparison with those from more middle-class backgrounds. In particular, as was shown in Chapters One and Four, children from working-class origins continue to be less successful educationally than those from more middle-class backgrounds, and Gatley (1984) has demonstrated that within Britain's new towns (where the process of

urban change has arguably been most marked) young people from working-class backgrounds not only tend to achieve poorer examination results, but are also far more likely than others to be unemployed and tend to enter low-status jobs. Moreover, it is unlikely that urban change has led to greater social mixing. The council estates on which the bulk of the working-class live tend to be located away from private (owner-occupied) estates, and both council and private estates are segmented within themselves, with the result that the social-class composition of individual housing estates tends to be broadly uniform. Thus the poorest people tend to live in high-rise council-owned flats and in inner-city terraced houses, and the richest people tend to live in detached houses on estates located on the outskirts of towns and cities. Given these factors, one might reasonably expect differences to persist in the attitudes and aspirations of people from different social-class backgrounds. Because of this it is unlikely that the changes which have occurred in recent years in the nature of the working class and the transformation of the working-class community can, by themselves, account for our findings.

Thirdly, we have so far treated the working class as homogeneous and undifferentiated, yet, as was mentioned earlier in this thesis, it can be differentiated in a number of ways. In particular (see Chapter Four), our sample of graduates from working-class origins were strongly atypical of their social class. Many of them came from the more 'respectable' sections of the working class, and as such they had many characteristics in common with their more middle-class peers. In particular, many of their mothers are employed within white-collar jobs and many are educated to GCE O-level standard or

beyond. They tend to come from small families, and many have a close relative who has also participated in higher education. Because of this one might expect the children of such people to have higher aspirations than the rest of the working-class and if this is so it might help to account for our findings.

The main problem with this explanation in helping us to account for the differences between our findings and those of Kelsall et al., is that the latter's sample of graduates from working-class origins was also strongly atypical of their social class. Like HELM graduates, they tended to come from small 'respectable' working-class families, about 30% of their parents (mothers as well as fathers) had attended a selective (grammar) school and 26% had a grandfather employed in a non-manual occupation (pp. 42-46). Consequently, it is unlikely that this factor alone can account for our findings, although this section of the working class may have been most affected by the changes which have occurred in recent years in the nature of the working-class community.

A fourth point is that the graduate labour market has changed considerably in the years since Kelsall et al. undertook their study. At that time graduates tended to enter a rather restricted range of occupations of which education and teaching were by far the most important (see Table 5.2). As will be shown in the next chapter, the range of occupations which graduates enter has increased markedly in recent years whilst the opportunities for them to enter teaching have declined following the falling birth-rate and the contraction of teaching training places in the 1970s. In consequence it seems reasonable to argue that many graduates from

working-class origins, who would otherwise have entered teaching, may have been forced to broaden their horizons and now seek employment in more varied fields.

More fundamentally, although Kelsall et al. found a strong relationship between the social-class origins and destinations of graduates, the way in which they undertook their study and choose their sample may have led them to underestimate the extent to which educated working-class youngsters in the 1960s were socially mobile. Kelsall et al.'s sample was composed of every second male and every female who graduated in 1960, with the exception of external-degree, overseas and medical students, and those who had attended the University of Bristol and some London colleges (1972: 9-10). The trouble with this approach is that it neglected those young people from working-class backgrounds who attended grammar schools and did not attend university. This is potentially of some importance, because the number of students in higher education was much lower in 1960 than it is today and entry to many of the professions (in marked contrast to today) took place through a process of vertical mobility in which, for example, a young person with a few GCE O-levels might leave school to join, say, an accountancy or engineering firm with the intention of obtaining professional qualifications over a period of several years which would have included a period of part-time study at a local technical college. Moreover, existing alongside the universities there was a parallel system of *advanced further education* which catered for those wishing to obtain specifically vocationally-orientated qualifications, such as HNDs.

Career decisions, especially for working-class youngsters, were much more likely to have taken place at school in the fifth or sixth forms, and it may have been possible at this time to differentiate, within (maintained) grammar schools, between three distinct groups of pupils: those who wished to enter higher education to gain a degree in order to enter a particular career such as teaching; those who sought a technical or related qualification and went on to attend a technical college; and those who left school (with GCE O- or A-levels) with the intention of obtaining professional qualifications by serving apprenticeships and studying part-time (Wolfenden, 1957). This situation would have contrasted markedly with that existing in both the public and direct grant schools (which over 40% of Kelsall et al.'s sample had attended) where a much higher proportion of all students undertaking GCE A-levels would probably have applied for a place at university.

Thus Kelsall et al.'s findings may be only partly explained in terms of the aspirations of graduates and may also reflect the existence, at that time, of *two alternative routes of social mobility*. It is possible to make a few comments on this question using their own data and other published research findings from studies which were conducted in the late 1950s and early 1960s. Further analysis of Kelsall et al.'s work suggests that much of the variation which they found in the social-class origins and destinations of graduates can be accounted for in terms of the numbers of graduates entering the teaching profession. Table 5.9 illustrates this point. It has been constructed from the two Tables given on pages 193 and 212 of Kelsall et al.'s work (1972) and reproduced as Tables 5.1 and 5.2 of the present volume. These show the social-class origins and

destinations of graduate men, together with the numbers employed in education. Making the assumption that 75% of those graduates employed in education were working as teachers (an intermediate (Class II) occupation), it can be seen that when these people are excluded from the analysis the relationship which previously existed between the social-class origins and destinations of graduate men almost totally disappears. Thus whilst 45% of those originating from manual, white-collar (IIIN) and intermediate (II) backgrounds were employed in professional occupations (Class I), 51% of those originating from professional backgrounds were.

Table 5.9: Social-Class Origins and Destinations of Kelsall et al.'s Graduates Excluding those in Teaching (Men)*

Column%	I	II	IIIN	Manual	All
Graduates/ Fathers...					
I	51	45	45	45	46
II	46	51	52	52	51
Other	3	4	3	3	3
Number	895	2473	908	1623	5899

* See Table 5.1 for an explanation of the social classes.

Source: Kelsall et al. 1972: 193, 212

This finding is significant because in the early 1960s teaching was one of the few careers which required a period of study at either college or university, and hence school leavers intent on having such a career had no option but to do either a degree course at university or a teacher training course at college. Although many graduates from working-class origins may have decided to enter teaching whilst they were at university or even after graduation, this must add some support to the contention that Kelsall et al.'s sample was not typical of school leavers as a whole, and that the universities may have been attracting a disproportionately high

proportion of students from working-class origins intent on entering a career in teaching.

If Kelsall et al's findings do, at least in part, reflect the existence of two alternative routes of social mobility, then educated school leavers from working-class backgrounds must have been making greater use of the alternative (non-university) avenue of social mobility. It is possible to make a few comments on this using data collected from the Robbins and Crowther Reports. Figures published in the *Robbins Report: Appendix 2 (A)* (Cmd. 2154-II) show that in 1962/3 more students, 139,000 (p. 90) were undertaking advanced-level courses in further education than were attending the universities, 118,400 (p. 19). Of these students 38,300 were full-time, 50,200 were part-time and 50,000 attended in the evening.

Table 5.10: Types of Course Undertaken by Students in Advanced Further Education: 1962/3

Col%	Full-time	Part-time	Evening	All
Degree	19.4	4.0	4.4	8.4
Dip. Tech.	18.8	-	-	5.2
HND/HNC	14.1	61.8	36.1	39.4
NDD/ATD+	17.3	0.4	0.2	4.9
Professional etc.				
Science and technology	14.1	19.5	24.8	19.9
Commerce, Architecture etc.	16.2	14.3	34.5	22.2
Number	38,300	50,200	50,000	138,500

+ Art and Design qualifications.
Source: Robbins, 1963: App. 2 (A): 100

Table 5.10 shows the types of courses which these students undertook, and it can be seen from this that technical colleges were

playing an important role in training highly-qualified manpower for industry and commerce, and, in particular, we note the high proportions of part-time and evening students undertaking HNDs, HNCs and various professional qualifications.

Unfortunately the Robbin's Committee did not examine the educational and social-class origins of these students. However, the Crowther Committee which reported in 1960 did do so, though only in relation to students undertaking all courses in further education, including those taking relatively low-level courses such as GCEs, ONCs, City and Guilds, etc.. Their work (1960: II.57, 67) suggested that although young people from working-class origins were far less likely than those from more middle-class backgrounds to attend university the differences in the proportion who went on to undertake *some other form of further education* was much less marked. A number of small-scale studies at this time (Cotgrove, 1958; Jahoda, 1963) suggested that the proportion of students from working-class backgrounds declined as the level of the course increased (Jahoda, 1963: 54), and studies undertaken in specific colleges of advanced technology (the most 'prestigious' of the technical colleges) suggested that the social-class origins of their students were not markedly different from those of the universities (Jahoda, 1963; Marries, 1964). Even so, it is clear from this discussion that the technical colleges of the early 1960s were an important alternative route into many high-status occupations and that such colleges attracted at least as high (and probably a higher) proportion of students from working-class origins as the universities. An additional indication of the importance of these alternative avenues of social mobility comes from an

examination of Table 1.2 in Chapter One taken from the *Oxford Mobility Study*, from which it can be seen that under 30% of self-employed and salaried professionals possessed a degree, and nearly 40% of self-employed and 60% of salaried professionals had begun their careers in lower-status occupations and worked their way into more senior positions.

What is not clear, however, is the extent to which the employment and social-class destinations of those who studied an advanced course in further education may have differed from those who had studied at university. It is, however, possible to make a few comments on this question by using material from the *1981 Census of Highly Qualified Manpower*. Table 5.11 shows the proportion of men aged 40-49 (most of whom would have qualified in the 1950s and early 1960s), with a qualification above GCE A-level but below degree-level standard, employed in various high-status occupations. It should, however, be stressed that this Table underestimates the importance of the alternative route in training highly-skilled manpower both because those with low-level qualifications (such as GCE A-levels and ONCs) are excluded and because those with advanced-level qualifications of degree standard have been classified along with those with a university degree. Nevertheless it can be seen from this Table that advanced further education was playing an important role in training people for some of the senior professions (such as accountancy, personnel management, pharmacy, engineering and architecture) and that it was playing an even more important role in the training of semiprofessionals (welfare workers and radiographers), technicians (including computer programmers and systems analysts) and managers.

Table 5.11: Proportion of Men Aged 40-49 with Sub-Degree
Level Qualifications

Accountants, valuers, etc.	27.5%
Personnel managers, and industrial relations officers.	52.3%
Economists, statisticians, systems analysts & computer programmers	32.5%
Marketing, sales, advertising, public relations and purchasing managers.	31.0%
Local gov't officers (administrative and welfare functions).	38.3%
Welfare workers.	66.5%
Pharmacists, radiographers and therapists, etc.	20.7%
Scientists, physicists and mathematicians.	28.3%
Civil, structural, municipal and mining engineers.	19.6%
Mechanical and aeronautical engineers.	47.3%
Electrical and electronic engineers.	53.5%
Laboratory and engineering technicians.	69.0%
Architects, town planners, quality, building and land surveyors.	18.6%
Managers (all)	51.6%

Source: Census of Highly Qualified Manpower, 1981.

Finally, it should be mentioned that other studies of social mobility suggest that more people from working-class origins may have entered senior professional and managerial occupations than can be accounted for in terms of Kelsall et al.'s findings. Table 5.12, taken from the *Oxford Mobility Study*, illustrates this point. This shows the proportion of respondents employed in Class I (senior professional and managerial) and Class II (semiprofessional and junior managerial) broken down according to their fathers' occupational class, and in order to simplify the analysis the proportions employed in these two social classes have also been expressed as a percentage of all professional and managerial employees.

Table 5.12: Social-Class Origins and Destinations (Oxford Mobility Study)*

Row%	Snr Prof/ Snr Mangt	Semiprof/ Jnr Mangt	Other	-N-
Father/	Son...			
I	45.2 (70.5)	18.9 (29.5)	35.9	688
II	29.1 (55.7)	23.1 (44.3)	47.8	554
III	18.4 (54.0)	15.7 (46.0)	65.9	694
IV	12.6 (52.5)	11.4 (47.5)	76.0	1329
V	14.2 (51.1)	13.6 (48.9)	72.2	1082
VI	7.8 (47.0)	8.8 (53.0)	83.4	2594
VII	6.5 (45.0)	7.8 (55.0)	85.7	2493
All	13.6 (54.2)	11.5 (45.8)	74.9	9494

Source: Goldthorpe and Llewellyn, 1980: 48

* See Chapter Three for a full explanation of the social classes. Figures in brackets show the percentage in Classes I and II as a percentage of all professional and managerial workers.

From this Table it can be seen that the sons of manual workers (Classes V, VI and VII) were indeed less likely to enter senior professional or managerial occupations than were those originating from more middle-class backgrounds. However, the differences in the relative proportions of those entering 'senior' and 'junior' positions (shown in brackets) are not particularly marked, except that those originating from senior professional and managerial backgrounds were themselves far more likely than others to become senior professionals or managers. Bearing in mind our earlier observation (see Table 1.2) that under 30% of senior professionals and managers possessed a degree and Kelsall et al.'s observation that graduates from working-class origins were far less likely, than their more middle-class peers, to become senior professionals, these figures must add some support to the contention that intelligent working-class youngsters were more likely than their more middle-class peers to make use of the alternative avenue of social

mobility.

Relating these findings back to the work of Kelsall et al., it should be clear that there are sufficient grounds for believing that Kelsall et al.'s decision to limit their study to university graduates may have led them to underestimate the extent of social mobility amongst *educated working-class youngsters*. If this is so, then the HELM findings would become much easier to understand. The last thirty years have seen *qualification spiral* (Dore, 1976) and possession of a degree-level qualification is rapidly becoming a prerequisite for entry into many high-status occupations from accountancy to engineering, and it has become almost impossible for the more intelligent school leaver with only a few GCE O-levels to enter these careers. The number of students has increased and many of the old colleges of advanced technology and regional colleges have been upgraded into universities and polytechnics. Because of these trends fifth and sixth formers in modern comprehensive schools have far less choice than existed in the old grammar schools over what path to follow when they leave school, and many are forced to enter higher education as a prerequisite to gaining the professional qualifications which are now increasingly necessary for entry into many high-status occupations.

Even so, our findings do lend some support to Kelsall et al.'s contention that graduates from working-class origins will tend to be employed in lower-status occupations than those from more middle-class backgrounds, in so far as a weak but statistically significant relationship was found to exist between the social-class origins and destinations of graduate men and this deserves more

attention. One area which we have so far ignored, and which was not examined by Kelsall et al., is the nature of the graduate labour market and the role played by qualifications and credentials in the allocation of occupational roles. These matters are discussed in more detail in the next chapter, but suffice it to say here that Kelsall et al. looked at the supply side of the graduate labour market only, and ignored employers and the recruitment strategies which they adopt. Recent research based upon HELM data (Brennan and McGeevor, 1988) suggests that employment outcomes - at least at the initial point of entry into the labour market - vary according to the course of study undertaken, and work by Roizen and Jepson (1985) suggests that employers often put more stress on personality traits (confidence, man-management skills, etc.) than upon the specific course of study undertaken. These matters are potentially of great importance to us because if these factors are unevenly distributed between social classes to the disadvantage of those from manual backgrounds - if, for example, they tend to undertake those courses which have only poor employment outcomes or tend to be lacking in those personality traits which employers value - then one might expect them to fare less well in the labour market than others.

In Chapter Six the major characteristics of the graduate labour market are examined in some detail, and the social-class origins and destinations of graduates are compared by means of a matched sample. In Chapter Seven the courses undertaken by graduates are examined, and an attempt is made to analyse those factors which influence young people in their choice of which course of study to follow in higher education.

CHAPTER SIX: THE GRADUATE LABOUR MARKET

The last chapter examined the employment and social-class destinations of graduates and it will be recalled that, whilst a weak relationship was found to exist between the social-class origins and destinations of graduate men, no such relationship was found for women. The analysis which has so far been performed can, however, be criticized as being far too simplistic, in so far as, in concentrating its attention on graduates, it has failed to take an overall view of the labour market. In particular, it has ignored the roles of employers and professional associations and has failed to consider the parts played by different degree courses and other qualifications. Further, our analysis has treated the labour market as a homogeneous entity in which graduates compete for the same jobs, when it is more realistic to view it as being divided into distinct fragments or sectors within which different groups of graduates compete for similar jobs. Moreover, the role of degree-level and other qualifications and the nature of the competition for jobs might differ in each sector. If this is so, then the relationship which might exist between the social-class origins and destinations of graduates may be more apparent in some sectors than in others. It is to a consideration of this question that we turn in this chapter.

The chapter is divided into three parts. In Part One, the changing relationship between higher education and the labour market is briefly discussed. Part Two looks at the various ways in which the graduate labour market might be fragmented. Finally, Part Three

examines the performance of graduates in each sector, differentiated according to their social-class origins.

Part One: Change in Higher Education and the Graduate Labour Market

Although the approach which was taken to graduate employment in the last chapter has been criticized as being too simplistic, until comparatively recently most other writers - including Kelsall et al. (1972) - have tended to adopt a similar one. The reasons for this are not hard to find, for the labour market for graduates and highly-educated labour has changed enormously since the early 1960s, the absolute number of graduates was much lower, there were fewer courses on offer, and fewer were specifically vocational in orientation. As was shown in the previous chapter, graduates used to be employed in a rather restricted range of occupations (see Table 5.2), and entry into many professions took place through a process of 'vertical mobility'.

In recent years, major changes have occurred both in higher education and in the labour market for graduates and highly-skilled manpower. The role previously played by the technical colleges in training highly-skilled manpower has declined as the universities have expanded and new institutions - polytechnics and colleges of higher education - have come into being. UGC and CNAA statistics show that the number of new degrees awarded each year has increased enormously - from just under 10,000 in 1945, to 16,800 in 1954, 33,210 in 1966, 57,370 in 1975 and 102,000 in 1982. The number of courses available to students has increased, many courses have become more relevant to the world of industry and commerce, and

offer exemption from various professional and related examinations. The number of sandwich courses has increased, and it is now possible to study courses in far more varied fields which, although not specifically vocational in nature, nevertheless provide instruction in skills necessary for employment in many occupations.

Partly as a result of these changes, graduate unemployment - at least at the initial point of entry into the labour market - has increased, and graduates now seek employment within more varied fields. With the growth of professionally- and vocationally-orientated courses there is now a closer tie between degree course and the type of job undertaken by graduates. Moreover, it has been argued (see below) that the relative success of graduates in the labour market may be affected by factors other than the actual degree course undertaken, including the type of institution attended, social skills, personality traits, ethnicity and gender.

Part Two: Labour Market Fragmentation

The usual starting point in most discussions of the labour market is the neo-classical economic model. In this model, wage rates are assumed to be determined by the forces of supply and demand, such that the rate paid for a particular job will tend to equal the marginal productivity of the last man or woman employed. Such an approach assumes the existence of a perfect market in which there are many employers, none of whom are sufficiently large enough to influence wage rates, and of workers who are undifferentiated as regards their skills and qualifications (see McCormick, 1969;

Schultz, 1971; Carline et al., 1985).

The human capital approach, although grounded within the neo-classical tradition, rejects the assumption that the skills needed to undertake different jobs are homogeneous. In this approach rates of pay are seen to vary according to the level of skill needed to undertake different jobs. Where people with the necessary skills to undertake a particular job are in short supply, wages will be high (Becker, 1964). This acts as a signal for people without such skills to train for them, which increases the supply of suitably trained manpower, which in turn reduces the rate of pay.

These neo-classical approaches can be criticized for a variety of reasons (see Kreckle, 1980: 531-4). Firstly, they are unable to explain differences in the earnings of similarly-qualified individuals who differ as regards their sex, race, social origins etc.. Secondly, they assume that employers and employees have perfect knowledge of the labour market, which is highly unlikely. Thirdly, the skills necessary to undertake jobs are often not quantifiable and clear cut, and employers vary in the amounts of stress which they place on them.

Nevertheless, these approaches are of interest to us in so far as they suggest that those graduates who lack relevant knowledge of labour market opportunities will be disadvantaged there because they will not be able to respond to 'pricing signals' and will thus tend to be employed in lower-status and lower-paid jobs than would otherwise be the case. Indeed this, translated into economic terminology, is what was implied by Kelsall et al. (1972: 73-4) when

they suggested that, owing to their socialization, graduates from working-class origins may have less knowledge of the graduate labour market than others, which, in turn, might lead them to aspire to lower-status jobs than those graduates from more middle-class backgrounds. Conversely, one might expect those from more middle-class backgrounds to benefit in those instances where they have 'inside' knowledge of employment opportunities as a result of the 'old-boy network'. This can be regarded as a form of labour market fragmentation if it means that graduates from different social-class backgrounds compete for different types of jobs.

Similarly, research by Kogan and Boyes (1984) suggests that employers often lack knowledge not only of the credentials and qualifications which potential candidates for jobs possess, but also of the nature and characteristics of different degree courses and institutions (universities, polytechnics and colleges) of higher education (see also Roizen and Jepson, 1985). Quite simply, relatively few managers and personnel officers in Britain possess degree-level qualifications, few went to university and many completed their education before the polytechnics and colleges of higher education became fully established (see Lee, 1981). Because of this few have a deep understanding of the country's system of higher education and the differences which exist between institutions and courses.

Hence the marginal productivity theory of labour (which suggests that the best qualified individuals will be appointed to each position) is incorrect in so far as employers are forced to make their recruitment decisions on the basis of factors of which they

have some 'knowledge'. Thus employers often put great stress on A-level scores (a factor of some importance in those instances in which employers recruit their graduate entrants before their degree results are known) and the institution of higher education attended. They may also hold stereotyped images of the ideal employee (which may, for example, lead them to prefer to employ men rather than women), and their traditional recruitment practices are important because they simplify the recruitment process (Spencer and Podmore, 1987).

Arrow (1973) and Hirsch (1977) argue that candidates for a particular job can be viewed as forming a queue in which education serves a pre-selection (screen or filter) function which simplifies the employers' recruitment process. In this queue Oxbridge graduates are seen as the most able and other university graduates are preferred to public sector ones, as are those with high rather than low A-level scores and those who attended public and grammar rather than comprehensive schools (see Kogan and Boys, 1984; Roizen and Jepson, 1985).

This would tend to suggest that the graduate labour market may be fragmented hierarchically by institution, such that Oxbridge graduates may tend to be employed in higher-status jobs than red-brick university graduates, who in turn tend to be employed in higher-status jobs than public sector graduates. Moreover, should employers have a preference for men rather than women and white rather than black candidates then the labour market will also be fragmented by gender and race. This approach, however, can be criticized because it ignores the importance of different degree

courses and other qualifications in determining employment outcomes.

Following Buley (1972) and Kreckle (1980), it can be argued that there are three basic types of skill: occupational-specific, industry-specific and general. Occupational-specific skills are those which equip people to undertake a particular job. Industry-specific skills are similar to these, but whilst someone with occupational-specific skills may be qualified to work in many industries, those with industry-specific skills tend to be 'tied' to one industry or employer. Accountancy skills, for example, are transferable across many occupations, whereas teaching and nursing skills are not. General skills, in contrast, do not require a specific training: they are easily transferred between occupations and are learnt through both the education process (for example, mathematical and related analytical skills which can be used in a variety of fields) and the basic socialization process (for example, man-management skills and the ability to get on with people and to mix socially).

Employers vary in the stress which they place on specific and general skills. Pearson (1976) argues that employers have three main recruitment streams: one for professional/technical posts which are filled by people with degrees in specific subjects such as teaching, medicine and engineering, and two for managerial and administrative posts which tend to be filled by people with degrees (or lower-level qualifications such as HNCs) in non-vocational subjects. Within the latter category it is possible to distinguish 'high-flyers' who are very ambitious, and have strong man-management skills who tend to be recruited from the more prestigious institutions (Oxbridge) and

'low-flyers' who are less ambitious and perhaps lack man-management skills, and who tend to be recruited from the less prestigious institutions (polytechnics and redbrick universities).

Although Pearson did not discuss fragmentation as such, his two recruitment streams can, in effect, be thought of as forming two distinct labour market sectors. Entry into the professional/technical sector is only possible with a qualification in a vocationally-orientated subject and any high-level (not necessarily degree-level) qualification will suffice for entry into the managerial/administrative sector. 'Success' within the managerial/administrative sector is determined by factors in addition to the possession of 'paper' qualifications (although these are also important) and include the 'prestige' of the institution attended, the possession of general skills and various personality traits. Should these factors be distributed differentially between social groups then some groups would tend to be more successful within the managerial/administrative sector than others. Roizen and Jepson (1985: 167-8) have argued that, owing to differences in their upbringing and education, graduates from more middle-class backgrounds may possess those characteristics valued by employers to a greater extent than those from working-class backgrounds, with the result that the latter may be disadvantaged within this sector, and the same may also be true of women and black graduates.

The approach which has so far been taken is limited in so far as it has examined labour-market fragmentation from the perspective of employers only, and has ignored the influence which employees may have over the recruitment process. Many, if not the majority of,

graduates are employed within the professions, and it is to a consideration of these that we now turn.

There are several approaches to the study of the professions which need not unduly concern us here (see Millerson, 1964; Ritzer, 1972; Johnson, 1972; Montagna, 1977: 176-7). Although these approaches differ in detail, they are similar in so far as they attempt to define professions in terms of a number of traits or functions, amongst the most important of which are: '(1) skill based on theoretical knowledge; (2) the provision of training and education; (3) testing the competence of members; (4) organization; (5) adherence to a professional code of conduct; and (6) altruistic service' (Johnson, 1972: 23). Such an approach has, however, been questioned by, amongst others, Johnson (1972) who argues that the approach is too atheoretical in nature, being based to far too great an extent on how professionals define themselves. Moreover, the approach has been based on a small number of occupations (medicine, law and the clergy) as they have existed in a limited number of English speaking countries for only a relatively short period of time.

Our interest in the professions lies in the approach taken by the Parrys (1976), Parkin (1979) and Larson (1980), who point out that professional bodies can be differentiated from other occupational groups (such as trades unions) in so far as they enjoy an advantageous position within the labour market which is based upon the possession of a complex 'knowledge base' (eg medicine, law, accountancy, etc) which requires a period of extensive training. Unlike trades unions, professional bodies have the power to regulate

entry into their occupations by the stipulation of minimum entry qualifications and a fixed period of training. Thus, using the Weberian concept of exclusion (see Chapter One), the Parrys (1977) define professionalism as:-

a strategy for controlling an occupation in which colleagues set up a system of self-government through the control of education, training and the possession of qualifications.

This is important because professional associations, through their control of the recruitment process, are able to limit the numbers of people entering a particular occupation which not only increases their earning potential but also constrains employers in their recruitment strategies.

Moreover, since one of the main functions of knowledge in this approach is to serve as a means of exclusion, it does not necessarily follow that the knowledge acquired in training is of use to those who practice the profession, and indeed Berg (1973) found little evidence to support the claim that variations in the level of education of people in a variety of professions were matched by differences in the quality of their work. Rather, the important point is that qualifications and credentials serve the function of excluding people from an occupation.

Writing of the situation in the United States, Larson (1980: 141-2), has shown us how professional associations have established links with the universities. This has given their specialist 'knowledges' a particular mystique, helped them to improve their occupational status and served to limit recruitment by making it difficult for people without a university training to enter the profession. A

similar process of professionalization is also occurring in the United Kingdom, and this is reflected in the growth of specialist and vocationally-orientated.

Johnson (1972) considers that the 'success' of a professional association is directly dependent upon the nature of its clientele. Where professionals are self-employed and in direct contact with a diffuse clientele which lacks a deep theoretical and practical understanding of the professionals' knowledge base the process of professionalization is likely to be most marked, and the professional association is likely to be in a strong position to regulate training and stipulate minimum entry requirements. For example, doctors serve a clientele - the general public - who have many of these characteristics (Johnson, 1972: 51-2). Conversely, where professionals have a monopsonistic employer (ie where they face a single employer) and they possess industry-specific skills which, by definition, are not transferable between industries, the process of professionalization is likely to be least effective and the single employer is likely to be in a strong position to determine minimum entry qualifications and regulate entry. Although not perfect examples, many semiprofessionals employed within the public sector (eg nurses, teachers and social workers) are in a similar position.

The process of professionalization, the growth of specialist courses and the increasing importance which employers place on specialist skills have led to attempts to develop typologies of courses which reflect their role in providing training for employment within particular occupations. Firstly, however, it should be stressed that

the distinction which is often drawn between vocational subjects which provide specific work-orientated training (eg Law, Accountancy, Medicine, etc.) and academic (or general) subjects which lead to employment in a variety of fields (eg Sociology, History, English Literature, etc.) is in many ways a false distinction. In particular, Jary (1969), looking at Sociology courses, has argued that all courses have vocational as well as academic elements and it is simply not possible to separate the two, and thus many Sociology courses provide instruction which can be applied in fields as diverse as teaching, personnel management and social work. Similarly, although courses in computing and engineering are more strongly vocational in orientation, they also cover theoretical approaches to the subject.

Brennan (1984) also doubts whether a simple dichotomy exists between courses. He proposes a typology of courses based upon a two-dimensional schema: role in training and role in selection. In this schema the role which a course plays in training relates to the extent to which it provides training aimed at a particular career. As such, the training for a particular course may provide: a) no vocational training; b) an optional base for future training; c) a necessary base for future training; d) partially-complete training; or e) complete training. The role of a course in selection relates to the extent to which it affords access to a particular career. It attempts to reflect both the demand for graduates from employers and the influence of professional bodies (and government regulations) over training and admission to a particular career. Three conditions are possible where a degree is: a) the sole regulator of entry into a career; b) a partial regulator of entry into a particular career

(ie possession of a degree is only one of several entry routes); and c) is not a regulator of entry into a career (ie an open-market situation exists).

By putting these two dimensions together, it is possible to perceive eight basic course types where the degree is: A) the sole regulator of entry and training is complete; B) sole regulator and part-training; C) sole regulator and an educational base for training; D) partial regulation and completed preparation; E) partial regulation and partly completed training; F) partial regulation and educational base for training; G) open market and employment-relevant educational base; and H) open market and non-relevant education base. In this schema, courses of type, A, B and C can be differentiated from the others in that a degree is an essential requirement for entry and they differ only in the amount of further training which they require. Courses D, E and F can be differentiated from the previous three in that possession of a degree is only one means of entry in so far as graduates face competition from non-graduates with advanced-level qualifications (eg HNDs, professional qualifications, etc) for available jobs, but such graduates do, however, possess specialist skills. Graduates with G- and H-type courses have general skills which may be of use to employers in a range of areas. They can be differentiated from one another in so far as type H courses have not been devised with an eye to possible employment. Brennan's typology is illustrated in Figure 6.1.

Figure 6.1: Brennan's Typology of Courses

Role in/.... Selection	Training				
(i) Sole Regulator			(C)	(B)	(A)
			Specific course-employment relationships		
(ii) Partial Regulator			(F)	(E)	(D)
(iii) Market	(H) Diffuse (G) course-employment relationships				
	(a)	(b)	(c)	(d)	(e)
	(a) Non-relevant		(b) Optional Base		
	(c) Necessary Base		(d) Part-complete		
	(e) Complete.				

Source: Brennan, 1984

In their report on the HELM project, Brennan and McGeevor (1986: 45) move away from this eight-fold typology in favour of the following four-fold schema. *Generalist* courses are those which have 'no special standing either in relation to training or in the regulation of entry to particular occupations'. *Generalist plus* courses are similar to generalist courses except that the 'graduate will possess certain specialist skills and knowledge applicable to work and which are not necessarily possessed by graduates in other subjects'. *Occupational-Generalists* 'will have some idea of what they want to do after graduation and will see their degree as a contribution to getting there'. Finally *Occupational-Specialist* courses are those where there is a specific and direct link between what is taught and an occupational role, possession of a specific degree often being a

requirement of entry into a particular occupation. Table 6.6 shows the HELM courses broken down according to this schema (see also Brennan and McGeevor, 1988: 47-8).

Although not as complex or detailed as Brennan's eight-fold schema, Brennan and McGeevor demonstrate that there are quite marked differences in the employment destinations of graduates between each of these four course groupings. Not surprisingly, those with degrees in occupational-specialist courses tended to find employment within the professionals and semiprofessions for which their degree courses had provided a training, whilst those with degrees in generalist courses were employed within a far wider variety of occupations (Brennan and McGeevor, 1986: 51-3). They also found that a direct relationship existed between how graduates rated the quality of their work and the type of course which they had undertaken. Thus they found that those with degrees in occupational-specialist courses gave their jobs the highest rating and those with degrees in generalist subjects gave their courses the lowest rating (p. 56-7). Although Brennan and McGeevor do not specifically refer to their model as one of labour market fragmentation, it can be argued that their graduates are in fact competing for jobs within separate labour markets.

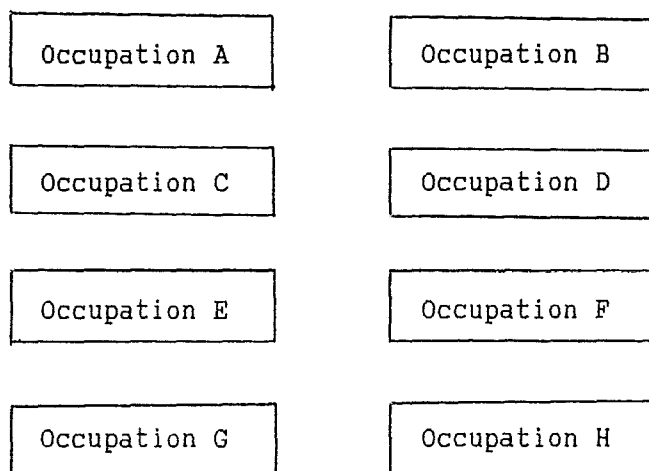
We have, then, identified three possible sources of labour market fragmentation, and these can be seen as resulting from: a) socialization; b) institution attended; and c) course undertaken. To these may also be added gender and race, discussion of which will, however, be left until later chapters.

In the next section the contention that the relationship which exists between the social-class origins and destinations of graduates varies between labour market sectors is examined.

Part Three: Empirical Evidence

The first thing which needs to be considered is how the concept of labour market fragmentation is to be measured. From our previous discussion it should be clear that fragmentation can be said to exist where people are excluded from employment within a particular field (see Parkin, 1979: 44-7; Kreckle, 1980), and it has been suggested that such exclusion might exist where graduates possess the 'wrong' qualifications defined in broad terms to include 'knowledge' of labour market opportunities, personality traits, paper qualifications and even physical characteristics such as gender and ethnicity. Probably the easiest way to conceptualize this is in terms of Figure 6.2, from which it can be seen that each occupational group competes for jobs within a separate labour market. Each occupation is closed to outsiders in the sense that those without minimum entry qualifications are excluded from it, and movement between occupations is difficult if not impossible.

Figure 6.2: Fragmented Labour Markets



This situation approximates to that which exists within many professions including law, accountancy, medicine, teaching and social work. If these occupations are then grouped together on the basis of those which share similar market and work situations, we arrive at a schema which resembles the social-class schema which we discussed in Chapter Three. It differs only in so far as our social-class schema contains a managerial trajectory which combines together clerks with junior and senior managers and as such reflects the fluid nature of such occupations. Even so, it should be clear that our social-class schema is also a measure of occupational fragmentation because it reflects the extent to which graduates compete for jobs within separate and distinct labour markets.

Similarly, should the graduate labour market be fragmented then one might logically expect this to be reflected in how graduates rate the quality of their work, with those employed in less-prestigious sectors of the economy rating it lower than others. Thus it can be argued that the various measures of job quality employed in the

previous chapter can also be thought of as shadow measures of labour market fragmentation.

Empirical support has already been found for the contention that labour market fragmentation may exist as a result of differences in the 'level of knowledge' which graduates originating from different social classes have of the labour market, and this has already been discussed in the last chapter. However, the discovery of such a relationship does not indicate its cause, which may be a facet of some other form of fragmentation. It is, therefore, necessary to make allowances, for these other forms of fragmentation before this question can be discussed further.

The second source of fragmentation which might exist is that of fragmentation by institution, which may result from an employer's preference for Oxbridge and other university graduates rather than public sector ones. Unfortunately, university graduates were not included in the HELM sample, although *First Destination Statistics* and a recent study by Boys and Kirkland (1987) allow us to draw comparisons between graduates on both sides of the binary divide.

Table 6.1 shows the employment status of university, polytechnic and CHE (college of higher education) graduates six months after graduation.

Table 6.1: First Destination of Graduates by Institution: 1984

Row%	Employed	Further Study	Unemployed	Not Available	-N-
University	61.1	26.9	9.5	2.5	62058
Polytechnics	66.9	17.1	14.3	1.7	26691
Colleges	68.2	17.4	12.1	2.4	7673

Source: CRAC (1984) What Do Graduates Do?

From this Table we see that unemployment six months after graduation was indeed higher amongst those with polytechnic degrees and lowest amongst those with university degrees. The differences, however, are not particularly marked and when account is taken of those engaged in further study a higher proportion of public sector than university graduates were in employment.

The First Destination Statistics are, however, of only limited value to us. They provide only a snap shot of the employment of graduates six months after they left college and they give little indication of job quality. Moreover, separate figures are only available by institution, course of study and gender, and it is not possible to disaggregate the data by social-class origins, ethnicity, age, etc..

