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"Transition from School to University: An Environmental Approach.
A Comparative Study of Students at the Universities of Durham and
Loughborough" by Alan John French.

ABSTRACT

The university environment as a whole was subdivided into five environmental spheres:- the physical, human, institutional, academic and personal. The effects that aspects of each of these five spheres had upon transition were assessed by surveying a randomly selected systematic sample of 25% of the first year undergraduates at Durham and Loughborough during the first term of their first year, in November 1975. These two universities were chosen because of their similarity in proportion of students in residence and similar student numbers. A specially devised questionnaire was used containing questions eliciting students' attitudes towards aspects of the university situation within each of the five spheres.

A Supplementary Survey was conducted during the students' second year (February 1977) to assess the degree of attitude change and adjustment, and to discover the ease with which transition had been accomplished. Between these two surveys interviews had been conducted with students at both universities to discuss more fully the implications of the Main Survey.

Results obtained from both surveys and interviews were then compared with final degree results, published between 1978 and 1980, and frequency with which students reported experiencing transitional problems, using a specially computed problem score. Individualised characteristics such as age, academic attainment on entry to university, home area and school experience were also compared with degree results and problem reportage. There was a tendency for environmental factors to be less significantly related to degree success, attrition and problem reportage than some other student characteristics, especially previous academic attainment.

TRANSITION FROM SCHOOL TO UNIVERSITY :

AN ENVIRONMENTAL APPROACH

A Comparative Study of
Students at the Universities
of Durham and Loughborough
(Two Volumes)

VOLUME ONE

Chapters One to Ten

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A thesis submitted for the degree of

Doctor of Philosophy

in the University of Durham

School of Education

by

Alan John French

1982



22. MAY 1984

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DECLARATION

No material contained in this thesis has previously been submitted for a degree in Durham University, or any other university.

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PRE-AMBLE

This research was conducted over a span of years. The nature of the study, comparing students' attitudes towards the five aspects of their new environment devised by the author with results obtained in final degree examinations, necessitated a number of years to pass before analysis and writing up of data. A number of courses in engineering and applied science at Loughborough, as well as those involving a year's study abroad as part of a foreign language course at Durham, were of four year's duration. So as students who were being surveyed had entered university in October 1975 some were not expected to graduate until July 1979. Where some had re-taken a year, or had to resit examinations, this meant that final results were delayed a further twelve months.

A chronological sequence of the events involved in this study may clarify the course of the research.

June	1975	Preliminary Survey at Durham
August	1975	Five-fold classification of the university environment was devised and, until October, the Main Questionnaire was compiled
October	1975	Registrar at Durham University consulted and Heads of Durham Colleges were invited to give permission for research to be conducted.
November	1975	Principals of Colleges still seen before Main Questionnaire issued at the end of the month.
December	1975	Replies received from Main Survey

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January to March 1976 Interviews conducted at both Durham
and Loughborough Universities

July 1976 Preliminary first year examination results
published where appropriate

August to November 1976 Supplementary Questionnaire devised

February 1977 Supplementary Survey administered

March 1977 Last replies received from Supplementary Survey

November 1978 First degree results for three year courses

November 1979 Degree results for four year courses and those
retaking a year in a three year course

November 1980 Last remaining degree results obtained or
confirmation a student had terminated

Since September 1977 the author has been teaching in
Dover and analysis of results could only take place during school
holidays when it was possible to return to Durham to make use of
the computing facilities.

Consequently, students who were being surveyed and who
participated in this study have all passed through the university
system with varying degrees of success. It is unlikely that any
are students at the present time. Their responses cannot be of
much benefit to them, but may be of value to succeeding
generations of undergraduates.

PART ONE : BACKGROUND

CHAPTER ONE

THE ROBBINS REPORT, HIGHER EDUCATION AND THE UNIVERSITY SECTOR

CHAPTER ONE

THE ROBBINS REPORT, HIGHER EDUCATION AND THE UNIVERSITY SECTOR

1.1 Introduction

The problem of student wastage has only recently been recognised as a problem at all and, hence, worthy of investigation.¹ Indeed, until the late 1960's British universities and colleges seemed to conduct research into most topics save themselves. Throughout the 1970's higher education expanded and became a growth industry. Research into its many aspects, one of which was student wastage, also flourished. Investigations of the problems students actually experienced developed as logical consequences of studies of student wastage. Studies of this nature ought to progress beyond merely discovering the proportion of students leaving university prematurely or failing to graduate. It is more important to discover why wastage of students occurs.



In the first few years of the 1980's a world-wide recession has led to financial constraints and cut-backs being applied to university education. Higher education is no longer the flourishing growth industry it once was. Contraction, imposed by economic cuts, is prevalent. The efficiency of higher education and its cost effectiveness are of more concern today than they were a decade or so ago. Lack of research in higher education was once probably a result of much doubt and controversy as to what was an institution of higher education and what was not. This dilemma has been resolved. However, it is likely that insufficient research into higher education will now be a consequence of inadequate funds. The economic climate of the 1980's demands maximum use to be made of all resources. It is, therefore, important that student wastage be investigated at this time.

1.2 Higher education in Britain

Post-school education in Britain is a complicated affair owing much to haphazard development or re-organisation, both of which have been the results more of political expediency than any long term policy or planning. At present a variety of institutions provide different levels of education to both full-time and part-time students aged sixteen years or more. The distinction between "further" and "higher" education is now less blurred than it was in the late 1950's and early 1960's, when much of the groundwork for today's diversity in post-school educational provision was made. This has been due, mostly, to the Robbins Committee's investigation of higher education and its interpretation of its frame of reference.²

The Committee's brief was to make recommendations about full-time higher education in Britain. The Committee looked at three types of establishment, for apparently different reasons, and labelled these as "Institutions of Higher Education". By virtue of their age and prestige the universities were the most important providers of post-school education. They offered degree courses to a limited proportion of the population. To use the taxonomy referred to by Watts³ the three types of university, Oxbridge, Ancient Scottish and Civic, were concerned with educating an élite that would become leaders in politics, commerce and the Church. Therefore, the Arts, and more latterly the physical and social sciences, were included in the curriculum. It is important to understand that the use of the word "élite" is, in no way, disparaging or polemic. Undergraduates were traditionally selected from the upper echelons of society, able to finance themselves, or were the most able academically, being winners of a scholarship. Thus, being a highly selected minority, the student undergraduate population was, by definition, an élite. In providing a specialised and distinctive education to degree level, universities were clearly to be regarded as "Institutions of Higher Education".

On the other hand, teacher training colleges, as their former name suggests, were specifically concerned with supplying a pool of trained teachers for employment in State-maintained schools. These institutions aimed at providing a vocational training rather than a broad, general education. Admission to teacher training college was granted to school leavers and mature applicants possessing qualifications that were inferior to those required for admission to a university. The inclusion of teacher

training colleges in the category of "institutions of higher education" by the Robbins Committee reflected the importance of such a training in the context of British education at the time rather than the depth or quality of the training.

The third type of institution Robbins selected was the College of Advanced Technology. This type of establishment had expanded and developed in the post-war period to match the demand for technologists and applied scientists that the universities could not supply. Some of the CAT's, as they were known, were offering degree level courses in engineering and applied science because of expedience alone. Entry to such courses required qualifications similar to those demanded by universities. It was this level of education that was considered vitally important for the country's economic well-being and it was this provision alone that the Robbins Committee investigated. The great bulk of part-time and lower level work taking place in the CAT's was ignored, as was educational provision in other colleges.

In the post-Robbins era, therefore, there has been a tendency to see higher education in terms of full-time, rather than part-time, study for a degree or its equivalent. The implication has been that higher education, as its name suggests, involves a depth of study superior to that conducted at school, while further education is an extension of school. This implies a hierarchical structure to post-school education in Britain and it is one that has been perpetuated in recent years. Since publication of the Robbins Committee's recommendations, developments in post-school educational provision have tended to be moves towards product differentiation and acts of political expediency

rather than the results of systematic planning. This has been made apparent in the implementation of only some of the Committee's recommendations. One, that teacher training should be administered by the universities was rejected. However, with the introduction of a graduate-only profession and the demise of Colleges of Education this has, now, effectively been implemented.

Robbins had profound effects upon university education. The CAT's were upgraded to university status, becoming the Technological Universities of Aston, Bath, Bradford, Brunel, City, Heriot-Watt, Loughborough, Salford, Strathclyde and Surrey. In addition to Keele that had been established after the war, completely new institutions were set up, the "plate-glass" universities of East Anglia, Essex, Kent, Lancaster, Stirling, Sussex, Ulster, Warwick and York. Each was granted its own charter and the right to confer its own degrees. These nineteen new and technological universities formed almost half of the forty-four British universities and contained almost a quarter (23.8%) of the undergraduate population.⁴ By almost doubling the number of universities (the Universities of London and Wales being regarded as single institutions) the implementation of this proposal made by the Robbins Committee enabled some 11% of the student-aged population to receive a university education: still a small proportion.⁵

The Committee's recommendations concerning teacher training were not put into effect. In order that Government control could be maintained over the output of teachers the Secretary of State for Education and Science, the Rt Hon.

Michael Stewart announced in 1964 that though the teacher training colleges would be renamed "Colleges of Education" they would not be administered by the universities,⁶ as Robbins had recommended. Thus, colleges of education were not to become autonomous bodies but were to remain under State control. This heralded the move towards a binary system of higher education in Britain. On one side there were autonomous universities, while on the other were State-maintained and controlled colleges of education and the new polytechnics, the latter being another of the Robbins Committee's recommendations. The rationale behind the binary system, with its two parallel structures of higher education, was outlined by a later Secretary of State, the Rt Hon. Anthony Crosland⁷ in a speech at Woolwich Polytechnic in 1965, when he stated that a dual system was preferable to:

"... the alternative concept of a unitary system, hierarchically arranged on a 'ladder' principle, with the universities at the top and other institutions down below.... Such a system would be characterised by a continuous rat-race to reach the first or university division, a constant pressure on those below to ape the universities above, and a certain inevitable failure to achieve the diversity of higher education which contemporary society needs."

This policy was intended to provide alternative educational facilities that would be different from, and not inferior to, the universities. The newly-named colleges of education were to offer B.Ed. courses, phasing out the Certificate of Education, and in so doing provide a less narrow vocational training for their students. As the name suggests they were to educate and not merely train potential teachers. It would now be possible for a student to obtain a degree from either a university

or a college of education, degrees from the latter being validated by a university or the CNAA. Furthermore, the new polytechnics were to offer degree courses, and this function has been expanded. Thus, the binary system isolated the autonomous universities from the rest of the institutions of higher education. The distinction between institutions in this dual system rested upon whether the Government did, or did not, have direct control in maintaining the institution.