Boys and Kirkland (1987) looked at the employment destinations of a sample of 1,584 graduates who were contacted in 1985, three years after they left college. Their sample was chosen in such a way as to allow comparisons to be drawn between type of institution attended and course of study, and analysis of their data suggested that Oxbridge graduates had fared best and college graduates had fared least well. However, differences in the destinations of other university and polytechnic graduates were not particularly marked (pp. 48-58). These points are illustrated in Table 6.2 which shows

the replies given to six questions.

Table 6.2: Job Quality by Institution Attended

Tot%	-A-	-B-	-C-	-D-	-E-	-F-
Oxbridge	26%	23%	22%	36%	89%	24%
Poly'nic	25	21	33	21	81	31
Univer'y	31	24	33	37	82	29
College	49	44	46	40	74	44

Boys and Kirkland 1987: 48-58

- A- Little opportunity for rapid promotion.
- B- Little opportunity for high salary.
- C- Little opportunity for high prestige.
- D- Little opportunity to use degree-based knowledge.
- E- Career prospects better than other graduates.
- F- Feeling overqualified.

From this Table it can be seen that on three of these measures Oxbridge graduates rated the 'quality' of their jobs higher than others and on each measure college graduates rated the 'quality' of their jobs lower than others. When, however, the replies given by 'other' university and polytechnics graduates are examined, it can be seen that on several measures polytechnic graduates rated the 'quality' of their jobs higher than university graduates. To the extent (see Chapter Four) that students from working-class origins are more likely to attend public sector institutions and are particularly under-represented amongst students at Oxford and Cambridge, this would tend to suggest that the relationship which has been found between the social-class origins and destinations of graduate men would have been greater had university graduates been included in the HELM sample. It should, however, be stressed that nationally only a relatively small proportion of students (under 7%) attend either Oxford or Cambridge so the differences would probably not have been very great.

Returning to our analysis of the HELM data set, Table 6.3 shows the social-class destinations of men and women three years after graduation broken down according to type of institution attended.

Table 6.3: Institutions Attended by Social-Class Destinations:
Wave III

Men Row%	Snr Profs	Snr Engin	Semi- profs	HGT's	Mger /clerks	Lower class	-N-
Polyt'cs	14.8	24.1	20.3	14.0	17.9	8.9	507
Colleges	7.8	20.3	31.3	7.8	21.9	10.7	64
Scotland	21.5	35.4	12.3	15.4	10.8	4.6	65
All	14.8	24.8	20.6	13.5	17.6	8.6	636

CHI SQR p.<0.05

Women Row%	Snr Profs	Snr Engin	Semi- profs	HGT's	Mger /clerks	Lower class	-N-
Polyt'cs	15.1	3.8	41.5	11.6	19.1	8.8	398
Colleges	4.9	2.0	50.0	-	25.5	17.6	102
Scotland	15.4	-	46.2	16.9	9.2	12.3	65
All	13.3	3.0	43.5	10.1	19.3	10.8	565

CHI SQR p.<0.001

From this Table we see that men who had attended Scottish institutions were more likely to be senior professionals or engineers and less likely to be employed in the managerial trajectory than others. Men who had attended CHEs fared least well in so far as 31.3% of them were semiprofessionals and nearly 11% were in lower-class occupations. A similar trend is apparent for the women, although those who attended polytechnics appear to have fared better than the other two groups. Women who attended CHEs appear to have fared the worst.

These differences in the destinations of graduates would tend to suggest that fragmentation exists in the graduate labour market according to type of institution attended. However, when the type of

institution attended was broken down according to the four-fold typology of courses developed by Brennan and McGeevor, highly significant differences were found to exist in the types of courses undertaken. Thus from Table 6.4 we see that men and women who had attended Scottish institutions were the most likely to have undertaken a specialist course, and those who had attended CHEs were the most likely to have undertaken a generalist course.

Table 6.4: Type of Course by Institution

Men Row%	Gen'list	Gen Plus	Occup'n Gen'list	Specialist	-N-
Poly'nic	16.6	34.8	14.6	34.0	1076
College	53.9	9.1	6.1	30.9	165
Scotland	12.6	34.4	18.5	34.4	151
All	20.6	31.7	14.0	33.7	1392

CHI SQR p.<0.001

Women Row%	Gen'list	Gen Plus	Occup'n Gen'list	Specialist	-N-
Poly'nic	25.0	25.4	21.5	28.1	875
College	70.4	10.8	6.7	12.1	223
Scotland	9.8	46.9	9.0	35.3	133
All	31.6	24.9	17.5	26.0	1231

CHI SQR p.<0.001

This is important because, as Table 6.5 and 6.6 show, a much greater degree of fragmentation exists in the economic status and social-class destinations of graduates according to types of courses undertaken. Thus, those who had undertaken specialist degree courses tended to be more successful in the labour market than others, whilst those with generalist degrees tended to be the least successful.

Table 6.5: Social-Class Destinations By Type of Course: Wave I.

Men Row%	Prof	Eng	Semi prof	HGTs	Mangs /clerks	Lower class	Pgrad	Unemp	-N-
Gen'ts	1.8	1.5	9.8	4.4	17.1	15.3	18.9	31.3	275
Genplus	5.3	3.3	3.1	22.5	10.0	9.5	22.9	23.6	423
OccnGen	16.9	12.4	7.9	5.6	23.6	8.4	7.3	18.0	178
Spec't	20.6	31.9	3.1	10.0	4.7	6.4	10.6	12.6	451
Total	11.3	13.9	5.1	12.2	11.5	9.5	15.8	20.7	1327

CHI SQR p<0.001

Women Row%	Prof	Eng	Semi prof	HGTs	Mangs /clerks	Lower class	Pgrad	Unemp	-N-
Gen'ts	3.4	1.7	8.8	2.3	19.5	18.6	24.9	20.9	345
Genplus	2.4	5.1	7.8	20.1	11.6	9.2	26.5	17.3	294
OccnGen	10.9	2.0	12.4	6.9	24.7	13.4	11.9	17.8	202
Spec't	17.0	3.2	24.5	5.3	7.5	18.4	13.1	11.0	282
Total	7.9	3.0	13.1	8.5	15.4	15.2	20.1	17.0	1132

CHI SQR p<0.001

From Table 6.5 we see that one year after graduation a strong correlation exists between course of study and the social-class destinations of graduates. Unemployment was highest amongst those with general degrees and lowest amongst those with specialist degrees. Graduates with specialist degrees were the most likely to be senior professionals or engineers. After three years in the labour market men with general degrees were the most likely to be semiprofessionals and managers/clerks, and those with specialist degrees were the most likely to be senior professionals and engineers. The situation amongst the women is more confused, although the general pattern is very similar to that which exists for men, and thus those with specialist degrees were the most likely to be senior professionals and those with general degrees were the most likely to be employed in lower-class occupations.

Table 6.6: Social-Class Destinations by Course: Men

Row%	Snr Prof	Engin	Semi- prof	HGTs	Mgrs /clerks	Other	-N-
<i>Generalist</i>							
Humanities	3.8	-	46.2	11.5	30.8	7.7	26
Eng. Lit.	-	-	20.0	-	60.0	20.0	5
Geography	10.3	6.9	24.1	10.3	31.0	17.2	29
Comm Studs	10.0	-	25.0	8.3	50.0	20.0	20
Soc Studs	4.3	-	34.8	13.0	26.1	21.7	23
Interfac	10.0	16.7	36.7	6.7	16.7	13.3	30
<i>Generalist Plus</i>							
Mod Language	8.3	-	25.0	8.3	50.0	8.3	12
Economics	15.8	5.3	21.1	-	47.3	10.5	19
Maths	5.6	16.7	11.1	44.4	11.1	11.1	18
Science	3.8	11.5	23.1	26.9	23.1	11.5	26
Chemistry	10.3	37.9	10.3	34.5	6.9	-	29
Biology	12.2	19.5	-	41.5	17.1	9.8	41
Comp Sci	3.7	11.1	3.7	70.4	11.1	-	27
Envtl Sci	-	4.0	44.0	8.0	32.0	12.0	25
Fine Art	-	5.6	50.0	5.6	11.1	27.8	18
<i>Occupational General</i>							
Buss Studs	42.4	-	9.1	15.2	24.2	9.1	33
Entl Png	-	66.7	11.1	7.3	14.8	-	27
Hotel Admin	-	11.1	11.1	-	55.6	22.2	9
Textile	-	-	57.1	-	42.9	-	7
3D Design	-	-	73.3	-	6.7	20.0	15
<i>Occupational Specific</i>							
Accounts	70.8	-	4.2	-	16.7	8.3	24
Lib'ship	63.6	-	-	-	9.1	27.3	22
Law	88.9	-	-	-	11.1	-	9
Psychology	12.5	-	62.5	12.5	12.5	-	8
U.E.M.	8.3	88.9	-	-	2.8	-	36
Civil Eng	-	92.3	-	5.1	-	2.6	39
Elec Eng	-	81.3	18.8	-	-	-	16
Prodn Eng	-	75.0	3.1	3.1	12.5	6.3	32
Pharmacy	94.1	-	-	-	5.9	-	17
Graphics D'n	9.1	-	77.3	-	13.6	-	22
<i>Type of Course</i>							
Gener't	7.5	5.3	36.1	9.0	26.3	15.8	133
Gen Plus	7.0	14.4	18.1	30.2	20.9	9.3	215
Occun Gen	15.4	20.9	24.2	7.7	23.1	8.8	91
Spec't*	26.8	46.5	12.3	1.8	7.9	4.8	228
All	15.0	24.4	20.5	13.2	17.8	9.0	667

* Includes three nurses.

CHI SQR P<0.001

Table 6.6: Social-Class Destinations by Course. Continued: Women

Women Row%	Snr Prof*	Semi- prof	HGTs	Mgrs /clerks	Other	-N-
<i>Generalist</i>						
Humanities	6.1	46.9	2.0	20.4	24.5	49
Eng. Lit.	5.3	42.1	-	52.6	-	19
Geography	-	50.0	12.5	12.5	25.0	24
Comm Studs	7.1	35.7	7.1	35.7	14.3	14
Soc Studs	-	62.1	10.3	17.2	10.3	29
Interfac	7.1	35.7	9.5	28.6	19.0	42
<i>Generalist Plus</i>						
Mod Language	3.2	32.3	6.5	35.3	22.6	31
Economics	50.0	-	-	25.0	25.0	4
Maths	28.6	14.3	42.9	7.1	7.1	14
Science	26.9	30.8	30.8	7.7	3.8	26
Chemistry	25.0	37.5	25.0	-	12.5	8
Biology	8.7	8.7	52.2	4.3	26.1	23
Comp Sci	-	18.2	81.8	-	-	11
Envtl Sci	-	36.4	18.2	36.4	9.1	11
Fine Art	-	63.6	-	36.4	-	11
<i>Occupational General</i>						
Buss Studs	37.5	12.5	6.3	37.5	6.3	16
Entl Png	71.4	14.3	-	-	-	7
Hotel Admin	6.7	26.7	3.3	56.7	6.7	30
Textiles	-	77.1	-	22.9	-	35
3D Design	-	92.3	-	7.7	-	13
<i>Occupational Specific</i>						
Accounts	80.0	20.0	-	-	-	5
Lib'ship	67.6	8.1	-	8.1	16.2	37
Law	69.2	23.1	-	7.7	-	13
Psychology	3.3	56.7	3.3	26.7	10.0	30
U.E.M.	66.7	22.2	-	-	11.1	9
Pharmacy	100.0	-	-	-	-	12
Nursing	2.4	95.1	2.4	-	-	41
Graphics D'n	-	90.9	-	4.5	4.5	22
<i>Type of Course</i>						
Gener't	4.6	45.8	6.8	25.4	17.5	177
Gen Plus	12.9	27.3	29.5	17.3	12.9	139
Occun Gen	12.8	49.5	2.0	31.7	4.0	101
Spec't+	35.1	49.7	1.2	7.6	6.4	171
All	16.8	43.2	9.7	19.4	10.9	588

+ Includes two civil engineers

CHI SQR P<0.001

* Includes engineers and
related occupations.

Taken together, these Tables suggest that the graduate labour market is strongly fragmented according to the type of course which graduates had undertaken such that graduates with different degree courses tend to compete for jobs within separate and distinct labour markets.

In the next chapter it is demonstrated that graduates from working-class origins were far more likely than others to have studied a generalist or generalist-plus degree course and were less likely to have studied a specialist or occupational-generalist course. This would tend to suggest that graduates from working-class origins are disadvantaged in the labour market to the extent that they have undertaken those courses which have poorer employment outcomes. The process by which graduates are allocated to these courses is therefore of some interest to us, and is a question to which we shall be returning in the next chapter.

Given the high degree of labour market fragmentation which has been found to exist between graduates who undertook different types of course (that is the tendency for graduates with different degree courses to find employment within different sectors of the economy) it seems reasonable to argue that the relationship between the social-class origins and destinations of graduates will be mediated through their courses of study, such that amongst graduates in the more vocationally-orientated subjects the relationship will be quite weak as possession of such a degree often facilitates entry into employment within a particular field, and amongst those with degrees in more generalist subjects the relationship will be stronger.

From our previous discussion it should be clear that there are several reasons why one might expect the relationship between the origins and destinations of graduates to be stronger amongst those with more general degrees. Firstly, owing to differences in their early socialization graduates from manual backgrounds are more likely than others to 'lack knowledge' of the labour market with the result that they are more likely to aspire to lower-status jobs, and secondly, again owing to their socialization, graduates from manual backgrounds may be lacking in the social skills which employers value.

The easiest way in which to look for evidence of this association would be to generate two sets of tables, for men and women, showing the relationship between the social-class origins and destinations of graduates for each of the four HELM course types. This approach was not, unfortunately, feasible, as the numbers in some of the cells would have been so small that interpretation would be difficult if not impossible. In an attempt to overcome this problem it was decided to combine both the generalist and generalist-plus categories (generalists) on the one hand and the occupational-generalist and occupational-specialist categories (vocationalists) on the other. Even so, the number of respondents in some of the cells is rather small and the following four Tables should be interpreted with great care.

Table 6.7 shows the relationship which exists between the social-class origins and destinations of graduate men with general degrees and Table 6.8 shows the same information for those with vocational degrees.

Table 6.7: Social-Class Origins by Destination: Male Generalists

Row%	Snr Prof	Engin- eer	Semi- prof	HGTs	Mangrs /clerks	Lwr Class	-N-
Fathers/	Graduate Men...						
Snr Prof	6.7	17.8	26.7	15.6	26.7	6.7	45
Snr Magt	6.7	10.0	13.3	10.0	46.7	13.3	30
Semiprof	9.1	3.0	21.1	24.2	27.3	15.2	33
Jnr Magt	5.7	17.1	17.1	37.3	20.0	2.9	35
W'collar	6.3	9.4	18.8	12.5	28.1	25.0	32
Selfempd	13.3	13.3	26.7	13.3	13.3	20.0	30
LGTs	5.9	5.9	23.5	41.2	17.6	5.9	17
Manual	3.8	11.5	33.3	29.5	12.8	9.0	78
Total	6.7	11.7	24.3	23.0	22.7	11.7	300

CHI SQR $p < 0.05$

Table 6.8: Social-Class Origins by Destination: Male Vocationalists

Row%	Snr Prof	Engin- eer	Semi- prof	HGTs	Mangrs /clerks	Lwr Class	-N-
Fathers/	Graduates Men...						
Snr Prof	24.5	39.6	15.1	5.7	9.4	5.7	53
Snr Magt	6.1	30.3	24.2	9.1	18.2	12.1	33
Semiprof	26.8	41.5	12.2	-	14.6	4.9	41
Jnr Magt	29.6	51.9	11.1	3.7	-	3.7	27
W'collar	37.5	31.3	-	6.3	18.8	6.3	16
Selfempd	24.4	36.6	19.5	-	12.2	7.3	41
LGTs	30.0	55.0	5.0	-	10.0	-	20
Manual	13.7	45.1	17.6	5.9	13.7	3.9	51
Total	22.3	41.1	14.9	3.9	12.1	5.7	282

CHI SQR $p = ns$

The data presented in these two Tables are in line with expectations, in so far as that whilst significant differences were found in the social-class destinations of those with general degrees no such relationship was found amongst those with vocational degrees. Thus, from Table 6.7, it can be seen that those from manual and LGT backgrounds were the most likely to be employed as semiprofessionals and HGTs, whilst the sons of senior professionals

were themselves far more likely to be senior professionals (including engineers) and almost half the sons of senior managers were themselves managers or clerks.

Tables 6.9 and 6.10 show the same information for graduate women, and from these it can be clearly seen that there does not appear to be a statistically significant relationship between the social-class origins and destinations of both groups. The daughters of manual workers with both general and vocational degrees were, however, less likely than the daughters of senior professionals to be employed in semiprofessional positions.

Table 6.9: Social-Class Origins by Destination:
Female Generalists

Row%	Snr Prof	Semi- prof	HGTs	Mangrs /clerks	Lwr Class	-N-
Fathers/	Graduate Women...					
Snr Prof	5.3	42.1	12.3	19.3	21.1	57
Snr Magt	15.2	24.2	21.2	27.3	12.1	33
Semiprof	5.3	50.0	18.4	18.4	7.9	38
Jnr Magt	20.8	25.0	12.5	29.2	12.5	24
W'collar	-	46.4	25.0	17.9	10.7	28
Selfempd	5.7	31.4	22.9	14.3	25.7	35
LGTs	10.0	30.0	20.0	25.0	15.0	20
Manual	8.0	30.0	20.0	28.0	14.0	50
Total	8.1	35.8	18.6	22.1	15.4	285

CHI SQR p=ns

Table 6.10: Social-Class Origins by Destination:
Female Vocationalists

Row%	Snr Prof	Semi- prof	HGTs	Mangrs /clerks	Lwr Class	-N-
Fathers/ Graduate Women...						
Snr Prof	25.4	62.7	1.7	8.5	1.7	59
Snr Magt	34.3	42.9	-	22.9		35
Semiprof	35.3	35.3	-	23.5	5.9	34
Jnr Magt	20.0	55.0	-	20.0	5.0	20
W'collar	29.2	50.0	-	16.7	4.2	24
Selfempd	26.3	47.4	-	21.1	5.3	19
LGTs	-	42.9	-	42.9	14.3	7
Manual	26.4	44.1	5.9	11.8	11.8	34
Total	27.6	49.1	1.3	17.2	4.7	232

CHI SQR p=ns

Interpreting these four Tables has not, however, been easy. Many of the cells have no or only a few cases, and there are marked variations in the courses of study and institutions attended by graduates originating from different social-class backgrounds. Moreover, the analysis has been further confused by ambiguities in the class locations of those graduates from routine white-collar, self-employed and LGT (intermediate class) backgrounds.

Because of these problems, it was decided to repeat the analysis using a matched sample. Because of problems in the categorization of those from the intermediate class backgrounds and in order to 'amplify' any differences which might exist in the destinations of graduates from professional and managerial origins on the one hand and manual origins on the other, it was felt best to exclude the intermediate classes (self-employed, routine white-collar workers and low-grade technicians) from the analysis.

An attempt was made to match each graduate from manual origins with

one from professional or managerial origins (the service class) who had undertaken the same type of course, was of the same sex, and ideally had obtained the same class of degree and had attended the same institution. Table 6.11 shows the composition of the matched sample.

Table 6.11: Matched Samples

Men	Total	Same Degree Class	Same Institu'n	Same Degree Class & Institu'n
Matched	136	73 53.7%	107 78.7%	65 50.0%
No match	9			
Women				
Matched	89	53 59.6%	77 86.5%	52 58.4%
No match	6			

From this we see that out of 145 men from manual backgrounds an exact match by sex and course of study was found in 136 cases, and nine were excluded from the analysis because this could not be found. Of the 95 women from manual origins, a match was found on 89 occasions and six were excluded. In all 53.7% of the 'matched' men had obtained the same class of degree, 78.7% had attended the same institution and 50.0% had obtained the same class of degree and had attended the same institution. Of the 'matched' women, 59.6% had obtained the same class of degree, 86.5% had attended the same institution and 58.4% had obtained the same class of degree and had attended the same institution.

Table 6.12 shows the distribution of graduate men and women between the four HELM course types. From this we see that the number of cases in each of the four women's groups is rather small as are the

numbers of men who had undertaken generalist and occupational-generalist courses.

Table 6.12: Type of Course Undertaken by 'Matched' Men and Women

Count Row%	G'list	G'list plus	Occup'n g'list	Specialist	-N-
Men	25 18.4	61 44.9	12 8.8	38 27.9	136
Women	23 25.8	30 33.7	10 11.2	26 29.2	89

Owing to the small cell sizes, it was again decided to combine both the generalist and generalist-plus categories on the one hand, and occupational-generalists and occupational-specialists on the other. Table 6.13 shows the numbers of men and women with general and vocational degrees.

Table 6.13: Male and Female Generalists and Vocationalists

Count Row%	Generalist	Vocationalist	-N-
Men	86 63.2	50 36.8	136
Women	53 59.6	36 40.4	89

Looking first at the graduate men, Table 6.14 shows the social-class origins and destinations of all men and of the matched sample.

Table 6.14: Social-Class Origins and Destination of Graduate Men

Row%	Snr prof	Eng' neer	Semi prof	HGTs	Managers /clerks	Lower class	-N-
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All

Manual	7.8	24.8	27.1	20.2	13.2	7.0	129
Service	14.8	26.9	17.8	12.8	19.9	7.7	297

CHI SQR p<0.03

Matched

Manual	8.3	24.2	25.8	21.7	14.2	5.8	120
Service	9.5	27.8	19.0	17.5	18.3	7.9	126

CHI SQR p.=ns

Table 6.14 shows us that amongst the full sample men from manual origins were far more likely than those from service-class (professional and managerial) origins to be employed as semiprofessionals and HGTs and less likely to be senior professionals or managers. Moreover, these differences are significant at the 3% level of confidence. When the matched samples are compared, only minor (non-significant) differences exist in the destinations of graduates, although those from manual origins were slightly more likely to be employed as semiprofessionals and HGTs. This is an interesting finding in so far as it reinforces the suggestion that differences in the destinations of graduates originating from our two social classes are related to differences in the courses which they undertook. We shall return to this point in the next chapter, our concern here lies in understanding how the destinations of graduates might vary according to course type.

Table 6.15 shows the actual occupations undertaken by our matched men and from this we see that 'generalists' from manual backgrounds were more likely than their matched counterparts to be employed in

teaching and research, and less likely to be employed in computing, accountancy and business, and other professional and managerial work. There is far less variation in the occupations of those who undertook vocational degrees, although those from manual origins were less likely to be employed in engineering and related occupations.

Table 6.15: Occupations of Matched Samples by Social-Class
Origins: Men

Column%	Generalists		Vocationalists	
	Manual	Service	Manual	Service
Engineering	4.2	3.8	39.6	47.9
Teaching	18.1	3.8	6.3	8.3
Research+	20.8	17.7	2.1	-
Medicine*	4.2	3.8	-	-
Computing	16.7	20.3	6.3	2.1
Commercial	4.2	11.4	12.5	14.6
Librarianship	-	-	4.2	4.2
Social Work	5.6	3.8	-	-
Art & Design	4.2	1.3	12.5	10.4
Other P&M	18.1	25.3	14.6	8.3
Low-status	4.2	8.9	2.1	4.2
	72	79	48	48

+ Includes laboratory technicians.

* Includes pharmacy and nursing.

Table 6.16 shows the social-class origins and destinations of graduate men broken down according to course type. From this Table we see that the differences in the occupational destinations of our two social classes are not significant, but, even so, the differences for those who did general courses are interesting and are certainly in the expected direction.

Table 6.16: Social-Class Origins and Destinations by Type of Course: Men

Row%	Snr prof	Eng' neer	Semi prof	HGTs	Mangers /clerks	Lower class	-N-
Generalists							
Manual	4.1	12.3	31.5	31.5	13.7	6.8	73
Service	9.0	16.7	17.9	26.9	21.8	7.7	78
						CHI SQR p=ns	
Vocationalists							
Manual	14.9	42.6	17.0	6.4	14.9	4.3	47
Service	10.4	45.8	20.8	2.1	12.5	8.5	48
						CHI SQR p=ns	

Thus we see that a far higher proportion of men from manual origins were employed within semiprofessional positions (31.5% as opposed to 17.9%), and that they were less likely to be managers/clerks (13.7% as opposed to 21.8%). Owing to the small sample sizes these results should be treated with care. Differences in the occupations of those with vocational degrees were even less marked than those found amongst the generalists and this finding is in line with expectation.

These impressions are reinforced in the findings presented in Table 6.17, which shows the mean salaries of graduates broken down by social-class origins and course type. From this we see that amongst the generalists those from manual origins were earning over £1300 a year less than those from service-class origins ($p < 0.1$), whilst only minor differences were found in the mean salaries of the vocationalists.

Table 6.17: Mean Salaries of Graduate Men: Matched Sample

Mean	Generalists	Vocationalists
Manual	7,923	9,940
Service	9,288	9,758
Difference	-1,365	182
T-Test	p<0.10	p=ns

Income data does, then, add weak support to the contention that amongst those with general degrees graduates from manual origins fare less well in the labour market than those from service-class backgrounds. This result, however, must be set alongside the findings presented in Table 6.18 which shows the mean scores obtained by male generalists on each of eleven measures of job quality.

Table 6.18: Job 'Quality' by Social-Class Origins:
Male Generalists+

Job/.....	Manual	Service	Dif'ce
1) Involves autonomy.....	79	65	14**
2) Requires initiative.....	80	73	7
3) Requires motivation.....	76	68	8
4) Involves responsibility ...	73	63	10*
5) Opportunity for professional development.	58	51	7
6) Possibility of rapid promotion	32	31	1
7) Creative and original	64	46	18**
8) Involves leadership	51	46	5
9) Continually challenging ...	71	62	9*
10) Supervising others	35	37	-2
11) Work within clearly defined rules and regulations	33	44	-11*

* p <0.10 ** p <0.01

+ For ease of comparison mean replies have been converted into percentages.

From this Table we see that on all but one of these measures of job 'quality' male generalists from manual origins appear to be in

'better quality' jobs than their matched counterparts, and in two cases the differences are significant at the 1% level of confidence. These data are difficult to interpret, for, as with most such attitude questions, it is difficult to know with whom graduates are drawing comparisons. If, for example, they are comparing their jobs with those of their fathers then one would expect graduates from manual origins to rate the quality of their work highly and those from service-class backgrounds to rate them rather lower. If, however, comparisons are being drawn with colleagues, then one could interpret these figures to mean that those from manual origins are in better 'quality' jobs. Alternatively, these figures could reflect the numbers from manual origins employed in semiprofessional positions. Many semiprofessionals are employed within the public sector and, although they tend to enjoy a great deal of autonomy at work, they often earn less than junior managers working for large private sector companies. Finally, no differences were found in replies to these questions given by male graduates who had undertaken vocational degrees.

Moving on to a consideration of our matched sample of graduate women. Table 6.19 shows the occupational destinations of all women and those of the matched sample.

Table 6.19: Social-Class Origins and Destinations of Women

Row%	Snr prof	Eng' neer	Semi prof	HGTs	Managers /clerks	Lower class	-N-
All							
Manual	13.1	2.4	35.7	14.3	21.4	13.1	84
Service	15.0	4.3	43.9	8.3	19.9	8.2	301

CHI SQR p=ns

Matched

Manual	13.9	1.3	34.2	13.9	22.8	13.9	79
Service	15.4	-	42.3	12.8	15.4	14.1	78

CHI SQR p=ns

From this Table it can be seen that there are no significant differences in the destinations of graduate women according to their social-class origins both overall and for the matched sample - although those from manual origins were somewhat less likely to be employed as semiprofessionals and were more likely to be managers/clerks.

Table 6.20 shows the actual occupations of women in the matched sample. Amongst the generalists we see that those from service-class backgrounds were more likely to be employed in teaching, computing and commercial work and less likely to be employed in research, medical work and low-status employment. Although there is a close relationship between course of study and employment amongst those with vocational degrees, it is interesting to note that women from service-class origins were more likely to be employed in teaching and commercial work and were less likely to be employed in other professional and managerial occupations.

Table 6.20: Occupations of Matched Samples: Women

Column%	Generalists		Vocationalists	
	Manual	Service	Manual	Service
Teaching	11.4	26.2	3.6	12.9
Research+	11.4	4.8	3.6	3.2
Nursing	4.5	-	17.9	19.4
Medicine*	9.1	-	3.6	3.2
Computing	6.8	11.9	3.6	-
Commercial	4.5	21.4	7.1	12.9
Librarianship	-	-	10.7	12.9
Social Work	6.8	2.4	7.1	-
Art & Design	-	4.8	14.3	9.7
Law	-	-	7.1	3.2
Other P&M	22.7	19.0	17.9	12.9
Low-status	22.7	9.5	3.6	9.7
	44	42	28	31

+ Includes laboratory technicians.

* Includes pharmacy and nursing.

From Table 6.21 it can be seen that the social-class destinations of those women with vocational degrees are almost identical, and that the differences in the destinations of those with general degrees are not statistically significant, although women from manual origins with general degrees were less likely to be semiprofessionals and more likely to be employed in managerial/clerical positions.

Table 6.21: Social-Class Origins and Destinations by Course Type: Women

Row%	Snr Prof & Enginr	Semi prof	HGTs	Managers /clerks	Lower class	-N-
Generalists						
Manual	8.5	27.7	19.1	29.8	14.9	47
Service	8.9	40.0	20.0	13.3	17.8	45

CHI SQR p=ns

Vocationalists						
Manual	25.0	43.8	6.3	12.5	12.5	32
Service	24.2	45.5	3.0	18.2	9.1	33

CHI SQR p=ns

When, however, other measures of job quality are examined, we find that those from manual origins with general degrees were earning rather less and consistently rated the quality of their work lower than those from service-class backgrounds, as Table 6.22 shows.

Table 6.22: Job 'Quality' by Origins: Generalist Women⁺

Job/.....	Manual	Service	Dif'ce
Salary	7163	7648	-485
1) Involves autonomy.....	69	80	-11*
2) Requires initiative.....	67	79	-12*
3) Requires motivation.....	62	77	-15*
4) Involves responsibility ...	61	73	-12*
5) Opportunity for professional development.	43	51	-8
6) Possibility of rapid promotion	21	22	-1
7) Creative and original	36	53	-17*
8) Involves leadership	33	46	-13*
9) Continually challenging ...	54	64	-10
10) Supervising others	23	31	-8
11) Work within clearly defined rules and regulations	60	47	13*

* p<0.10

+ For ease of comparison mean replies have been converted into percentages.

These findings are interesting because they suggest that women from manual origins are more likely to be employed in low-status jobs than those from service-class backgrounds. This finding may, however, reflect our earlier observation that women from working-class backgrounds were more likely than those from more middle-class backgrounds to be employed within the managerial trajectory. This may be important because research, discussed in a later chapter, suggests that women employed in such occupations tend to be employed in lower-status positions (clerks) than men.

Moreover - as Table 6.23 shows - differences were also found in the

'quality' of work being undertaken by those women with vocational degrees, which again suggests that those from manual origins may be employed in lower-quality jobs.

Table 6.23: Job 'Quality' by Social-Class Origins:
Female Vocationalists

Job/.....	Manual	Service	Dif'ce
Salary	6797	7580	-783
1) Involves autonomy.....	64	72	-8
2) Requires initiative.....	74	85	-11*
3) Requires motivation.....	70	77	-7
4) Involves responsibility ...	68	74	-6
5) Opportunity for professional development.	52	57	-5
6) Possibility of rapid promotion	30	19	11
7) Creative and original	42	59	-17*
8) Involves leadership	54	49	-5
9) Continually challenging ...	68	68	-
10) Supervising others	48	37	11
11) Work within clearly defined rules and regulations	59	51	8

* $p < 0.10$

The differences, however, are not very marked. Thus we see that amongst those with vocational degrees women from manual origins were earning over £780 a year less than those from service-class backgrounds and, on seven of the eleven measures of job quality, women from manual origins rated their jobs below that of those from service-class backgrounds.

We may conclude this section by saying that, although there is some evidence which suggests that both men and women from manual origins with general degrees fare less well in the labour market than those from service-class backgrounds, the differences do not appear to be particularly marked. Men with general degrees were, however, earning £1,300 a year less than those from service-class backgrounds and were more likely to be employed as semiprofessionals and high-grade

technicians and were less likely to be employed as senior professionals and within the managerial trajectory. Differences in the social-class destinations of those men with vocational degrees were comparatively small, and those from manual origins were actually earning slightly more than those from service-class backgrounds. Minor and, again, non-significant differences were also found in the destinations of women differentiated by their social-class origins. Those from manual origins with general degrees were, however, more likely to be employed within managerial and clerical positions and were less likely to be semiprofessionals. They did, however, consistently rate the 'quality' of their jobs below that of those from service-class backgrounds. Again, only minor differences were found in the destinations of women with vocational degrees. Those from manual origins were, however, earning less and consistently rated the 'quality' of their work below that of those from service-class backgrounds.

Trying to discern why such differences exist in the destinations of our matched samples is difficult as the differences are comparatively minor and are often within the bounds of statistical error. If Kelsall et al. (1972) are right, they could be related to differences in the deliberate occupational choices made by graduates from the different social classes; if Roizen and Jepson are correct then they would be due to graduates from manual backgrounds being at a disadvantage in the recruitment practices adopted by graduate employers.

The HELM questionnaires did contain a number of questions which throw some light on to the validity of these two conflicting

explanations. Firstly, the HELM questionnaires contained a number of questions intended to examine the personality traits of graduates. If Roizen and Jepson are correct then one might expect those who are 'creative', 'independent', 'responsible' and 'sociable' to have performed better in the labour market than those lacking such traits. An analysis of the results found that significant differences existed in the replies to two of these questions (responsibility and sociability) for men and three (responsibility, creativity and independence) for women when they were broken down according to social-class destinations. But, these differences are not particularly marked and they follow no consistent pattern as Table 6.24 shows.

Table 6.24: Personality Traits by Social-Class Destinations

Mean%	Snr prof	Eng' neer	Semi prof	HGTs	Managers /clerks	Lower class
<i>Men</i>						
Creative	54	51	67	53	57	56*
Sociable	73	71	71	67	72	62*
Responsible	81	75	71	75	76	71*
Independent	75	75	77	74	76	73

ANOVA * $p < 0.01$

Mean%	Snr prof	Eng' neer	Semi prof	HGTs	Managers /clerks	Lower class
<i>Women</i>						
Creative	48	49	62	50	61	56*
Sociable	75	73	74	76	75	71
Responsible	79	80	80	76	83	76+
Independent	71	77	78	75	77	72+

ANOVA * $p < 0.01$

ANOVA + $p < 0.10$

Even though these differences exist in the replies given to these individual questions, no related differences were found in the replies given by graduates from the different social classes. This

would tend to suggest that Roizen and Jepson are wrong in their view that graduates from manual origins are lacking in the personality traits which employers value. However, these questions were subjective in nature and - as with all such questions - it is difficult to know to what extent graduates are aware of personality differences between themselves and other people. In other words, graduates from manual backgrounds may indeed lack the personality traits which employers value, but the HELM questionnaires were unable to trace this.

There is, however, some evidence which supports the approach taken by Kelsall et al.. Entry to many semiprofessional positions is now only possible if potential candidates hold a professional qualification, which in turn requires a period of postgraduate training. When it is recalled that 31% of male graduates from manual backgrounds in our matched sample were semiprofessionals compared with only 17% of those from service-class backgrounds, this clearly suggests that they have made a conscious decision to follow these careers. This view is reinforced in Table 6.25, which shows us that over half the men from manual origins who had undertaken general degrees and went on to further study took an educational qualification (mainly PGCEs) in comparison with only 16.9% of those from service-class origins, who were more likely to have gone on to study engineering, business (including law) and farming. Differences are much less marked amongst the women, and the relatively high proportion of these who had undertaken business courses can be explained by the large numbers with secretarial qualifications.

Table 6.25: Postgraduate Study by Matched Social-Class: Generalists

Count col%	Men		Women	
	Manual	Service	Manual	Service
Arts/Social	3 9.7	7 10.8	1 4.0	2 2.2
Science	6 19.4	17 26.2	2 8.0	9 10.1
Engineering	1 3.2	6 9.2	-	-
Maths, etc	2 6.5	5 7.7	-	-
Education	16 51.5	11 16.9	11 44.0	33 37.1
Law, Business (a)	-	8 12.4	7 28.0	22 24.7
Other	3 9.7	11 (b) 16.9	4 20.0	23 (c) 25.8
Number	31	65	25	89

(a) Includes secretarial courses.

(b) Includes 5 in farming.

(c) Includes 11 linguists.

This analysis would tend to support Kelsall et al.'s suggestion that differences in the destinations of graduates with general degrees, minor though they are, can be explained by differences in their deliberate occupational choices, with men from manual backgrounds being more likely to make a conscience decision to enter the semiprofessions. However, the number of cases involved is rather small: only 31 out of 86 men and 25 out of 53 women went on to undertake a postgraduate course of study, and the process by which graduates reach their career decisions is not clear from this Table. In particular, career decisions are constrained by many factors of which the individual's socialization is only one. This question is examined further in the next chapter.

Conclusion

The HELM data has been analysed in this chapter in terms of various approaches which suggest that the graduate labour market is differentiated into a number of distinct fragments. Considerable support has been found for Brennan and McGeevor's contention that graduates with specialist skills tend to be more successful in the labour market than those with more general degrees. In order to test the contention that the relationship which might exist between the social-class origins and destinations of graduates is more marked amongst those with generally-orientated degrees than amongst those with vocationally-orientated degrees, their performances, were examined by using matched samples. Analysis of the resulting data for men showed that, whilst no statistically significant relationship existed between the social-class origins and destinations of those with vocational degrees, a weak relationship was found to exist amongst those with general degrees, which, although not statistically significant, was in the expected direction. No such relationship was found to exist between the two groups of women, although those from manual origins with general degrees consistently rated the quality of their work below that of those from service-class backgrounds. Further analysis of the data for men failed to find any support for Roizen and Jepson's claim (1985) that graduates from manual origins might be lacking in those personality traits which employers value. More than half the men with general degrees who went on to further study did a teacher training course, and this can be taken as indirect evidence that their aspirations may differ from those from more middle-class backgrounds.

In the next chapter the process by which graduates came to undertake their courses is examined. This is important because, as will be shown, graduates from working-class origins had a distinct tendency to undertake those courses which had relatively poor employment outcomes.

CHAPTER SEVEN: CHOICE OF COURSE AND ENTRY INTO HIGHER EDUCATION.

From the discussion in previous chapters it should be clear to the reader that Britain's system of higher education is now playing an increasingly important role in the training of highly-skilled manpower for industry and commerce, and is also an important avenue of social mobility. The degree to which graduates are likely to be successful in the labour market has, however, been shown to be strongly related to the courses which they undertook as students, such that those who studied the more vocationally-orientated subjects (specialists and occupational-generalists) tended to be more successful than others (see Tables 6.5 and 6.6). Moreover, it was demonstrated in the last chapter that, although a weak relationship exists between the social-class origins and destinations of graduates, much of the variance disappears once controls are introduced for the type of course undertaken. This would tend to suggest that graduates originating from working-class backgrounds might have a tendency to undertake those courses which have the poorer employment outcomes, and, to the extent that this is so, this, in turn, suggests that the process by which students enter higher education and choose their courses of study is important if one is to fully understand the various ways in which they might be disadvantaged in the labour market. It is to a consideration of this matter that we turn our attention in this chapter. In Part One the courses undertaken by graduates are examined, differentiated according to their social-class origins. Part Two focuses upon the

reasons which graduates gave for entering higher education. Part Three interrupts the main sequence of the chapter to examine the relationship which exists between the school curriculum and employment destinations. In Part Four it is argued that, although people are free to choose which courses to undertake in higher education, that choice is strongly constrained by their upbringing and secondary education. In Part Five our findings are analysed using the model of sponsorship mobility developed by Turner (1960). Finally, in Part Six, we return to our initial analysis of the courses undertaken by graduates.

Part One: Courses of Study

We begin with the courses of study undertaken by graduates, differentiated according to their social-class origins. It can be seen from Table 7.1 that graduate men from manual backgrounds were, as was suggested earlier, the least likely to have undertaken vocationally-orientated (specialist and occupational general) subjects, whilst those from LGT backgrounds were the most likely to have done so. Differences are also evident in the subjects undertaken by the middle-class groups, with those from the two professional classes and the self-employed being the most likely to have undertaken a vocationally-orientated course. Moreover, these differences are statistically significant. Amongst the women there are no significant differences in the types of course undertaken. It is, however, interesting to note that those from senior professional backgrounds were by far the most likely to have undertaken a specialist course and those from junior managerial backgrounds were the least likely to have done so.

Table 7.1: Courses Undertaken by Social-Class Origins

Men Row %	Gen'list	Gen'list plus	Occup'n gen't	Sp'lists	-N-
Snr Prof	22.5	26.1	13.4	38.1	231
Snr Mangt	22.9	28.0	18.6	30.5	118
Semiprof	18.7	29.7	13.5	38.1	155
Jnr Mangt	13.5	41.3	15.9	29.4	126
Whitecollar	21.6	31.9	15.5	31.1	116
Self-empd	19.0	26.6	13.3	41.1	158
L.G.T.s	15.1	28.8	15.1	41.1	73
Manual	20.4	40.4	10.0	29.3	280
All	19.7	32.1	13.7	34.4	1257

CHI SQR $p < 0.02$

Women Row %	Gen'list	Gen'list plus	Occup'n gen't	Sp'lists	-N-
Snr Prof	29.3	20.9	18.6	31.2	215
Snr Mangt	31.5	21.7	23.8	23.1	143
Semiprof	34.9	27.9	15.7	21.5	172
Jnr Mangt	32.0	29.0	23.0	16.0	100
Whitecollar	36.6	18.3	14.0	31.2	93
Self-empd	26.4	31.0	17.8	24.8	129
L.G.T.s	32.8	34.4	12.5	20.3	64
Manual	32.5	29.6	12.8	25.1	202
All	31.7	26.1	17.3	24.1	1119

CHI SQR $p = ns$

However, Table 7.1 hides interesting differences in the courses undertaken by graduates. Tables 7.2 and 7.3 show the proportion of respondents from manual backgrounds who undertook each course. Overall, 22% of males and 18% of females come from manual backgrounds, and these figures have been used as base lines for constructing these two Tables. Looking first at the men, we see that graduates from working-class backgrounds are over-represented on only one specialist course (Electrical Engineering) and are under-represented on six such courses. In contrast, they are significantly over-represented on two of the six generalist courses and on five of the eight generalist-plus courses. There is much less

Table 7.2: Subjects Undertaken by Men of Working-Class Origin

Prop'n	Generalist	Gen'list plus	Occup'n gen'ts	Sp'lists
27%+	Com Studies Soc Studies	Chemistry Biology Mathematics Computing Fine Art		Elec Eng
17%- 27%	Humanities English Lit Interfac'ty	Science Economics	Env Plan'g Env Sci	Civ Eng Prod Eng Graphics
Less 17%	Geography	Mod Langs	Bus Studs Hotel Ad 3D Des'n	Lib'ship Accounts Law Psychology U.E.M. Pharmacy
Too few cases*			Textiles	Nursing

U.E.M. Urban Estate Management.

* Courses undertaken by only a few men.

Table 7.3: Subjects Undertaken by Women of Working-Class Origin

Prop'n	Generalist	Gen'list plus	Occup'n gen'ts	Sp'lists
23%+	Humanities Soc Studies	Biology		
13%- 23%	Geography Interfac'y	Mod Langs Science Fine Art	Bus Studs Textile	Lib'ship Psych'gy Nursing Graphics
Less 13%	Eng Lit Com Studs	Env Sci	Hotel Ad 3D Design	Pharmacy
Too few cases*		Economics Chemistry Mathematics Computing	Env Plan	Accounts Law U.E.M. Civil Eng Elec Eng

U.E.M. Urban Estate Management.

* Courses undertaken by only a few women.

variation in the proportion of women from manual backgrounds who undertook each type of course, although they are over-represented on none of the occupationally-general and specialist courses.

The tendency of graduates from working-class origins to undertake those courses which have poorer employment outcomes is interesting and requires further examination.

Part Two: Motives for Entering Higher Education

Educationalists and occupational choice theorists have advanced three basic explanations as to why people enter higher education (see Cohen, 1970; Dole, 1970; Harrison et al., 1977, Hansgert, 1985; Jones, 1979). These are the instrumental or economic, the expressive or maturation and the fortuitous. In the instrumental approach, people are seen as basing their educational decisions upon occupational considerations (Ginzberg et al., 1951; Blau et al., 1956), that is, they first decide upon a particular career and, having done so, they enter higher education in order to undertake a vocational course which will allow them to enter that career. In the expressive approach, higher education is valued for its own sake and the experience of higher education (both academic and social) is believed to contribute to the individual's well-being. In the fortuitous approach, entry into higher education is seen as a part of a process over which the individual has little control and in which school, family, friends and wider socializing influences are seen as channelling people along a 'path' which leads them into it (Katz and Martin, 1962).

Each of these approaches contains an element of truth. Our concern lies in understanding how the decision to enter higher education may vary between social groups. It seems intuitively reasonable to argue that young people from working-class origins will be more instrumental in their reasons for entering higher education and will view it in terms of its vocational relevance. It is argued (see Donaldson, 1975: 75-82) that since working-class families, tend to be poorer than middle-class families they are less likely to view higher education as an end in itself (i.e. in terms of maturation) and more likely to value it in terms of its potential economic benefits.

Donaldson (1975: 77-82) in his own study and review of relevant literature has found little support for the contention that students from working-class origins are more likely to value higher education because of its potential economic benefits. Indeed, work by Abbott (1971: 188-9) and Kelsall et al. (1972: 71-80) suggests that students and graduates from middle-class backgrounds may actually be more influenced by career considerations than those from working-class backgrounds. However, the differences which they obtained were not very significant and were well within the range of statistical error. Similarly Donaldson (p. 82-4) found no existing relationship between social-class origins and students' perceptions of the binary system which led him to conclude that '... the middle class have instrumental and calculative orientations towards higher education of a similar sort to those of the working class'.

Unfortunately, for us, HELM respondents were not specifically asked

why they had entered higher education, but respondents to the CRE study were presented with a list of eight factors and asked to say how important each was in their decision to undertake their courses of study. Table 7.4 shows the results broken down according to social-class origins and with the figures have been converted into percentages for ease of comparison - a high score indicates that the factor was important. From this Table it can be seen that the replies given by graduates from manual and other backgrounds were remarkably similar to one another. Those from manual origins were, however, less likely to say that they were undertaking their course to help them to get a particular job and were more likely to say that their interest in the subject was important, but these differences are barely significant at the 5% level of confidence.

Table 7.4: Reasons Given for Undertaking Course by Social-Class Origins

	Manual	Other	Difference
1) Enjoyed subject at school or college.	47%	46%	1
2) To help get a particular job.	66	71	-5*
3) To help career prospects generally.	77	79	-2
4) Thought it would be interesting.	88	84	4*
5) Advice of family.	23	37	-14**
6) Advice of friends.	20	25	-5
7) Advice of careers teacher.	18	22	-4
8) Advice of other teacher.	21	23	-2
Number of cases.	165	548	

* $p < 0.05$

** $p < 0.01$

Although the HELM survey did not look at the reasons why graduates had entered higher education, a number of questions were, nevertheless, included in the study which have a bearing on their

motivations and also on their views of higher education and its roles and functions. Table 7.5 summarizes the replies given to several of these questions, broken down by social-class origins. Again, these figures give support to Donaldson's contention that images of higher education are independent of social class. Thus there were only minor differences in the proportions of graduates with a long-term career in mind upon graduation, and no significant differences were found in the stress which graduates placed on the role which higher education might play in providing trained manpower for industry and commerce, or in contributing to the personal growth and development of the individual student. Those from other backgrounds were more likely to feel that the content of courses should be related to the needs of employers, but again the differences are minor and significant only at the 5% level of confidence.

We can, then, agree with Donaldson that attitudes towards higher education and its role and functions do not appear to be related to the social-class origins of students and graduates. The above analysis clearly suggests that students, irrespective of their social class-origins, put a great deal of stress on the role which higher education might play both in their maturation and in improving their job prospects.

Table 7.5: Attitudes Towards Higher Education by Social-Class Origins.

	Manual	Other	Difference
1) Percent with long-term career in mind when left college.	66%	68%	-2
2) Content of courses should be related to needs of employers (% agreeing)	80	85	-5*
Mean Replies+	Manual	Other	Difference
3) Training of highly qualified specialists for industry & commerce.	70	72	-2*
4) Personal growth and development of student.	78	79	-1
5) A means of improving the position of disadvantaged groups.	55	52	3
6) Perpetuation and justification of a social elite.	10	11	-1
7) The production of critical intellectuals.	53	53	0
8) Preservation & transmission of society's culture.	41	46	-5***
9) Research to produce new knowledge.	76	75	-1

* $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

+ Converted into percentages for ease of comparison.

The main problem with the instrumental and expressive approaches is that they tend to see the decision to enter higher education as essentially a rational process in which each individual is orientated towards a set goal (of acquiring a 'good job' or becoming better educated), and they ignore factors which constrain each individual's decisions and freedom of action. The fortuitous approach sees the decision to enter higher education and choice of which subject to study as parts of a process in which an individual's freedom of action is constantly narrowed down as a

result of prior decisions (see Harrison et al., 1977; Pavalko, 1971). Thus, in this approach, student choice over which subject to study in higher education is constrained by entry qualifications which in turn are constrained by choice of which subjects to study at secondary school. Moreover, few children are free to choose which subjects to study at school, and the curriculum which each pupil studies is strongly influenced by many factors (type of school attended, the attitudes of teachers and parents, etc.) over which he/she has little control. We return to this point later in the chapter when it is argued that, for a number of reasons, students originating from working-class households tend to be channelled by the educational system and the school curriculum into those courses which tend to have the poorest employment outcomes.

Part Three: School Curriculum and Employment Destinations

In order to explain why the school curriculum is important, it is first necessary to show how the occupational and social-class destinations of graduates vary according to their secondary education. School attended and standard entry qualifications tell us little about the secondary education of graduates. As Neave (1976: 42-3) points out, there is much variation in what are termed 'grammar', 'comprehensive', 'high' and 'fee-paying' schools. In some authorities comprehensive schools are called 'high schools' and in others 'grammar schools'. In some instances (for example Kent) the old bipartite system still exists and their grammar schools take a selective intake, and some grammar schools are fee-paying. Moreover, the type of school attended tells us little about the curriculum undertaken by graduates before they entered higher education. Some

comprehensive schools are streamed and children are taught a curriculum based upon their perceived level of ability.

In view of these problems, it was decided to ignore the actual school attended and in the following analysis use is made of a constructed variable which differentiates graduates on the basis of their school curriculum. A number of writers (eg Lawton, 1975; Eggleston, 1977; Goodson, 1983) have pointed to the existence of two distinct traditions which have influenced the curriculum taught in English schools. These are labelled, by Goodson, (1983: 27) the 'academic' and the 'utilitarian'. Historically the origins of these two curriculums have lain in the twin origins of secondary education in England, based upon the public/grammar schools on the one hand, which tended to teach an academic range of subjects to children originating from the upper and middle classes, and upon the elementary school on the other hand, which taught a more practical curriculum to working-class children (Goodson, 1983: 16-8; Lawson and Silver, 1973). The academic curriculum consisted of a limited number of subjects (for example Mathematics, Latin, French, History, Geography, etc.) which were highly valued by the universities (Reid, 1972: 50). It aimed to instil into children the ability to think in abstract terms and manipulate concepts in such a way as would fit them for employment within white-collar occupations and the professions. In sharp contrast, the utilitarian curriculum was far more practical in orientation and concentrated on instilling into children skills which would be useful to them in undertaking manual and, for girls, domestic work. To a large extent the existence of these two curriculums was sanctioned in the late 1940s by many local authorities when they introduced the tripartite system of secondary

education, and - in spite of the establishment of comprehensive schools in the 1960s and 70s - a similar division still exists within many schools today (Reid, 1972; Goodson, 1983).

Before discussing how the variable was constructed, it should be mentioned that schools in Britain have tended not to teach subjects of a strictly technical nature aimed at specific careers. Such teaching has tended to be undertaken in technical colleges and has consisted of business, engineering and craft-apprenticeship courses often taught on a day- or block-release basis at ONC, HNC and B/TEC level. Because many HELM graduates had such qualifications it was necessary to make allowances for them in constructing the 'measure'.

The procedure adopted was first to code all passes at GCE O- and A-level, CSE and their Scottish equivalents according to the schema discussed in Appendix A. The literature relating to the school curriculum, discussed above, was then examined and a group of seventeen GCE-level subjects was then chosen as forming the basis of the academic curriculum - see Table 7.6.

Table 7.6: Academic Subjects

English Language	Geography
English Literature	Mathematics
Welsh/Gaelic	Other Mathematics (a)
French	Physics
German	Chemistry
Other Modern Language	Biology
Latin/Greek	Economics
History (b)	Human Biology
Religious Studies (c)	

(a) Includes pure mathematics and statistics.

(b) Excludes economic and social history.

(c) Christian religion only, excludes Islam and Hinduism.

It should be stressed that since the aim was to construct a variable

capable of measuring differences in the curriculum taught to children at secondary school, it was decided to deviate from the normal practice of categorizing a CSE grade 1 pass as equivalent to a GCE O-level, and all CSE passes were categorized in the same way. Where respondents had two or more passes in the same subject (eg CSE and GCE A-level) only the higher pass was coded. The variable was then constructed as follows: a) those graduates with no examination passes, those with passes in CSEs only, and those with five or fewer GCE passes in academic subjects were classified as having undertaken a utilitarian curriculum; b) those with eight or more GCE passes in academic subjects were classified as having undertaken an academic curriculum; c) those with ONCs, HNCs, B/TECs etc. were classified as having undertaken a technical curriculum irrespective of what other examinations they had taken; and d) those who had undertaken a broad range of academic and utilitarian subjects, and who lacked a technical qualification as in 'c' above, were classified as having undertaken a mixed curriculum.

Looking ahead to Table 7.13 it can be seen that our curriculum variable does appear to differentiate graduates on the basis of their secondary education. In particular we see that 51.5% of men and 47.3% of women who had studied a utilitarian curriculum had attended non-selective (secondary modern and comprehensive) schools and they were the most likely to be non-standard entrants. Men and women with technical curriculums were the most likely to have attended a college of further education and those with an academic curriculum were the most likely to have started their degree courses straight after leaving school.

Table 7.7 shows the proportions of men and women who had undertaken these four types of curriculum.

Table 7.7: Type of Curriculum by Gender

Col%	Men	Women	All
Utilitarian	31.7	33.8	32.7
Mixed	34.2	33.9	34.1
Academic	22.6	28.7	25.4
Technical	11.5	3.6	7.8
Number	1301	1147	2448

From this we see that the types of school curriculum undertaken by men and women are not particularly different, except that women were less likely than men to have undertaken a technical curriculum and more likely to have undertaken an academic one. It should, however, be mentioned that these figures conceal major differences in the specific subjects undertaken by graduate men and women when they were at school. This matter is discussed more fully in the next chapter.

Table 7.8 shows the occupations of graduate men and women three years after leaving college broken down according to their school curriculum.

Table 7.8: Occupations by School Curriculum

Men Col %	Util'n	Mixed	Academic	Technical
Engineering	13.6	18.7	19.6	51.5
Teaching	11.8	4.3	5.4	4.5
Research/lab technicians	5.0	7.0	12.2	6.1
Medical*	2.7	5.2	3.5	-
Computing	5.4	13.5	6.1	10.6
Commercial	7.2	10.9	16.2	7.6
Librarianship	4.5	1.7	1.4	3.0
Social Work	5.0	1.3	-	3.0
Art & Design	10.0	3.5	3.4	-
Other Profes'al/ & managerial	26.3	29.5	22.3	9.1
Low-status	8.6	4.3	9.5	4.5
Number	221	230	148	66

* includes nursing

Women Col %	Util'n	Mixed	Academic	Technical
Engineering	1.6	3.5	1.5	5.3
Teaching	16.7	13.5	14.1	5.3
Research/lab technicians	4.2	4.5	10.6	-
Nursing	4.7	6.5	8.5	-
Medical	0.5	1.5	5.5	5.3
Computing	1.0	5.0	5.5	5.3
Commercial*	5.2	9.5	8.5	10.5
Librarianship	4.7	4.5	3.5	5.3
Social Work	3.1	4.5	1.5	5.3
Art & Design	15.1	5.5	3.5	10.5
Other Profes'al/ & managerial	31.2	30.5	30.1	47.3
Low-status	12.0	11.0	7.0	-
Number	192	200	199	19

* includes secretarial work

From this Table we see that amongst the men those with a utilitarian curriculum were the most likely to be employed in teaching and art and design, those with a academic curriculum were the most likely to be employed in research (including laboratory technicians) and commercial occupations (accountancy, insurance, etc.), and those with a technical curriculum were the most likely to be employed in

engineering and computing. There was less variation in the occupations of graduate women, although those with a utilitarian curriculum were the most likely to be employed in art and design and those with an academic curriculum were the most likely to be in research.

Table 7.9 shows the social-class destinations of graduates broken down according to their school curriculum.

Table 7.9: Social-Class Destinations by School Curriculum

Men Row%	Snr Prof	Eng- ineer	Semi prof	HGTs	Mangrs /clerks	Lower class	-N-
Util'n	12.9	17.0	32.5	8.8	15.5	13.4	194
Mixed	16.1	24.1	15.1	20.1	17.1	7.5	199
Academic	14.4	25.9	12.9	12.2	27.3	7.2	139
Tech'l	9.5	58.9	9.5	11.1	9.5	1.6	63
Total	13.9	25.9	19.7	13.6	18.2	8.7	595

CHI SQR $p < 0.001$

Women Row%	Senior Prof's	Semi prof	HGTs	Mangrs /clerks	Lower class	-N-
Util'n	9.4	52.2	5.7	20.8	11.9	159
Mixed	19.3	38.0	9.4	22.8	10.5	171
Academic	19.4	34.9	16.6	18.3	10.9	175
Tech'l	38.9	38.9	5.6	11.1	5.6	18
Total	17.0	41.3	10.5	20.3	10.9	523

CHI SQR $p < 0.005$

From this Table we see that there are marked, and highly significant, differences in the social-class destinations of both graduate men and women. Both men and women with utilitarian curriculums were more likely to be employed within the semiprofessions and lower-class occupations. Men who had undertaken a technical curriculum were by far the most likely to be engineers and those with academic curriculums were the most likely to be

managers/clerks. Only eighteen women had undertaken a technical curriculum and these were by far the most likely to be employed as senior professionals and/or engineers.

These differences in the social-class destinations of graduates were also reflected in their annual salaries, as Table 7.10 demonstrates. Thus we see that men with a utilitarian curriculum were earning £800 a year less than the mean salary for all men and £1,400 a year less than those with a academic curriculum. Men with academic curriculums were earning the most, but not much more than those with mixed and technical curriculums. Women with technical curriculums were the highest earners with average earnings over £1,000 a year above that of those with mixed and academic curriculums and £2,000 a year more than those with utilitarian ones.

Table 7.10: Annual Salaries by School Curriculum

Curriculum	Men	Diff'nce from mean	Women	Diff'nce from mean
Util'n	8,512	-828	7,272	-691
Mixed	9,640	300	8,084	121
Academic	9,968	628	8,309	344
Technical	9,564	224	9,381	1,418
Range		1,456		2,109
All	9,340		7,963	
Significance	p<0.05		p<0.05	

Part Four: The Secondary-School Curriculum and Course of Study

Having shown that there is a strong and highly significant relationship between the secondary-school curriculum undertaken by graduates and their occupational and social-class destinations, the next thing which needs to be considered is the relationship which exists between the school curriculum and the course of study.

Table 7.11: School Curriculum by Type of Course

Men Row %	Gen'ist	Gen'ist plus	Occupn gen't	Spec'ist	-N-
Util'n	28.8	27.6	14.6	29.0	410
Mixed	21.0	33.4	13.3	32.3	443
Academic	13.6	39.3	15.0	32.0	294
Technical	5.4	26.5	10.9	57.1	147

CHI SQR $p < 0.001$

Women Row %	Gen'ist	Gen'ist plus	Occupn gen't	Spec'ist	-N-
Util'n	39.6	16.9	23.7	19.8	384
Mixed	33.2	30.1	13.2	32.3	379
Academic	24.5	32.7	15.0	27.8	327
Technical	24.4	22.0	17.1	36.6	41

CHI SQR $p < 0.001$

From Table 7.11 it can be seen that both graduate men and women with technical qualifications were the most likely to have undertaken a specialist course, and those with utilitarian qualifications were the most likely to have undertaken a generalist course and the least likely to have done a specialist one. More interesting differences emerge when we examine the actual courses undertaken by graduates as Table 7.12 shows.

From this Table, it can be seen that those courses with the highest proportions of graduates with a utilitarian curriculum were art and

Table 7.12: Course by School Curriculum: Men+

Row#	Util'n	Mixed	Academic	Tech'l	-N-
Fine Art	86.2	6.9	3.4	3.4	29
Textiles	77.8	22.2	-	-	9
3D Design	67.5	20.0	5.0	7.5	40
Librarianship	60.9	21.7	13.0	4.3	23
Humanities	52.7	32.7	14.5	-	55
English Literature	50.0	33.3	16.7	-	12
Social Studies	47.9	35.4	10.4	6.3	48
Interfaculty	47.2	35.8	13.2	3.8	53
Graphics Design	45.7	39.1	15.2	-	46
Comm'n Studies	43.6	41.0	15.4	-	39
Law (LLB)	40.0	26.7	20.0	13.3	30
Electrical Engineering	38.8	22.4	2.0	36.7	49
Geography	35.8	35.8	22.6	5.7	53
Psychology	35.0	30.0	30.0	5.0	20
Env't Planning	31.3	35.4	27.1	6.3	48
Mathematics	30.3	36.4	24.2	9.2	33
Comp't Science	28.6	37.1	25.7	8.6	35
Economics	28.6	33.3	16.7	21.4	42
Accountancy	26.5	35.3	32.4	5.9	34
App'd Chemistry	23.2	39.3	28.6	8.9	56
App'd Biology	22.1	33.8	35.1	9.1	77
Science	20.5	33.3	33.3	12.8	78
Env'tal Science	19.6	47.1	31.4	2.0	51
Civil Engin'g	18.8	34.4	10.9	35.9	64
Business Studies	15.4	36.9	35.4	12.3	65
Urban Estate Management	14.7	38.2	39.7	7.4	68
Pharmacy	13.3	44.4	37.8	4.4	45
Prodn Engin'g	11.3	26.4	13.2	49.1	49
Hotel Admin'n	5.9	47.1	35.3	11.8	17
Modern Languages	-	60.0	40.0	-	15
Total	31.7	34.3	22.7	11.3	1287

+ Excludes Nursing undertaken by only three men.

Table 7.12: Course by School Curriculum Continued: Women+

Row%	Util'n	Mixed	Academic	Tech'l	-N-
3D Design	77.5	17.5	5.0	-	40
Textiles	71.2	16.7	9.1	3.0	40
Fine Art	63.2	28.9	7.9	-	38
Graphics Design	59.1	25.0	15.9	-	44
English Literature	57.5	25.0	17.5	-	40
Social Studies	48.3	29.2	19.0	3.4	58
Comm'n Studies	43.4	34.0	18.9	3.8	53
Humanities	43.0	31.2	22.6	3.2	93
Librarianship	34.5	41.4	22.4	1.7	58
Economics	33.3	16.7	33.3	16.7	12
Interfaculty	31.9	41.8	24.2	2.2	91
Psychology	31.4	37.3	25.5	5.9	51
Env't Planning	30.0	40.0	30.0	-	10
Mathematics	27.8	38.9	33.3	-	18
Geography	27.3	42.4	27.3	3.0	33
Science	20.4	33.3	40.7	5.6	54
Env'tal Science	17.2	51.7	31.0	-	29
Comptr Science	16.7	55.6	27.8	-	18
Modern Languages	15.2	31.8	51.5	1.5	66
Nursing	14.9	34.0	51.1	-	47
Hotel Admin'n	14.3	36.7	40.8	8.2	49
Law (LLB)	11.8	29.4	35.3	23.5	17
Business Studies	9.4	31.3	56.3	3.1	32
Accountancy	7.7	30.8	46.2	15.4	13
Pharmacy	7.1	17.9	64.3	10.7	28
App'd Biology	6.3	50.0	41.7	2.1	48
App'd Chemistry	-	50.0	33.3	16.7	12
Total	34.0	33.5	29.0	3.5	1128

+ Excludes Electrical Engineering (1 respondent), Civil Engineering (1), Urban Estate Management (0) and Production Engineering (0).

design courses (Fine Art and Textiles), Librarianship, the humanities and social sciences, and those with the lowest proportions of graduates with a utilitarian curriculum were Modern Languages, Hotel Administration, Pharmacy, Urban Estate Management and Business Studies. Those courses with the highest proportion of graduates with a technical curriculum were the three engineering courses, Economics and Law.

Returning to our discussion of the relevance of the fortuitous approach in explaining why people enter higher education, it is possible to explain these differences in the courses undertaken by graduates in terms of the constraints which the school curriculum placed upon their freedom of choice. To a large extent, the complexity and degree of background knowledge necessary to undertake some degree courses explains why the school curriculum constrains the extent to which students are free to choose a particular degree course. But other factors are also important, as will be argued in the next section.

To summarize at this point, it has been argued that the school curriculum not only places limits upon the range of courses which students can pursue, but that this, in turn, also appears to influence how well they perform in the labour market after graduation. Given the association which has been found between the school curriculum undertaken by graduates and their social-class destinations two questions now need to be asked. Why do such differences exist in the school curriculum which graduates had undertaken? And what is the nature of the relationship between the social-class origins of graduates and their school curriculum?

Part Five: Sponsored and Contest Mobility

So far much of our analysis of the various factors which have a bearing on the occupational and social-class destinations of graduates might lead one to suppose that the social-class origins of graduates are relatively unimportant. Much of the variance which exists in their occupations can be related to differences in the courses of study which they had undertaken, which, in turn, can be related to differences in the curriculum which they had undertaken at school. So far in this thesis, however, we have used the concept of 'social class' as a variable rather than as a *relationship*. The difference between these two uses of the concept is that where social class is used as a variable, attention tends to focus upon analysing its effect in terms of a number of attributes which differ between social classes. For example, in our analysis of the social-class origins of graduates, in Chapter Four, it was argued that those from working-class backgrounds are strongly atypical of their class of origin in so far as they share a number of attributes with those who originate from more middle-class backgrounds. In contrast, where social class is used as a *relationship* attention tends to be drawn to the relationship which exists between social classes, differences in the amount of power which they hold and the ability of some groups to manipulate the system to their own advantage.

The work of Turner (1960) provides us with a theoretical framework within which to examine the influence of social class as a

relationship rather than as a variable. Turner's interest lay in developing two opposing models of social mobility, 'sponsored' and 'contest', which he believed typified social mobility in England and the United States respectively. Under contest systems people are seen as competing against one another for entry into elite positions, whereas under the sponsorship model '... elite recruits are chosen by the established elite or their agents, and elite status is given on the basis of some criterion of supposed merit' (p. 856). A similar position to that of Turner is taken by radical and Marxist sociologists, such as Bowles and Gintis (1976), Grace (1978) and Harris (1982), who argue that one of the primary functions of education under capitalism is to help reproduce capitalist modes of production. Like Turner, they argue that the educational system tends to separate children at an early age and gives them an education appropriate to their eventual station in life. These approaches tend to differ from Turner's in the ways in which they view contest mobility but are in broad agreement in how they view sponsored mobility.

Before attempting to analyse the HELM data using Turner's framework, several points need to be made. Firstly, Turner used the concept of an elite in only a very vague sense, and he suggested that whilst contest mobility was most likely to occur where 'multiple elites' existed and no single group was powerful enough to control recruitment, sponsored mobility was most likely to occur where there was a 'a single elite' or a 'recognized elite hierarchy'. Thus he described English society 'as the juxtaposition of two systems of stratification, the urban industrial class system and the surviving aristocratic system' (p. 858), and he argued that whilst sponsored

mobility was the province of the aristocratic system it had been imposed upon the industrial one. Secondly, Turner was concerned about entry into the elite and the role of education in this process, and he did not discuss the extent to which the elite was self-recruiting, that is, the extent to which the elite is able to transfer wealth and privilege across generations through inheritance and its members' ability to buy their children a 'good' education. Thirdly, in the twenty-seven years since Turner wrote his paper major changes have occurred in Britain's system of secondary and higher education. Finally, Turner did not discuss gender and the extent to which the school curriculum taught to boys and girls might differ a topic which is discussed in the next chapter.

It is now possible to discuss the role of the polytechnics within Turner's theoretical framework. Looking at higher education in the early 1960s and following the work of Tapper and Salter (1978: 142-3), it is possible to see the university as the principal agent facilitating entry into the elite. In Tapper and Salter's view (p. 146-7) the main function of the universities was to help legitimate the elite and preserve its power. Vocational training aimed at specific careers tended to be neglected (if not ignored in order to frustrate the ambitions of the 'educated' middle classes), and students were educated within closely-knit and closed communities where they were exposed to a cultural milieu which supported and stressed elite values. The role of the universities, however, went further than this. They set their own entry qualifications (GCE O- and A-levels) and in doing so defined what was and what was not acceptable knowledge, and this in turn helped to earmark those from lower-class origins who were to be sponsored

through higher education.

In 1960, when Turner wrote his paper, a selective system of secondary education was in operation in most of England and Wales, in which, on the basis of an examination taken at the age of eleven (the eleven-plus), children were allocated to one of three types of school: grammar, secondary modern and (in some local authorities) technical schools. The curriculum taught to children within these schools reflected the twin origins of secondary education in England, discussed earlier in this chapter, and differed according to their levels of intelligence, and eventual station in life (Lawson and Silver, 1973; Goodson, 1983: 16-8). Grammar school pupils were taught a strongly academically-orientated curriculum intended to equip them with knowledge and skills necessary to enter university. Since the universities sought to 'educate' their students into the elite culture, the grammar school curriculum was not particularly vocational in orientation. In marked contrast, the curriculum taught to children within secondary modern schools, which the overwhelming majority of children attended, was more utilitarian in orientation and sought to equip them with the skills necessary for employment within more mundane (manual and low-level clerical) occupations. The secondary modern school curriculum was simply not geared to university entrance. Few such schools taught Latin (in which a GCE pass was required by most universities), their science laboratories were rarely on a par with those of grammar schools, and until the early 1960s few entered their children for public examinations (CSEs and GCEs).

This is not the place to discuss the profound changes which occurred

in Britain's system of secondary and higher education during the 1960s - the establishment of comprehensive schools and the polytechnics. Suffice it to say here that throughout this period a tendency for working-class youngsters to attend secondary modern schools and for more middle-class children to attend grammar schools was noted (see Chapter One) with the result that the education system tended to reinforce, rather than counteract, the educational disadvantages suffered by youngsters from manual backgrounds and the vocational opportunities available to such youngsters were thwarted still further. Moreover, research was casting doubt on the ability of the eleven-plus examination to differentiate people according to their level of intelligence (Benn and Simon, 1972). Because of this support grew for the introduction of the comprehensive system of education. Finally, there was a widespread feeling that the universities were neglecting the economic needs of the nation by concentrating on the teaching of general rather than vocationally-orientation subjects (Tapper and Salter, 1978: 147-9).

In terms of Turner's model, this would tend to suggest that the system of sponsored mobility was not serving the best interests of the country, because many of the more able working-class children were not socially mobile, and the system was not producing the highly-skilled manpower needed by industry and commerce.

The establishment of comprehensive schools and polytechnics can therefore be viewed as an attempt to correct these shortcomings by moving the education system away from the sponsorship model of mobility and toward the contest one. At secondary level, the introduction of comprehensive schooling can be seen as an attempt to

give all children, irrespective of home background, an equal opportunity to compete for entry into elite positions through the education system (see Young, 1961: 40-6). Similarly, the establishment of the polytechnics can be viewed as an attempt to introduce a contest element into higher education and 'open-up' higher education to the late developer and second-chance student who had been unable to compete on equal terms at an earlier age.

The problem with this approach was that change was only attempted in a 'partial' and 'half-hearted' fashion, in so far as the polytechnics were grafted onto a sponsorship system of education. At secondary-school level the public and private schools were not affected by the changes in the state system of education, and some LEAs (for example Kent) continued to operate a selective system of education. Moreover, under the, then, new binary system of higher education the universities were not (and have not been) radically altered. They continued to encourage a system of sponsored mobility drawing their students predominantly from selective (grammar and independent) schools, and through their control of the GCE O- and A-level curriculums they are in a strong position to influence what is taught in comprehensive schools.

The continued control exercised by the universities over the school curriculum has had two consequences. Firstly, it has meant that comprehensive schools have been forced to teach an academically-orientated curriculum in order to allow their pupils to compete for places in higher education, and, secondly, public sector institutions of higher education have been forced to adopt the same entrance criterion as the universities. Let us take each of these

points in turn.

Today only a few LEAs operate the old bipartite system of education, yet there is some evidence which suggests that the curriculum taught to pupils within comprehensive schools varies considerably. In many local authorities, children from well-to-do families living in the more middle-class suburban estates tend to attend one particular comprehensive school which in consequence gets a 'good name', attracting better teachers and arguably more generous funding, whilst children from poorer families tend to attend an inner-city comprehensive school which in consequence gets a 'bad name' attracting poorer staff and perhaps less generous funding. As a result suburban schools serving the more middle-class estates tend to offer a broader range of subjects to their pupils, and generally have better science and language laboratories which in turn improve the chances of their pupils being successful in their GCSE examinations. Moreover, the falling birth-rate in the 1960s and early 1970s and the consequent fall in school rolls disproportionately affected inner-city comprehensive schools at a time when urban 'redevelopment' programmes were encouraging people to move to new suburban housing estates. This has forced many inner-city comprehensive schools to reduce the number of subjects which they offer to their pupils, which has reduced the range of subjects which they can undertake in higher education (see Byrne et al., 1975).

Further, the curriculum taught to pupils attending the same school also tends to vary according to the individual child's intelligence. Until the recent introduction of the GCSE examination, brighter

children tended to undertake GCE O-levels and less bright children CSEs. Although a CSE grade one pass is the equivalent of a GCE O-level pass, it should be stressed that the CSE was originally designed for the intelligent pupil who expected to leave school when aged sixteen, and it is a qualification which places constraints on the range of degree-level subjects which a student may undertake, which, in turn, may be placing them at a disadvantage in the graduate labour market. Moreover, a number of writers (Cicourel and Kitsuse, 1963; Nash, 1973) have argued that teacher expectations (labelling) can have a major influence on the academic achievements of school children, such that where a teacher expects a child to fail he or she is more likely to do so. In terms of our earlier analysis, we might expect this to be reflected in the type of curriculum which is taught to children, those perceived as less intelligent being taught a utilitarian curriculum and those perceived as more intelligent being taught an academic curriculum.