Theoretically there are other distinguishing features that differentiate the new polytechnics from the universities. The Minister of State for Education, Mr Gerry Fowler,⁸ in replying to a question in the House of Commons concerning these differences stated that he attached:

"... particular importance first to their (the polytechnics) maintaining links with industry and commerce and generally contributing to the community which they serve, and secondly to their continuing to cater for all types of students by offering a wide range of courses, including sandwich and part-time courses at a variety of levels."

At such institutions some 50% of students are part-time, so the new polytechnics differ greatly from the universities and colleges of education.

Recent re-organisation and merging of colleges of education with university departments of education have not solved the problems of the binary system. There are still two parallel, yet now competitive and hierarchical systems. The university

sector is now proportionally smaller in an expanded sphere of post-school education. It may even become smaller than the Robbins Committee envisaged. The former pre-eminence of the universities is being threatened by weight of numbers alone.

In 1981 there were approximately 3000 fewer students admitted to university than in the previous year as a result of financial constraints. However, in the same year admissions to polytechnics had increased by some 9000. The total number of students in higher education had, therefore, risen. The university sector is becoming less significant in terms of numbers alone. Following the peak of eighteen year olds in the population at large in 1982 there is to be a steadily declining pool from which students in higher education may be selected. By 1995 there will be a third fewer eighteen year olds. The universities, already experiencing cut backs and financial restrictions, must contract, as indeed will all aspects of higher education for even the polytechnics are experiencing some financial difficulties.⁹ The universities have retained their prestigious position in spite of falling numbers of students. The future of universities may well be determined by their effectiveness and efficiency as educational institutions.

1.3 University education in Britain

It has been suggested that there is as much diversity within the university sector itself as there is within the sphere of higher education as a whole.¹⁰ It is clear that the British

system of university provision, one of the oldest, differs from that found elsewhere in the world. Not only is there a generous grants system and the provision of residential accommodation, there is also a wider choice of institution and a greater degree of mobility within the country for intending students. The differences between the British and other systems of university provision have been outlined by Watts¹¹ who notes that a significant difference is the highly competitive and selective nature of university admissions practised in this country.

In the United Kingdom there is a tendency for school leavers to apply for admission to university before entrance requirements have been met. Thus, some successful applicants are offered places only to be rejected at the last moment for failing to obtain the necessary qualifications. On the other hand there are some students who were not offered a place on application but who obtain the required examination results and are subsequently given the opportunity to study for a degree. In order that this highly competitive admission procedure could be streamlined the Universities Central Council on Admissions (UCCA) was established in 1961. This one central body deals with virtually all admissions to British universities, in spite of the great variations that exist between them.

Various attempts have been made to simplify the complex nature of university provision in this country. Universities may be classified by age, size or function. Whatever criterion is used to classify universities there are bound to be

some exceptions and room for debate. A widely accepted eight-fold classification divides British universities into the following categories, with the date of their being allowed to confer their own degrees in parenthesis:

- 1 Oxbridge - Oxford (1263) and Cambridge (1284)
- 2 Ancient Scottish - Aberdeen (1494) Dundee (1967)
Edinburgh (1583) Glasgow (1451) and St Andrews (1411)
- 3 London (1836)
- 4 Larger Civic "Redbrick" - Birmingham (1900)
Bristol (1909) Durham (1832) Leeds (1904)
Liverpool (1903) Manchester (1857)*
Newcastle (1852)** and Sheffield (1905)
- 5 Smaller Civic "Whitetail" - Exeter (1955)
Hull (1954) Leicester (1957) Nottingham (1948)
Reading (1926) and Southampton (1952)
- 6 Wales (1893) and Belfast (1908)
- 7 New "Plate-glass" - East Anglia (1963)
Essex (1964) Keele (1962) Kent (1965)
Lancaster (1964) Stirling (1967) Sussex (1961)
Ulster (1965) Warwick (1965) and York (1963)
- 8 Technological - Aston (1966) Bath (1966)
Bradford (1966) Brunel (1966) City (1966)
Heriot-Watt (1966) Loughborough (1966)
Salford (1967) Strathclyde (1964) and Surrey (1966)¹²

* Manchester University was established by Royal Charter in 1880, having been a University College since 1857.

** Newcastle, founded as a University College of Durham in 1852, received its own Charter in 1963.

However, the Open University (1969) does not fit into any category. Furthermore, Durham, being a collegiate university has more in common with Oxford and Cambridge, some would say, than with the other larger civic universities. There is certainly a case for separating Durham from Newcastle as the latter was granted its own charter as recently as 1963, being a college of Durham University before that date. In a similar way Dundee, a college of St Andrews till granted its own charter in 1967, cannot be considered as "ancient Scottish". Little profit can be gained from merely classifying universities, however. Of far more importance is the consensus as to what a university is, which unites all of these institutions of varying age and structure, so minimising their differences.

1.4 Aims of university education

The answer to the question "What is a university?" ought to involve discussion of the aims and objectives of higher education and cannot be a mere description of an institution. There may be some disagreement as to what these aims are primarily, but generally there are two fundamental features of a university.¹³ As Ryle¹⁴ succinctly puts it, there is, firstly, the university's pre-occupation with the preservation and transmission of academic standards, and secondly, this has been traditionally linked with the education of the whole man. The Robbins Committee found no single aim of higher education but rather four essential components:¹⁵

- 1 Instruction in skills and techniques
- 2 Promotion of general powers of the mind

- 3 Advancement of learning
- 4 Transmission of a common culture and standards of citizenship

The aims of higher education can thus be labelled "cognitive" i.e. to do with the pursuit of academic excellence, and "non-cognitive" i.e. concerned with socialisation.

Difficulties seem to arise when either the cognitive or non-cognitive aims are given precedence. In the works of Peters¹⁶ there has been discussion of the development of "desirable qualities". Morris¹⁷ has been concerned with similar characteristics when he has talked about the development of "those powers, virtues and sympathies which seem to constitute the essence of what we mean by being human". If universities are solely concerned with such objectives, graduates would possess those desirable and worthwhile qualities that the society in which they live considers worth possessing. They need not, necessarily, have attained a high academic standard. The problems associated with this definition of what constitutes a university are obvious. Firstly, there is the problem concerned with who determines what are worthwhile and desirable qualities. Secondly, there is a negation of a university's traditional role which has been the pursuit of excellence. In response to the former, the decision as to what constitutes worthwhile qualities and what are worthless involves value judgements which may differ from one society to another, or may differ markedly within the same society over a period of time.¹⁸ Writers have observed how student unrest in the 1960's encouraged the demand for "relevance" in undergraduate courses, reflecting a

shift in society's values over a relatively short period of time.¹⁹ With reference to the second problem, one must assume that such elements as academic excellence and high attainment are seen as "worthwhile qualities". University education in Britain, that has survived for over seven centuries, cannot be defined in terms of socialisation alone with a disregard for academic attainment.

Perhaps a more cynical approach is to view university education in more sociological or anthropological terms as a "rite of passage"²⁰ into an adult world, or as an entry into an occupation or a profession.²¹ Seeing the university as a factory or a conveyor belt, with graduates as the product, is a materialistic and pragmatic view leaving little scope for personal and human development.²² Yet this is more easy to understand than Truscot's²³ nebulous and paradoxical claim that graduates should:

"... feel fuller, and yet emptier ... Should have increased power yet at the same time a keener sense of their own weakness; above all, they should be afired with passion to discover and explore."

Within this rather poetic definition of the aims of university education is the implication that the essence is personal and individual development; a process that should continue long after graduation. Such a view has been expounded on both sides of the Atlantic, with such noted educationalists as Freedman²⁴ and Sanford²⁵ in the United States agreeing with British workers.²⁶

In claiming that personal development is the aim of university education there is no denial or exclusion of academic

criteria. The pursuit of excellence is an integral part of personal development and is a vital feature of university education, distinguishing it from other areas of post-school education. As Daniels and Schouten²⁷ have stated, the primary educational aim of higher education is the transfer of knowledge. Academic development is one facet of personal development as a whole. It is when the aims of university education are seen in narrow, academic terms alone that debate and controversy arise. The proliferation of students' unions and societies suggests that students themselves see university education in a broader light than being solely concerned with the transfer of knowledge and acquisition of skills. Consequently, with the aim of university education being more broadly based than the narrow confines of academic standards imply, the concept of student wastage can be perceived in different ways. Can there be wastage if the essential point of a university education is personal development? If a student fails to graduate has there been a waste? The Robbins Committee was aware of this dilemma and doubted the validity of the terminology used.²⁸ This view has been expressed more recently by contemporary student counsellors.²⁹

Two universities, one England's third oldest and the other one of its most recently established, were selected for investigation and comparison. By focusing attention on two institutions within the university sector, the University of Durham and Loughborough University of Technology, it may be possible to identify some aspects of student wastage.

Historically and traditionally, university education in Britain has been characterised by a pre-occupation with the

development and education of the whole man. Moral tutors and regent schemes, the various guises of pastoral care, the abundance of extra-curricular activities and inter-varsity sporting fixtures can be cited as evidence to support the notion that university education is concerned with the development of individuals and the fulfilling of potential. Part of this development involves the intellect, certainly, and academic attainment is critical, but it is not the sole aim or objective. In this light some of the attitudes shown towards student wastage in the past, and the apparent unconcern for students' problems, may be more clearly understood. More particularly, the concept of student wastage itself must be examined afresh.

Notes and references:

- 1 Malleon, N. J. Student wastage in the United Kingdom in Butcher, H. J. and Rudd, E. (Eds) Contemporary problems in higher education (London: McGraw-Hill, 1972) p 83
Many references to the scarcity of research into higher education are to be found in Butcher and Rudd's overview of current research, which has been of great value to the author in the background to this study.
- 2 Higher education A Report of the Robbins Committee (HMSO, 1963) Cmnd. 2154
- 3 Watts, A. G. Diversity and choice in higher education (Routledge and Kegan Paul, 1972) p 22
- 4 Statistics in Education Volume 6 - Universities (HMSO, 1976) Table 7, pp 16-17
- 5 No exact figures are available but this approximation may be estimated using information gleaned from various sources. Expansion of university provision led to anything from 15% to 20% of the age group attending university, according to Sir P. Venables in his Oration delivered at Birkbeck College, London (Universities Quarterly, 24(4), 1970) pp 375-391. According to information from the 1971 Census there were 1,825,535 students in Britain, including some aged 15-18 years. (Economic activity Part 1 HMSO, 1974) This gives a proportion nearer 11% of the total age group than the former 7%. It is clear that post-Robbins expansion of universities has enabled a slightly larger proportion of the student-aged population to receive a university education. Lord Todd

claimed that "more means worse" (The Times, December 4th, 1969) which view was re-affirmed by Lord Annan, Provost of University College, London when he claimed that expansion would mean undergraduates would find it difficult to obtain lower class honours degrees as the calibre of new entrants would be inferior to that when a smaller proportion were admitted. This view, recently expressed by Dr Rhodes Boyson in The crisis in education (The Woburn Press, 1975) is not held by academics in general, and not by Sir P. Venables.