It was suggested earlier that the continued control exercised by the universities over the secondary-school curriculum may have forced many public sector institutions of higher education to adopt the same entrance requirements for their students as the universities. This is important because it has limited the ability of the polytechnics and colleges to widen their entrance requirements in order to attract the second-chance student who may have undertaken a utilitarian curriculum. Other factors have also limited the ability of public sector institutions to widen their entrance requirements. Prime amongst these is the complexity of specific degree courses and the level of attainment needed to undertake them. Science, Language and Engineering courses, for instance, require examination passes

(GCEs, O/HNDs, etc) in related subjects, whilst Art and Design courses require a grounding in more practically-orientated subjects which those who studied a utilitarian curriculum are, arguably, more likely than others to have received (see Table 7.12).

Another factor, discussed at length in Chapter Six, is the degree of control exercised by professional bodies over recruitment. This is important because they often set their own entry qualifications and often have the ability to regulate the number of new entrants. It is difficult to know how important this factor might be and the extent to which it limits the ability of polytechnics and colleges to widen their entry requirements. In teaching, for example, it is important to the extent that new entrants require GCSE passes in English Language and Mathematics, but such direct specification of entry requirements is probably unusual. Of perhaps more importance is Berg's (1973) observation that the level of knowledge needed to undertake many professional occupations is only weakly related to the level of attainment in professional examinations necessary for entry. To the extent that this is so, it seems reasonable to argue that polytechnics and colleges are further constrained in their ability to open up their courses to those who have undertaken a utilitarian curriculum and/or lack standard entry qualifications.

Thus public sector institutions of higher education have not succeeded in opening up their courses to a wider range of potential students, and the courses with a high proportion of students with a utilitarian curriculum (Table 7.12) tend to be: those for which students with such a curriculum are ideally suited (such as art and design courses which require more 'practical' skills); those which

Table 7.13: Main Characteristics and Destinations of Respondents
by School Curriculum: Men

Characteristics of Graduate Men: Wave I

Number%	Util'n	Mixed	Academic	Technical	All
Non-selective school	51.9	40.1	25.4	50.0	41.7
Selective school	27.7	40.1	61.8	31.5	40.0
Attended an F.E.College	54.3	31.6	30.4	92.5	45.7
Aged over 21 on entry	35.6	24.1	16.4	57.2	29.9
Sponsored by employer	3.5	5.3	7.3	29.3	7.8
Manual origins	28.5	18.1	16.4	30.9	22.4
Non-standard entry	21.4	7.2	4.4	-	10.2
Started degree after school	38.3	51.5	62.9	11.4	45.3
Undertook F.T. employ't	20.1	11.7	5.1	47.7	17.0
Number	386	421	281	136	1224

Social-Class Destinations: Wave III

Number	Util'n	Mixed	Academic	Technical	All
Senior professionals*	29.9	40.2	40.3	68.4	39.8
Semiprofessionals	32.5	15.1	12.9	9.5	19.7
Lower class employ't	13.4	7.5	7.2	1.6	8.7
Income	8,512	9,640	9,968	9,564	9,340
Number	194	199	139	63	595

* Includes engineers.

Table 7.13: Main Characteristics and Destinations of Respondents
by School Curriculum Continued: Women

Characteristics of Graduate Women: Wave I

Number%	Util'n	Mixed	Academic	Technical	All
Non-selective school	47.3	36.5	27.8	33.3	37.6
Selective school	33.3	42.2	60.6	50.0	44.8
Attended an F.E.College	60.0	34.4	24.6	87.8	42.3
Aged over 21 on entry	27.3	14.4	7.9	57.5	18.5
Sponsored by employer	1.3	2.1	2.5	10.0	2.2
Manual origins	20.4	18.4	13.8	22.2	18.1
Non-standard entry	28.6	10.3	4.7	-	14.2
Started degree after school	32.7	58.9	66.9	29.3	51.3
Undertook F.T. employ't	19.8	10.5	6.1	46.3	13.7
Number	367	369	320	40	1096

Social-Class Destinations: Wave III

	Util'n	Mixed	Academic	Technical	All
Senior professionals*	9.4	19.3	19.4	38.9	17.0
Semiprofessionals	52.2	38.0	34.9	38.9	41.3
Lower class employ't	11.9	10.5	10.9	5.6	10.9
Income	7,272	8,084	8,309	9,381	7,963
Number	159	171	175	18	523

* Includes engineers.

require little pre-college training (English Literature, Humanities and the Social Sciences); and those which are not specifically vocational in orientation.

Using Turner's model it is now possible to view our four school curriculums as representing three distinct routes through secondary and higher education and into the graduate labour market. The major characteristics of those who undertook the four curriculums are shown in Table 7.13.

Those with an academic curriculum can be identified as being sponsored through secondary school and higher education. In terms of Turner's model they were chosen for 'elite' positions at an early age, most attended selective (grammar and fee-paying) schools and most entered higher education straight after leaving school. Because of the broad and academic nature of their school curriculum there were fewer constraints inhibiting their choice of which degree-level subject to undertake, and they have fared relatively well in the labour market. Those with a utilitarian curriculum can be thought of as representing a 'contest' element. Over half the men attended a non-selective (secondary modern or comprehensive) school, over a third were aged twenty-one or over on entry to higher education, many had studied at a college of further education and 20% had some work experience. They were constrained in their choice of which subject to undertake in higher education by their school curriculum and this is reflected in their mean incomes and social-class destinations. Those with a mixed curriculum appear on balance to have more in common with those who undertook an academic than with those who undertook a utilitarian curriculum.

One group which we have not so far mentioned are those with a technical curriculum. In terms of their early education, they have much in common with those with a utilitarian curriculum: half the men had attended a non-selective school and the vast majority had attended a college of further education, almost half had some full-time work experience and many were mature entrants. They differ in terms of their employment outcomes as can be seen from their incomes, and social-class destinations which reflect the vocational-specificity of their degree-level courses. In terms of Turner's model they are more difficult to place than the other groups. To some extent they represent a 'contest' group in so far as few were directly sponsored through secondary education as those with an academic curriculum were. However, many have been sponsored into higher education directly by an employer.

So far the relationship between the school curriculum and the occupational and social-class destinations of graduates has been discussed primarily in terms of the constraints which the school curriculum places upon the range of courses which students can pursue. The school curriculum may, however, be exerting an influence on the employment destinations of graduates via its hidden content. Bowles and Gintis (1976) in the United States and Harris (1982) in Great Britain and Australia have argued that the 'hidden curriculum' aims to produce a servile workforce for industry. In this approach the basic organization of the school with its hierarchy of headmaster, teacher and pupil is seen to mirror the basic structure of capitalist enterprises and various disciplinary measures are used to keep children in check. The brighter children are, however,

subjected to less stringent forms of teaching and are encouraged to develop social relations which emphasize autonomy, independence, and creativity (Hargreaves, 1982: 13-15).

An alternative approach to the 'hidden curriculum' is that taken by Hargreaves (1982), who argues that schools tend to strip pupils of their 'dignity' in so far as teachers tend to use sarcasm and fear (if inadvertently) as forms of control in the classroom, the effects of this being either to produce 'docile' children who accept what is taught to them without question or a rebellious counter-culture. Although Hargreaves, like most educationalists, is mainly concerned with the problems posed by the pupil counter-culture, it seems reasonable to suggest that 'docile' pupils (for want of a better term) who enter higher education are likely to have lower aspirations than others, and may lack some of the personality traits (confidence, leadership potential, etc.) which are valued by employers.

Unfortunately it is not possible to comment on the aspirations of HELM graduates on entry to higher education, although Floud and Halsey (1956) and Liversidge (1962) found that grammar school pupils tended to have far higher aspirations than secondary modern pupils, and these differences remained even when allowance was made for their social-class origins. Today one might reasonably expect similar differences to exist between those who had undertaken an academic and those who had undertaken a utilitarian curriculum.

If Bowles and Gintis (1976), Harris (1982) and Hargreaves (1982) are right in their assertions concerning the hidden curriculum, then one

might expect to find that graduates with an academic curriculum were more likely than others to be independent and to possess those social skills which employers value, whilst those with a utilitarian curriculum would be lacking in such traits. To test this assertion, the personality traits of those with academic and utilitarian curriculums were examined using a series of simple T-TESTs.

Table 7.14: Personality Traits by School Curriculum+

Men	Util'n	Academic	Difference
Intelligent	62	67	-05**
Creative	62	54	08***
Interested in new fields of study	63	55	08**
Critical	71	67	04*
Numerate	56	66	-10***
Interest in social problems	62	51	11***
Conservative	41	49	-08**
Life determined by soc- iety's requirements	65	58	07***
Women	Util'n	Academic	Difference
Intelligent	63	66	-03*
Creative	67	52	15***
Keen to try out new ideas	58	53	05*
Numerate	45	62	-17***
Interest in social problems	67	58	09***
Conservative	39	45	-06*
Life determined by soc- iety's requirements	63	58	05*

* p.<0.1 ** p.<0.01 *** p.<0.001

+ Replies converted to percentages for ease of comparison.

From Table 7.14 we see that amongst the men significant differences exist in the replies given to eight of the 26 questions. Those with utilitarian curriculums saw themselves as less intelligent, less numerate, more creative, more critical, were more interested in trying out new fields of study, were more concerned about social problems and were more likely to feel that their lives were

determined by society's requirements than those with an academic curriculum. It is difficult to know what to make of these findings, although their concern with social problems and interest in new fields of study does tend to reinforce the view that such people have a positive preference for careers in the semiprofessions (teaching and social work). The replies do not appear to support the contention that those with a utilitarian curriculum are lacking those personality traits which employers value, although they were less conservative: more importantly, however, no personality differences were found as regards practicability, confidence, independence, reliability, sociability and shyness. Almost identical replies were given by the women, so much of what has been said about the men also applies to them. This analysis strongly suggests that differences in the occupational destinations of graduates according to school curriculum are not due to those with utilitarian curriculums lacking those personality traits which employers value, and that differences in the employment destinations of graduates with different school curriculums can be primarily related to differences in their courses of study and possibly their aspirations.

Part Six: Social-Class Origins and Sponsored Mobility

We are now in a position to relate our discussion of sponsored mobility and of the school curriculum to our analysis of the social-class origins of graduates and the courses which they undertook. Not surprisingly, when the association between the social-class origins and school curriculum undertaken by graduates is examined we find that a highly significant relationship exists

between them.

Table 7.15: Social-Class Origins by School Curriculum

Men Row%	Util'n	Mixed	Academic	Technical	-N-
Snr Prof	25.2	32.7	34.7	7.5	226
Snr Mangt	28.9	33.3	28.9	8.8	114
Semiprof	27.0	35.8	24.3	12.8	148
Jnr Mangt	29.3	40.7	20.3	9.8	123
Whitecollr	40.5	29.7	18.0	11.7	111
Selfemp'd	31.0	40.0	19.4	9.7	155
L.G.T.	23.3	47.9	17.8	11.0	73
Manual	40.1	27.7	16.8	15.3	274
All	31.5	34.4	23.0	11.1	1224

CHI SQR P<0.001

Women Row %	Util'n	Mixed	Academic	Technical	-N-
Snr Prof	26.2	29.6	40.3	3.9	206
Snr Mangt	26.2	39.7	31.9	2.1	141
Semiprof	35.6	28.2	31.6	4.6	176
Jnr Mangt	46.4	32.0	18.6	3.1	97
Whitecollr	34.8	33.7	27.2	4.3	92
Selfemp'd	35.9	33.6	28.1	2.3	128
L.G.T.	26.7	50.0	23.3	-	60
Manual	37.9	34.3	22.2	5.6	198
All	33.5	33.7	29.2	3.6	1096

CHI SQR P<0.005

Thus from Table 7.15 it can be seen that amongst both men and women, those from manual and routine white-collar backgrounds were the most likely to have undertaken a utilitarian curriculum, and those from manual backgrounds were also the most likely to have undertaken a technical and the least likely to have undertaken an academic one. Relating this to the analysis which was performed earlier in this chapter (see Table 7.12) it should be clear that the utilitarian school curriculum which those from working-class origins tended to undertake constrained their freedom of action with the result that they tended to undertake those courses which had relatively poor

employment outcomes.

What now needs to be accounted for is why such differences should exist in the nature of the school curriculum undertaken by people from different social-class backgrounds.

Firstly, it can be seen from Table 7.13 that 'mature' graduates (aged 21 or over on entry to higher education) were more likely than others to have undertaken a utilitarian curriculum. This is understandable when one considers that many of these graduates would have left school when aged 15 or 16 with few qualifications beyond GCE O-level standard, and the fact that some courses have special arrangements for admitting mature students with less than standard entry qualifications. However, as was mentioned in Chapter Four, only a weak relationship exists between the age of graduates and their social-class origins (29.9% of those originating from manual backgrounds but 25.0% of all graduates were aged 21 or over on entry to higher education), and in consequence 'age' only partially helps us to account for the tendency of graduates from working-class origins to have undertaken a utilitarian curriculum.

Referring again to Table 7.13, it can be seen that graduates with a utilitarian curriculum were more likely than others to have attended a non-selective (comprehensive or secondary modern) school. Graduates from manual backgrounds were almost twice as likely to have attended a secondary modern school as others - 7.7% of all graduates but 13.3% of those originating from manual backgrounds had attended such a school. More importantly, children from more middle-class backgrounds tend to benefit from their parents' greater

control over financial and other resources. The very rich are in a strong position to buy their children a good education by sending them to an independent (fee-paying) school - 20.9% of the children of senior professionals, 25.3% of the children of senior managers but only 6.9% of other respondents had attended such a school. Graduates from lower middle-class backgrounds also benefit. Their parents are often more attuned to the differences which exist between state schools in their local areas, and they are more likely to be in positions to send their children to one of the remaining state-run selective (grammar) schools or the better comprehensive schools. They often live on private suburban estates which tend to be served by the best comprehensive schools which, as we have seen, tend to have the best teaching staff and the best facilities. Such schools also tend to have the most active parent-teacher organizations which often run fund raising events. Moreover, it is not uncommon for the families of such people to move house in order to fall within the catchment area of a particular school. Thus the middle classes are often in a position to sponsor their own children through secondary and higher education. In marked contrast, children from more working-class backgrounds tend to attend the poorer schools often located on the outskirts of rundown council estates or the inner cities. As was argued earlier, such schools tend to attract the poorer teachers, offer a rather restricted range of subjects, are often underfunded and lack external sources of finance (see Byrne et al. 1975). Because independent (fee-paying), grammar and the better comprehensive schools tend to teach a more academically-orientated curriculum than other schools, and because of the more middle-class composition of their pupil intake, it follows that students and graduates from middle-class backgrounds

are more likely than their peers from more working-class backgrounds to have undertaken an academic rather than a utilitarian curriculum.

Finally, it should be mentioned that because the parents of more middle-class children tend to be better educated than the parents of working-class children they are in stronger positions to pass on cultural capital to their children. This tends to benefit their children during their first years at school, with the result that they are more likely to be labelled 'intelligent', which, in turn, increases their chances of undertaking an academic curriculum and of being sponsored through secondary education (Cicourel and Kitsuse, 1963; Hargreaves, 1982).

It should, however, be mentioned that more graduates from working-class origins had undertaken either an academic or mixed curriculum than had undertaken a utilitarian one, and, conversely, a large number of men and women from more middle-class backgrounds (and over a quarter of the sons and daughters of senior professionals) had undertaken a utilitarian curriculum and in consequence were relatively disadvantaged in the labour market. In terms of the sponsorship model of social mobility, developed by Turner (1960), this clearly suggests that the educational system is providing for the needs of some of the more intelligent working-class youngsters at the expense of those from more middle-class backgrounds. Where the system falls down is at the point of initial selection for sponsorship, and, as was shown in Chapters One and Four, children from working-class origins tend to 'drop out' of education at an earlier age than their more middle-class peers, and they are far less likely to participate in

higher education.

Conclusion

Having argued in the previous chapter that much of the variance in the relationship which exists between the social-class origins and destinations of graduates can be explained in terms of the subjects which they had undertaken, this chapter set out to explain why graduates (and those from working-class origins in particular) undertook the courses which they did. No significant differences according to social-class origins were found in the reasons which they gave for entering higher education and in their views of its role and functions. Attempts were made to account for the differences in the courses undertaken by graduates originating from different social classes in terms of differences in the school curriculum undertaken by them. Using the sponsorship model of social mobility developed by Turner, it was argued that whilst those earmarked for elite station tended to be taught an academic curriculum others tended to be taught a more utilitarian one. Analysis of the HELM data revealed that, whilst those who had undertaken an academic curriculum had considerable choice over which subject to study and tended to fare particularly well in the labour market, those who had undertaken a utilitarian curriculum found themselves constrained over their choice of which course to undertake and tended to fare much less well in the labour market. Further analysis of the data suggested that this process tends to work to the advantage and disadvantage of students from all social classes, but the balance of the disadvantage undoubtedly lies with those from working-class origins who tend to drop out of education

at earlier ages than those from more middle-class backgrounds, and many of those who do participate in higher education find themselves constrained as regards their choice of which subject to study.

CHAPTER EIGHT: GENDER, SOCIAL CLASS AND THE EMPLOYMENT DESTINATIONS GRADUATES

In our earlier discussion of the relationship which exists between the social-class origins and destinations of graduates we have treated men and women separately. We have not as yet discussed how the careers of men and women as a whole might differ from one another, and neither have we asked why the relationship which exists between the social-class origins and destinations of graduates appears to be less marked amongst women than men. It is to a consideration of these matters to which we turn in this chapter. It is divided into three. Part One looks at theoretical approaches to social class and gender. Part Two looks at the participation of men and women in higher education. Finally, Part Three looks at the destinations of graduate men and women, and attempts are made to interpret the data in terms of the theoretical approaches outlined earlier in the chapter.

Part One: Theoretical Approaches to Gender and Social Class

Both Marxist and Weberian approaches to social class have been criticized because they have tended to be 'gender blind' (see Hartmann, 1981; Beechey, 1986; Crompton and Mann, 1986), that is, they have tended to ignore differences in the occupations and social-class situations of men and women. Hartmann (1981: 3-4), for example, has criticized orthodox Marxist theory in so far as the dichotomous social-class schema it employs (bourgeoisie and proletariat) sees the proletariat as undifferentiated and

homogeneous and as such ignores the extent to which the occupations of men and women differ. The reasons for this neglect are not hard to find: until comparatively recently women tended to withdraw from the labour market when they married or started families with the result that working women tended to be young and/or single and few had a career. Moreover, women have also been ignored in studies of social mobility, it being argued (Goldthorpe, 1983; see also Walby, 1986) that the household rather than the individual should be proper unit of analysis, and that since men rather than women are the main breadwinners in most families, the husband's, rather than the wife's, occupation is the best indicator of the family's social-class position (see Chapter Three).

Recent years have seen a large increase in the numbers of women participating in the labour market. Married women in particular are now far more likely to work, the proportion in employment having risen from 21.7% in 1951, to 29.7% in 1961 and 50% in 1981. Moreover, whilst the number of males in employment fell from 13.1 million in 1979 to 11.5 million in 1983, the number of women in employment has fallen by only a third of this figure from 9.3 to 8.8 million, with a slight increase having been registered in the numbers working part-time (Beechey, 1986). Finally, the rising divorce rate combined with an increase in the numbers of illegitimate births has led to a large increase in the number of single-parent families without a male head.

Research which has been undertaken into the employment of women suggests that not only do women tend to be employed in different occupations to men but the jobs which they do tend to be of lower

status (Hakim, 1979; Dex, 1985; Beechey, 1986). Looking first at the occupations undertaken by men and women, Beechey (1986: 86), using data collected for the EOC (Equal Opportunities Commission) *Eighth Annual Report 1983* shows us that women tend to be employed in routine assembly work, clerical work, selling, personal services (including catering, cleaning and hairdressing) and the caring professions such as nursing, social work and teaching. Women tend to be employed in a much narrower range of jobs than men and whilst less than 25% of the workforce in fourteen of the thirty-one industrial sectors used by the EOC were women, in none of the sectors did the proportion of men employed fall below 29% (Beechey, 1986: 84). Using the 1976 *General Household Survey*, Arber et al. (1986) have analysed the occupations of men and women in the population as a whole using the seven-fold Goldthorpe-Llewellyn social-class schema discussed in Chapter Three of this thesis. Table 8.1 shows their results.

Table 8.1: The Occupational Classes of Men and Women*

Column%	Men	Women full-time	Women part-time	Women unwaged
Snr P&M	12.7	2.8	0.8	1.0
Lwr P&M/HGT	12.8	18.6	10.4	11.0
White collar	9.1	50.1	54.6	52.6
Small owners	7.4	3.5	3.8	1.5
LGT & foremen	11.2	1.5	0.6	0.8
Skilled manual	23.5	4.8	2.9	6.3
Other manual	23.3	18.7	26.9	26.8
Number	7532	2954	2378	3426

* See Chapter Three for details of the social-class schema.

Source: Arber et al., 1986: 82

From this Table it can be seen that over 50% of women were employed within routine non-manual (white-collar) occupations, and that within both professional and managerial occupations women were far

more likely to be employed in lower-status positions than men. Thus whilst 12.7% of full-time men were employed within senior professional and managerial occupations under 3% of full-time women workers were.

Considerable segmentation has also been found to exist in the occupations of highly educated men and women. Kelsall et al., (1972: 229) found that 68% of graduate women but only 36% of graduate men, in their sample, were employed in education (mainly teaching). In comparison 28% of men, but only 5% of women were employed in industry. Tables 8.2 and 8.3 show the high degree of segmentation which was found to exist in the employment of male and female graduates in the 1981 *Census of Qualified Manpower*. From Table 8.2 we see that nearly 80% of the women, but only 46.6% of men were employed within Other Services a category which includes both teaching, which employed 52.4% of all graduate women, and medicine (mainly nursing) which employed 8.7%. Moreover, these figures understate the degree of segmentation which exists amongst highly qualified men and women because women teachers tend to be employed in infant and junior schools and men teachers within secondary, tertiary and higher education.

Finally, recent research reviewed by Spencer and Podmore (1987) strongly suggests that women within male-dominated professions (law, medicine, higher education and engineering), the health service and the senior civil service tend to hold more junior positions than men, are less likely to be promoted and tend to be channelled, by men, into certain 'ghetto' areas for which they, as women, are perceived to be particularly well suited.

Table 8.2: Graduates in the Workforce by Gender

Column%	Male	Female
Agriculture	0.7%	0.4%
Energy and Water	3.5	0.6
Extraction	4.4	1.1
Metal & Engineering	9.8	1.6
Manufacturing	4.1	2.8
Construction	3.9	0.3
Distribution, Hotels and Catering	6.0	5.3
Transport & Com'ns	2.8	1.0
Banking & Finance	18.2	7.7
Other Services	46.6	79.1
Total	118,753	46,790

Source: 1981 Census of Qualified Manpower.

Table 8.3: Graduates in Banking & Finance & Other Services by Gender

Column%	Male	Female
Banking & Finance	18.6%	7.7%
Banking & Finance	8.1	10.3
Insurance	5.0	6.5
Business Services	83.5	77.2
Renting & Movables	0.6	0.6
Real Estate	2.8	5.4
Total	21,607	3,624
Other Services	46.6	79.1
Public Administration	20.2	9.3
Sanitary Services	0.8	0.2
Education	46.7	66.3
Research & Develop't	4.2	1.2
Medical & Related	15.6	11.0
Other Services	6.1	6.3
Recreation & Culture	4.4	4.7
Personal Services	0.2	0.2
Diplomatic Service	0.2	0.1
Other (nec)	1.6	0.7
Total	553,451	37,033

Source: 1981 Census of Qualified Manpower.

Theoretical approaches to gender and social class have sought to explain both the participation of women in the labour market and to analyse their social-class position. The Marxist Braverman (1974)

has argued that the process of capitalist development has had an effect on the historical development of the family and productive enterprises. The growth of labour-saving goods industries for the home (processed foods, vacuum cleaners, washing machines, etc.) and the development of education and social services has integrated into the market economy many of the jobs traditionally undertaken by women in the home, which, in turn, has released many women for employment. Moreover, the growth of large productive enterprises, the separation of ownership from control and the deskilling of many previously skilled jobs has created new job opportunities. Women are seen to be ideal employees in these new industries, because, many of them have created jobs which women have traditionally undertaken in the home and because women are a cheap source of labour. In this view women are seen to form a part of the lumpenproletariat (the reserve army of unemployed) who are relatively easy to dispense with in times of recession. The problem with this approach is that in using a simple dichotomous social-class schema (bourgeoisie and proletariat) Braverman ignores the extent to which women tend to be employed within a subordinate position to men within the productive process. Nevertheless the approach is of some interest to us in so far as it suggests that women will be employed in those tasks which were formally undertaken within the confines of the family (caring and education).

Another approach is that taken by Barron and Norris (1976) who have attempted to analyse the position of women in the labour market using *dual labour market theory*. This sees the labour market as segmented into two distinct sectors: a *primary sector*, composed of highly skilled workers with high incomes, stable jobs, career

ladders, good working conditions and fringe benefits, and a secondary sector with the opposite characteristics. Barron and Norris (1976) go on to argue that the processes by which workers are recruited into the two sectors differ and whilst men tend to be employed in the primary sector, women tend to be recruited into the secondary sector of the economy where they undertake unskilled and semiskilled work, earn little and have only poor job security. To Barron and Norris women are ideal people to employ within the secondary sector: they are easy to dispense with in times of recession, there is a clear physical difference between them and men, they often have little interest in acquiring training, are often prepared to work for a low income and have little involvement with trades unions. This approach has, however, been criticized because it is based on evidence collected from a limited number of manufacturing industries and it ignores the fact that women are employed within all social classes.

Nevertheless Barron and Norris's approach is of some interest to us in so far as it focuses attention on the extent to which women might be disadvantaged in the actual recruitment process. Should employers have a preference for employing graduate men rather than women then graduate women are likely to be employed in lower-status jobs than graduate men. There are several reasons for believing that employers may have a preference for men rather than women. Prime amongst these is tradition, that is, men have always tended to be employed in some jobs and through habit continue to be so. Secondly, there is a cost involved to employers in training people to undertake senior managerial roles, and employers may be reluctant to incur this cost on training women for fear that they may leave after

a short period of time: for example, to start a family. Thirdly, in a society in which men rather than women tend to hold the more senior positions within companies, employers may be reluctant to employ women in these posts for fear of upsetting a predominantly male workforce. Finally, Spencer and Podmore (1987: 2) have suggested that employers may hold stereotyped images of women as 'emotional', 'unstable' and 'indecisive', and hence unsuitable for employment within the 'more' physically demanding professions (see also Roizen and Jepson, 1985: 167-8).

This approach, in turn, can be criticized because it ignores the ability which male-dominated trades unions and professional associations might have to limit recruitment into particular trades and occupations. In particular, Parkin (1979: 95-7) and Beechey (1986) seek to explain the tendency of women to undertake different, and often lower-status, jobs than men in terms of the operation of exclusionary strategies by trades unions and professional associations, who seek to exclude women from many skilled and professional occupations in order to maintain high levels of remuneration. To Parkin women occupy a dual class position in the labour market itself, vis-a-vis employers on the one hand and male employees on the other. This theme is also taken up by Spencer and Podmore (1987: 2) who argue that many women may find it difficult to establish themselves in the professions because they lack the support of senior professionals who fear that the influx of women into the profession may adversely affect levels of remuneration and prestige, and they may, therefore, be reluctant to employ women and/or provide financial support for their training.

An altogether different way of looking at the social-class position of women is that used by radical and Marxist feminists. There are several approaches (Millet, 1970; Firestone, 1972; Rowbotham, 1973; Parkin, 1979; Hartmann, 1981; Walby, 1986) which argue that women occupy a dual class position. Although these approaches differ in detail, they agree in so far as they attempt to analyse the position of women in terms of patriarchy and the social division of labour - two concepts which are closely linked together. The social division of labour refers to the extent to which roles within the family are differentiated according to gender such that men tend to be employed within the public domain of the workplace and women tend to be employed within the private domain of the home. In a Marxist sense both sexes are seen to constitute a section of the proletariat, but, whilst men tend to be employed directly in the productive process, women have responsibility for the reproduction of the labour force, not only in a biological sense but also in terms of the socialization of children (Rowbotham, 1973). Patriarchy refers to the way in which power is structured within the family and wider society and in particular refers to the subordination of men and women. In some Marxist approaches (Firestone, 1972; Hartmann, 1981) patriarchy is viewed as a parallel form of exploitation by which men exploit women within the family. Marxist-Feminists disagree as to the extent to which social class and patriarchy are two distinct systems of exploitation. Firestone (1972) and Hartmann (1981) argue that patriarchy has existed in all past societies, its form being determined by the predominant mode of production. Others, for example Young (1981), disagree because the factors which account for the existence of patriarchy are rarely spelt out. Despite these disagreements, however, Marxist-Feminists are agreed that women in

our patriarchal society occupy a subordinate position to men.

Writing from within a Weberian perspective, Walby (1986) argues that men and women do not form social classes but rather, '... housewives and husbands can be conceptualized as classes, when class is defined in terms of a distinctive work and market situation' (p 33). Within this approach a class relationship exists within the family which is patriarchal in form and in which the wife occupies a subordinate position to that of her husband and is exploited in so far as she performs domestic tasks for which she is not paid. Moreover, Walby continues, the subordinate position of women is independent of the husband's social-class position, and even in those instances in which the family is rich enough to employ servants the wife is still very often financially dependent on her husband and also serves a managerial role vis-a-vis her servants.

Although we shall have little to say about the family and the relationship which might exist within it between the husband and the wife, these approaches are of considerable interest to us in so far as people tend to be 'socialized' into a specific social-class position. Bell and Newby (1976) have argued that girls and young women tend to be socialized both at home and school to accept a subordinate position within the family, to accept male authority, to defer to male decisions and to accept the major responsibilities for child rearing. Thus they write (p. 160):

That male and female children are in many important respects treated differently from birth by all their significant others, in a manner that is consistent with the existing ideological hegemony, is a, if not the vital social mechanism for the creation and maintenance of this (patriarchal) ideological control (their emphasis).

This is important to us because if these writers are correct in their analysis of the family and of the nature of male and female socialization, then one might expect this to be reflected not only in the role of men and women in the family but also in the occupations which men and women enter, and, in fact, it will be recalled from our earlier discussion that the occupations of men and women do indeed differ significantly from one another with 'educated' women tending to be employed within health and education to which, owing to their socialization, one might logically expect them to be particularly well suited.

Although Turner (1960), in his discussion of sponsored and contest mobility, did not specifically discuss gender, it is possible to make a few comments on how the education of boys and girls might differ under a sponsorship system such as that which exists in Great Britain. Since women are socialized primarily to play a domestic role within the family as housewives and mothers one might logically expect fewer women than men to participate in higher education. Moreover, one might also expect the curriculum taught to boys and girls to differ significantly, that taught to boys having a relatively strong vocational content and that taught to girls having a strong domestic content. As we have seen the curriculum also varies according to the expected occupational and social-class destinations of the child. Thus boys earmarked for employment within manual occupations tend to be taught a utilitarian curriculum and those earmarked for employment within more middle-class occupations tend to be taught a more academically-orientated curriculum. The curriculum taught to girls, however, tends to reflect the needs of their future husbands rather than themselves. Thus those expected to

marry into the working-classes tend to be taught a utilitarian curriculum with a stress on domestic subjects (Needlework, Cookery and Child care), whilst those expected to marry into the middle-classes tend to be taught a more academically-orientated curriculum with a stress on the more cultural subjects (History, Languages, Music, etc) which would equip them with skills which would enable them to support their husbands in their careers and help them to socialize their own children into middle-class mores. In this approach the vocational content of the female school curriculum can be thought of as a by-product of its primary function of socializing girls into a subordinate social-class position within the family, and can be expected to channel women into careers which tend to be related to what the feminist writer Novarra (1980: 17-9) has referred to as the 'six tasks' for which women have historically been responsible, namely: 'child rearing', 'agriculture', 'clothing', 'caring', 'education' and 'domestic work' (see also Deem, 1978; Arnot, 1986).

To summarise, a number of theoretical approaches to the social-class positions of men and women have been discussed and it can now be suggested that graduate women might be employed within a different range of, often lower-status, jobs than men. Two reasons have been advanced for believing that this might be so. Firstly, it has been suggested that women might be disadvantaged in the actual recruitment process both because employers might have a preference for employing men rather than women and because professional associations and trades unions might operate exclusionary policies to the advantage of their predominantly male membership. Secondly, women might be disadvantaged because they are socialized into a

dual-class position within the home and work place. In this approach women come to find employment within different and lower-status jobs than men because their socialization and secondary education aims to equip them to play a domestic role within the family which constrains the range of occupations and careers open to them.

Part Two: Secondary Education & Participation in Higher Education

If, as was suggested earlier, women are socialized into a subordinate social-class position within the family, then one might expect fewer of them to participate in higher education. In fact, as was mentioned in Chapter Four (Table 4.1) women are indeed less likely to participate in higher education than men, although the proportion of women amongst the student population (excluding the old colleges of education) has risen from around 25% in the early 1950s to about 40% in the early 1980s. Similar proportions of men and women students can be found in the polytechnics and universities, although the proportion of women attending colleges of higher education is probably higher. Regarding their social-class origins, it seems reasonable to argue that women from working-class backgrounds will be doubly disadvantaged and will be less likely to participate in higher education than those from more middle-class backgrounds. Indeed a number of studies (Whiteburn et al., 1976; Edwards, 1982) have found that women students are less likely to come from manual origins than men and more likely to come from more middle-class backgrounds. As was shown in Chapter Four (Table 4.9), this trend was also found in the HELM data set, although the differences are not particularly marked.

More interesting differences were found when the occupational social class of respondents' mothers was examined. As can be seen from Table 8.4, a lower proportion of women (31.3%) than men (38.9%) had an 'unwaged' mother and the mothers of graduate women were far more likely to be employed within a professional or managerial capacity.

Table 8.4: Mothers' Social Class by Gender

Row%	Prof'l/ Mang'l	White- Collar	Self- Empl'd	Manual	Unwaged	-N-
Male	23.9	25.9	3.6	7.7	38.9	1264
Female	30.2	29.7	2.7	6.2	31.3	1136
Total	26.9	27.7	3.2	7.0	36.3	2400

CHI SQR $p < 0.05$

Women tended to be younger than men (69.8% of men but 80.0% of women were aged under twenty-two on entry to higher education), although a higher proportion of women (11.2%) than men (8.4%) were aged twenty-five or over.

It has also been suggested that the curriculum taught to boys and girls at school might differ such that whilst that taught to boys might equip them with skills suitable for employment within a variety of fields, that taught to girls might be expected to reflect the needs of their future husbands and their own future roles as housewives and mothers. Indeed considerable research has been undertaken which strongly suggests that such differences do exist in the curriculum taught to boys and girls. Department of Education statistics show that there are major differences in the subjects

studied by boys and girls at school and college. In particular, girls are more likely than boys to leave school with examination passes in domestic subjects (Cookery and Needlework), languages and humanities, and are less likely to have examination passes in the sciences (apart from Biology), Mathematics, Engineering and technical subjects (see EOC, 1987).

Moving on to a consideration of the HELM data, Table 8.5 shows the type of school attended by men and women, Table 8.6 shows their highest educational qualification on entry and Table 8.7 shows the type of school curriculum which they undertook. From these tables it can be seen that only minor differences exist in the type of school which graduate men and women had attended and roughly equal proportions of men and women had attended selective (grammar and independent) and non-selective (secondary modern and comprehensive) schools. More than three-quarters of the respondents (78.0% of men and 81.4% of women) had standard entry qualifications.

Table 8.5: School Attended by Gender

Row%	Modern	Comp've	Grammar	Indep't	Other*	-N-
Male	8.6	33.0	28.1	11.9	18.3	1383
Female	6.6	30.3	32.1	12.0	19.0	1213
Total	7.7	31.8	30.0	12.0	18.6	2596

CHI SQR p=ns

* Includes those educated in Scotland.

Table 8.6: Entry Qualifications by Gender

Row%	Up to 1 A-level	Standard Entry	Technical	Other	-N-
Men	6.8	78.0	10.6	4.6	1401
Women	9.1	81.4	3.3	6.2	1248
Total	7.9	79.6	7.2	5.3	2649

CHI SQR $p < 0.001$

In Chapter Seven it was argued that the type of curriculum studied at school - utilitarian, mixed, academic or technical - constrains the range of courses which students can pursue at degree level. In particular it was argued that the academic curriculum imposes relatively few constraints upon the range of courses which students can pursue at degree-level, and graduates who studied such a curriculum have been shown to be amongst the most successful in the labour market. From Table 8.7 it can be seen that women were more likely than men to have undertaken an academic curriculum, but as can be seen from Table 8.8, these figures conceal major differences in the subjects undertaken by men and women.