- 6 Parliamentary Debates Commons Volume 703 December 11th 1964
Column 1972
- 7 Crosland, A. Speech given at Woolwich Polytechnic April 27th 1965 (Mimeo)
- 8 Parliamentary Debates Commons Volume 875 June 25th 1974
Oral answers
- 9 Judd, J. The race for student places grows tougher (The Observer, August 22nd, 1982)
- 10 Watts (1972) p 8
- 11 Watts (1972) p 5ff
- 12 Watts (1972) p 20. The dates of foundation are taken from Mann, J. F. Education (Pitman, 1979)
- 13 Beard, R. M., Healey, F. G. and Holloway, P. T. Objectives in higher education (Society for Research into Higher Education, 1968) conclude that there are confused aims of higher education, while Entwistle, N. J. in Students and their academic performance in different types of institution in Butcher and Rudd (1972) notes contrasting objectives, and that students perceive these aims differently.
- 14 Ryle, A. Student health and counselling in Butcher and Rudd (1972) p 212
- 15 Robbins Report (1963) p 6; A four-fold classification of the aims has been given by Halsey, A. H. and Trow, M. in The British university teacher in Butcher and Rudd (1972) p 281 comprising:-(1) transmission of knowledge;(2) discovery of new knowledge;(3) selection and formation of, and giving recognition to, a social elite;(4) provision of higher vocational training. Like the Robbins Report the aims are cognitive (teaching and research) and non-cognitive (socialisation).
- 16 Peters, R. S. Education and the educated man in Dearden, R. F., Hirst, P. H. and Peters, R. S. (Eds) Education and the development of reason (Routledge and Kegan-Paul, 1972) p 3. See also Peters, R. S. Education as initiation (Evans Brothers, 1963)

- 17 Morris, B. Objectives and perspectives in education: studies in educational theory 1955 - 1970 (Routledge and Kegan-Paul, 1972) p 25
- 18 Ormell, C. P. Bloom's Taxonomy and the objectives of education (Educational Research, 17(1), 1974) p 3 makes the observation that the aims of education are relative to the value systems of the society in which the education is practised.
- 19 Changes in society and their effect upon university education are cited as possible causes of student unrest during the late 1960's by Hatch, S. in Change and dissent in the universities in Butcher and Rudd (1972) p 225 and by Dr Rhodes Boyson (1975) p 121.
- 20 Goodlad, S. Conflict and consensus in higher education (Hodder and Stoughton, 1976) p 90 and Ryle, A. Student casualties (Pelican, 1969) p 100
- 21 Niblett, W. R. and Pole, K. Objectives in higher education in Butcher and Rudd (1972) pp 35 - 44. See also Collier, K. G. New dimensions in higher education (Longmans, 1968) p 5
- 22 Niblett, W. R. Universities between two worlds (University of London Press, 1974) p 10. Minogue, K. R. in The concept of a university (Weidenfeld and Nicolson, 1973) discusses the philosophical aspect of what a university is, but concludes by saying that graduates are the products of the factory-like university. p 197
- 23 Truscot, B. Redbrick university (Faber and Faber, 1949) p 50
- 24 Freedman, M. B. Studies of college alumni in Sanford, N. (Ed) The American college (New York, Wiley and Sons Inc., 1962) p 883
- 25 Sanford, N. Where colleges fail (Jossey-Bass Inc., 1967) p xiv
- 26 Many British workers have referred to the aims of education in terms of personal growth and development as Niblett, W. R. and Pole, K. observed in their contribution to Butcher and Rudd (1972). However, they suggest there is a need to discover what a university education achieves rather than making "wildly general statements concerning the characteristics of the 'educated man'" p 43
- 27 Daniels, M. J. M. and Schouten, J. The screening of students - problems of assessment and prediction of academic performance (Harrap, 1970) p76
- 28 Robbins Report (1963) p 119
- 29 In a paper presented at the Student counselling - new directions Conference at Aston University, February 21 st 1975, Daws, P. P. referred to counselling as attempts to help

or cure academically failing students. However, as his view of counselling is more concerned with enabling a student to develop as a person than merely to graduate, especially if a student had been steered into an inappropriate course, the so-called 'drop-out rate' could increase in response to good counselling. This view has been expressed by Clarke, J. and Jones, A. in The transition from school to college (Youth Counselling Bulletin 1(4), 1975) when they stated that a student's decision to withdraw may be the first positive decision a student makes for himself. 'Drop-out' and 'wastage' are terms with a negative over-tone and are therefore inappropriate when talking about positive steps being made by students. Clearly the terminology used in the past needs re-evaluation.

CHAPTER TWO

STUDENT WASTAGE

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2.1 Introduction

The first, and only, comprehensive figures showing the rate of student wastage in Britain were included in a report entitled "An Enquiry into Student Progress" which was published in 1968.¹ At that time the average rate of wastage was 13.3%, with 14.2% of male students and 10.6% of female students leaving university prior to graduation.² These rates of attrition were lower than those experienced in other countries³ but seemed relatively high when the competitive and selective nature of university admission practised in this country was taken into consideration.⁴ Concern was expressed over these rates of wastage and two possible explanations were suggested. Firstly, it was proposed that wrongful admission accounted for some withdrawals. Students may have been accepted to study inappropriate courses at the wrong institution, mainly as a result of being

"channelled" into university application by parental or school pressure. Secondly, there was the suggestion that some students failed to develop intellectually beyond the level they had attained on entry, so were unable to meet the academic demands made of them.

The Robbins Committee accepted these reasons as likely explanations for withdrawal some five years earlier.⁵ Furthermore the Robbins Committee accepted, as inevitable, a certain proportion of students withdrawing.⁶ Though it may be inevitable that some students leave university before graduating, or may sit final examinations and fail, the Robbins Committee criticised the terminology used to define this phenomenon. The so-called failing student had not, necessarily, gained nothing from a limited time at university. Hence, wastage was a misnomer.⁷

The terminology used in discussing students who fail to graduate is value-loaded and essentially negative in character. Terms such as "wastage", "failure" and "drop-out" are all derogatory. Each has connotations of uselessness and futility, with the implication that nothing of value has been assimilated. Associated with this value-loaded terminology are the problems arising from the controversy as to what is meant by the words "success" and "failure" in a university context. The suggestion is that success is defined in terms of academic criteria alone. Yet the aims and objectives of university education are broader and more diverse. The use of such negative terminology in describing attrition is unsatisfactory. A less emotive terminology is necessary for the Robbins Report does not stand alone in its

assertion that something of value may be obtained from even a short spell as an undergraduate.⁸ Indeed, recent workers have already talked of withdrawal as a positive step so it cannot be regarded as waste or as failure.⁹

2.2 Terminology used in reporting student withdrawal

When Malleeson¹⁰ asked, nearly twenty years ago, "Must students be wasted?" the term student wastage was born. In defining wastage as the proportion of students that leave university, for whatever reason, without obtaining a degree, Malleeson admitted that academic inadequacy was probably not the only reason for withdrawal. He felt, however, that too much emphasis had been placed upon non-academic reasons as he believed a student would rather give a social or medical reason for leaving than to admit to any intellectual inability. In some instances, of course, this may well have been the true reason for withdrawal.

Malleeson's use of the term "wastage" is interesting for it did not stem from his observation that the proportion of students leaving prematurely seemed to be constant. Neither did it arise from his implication that poor selection may have been involved. His concept of wastage arises, essentially, from an estimate that some £15 million of tax-payers' money was being wasted per year by students leaving university before successful completion of their courses. At the very start of its usage, therefore, wastage did not refer to the student himself so much as to the money involved in non-utilisation of resources. Thus it was the cost incurred by academic staff and facilities, of

accommodation and allowances, that arose when an unfillable vacancy occurred in the duration of a course. In its repeated use since 1963 the term has been given a more negative connotation where the implication has been that the student himself is being wasted.

There have been many works published since 1945 that have referred to students leaving prematurely, and these references have tended to have been couched in negative terms. In addition to the term "wastage" there have been such epithets as "failed", "dropped-out", "opted-out" and "unsuccessful". In defining students who leave prematurely in this way there is an implication that not graduating is an undesirable affair. This interpretation of withdrawal is difficult to reconcile with the view that something of value may be obtained from some time as an undergraduate.

If, as it has been suggested, education, like most other living things, is impossible to define¹¹ and if there is uncertainty regarding the aims of higher education it is difficult to determine whether the process has, or has not, been successful. Similarly, it is difficult to conclude, with any certainty, whether there is any wastage, apart from a simplistic financial waste. The problem of assessing the success of higher education has been compounded by a general view that success can be measured in terms of academic achievement. This may be a pass in progress examinations,¹² or merely obtaining the qualification sought.¹³ More specifically success may mean passing at the first attempt.¹⁴ In whatever guise, success is viewed in academic terms and it means reaching a minimum level of attainment. Consequently, the

antithesis of this, failing the examination or terminating one's studies prior to sitting the examination, has been seen as failure.¹⁵ The terminology suggests that the sole aim of higher education is academic achievement.

An attempt to define success in the field of employment¹⁶ referred to five factors: progress, competence, satisfaction, fitness and adjustment. As Wilson¹⁷ has observed, universities have tended to define success in terms of progress and competence only. It is in the United States that workers in education have formulated definitions of success that have embraced not only the academic aims but also the developmental aspect. According to Freedman¹⁸ success, from a developmental point of view, involves the instillation of favourable characteristics in students, encouraging their development after completion of the course. This is reminiscent of Truscot's view already mentioned.¹⁹ Those who see higher education in terms of a developmental process, fostering maturity, tend to regard success as the degree to which personality changes for the better.²⁰ Sanford put forward a similar view:²¹

"If a college admits students with relatively primitive tastes, shallow interests, values unmodified since childhood, and rigid patterns of thinking, and if after four years it turns out students who are flexible, imaginative, discriminating and capable of self-expression, the college is undoubtedly a success."

Elsewhere, Sanford has agreed that success in college is usually measured in terms of grades, progress and competence.²² This may not be success from the point of view of a student or another

interested party, although this may be success from the college's point of view.

The essentially philosophical discussion of what is meant by the term "success" in an educational context has taken place in the United States where workers have examined student progress through high school as well as other institutions, not universities alone. It is clear that in the university context success involves some measure of academic achievement. This may be most easily assessed by reference to the class of degree obtained. In order that this measure of success may be reached it is necessary for the student to possess a certain level of intellectual ability, and to have developed suitable skills and techniques through the duration of the course. The latter can be clearly seen as aspects of development and maturation. The former may be perceived in a similar fashion if one accepts the notion that intellectual demands made upon students at the end of a course are of greater depth than those made on admission: else, in Britain, a degree would be on a par with A-levels. The dilemma arises when a student is unable to develop to a sufficiently high level and either fails to graduate or, for whatever reason, feels compelled to withdraw prematurely. The question is, does this warrant a failure or lack of success?