Table 8.7: Type of School Curriculum by Gender

Row%	Util'n	Mixed	Academic	Technical	-N-
Men	31.7%	34.2	22.6	11.5	1301
Women	33.8	33.9	28.7	3.6	1147
Total	32.7	34.1	25.4	7.8	2448

CHI SQR $p < 0.000$

Thus, it can be seen that, women were more likely to have studied languages (English Literature, French, German and Latin), domestic subjects (Cookery and Needlework), Biology, Human Biology and Sociology. In contrast, men were more likely to have undertaken Mathematics, Additional Mathematics, Physics, Chemistry,

Table 8.8: GCE & CSE Examination Passes by Gender†

Row%	Men	Women	-N-
Home Management	-	100.0	10**
D.S. (Cookery)	4.1	95.9	196***
Secretarial Studies	4.2	95.8	24***
D.S. (Needlework)	7.6	92.4	92***
Typewriting	15.4	84.6	39***
Psychology	30.4	69.6	23*
Music	34.5	65.5	110***
Sociology	34.9	65.1	189***
German	35.5	64.5	358***
Human Biology	35.6	64.4	174***
Drama/Human Move't	36.4	63.6	22
European Studies	36.4	63.6	11
Latin or Greek	36.6	63.4	284***
Classical Studies	37.5	62.5	32*
French	40.9	59.1	1315***
Other Language	40.9	59.1	164***
Art & Craft	43.1	56.9	727***
Economic History	43.9	56.1	41
Biology	44.1	55.9	1271***
English Literature	45.4	54.6	1811***
Religious Studies	45.7	54.3	346**
Commerce	46.3	53.7	82
History	48.2	51.8	1252***
Other Science	49.6	50.4	133
Social Studies	51.1	48.9	45
English Language	52.3	46.8	2259
Humanities	53.8	46.2	13
Welsh or Gaelic	54.2	45.8	24
Arithmetic	54.5	45.5	235
English Oral	54.7	45.3	53
Geography	54.8	45.2	1415*
General Studies	54.8	45.2	546
Mathematics	55.2	44.8	2077***
Local/Rural Studies	56.1	43.9	41
Chemistry	62.6	37.4	1099***
General Science	63.8	36.2	69*
Geology	65.2	34.8	138**
Accountancy	65.9	34.1	85*
Economics	66.9	33.1	450***
British Government	67.1	32.9	149***
Computer Studies	69.6	30.4	56*
Additional Maths	69.6	30.4	369***
Design & Ceramics	73.7	26.3	19*
Physics	73.7	26.3	1144***
Woodwork	91.7	8.3	84***
Technical Drawing	95.4	4.6	284***
Metalwork	97.6	2.4	83***
Applied Mechanics	100.0	-	18***
Percent Male/Female	52.9	47.1	2660

+ Excluding subjects studied by fewer than ten respondents.

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.1$

Technical Drawing, Economics, Woodwork and Metalwork. These findings are in line with the published statistics of the DES and in terms of the analysis introduced in the last chapter one might expect the formal curriculum undertaken by women at school to constrain the range of subjects which they are able to pursue in higher education. Indeed, Arnot (1986) has argued that amongst school leavers women find it difficult to obtain craft apprenticeships because they lack passes in Woodwork, Metalwork, Technical Drawing, etc., with the result that they are often 'channelled' into work of a clerical or personal service nature (hairdressing, shop assistants, etc.), and partly-skilled light assembly work in, for example, the electronics, textile and pottery industries (see also Silverstone and Ward, 1980: 209). Amongst those women who go on to higher education one might expect their choice of degree subject to be constrained such that they would be more likely than men to undertake the more generalist courses in humanities and the social sciences and specialist courses leading to employment within the 'caring' professionals: nursing, teaching, social work, etc.. Moreover, men, were more likely than women, to have a technical qualifications (see Table 8.7), and this is important because students with such a qualification are often preferred on courses such as Engineering, Business Studies, Computing and Economics with the result that women may find it more difficult than men to obtain places on such courses.

Table 8.9 shows the proportions of men and women who undertook each of the 31 types of course included in the HELM sample. If a sex ratio in the range 60:40 to 40:60 is taken, if somewhat arbitrarily, as an indication of a sexually balanced course, then nine of the

Table 8.9: Subjects Undertaken by Graduate Men and Women

Row%	Men	Women	Number
Nursing	6.2	93.8	65
Textiles	11.5	88.5	87
Modern Languages	20.0	80.0	85
English Literature	23.6	76.4	55
Librarianship	27.0	73.0	100
Psychology	27.7	72.3	83
Hotel Administration	27.8	72.2	72
Interfaculty	37.7	62.3	151
Humanities	39.9	60.1	163
Com'tions Studies	42.7	57.3	96
Fine Art	43.1	56.9	72
Social Studies	46.7	53.3	122
Three D Design	50.6	49.4	83
Graphic Design	51.6	48.4	95
Science	58.7	41.3	143
Geography	60.7	39.3	89
Law	61.4	38.6	57
Pharmacy	61.7	38.3	81
Applied Biology	62.2	37.8	135
Environmental Science	64.7	35.3	85
Mathematics	64.8	35.2	54
Computer Science	66.7	33.3	54
Business Studies	67.6	32.4	105
Accountancy	73.1	26.9	53
Economics	77.8	22.2	54
Environmental Planning	82.5	17.5	63
Applied Chemistry	83.6	16.4	73
Urban Estate Mang't	86.6	13.4	82
Elec & Elec Eng'g	98.1	1.9	53
Civil Engineering	98.5	1.5	66
Production Eng'g	100.0	-	55
All	53.1	46.9	2630

Table 8.10: Type of Course by Gender

Row%	Gen'list	Gen'list Plus	Occup'nal Gen'list	Spec'list	-N-
Men	20.6	31.8	13.9	33.9	1400
Women	31.5	25.1	17.4	26.1	1236
Total	25.6	28.6	15.6	30.2	2630

CHI SQR p<0.001

thirty-one courses had a majority of women, sixteen had a majority of men and only six had roughly equal proportions of men and women. These findings are in line with expectation and support our hypothesis that the subjects and curriculum studied by girls at school is likely to exert a major influence on the courses which they pursue in higher education. Thus we see that women were far less likely than men to have studied engineering and science subjects and far more likely to have undertaken Nursing, Modern Languages, Textiles and Librarianship. These differences are also apparent in Table 8.10, which shows the vocational-specificity of courses broken down by gender, and from this we see that women were far more likely than men to have undertaken a generalist course and less likely to have undertaken a specialist one.

Part Three: Men and Women in the Graduate Labour Market

Using HELM data Chapman (1986) has examined the careers of graduate men and women during their first year in the labour market. His work suggests that men and women have different orientations towards work. Thus from Table 8.11 it can be seen that, relative to men, women were more likely to seek a career within which they would be working with people, caring for others and using their special skills and attributes. They were less concerned than men about their future salaries, the possibility of rapid promotion and the chance to exercise leadership. Men and women did not differ, however, as regards the stress which they placed on professional development, the chance to improve society and the opportunity to be creative and original.

Further analysis of the HELM data, by Chapman (1986), showed that women were more likely than men to be engaged in further study and were less likely to be unemployed. Women in work tended to be in lower-status occupations (mainly the semiprofessions and routine white-collar employment) than men, and they consistently rated the 'quality' of their work lower than men. Thus (see Table 8.12) women were less likely than men to require a degree, had fewer graduate colleagues, earned less and were more likely to feel overqualified. These differences remained even when allowance was made for the faculty within which graduates had studied.

Table 8.11: Preferred Characteristics of Long-Term Job by Gender

Meant ⁺	Men	Women	Difference
Opportunity to work with people	64	75	-11***
High salary	62	56	6***
Considerable leisure time	52	48	4***
Considerable job security	69	65	4***
Opportunity to help others	55	63	-8***
High prestige & social status	36	34	2*
Opportunity for professional development	71	71	-
Flexible working hours	46	47	-1
Potential for improving society	46	47	-1
Work which is not too exacting	18	19	-1
A strong possibility of rapid promotion	53	44	9***
Opportunity to be creative and original	68	67	1
Relative freedom from supervision by others	66	65	1
The chance to exercise leadership	57	53	4***
Opportunity to use one's special skills & abilities	79	82	-3***
Work which is continually challenging	81	83	-2*

+ Replies converted to percentages for ease of comparison

* p<0.1 ** p<0.01 *** p<0.001

Derived from Chapman (1986)

Table 8.12: Measures of Job Quality by Gender (Wave I)

Percent/....	Men	Women	Difference
Requiring a degree	53	40	13
Feeling overqualified	47	50	-3
Received job training	51	59	-8
Colleagues graduates (mostly all)	38	31	7
Earning over £6,000	40	21	-19

Derived from Chapman, 1986

In his paper Chapman did not examine the destinations of graduate men and women three years after graduation and neither did he treat gender as a dimension of social class. In the rest of this section Chapman's original work is extended upon, and the destinations of graduate men and women three years after graduation are examined. Attempts are also made to relate our findings to the theoretical approaches to gender and social class outlined earlier in this chapter.

Three years after graduation, as Table 8.13 shows us, the majority of graduates (87.3% of men and 80.7% of women) were in full-time employment. Women were, however, more likely than men, to be in part-time employment or not available for work - a finding which reflects the number of young mothers in the HELM sample.

Table 8.13: Employment Status by Gender

Row%	Full-time work	Full-time study	Part-time work	Unempl'd	Not Avail	-N-
Men	87.3	5.4	2.6	3.9	0.8	741
Women	80.7	4.7	6.9	3.8	5.0	680
Total	83.6	5.1	4.6	3.9	2.8	1421

CHI SQR $p < 0.001$

Table 8.14 shows the proportion of men and women employed in various occupations. From this Table we see that there are major differences in the occupations within which HELM men and women are employed. Thus women were far more likely than men to be employed in teaching, nursing, librarianship and art and design, and much less likely to be employed in engineering, computing and commercial occupations. The differences are, however, perhaps not as great as our previous discussion would have suggested they should have been. However, a substantial proportion if not the majority of graduate women, in Britain as a whole, are employed within education (see Table 8.3). Since graduates with education degrees were not included in the HELM sample, our findings may well underestimate the extent to which the graduate labour market is segmented by gender.

Table 8.14: Occupations of Graduate Men and Women

Row%	Men	Women	-N-
Nursing	3.8	96.2	53
Teaching	35.6	64.4	149
Librarianship	37.7	62.3	53
Art and design	42.2	57.8	102
Social work	44.2	55.8	43
Law	47.4	52.6	19
Pharmacy & medicine	57.8	42.2	45
Research/lab technicians	58.1	41.9	93
Commercial work	62.8	37.2	137
Computing	71.6	28.4	88
Engineering	91.1	8.9	158
Other prof & man	46.9	63.1	382
Other work	43.0	57.0	114
All	52.0	48.0	1436

CHI SQR $p < 0.001$

Women were more likely than men to work in the public/voluntary sector and were less likely to work in manufacturing - see Table 8.15.

Table 8.15: Employment Sector by Gender

Row%	Public/ Volunt'y	Manufac- turing	Commerce	Number
Male	39.1	29.4	31.5	647
Female	56.2	12.4	31.4	573
Total	47.1	21.4	31.5	1220

CHI SQR $p < 0.0000$

Moving on to a consideration of the social-class destinations of graduate men and women, we see from Table 8.16 that graduate women were far more likely than men to be employed in the semiprofessions, and were far less likely to be employed in engineering and related occupations, and as high-grade technicians. Interestingly, women were only marginally less likely than men to be employed as senior professionals: this is a reflection, in part, of the number of librarians in the HELM sample and the differences would probably have been larger had graduates with education degrees been included in the sample. Women were slightly more likely than men to be employed in the managerial trajectory, a category which includes clerks.

Table 8.16: Social-Class Destinations by Gender

Row%	Snr prof	Engin- eers	Semi- profs	HGTs	Managers /clerks	Lower class	-N-
Men	15.0	24.4	20.5	13.2	17.8	9.0	667
Women	13.6	3.2	43.2	9.7	19.4	10.9	588
Total	14.3	14.5	31.2	11.6	18.6	9.9	1255

CHI SQR $p < 0.001$

An examination of other measures of 'job quality' also suggested that women were in lower-status jobs than men. Thus from Table 8.17, we see that women were, on average, earning £1,400 a year less than

men, they rated their job prospects as poorer, were more likely to think that promotions were handled unfairly by their employers and were more likely to feel overqualified. Women were, however, more likely to require a professional qualification and were as likely as men to feel that the quality of their work had benefitted from having a degree.

Table 8.17: Other Measures of Job Quality by Gender

Mean/...	Men	Women	Difference
Salary	£9,443	£8,010	£1,433**
Good chance of promotion in coming year+	45	35	10**
Promotions handled unfairly+	26	32	-6*
Percent Agreeing/...	Men	Women	Difference
In preferred job	61%	59%	-2%
Quality of work benefits from degree	60%	60%	-
Feels 'overqualified'	28%	34%	-6%**
Employer employees less than 50	25%	28%	-3%
	* p<0.05	** p<0.01	

+ Mean expressed as a percentage.

Finally, Table 8.18 shows the replies given by graduates to a series of Likert-type attitude questions designed to examine the major characteristics of graduate employment. From this we see that significant differences exist in the replies given to only four of these questions, and generally men appeared to have better promotion prospects than women and were more likely to supervise others. The sexes did not, however, appear to differ as regards job autonomy, responsibility, initiative and motivation, and found their work equally challenging.

Table 8.18: Major Job Characteristics by Gender+

Job/....	Men	Women	Difference
Involves autonomy	74	71	3
Requires initiative	79	78	1
Requires motivation	73	72	1
Involves responsibility	73	74	-1
Involves professional development	59	51	8**
Rapid promotion possible	36	23	13**
Creative & original	54	49	5*
Involves leadership	49	51	-2
Continually challenging	67	66	1
Involves supervising others	41	36	5*
Has defined rules and regulations	50	51	-1

+ Replies converted to percentages for ease of comparison

* $p < 0.05$

** $p < 0.01$

Moving onto a consideration of why such differences exist in the occupations and social-class destinations of men and women, much of our analysis would tend to support the contention that, owing to differences in their early socialization and secondary education, the aspirations of graduate men and women differ with the result that women tend to be channelled into different degree courses and seek employment within different, and often lower-status, occupations than men. As was mentioned earlier in this chapter, Chapman (1986) has shown us (see Table 8.11) that there are differences in the orientations of graduate men and women towards work, such that women are more likely than men to want to work with people in a caring position whilst men place more stress on income and career advancement, and these differences can, in turn, be seen as reflecting differences in the socialization and secondary education of men and women graduates. Additional support for this contention comes from an examination of Table 8.19 which shows the major personality traits of graduates. It is difficult to know quite

how to interpret these data, although, in comparison with men, women expressed a greater interest in family, marriage and social problems and saw themselves as more sympathetic. As such, one might expect these traits to lead them to aspire to careers within teaching, nursing and social work. However, replies to some of the questions also add support for the contention that women may lack some of those traits which employers value. Thus women, in comparison with men, saw themselves as being less concerned about their careers, were less confident about their intellectual abilities, less numerate, less conservative and less likely to be swayed by argument than emotions. To the extent that employers have a preference for those with a strong commitment to their careers, who are confident and 'hard' (unsympathetic), this would tend to suggest that women are likely to be disadvantaged in the basic recruitment process. However, women 'scored' higher than men on a number of personality traits which employers might be expected to value, and they saw themselves as more practical, independent, reliable, industrious, adaptable and sociable than men.

Table 8.19: Personality Traits by Gender+

Mean/Percentage Score	Men	Women	Diff'ce
<i>Interests</i>			
Politics and public life	47	43	4***
Arts and culture	55	68	-13***
Amusement & leisure time	75	71	4***
Education	72	77	-5***
Academic Research	50	54	-4***
Family	79	85	-6***
Profession and work	76	80	-4***
Sociability and friends	82	84	-2*
Marriage	61	63	-2*

Personality Traits	Men	Women	Diff'ce
Intelligent	65	64	1
Creative	58	61	-3*
Swayed by argument rather than emotions	59	50	9***
Practical	64	66	-2*
Good at putting ideas into words	58	56	2*
Knowledgeable	62	58	4***
Confident of intellectual abilities	61	54	7***
Interested in new fields of study	58	62	-4***
Critical	69	67	2
Independent	74	76	-2*
Numerate	63	54	9***
Reliable	78	80	-2**
Sociable	71	74	-3***
Adaptable	73	76	-3***
Interested in social problems	56	65	-9***
Sympathetic	65	73	-8***
Shy	43	45	-2*
Religious	26	31	-5***
Industrious	66	69	-3***
Responsible	75	79	-4***
Conservative	45	40	5***
Life determined by ...	Men	Women	Diff'ce
Own wishes and intentions	71	73	-2**
Society's requirements	62	61	1
Own personal characteristics	76	78	-2**
Coincidences and luck	57	57	-

+ Replies converted to percentages for ease of comparison.

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.1$

A more important indication that our findings reflect differences in the socialization and secondary education of men and women graduates comes from an examination of differences in their courses of study. As was demonstrated in Chapter Seven, the course of study undertaken by graduates imposes constraints on the range of careers which they are able to pursue. In particular, as can be seen from Table 8.9, men and women differed in the specialist courses (which facilitate entry into specific careers) they undertook, women having a

preference for Nursing, Textiles, Hotel Administration and Librarianship, and men for Engineering, Accountancy and Computer Science. Moreover, there were similar differences in the vocational-specificity of courses undertaken by male and female graduates at postgraduate level and this can be taken as evidence that their aspirations differ.

Table 8.20: Postgraduate Courses by Gender*

Row%	Men	Women	-N-
<i>Vocational</i>			
Linguistics	-	100.0	12
Social Work	10.0	90.0	10
Business & Secretarial	21.1	78.9	57
Education	33.3	66.7	126
Law	68.4	31.6	38
Engineering	90.9	9.1	22
<i>Other Courses</i>			
Art & Design	37.8	62.2	37
Art & Social Science	66.7	33.3	21
Science	69.8	30.2	53
Mathematics & Computing	90.0	10.0	10
<i>Qualification</i>			
PGCE	27.0	73.0	111
Other professional qualification	42.3	57.7	194
Taught Masters'	60.4	39.6	91
Masters' (research)	63.6	36.4	22
PhD	79.3	20.7	58
No qualification	46.7	53.3	45

* Excluding courses undertaken by fewer than ten graduates.

Although the numbers in some categories are small, we see, from Table 8.20, that women were more likely to be found amongst those who had studied Linguistics, Social Work, Education, Art and Design and Business and Secretarial Studies, whilst men were over-represented amongst those who had studied Engineering, Law,

Science, Mathematics and Computing. Differences were also found in the level of qualification undertaken by men and women. In particular, men were more likely to have studied PhDs and Masters' Degrees which traditionally lead to careers within higher education, whilst women were more likely to have studied PGCEs and other professional qualifications.

From our earlier discussion it will be remembered that there is, however, an alternative explanation for our findings, namely that women are the 'victims' of exclusionary policies operated by employers and professional associations (Spencer and Podmore, 1987). If this is the case it might be expected to manifest itself in one of two ways: a) through differences in the ease with which men and women were able to obtain work, and b) through differences in the social status of men and women in the same social-class positions.

If graduate women are the 'victims' of the operation of exclusion policies by employers and professional bodies then this might be reflected in the rate of unemployment amongst graduate men and women, and in the ease with which they were able to find suitable employment. Chapman (1986) has already demonstrated that one year after graduation there were only minor differences in the rates of unemployment of men and women graduates and this was also true two years later (see Table 8.13). Further analysis of the HELM Wave I data set - see Table 8.21 - suggested that men and women did not differ as regards the difficulties which they encountered in finding suitable work.

Table 8.21: Difficulty in Finding Suitable Employment: Wave I

Number%	Men	Women	Diff'ce
Difficulty in obtaining any job	18.8	14.7	3.9
Difficult to find job appropriate to qual'ns	18.4	21.1	-2.7
Difficult to obtain preferred job	25.2	26.2	-1.0
Little difficulty in finding preferred job	21.6	19.3	-2.3
Number	1279	1135	

Source: Chapman (1986) p 14.

Table 8.22 presents the same information for graduate men and women three years after graduation. Some evidence for exclusion can be seen to exist in this Table in so far as women experienced greater difficulty in finding employment appropriate to their qualifications. However, analysis of the Table is complicated due to differences in the courses of study undertaken by men and women, and women reported fewer difficulties in finding the job they really wanted.

Table 8.22: Difficulty in Finding Suitable Employment: Wave III

Number%	Men	Women	Diff'ce
Difficulty in obtaining any job	9.9	10.5	-0.6
Difficult to find job appropriate to qual'ns	15.1	20.8	-5.7**
Difficult to obtain preferred job	27.1	27.2	-0.1
Little difficulty in finding preferred job	15.5	19.4	-3.9*
None of the above apply	6.1	6.2	-0.1
Number	750	692	

* p<0.1 ** p<0.01

Although it is difficult to be certain, these data would tend to

support the contention that differences in the employment patterns and social-class destinations of men and women graduates are not primarily related to the operation of exclusionary policies by employers and professional associations.

Nevertheless, should women in the same social-class position as men tend to be employed in less-prestigious occupations than this might point to the operation of exclusionary policies. To test this idea the income of men and women graduates undertaking similarly placed occupations within the social-class structure were examined together with the replies which they gave to a number of questions designed to measure job quality. Table 8.23 shows the mean income of men and women graduates by social-class position and occupation. Some evidence for the operation of exclusionary policies can be seen to exist in this Table and thus women in all social classes were earning less than men - the difference being particularly marked amongst senior professionals. Differences in the annual salaries of men and women undertaking the same occupation were not as marked, and women employed in five occupations - computing, librarianship, social work and other (low-status) occupations - were earning more than men. However, when other measures of job quality were examined no additional support was found for this contention as can be seen from Table 8.24.

Table 8.23: Mean Salaries by Gender and Social Class Destinations

Mean/Social Class	Men	Women	Difference
Senior Professionals	10,763	8,896	1,867
Engineers	10,332	9,926	406
Semiprofessionals	8,974	7,810	1,164
High-grade t'cians	9,564	8,340	1,224
Managers/clerks	9,213	8,559	654
Lower Class	6,396	5,644	752
Mean/Occupations	Men	Women	Difference
Engineering	10,503	9,135	1,368
Teaching	8,338	7,480	858
Research/Lab'y Tech'ns	9,319	7,459	1,860
Nursing	*	7,132	-
Pharmacy & Medicine	10,557	10,136	421
Computing	10,156	10,330	-172
Accounts & Finance	11,474	9,350	2,124
Librarianship	7,263	7,352	-89
Social Work	6,266	8,406	-2,140
Art & Design	10,277	8,441	1,836
Law	5,528	6,062	-534
Other Prof'l & Manag'l	8,597	8,090	507
Low Status	6,787	6,962	-175
All	9,471	8,003	1,468

* Only two men were employed in nursing

Table 8.24: Measures of Job Quality by Gender and Social-Class Destinations

% Feeling Overqualified	Men	Women	Difference
Senior Professionals	9.0	11.3	-2.3
Engineers	16.8	10.5	6.3
Semiprofessionals	29.1	27.8	1.3
High-grade t'cians	26.1	28.1	2.0
Managers/clerks	44.9	49.5	-4.7
Lower Class	59.3	73.0	-13.7
% Quality of work benefits from having a degree	Men	Women	Diff'ce
Senior Professionals	80.6	73.8	6.8
Engineers	84.6	84.2	0.4
Semiprofessionals	76.5	80.9	-4.4
High-grade t'cians	71.6	73.7	-2.1
Managers/clerks	50.8	57.0	-6.2
Lower Class	41.7	42.2	0.5

% In Preferred Occupations	Men	Women	Diff'ce
Senior Professionals	68.4	67.5	0.9
Engineers	67.3	63.2	4.1
Semiprofessionals	63.2	66.3	-3.1
High-grade t'cians	60.9	56.1	4.8
Managers/clerks	54.2	46.5	7.7
Lower Class	47.6	39.1	8.5

These findings are particularly interesting because they conflict with those of other studies which, as we have seen, strongly suggest that women within the professions and management tend to be employed within the less-prestigious and more marginalized positions (Fogarty et al., 1971; Silverstone and Ward, 1980; Spencer and Podmore, 1987). However, it should not be forgotten that the HELM study looked at the employment and social-class destinations of graduates at a relatively early point in their careers. Many graduates, and especially those who had undertaken a period of postgraduate study, had been in employment for less than two years, and most (both men and women) were presumably employed within relatively junior positions. Thus, it seems reasonable to argue that differences in the employment status of men and women graduates employed in similar work might be expected to grow with time. Men perhaps achieving promotion more rapidly than women, and women being channelled into specific - less attractive - areas where they are perceived by men to be particularly well suited. Were the same group of graduates to be contacted again say six or more years after graduation such differences may well be apparent.

Finally, before concluding this chapter reference should be made to differences in the relationship which exists between the social-class origins and destinations of graduate men and women, which has been shown to be stronger for men than women. The reasons

for this should now be apparent to the reader, because, as has been shown, graduate women tend to aspire to lower-status occupations than men, and they tended not to have undertaken the more specialist courses which facilitate entry into the senior professions (such as Engineering and Accountancy). In consequence, graduate women as a whole tend to find employment within a much narrower range of relatively low-status occupations than men, and this, in turn, might be expected to obscure the nature of the relationship which might exist between the social-class origins and destinations of graduate women.

Conclusion

In this chapter the participation of men and women in higher education and their eventual employment and social-class destinations have been examined. In Part One theoretical approaches to the study of social class were examined which argue that girls and young women are socialized into a subordinate social-class position, vis-a-vis men, within the home and the school. It was hypothesised that such socialization, both at home and at school, would have a major influence upon the school curriculum undertaken by girls which in turn would both constrain the range of degree-level courses which they could pursue in higher education and lead them to aspire to a different range - and often lower-status - jobs than men. Considerable support for this contention was found in the HELM data set. Large differences were found to exist in the school curriculum undertaken by graduate men and women which, in turn, appears both to have affected their aspirations and to have channelled them into different degree courses. The employment

destinations of men and women reflected these differences in the courses which they had undertaken and women tended to be employed in lower-status occupations, earned less and rated the quality of their work as inferior to that of men. Little support for the contention that women might be the 'victims' of the operation of exclusion policies by employers and professional associations was found, although there are reasons for believing that such exclusion policies might exist, evidence for which might emerge some years after graduation.

CHAPTER NINE: ETHNIC MINORITIES IN HIGHER EDUCATION AND THE GRADUATE LABOUR MARKET

In this chapter the participation of Britain's ethnic minorities in higher education, together with their members' early career histories, is discussed in relation to the HELM data. Part One of the chapter looks at Marxist and Weberian approaches to ethnicity and social class. In Part Two the role of public sector institutions in providing an avenue of social mobility for black people is discussed, and, finally, in Part Three we look at the experiences of black graduates in the labour market. It should, however, be stressed that we are specifically concerned, in this chapter, with the experiences of *black Britons* as opposed to people domiciled overseas who graduated in this country.

Part One: Ethnic Minorities and Social Class

In our Chapter One discussion of social class it was briefly mentioned that some Marxists and Weberians have attempted to expand the concept of class in such a way as to include within it different ethnic groups.

The Marxist approach (associated with Castles and Kosack: 1973; and Phizacklea and Miles: 1980) asserts that, although both black people and the white working class form a part of the same social class in so far as both are propertyless, black people can nevertheless be differentiated from the white working class in so far as they constitute an *under class* or *class fraction* which differs from the

white working class in several important respects. Firstly, black people tend to be concentrated in what economists term the secondary sector of the economy whereas white workers tend to be employed in the primary sector (Doeringer and Piore, 1971). The importance of this differentiation is that whilst workers in the primary sector tend to be employed in skilled work and, to some extent, enjoy job security, those in the secondary sector tend to be employed in unskilled and semiskilled work, are concentrated in a narrow range of industries and have little job security (Phizacklea and Miles: 1980). Secondly, although in objective terms both black and white workers may form a part of the working class, in subjective terms they often differ in how they view their class position. Thus the indigenous working class often views black workers with suspicion in so far as they compete for similar jobs in the marketplace. Finally, migrant labour (as opposed to black labour) often has fewer political rights than the indigenous working class, may face the prospect of deportation and be excluded from trades unions.

It will be recalled from our discussion in Chapter One, that Weberians define social class primarily in terms of the market place. Each individual is seen to possess certain marketable skills or attributes and social classes can be thought of as consisting of groups of people who share broadly similar market and work situations. In this approach ethnicity can be thought of as a dimension of social class if, because of their ethnicity, different groups are in an advantageous or disadvantageous position in the labour market. Thus black people can be thought of as a social class if employers exhibit a tendency to employ them within the less skilled and more mundane occupations. A broadly similar position is

taken by the Weberian Parkin (1979: 91-3) who using the concept of exclusion has argued that many black people occupy a dual class position, in so far as not only do they occupy a subordinate position vis-a-vis the bourgeoisie, but are also excluded from many of the more prestigious and better paid manual jobs as a result of the tactics adopted by trades unions in an attempt to maintain the more advantageous position of their predominantly white membership.

Figure 9.1 illustrates those approaches to social class, both Marxist and Weberian, which argue that black people constitute an under class or class fraction.

Figure 9.1: Approaches to the Black Under Class

Bourgeoisie
Middle class
Proletariat
Under class

There is some empirical support for these approaches. The Labour Force Survey for 1985 found that unemployment amongst males from Afro-Caribbean and Indo-Pakistani origins at 22.7% and 22.1% respectively was twice that for Britain's white population (10.7%). Moreover, unemployment amongst young black people is a particularly serious problem and the 1982 PSI survey found that whilst 22% of white people aged 20-24 were unemployed the comparable figure for those from West Indian origins was 42% compared with a figure of 26% for those of Asian origin (Brown, 1984: 190). Black people as a

whole tended to earn less than UK Europeans and were more likely to be employed in manufacturing (vehicles, metal, textiles, clothing and ceramics), transport and communications and routine service work (Braham et al., 1981: 99-101; Brown, 1984: 202). However, as Table 9.1 shows, both West Indian and Asian workers are to be found in all social classes. Nearly half of West Indians (48%) were employed within skilled manual occupations and 13% of Asians (but 19% of whites) were professionals/employers.

Table 9.1: Job Levels of Male Employees By Ethnicity

Column%	White	West Indian	Asian
Professional & employer	19	5	13
Other Non-manual	23	10	13
Skilled Manual & Foreman	42	48	33
Semiskilled	13	26	34
Unskilled Workers	3	9	6
Total (unweighted)	591	467	1041

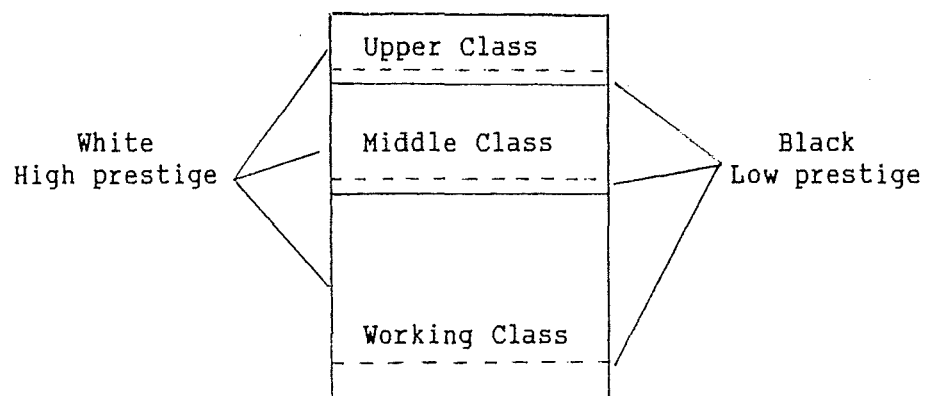
Source: Brown, 1984: 197

In view of these and similar findings, Allen and Smith (1974) argue that, whilst the Marxist approaches and that of Parkin outlined earlier might help us to analyse the social-class position of many West Indians and their families who tend to be employed in much lower-status jobs than whites, it falls down in analysing the position of many people from Asian origins who tend to be employed within all social classes.

In the last chapter, which looked at gender as a dimension of social class, it was suggested that although women are to be found within all social classes they tend to occupy less-prestigious positions than men within each. Similarly, black people may tend to occupy

less-prestigious positions than white people within each social class - see Figure 9.2. Several reasons can be advanced for believing that this might be so. Like women, employers may hold stereotyped images of black people as being unsuited for certain types of work, where for instance they believe they may lack certain personality traits, or may fear that their clients or workforce might object. Moreover, following Parkin (1979) black people might be the victims of exclusionary strategies operated by trades unions and professional associations.

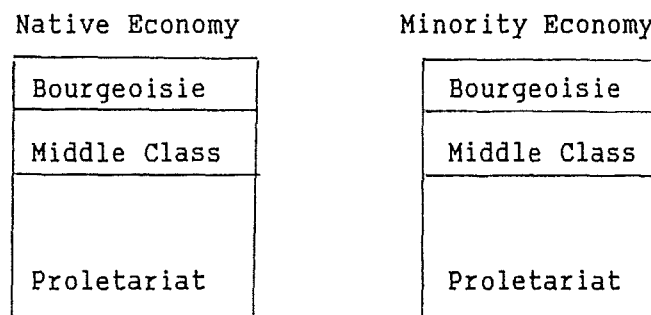
Figure 9.2: Alternative Social-Class Schema



Rex and Tomlinson (1979) and Rex (1986), also arguing from a Weberian prospective, accept much of what the Marxists, Castles and Kosack and Phizacklea and Miles, and the Weberian Parkin have to say regarding the social-class position of black people. However, they point out that social class was only one of three dimensions of social stratification identified by Weber - also important are the concepts of status and power. Rex (1986) goes on to argue that many black people live in distinct status groups which tend to have different life styles, live in distinct communities (often in poorer inner-city areas), are not well integrated into the trades unions, and seek support and comradeship from their kith, kin and immediate

community rather than labour unions, the major political parties and state-run welfare agencies. Moreover, these status groups can be differentiated not only from the indigenous working class but also from one another. Partly because of the existence of distinct black communities and the exclusion of black people from some industries and occupations, there might also exist a dual economy or labour market. The concept of a dual labour market as originally devised by Doeringer and Piore (1971) saw black people as predominantly employed within the secondary sector of the economy where their earnings were low, they enjoyed little job security and were employed in mainly unskilled and semiskilled jobs. In contrast Rex (1986: 75-7) suggests that two or more independent economies might exist for native and minority groups, which might also be divided into distinct social classes. In this approach the separate minority economies are seen, to a large extent, to be self-contained with their own employers, manual workers, shopkeepers and so forth, drawn from one specific ethnic group. In practice it is unlikely, however, that total segmentation of the native and minority economies would exist and some overlap would exist between the two - see Figure 9.3.

Figure 9.3: Dual Class Model of the Native and Minority Social Class Schemas



Derived from Rex, 1986:76

Before concluding this section, it should be mentioned that so far in this chapter we have tended to refer to Britain's black population as if it were a single and unified group. This is far from the case and the 1988 edition of *Social Trends* shows us that there were c. 534,000 people of West Indian descent, c. 760,000 people of Indian descent, c. 397,000 people of Pakistani descent, c. 103,000 people of Bangladeshi descent, c. 115,000 of Chinese descent and c. 523,000 others living in the United Kingdom. Each of these groups can be differentiated from the others and from the predominantly white native population in so far as they originate from different countries, are members of distinct ethnic groups and profess different religious beliefs. As we shall see in the following sections, differences exist in the average academic attainments of each of these groups, their degree of participation in higher education and in their degree of success in the labour market.

Part Two: Participation in Higher Education

The participation of Britain's ethnic minorities in higher education has been neglected until very recently, as a casual glance at both government publications and more learned works reveals. The Robbins Report (1963: 49-51; App. 2 (B): 1-3), whilst looking in some detail at the social-class and educational origins of British students, did not look at their ethnic origins although a section was devoted to overseas students (App. 2. (B): Part VIII). The 1966 White Paper *A Plan for Polytechnics and Other Colleges* (Cmnd. 3006) also ignored ethnic minorities and the most recent government White Paper, *Higher Education: Meeting the Challenge* ((cm. 114) 1987: 5-13), whilst

acknowledging the under-representation of students from working-class origins in both the universities and public sector institutions makes no specific reference to ethnic minorities.

In similar fashion Abbott (1972) makes only six insignificant references to 'black' students and then, with only one exception, in regard to the United States. But, Abbott's single reference is an improvement on the works of Donaldson (1975) and Whitburn et al. (1976) whose indexes contain not a single reference to 'black' students and graduates. Even Edwards (1982), in one of the most exhaustive works on the social-class origins of students in higher education, does not appear to have looked at ethnic minorities. The reason for this neglect is not hard to find, and Britain's 'black' population is a comparatively new phenomenon - the proportion of people of New Commonwealth and Pakistani descent within the country's population having risen from 0.5% in 1945 to 1.7% in 1966 and 3.9% in 1980 (Brown, 1984: 37).

What we do know about the participation of ethnic minorities in higher education is that those from West Indian origins are far less likely to take part than those from both Asian and UK European origins. Thus research by the Rampton Committee (1981) found that only 2% of school leavers from West Indian origins went on to undertake a degree in comparison with 8% of Asian and 9% of all school leavers in the six LEAs examined. Table 9.2 breaks down these figures by sectors.

Table 9.2: Participation in Higher Education by Sector and Ethnicity

	All School leavers	West Indian	Asian
Public sector	4%	1%	5%
University	5	1	3
Total	9	2	8

Source: Little and Robbins, 1981: 58

These findings have, however, been questioned. Asians were less likely to go into full-time employment than all school leavers and may have entered higher education because they experienced greater difficulties in finding suitable employment and the destinations of 25% of Asian school leavers, but only 8% of all school leavers were unknown (Little and Robbins, 1981: 51). Moreover, Rampton does not appear to have differentiated his findings according to social-class origins, with the result that his findings might be a reflection of the social-class as opposed to the ethnic origins of his sample (Jeffcoate, 1982: 14). Nevertheless the findings do suggest that young people from Asian origins, in marked contrast to West Indians, are about as likely as young white people to participate in higher education. Similar findings to these were also found by Croft (1983) in his study of fifth- and sixth-formers in an outer London borough and Gupta (1977) in his study of Asian school leavers from two London comprehensive schools. Croft's work supported the contention that West Indian children were the lowest achievers and much less marked differences existed between Asian and White youngsters even when controls were introduced for social class. Gupta's (1977) work is particularly interesting in so far as it suggests that young people from Asian origins have higher aspirations than their white counterparts in so far as a higher proportion expressed a wish to

enter higher education and they were more likely to aspire to white-collar employment. So far in this discussion, we have treated Asians as a unified group when, in fact, differences have been found to exist in the average academic attainments of different Asian groups. In particular, research undertaken as a part of the *Labour Force Survey* suggests that people of Indian descent are far more likely to possess a degree-level qualification than those of Pakistani and Bangladeshi descent (see *Social Trends*, 1988: 62).

One of the few studies of ethnic minorities in higher education was that undertaken by Lyon (1988), who looked at the social and educational origins and courses of study undertaken by students at South Bank Polytechnic in central London which has a particularly high proportion of black students. Owing to the absence of comparable national data, Lyon's work needs to be interpreted with some care. Nevertheless out of a total of 4,814 students, 5% described themselves as Caribbean, 10% as Asian and 85% as European. As regards their sex, men outnumbered women by a ratio of 7:3 amongst both Asian and European students, whilst 60% of Caribbean students were women. Black students were more likely than Europeans to come from manual origins: the figures being 38% of Europeans, 53% of Asians and 65% of Caribbeans. Both Asian and Caribbean students were more likely to be mature and they had a much more varied range of entry qualifications. Interesting differences were also found in their courses of study and whilst Asians were more likely than other groups to study engineering, Caribbean students were more likely to study education, humanities and social sciences, although these findings may, in part, be a reflection of gender differences in the students undertaking these courses.

The HELM and CRE Studies

The origins and employment histories of HELM graduates one year after graduation and differentiated according to their ethnic origins have already been examined in a paper by Brennan and McGeevor (1985). When they undertook their work, however, they lacked relevant data on the social-class origins and educational histories of graduates and looked at their destinations only one year after graduation. Moreover, their work was mainly descriptive in nature and they did not attempt to relate their findings to theories of social class and ethnicity. In the rest of this section we build upon the work of Brennan and McGeevor, and examine the social-class and educational backgrounds of HELM graduates. In the next section we look at the occupational and social-class destinations of HELM respondents two and three years after graduation.

Firstly, however, it is necessary to say something about the response rate to the three HELM questionnaires from the different ethnic groups. In total only 120 Asians (4.5% of graduates), 19 (0.7%) Caribbeans (or West Indians) and 22 (0.8%) Africans replied to the Wave I HELM questionnaire and the response to the second and third waves was even lower as Table 9.3 shows.

Table 9.3: Response Rates by Ethnicity

	Wave I	Wave II	Wave III
African	22 (0.9)	9 (0.5)	4 (0.3)
Caribbean	19 (0.8)	6 (0.4)	7 (0.5)
Total Afric/Carib	41 (1.6)	15 (0.9)	11 (0.8)
Asian	120 (4.7)	51 (3.1)	33 (2.5)
UK European	2282 (90.2)	1549 (94.1)	1266 (94.5)
Other European	54 (2.1)	22 (1.3)	20 (1.5)
Other World	32 (1.3)	9 (0.5)	10 (0.7)
Number	2529	1646	1340

(Figures in brackets show the percentage of people in each group)

Because of the small sample sizes and 'distortions' which may be introduced into the analysis as a result of differences in the courses undertaken by graduates, their sex, class of degree and institution attended, African and Caribbean graduates were combined together into a single group and resort was made to the use of matched samples in much of the analysis which follows. The need to combine African and Caribbean graduates is unfortunate because, as shall be shown in the following pages, the two groups differ in several important respects. This was, however, also the approach taken by Brennan and McGeevor (1985: 19) in their study based upon the Wave I questionnaire. Full details of how the matched samples were taken is given in the Appendix to this chapter. Suffice it to say here that attempts were made to 'match' each African/Caribbean and Asian graduate with a European of the same sex who had undertaken the same course of study and obtained the same class of degree.

In Chapter Two it was briefly mentioned that the author also had access to the data set of a related study commissioned by the CRE

(Commission for Racial Equality). It should, however, be mentioned that, in order to sample as many black graduates as possible, the institutions included in this study were deliberately chosen because they were situated in areas known to have large black populations - principally London, the West Midlands, the North West and West Yorkshire. If, as seems likely, universities and colleges recruit a high proportion of their students from their immediate localities more black graduates would have been sampled than would have been the case had a random sample been taken. By taking a large sample of black graduates it was hoped to look at their careers in greater detail than would otherwise have been possible. But, because the sample is not a random one, it is not possible to calculate the extent to which the findings fully reflect the experiences of black graduates as a whole.

Unfortunately the number of black graduates who took part in the CRE study was not as high as had been hoped, and of the 813 respondents 10 (1.2%) were African, 18 (2.2%) were Caribbean, 44 (5.4%) were Asian, 15 (1.8%) were Afro-Asian, 680 (85.6%) were UK European and there were 46 (4.7%) others. Overall 21.5% of public sector but only 4.8% of university graduates were black. Why the universities should have such a low proportion of black (British) students is not known, although it does suggest that public sector institutions may draw a higher proportion of their students from their immediate localities than the universities (see also Whitburn et al., 1976). Finally, because of the small numbers involved, use was again made of a matched sample and African and Caribbean graduates on the one hand and Asian and Afro-Asian graduates on the other were combined (see Lyon and Gatley, 1988).

Social Mobility

We now move on to a consideration of the role of public sector institutions in providing an avenue of social mobility for black people. Table 9.4 shows the proportions of Asian, African, Caribbean and other graduates included in the HELM sample.

Table 9.4: Ethnic Origins of HELM Graduates

Col%	HELM	Great Britain
Asian	4.7%	2.6%
African	0.8	1.0
Caribbean	0.9	0.2
Other	93.7	96.2

Source: *Social Trends*, 1988: 26

At first sight this Table appears to suggest that, whilst Asians are more likely than white people to participate in higher education, Caribbeans are only marginally less likely to do so. Overall 4.7% of HELM respondents, but only 2.6% of the country's population are of Asian origin and whilst 0.8% of HELM respondents were of Caribbean descent 1.0% of Britain's population was. This finding is interesting in so far as it conflicts with the findings of those studies cited earlier in this chapter which suggest that Caribbean people are far less likely, and Asians as likely, to participate in higher education as UK Europeans. It is, however, a conclusion which can be questioned.

Nationally a higher proportion of Britain's black population are aged under thirty (*Social Trends*: 1988: 26) and because of this the national figures, quoted in Table 9.4, probably under-estimate the

proportion of black people at an age in which they might participate in higher education. More importantly, however, the way in which the sample was taken has probably artificially inflated the number of black graduates included in the HELM sample. Nationally, black people tend to live in a relatively small number of areas where they form a particularly high proportion of the population (Brown, 1983: 20-1). Were institutions situated in these areas (eg London and the West Midlands) over-represented in the HELM sample, then this would have inflated the number of black people included in the sample. Similarly, as shall be shown later in the chapter, black people within the HELM sample, and Asians in particular, tended to undertake a limited number of courses. Again were such courses over-represented in the HELM sample then this may also have inflated the numbers of black graduates there.

Even so, the HELM figures do show that public sector institutions are providing places for Britain's black population. When it is recalled that 21.5% of public sector but only 4.8% of university graduates who replied to the CRE study were black, the overall impression created is that public sector institutions are catering for the needs of Britain's black population to a much greater extent than the universities. This suggestion must, however, be set alongside our earlier observation that, because of the way in which the CRE sample was taken, it is not possible to calculate the extent to which respondents were representative of graduates as a whole.

Characteristics of Black Graduates

In Chapter Four it was argued that graduates from working-class origins are, in several ways, atypical of their social class, in so far as they share a number of characteristics with those from more middle-class backgrounds: many had a mother employed in a white-collar (clerical or semiprofessional) occupation, their mothers tended to be well educated, many had a close relative (mother, sister or brother) who had also participated in higher education, and they tended to come from small families. They were different in a number of ways and they were more likely to be male than female and tended to be somewhat older, but in neither case were the differences particularly great. In this section a similar analysis is undertaken of black graduates to see in what ways they may be different from UK Europeans.

Table 9.5 shows the social-class origins (father's occupation) of the different ethnic groups. From this it can be seen that, like UK Europeans, only a minority of graduates from each of the minority groups came from manual backgrounds.

Table 9.5: Social-Class Origins by Ethnicity

Col%	African	C'bean	Asian	UK Euro	Other	All
Snr Prof	28.9	6.3	15.7	18.7	17.1	18.5
Snr Mangt	9.5	6.3	6.5	11.4	7.9	11.0
Semiprof	23.8	18.8	18.5	13.5	7.9	13.7
Jnt Mangt	-	6.3	1.9	10.1	9.2	9.5
Whitecolr	9.5	6.3	9.3	9.0	10.5	9.0
Selfempd	23.8	12.5	19.3	10.8	27.6	11.9
LGT	4.8	-	4.6	6.2	6.0	6.1
Manual	-	43.8	24.1	20.3	17.1	20.3
Number	21	16	108	2084	76	2305

Only amongst Caribbean graduates do a significant proportion (43.8%) come from working-class backgrounds and none of the African graduates had a manual worker for a father. Analysis of the social-class of respondents' mothers and of their highest educational attainments confirm the impression that black graduates, like UK Europeans, tend to come from middle-class backgrounds. Thus, from Table 9.6, it can be seen that within all the ethnic groups higher proportions of mothers were employed in white-collar occupations than manual ones, and 28.6% of African and 31.3% of Caribbean mothers were employed in professional or managerial occupations. Table 9.7 shows us that although Caribbean and Asian mothers were less likely than UK Europeans to possess an educational qualification the differences are not particularly marked and, when their ages are taken into account, it is highly likely that many had attended a selective school.

Table 9.6: Social-Class of Respondents' Mothers by Ethnicity

Row%	Prof/ Mang'l	Personal Service	Self- empl'd	Manual	Unwaged	-N-
African	28.6	9.5	23.8	-	38.1	21
Carib'n	31.3	12.5	-	25.0	31.3	16
Asian	9.3	5.6	2.8	14.8	67.6	108
UK Euro'n	28.1	29.9	2.7	6.5	32.9	2084
Other	15.8	10.5	6.6	6.6	60.5	76
Total	26.8	27.8	3.0	6.9	35.5	2305

Table 9.7: Highest Educational Attainments of Respondents' Mothers by Ethnicity

Row%	None	O-level	A-level /sub degree	Degree	Other	-N-
African	27.3	22.7	36.3	9.1	4.5	22
Carib'n	55.6	27.8	5.6	5.6	5.6	18
Asian	50.9	28.1	14.9	4.4	1.8	114
UK Euro'n	40.9	28.4	19.4	5.5	5.9	2151
Other	37.7	32.5	15.6	5.2	9.1	77
Total	41.2	28.4	19.1	5.5	5.8	2382

Moving on to a consideration of the sex of graduates, it is clear from Table 9.8 that women are under-represented amongst both Asian and African graduates, and there is near equality in the proportions of men and women in the other ethnic groups.

UK Europeans were less likely than black graduates to be mature entrants (aged 21 or over on entry to higher education), although with the exception of African graduates - see Table 9.9 - only minor differences existed in their ages. Moreover, as Table 9.10 shows, Asian and Caribbean graduates were more likely than UK Europeans to have started their degree courses straight after leaving school.

Table 9.8: Ethnic Origins by Gender

Row%	Male	Female	Number
African	90.9	9.1	22
Caribbean	57.9	42.1	19
Asian	72.9	27.1	118
UK European	52.2	48.0	2262
Other	51.8	48.2	85
All	53.4	46.6	2506

Table 9.9: Ethnic Origins by Age on Entry to Higher Education

Row%	Under 21	21-24	25 Plus	Number
African	40.9	18.2	40.9	22
Caribbean	61.1	22.2	16.7	18
Asian	59.0	31.6	9.4	117
UK European	76.8	14.1	9.1	2243
Other	40.5	35.7	23.8	84
All	74.3	15.7	9.9	2484

Table 9.10: Proportions Starting their Degree Courses Straight
After Leaving School by Ethnicity

	Started Degree Straight after School	Percent	-N-
African	4	18.2	22
Caribbean	11	57.9	19
Asian	73	60.8	120
UK European	1116	48.9	2282
Other	27	31.2	85
All	1231	48.7	2528

To conclude this section, it has been shown that black graduates, from each of our ethnic groups, have much in common with their UK European counterparts. As measured by their fathers' and mothers' occupations, graduates from each of the minority groups were, like UK Europeans, more likely to come from middle-class rather than working-class backgrounds, and significant proportions of their mothers possessed a qualification at or above GCE O-level standard. Asian graduates were less likely than the others to be female and, with the exception of African graduates, there were only minor differences in the proportions of mature entrants. Relating these findings to the Marxist and Weberian approaches to ethnicity and social class, it is clear from this work that public sector institutions do not appear to be drawing their black student intake from a black under class, but rather are drawing them from the more privileged sections of Britain's black communities, and, as such, black graduates would appear to be strongly atypical of black people as a whole, who tend to be employed within manual occupations. Thus, to a large extent, it seems reasonable to argue that participation in higher education is more strongly related to the social-class (occupational) backgrounds of graduates than it is to ethnicity.

Secondary Education

Research into the factors which affect the educational performance of black children has tended to focus upon those associated with both the home and school. It is argued that many black children are handicapped in so far as they are brought up in small, often overcrowded, inner-city homes which lack basic facilities. Moreover many West Indian children are disadvantaged because they originate from single-parent families, and many of their mothers go out to work (see Tomlinson, 1983: 64; Brown, 1984: 37). Since our principal concern lies in analysing the educational origins and the social-class destinations of black graduates we shall have little to say about home-based factors, but suffice it to say here that when one recalls the social-class origins of our sample, it seems reasonable to suggest that relatively few of our HELM graduates (apart possibly for some of the Caribbeans) would have been unduly disadvantaged as a result of such home-based factors.

More important from our point of view is research which suggests that many teachers hold stereotyped images of black children (see Tomlinson (1983: 73-8) for a review of the literature), which lead them to under-estimate their academic ability with the result that they tend to underachieve in comparison to children who are more favourably evaluated by teachers. If this is so, then one might expect this to be reflected in the school curriculum undertaken by black children such that Asian, African and Caribbean graduates would be more likely to have studied a utilitarian, as opposed to an academic, school curriculum, and it is to an examination of the

secondary education of different ethnic groups that we now turn.

Table 9.11: Type of School Attended by Ethnicity

Row%	Modern	Comp.	Grammar	Indep't	Other	-N-
African	4.8	19.0	23.8	23.8	28.6	21
Carb'n	10.2	47.4	31.6	-	10.6	19
Asian	12.6	33.6	20.2	6.7	26.9	119
UK Eur'n	7.1	32.5	31.1	12.3	16.9	2255
Other	9.5	17.9	20.2	8.3	44.0	84
All	7.5	32.1	30.1	11.9	18.4	2498

From Table 9.11 it can be seen that sizeable proportions of graduates from each of our ethnic groups had attended a selective (grammar or independent) school which, in terms of Turner's model discussed in Chapter Seven, suggests that they were sponsored through secondary education. When one considers the social-class origins of graduates, this finding is not as surprising as it might at first appear (see Table 9.5). Graduates from Caribbean and Asian backgrounds were, however, more likely to have attended a secondary modern school, and these were also the two groups who were most likely to have attended a technical college - Table 9.12.

Table 9.12: Attendance at an F.E. College by Ethnicity

Groups	Attended	Percent	-N-
African	9	42.9	21
Caribbean	11	57.9	19
Asian	70	59.3	118
UK European	934	42.2	2215
Other	46	56.1	82
All	1070	43.6	22455

Some support for the contention that graduates from ethnic minority backgrounds might have a tendency to have undertaken a utilitarian rather than an academic curriculum is given in Table 9.13. In particular, it can be seen that Asian and Other graduates were by

far the most likely to have undertaken a utilitarian curriculum and were the least likely to have undertaken an academic one. UK European graduates were the most likely to have undertaken an academic curriculum, and African and Caribbean graduates were the most likely to have done a technical one.

Table 9.13: Type of School Curriculum by Ethnicity

Row%	Util'n	Mixed	Academic	Technical	-N-
African	18.2	45.5	18.2	18.2	22
Carb'n	31.6	31.6	21.1	15.8	19
Asian	44.0	34.9	14.7	6.4	119
UK Eur'n	32.1	34.0	26.5	7.5	2106
Other	43.7	28.2	14.1	14.1	71
All	32.8	33.9	25.4	7.8	2327

Given the tendency for Asian and Other graduates to undertake a utilitarian curriculum, one might expect this to be reflected in their choice of degree-level subject. In fact, as Tables 9.14 and 9.15 show, this does not appear to be the case, and Asian graduates were the most likely to have undertaken a specialist course. However, further analysis of the data shows that 36 of the 57 Asian graduates with a specialist degree had studied just two courses - Pharmacy and Electronic and Electrical Engineering. If these courses are excluded, the differences in the vocationally-specificity of courses undertaken by Asian and UK European graduates are much less marked. Moreover, nearly 70% of Asian graduates were men, and, as was mentioned in Chapter Eight, men were far more likely than women to have studied a specialist degree course. Owing to the small numbers involved it is difficult to make any specific comments about African and Caribbean graduates - although they were slightly more likely than UK Europeans to have undertaken a generalist or generalist-plus course.

Table 9.14: Course of Study by Ethnicity

	Total Graduates	African	Asian	Carib'n	%Black
Pharmacy	83	2	22	-	28.9
Elec/Elec					
Engineering	53	-	14	1	28.3
Economics	54	3	7	-	18.6
Law	57	-	6	2	15.8
Science	143	4	17	1	15.4
Mathematics	54	-	7	-	13.0
Applied Chemistry	73	1	3	3	9.6
Psychology	83	-	6	2	9.6
Accounting	52	1	4	-	9.6
Applied Biology	135	2	10	-	8.9
Computer Science	54	-	3	-	5.6
Interfaculty	151	1	5	2	5.3
Social Studies	122	2	2	2	4.8
Civil Engineering	66	-	3	-	4.5
English Language	56	1	1	-	3.6
Urban Estate					
Managment	82	-	1	2	3.6
3 D Design	83	-	2	1	3.6
Graphic Design	95	2	1	-	3.2
Business Studies	105	-	2	1	2.9
Prod'n Engin'ing	55	-	1	-	1.8
Nursing	65	-	1	-	1.5
Hotel & Catering					
Administration	72	-	1	-	1.4
Geography	89	1	-	-	1.1
Textiles/Fashion	87	-	1	-	1.1
Communications					
Studies	96	-	1	-	1.0
Humanities	164	-	-	1	0.6
Modern Languages	85	-	-	-	-
Librarianship	101	-	-	-	-
Environmental					
Planning	63	-	-	-	-
Environmental					
Science	85	-	-	-	-
Fine Art	72	-	-	-	-

Source: Brennan and McGeevor, 1985

Table 9.15: Type of Course by Ethnic Origins

Row%	Gen'list	Gen'list Plus	Occ'nal Gen'list	Sp'lists	-N-
Afric/Carib	25.0	35.0	5.0	35.0	40
Asian	7.5	39.2	5.0	48.3	120
UK Eur'n	27.0	28.2	16.3	28.5	2278
Other	16.5	29.4	12.9	41.2	85
All	25.6	28.9	15.5	30.0	2523

These two Tables do, however, suggest that Asian graduates may be more strongly instrumental in their view of higher education than UK Europeans, deliberately choosing their degree courses for vocational rather than expressive reasons. To test this idea, the replies given by respondents to a series of questions on the functions of higher education were examined, comparisons being made between the replies given by Asian and African/Caribbean graduates, all UK Europeans and the two groups of matched Europeans. Table 9.16 shows the replies given by Asian graduates.

Table 9.16: Functions of Higher Education: Asians+

U K Europeans	Asians	Matched Asians	Diff- erence
71 Training for industry	78	74	4
79 Personal growth and development	79	75	4
53 Help disadvantaged groups	63	49	14**
9 Perpetuation of a social elite	36	11	25**
52 Production of critical intellectuals	63	47	16**
45 Preservation of society's culture.	47	32	15**
75 Promotion of research	81	77	4

+ Replies converted to percentages for ease of comparison.

** $p < 0.001$

This Table is interesting and suggests that, once allowance is made for course of study and gender, Asian graduates and their matched UK European counterparts do not differ significantly in the stress which they place on the role of higher education in providing trained manpower for industry and in promoting the personal growth and development of individual students. Interestingly, Asians placed far more stress than their matched counterparts and all UK Europeans on the role higher education can play in improving the position of

disadvantaged groups which strongly suggests that they perceive higher education to be an avenue of social mobility. In sharp contradiction to this, however, they are also more likely to value higher education because it perpetuates a social elite.

Table 9.17: Functions of Higher Education: African/Caribbeans+

U K Europeans	Afric/ Carib	Matched A/C	Diff- erence
71 Training for industry	79	72	7
79 Personal growth and development	79	79	-
53 Help disadvantaged groups	68	48	20**
9 Perpetuation of a social elite	13	5	8*
52 Production of critical intellectuals	55	48	7
45 Preservation of society's culture.	44	48	-4
75 Promotion of research	78	79	-1

+ Replies converted to percentages for ease of comparison.

** p.<0.01

* p.<0.10

Broadly similar replies were given to these questions by African/Caribbean graduates and their matched counterparts - see Table 9.17 - and again we note that African/Caribbean graduates placed more stress on the role which higher education might be playing in providing an avenue of social mobility for disadvantaged groups.

We may conclude this section by saying that both Asian and African/Caribbean graduates, like UK Europeans, tend to come from middle-class, rather than working-class, backgrounds and as such are probably atypical of most black people in Britain today. Also, like UK Europeans, many black graduates appear to have been sponsored through secondary education, although Asian graduates were the most

likely to have attended a secondary modern or comprehensive school and they were also the most likely to have undertaken a utilitarian curriculum. However, Asian graduates showed a strong preference for undertaking strongly vocationally-orientated courses, and this suggests that they may tend to hold more instrumental views of the role which higher education might play in improving their vocational opportunities and social status. Even so, no statistically significant differences were found to exist in how Asian graduates viewed the role of higher education in providing trained manpower for industry, although both ethnic-minority groups stressed the role which higher education might play in providing an avenue of social mobility for the disadvantaged.

Part Three: Ethnic Minorities in the Graduate Labour Market

Little is known about the employment of black graduates. Ballard and Holden (1975) looked at the difficulties encountered by black and white students in applying for graduate-level jobs during their final year at college. They concluded that black students made on average more job applications, received fewer interviews and were rejected for more jobs than white students. Further analysis of their data suggested that these findings had not been unduly influenced by other factors such as course of study, age, gender and social origins. Brennan and McGeevor (1985) have already analysed the Wave I HELM data relating to the employment of black graduates. Their work suggested that both Asian and Caribbean graduates were less likely to be in full-time employment and more likely to be unemployed or in full-time education than their matched counterparts (p 19-21). Using a variety of measures of 'job quality', they

concluded that both groups of black graduates were in lower-quality jobs than their matched counterparts. Black graduates were also earning somewhat less than their matched counterparts (p. 21-2).

Before moving on to a consideration of the experiences of black graduates and their matched counterparts two and three years after graduation, it should, however, be stressed that the response rate from Asian and African/Caribbean graduates was rather small and, as was mentioned earlier in the chapter, only eleven African/Caribbeans and 33 Asian graduates replied to the Wave III questionnaire. It is difficult to know quite how this may have affected the validity of our findings, especially if those in employment were more or less likely to participate in the study than others. Suffice it to say here that our findings should be treated with extreme caution. The first thing to be considered is the extent to which graduates had experienced difficulty in finding suitable employment. This question was examined in the CRE study, where graduates were asked to say how many job applications they had made during their final year at college. In total 19 African/Caribbeans, 13 of their matched counterparts, 37 Asians and 45 matched Asians had applied for jobs, and Table 9.18 shows how the numbers of applications differed between groups.

Table 9.18: Job Applications in Final Year by Ethnicity (CRE)

Row%	1-2	3-4	5-9	10+	-N-
Afric/Carib	21.0	15.8	21.0	42.1	19
Matched	53.8	15.4	7.7	23.1	13
Asian	16.2	13.5	16.2	54.1	37
Matched	33.3	20.0	22.2	24.4	45

From this Table it can be seen that both ethnic minority groups made

more job applications than their matched counterparts. The implication of this is that black graduates were experiencing greater difficulty in finding suitable employment than their UK European equivalents. Some support for this view comes from an examination of Table 9.19 which shows the number of job offers received by graduates. From this Table it can be seen that both Asian and African/Caribbean graduates were less likely to have been offered a job during their final year in higher education. Overall, of those applying, 57.9% of African/Caribbeans but only 38.5% of their matched counterparts had not been offered employment. The comparable figures for Asian graduates and their matched counterparts were 35.1% and 20.0% respectively.

Table 9.19: Job Offers in Final Year by Ethnicity (CRE)

Row%	None	One	Two	Three plus	-N-
Afric/Carib	57.9	31.6	5.3	5.3	19
Matched	38.5	53.8	7.7	-	13
Asian	35.1	32.4	21.6	10.8	37
Matched	20.0	35.6	26.7	17.8	45

Table 9.20: Difficulty in Finding Employment by Ethnicity (CRE)

Row%	Very Difficult	Difficulty in finding the 'right' job	Little Difficulty	-N-
Afric/Carib	36.0	44.0	20.0	27
Matched	22.7	50.0	27.3	22
Asian	21.7	26.1	52.1	46
Matched	11.1	13.3	75.6	45

As an additional check on the problems which graduates might have encountered in finding suitable employment, they were asked to say how difficult they had found it to find work. From Table 9.20 it can be clearly seen that both ethnic-minority groups had found it more difficult to find employment than their matched counterparts.

Overall 52.1% of Asian but 75.6% of their UK European equivalents had experienced little difficulty in finding suitable employment. The comparable figures for African/Caribbean graduates and their matched counterparts were 20.0% and 27.3% respectively.

Table 9.21: Employment Status of Respondents by Ethnicity

WAVE I	Employed	Educ'n	Unempl'd	Not Avail	-N-
Afric/Carib	18 (73.4)	12 (31.6)	7 (18.4)	1 (2.7)	38
Matched	18 (52.9)	8 (23.5)	8 (23.5)	-	34
Asian	59 (52.7)	27 (24.1)	26 (23.2)	-	112
Matched	81 (73.6)	16 (14.5)	12 (10.9)	1 (0.9)	110
WAVE II	Employed	Educ'n	Unempl'd	Not Avail	-N-
Afric/Carib	11 (78.6)	3 (21.4)	-	-	14
Matched	14 (93.3)	1 (6.7)	-	-	15
Asian	35 (70.0)	11 (22.0)	4 (8.0)	-	50
Matched	43 (86.0)	2 (4.0)	4 (8.0)	1 (2.0)	50
WAVE III	Employed	Educ'n	Unempl'd	Not Avail	-N-
Afric/Carib	9 (81.8)	2 (18.2)	-	-	11
Matched	11 (100.0)	-	-	-	11
Asian	29 (87.9)	4 (12.1)	-	-	33
Matched	33 (100.0)	-	-	-	33

An analysis of HELM data supported the contention that African/Caribbean and Asian graduates experienced greater difficulty than their matched UK European counterparts in finding suitable employment during their first year in the labour market. However, the proportion of graduates in employment rose over the three years

Table 9.22: Type of Employment by Ethnic Origins

Count Col%	Afric/ Carib	Matched A/C	Asian	Matched Asian
Engineering	2 (18.2)	2 (18.2)	4 (12.9)	5 (15.2)
Teaching	1 (9.1)	3 (27.3)	2 (6.5)	2 (6.1)
Research/Lab Techs	3 (27.3)	1 (9.1)	2 (6.5)	3 (9.1)
Pharmacy	-	-	4 (12.9)	4 (12.1)
Computing	-	-	4 (12.9)	3 (9.1)
Accountancy & Finance	-	2 (18.2)	4 (12.9)	8 (24.2)
Social Work	1 (9.1)	-	-	-
Art & Design	-	1 (9.1)	-	-
Law	-	-	-	1 (3.0)
Other Prof'nal	3 (27.3)	1 (9.1)	7 (22.6)	5 (15.2)
Clerical & Manual	1 (9.1)	1 (9.1)	4 (12.9)	2 (6.1)
Number	11	11	31	33

Table 9.23: Type of Employer by Ethnicity

Count Col%	Afric/ Carib	Matched A/C	Asian	Matched Asian
Public	7 (77.8)	7 (63.6)	7 (23.3)	8 (24.2)
Manufacturing	2 (22.2)	-	11 (36.7)	13 (39.4)
Commerce	-	4 (36.4)	12 (40.0)	12 (36.4)
Number	9	11	31	33

of the study (see Table 9.21), and none of the black graduates nor their matched counterparts was unemployed after three years, although four Asian and two African/Caribbean respondents were in full-time study three years after graduation.

Moving on to a consideration of their employment, Table 9.22 shows the types of work they were undertaking three years after graduation and Table 9.23 shows the sectors of the economy within which they were employed. Reading these two Tables together, we see that none of the African/Caribbean graduates were employed in commerce in comparison with four of their matched counterparts, and only four Asians, but nine of their matched counterparts were employed in accountancy, finance and law. This is an interesting finding, which adds some support to the contention that the graduate labour market may be segmented according to ethnicity. Unfortunately the small numbers involved make such an interpretation difficult, although some additional support for this view comes from an examination of Table 9.24 which shows the employment sector of CRE graduates. As in the HELM survey, African/Caribbean graduates were more likely than their matched counterparts to be employed in the public sector, but unlike HELM graduates, they were considerably less likely to be employed in manufacturing. More interesting are the differences in the employment sectors of Asian graduates and their matched counterparts, and we note in particular the much higher proportion of Asians who were self-employed.

Table 9.24: Employment Sector by Ethnicity (CRE)

Row%	Public Sector	Manufac- turing	Commerce	Self- emplo'd	-N-
Afric/Carib	61.9	9.5	23.8	4.8	21
Matched	40.9	22.7	27.3	9.1	22
Asian	22.6	18.9	32.1	26.4	53
Matched	19.2	21.2	53.8	5.8	52

In regard to their employment status, we see from Table 9.25 that both Asian and African/Caribbean graduates were less likely than their matched counterparts to be employed in senior professional positions and Asians, but not African/Caribbeans, were more likely to be employed in lower-class occupations. A higher proportion of Asian and African/Caribbean graduates were, however, employed in engineering and related occupations and, somewhat interestingly, Asians were more likely than their matched counterparts to be employed in the managerial trajectory - a category which includes clerks - but, owing to the small numbers involved, it is difficult to know quite how to interpret these findings.

Table 9.25: Social-Class Destinations by Ethnicity

Count Col%	Afric/ Carib	Matched A/C	Asian	Matched Asian
Snr Prof	-	2 (18.2)	5 (17.9)	9 (27.3)
Engineering	3 (37.5)	1 (9.1)	6 (21.4)	6 (18.2)
Semiprof'l	3 (37.5)	4 (36.4)	2 (7.1)	6 (18.2)
H.G.T.s	1 (12.5)	1 (9.1)	4 (14.3)	5 (15.2)
Managers/clerks	1 (12.5)	1 (9.1)	6 (21.4)	5 (15.2)
Lower Class	-	2 (18.2)	5 (17.9)	2 (6.1)
Number	8	11	28	33

Tables 9.26 to 9.29 summarize the replies given to a number of

questions intended to measure 'job quality' by both HELM and CRE respondents. The overall impression gained from an examination of these Tables is that, whilst Asians tend to be in lower-status jobs than their matched counterparts, African/Caribbeans appear to have fared no better and no worse than their matched counterparts. However, the position of the two minority groups does appear to have improved considerably over the three years of the study. When it is recalled that unemployment amongst black people in the population as a whole is far higher than that for white people and that black people tend to be in lower-status jobs, this would suggest that even though Asian graduates do not appear to have performed as well as white graduates, higher education is a major avenue of social mobility for those black people who have participated in it. Again, however, it should be stressed that these conclusions should be treated with some caution owing to the small number of respondents.

From Table 9.26 we see that there are only minor differences in the annual earnings of our two minority groups and their matched counterparts. Asian graduates in the HELM sample were earning slightly more than their UK European equivalents two years after graduation, and the same was also true of those Asians sampled in the CRE study. Three years after graduation, African/Caribbean graduates in both studies were earning more than their matched counterparts.

Table 9.26: Mean Incomes of Graduates by Ethnicity

Mean (Std Devn)	Afric/ Carib	Matched A/C	Asian	Matched Asian
Wave I	6,119 464	5,993 282	5,698 272	5,979 262
Wave II	7,052 3,083	7,095 1,774	8,177 2,362	8,085 1,883
Wave III	8,444 2,841	8,242 2,867	8,698 2,981	9,319 3,184
CRE	10,322	10,182	13,124	12,203

From Table 9.27 it can be seen that Asian graduates in all three waves of the HELM questionnaire were less likely than their matched counterparts to be in their preferred job, although the differences in replies to the Wave II questionnaire are not particularly marked. The same is also true of respondents to the CRE study.

Table 9.27: Preferred Occupation by Ethnicity

Count Number%	Asian	Matched Asian	Afric/ Carib	Matched A/C
Wave I	37 (62.7)	59 (71.1)	10 (50.0)	11 (52.4)
Wave II	19 (55.8)	23 (56.1)	6 (54.5)	8 (66.7)
Wave III	17 (58.6)	22 (78.6)	3 (37.5)	5 (55.5)
CRE	46.3	73.2	39.1	43.5

Table 9.28 shows us that whilst over 40% of Asian respondents to the HELM questionnaire felt overqualified for their jobs three years after graduation, only 27% of their matched counterparts felt this way. A lower proportion of African/Caribbean graduates than their UK equivalents felt overqualified for their jobs both one and three years after graduation.

Table 9.28: Feels Overqualified by Ethnicity

Count Number%	Asian	Matched Asian	Afric/ Carib	Matched A/C
Wave I	30 (46.2)	33 (37.1)	12 (60.0)	15 (60.0)
Wave II	16 (44.2)	17 (38.6)	5 (41.7)	5 (35.7)
Wave III	13 (43.3)	9 (27.3)	4 (44.4)	5 (50.0)
CRE	25.0	26.8	45.5	38.1

The 'size' of the respondents' employing organisation is important because promotion prospects tend to be poorer in small, rather than, large firms. Table 9.29 shows us that in all three waves of the HELM questionnaire Asians were far more likely than their matched counterparts to be employed by an organisation with fewer than 50 employees. Three years after graduation none of the African/Caribbeans or their matched counterparts were employed by such a small firm - a finding no doubt related to the numbers of such graduates employed in the public sector. Amongst respondents to the CRE study, both minority groups were more likely than their matched counterparts to work for small rather than large organizations.

Table 9.29: Size of Employer - Less than 50 Employees

Count Number%	Asian	Matched Asian	Afric/ Carib	Matched A/C
Wave I	38 (53.5)	26 (31.0)	5 (25.0)	5 (30.8)
Wave II	15 (45.5)	11 (25.0)	2 (18.2)	5 (35.7)
Wave III	12 (40.0)	5 (15.6)	-	-
CRE*	22.5	10.9	22.7	14.3

* 20 employees.

To summarize at this stage analysis of the occupational and social-class destinations of respondents, to both the CRE and HELM studies, has been complicated by the small numbers of black graduates who took part in the two studies. Analysis of the data strongly suggests that black graduates during their first year in the labour market experienced more difficulties in finding suitable employment than their matched counterparts. During their final year at college black graduates made more job applications and received fewer job offers than their UK European equivalents, and one year after graduation black graduates were more likely to be unemployed. Analysis of questions relating to job quality suggested that whilst African/Caribbean graduates fared about as well in the labour market as their matched UK European counterparts, Asian graduates fared somewhat worse. Asian respondents to the HELM study were less likely to be employed as senior professionals, they were earning less, they were less likely to be in their preferred occupations, were more likely to be feel over-qualified and tended to work for smaller organizations. Some evidence of labour market segmentation was found in that African/Caribbean graduates were more likely to be employed within the public sector than their matched counterparts and Asian graduates were more likely to be self-employed.

Relating our findings to the theoretical approaches to social class and ethnicity, it is clear from our findings that black graduates do not form a part of a black under class in so far as relatively few are employed in low-status jobs. Nor is the evidence that the graduate labour market is segmented by ethnicity conclusive. Asian, African/Caribbean and UK European graduates were employed within a wide range of occupations within the public sector, manufacturing

and commerce. It is true that Asian respondents to the CRE study were more likely to be self-employed, but further analysis of the data revealed that many of these people were pharmacists. Another interpretation of our data sees Asian, and to a lesser extent African/Caribbean, graduates as employed within a wide range of occupations, but within each occupation they tend to be employed in lower-status positions (see Figure 9.2).