The recognition that development may be enhanced elsewhere, in some other area or field of study or course of action, is, in itself, a sign that university has successfully

encouraged individual growth. The relatively narrow confines of academic criteria may not accommodate this as "success", yet it is doubtful that no progress has been made or that nothing of worth has been attained in such a situation. For this reason alone the terminology is unsatisfactory. Being couched in negative and unfavourable terms, failure at university may be regarded by many students as a failure of themselves as people and may be a disadvantage to them.²³ However, a first degree course is not the only valid training that is acceptable in the worlds of commerce and industry.²⁴ It is not an experience suited to all. A university course offers opportunity for both academic and personal development, the former being an essential part of the latter. University should be a creative process and not a filter.²⁵ Students not obtaining the qualification sought, hitherto defined as wasted, dropped-out or failed, should be defined with less emotive, more neutral terminology.

For the purposes of this research and as an attempt to avoid value-loaded language the term "attrition" has been used when referring to the process whereby matriculated students do not complete their courses and so do not obtain the qualification sought. The "rate of attrition" will mean the proportion of matriculated students in this category. A "terminator" or a "terminating student" is one who, for any reason, prematurely leaves or is unable to complete the course. The "continuing student" is one who perseveres with the course and who passes the necessary examinations.

2.3 The problem of student attrition

It is essentially as a result of students in this country being a highly selected group that concern has been expressed over rates of attrition and that these have been regarded as a problem in higher education. Although undergraduates comprise apparently able students, with high academic qualifications on entry, a sizable proportion fails to graduate. According to the University Grants Committee enquiry, referred to above (p 19), some 13% of students who should have graduated in the academic year 1965 - 1966 did not do so. Virtually half of those students terminating their studies did so by the end of their first year. Though over ten years old these statistics are the only ones available and, consequently, have been referred to frequently. However, they are not fully comprehensive and care must be taken if valid inferences are to be made from them.

The list of institutions omits the then recently established, so-called "plate-glass" universities of East Anglia, Essex, Kent, Lancaster, Stirling and Warwick. Furthermore, the figures pre-date recent expansion of university admissions so absolute numbers tend to be small. Indeed, for some of the more recently established institutions they are very small. However, there are certain patterns and characteristic features that emerge from these figures.

Firstly, rates of attrition varied widely, varying from one institution to another. The lowest rate of 3.4% was recorded at Cambridge while the highest, 34%, was found at Loughborough. Secondly, there appeared to be distinct clusterings

of attrition rates. At the lower end of the scale, with rates ranging from 3% to 6%, there were the collegiate universities of Cambridge, Oxford and Durham. The next group consisted of the bulk of institutions with rates of attrition ranging from 7% to 14%. Three ancient Scottish universities, namely Aberdeen, Edinburgh and Glasgow, had rates of attrition of 16% to 18% and so formed a third cluster. Finally, there were the ten former CAT's, the new technological universities, that had rates of attrition in excess of 28%.

The UGC listed thirty-six institutions, of which twenty-two had more than half of those students terminating their studies by the end of the first year. The importance of the first year as the time when most attrition was likely to have occurred was shown by all save one university having 35% or more of all terminating students leaving by the end of the first year. This phenomenon, clearly documented in the UGC report, has been noted by other workers in this country²⁶ as well as in the United States²⁷ and elsewhere.²⁸

With a substantial proportion of terminating students leaving university during their first year, coupled with the concern expressed over rates of attrition in general because of the selective nature of university admissions practised in this country, it is not surprising to find that poor selection was seen as the cause of termination. Research into selection methods has, on the contrary, tended not to support this notion but rather suggest selection, with all its inherent weaknesses, is adequate. Indeed,

research has been either ambiguous or contradictory with its findings so that many of the proposed causes of attrition seem to be unrelated to selection for admission.

2.4 Suggested causes of attrition

Much work in this area of study has been based upon the premise that selection methods have been at fault and that if entrance standards were to be raised the rate of attrition would fall. Following Eysenck's optimistic assertion that school leaving qualifications, together with the results of intelligence tests, gave a satisfactory indication of a student's potential²⁹ studies have been carried out on the relationship between entrance qualifications and later academic performance. Eysenck's work preceded the introduction of General Certificate of Education A-levels that were soon to become the major selection tool in university admissions.³⁰ Grades attained at A-level still remain important in entrance procedures and the proportion of students admitted with only two A-level passes has become smaller than it was a decade ago,³¹ suggesting standards of entry are not being lowered, but rather raised. Over-subscription to courses enables universities to be more selective, while the emerging polytechnics absorb some of the less successful applicants. As rates of attrition have, apparently, not decreased as entrance standards have been raised, there seems to be little evidence of a direct and total relationship between entrance qualifications and subsequent degree performance.

Pilliner's "disconcerting inconsistent relationship"³²

between entrance qualifications and degree performance has been noted by others.³³ Low, positive co-relations have been found but these have tended to be insignificant.³⁴ Confirmation of these findings has come from as far afield as the United States,³⁵ Australia³⁶ and New Zealand.³⁷ Rather than proposing slight co-relations some workers have, more boldly, asserted that terminating students tend to possess lower entrance qualifications than those continuing.³⁸ However, the dilemma is whether, as Dale³⁹ has suggested, there is a minimum level of pre-university attainment, below which it is unwise to embark on a university course, or whether it is not necessarily the weakest students, taking entrance qualifications as the criterion, who fail.⁴⁰ The inadequacy of using A-level grades as the major selection tool has been noted by Austwick⁴¹ who believed that a substantial number of potential graduates would be denied admission to university because of their relatively low A-level grades. Entrance requirements alone are unsatisfactory predictors of subsequent degree performance as:⁴²

" ... a substantial part of the variation in students' performance in university is basically unpredictable from evidence available at time of entry to university."

Research in this field has shown that the causes of attrition are complex.⁴³

Results gained from the use of sophisticated intelligence tests have been found to be of no greater value in predicting university performance.⁴⁴ The fact that intelligence test scores may identify potential first class honours candidates has been noted⁴⁵ as well as their inability to identify potential terminators.

There is little reason to believe that the causes of attrition lie in either the possession of relatively inferior grades at A-level on entry, or relatively low scores in aptitude tests. As Ryle⁴⁶ has observed, intellectual inadequacy is rarely a cause of attrition in British universities. The cause must lie elsewhere.

An extension of the work in the area of entrance qualifications and degree performance has been carried out by Wankowski who has seen the relationship between these two factors as an index of "consistency of learning behaviour"⁴⁷ at two successive levels of formal education. He asserts that consistency of learning behaviour is related to personality traits and much of his work has been concerned with examining the personality characteristics of terminating and continuing students at the University of Birmingham. His findings have been ambiguous in so far as the traits significantly related to termination, extroversion and neuroticism, are also characteristics of the high achiever at degree level.⁴⁸ The relationship between personality and attainment is a confusing one.⁴⁹ It appears unwise to try and relate academic success with personality.⁵⁰ In some studies it has been found that introverts have obtained better degree results than extroverts.⁵¹ Elsewhere there have been conflicting findings.⁵² It is clear that there are different types of successful student⁵³ and some of these differences may be related to personality. However it seems that it is not the personality trait, per se, that is of importance but rather how that manifests itself in the student's day to day life and work.

Associated with personality as a possible cause of

attrition is the student's mental health, and much research has been conducted in this area. Following the recommendations of the Goodenough Committee⁵⁴ student health services were established and surveys of their efficacy have tended to produce contradictory findings. There is consensus, however, as to the proportions of students that suffer from some mental or emotional illness of a severe nature.⁵⁵ In other areas there has been less agreement as to the effect of mental ill-health upon students. For example, the horrifying discovery that the suicide rate amongst Oxford University undergraduates was considerably higher than the norm for that age group⁵⁶ is not a general phenomenon. Kidd⁵⁷ has observed that in Scottish universities the suicide rate is much lower than that of the population in general. All workers agree, however, that some students are incapacitated by mental illness at some time, and that there is little that can be done to identify those most at risk.⁵⁸

It is of interest to note that findings from research carried out in this area have been used to refute the notion that examination stress leads to mental ill-health. The number of referrals to out-patient psychiatric departments or consultations with health service personnel by students exhibiting psychiatric symptoms conforms with the general trend with a peak in spring, not late spring and early summer when examination stress would be at its greatest.⁵⁹ In such a confused area it is possible only to claim that some students may terminate their studies as a consequence of mental illness or incapacity as a result of severe emotional disturbance: a large proportion of students appear to be unaffected.

This may be a dangerous assumption to make as students may find their ability either to function well or to fulfill their potential is thwarted as a result of minor emotional upsets. Indeed, though the peak of referrals with serious psychiatric problems appears to be congruent with the peak in the population at large and not at times of supposedly greater stress for students, both examination and transitional stresses have been cited as causes of concern and difficulty by students themselves.⁶⁰

Suggested causes of attrition noted thus far, standards of academic attainment on entry, scores obtained in intelligence testing, personality traits and mental health, each doubted by some workers as actually being a cause, can all be defined as essentially internal and individual to the student. Each factor is unique to a particular student, being a feature of his individual personality and psyche. It is believed that these internal factors affect a student's ability to cope with a university course, but evidence has been shown to be too often contradictory. Related to these internal factors are those identified by sociologists and those interested in the effect social background has upon academic performance.

The effects of deprivation in childhood⁶¹ and the disadvantages working class children have in reaching higher levels of education⁶² have been noted elsewhere. These factors appear to make it more difficult for offspring from lower social levels to gain admission to university.⁶³ After such a difficult and arduous journey into higher education it is not surprising to find the suggestion that working class offspring are high achievers at

university, being highly motivated to raise their social status.⁶⁴ However, Entwistle⁶⁵ has found no such co-relation between social class and motivation. What has been observed is that young people from working class backgrounds may find difficulty in sustaining relationships with their families as university experience tends to create cultural and linguistic barriers.⁶⁶ It is possible that such students may find it difficult to socialise with their peers, perhaps because they tend to form a small proportion of the student population.⁶⁷ What is evident from research in this field, however, is that most workers have found little co-relation between social class and attrition.⁶⁸

Factors that may have had some effect upon rates of attrition, those related to the individual student and defined as internal factors, appear to be unable to resolve the problem. The idea that attrition may not be a result of a student's innate characteristics but rather a consequence of factors outside the student, but acting upon him, has rarely been considered.⁶⁹ The effect student residence has upon students has been examined, with no clear findings as to its relationship with either academic performance or friendship patterns.⁷⁰

Recently, student counsellors have stressed not only their therapeutic role⁷¹ but also their concern with institutional change, where appropriate.⁷² This suggests that some of those most close to, and aware of, students' problems see some of the causes of attrition arising from the university situation itself: outside the student. This concept of external factors affecting

students, and consequently being related to rates of attrition, has been developed by American workers and has been competently reviewed elsewhere.⁷³