Following Parkin (1979) it has already been suggested that one of the reasons for the relatively poor performance of Asian graduates in the labour market may be a reflection of the operation of exclusion strategies by employers and professional associations who give preferential treatment to white applicants for jobs. The nature of the HELM and CRE data sets do not allow us to comment directly upon these matters. Nevertheless there is some evidence that employers may be discriminating against black graduates in their recruitment strategies. A recent leader in *The Guardian* newspaper (25.Feb.1988) described how St. George's hospital in London made use of a computer program in its recruitment process which mimicked human behaviour in such a way as to discriminate against women and black applicants. Moreover, research by Jowell and Prescott-Clarke (1970), McIntosh and Smith (1974) and Firth (1981) strongly suggests that many employers discriminate against black applicants. Firth, for example, undertook a study in which bogus letters of application were sent to accountancy firms in response to specific job advertisements. His replies suggested that considerable discrimination existed against black applicants for, whilst 85% of (white) British applicants were set an application form and/or invited to interview, only 48% of West Indian and 44% of Indian and

Pakistani applicants were.

Although it is not possible, using the HELM and CRE studies, to comment directly upon the recruitment strategies used by employers, participants in the CRE study were presented with a list of eight factors - including ethnicity - and were asked to say which they thought had helped and which had hindered them in their search for suitable employment. Table 9.30 shows the replies which our four groups of graduates gave to these questions. The replies given by black graduates and their UK European equivalents were remarkably similar, except that both African/Caribbean and Asian graduates were far more likely to see their ethnicity as hindering them in their search for employment. This finding adds some support to the contention that some employers might be discriminating against black graduates in their recruitment strategies.

Table 9.30: Factors Determining Success in Labour Market
by Ethnicity (African/Caribbeans)

Row %	African/Caribbean			Matched		
	Help	Neut'l	Hinder	Help	Neut'l	Hinder
Degree Subject	58.3	29.2	12.5	50.0	37.5	12.5
Degree Class	33.3	41.7	25.0	25.0	62.5	12.5
College Attended	8.3	87.5	4.2	4.2	95.8	-
Pre-college education	20.0	68.0	12.0	20.8	70.8	8.3
Previous experience	56.0	28.0	16.0	62.5	29.2	8.3
Gender	8.7	78.3	13.0	8.7	87.0	4.3
Ethnicity	8.7	39.1	52.2	4.3	95.7	-
Family Responsibility	4.2	95.8	-	4.2	95.8	-

Table 9.30: Factors Determining Success in Labour Market
by Ethnicity: Continued (Asians)

Row %	- Asian -			Matched		
	Help	Neut'l	Hinder	Help	Neut'l	Hinder
Degree Subject	80.0	15.6	4.4	89.8	8.2	2.0
Degree Class	32.6	54.3	13.0	26.5	65.3	8.2
College Attended	4.5	81.8	13.6	14.3	77.6	8.2
Pre-college education	13.6	75.0	11.4	26.5	65.3	8.2
Previous experience	27.3	54.5	18.2	40.8	55.1	4.1
Gender	-	93.2	6.8	12.5	87.5	-
Ethnicity	-	68.9	31.1	6.3	93.7	-
Family Responsibility	4.4	82.2	13.3	4.1	93.9	2.0

The next things to be considered are the personality traits of black graduates. Looking first at Asians, Ballard and Hollard (1975) in their article cited earlier in this chapter have suggested that they may not have the personality traits which employers value (leadership abilities, initiative, confidence and an ability to get along with other people), and if this is so than it might account for our findings. Luckily, the Wave I questionnaire contained a number of Likert-types attitude questions which sought to examine the personality traits of graduates. Table 9.31 shows the replies which graduates gave to these questions, replies having been converted into percentages for ease of comparison. From this Table we find little support for the contention that Asians may be lacking in those personality traits which employers are said to value. Thus, in comparison with their matched counterparts, Asians valued their careers more, were more confident of their intellectual abilities, saw themselves as more sociable, creative, adaptable, responsible and numerate, and were keener to try out new ideas. They did not differ from their matched counterparts as regards their

Table 9.31: Personality Traits of Asian Graduates+

Importance of...	Asian	Matched Asian	Difference
Politics & public Life	48	42	6
Arts & culture	51	51	-
Amusement & leisure time	64	73	-9**
Your education	84	70	13**
Academic research	69	51	18**
Family	86	81	5
Profession and work	84	75	9**
Sociability and friends	82	82	-
Marriage	74	66	8*
Thinks of self as/....			
Intelligent	67	65	2
Creative	59	53	6*
Swayed by arguments	54	56	-2
Practical	65	63	2
Good at putting ideas into words	58	52	6*
Knowledgeable	68	58	10**
Keen to try out ideas	59	53	6*
Confident of intellectual ability	69	56	13**
Interested in new fields of study	66	57	9**
Critical	64	69	-5*
Independent	74	76	-2
Numerate	74	68	6*
Reliable	84	80	4
Sociable	76	68	8**
Adaptable	79	71	8**
Interested in social problems	71	52	19**
Sympathetic	78	66	12**
Shy	46	47	1
Religious	44	30	14**
Industrious	71	66	5
Responsible	84	76	8**
Conservative	52	44	8**
Extent to which life determined by/...			
Own wishes & intentions	85	87	-2
Society's requirements	80	73	7*
Personal characteristics	91	93	-2
Coincidences and luck	72	67	5

+ Replies converted to percentages for ease of comparison.

** p<0.01 * p<0.10

Table 9.32: Personality Traits of Afro-Caribbean Graduates+

Importance of...	Afric/ Carib	Matched A/C	Differ- ence
Politics & public Life	58	38	20**
Arts & culture	58	47	11*
Amusement & leisure time	70	76	-6
Your education	83	76	7
Academic research	62	49	12*
Family	85	79	6
Profession and work	85	79	6
Sociability and friends	82	80	2
Marriage	70	69	1
Thinks of self as/....			
Intelligent	66	59	7
Creative	58	49	9
Swayed by arguments	64	59	5
Practical	71	69	2
Good at putting ideas into words	62	51	11*
Knowledgeable	64	54	10*
Keen to try out ideas	59	50	9*
Confident of intellectual ability	63	56	7
Interested in new fields of study	64	55	9
Critical	69	67	2
Independent	73	72	1
Numerate	62	58	3
Reliable	82	81	1
Sociable	69	70	-1
Adaptable	77	74	3
Interested in social problems	73	53	20**
Sympathetic	75	60	15**
Shy	34	49	15*
Religious	43	23	20**
Industrious	69	62	7
Responsible	83	77	6
Conservative	40	49	-9
Extent to which life determined by/...			
Own wishes & intentions	91	83	9
Society's requirements	79	76	3
Personal characteristics	92	89	3
Coincidences and luck	64	72	8

+ Replies converted to percentages for ease of comparison.

** p<0.01 * p<0.10

industriousness, shyness, independence and practical abilities. Asians appear to value their education more, were keener on research, more interested in social problems, and saw themselves as more religious and sympathetic. It is difficult to see how such traits could be a disadvantage to them in the labour market, although they suggest that Asians may, relative to their UK European counterparts, have a preference for careers in social work and/or teaching. This impression is not, however, reflected in their actual occupations.

Moving on to a consideration of the personality traits of African/Caribbean graduates, Table 9.32 compares them with those of their matched counterparts. From this we see that there are few differences between our two groups of graduates. African/Caribbean graduates saw themselves as more knowledgeable, less shy, more religious and more sympathetic than their matched counterparts. They were more concerned about social problems and expressed a greater interest in politics and public life, and art and culture. Again, because of the small numbers involved it is difficult to relate these findings to the Wave III destinations of African/Caribbean graduates, but, as with Asians, there is little reason to believe that African/Caribbean graduates are unduly disadvantaged in the labour market as a result of having the 'wrong' personality traits.

Assessment of Higher Education

The CRE questionnaire also included a series of eleven Likert-type attitude questions which sought to examine the attitudes of respondents towards higher education and their assessment of its benefits, both vocational and otherwise, to them.

Table 9.33 shows the replies (the mean scores being converted into percentages for ease of comparison) to these questions given by African/Caribbean graduates and their matched counterparts. On all but one occasion, African/Caribbean graduates were less likely than their matched counterparts to feel that the quality of their work had improved as a result of their experience of higher education. Thus, they were more pessimistic regarding 'getting an interesting job', 'securing a good income' and 'improving long-term job prospects'. The differences, although in the expected direction, are not statistically significant. However, the small sample sizes should be borne in mind for the order of magnitude of some of the differences is quite large. Much less marked differences were found in the 'other' benefits which graduates felt they had gained from higher education, although African/Caribbean graduates were more likely to feel that their social status had improved.

Table 9.34 gives the same information for Asian graduates and their matched counterparts. Both Asian graduates and their matched counterparts believed that their career prospects had improved as a result of their experience of higher education. However, in each case Asians gave a less-positive evaluation of the benefits of higher education, and the differences are particularly marked as

regards 'getting an interesting job', 'improving long-term job prospects' and 'enhancing long-term earnings'. Asians were, however, more likely to feel that higher education had improved their social status, although they were more pessimistic regarding the opportunities they had had to learn about a subject which interested them.

Table 9.33: Benefits of Higher Education: African/Caribbean (CRE)

Career Aims	A/C	Matched	Difference
Getting an interesting job	59	65	-6
Securing a good income	46	59	-13
Made it easier to get a job	56	70	-14
Improved long-term job prospects	63	78	-15*
Increased early earnings	38	56	-18
Enhanced long-term earnings	57	61	-4
Improved quality of work	68	63	-5
Other	A/C	Matched	Difference
Improved social status	46	38	8
Becoming a widely educated person	56	54	2
Having time to sort out ideas	39	44	5
Learning about a chosen subject	72	69	3

* p<0.1

Table 9.34: Benefits of Higher Education: Asians (CRE)

Career Aims	Asians	Matched	Difference
Getting an interesting job	71	84	-13*
Securing a good income	68	70	-2
Made it easier to get a job	80	87	-7
Improved long-term job prospects	79	90	-11**
Increased early earnings	62	65	-3
Enhanced long-term earnings	71	80	-9
Improved quality of work	66	74	-8

Table 9.34: Benefits of Higher Education: Asians (CRE): Continued

Other	Asians	Matched	Difference
Improved social status	61	51	10
Becoming a widely educated person	61	54	7
Having time to sort out ideas	42	38	4
Learning about a chosen subject	62	74	-12**
* p<0.10 ** p<0.05			

Conclusions

In conclusion, this chapter has examined the role of public sector institutions in providing an avenue of social mobility for black graduates. In terms of their social-class origins, black graduates appear to be strongly atypical of black Briton's as a whole, in so far as most Asian and African/Caribbean graduates originated from more middle-class backgrounds. Differences were also apparent between separate ethnic-minority groups, and, whilst African/Caribbean graduates are far less likely to participate in higher education than UK Europeans, Asians were about as likely to participate. Of those Asian and African/Caribbean graduates who did participate in higher education, the majority were employed in relatively high status occupations three years after graduation. When, however, comparisons are drawn with the occupations and social status of UK Europeans, Asians, but not African/Caribbeans, performed less well. Analysis of the attitudinal data suggests that these differences are not related to the major personality traits of graduates. This, in turn, suggests that employers may be discriminating against black people in their recruitment strategies.

Appendix: Matched Samples

As was mentioned earlier in this chapter, the total number of Asian and African/Caribbean graduates who participated in the HELM study was quite small (see Table 9.3), and because of this comparisons between Asian and African/Caribbean graduates on the one hand and UK Europeans on the other were difficult to make due to distortions which may have been introduced into the analysis as a result of differences in both the courses of study and the sex of the respondents. In an attempt to overcome this problem, use was made of matched samples, this being the approach adopted by Brennan and McGeever (1985: 19) in their report on the Wave I findings.

Attempts were made to match each of the Asian and African/Caribbean graduates with a UK European of the same sex, course of study, degree class and institution attended. Owing to differences in the response rate between the three waves of the questionnaire, it was not always possible to match the individual Asian and African/Caribbean graduate with the same European on each questionnaire, and it was sometimes necessary to make new matches. This has introduced an element of uncertainty into the analysis which is unfortunately unavoidable.

On all three waves of the questionnaire exact matches were found by sex and course of study. However, as Table 9.35 shows, in 31 out of 120 cases differences existed in the institution attended by Asian graduates and in 11 cases there was a difference in degree class. Amongst the 39 African/Caribbean cases an exact match was found on 27 occasions and on 12 occasions differences existed in the

institution attended.

Table 9.35: Matched Samples Wave I

	Asian		Afric/Carib	
	Number	Accum%	Number	Accum%
Exact Match	84	70%	27	69%
Different institution	29	91	12	100
Different Degree Class	5	95	-	-
Different Degree Class and Institutions	6	100	-	-

Brennan and McGeevor, 1985: 19

Table 9.36 shows the matched samples used in the Wave II and Wave III questionnaires. From this we see that roughly one-third of the matched Asian graduates had either attended a different institution and/or had a different class of degree. Five of the fifteen matched African/Caribbean graduates replying to the Wave II questionnaire had also attended a different institution and/or had a different class of degree, but an exact match was found for all eleven of the Wave III African/Caribbean respondents.

Table 9.36: Matched Samples Waves I and II

	Wave II		Wave III	
	Number	Accum%	Number	Accum%
Asian				
Exact Match	33	65%	21	64%
Different Institution	12	88	8	88
Different Degree Class	5	98	1	91
Different Degree Class and Institutions	1	100	3	100
Afric/Carib				
Exact Match	10		11	
Different Institution	4		-	
Different Degree Class	1		-	
Different Degree Class and Institutions	-		-	

A matched sample also was used to analyse the CRE data set, and the

same procedure was used to obtain the matched sample that was used with the HELM data set. An exact match was found in each case by course of study and gender, although four of the matched African/Caribbeans and three of the matched Asian graduates had a different class of degree. An exact match by type of institution attended was found in all but one instance. The odd case being an African graduate who had attended a college of higher education and who was matched with a polytechnic graduate.

CHAPTER TEN: CONCLUSIONS

From our discussions in previous chapters it should be clear that higher education has changed radically in the last thirty or so years and is now playing an increasingly important role in the allocation of high-status positions within British society. New institutions, the polytechnics and colleges of higher education, have been created. The number of degrees awarded by the universities and (since 1965) by the CNAA has increased dramatically. Major changes have occurred in the nature and composition of the student body. The number of courses on offer to students has also increased and they have become more relevant to business and professional needs, many more than previously now offering exemption or part-exemption from the qualifying examinations of professional bodies. Finally, more students now undertake sandwich courses which involve placements in commerce or industry.

These changes have had important consequences for the nature of social mobility within our society. Prior to the early 1960s, relatively few graduates were employed in industry and commerce, and training for most professions (eg much of engineering, accountancy and nursing) took place through a process of 'vertical mobility' in which new recruits would start their employment in relatively low-level positions (eg as articled clerks or apprentices) and through a process of internal training supplemented by part-time study would gradually rise in the company's hierarchy to more senior positions. As a result of the growth in the number of places in

higher education and in the types of course on offer, 'vertical mobility' - at least in its traditional form - has now virtually ceased in many professions and to a lesser extent in management, and possession of a degree is now increasingly necessary for entry into many professions and managerial posts.

Under these changing conditions this thesis, as its title suggests, set out to examine how the social-class origins of graduates might influence their participation in higher education, the courses which they undertook and their entry into employment. Social class, however, has been defined in a broad sense to refer not only to the hierarchical division of society into distinct occupational groups but to include also the dimensions of gender and race. In particular, this study has been concerned with the experiences of women, black graduates and those originating from working-class backgrounds, and, as such, it has focused upon two main areas of interest - access to higher education and the occupational and social-class destinations of graduates. Finally, owing to the nature of the HELM data set our study has looked at public sector (polytechnic and college of higher education) graduates only, and we have had little to say about university graduates.

At the time of their establishment in the 1960s, it was widely hoped that the polytechnics would help to widen educational opportunities for young people from working-class backgrounds, for at that time research suggested that only a minority of students came from manual origins. In Chapter Four it was demonstrated that, although a higher proportion of students from manual origins attended public sector institutions than the universities, they were nevertheless

under-represented within them. Thus whilst, in 1979, only 19% of university entrants were from working-class origins, the comparable figure for public sector institutions was 26%. Conversely 22% of university entrants but 19% of HELM respondents were from senior professional backgrounds. Moreover, when comparisons were drawn between the findings of the HELM study and those of related studies undertaken in the early to mid 1970s, the general impression was that the proportion of students attending the universities and polytechnics had at best remained constant and had possibly declined (see Edwards, 1982). When it is recalled that until the early 1960s entry into many of the professions took place through a process of vertical mobility, it is tempting to suggest that the expansion of higher education, far from expanding vocational opportunities for the working class may actually have helped to curtail them by closing an alternative avenue of social mobility.

Further analysis of the HELM data revealed that graduates from working-class origins tended to be older than others, although the differences were not particularly marked. They also tended to be atypical of their class of origin: many of their mothers were reasonably well-educated and/or were employed within white-collar occupations, and they tended to come from small families. They did not differ from their more middle-class peers as regards their reasons for entering higher education, and all graduates laid great stress on the opportunity which higher education provided them with both to further their careers and to learn about subjects which interested them.

An examination of published statistics compiled by the DES and CNAA

revealed that women are less likely to participate in higher education than men, although recent years have seen an increase in the proportions of women students from around 25% in the early 1960s to over 40% today. Only minor differences exist in the proportions of men and women attending universities and public sector institutions. Women in the HELM sample are more likely than men to have a working mother and a parent (father or mother) employed within a managerial or professional capacity. Women also tended to be younger than men.

Because only a minority (7.6%) of HELM respondents were black it was difficult to make any firm conclusions about their characteristics. Analysis of the HELM data suggested that, like UK Europeans, they are more likely to be male than female and the majority come from more middle-class backgrounds. Black graduates tended to be older than their UK Europeans counterparts. The author also had access to a related study commissioned by the CRE (Commission for Racial Equality) and analysis of this confirmed many of the impressions gained from the HELM data set as regards the sex, age and social-class origins of black graduates. The CRE study also included a sample of university graduates amongst whom there were far fewer black Britons.

The second question which was examined concerns the relationship which exists between the social-class origins and destinations of graduates, that is, the extent to which their social-class origins exert an influence (if any) on their future employment. A number of studies which have investigated the process by which graduates enter the labour market (Kelsall et al., 1972; Pearson, 1976;

Parkin, 1979; Roizen and Jepson, 1985; Kogan & Boys, 1984; Beechey, 1986), suggest that for a variety of reasons graduate women and those from working-class and ethnic-minority backgrounds are likely to be disadvantaged. Kelsall et al. (1972) have suggested that both women and those from manual origins are likely to have lower aspirations than others, and in consequence are likely to attain lower-status jobs. Other studies have focused upon those factors which employers take into account in reaching their employment decisions. Parkin (1979), in respect of black people and women, and Beechey (1986), in respect of women, have suggested that employers and professional associations may operate exclusionary strategies in order to maintain high levels of remuneration for predominantly (white) male employees. Pearson (1976), Parkin (1979), Roizen and Jepson (1985) and Kogan and Boys (1984) argue that employers take a number of factors into account in making their decisions over whom to employ. These factors include subject of study, class of degree, type of institution attended, school attended, and various non-academic factors such as leadership potential, general confidence, appearance and communications skills. The use which employers make of these is determined primarily by the degree of skill needed to undertake a particular job. Where the skills needed are highly specific and there is a shortage of suitable applicants the graduates' degree subject is likely to be of prime importance. Where the skills needed are more general (for example in most managerial positions) the actual course studied is likely to be of less importance than the class of degree obtained, the institution attended and personality traits. Should the factors which employers take into account be unequally distributed between groups to the disadvantage of women and those from manual and ethnic-minority

backgrounds then one might expect them to fare less well in the labour market.

In Chapter Five, the empirical evidence relating to the employment of graduates originating from different social-class backgrounds was examined. Amongst men, but not women, some but weak support was found for the contention that graduates from manual origins will tend to acquire lower-status jobs than those from more middle-class backgrounds. Men from manual origins were more likely than others to be employed as semiprofessionals (in teaching) and as high-grade technicians (computer programmers and laboratory technicians) and were amongst the least likely to be senior professionals. However, the relationship between origins and destinations was complex, no statistical difference was found in the yearly salaries of graduates broken down according to their social-class backgrounds and the sons of low-grade technicians appear, in some ways, to have performed best of all. Graduate men from routine non-manual backgrounds were the lowest earners and were the most likely to be in low-status employment. In Chapter Six attempts were made, by the use a matched sample, to control for the influence of course of study, gender, class of degree and institution attended on the destinations of graduates from manual backgrounds on the one hand, and professional and managerial backgrounds on the other. When the results on the full matched sample were examined, the relationship previously found between the origins and destinations of graduate men originating from the different social classes disappeared, and graduate men from manual backgrounds appear to have performed just as well as their matched counterparts. Minor, but statistically non-significant, differences were found in the destinations of graduates with general

(but not vocational) degrees, and graduates from manual backgrounds were more likely than their matched counterparts to be employed in the semiprofessions (mainly teaching) and less likely to be in managerial positions. They were also earning less. An even less marked relationship was found to exist for graduate women, although, in contradiction to the results for men, women from manual origins with generalist degrees were less likely to be employed in the semiprofessions and more likely to be employed in the managerial trajectory. Women from manual origins did, however, consistently rate the 'quality' of their work below that of their matched counterparts. The matched-sample analysis supported the view that differences in the destinations of graduate men from different social-class backgrounds are related primarily to differences in their courses of study.

In Chapter Seven an attempt was made to analyse our findings using the models of sponsored and contest mobility developed by Turner (1960). The difference between these two opposing models of social mobility is that whilst under a contest system pupils and students are in competition against one another within the educational system to gain the qualifications necessary for entry into many high-status positions, under a sponsorship system 'elite' recruits are chosen and segregated from others at an early age and given a specific education deemed suitable for elite station. When Turner wrote his paper a tripartite (bipartite) system of education was in operation in most of Britain and grammar schools were the main educational vehicles for facilitating entry into the universities and the elite. Although the movement towards comprehensive schooling and the establishment of public sector institutions which occurred in the

1960s can be viewed, at least in part, as an attempt to introduce a contest element into Britain's educational system, it was argued that Britain's educational system remains essentially a sponsorship one in which the curriculum taught to children varies according to the type of school attended and the perceived level of intelligence of the individual child. Those earmarked for 'elite' station tend to be taught an academic curriculum whilst others are taught a more utilitarian one. When the subjects undertaken by graduates whilst at school were analysed, quite marked and highly significant differences were found to exist in the types of school curriculum undertaken by HELM graduates originating from different social-class backgrounds. Those from manual backgrounds were found to be more likely to have attended non-selective schools and to have undertaken a utilitarian or technical curriculum, whilst those from more middle-class backgrounds were more likely to have attended selective schools and to have undertaken an academic curriculum. Further analysis of the data found that those with a utilitarian curriculum were more likely to be employed within the semiprofessions and lower-class occupations, and that those with a technical curriculum were the most likely to be employed in engineering. Men with academic curriculums were the most likely to be employed in management and enjoyed the highest salaries. The most obvious way in which the school curriculum might influence the destinations of graduates is by influencing their course of study in higher education, and for both men and women a direct relationship was found between the school curriculum and the vocational specificity of their course of study. Thus graduates with technical qualifications were the most likely to have undertaken specialist courses (such as engineering) and those with utilitarian curriculums

were the most likely to have undertaken generalist courses (Humanities, Fine Art, Social Science, etc).

It should, however, be stressed that, although the sponsorship system appears to disadvantage those from working-class backgrounds who were the most likely to have undertaken a utilitarian curriculum, graduates from working-class origins with technical and academic curriculums had a broader range of courses from which to make their choices. Conversely, graduates from more middle-class backgrounds with utilitarian curriculums found their choice of which course to study constrained.

Graduate women appear to have fared less well in the labour market than their male counterparts. They were far more likely to be employed in the semiprofessions (nursing and teaching) and far less likely to be employed in engineering and related occupations. Although roughly equal proportions of men and women were senior professionals differences were found in the type of work which they did. For example, whilst women were more likely to be librarians men tended to be employed in commercial posts such as accountancy. Overall, three years after graduation, women were earning, on average, over £1,400 a year less than men and they rated their promotion prospects worse. By and large, however, women appeared to be satisfied with their occupations and equal proportions of men and women were in their preferred jobs three years after graduation. This suggests that women might have lower aspirations than men, and little evidence was found to support the contention that employers may have a preference for employing men rather than women in high-status occupations, although women in the same social-class position as men

tended to earn less.

Although Turner (1960) did not discuss gender differences in the curriculums taught to boys and girls at school, attempts were also made to analyse gender differences in the employment of graduates using his model of sponsored mobility. It was argued that women are socialized to occupy a subordinate social-class position to men within the family and that this socialization was affected by both the home and school. It was suggested that the school curriculum taught to girls will tend to reflect the needs of the men they are seen likely to marry, and that, as such, it is likely to vary according to the expected social-class destinations of their future husbands. In particular, those seen to be likely to marry into the elite tend to be taught an academic curriculum with a stress on the arts, humanities and social sciences which will equip them with skills which will compliment the more vocationally-orientated ones taught to their husbands. In this view the vocational content of the female curriculum can be thought of as a by-product of its primary function of socializing women into a domestic role within the family. Considerable support for this view was found to exist in the HELM data, and major differences were found to exist in the courses of study undertaken by men and women with the latter tending to have undertaken the more generalist courses and specialist courses in Nursing, Librarianship, Psychology and Hotel Administration. In turn, these course differences appeared to be related to quite marked differences in the curriculums undertaken by graduates when they were at school.

In order to examine the performance of black graduates in the labour market, use was made of a matched sample in which the experiences of Asian and African/Caribbean graduates were compared with an equal number of UK European graduates who were of the same sex, had undertaken the same course of study and, where possible, had attended the same institutions. Owing to the small sample sizes it was difficult to reach any firm conclusions, but both groups of black graduates tended to be employed in high-status jobs three years after leaving college, which suggests that higher education is a major source of social mobility for those Asian and African/Caribbean graduates who enter it.

When comparisons were drawn with the performance of their matched counterparts, however, Asian graduates were found to have performed less well in so far as they were more likely to be in lower-status jobs, were earning less and rated the 'quality' of their work as poorer than their matched UK European counterparts. Given that controls had been introduced to allow for differences in the courses of study undertaken by Asian and UK European graduates, this finding must point to the conclusion that Asian graduates are disadvantaged in the basic recruitment process. It is interesting that African/Caribbean graduates appear to have performed slightly better in the labour market than their matched UK European counterparts, but this finding must be treated with some caution owing to the small size of the sample.

Analysis of the educational and social origins of black graduates revealed that they had much in common with their UK European counterparts. Most originated from more middle-class backgrounds,

many had attended a selective school and had undertaken an academic curriculum. This suggests that they too had been sponsored through secondary and higher education. Asian graduates were, however, amongst the most likely to have undertaken a utilitarian curriculum.

To conclude, it has been argued that the influence which social class exerts on the employment destinations of graduates manifests itself primarily through the sponsorship system which exists in Britain. Under this system children and young people are earmarked for their eventual station in life at an early age and are sponsored through secondary education. The type of curriculum which children are taught at school can be differentiated according to their gender and eventual occupation. Boys seen to be suitable only for employment in manual occupations are taught a distinctly utilitarian curriculum with a stress on the more practical subjects, whilst those seen to be suitable for elite status are taught a more academic curriculum. Girls tend to be taught a curriculum more suited to the needs of their future husbands than themselves, and, whilst those seen to be likely to marry into the working-class are taught a utilitarian curriculum aimed at equipping them with domestic skills, those seen to be likely to marry into the elite are taught a more academic curriculum which equips them with skills which enable them to support their husbands in their careers. Sponsorship under this system can take several forms - the very rich are able to 'buy' their children a good education by sending them to private schools, whilst the educated middle classes are in a strong position to benefit their children by passing on cultural capital and by manipulating the state education system to their children's advantage. Finally, some children from working-class origins are

'earmarked' for elite station at an early age and sponsored through secondary education because they are perceived by teachers to be intelligent.

Our analysis so far would tend to suggest that the distinction which was drawn earlier between the questions of access to higher education and employment was a false one. It has been argued that access to higher education tends to be determined by sponsorship, which also, to a large extent, determines the type of degree-level courses which students can pursue, the range of courses open to them being largest for those who have studied an academic curriculum and smallest for those who have studied a utilitarian curriculum. The occupational and social-class destinations of graduates are, in turn, determined to a large measure by the courses of study which they undertook.

It should, however, be mentioned that other factors also appear to exert an influence on the employment destinations of graduates. Women, and to some extent men from working-class backgrounds, appear to have lower aspirations, although these seem to have resulted as much from their experiences of secondary education as from their early socialization at home. Asian graduates appear to fare less well in the labour market than their matched counterparts of the same sex and with the same qualifications (degree subject and class of degree) and this suggests that, other things being equal, employers might have a preference for employing white rather than black graduates.

APPENDIX A: THE RESEARCH PROCESS

In this appendix four matters are discussed. Part One looks at the nature of the research process. Part Two examines the HELM data set. In Part Three various coding and technical problems which the author encountered are discussed. Finally, in Part Four the statistical tests which the author employed whilst analysing the data are examined.

Part One: The Research Process

It is possible to identify a series of stages through which any research programme processes (see Moser, 1958: 39-44; Drake, 1974: 24). These stages are:-

- 1) Problem definition stage. In this stage the initial problem to be investigated is defined.
- 2) Hypothesis formation stage. In which the aims of the project are defined and the hypotheses to be tested are formulated.
- 3) Review stage. At this point previous literature and other substantive work in the field of interest is examined in relationship to the major aims and hypotheses of the study.
- 4) Formulation of research strategy stage. In this stage a research strategy is devised to examine the aims and to test the major hypotheses of the study.
- 5) Data gathering and collection stage.
- 6) Data analysis stage.
- 7) Writing-up stage.

However, it should be stressed that although these stages are common to most research programmes they rarely take place in a simple sequential order. Rather the stages interact with one another and they cannot be readily separated. This point can be best illustrated

by reference to the author's experiences whilst undertaking his research.

When the author began his work he started with two basic aims: a) to examine the extent to which public sector institutions were providing places for young people from different social-class backgrounds, and b) to examine the extent to which graduates from working-class backgrounds might be disadvantaged in the labour market. These aims led to the formulation of two hypotheses: that young people from working-class origins would be under-represented within public sector institutions of higher education, and that graduates from working-class origins would be less successful in the labour market than those from more middle-class backgrounds. A preliminary review of the literature - whilst confirming that his initial hypotheses might be correct - led to a reformulation of the concept of social class to include dimensions of both gender and ethnicity. Additional hypotheses were then formulated, namely that women in general and black people will tend to be less successful in the labour market than white men.

After coding the HELM data in such a way as to allow him to test his hypotheses (see Part Three below) the author was able to confirm the hypotheses that working-class, women and black graduates were indeed under-represented in higher education. Whilst both women and black graduates were found to have been less successful in the labour market than others, only weak support for the contention that graduates from working-class origins would fare less well than those from more middle-class origins was found.

These discoveries, in turn, led to the formulation of new hypotheses, further data collection and a re-analysis of the data set. On the one hand, the author set out to explain why his findings should have differed so much from those of previous researchers in the field (Kelsall et al., 1972), and on the other hand an explanatory model which might explain his (the present writer's) findings was sought.

On the first point, evidence was collected which suggested that previous researchers may have under-estimated the extent to which highly-educated youngsters from working-class origins were socially mobile because they did not pay sufficient attention to the importance of alternative avenues of social mobility which were open to such people in the 1960s when they undertook their research. On the second point, an attempt was made to analyse the findings in terms of the model of sponsorship mobility developed by Turner. This in turn led the author into using social class not as a variable, as in his initial analysis, but as a relationship and attention was thus drawn to the way in which power is distributed within society.

From this summary of the present writer's experiences it should be clear that the research programme was not undertaken in a series of simple sequential stages. Since the study was based primarily upon the analysis of secondary data much of the data collection took place - paradoxically - before the initial aims and hypotheses of the study were formulated. The literature review is an ongoing process which although initially directed by the projects aims and hypotheses, was later directed by the research findings. In a

Table A.1: Rough Timetable of Research Programme

Date	Work Undertaken
Prior to Aug 1984	Initial research work, questionnaire construction, distribution and analysis undertaken by John Brennan of the CNAA.*
Sep 1984 - Jun 1985	<ul style="list-style-type: none"> a) Literature search for relevant information relating to social class, social stratification, and secondary and higher education. b) Formulation of initial aims and hypotheses. c) Completion of CNAA degree-submission document. d) Preliminary analysis of Wave I data set. e) Formulation of questions (including the author's) for inclusion in the Wave III questionnaire.
Jly 1985 -	a) Coding of additional Wave I data.
Dec 1985	b) First attempt at writing literature review as an aid to the development of the aims and hypotheses.
Jan 1986 - Jun 1986	<ul style="list-style-type: none"> a) Development, writing and testing of computer programs to analyse the Wave II data. b) Analysis of Wave II data. c) Development of social-class schema.
Jly 1986 -	a) Coding of Wave III data.
Dec 1986	<ul style="list-style-type: none"> b) Analysis of Wave III data. c) First draft of Chapter Two.
Jan 1987 -	a) Further analysis of data.
Sep 1987	b) Writing of first draft of thesis.
Oct 1987 -	a) Analysis of CRE survey.
Jun 1988	<ul style="list-style-type: none"> b) Reformation of aims and hypothesis. c) Second literature search. d) Writing of second and final drafts of thesis.

* The present writer was not involved with the research at this stage.

similar fashion rather than the hypotheses directing the research programme, the ongoing literature search and research findings led to a constant redefinition of the project's aims and hypotheses. Finally, like the literature search, the writing-up stage is also an ongoing process, which helped the present writer to clarify his ideas and direct his analysis of the data.

Because of the way in which the research programme was undertaken it has not been possible to produce a simple straightforward timetable of the research programme broken down into simple sequential stages, and Table A.1 should be taken as being only a rough approximation as to the order in which research was undertaken.

Part Two: The HELM Questionnaires

In Chapter Two it was mentioned that the HELM study was undertaken by means of three postal questionnaires which were sent to graduates one year, two years and three years after graduation. The three questionnaires were highly structured in so far as they consisted mainly of a series of pre-coded questions. The main advantages of such questionnaires are well stated in the literature and relate primarily to the ability to collect data which is easily comparable between groups and individuals at relatively low cost (Nachmias and Nachmias, 1976: 100).

As in most such studies, the author made only limited use of the full data set and data from the Wave II questionnaire was only briefly used in Chapter Nine. The reasons for not making more use of

the Wave II data were: a) much of the information relating to the social-class origins and destinations of graduates had not been coded; b) all the questions relevant to the social-class origins and education of graduates were included in the Wave I questionnaire; and c) it was felt that comparison of the Wave I and Wave III questionnaire data was sufficient to indicate how graduate careers were developing.

The main data used from the Wave I questionnaire related primarily to the origins, attitudes and personality traits of graduates, and included:-

Section One: Those questions relating to the graduates course of study, institution attended and class of degree obtained.

Section Two: Questions relating to the employment status of graduates one year after graduation, their employment, annual salaries and social-class destinations.

Section Five: Questions relating to the functions of higher education.

Section Six: Questions relating to the major personality traits of graduates.

Section Seven: Questions relating to the sex, age, marital status, secondary education, social-class and ethnic origins of graduates.

The principal data used from the Wave III questionnaire related to the destinations of graduates three years after graduation and their attitudes towards work, viz:-

Section One: Employment status, occupations and social-class destinations of graduates, annual salary and 'job quality'.

Section Five: Reassessment of higher education and an examination of those factors which graduates saw as determining success in the labour market.

Part Three: Technical Problems

In undertaking the research a number of technical problems were encountered. Firstly, the questions relating to the social-class origins and secondary education of graduates were not coded when the Wave I data was 'punched' into the computer and the present writer undertook this task himself. Although this caused him some additional work, it did give the present writer full control over the coding of this data, and gave him the opportunity to search for a social-class schema which would best suit his needs.

Full details of how the social-class questions were coded are given in Chapter Three. Suffice it to say here that the occupations were initially coded according to a modified version of the 36 point Hope-Goldthorpe schema of the 'general desirability of occupations' in such a way as to allow the separate categories to be re-combined into separate social classes.

The entry qualifications were coded on to a separate card with provision for fifty-five separate CSE/GCE/RSA examinations (and Scottish equivalents) and two other examinations. The examination results were coded according to the schema given in Table A.2. From this it can be seen that where an individual possessed a CSE in a subject it was coded as one irrespective of the grade. Where a graduate possessed two or more passes in the same subject the higher code was used. Thus where a graduate had a CSE and a GCE A-level the relevant GCE A-level code was used.

Table A.2: Codes Given to Examination Passes

Examination/Grade	Code
CSE (incl. RSAs)	1
GCE O-level	2
GCE A-level (grades D & E)	3
(grades B & C)	4
(grades A & S)	5
High-school Certificate	6
Scottish (O-level)	7
(H-level)	8
Other examinations	9
No examination	Blank

Other qualifications were coded into three columns, the first two of which related to the subject taken and the third to the level of qualification obtained. Table A.3 shows the codes which were used.

Table A.3: Codes Given to Other Examination Passes

Examination/Grade	Code
City & Guilds/apprenticeship	1
ONC & BTEC (ordinary diploma)	2
HNC & BTEC (national/higher diploma)	3
Dip. H.E. & Teaching Qualifications	4
Degree Course	5
Foundation Course/OU Credits	6
Other professional qualifications	7
Overseas Examination	8
No examination	Blank

The principal advantage of this schema lies in the ability both to examine how graduates differ in their initial entry qualifications and to construct more complex variables based upon both subject taken and level of attainment.