Fundamentally, American workers have seen student distress in terms of a "mis-match" between student and college.⁷⁴ As a result of this research college environments have been studied and classified. A theory has been formulated that states that certain types of student, using personality traits as the essential criteria, are most suited to study at certain sorts of institution: the needs of the student are best met at a specific type of university.⁷⁵ Where this match is not made, the student is unlikely to survive in the same way that an organism cannot survive if it is not in its optimum environment.⁷⁶ This concept, essentially organic in character, has evolved from Murray's⁷⁷ "needs-press" theory. Using the techniques developed by Pace and Stern⁷⁸ assessments were made of over two thousand college environments.⁷⁹ This approach has been taken a step further with the development of "transactional analysis" of personality and environment.⁸⁰

Superficially, and in simplistic terms, this theory is an attractive one. It suggests that the problem of attrition may be solved when the right peg is placed in the correct hole.⁸¹ However, there are some fundamental objections to this proposed solution. In the first instance, colleges are described and classified with no analysis or critical study being made of them. This is not an approach likely to foster development or progress in higher education: it does not encourage improvement of colleges where this may be appropriate. In studying and

defining liberal, as opposed to authoritarian, colleges⁸² or in classifying "environments of learning"⁸³ the status quo is perpetuated. The transaction between students and teachers has also been examined,⁸⁴ but not in order that institutional change could take place for the better, but rather so that the system be preserved and that only certain types of students be enrolled. This approach is undesirable for it inevitably leads to a narrow range of inter-student interaction so hindering development of the individual student as the opportunity for mixing with a wide range of students would not be possible. It is surprising to find notions of matching students with appropriate institutions being advocated in a country where the developmental concept is seen as the aim of education and it has been strongly supported. Matching, and so reducing opportunities of growth, appears to be a negation of the developmental model. The concept of matching students seems to be erroneous and doomed to failure for the simple reason that a student's personality is most unlikely to remain static or constant.⁸⁵ Clearly, by the time a student has attended a college for a number of years he will probably not manifest exactly the same attributes that qualified him for entry. Indeed, the fact that even the college environment is in a "process of continual change"⁸⁶ has been noted by an advocate of this approach. Matching can only be practicable if both college characteristics and students' personalities remain static, both of which seem to be dynamic.

In Britain there has been little work carried out in this field.⁸⁷ The effect of the university situation upon

the student has, with a few exceptions, largely been ignored.⁸⁸ It is apparent that greater understanding of the influence of "institutional operations" upon "student inputs"⁸⁹ is needed, but not to facilitate matching students with institutions. In the same way that different students perceive the same environment in differing ways,⁹⁰ so the effect of the same university environment is variable. The concept of matching is invalid as it assumes a singular perception of that environment. Furthermore, that singular view is also static. There is no evaluation, no discrimination: the institution is accepted as it is, needing no change. Essentially, the problem is philosophical and is concerned with what a college ought to be doing and whether its facilities encourage the attainment of that end. If the end is development of its students, matching is inappropriate. Rather than restricting individual freedom of choice by allocating students to what are considered to be appropriate colleges, however objectively this may be executed, there is greater scope in identifying those features of the college environment that are not conducive to, or are not instrumental in, the attainment of its objectives. The philosophical nature of the dilemma is: what are the objectives of colleges and universities?

It has been observed already that full agreement concerning the aims of university education is unlikely to be reached. The aims, as perceived by academics and teaching staff, the objectives, as seen by students, even the desires of society have all to be taken into consideration. In any assessment of what ought, or ought not, to be the outcome of a university education, value

judgements have to be made. Can one quantify what are essentially qualitative elements? Hence the difficulties that arise when attempts have been made to analyse the efficiency, productivity or cost-effectiveness of university education.⁹¹ It is virtually impossible to estimate the efficiency of an organisation when individuals enter with wide and disparate expectations. The reasons students have given for continuing in higher education⁹² suggest that gaining an academic distinction or receiving a vocational training do not rank highly in their list of priorities. Students' expectations may well differ from those of academics, or even the tax-payer. How can the efficiency of university education be calculated? All one can assume is that where expectations differ, problems arise.

When a student's expectations differ from those possessed by university administrators or academics there may be conflict. Disagreement in the order given to priorities may lead to dissatisfaction and consequent disfunction. It is doubtful whether the university is being successful when a student is not satisfied with his course, or even with the institution. Too narrow a definition of university aims on the part of either student or institution may make higher education more of a battle-ground, upon which opposing factions are polarised. The two parties, the teacher and the taught, "them" and "us", cannot come together and explore the possibilities of learning. Only when both sides realise that differing aims need not be incompatible can this occur.

Students' expectations affect their perception of university and their willingness to adapt to the changes it demands.

Closely bound up with this and with students' performances at university are such elements as the students' own aim in higher education, the goal sought and its effect on adjustment to university life, self-assessment of progress and individual understanding of what is meant by the term "success" in this context.

2.5 Students' expectations of university and their effect upon attrition

Students may give many and varied reasons for going to university. In a survey of second year students at University College, Swansea⁹³ a wide range of reasons was given. Interestingly, some twenty per cent indicated that they had come to university because it had been expected of them, either at school or by parents. The fact that social and personal reasons were cited suggests that students do not necessarily enter university with high academic aspirations. A more recent study⁹⁴ showed equally diverse accounts for university entrance. Perhaps it is a consequence of many students entering university for reasons other than developing their academic studies or for advancing their skills and knowledge that their expectations are high and are quickly not fulfilled.⁹⁵

Ideally, students should enter college or university with realistic expectations.⁹⁶ How this should be achieved has not been made clear, but the decrease in number of academic failures and increase in voluntary withdrawals⁹⁷ suggest that better preparation for university may be desirable. It is possible that with employment opportunities for school leavers being sparse at the moment more applicants to university may seek entry to higher education rather than face unemployment. There will be as much

need for preparation in such a situation. At present it is clear that students feel less inhibited, less restraint in leaving university prior to sitting finals. This may not mean that their expectations have not been fulfilled. Although falling short of their potential in the eyes of their teachers, these withdrawing students may have fulfilled their own expectations, especially if these were to meet a future spouse or to play in a reputable sporting event, for examples.⁹⁸

It is possible that after reaching university, an undergraduate may question his being there at all. He may realise that his expectations cannot be fulfilled or were unrealistic in the first place. He may come to realise that his future life need not involve at least three years further study. Consideration of a student's expectations of university leads on to the possibility that this may be related to attrition. It may be possible that termination is a result of a student's becoming aware that a wrong decision had been made. Perhaps pressure placed upon a student to enter university is reduced in intensity once an undergraduate, so this may be overcome or faced up to, leading on to termination of study. Once a member of a university, it may become apparent to the student that this is not the expected avenue to higher social status or security in a career. Perhaps students' values and aims in life, their attitudes and beliefs have changed so drastically in recent years that university education has become a less significant part of their life style. As greater levels of freedom are experienced prior to university admission it may be possible that university life seems restrictive and paternalistic in contrast. Students may be more aware of the shortcomings of university life, more so that is than academics. There are many areas of doubt, many

questions that need answering. Termination may be the result of any one, or a number, of these.

The problem of attrition has been examined, therefore, in the past with the view that individualised, internal factors, such as psychological or sociological, psychiatric or intellectual factors had a strong bearing on the rate at which attrition occurred. The contradictory and ambiguous nature of research findings suggest that the cause may lie elsewhere. There may be reason to suppose that the university situation itself, in which first year students find themselves, is more likely to hold the key to the solution of attrition. The university environment affects the students within it in differing ways. Their perception of that environment may be affected by their expectations of university. As students experience university life and interpret that experience, they may find difficulties in adjusting to that new experience, especially where expectations are not being met. Success, in a university context, ought to take satisfaction into consideration. It may be that a clearer picture of attrition may emerge from a study of the university environment, how students perceive that environment and how satisfied they are with it.

2.6 The need for a broad environmental approach to investigations of attrition

The inadequacy of earlier work in explaining the causes of attrition may suggest that the problem has been viewed from the wrong angle. Perhaps concern over students who have terminated their studies has focused attention on merely the tip of an ice-

berg,⁹⁹ the greater part of which involves under-achievement by many students who have experienced difficulty at university. This may not have been of sufficient seriousness, however, to lead to examination failure or termination. Students' difficulties and problems have been referred to in many studies of both attrition and student performance.¹⁰⁰ The problem of attrition and the reasons why students terminate may be understood more easily if students' problems are investigated in the context of the total university environment. If the causes of attrition lie within the university environment it may be possible that changes may be made that may, in turn, affect rates of attrition more than improving selection procedures. What is clear is that a solution to the problem of attrition is no nearer after many years of research and study.

In the past it has been stated that the chances of predicting which students will be successful and which will not are slim using any single student characteristic such as student aptitude.¹⁰¹ Elsewhere, university life has been likened to a race and it has been noted that more than a knowledge of "form" is needed before the race to predict its outcome.¹⁰² To extend this analogy it is necessary that the course itself be known and understood, including its fences and hurdles. An investigation of the university, as the course along which the race is to be run, seems to offer some hope of identifying the possible causes of falls refusals or failures to complete the race. Work on the "form" of runners has not shed sufficient light on the matter. Clearly the lame and incapacitated will find completion of the race difficult if such a condition is present at the outset. Accepting the

validity of some findings of research associated with "form" that may identify the lame horse, unable to jump the fences, there is still scope for an environmental approach to attrition: an investigation of the race-course itself. This work is a record of a detailed investigation of the university environment as a whole and its effect upon the student in his "race" to graduation.

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CHAPTER THREE

THE ENVIRONMENTAL MODEL

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3.1 Introduction

Student attrition and its causes remain unresolved problems. Results of research have been inconclusive, whether a psychological or a sociological model has been adopted in analysis. In the former, attrition has been seen as a consequence of the influence student characteristics, such as personality traits, have upon student performance. In the latter, emphasis has been placed upon a student's sociological background. Focusing attention in this way upon student characteristics, or inputs, has been unsatisfactory. A broader approach is required.

Perhaps a fundamental criticism of models in which student characteristics predominate is that they tend to ignore the concept of "transition". The psychological model regards student characteristics in a way that denies their dynamism, seeing an input that is static. Growth and development of

personality, maturity as a result of either increasing age or greater experience, all suggest that personality is far from a static phenomenon. It is dynamic and is thus an unsatisfactory predictor of attrition. The sociological model accepts the influence that the individual's past situation has had upon his outlook and behaviour, but fails to accept any further influences when that situation is changed for another. For undergraduates, of whatever personality type or sociological background, the transition from school to university may be problem-ridden, leading to attrition. This suggests that a broader view is needed to understand the mechanics of student attrition. This involves the creation of a model that takes into consideration not just the students' characteristics, but more importantly, the environment into which transition occurs.

Each student, whether straight from school, a delayed entrant, or a mature student, finds himself in the milieu of university life. Each may perceive that environment, in which he finds himself, differently. The individual's perception of the environment may vary as much as the reaction to its varied aspects. So it has not been surprising to discover attrition appears to be related to a wide variety of student characteristics. For some students transition from school to university may be a source of difficulty. For others this transition may be made with relative ease. However, as investigations into student attrition have shown (see page 27 of this work) there is a great deal of evidence to suggest that the period of transition is critical for undergraduates. The environmental model used in this investigation of students at both Durham and Loughborough universities, paying particular attention to the period of trans-

ition and the environment in which it occurs, may be more useful in discerning the causes of transitional attrition.

3.2 Transition

Any change from one situation to another, or transition from one environment to another, gives the individual concerned a new chance, a fresh start. This has been expressed in terms of "opportunity value" by Hopson.¹ There is the possibility, in any transition, to make the most of opportunities the new situation offers. In the context of universities, the undergraduate moves from one environment, whether this be a boarding school or life at home, to life amongst a highly selected group of peers. There are many opportunities offered the undergraduate that range from contact with leading academics to a wide scope of social and recreational facilities. The change in environment may be beneficial, allowing the individual to grow and develop. Transition may, on the other hand, be for the worse, causing adjustment problems and distress for the individual. This is true of any transition. There is always opportunity and potential inherent in any human change from one situation to another. The transition from school to university is no exception, giving scope for both personal and academic development.

Most students appear to cope with the change more than adequately. Yet the observation that some students experience considerable stress as a consequence of this transition² suggests that the benefits offered by the change have not been enjoyed by all students. Indeed, the discovery that half of those

students terminating their studies do so before the end of their first year,³ re-inforces the assertion that there is a negative component or aspect of transition.

It is not the process of change, in itself, that is of most cause for concern. The transition from school to university is a change from one environment to another. It is the new environment into which students are placed that requires the attention and is, thus, the focus of the environmental model used in this study. It is possible that sources of difficulty for first year students arise from the university environment. It has been suggested that inadequate preparation for university may be a culprit in this context.⁴ A recently published guide to student life⁵ suggests that lack of preparation may lead to a student feeling "lost, homesick, and generally depressed". This is not considered a suitable start to a challenging career at university. The onus is, thus, on the student to familiarise himself with what is ahead. This outlook, in which attrition is seen as a failure on the part of the student concerned, has been held for many years.⁶ It is only recently that it has been suggested that inability to adapt may be a result of factors outside the student. Thus, environmental factors may be influential. According to Strom⁷ maladjustment may be symptomatic of a college's disorder rather than that of the student. Aspects of the environment may not be conducive to smooth transition. These may lead to stress and, ultimately, termination of study. Too little is known or understood of transitional difficulty and its causes. An environmental model, studying both transition per

se, and the environment into which the move is made, may be a useful tool in the study of attrition.

3.3 Transitional difficulty in the context of students' problems

There has been little consistency in terminology in the literature concerned with student problems and attrition. The terms "problem" and "difficulty" have been used synonymously. Daws,⁸ Ryle⁹ and Newsome and her colleagues¹⁰ have used the word "problem" while Malleson¹¹ has referred to students experiencing a "difficulty". In no case has there been an attempt to define the meaning of the term "problem" or of the term "difficulty" in a university context. An implicit meaning, applicable to both terms, may be discerned. A problem is the occurrence of a student perceiving his, or her,* behaviour or attitudes to be at variance with that expected. The expected mode of behaviour or attitude could be a self-imposed standard or one imposed from without, by the university for example. A more precise definition is difficult to obtain from the literature. Therefore, a problem (hereafter used in preference to, but with the same meaning as, difficulty) occurs, in the context of this study, when an individual perceives a difference between his behaviour or attitude and that expected of him. There is dis-harmony or lack of congruence between observed behaviour and that which is expected.

* For ease and convenience the male pronoun will be used in this work. There is no sexist over-tone and no implication that problems are common to one group only. Both male and female is understood to be indicated by the male pronoun used.

A problem is a problem if a student perceives it to be so. When feeling his behaviour does not conform to that which he expects for himself, then the student feels he has a problem. His expectations are not fulfilled. There is incongruity between expectations and actual behaviour. As perception of the environment may differ from one individual to another, others may be less aware of a problem as their experience differs and their expectations may be as varied. Though experience may be of a common environment, the perception of that environment and the meaning of that experience for each individual will differ. What is a problem for one student may not, therefore, be a problem for another. Even though a situation in which two students appear to be may be identical, a problem may be perceived by one and not the other. Thus, a problem exists when there is a discrepancy between expected behaviour and that practised. Furthermore, this discrepancy or lack of congruence must be perceived by the individual concerned.

Within the university context, however, problems may arise when the expected behaviour or attitude is one imposed from outside, by the institution or by an academic department, for example. The student achieving relatively low grades, but who has no high expectations and who is, thus, not perceiving any incongruity between his own expectations and his achievements, may not experience a problem. It is not until his academic tutor warns that unless grades are improved he may be forced to leave the university that his behaviour is seen as incongruent with his newly acquired expectations. Even so, the same student may not

perceive this situation as problematic as a third component is essential: a system of values needs to be used. A problem exists where the student's relative values ascribe greater worth to expectations than to actual behaviour.

This may be more clearly seen if a hypothetical group of students were to be examined. If each student was to attain the same standard of academic work then the existence of a problem in the eyes of an individual would depend on his own system of values. If an individual's internalised, self-imposed expectations were to be higher than the standard achieved, i.e., he expected to do better than he has done, he may perceive a problem as he is falling short of his own target. Even though the standard attained is considered satisfactory by his academic department, the individual may perceive his behaviour to be unsatisfactory so causing him distress. Academic excellence is valued highly but the student's behaviour has not attained that exalted end. Another student may have lower expectations, placing a lower value on academic attainment. His behaviour is seen to be adequate in his own eyes. No problem is perceived as both his department and himself are satisfied with his behaviour. In the case of the first student behaviour was not congruent with expectations, which were valued more highly. Where behaviour is not congruent with expectations and values, a problem may be perceived. What is, or is not, a problem, therefore, depends upon the relative values possessed by individuals and the relationship between these and behaviour.

In the transition from school to university the inability to make new friends, for example, may be seen as problematic if friendship is valued highly, or if friendships were expected to be made easily. Another individual, feeling more self-sufficient or who regards student friendships as superficial and, hence, of little value, may not perceive a problem in the same situation. So one student may be aware of a problem while another may not. Models that focus attention upon student characteristics as the determinants of attrition suggest that problem perception depends upon certain personality traits or sociological conditions being met. There are certain types of student at risk. The inadequacy of these models has been shown by inconclusive findings. An environmental model sees the source of transitional problems as being within the university environment and focuses attention upon that environment.

If a problem, arising from the transition to university, is not manifest in abnormal behaviour or malfunction on the part of the student concerned, others may not be aware that the individual is experiencing any difficulty. It may only be when a problem is reported to a helping agent or counsellor that its existence is appreciated by others. The resilience shown by most students in tolerating stress has been observed.¹² This resilience may also be seen as a disadvantage as it delays some students from seeking help, so letting problems develop to serious proportions.¹³ Even those never seeking help may experience sufficient difficulty to have their behaviour affected in so far as their academic performance may be impaired.

Problems students have experienced in the transition from school to university, i.e. situations in which individuals have felt their behaviour has been incongruent with that necessary to achieve a valued or desired end, may be classified into a number of categories. Ryle¹⁴ used a two-fold classification, seeing problems as being either academic or emotional in origin. Newsome and her colleagues¹⁵ referred to academic, vocational and personal problems. Daws¹⁶ listed nine categories. It is essential that the areas from which problems arise, whether these be academic or emotional in origin, be understood if guidance is to be prophylactic rather than a last resort in a crisis.¹⁷ Classification of students' problems alone does little more than identify a type of difficulty. The environmental model used in this study of transitional problems looks at the university environment in detail and categorises that environment. With the premise that it is within this environment that students' transitional problems have their origin, this approach may progress beyond mere description to identification of problems, and thus isolation of environmental factors affecting attrition.

3.4 A five-fold classification of the university environment

The university environment, into which first year students enter, is too complex a system to be understood as an entity in itself. The problem-centred classification outlined above, whether of two or nine categories, each enables greater understanding of the various problems students experience. The amount of detail is variable. The greater the number of categories, the greater the degree of precision that ensues.

A taxonomy of environmental spheres has been devised. The emphasis has been on sub-dividing the environment into its essential components from which transitional problems may arise. The environmental model focuses upon the spheres of the environment rather than the type of problem.

The environment for the undergraduate is the whole academic world in which the student acts out his daily life. It is clear that there is a certain uniqueness inherent in each university environment. They are not identical. There are, however, many similarities. It is within these environments that students grow and develop as people. It is essentially, therefore, an organic model, seeing the student as an organism needing a suitable environment in which to flourish. Where aspects of that environment are not conducive to growth, where expectations and actual experience or behaviour are not congruent, a problem may be perceived.

On the other side of the Atlantic this organic thesis has been taken to its logical conclusion with the concept of matching students with colleges. (see p 34 above) Attempts to match students may be as barren as attempts to identify attrition and its causes by looking at personality traits of terminating students. In each case the basic flaw is an assumption that personality is static and that once defined it may not change or develop.

The thesis upon which this study has been based is that

students experience problems, not because solely of the type of person they are, but because of the place they are at. The solution is not to "match" certain types of students with particular types of institutions but rather to identify those aspects of the environment that are most likely to cause difficulties. These may then be dealt with, if possible, in any way that seems appropriate. This study seeks to identify aspects of the university environment that pose problems for undergraduates in their transition from school to university.

The university situation as a whole comprises a number of different elements. It can best be analysed and studied by sub-dividing it into its component parts. There are the physical properties, such as its size and situation, as well as the less concrete abstractions, such as its tradition and ethos. Furthermore it must include relationships between, and among, students as well as those with academic or domestic staff and local residents. Traditional academic standards, teaching methods and study facilities also need to be included. In fact all things related to and connected with the university are included. The whole is sub-divided into a series of environmental spheres. These are the present author's classifications:

- i) the physical environment
- ii) the human environment
- iii) the academic environment
- iv) the institutional environment
- and v) the personal environment.

The first category, the physical environment, includes specifically geographical and locational factors pertaining to the site, situation and facilities of the institution. There are two aspects of the physical environment: the natural environment and the built environment. Within this category would be included such aspects as climate¹⁸ and accommodation.¹⁹ Each of these features specifically relates to the physical location of the university.

Contained within the physical environment are the students and other people. Each individual is one component of the whole collection of people that comprises the second category, the human environment. The human environment defines relationships and social contacts amongst students, domestic staff, academics and local residents. Though it is not concerned with tangible and concrete structures, it is an important aspect of university life. Students' social relations formed an integral part of Abbott's study of student life.²⁰ In various works there have been references to human inter-action within a university setting. The traumatic break-up or dislocation of emotional relationships has been mentioned.²¹ In a university context the contacts made between staff and students are an important feature of the human environment, along with the problems arising from isolation and loneliness.