Unfortunately no questions were included in the Wave I and Wave III questionnaires on the geographical origins of graduates and the extent to which they may be immobile. In an attempt to overcome this problem the counties shown in the addresses of the Wave I and

Wave III questionnaires were coded in such a way that counties were numbered according to their standard region. Thus, for example, the five counties of the northern region were coded 1 to 5 and the ten Scottish Regions and Island authorities were coded 62 to 71. Such a schema made it possible to regroup counties into regions with the minimum of effort.

Owing to the relatively primitive nature of the SPSS program package and the way in which the original coding was undertaken there was a problem in merging the two files. This was overcome by writing a small FORTRAN program to facilitate this process. A related problem arose from having to merge some of the Wave I data with the Wave II and Wave III data. This posed a problem because a certain amount of 'key' data (eg gender and social-class origins) had been collected on the Wave I questionnaire and needed to be transferred to the Wave III questionnaire for further analysis to take place. This problem was overcome by writing two small FORTRAN programs: one to extract the relevant information from the Wave I data set and another to merge it into the Wave II and Wave III data sets. Because of the declining response rate it was possible to 'match' only approximately half of the Wave I questionnaire data with the Wave III data set and there were a few individuals who replied to the Wave III but not the Wave I questionnaire. In such cases the 'transferred' data was set to missing value. As things turned out much of this work proved not to have been necessary as North Staffordshire Polytechnic, where the work was undertaken, replaced its ICL 2966 computer with a VAX computer with the SPSSX program package which has an automatic 'merge' facility.

Part Four: Analysis of the Data

SPSSX has many different subprograms which allow the user to undertake a great many statistical tests from relatively simple statistics such as chi-square to more complex tests such as regression and factor analysis, but owing to the way in which the HELM project was undertaken and the design of the HELM questionnaires many of the more complex facilities available with SPSSX were of little use to us.

Firstly, as was mentioned in Chapter Two, a non-random sample was used in the HELM study and in consequence it is impossible to calculate the degree to which the resulting sample is representative of all CNAA graduates. Since most statistical tests draw inferences on the basis of fully random samples to the population as a whole they are of little use to us because the degree of error involved cannot be calculated.

A second problem is one caused by the level of measurement. Stevens (1944) has identified four variable types which are commonly used by social scientists, namely: the *nominal*, *ordinal*, *interval* and *ratio*. In nominal-level measurement each value represents a distinct category and the value is merely a label or name. In ordinal-level measurement values are arranged in a rank order, such that if 'a' is greater than 'b' and 'b' is greater than 'c' then it follows that 'a' is also greater than 'c', but ordinal-level measurements give no indication of the relative distances between categories. Interval-level measurements are an extension of ordinal-level variables except that the distances between categories are now fixed

and equal. For example, Likert-type attitude scales are of this type. However, such scales are purely artificial constructions and although they make it possible to study differences they do not deal in proportionate magnitudes. Finally, ratio-level measurements make use of real numbers, and the distances between categories are fixed, equal and proportionate (Nachmias and Nachmias, 1976: 54-6).

The importance of Stevens' classification is that the statistical tests which it is permissible to use are determined by the variable-type used. Arranging Stevens' variables in order - nominal, ordinal, interval and ratio - it can be shown that a statistical test which can be applied to a lower-level variable can also be applied to a higher-level variable. Hence the mode and chi-square are the only permitted tests which can be performed upon nominal-level variables, whilst any statistical test can be performed upon a ratio-level variable.

Most variables which are commonly employed in questionnaire studies are of a nominal and ordinal nature and this applies also to the panel-questionnaires used to undertake this study. Unfortunately only a limited number of tests can be applied to such variables: in the case of ordinal variables the median, gamma, tau and chi-square. However, given the more sophisticated tests which can be undertaken, many social scientists prefer to use statistical tests which involve the calculation of the mean and standard deviation (eg T-Tests and Anova), although - strictly speaking - they are only permitted with higher-level measurements. Laboriz (1979) and Taylor (1983) have undertaken a series of statistical tests on the validity of this approach and have concluded that it is generally acceptable,

provided that the ordinal variables used are not of a dichotomous (eg sex) or trichotomous nature.

Because of these problems it was decided to use only the more elementary statistical tests (mainly chi-square) and to make limited use of those statistical tests which require a fully random sample and involve the calculation of the mean and standard deviation. Even so it should be stressed that the tests employed should be interpreted with considerable caution and should be taken as guides rather than as absolutes.

APPENDIX B: EXTRACTS FROM THE HELM QUESTIONNAIRES.

The Wave I Questionnaire/...

Section ONE: DETAILS AND EVALUATION OF YOUR DEGREE COURSE

H2/2

Q1 Which higher education institution did you attend?

Name of institution _____

Q2 Which year did you commence your course? 19

☐

Q3 What was the full name of the degree course on which you enrolled?
(eg BSc (Hons) Catering Systems, BA Combined Studies, etc)

Q4 If your degree course allowed choice between a number of major
specialisms, please indicate the main subjects or areas of study
selected.

☐☐

Q5 What class of degree did you obtain?

Ring One

First Class	1st	1
Second Class Upper	2.1	2
Second Class Lower	2.2	3
Third Class	3	4
Unclassified degree with commendation		5
Unclassified degree without commendation		6
Fail		7
Other (please specify)		8

☐

Section TWO: DETAILS OF EMPLOYMENT SINCE GRADUATION

Q15 (a) Are you currently engaged in Full-time study?

YES
NO

☐
☐☐

If YES, and if you had any periods of employment/
unemployment between graduation and starting full-
time study, please answer questions 16-32 starting
on page 8. Otherwise, go to Q33 on page 15.

If NO:

(b) Are you currently in FULL-TIME employment?

YES
NO

☐
☐☐

If YES, GO TO Q16 on page 8

If NO, have you been ...?

Ring One

- (i) Continuously unemployed (ie. without any full
or part-time work since graduation?
- (ii) Had part-time work only since graduation
- (iii) Had a period(s) of full-time work since
graduation

1
2
3

☐

If (i), please give reasons:

NOW

GO TO Q33 on page 15

If (ii), please give reasons:

NOW

GO TO Q16 on page 8

If (iii), please go to Q16 on page 8

		Current (Most Recent) Job	1st Job (if you have had more than one job)
Were you?	Self employed	1	1
	Employed	2	2
	Full time	3	3
	Part time	4	4
Job title (be specific) eg trainee chartered accountant; school teacher; secretary; production engineer; maintenance engineer;etc			
Field of Employment: eg Comprehensive school; retail trade; pharmaceutical industry; etc..			
Number of employees in the company as a whole (approx)			
less than 20		1	1
21 -49		2	2
50-199		3	3
200-499		4	4
500 +		5	5
Name of Employing Organization			
Salary or Weekly income (Before tax including any bonus supplement or London weighting)	Salary p.a. OR Weekly income	£ _____ £ _____	£ _____ £ _____
Location of Job: Within a 50 mile radius of the College or Poly- technic from which you graduated		1	1
51 - 150 miles		2	2
over 151 miles		3	3
	Month Year	Month Year	
Date of starting:	8	8	
(Where applicable) Date of leaving:	8	8	
(Where applicable) Reasons for leaving _____			
(for each job) _____			

Section THREE: JOB APPLICATIONS AND PREFERENCES

Q33 What was the main source of careers information and advice while you were studying for your degree? Ring One

- | | |
|---|---|
| Academic staff who taught on my course | 1 |
| Academic staff unconnected with my course | 2 |
| Careers Advisory Service | 3 |
| People outside my College/Polytechnic | 4 |
| My own reading and enquiries | 5 |

Q34 Approximately how many job applications have you made over the last twelve months? (write in)

.....

Q35 With approximately how many different employers have you had interviews over the last twelve months? (write in)

.....

Q36 How many job offers have you had over the last twelve months? (write in)

.....

Q37 Have you experienced.....? Ring One

- | | |
|---|---|
| Considerable difficulty getting any job at all | 1 |
| Difficulty getting any job appropriate to my qualifications | 2 |
| Difficulty getting a job I really want | 3 |
| I've had little difficulty getting a job I want | 4 |
| None of these apply (please give reasons) | 5 |

Q38 Please indicate which of the following (if any) have been important in your case:

Ring any

- | | |
|---|----|
| (i) Employers think that I am over qualified for the jobs available | 01 |
| (ii) The <u>class</u> of degree I have is not attractive to employers | 02 |
| (iii) Employers are not impressed with the sort of institution I attended | 03 |
| (iv) I do not think any of the jobs currently available are suitable for someone with my qualifications | 04 |
| (v) There are so many graduates looking for jobs that employers can pick and choose | 05 |
| (vi) There is too much competition from more highly qualified graduates | 06 |
| (vii) Employers are not impressed with the kind of course I studied | 07 |
| (viii) All of the jobs currently available are with the kinds of employers of which I disapprove | 08 |
| (ix) Employers are not impressed with a CNA degree | 09 |
| (x) There are no vacancies currently in the sorts of jobs I wish to do | 10 |
| (xi) Other (please specify) _____ | |

Q39 If you are currently employed (if not, go to Q40) please specify why you think you were successful in obtaining your current job.

Q40 Please indicate the importance of each of the following to your choice of a long-term job:

	Unimportant	Little Importance	Important	Very Important
(i) Opportunity to work with people rather than with things	1	2	3	4
(ii) High salary	1	2	3	4
(iii) Considerable leisure time	1	2	3	4
(iv) Considerable job security	1	2	3	4
(v) Opportunity to help others	1	2	3	4
(vi) High prestige & social status	1	2	3	4
(vii) Opportunity for professional development	1	2	3	4
(viii) Flexible working hours	1	2	3	4
(ix) Potential for improving society	1	2	3	4
(x) Work which is not too exacting	1	2	3	4
(xi) A strong possibility of rapid promotion	1	2	3	4
(xii) The opportunity to be creative and original	1	2	3	4
(xiii) Relative freedom from supervision by others	1	2	3	4
(xiv) The chance to exercise leadership	1	2	3	4
(xv) Opportunity to use one's special skills and abilities	1	2	3	4
(xvi) Work which is continually challenging	1	2	3	4
(xvii) Other (please specify)	1	2	3	4

And now, continue directly with Section FOUR on next page

Section FOUR: DETAILS OF COURSES OF STUDY UNDERTAKEN SINCE GRADUATION

Q41 Did you apply for any FULL-TIME post-graduate course of study while you were an undergraduate, and have you applied since graduation?

- | | | |
|---------------------------------------|---|--------------------------|
| YES, I applied while an undergraduate | 1 | <input type="checkbox"/> |
| YES, I have applied since graduation | 2 | <input type="checkbox"/> |
| NO | 3 | <input type="checkbox"/> |

Q42 Have you undertaken any period of further study (either full- or part-time) since graduation?

YES ☐
NO ☐

If NO, GO TO Q43 on Page 19

If YES:

Are/were all of these periods of study covered in Q27 (Training Courses in Current or Most Recent Employment)?

YES ☐
NO ☐

If YES, GO TO Q43 on Page 19

If NO, please answer the following questions about

- (A) your current period of study and/or
(B) any other periods of study since graduation which have been completed or which you left without completing

(A) CURRENT PERIOD OF STUDY

(i) Title of course (give exact title, please)

(ii) How long does the course last?

_____ years _____ months _____ weeks

- | | | | |
|-----------------------|---------------------------------|---|--------------------------|
| (iii) Is this course? | full-time | 1 | <input type="checkbox"/> |
| | part-time evenings | 2 | <input type="checkbox"/> |
| | part-time days/day and evenings | 3 | <input type="checkbox"/> |
| | other (please describe) | 4 | <input type="checkbox"/> |

(iv) Is this course part of a Government training scheme?

YES ☐
NO ☐

If YES, please state the title of the scheme (eg Training Opportunities Scheme, Community Programme)

(v) Do you receive financial support from? Ring all which apply

- | | | |
|---|---|--------------------------|
| an employer | 1 | <input type="checkbox"/> |
| the MSC | 2 | <input type="checkbox"/> |
| a Research Council | 3 | <input type="checkbox"/> |
| a joint industry and Research Council award | 4 | <input type="checkbox"/> |
| a college, polytechnic or university | 5 | <input type="checkbox"/> |
| a local education authority | 6 | <input type="checkbox"/> |
| relatives or friends | 7 | <input type="checkbox"/> |
| other (please specify) | 8 | <input type="checkbox"/> |

- (vi) If on a full- or part-time course, at which institution are you studying?

Name of Institution _____

- (vii) What qualification(s) result from successful completion of this course?

No formal qualification 1
Professional qualification 2
(Exact title _____)

PGCE 3
Masters Degree (taught course) 4
Masters Degree (by research) 5
PhD 6
Other (please specify) _____ 7

- (viii) What are the minimum qualifications for entry to the course?

No formal qualifications 1
"O" level (or equivalent) 2
"A" level (or equivalent) 3
A degree 4
A good honours degree 5

- (ix) To what extent is this course related to your undergraduate studies?

Not at all 1
Only in general terms 2
Very closely 3
Too much overlap 4

- (x) If undertaking full-time study, does this course include a period of work experience?

YES ☐
NO ☐

- (B) Periods of study (excluding those covered in Q27) completed or which you left without completing
(Refer to codes in A above where appropriate)

Period of Study

- (i) Title of course
- (ii) How long did the course last (in weeks)?
- (iii) Full-time [Codes 1-4, see A (iii)]
- (iv) Was this course part of a Government Training Scheme?
YES 1 NO 2

ONE	TWO

Section SIX: GENERAL ATTITUDES AND VALUES

Q51 Here are various spheres of life. Please mark how important each one is to you personally.

	No						Great
	Importance						Importance
(i) politics and public life	1	2	3	4	5	6	
(ii) arts and culture	1	2	3	4	5	6	
(iii) amusement and leisure time	1	2	3	4	5	6	
(iv) your education at College/Poly	1	2	3	4	5	6	
(v) academic research	1	2	3	4	5	6	
(vi) family (parents, brothers & sisters)	1	2	3	4	5	6	
(vii) profession and work	1	2	3	4	5	6	
(viii) sociability and friends	1	2	3	4	5	6	
(ix) marriage (own family)	1	2	3	4	5	6	

Q52 To what extent do you think of yourself as

	Not						Very
	at all						much
(i) intelligent	1	2	3	4	5	6	
(ii) creative	1	2	3	4	5	6	
(iii) swayed by arguments rather than emotions	1	2	3	4	5	6	
(iv) practical	1	2	3	4	5	6	
(v) good at putting ideas into words	1	2	3	4	5	6	
(vi) knowledgeable	1	2	3	4	5	6	
(vii) keen to try ideas out on others	1	2	3	4	5	6	
(viii) confident of your intellectual ability	1	2	3	4	5	6	
(ix) interested in trying new fields of study	1	2	3	4	5	6	
(x) critical	1	2	3	4	5	6	
(xi) independent	1	2	3	4	5	6	
(xii) numerate	1	2	3	4	5	6	
(xiii) reliable	1	2	3	4	5	6	
(xiv) sociable	1	2	3	4	5	6	
(xv) adaptable	1	2	3	4	5	6	
(xvi) interested in social problems	1	2	3	4	5	6	
(xvii) sympathetic	1	2	3	4	5	6	
(xviii) shy	1	2	3	4	5	6	
(xix) religious	1	2	3	4	5	6	
(xx) industrious	1	2	3	4	5	6	
(xxi) responsible	1	2	3	4	5	6	
(xxii) conservative	1	2	3	4	5	6	

Q53 To what extent do you believe that your life is determined by

	Not						Very
	at all						Much
(i) your own wishes and intentions	1	2	3	4	5	6	
(ii) society's requirements & constraints	1	2	3	4	5	6	
(iii) your own personal characteristics	1	2	3	4	5	6	
(iv) coincidences & influences outside of everyone's control	1	2	3	4	5	6	

And now, continue directly with Section SEVEN on next page

[illegible]

Secondary Modern	01
Technical Secondary	02
Comprehensive	03
Grammar/High	04
Direct Grant	05
Independent (Public/Private)	06
HM Forces School	07
Institution outside UK	08
Other (please specify)	09

Junior Secondary (3-4 year selective)	11
Senior Secondary (6 year selective)	12
Comprehensive	13
Grant-Aided	14
Independent (Public/Private)	15
Other (please specify)	

- Ring one number only.

- | | | |
|--------|---|----|
| (i) | No formal qualification | 1 |
| (ii) | GCE O levels or CSE Grade 1s (1-4 subjects) | 2 |
| (iii) | GCE O levels or CSE Grade 1s (5 or more)
or General School Certificate | 3 |
| (iv) | GCE A level (1 subject) | 4 |
| (v) | GCE A level (2 or more) | 5 |
| (vi) | ONC/OND, TEC Certificate/BEC National | 6 |
| (vii) | HNC/HND, TEC Higher/BEC Higher National | 7 |
| (viii) | Scottish Highers | 8 |
| (ix) | DipHE | 9 |
| (x) | Open University credits | 10 |
| (xi) | Other (please specify) | 11 |

- | |
|--|
| |
| |
| |
| |

- | | |
|--|--|
| | |
| | |
| | |
| | |

[illegible]

- 11 What did you do between completion of full-time secondary education and entering your degree course?

(Please ring all those numbers which apply in your case)

- (i) started immediately the degree course indicated in Q3 1
- (ii) started a different course at Polytechnic or College 2
- (iii) started a different course at University 3
- (iv) completed a training course in further education 4
- (v) undertook paid employment for a period of between 3 months and 1 year 5
- (vi) undertook paid employment for a period of more than 1 year 6
- (vii) undertook unpaid domestic work 7
- (viii) raised a family 8
- (ix) other (please specify) _____ 9

- 12 What is/was the main occupation of your father, mother and spouse (eg. civil servant, teacher, postman). Please include under self you own previous occupation if applicable.

- (i) Father _____
- (ii) Mother _____
- (iii) Self _____
- (iv) Spouse _____ No Spouse ☐
(tick)

- 13 As far as you know, what is the highest qualification achieved by your parents and spouse? (Please ring one in each column; if overseas equivalent please give best estimate or specify in "other")

	Father	Mother	Spouse
(i) None	1	1	1
(ii) GCE O levels, CSE grade 1s, School Certificate	2	2	2
(iii) GCE A levels or equivalent (ONC, OND, TEC/BEC National)	3	3	3
(iv) Qualifications above A level but not of degree equivalent (eg HNC, HND, TEC/BEC Higher, Teacher Certificate)	4	4	4
(v) First degree or equivalent and/or higher degrees (eg BA, MSc, PhD)	5	5	5
(vi) Other (please specify) _____	6	6	6

- 14 To monitoring of access to higher education and movement in to work, please provide details of your ethnic origin.

Ethnic Origin (Please tick one only)

- African/UK African ☐
- Asian/UK Asian ☐
- Caribbean/UK Caribbean ☐
- UK European ☐
- Other European ☐
- Specify other Origin/Country ☐

.....

The Wave III Questionnaire/...

OFFICE
USE
ONLY

CARD 01
3-6
7-8
9-10

This is the final questionnaire for our three year study of CNAAs graduates. The confidence that we have in our findings depends on the number of returned questionnaires so please fill this in and return it in the pre-paid envelope provided. We have tried to make the questionnaire easy to use - relying on circling or crossing out wherever possible. If you have any questions about the research or further comments to make please fill in the section at the end of the questionnaire and we will attempt to answer them as soon as possible.

Thanks in anticipation.

John Brennan
Philip McGeevor

Q1 Which of the following describes your current situation?

(ring ANY that apply)

- | | |
|--|---|
| 1. In full-time employment | 1 |
| 2. In part-time employment | 1 |
| 3. In full-time study | 1 |
| 4. In part-time study | 1 |
| 5. Unemployed and available for employment | 1 |
| 6. Unemployed and not available for employment | 1 |
| 7. Self employed | 1 |

11-17

The next section asks for details about your current employment. It is to be answered only by those currently employed whether as employees or self-employed. Others go to SECTION 2 on page 10 and answer question 32 onwards.

SECTION ONE: DETAILS ABOUT CURRENT EMPLOYMENT

OFFICE
USE
ONLY

- Q2 Is your present job? (ring ONE only)
- | | |
|---|---|
| Temporary (a contract for 3 months or less) | 1 |
| Fixed Term (a contract for more than three month) | 2 |
| Permanent | 3 |

18

- Q3 a) What is the title of your current job? (please be specific, eg chartered accountant; school-teacher; production engineer; sales assistant etc)
-

19-21

- b) What is your current position? (eg Apprentice, Assistant Manager, Foreman etc)
-

22-24

- c) For how many months have you been employed in your current position?

Months

--	--

25-26

- Q4 Please indicate whether the type of work you do falls under any of the following categories. If not, ring 'other'.

(ring ONE only)

- | | |
|--------------------------------------|----|
| Hotel, Catering & Amenity Management | 01 |
| Selling | 02 |
| Computer Programming | 03 |
| Accountancy | 04 |
| Research | 05 |
| Civil Engineering | 06 |
| Production Engineering | 07 |
| Other Engineering | 08 |
| Town & Country Planning | 09 |
| Scientific Laboratory Technician | 10 |
| Teaching/Lecturing | 11 |
| Social Work | 12 |
| Other Social/Welfare | 13 |
| Nursing | 14 |
| Pharmacy | 15 |
| Librarian | 16 |
| Artistic Design | 17 |
| Bank Clerk | 18 |
| Clerical/Secretarial | 19 |
| Manual Work | 20 |
| Other | 21 |

27-28

Q5

Please indicate the kind of employing organisation under the following general categories:

OFFICE
USE
ONLY

(ring ONE only)

- | | | |
|---|--|----|
| 1 | <u>Public & Voluntary Bodies</u> | |
| | Civil Service | 11 |
| | Local Government | 12 |
| | University | 13 |
| | Polytechnic | 14 |
| | Technical College | 15 |
| | School | 16 |
| | Health Authority | 17 |
| | Other Public or Voluntary Body | 18 |
| 2 | <u>Manufacturing & Allied Industries</u> | |
| | Agriculture, Forestry or Fisheries | 21 |
| | Civil Engineering Contractor or Builder | 22 |
| | Civil Eng. Consultant, Surveyor or Architect | 23 |
| | Oil, Mining or Extractive Industry | 24 |
| | Chemical or Allied Industry | 25 |
| | Engineering or Allied Industry | 26 |
| | Engineering Consultants | 27 |
| | Food, Drink or Tobacco | 28 |
| | Gas, Electricity, Water or Atomic Energy | 29 |
| | Other Manufacturing or Allied Industry | 30 |
| 3 | <u>Commercial & Allied Services</u> | |
| | Accountant | 31 |
| | Legal Services | 32 |
| | Health (Private Practice) | 33 |
| | Transport or Communications | 34 |
| | Entertainment or Leisure | 35 |
| | Retail | 36 |
| | Hotel & Catering | 37 |
| | Banking | 38 |
| | Other Commercial or Allied Service | 39 |

29-30

Q6

Approximately how many are employed in the company (or concern) as a whole?

- | | |
|----------------|---|
| Less than 20 | 1 |
| 20 - 49 | 2 |
| 50 - 199 | 3 |
| 200 - 499 | 4 |
| 500 - 5000 | 5 |
| More than 5000 | 6 |

31

Q7

Approximately how much do you earn per year before tax and including any allowances/weightings etc?

Earnings per year (eg 7000=07000 etc)

--	--	--	--	--

32-36

Q13 In your current job are you considered to possess a recognized 'expertise' which is based on your undergraduate or postgraduate education?

(Ring ANY that apply)

	Undergraduate	Postgraduate
Yes	1	1
No	2	2
Not applicable	-	3

OFFICE
USE
ONLY

45-46

Q14 Do you think that the quality of your work benefits from knowledge and skills you gained from your undergraduate studies?

(Ring ONE only)

Not at all	1
Very little	2
A fair amount	3
A great deal	4

47

Q15 a) How useful was the work/further study undertaken in the year immediately following graduation to obtaining your present job?

(Ring ONE only)

Essential	1
Useful	2
Of little use	3
No use	4

48

b) How useful was the work/further study undertaken in the year immediately following graduation to carrying out your present job?

(Ring ONE only)

Essential	1
Useful	2
Of little use	3
No use	4

49

Q16 Would you describe your present job as 'graduate level employment' in the sense that...?

(Ring ALL that apply)

- | | |
|--|---|
| 1) It has traditionally been regarded as such | 1 |
| 2) A degree is an essential requirement for entry into this area of employment | 1 |
| 3) The inherent character of the work requires graduate level ability/training | 1 |
| 4) Although not a traditional area of graduate employment it is becoming so | 1 |
| 5) Although not a traditional area of graduate recruitment, employers are now tending to employ some graduates | 1 |
| 6) None of these apply | 1 |

50-55

Q17 a) Which of the following describe the forms of job training which you received?

OFFICE
USE
ONLY

(ring ALL that apply)

- | | |
|---|---|
| 1) None | 1 |
| 2) Informal guidance from immediate colleagues | 1 |
| 3) Guidance from supervisors | 1 |
| 4) A systematic course of training of less than five weeks | 1 |
| 5) A systematic course of training of more than five weeks and less than three months | 1 |
| 6) A longer period of training | 1 |

56-61

b) Have you received any training that is directed towards future promotion and career development rather than towards skills for your existing job?

YES	1
NO	2

52

Q18 How long did it take you to feel that you had become competent enough to carry out your job effectively?

(Ring ONE only)

- | | |
|------------------|---|
| 0 - 1 month | 1 |
| 1 - 6 months | 2 |
| 6 plus months | 3 |
| Too early to say | 4 |

53

Q19 Do you consider that your current job is?

(ring ONE only)

- | | |
|--|---|
| i) At the moment, my most preferred type of occupation | 1 |
| ii) Convenient, until I can find something better | 2 |
| iii) Neither | 3 |

54

Q20 Are you actively seeking or applying for?

(ring ALL that apply)

- | | |
|--|---|
| i) The same sort of job with another employer | 1 |
| ii) A different sort of job with your current employer | 1 |
| iii) Promotion with your current employer | 1 |
| iv) A different job with a different employer | 1 |
| v) A job in a different part of the country | 1 |
| vi) None of the above | 1 |

65-70

Q21 a) What formal qualifications were required for entry into your current job?

(ring ONE only)

- | | |
|--------------------------|---|
| No formal qualifications | 1 |
| 'O' levels/CSE | 2 |
| 'A' levels/CNC/CND | 3 |
| TEC/BEC Higher National | 4 |
| Degree | 5 |

71

b) Were professional qualifications required	YES	1
	NO	2

72

(73-80)

Q22 a) Would you say that your current job involves/requires?

(ring ONE for each aspect)

	A great deal	A fair amount	A Little	Not very much
(1) A high degree of work autonomy	1	2	3	4
(2) Opportunity to use initiative	1	2	3	4
(3) A high level of motivation	1	2	3	4
(4) A lot of responsibility	1	2	3	4
(5) Opportunity for professional development	1	2	3	4
(6) A strong possibility of rapid promotion	1	2	3	4
(7) The opportunity to be creative and original	1	2	3	4
(8) The chance to exercise leadership	1	2	3	4
(9) Work which is continually challenging	1	2	3	4
(10) Supervising other staff	1	2	3	4
(11) Work within clearly defined rules and regulations	1	2	3	4

b) Which 3 of the above do you most value?

(Write in the number in brackets)

1st _____

2nd _____

3rd _____

Q23 Are you a member of a Professional Association or a Trade Union? Is this a condition of your employment?

(ring ANY that apply)

	MEMBER	CONDITION
A professional association	1	2
An employee/staff association	1	2
A trades union	1	2
Students' union	1	2
Not a member	1	2

Q24 Have you applied, or been considered, for promotion by your present employer?

YES
NO

(Ring ONE only)

1
2

(If NO go to Question 28)

OFFICE
USE
ONLY
CARD C
3-6

7-17

18-19

20-21

22-23

24-25

26-27

28-29

30-31

32-33

34

- Q25 If YES, please indicate which of the following most closely approximated to you situation (Ring ONE only)
- (i) Applied for a job against internal and external competition, 1
 - (ii) Applied for a job against internal competition only, 2
 - (iii) Considered by Promotion Board or equivalent, 3
 - (iv) Promotion offered "out of the blue". 4

OFFI
USE
ONLY

35

- Q26 If you have been considered for promotion by your current employer please indicate the effect you believe the following had on your case:

	Positive effect		No effect		Negative effect		
(i) The standard of my previous work for my employer	1	2	3	4	5		36
(ii) My relations with supervisors at work	1	2	3	4	5		37
(iii) My gender	1	2	3	4	5		38
(iv) My educational qualifications	1	2	3	4	5		39
(v) My professional qualifications	1	2	3	4	5		40
(vi) My ethnicity	1	2	3	4	5		41
(vii) The kinds of school and college I attended	1	2	3	4	5		42
(viii) My political views and social attitudes	1	2	3	4	5		43

- Q27 Have you been promoted by your present employer?

(Ring ONE only)

YES 1

NO 2

44

- Q28 If you have not applied for promotion is this because: (those who have been applied for promotion go straight to question 29)

	(Ring ANY that apply)		
(i) There are no promotion opportunities in your present employment,		1	45
(ii) The right kinds of opportunity have not come up.		2	46
(iii) You do not want to be promoted,		3	47
(iv) You do not think that you would be successful in obtaining promotion,		4	48
(v) You do not know how promotions come about in your organisation,		5	49
(vi) You have been advised against applying for promotion.		6	50

Q29 Do you think that you have a good chance of gaining promotion
(or further promotion) within the next 12 months?

(Ring ONE only)

YES 1
NO 2

OFFICE
USE
ONLY

51

Q30 How do you rate the promotion opportunities in your present
organisation?

Very good ← Very bad

(Ring ONE only)

1 2 3 4 5

52

Q31 Do you think that promotions are handled fairly within
your organisation?

(Ring ONE only)

YES 1
NO 2

53

If NO please give reasons

54-55

(56-80)

SECTION FIVE: REASSESSMENT OF HIGHER EDUCATION AND EMPLOYMENT

OFFICE
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CARD 09
3-6

Q49 Do you now feel that entering higher education and gaining a degree in your subject...?

	Strongly Agree	Agree with reservations	Disagree with reservations	Strongly Disagree	Not Applicable
Made it easier to get a job	1	2	3	4	5
Improved long-term career prospects	1	2	3	4	5
Increased earnings in the early stages of employment for someone of my age	1	2	3	4	5
Enhanced long-term earnings	1	2	3	4	5
Improved the quality of my work	1	2	3	4	5

7-11

Q50 Do you now think that the content of your degree course has been or is going to be of real value to you in employment?

	YES	NO
HAS BEEN	1	2
WILL BE	1	2

12-13

Q51 With hindsight if you could choose your undergraduate course again, would you...?

(ring ONE only)

Do the same course	1
Do a different course	2
Not enter Higher Education	3
Don't know	4

14

(a) If a different course, would this course be...?

(ring ONE only)

The same subject, but a different institution	1
Different subject, same institution	2
Different subject, and different institution	3

15

(b) If a different course would this involve a move from...?

(ring ONE only)

Social science to arts	1
Arts to social science	2
Arts or social science to science & technology	3
Science & technology to arts & social science	4
Science to technology	5
Technology to science	6
None of these	7

16

Q56 Which factors do you think determine whether somebody is successful in their career?

	Not at All					Very Much				
	1	2	3	4	5	6				
i) personal ability	1	2	3	4	5	6				
ii) type of school attended	1	2	3	4	5	6				
iii) qualifications	1	2	3	4	5	6				
iv) social origin, coming from the right family	1	2	3	4	5	6				
v) chance	1	2	3	4	5	6				
vi) gender	1	2	3	4	5	6				
vii) opportunism	1	2	3	4	5	6				
viii) political beliefs	1	2	3	4	5	6				
ix) private income	1	2	3	4	5	6				
x) honesty	1	2	3	4	5	6				
xi) connections	1	2	3	4	5	6				
xii) initiative	1	2	3	4	5	6				
xiii) ethnicity	1	2	3	4	5	6				
xiv) organisational abilities	1	2	3	4	5	6				
xv) professional competence in a special field	1	2	3	4	5	6				
xvi) personal attractiveness	1	2	3	4	5	6				
xvii) diligence, industry	1	2	3	4	5	6				

Q57 How far has your higher education altered your social standing?

(ring ONE only)

Increased it greatly	1
Increased it slightly	2
Not affected it	3
Decreased it slightly	4
Decreased it greatly	5

Q58 Please indicate how important to you is the opportunity in each of the following in your job and in your leisure.

	Job				Leisure			
	Very Important		Unimportant		Very Important		Unimportant	
	1	2	3	4	1	2	3	4
To be creative and original	1	2	3	4	1	2	3	4
To use ones special skills and abilities	1	2	3	4	1	2	3	4
To do something which is not too exacting	1	2	3	4	1	2	3	4
To do something which is intellectually stimulating	1	2	3	4	1	2	3	4
To contribute to society	1	2	3	4	1	2	3	4

Footnotes

- 1) For example, Kelley (1978) and Kelley et al. (1981) looked at social mobility in developed and undeveloped countries, and concluded that the more unequal a society is the less intergenerational mobility there tends to be, and in particular, they found that the children of those in high-status positions tended to benefit directly from the inheritance of both physical and cultural capital. Thus, for example, whilst in Bolivia the advantages of birth explained almost 40% of the variance in status attainment, the comparable figure for the United States was under 20%.
- 2) Reference should also be made to a study by Sewell and Shah (1968) of 10,318 Wisconsin high school seniors. Their work strongly suggested that 'parental encouragement is a powerful intervening variable between socioeconomic background and the intelligence of the child and his educational aspirations' (p. 559). Nevertheless, their work also suggested that other factors (such as the college attended and the student's knowledge of available opportunities) were also important.
- 3) Research in the United States on the relationship between the school attended and employment outcomes has produced contradictory findings. For example, Treimen and Terrell (1975) concluded that whilst there is less intergenerational occupational mobility in Britain than in the United States, 'in both countries education is largely independent of social origins and thus serves mainly as a channel of social mobility rather than an instrument of status maintenance' (p. 577). This conclusion has, however, been challenged by Burawoy (1977) because Treimen and Terrell looked at white men only and ignored black people and women. Moreover, there was great variation in the ages of men in their samples, and some of the social mobility could be accounted for in terms of the expansion of white-collar employment which has occurred in both countries during the twentieth century. Finally, the British sample was rather small and Burawoy believes that Treimen and Terrell did not make adequate allowance for the existence of both grammar and public schools in reaching their conclusions.

Another American study, by Griffin and Alexander (1978), is interesting in that its results suggest 'that qualitative variations in the educational process, deriving from differences between schools and from allocative mechanisms and educational experiences within them, do, in fact have important consequences for men early in their labor force careers and that such effects may be either more pronounced or less so for selected groups of students' (p. 342). Nevertheless much of the variance in subsequent career attainments and income of students was found to be strongly related to their socioeconomic origins and those from well-to-do families appear to be advantaged in so far as they are more likely to attend the better colleges.

- 4) Kelsall et al. (1970) in undertaking their study of graduate employment found that those graduates with 'poor' degree results were less likely to participate in their study, than those with 'good' degree results. This is important because, other things

being equal, those with 'poor' degree results tended to be less successful in the labour market than others. The extent to which, if at all, the employment and social-class destinations of HELM graduates have been distorted as a result of this factor is not known.

- 5) Reference should also be made to a study by Williamson (1981b) who looked at the employment destinations of more than 11,000 CNAAs and university graduates in 1977 seven years after graduation. His findings add support to Boys and Kirkland's (1987) conclusion that polytechnic and university graduates tend to find employment in occupations of roughly equal status, and whilst graduate men from the universities were earning on average £5,390 a year and women £4,290, the comparable figures for polytechnic men and women were £5,690 and £4,730 respectively (1981b: 27).
- 6) The question relating to the occupations of respondents' parents is shown in Appendix B (p. 26 of the Wave I questionnaire) and it can be seen that its wording was rather poor. Respondents were not asked to say in which industry their parents worked, whether they were self-employed or employed and whether they worked full- or part-time. Moreover, by asking respondents to use the job title 'civil servant' the question invited ambiguous responses because civil servants occupy most social-class positions from unskilled labourers to senior professionals. In practice, however, it proved possible to classify most occupations according to the Hope-Goldthorpe schema (see Chapter Three) although on occasion it was necessary to take into account the parents' highest educational qualification.
- 7) Overall, in the 1981 Census, 59% of household heads in Scotland were enumerated as working in manual occupations, and the ratio of graduates from working-class origins to working-class households was higher in Scotland (0.67) than in Great Britain as a whole (0.47). Bearing in mind that an unknown proportion of those graduating in Scotland were born elsewhere this does suggest that Scotland's institutes are more likely to draw their students from working-class origins than polytechnics and colleges south of the border. The small sample size and its non-random nature should, however, be borne in mind when interpreting these figures.
- 8) Our findings relating to Scotland contrast with those of Kelsall et al. (1972b) who found that whilst there were only minor differences in the social-class origins of men who attended English and Scottish universities, Scottish women were more likely to originate from professional backgrounds (p. 7). Women, but not men, who attended Scottish universities were more likely to have attended a public school, their mothers were likely to have finished their formal education when aged over 14 and their paternal grandfathers were more likely to have been employed in a non-manual occupation (pp. 7-12). The small sample size, the limited number of courses sampled in Scotland and the absence of adequate data on the places of birth of graduates precluded a more detailed analysis of the social-class and educational origins of Scottish graduates in the HELM sample.

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