The third component of the university environment is the academic sphere. Aspects of the academic environment include all parts of teaching and study at the institution. It is in this area that there has been some research yielding information

concerning the types of problems students experience. Difficulties have arisen from poor teaching²² as well as unsatisfactory study habits.²³ Some students have realised that they are following the wrong course²⁴ having experienced unfulfilled expectations or having realised that a wrong decision had been made earlier. It is likely that in an institution with the aim of imparting knowledge and skills, the academic component will be seen as important by those partaking in it.

The fourth category, the institutional environment, includes aspects of organisation and administration at the university. Included in this category, therefore, are aspects of the institutional environment which deal with inter-action between the student and facets of the university situation that are neither concrete nor tangible. This fourth category comprises two distinct areas: one is the administration and organisation of the university while the other is that emanating from the Students' Union. The complex procedures involved in registration and matriculation are aspects of the former, with student politics, Freshers' Week activities and student clubs related to the latter.

The fifth and final category differs conceptually from the preceeding four, each of which has been concerned with additions to a student's experience. The fifth sphere, called the personal environment, is concerned with discontinuities in a student's experience. There is a difference between the concrete and physical elements that comprise the natural and built environ-

ments of the first category, the physical environment, and those other environmental spheres concerned with students functioning and re-acting in an environment of people, the human environment, or in an environment of organised social and administrative activities, the institutional environment, or in an environment of academic work and study, the academic environment. Each of the latter three environmental spheres have been concerned with aspects of university life that a student experiences, even if they be less tangible and more abstract than the buildings or the size of the place. The fifth sphere, on the other hand, is concerned with even more abstract ideas. It involves those aspects of a student's life that may be described as a discontinuity of experience, a change from what went before. Separation from the family is a classic example. Separation from home has been seen as a potential source of transitional stress,²⁵ being placed high in a list of student problems. The concept of separation from home, or from former friends, involves a discontinuity in a student's experience. The new situation at university does not include the social relationships formed over years at school or amongst neighbourhood friends; parent-child relationships cannot remain the same when there is physical separation. Away from home, parental influence and authority, having also been removed from the probable authoritarian structures of school, students may find themselves in a position of relative freedom and independence. Adjustment has to be made to this situation.²⁶ This is another aspect of the personal environment as it arises from the effects of former spheres of influence upon the student.

The term "environment" therefore refers to the total university environment as a whole and when used hereafter will always refer to the complete university environment. What may be generally regarded as the geographical environment, the place and its concrete attributes, is known as the physical environment. The four other spheres of the environment will always be prefixed with the appropriate epithet, human, institutional, academic or personal.

Thus, a five-fold classification of the university environment facilitates greater understanding of the complexities of the university situation. Classification of phenomena into manageable categories makes analysis more easy. It also helps focus attention upon specific elements within the university environment as whole, although inter-action of the five various components is not to be neglected.

3.5 Testing the suitability of a five-fold environmental model

Having sub-divided the university environment into five spheres it was imperative that the suitability of this model be tested. It was important that the five categories could accommodate all of the different types of transitional problem that students may report. Thus a small-scale survey was devised to test this suitability.

The aim of the survey was to discover the adaptability of a five-fold classification in accommodating a variety of transitional problems. Although precision is increased with a larger

number of categories, this is achieved at the expense of simplicity. Furthermore, there may be greater difficulty in analysis of findings as allocation to certain classes may be arbitrary. This may lead to misrepresentation or misinterpretation of findings.

Testing of the five-fold classification would also give more up-to-date information concerning areas of the university environment most likely to give rise to transitional problems. Many references in the literature were more than twenty years old, so more contemporary information would be valuable. Testing was carried out by conducting a preliminary survey among first year students at Durham University towards the end of the academic year 1974 - 1975. Although Durham is a collegiate university and is, therefore, not representative of universities in general because of this, this was not considered to be an obstacle. The results of the survey were not expected to be invalidated by Durham's collegiate character. The intention of the survey was to elicit information concerning the extent to which separation from one environment and adjustment to a new situation were seen as problems by students. If separation from home, for example, were to be seen as a major problem then it would be so at whatever type of institution the students attended. The degree to which such isolation may be experienced could well differ if a student were in a hall of residence rather than a college, or in lodgings or a flat. The fact that a student had experienced a sense of isolation and that this had been reported was what the survey was intended to measure in the first place, not the degree to which

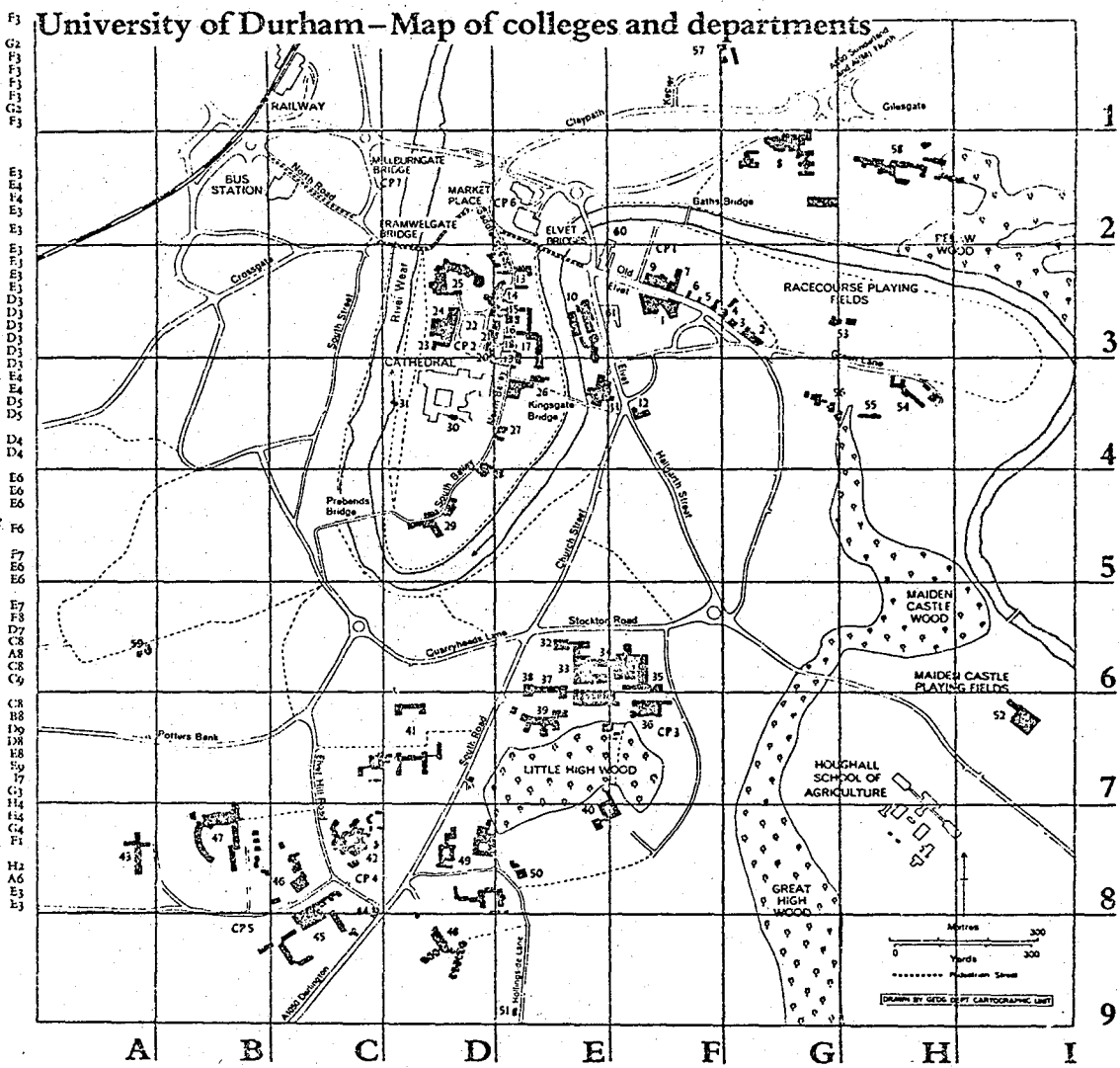
that sense of isolation had been felt.

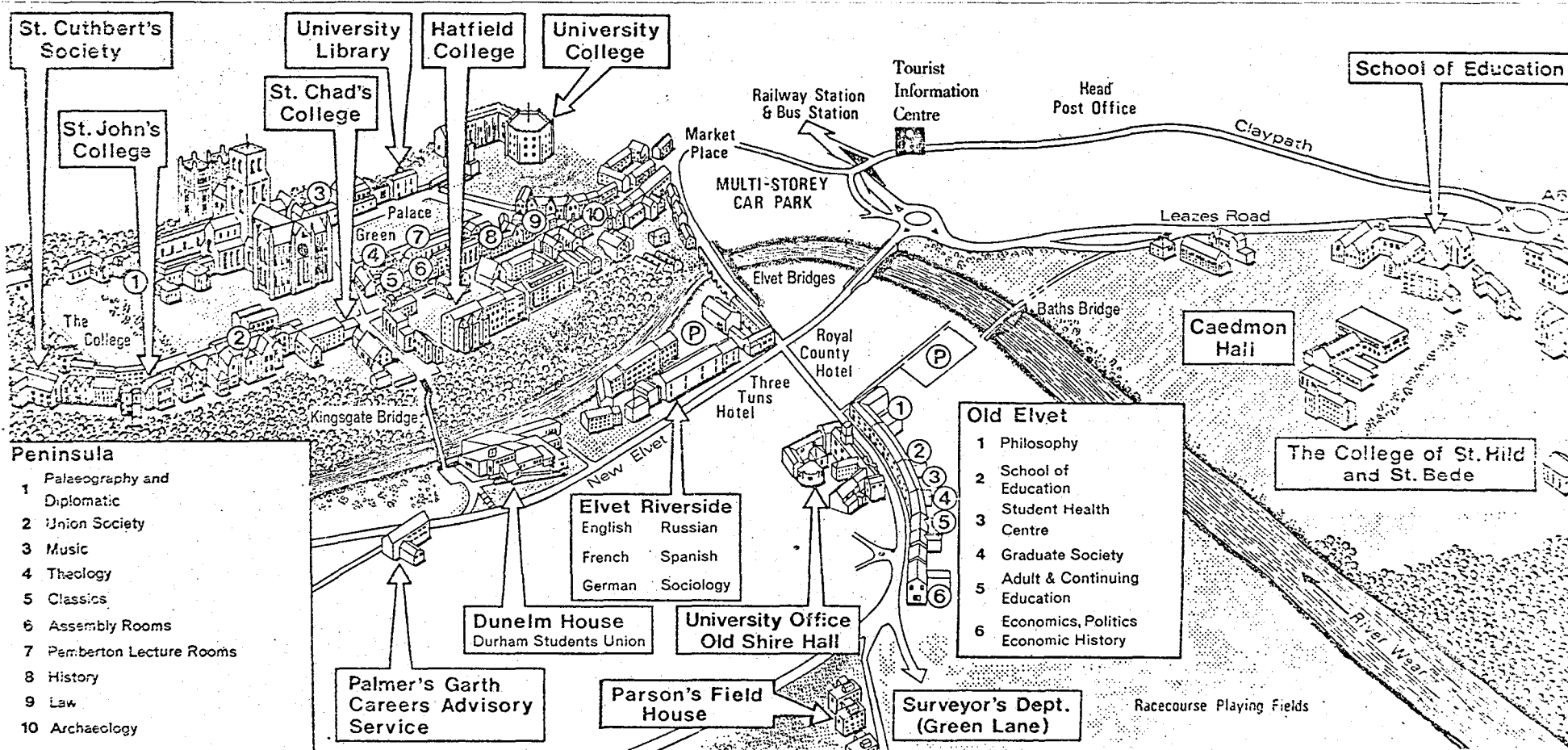
3.6 The preliminary survey

A sample of one hundred students was selected from three colleges. These reflected the geographical distribution of the colleges throughout the university as well as their age. Hatfield College, an all male establishment situated on the Peninsula, (see Map 1, p 67; Fig 1, p 68) close to the heart of the City, represented the older part of the university. St Mary's College is an all female establishment with an intake in 1974 similar in number to that at Hatfield. Situated on the south side of the River Wear, St Mary's is close to the recently built Science Site complex. (see Map 1, p 67; Fig 2, p 69) The third college, Collingwood, is Durham's most recent, a purpose-built mixed college. It is the one furthest from the centre of the City. (see Map 1, p 67; Fig 2, p 69) From Collingwood twenty men and twenty women were selected, reflecting the virtually equal numbers of male and female students in the first year at the time. From each of the two single sex colleges, thirty students were selected.

College authorities were willing that the survey be conducted and the author was granted access to college lists. It was from these lists of first year students that the names of American students spending one year at Durham were excluded, as were any retaking their first year. The remainder provided the total population from which a 25% systematic random sample was selected.²⁷ Each of the hundred students in the sample received an introductory letter explaining the purpose of the survey and the survey form itself, which was, for the most part blank. A

- 1 University Office, Old Shore Hall
 - 2 Departments of Economics, Economic History,
 - 3 Politics
 - 4 Department of Adult or J.C. Continuing Education
 - 5 Graduate Society, 34/35 Old Elvet
 - 6 Student Health Centre
 - 7 School of Education (Old Elvet)
 - 8 School of Education (Leazes Road)
 - 9 Department of Philosophy
 - 10 Elvet Riverside (Departments of English, English Language and Medieval Literature, French, German, Russian, Spanish, Sociology and Social Policy)
 - 11 Denehm House (including Duncelm Hall)
 - 12 Palmer's Garth (Careers Advisory Service)
 - 13 Department of Archaeology, Saddler Street
 - 14 Department of Law
 - 15
 - 16 Department of Modern History
 - 17 Hatfield College
 - 18 Assembly Rooms
 - 19 Department of Classics
 - 20 Departments of Theology, Abbey House
 - 21 Pemberton Lecture Rooms
 - 22 Palace Green
 - 23 Department of Music, Divinity House
 - 24 University Library
 - 25 University College (Durham Castle)
 - 26 St. Chad's College
 - 27 Union Society
 - 28 St. John's College
 - 29 St. Cuthbert's Society
 - 30 Prior's Kitchen (Department of Palaeography and Diplomatic)
 - 31 Old Fulking Mill
 - 32 Science Library (including Department of Palaeography and Diplomatic)
 - 33 Departments of Botany, Zoology
 - 34 Departments of Chemistry, Geological Sciences
 - 35 Department of Mathematics, Departments of Computing, Computer Unit, Science Faculty Office
 - 36 Departments of Engineering Science, Applied Physics & Electronics I
 - 37 Department of Geography
 - 38 Appleby Lecture Theatre
 - 39 Departments of Physics, Applied Physics and Electronics II
 - 40 Department of Psychology
 - 41 St. Mary's College
 - 42 Trevelyan College and Sir James Knott Hall
 - 43 Business School
 - 44 Department of Anthropology, South End House
 - 45 Van Mildert College
 - 46 School of Oriental Studies, Gulbenkian Museum of Oriental Art, Middle East Centre (Elvet Hill)
 - 47 St. Aidan's College
 - 48 Collingwood College
 - 49 Grey College
 - 50 Fountains Hall, Grey College
 - 51 Botanical Gardens
 - 52 Maiden Castle Sports Hall and Athletics Track
 - 53 Racecourse Pavilion and Squash/Fives Courts
 - 54 Surveyor's Department
 - 55 Parsons Field Court
 - 56 Parsons Field House
 - 57 Kestier Court and Kestier House
 - 58 The College of St. Hild and St. Bebe and Cuslmon Hall
 - 59 Observatory
 - 60 Royal County Hotel
 - 61 Three Tuns Hotel
- Car Parks**
- CP1 Old Elvet Car Park (University)
 - CP2 Palace Green Car Park (University)
 - CP3 Science Laboratories Car Park (University)
 - CP4 Elvet Hill Car Park (University)
 - CP5 Mill Lane Car Park (University)
 - CP6 Leazes Bowl Multi-Storey Car Park (Public)
 - CP7 Millburngate Car Park (Public)





(Source: Durham University, School of Education Library)

FIG 1 - A sketch-diagram of the older parts of Durham University

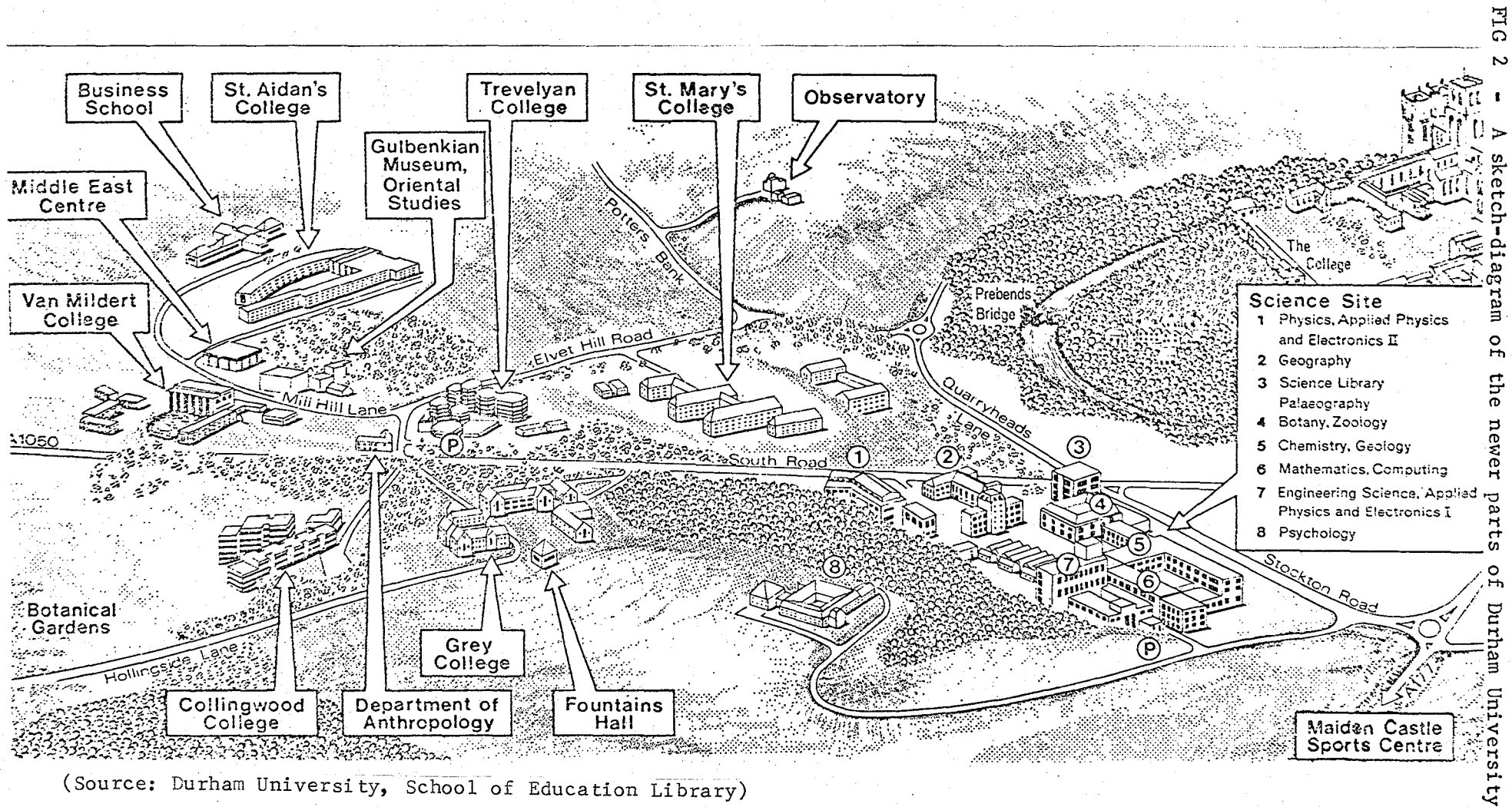


FIG 2 - A sketch-diagram of the newer parts of Durham University

(Source: Durham University, School of Education Library)

copy of the introductory letter and survey form can be found in Appendix A, V.II,* p237. It was hoped that by using a very open survey instrument²⁸ students would respond using their own words, with as little influence in responding in any particular way. There was ample space for respondents to write what problems they had experienced, if indeed they had done so. The students' views were also sought with as little prompting as possible. It was hoped that if no problems had been encountered, this fact would be reported.

There are some disadvantages in the use of this technique in social surveys. Much depends on the willingness of the person being surveyed to respond. Furthermore, a certain level of self-awareness is required in this kind of investigation. Assuming he has difficulties, if the individual being surveyed is not aware of these, they cannot be reported. It may be that respondents are unable to recall facts or feelings some time after the event. Others may not wish to impart information of a sensitive nature. For every response made, one can be sure much remains unstated. These difficulties, the sensitive nature of the ground being covered by the survey, the problem of recall and mere forgetfulness are difficulties encountered in any social survey.²⁹

The use of an open-ended survey instrument reduces the likelihood of bias being introduced by the researcher. The respondent is not influenced by the wording of questions, as there are none. The inherent disadvantage of such an approach, however, lies in the interpretation of responses made in analysis of the results by the researcher. Each response needs to be taken at

its face value. Care has to be taken to ensure the researcher's own views and opinions do not "cloud" his judgement. Being aware of this potential danger is a step towards ensuring any bias is kept to a minimum. As the aim of the survey was to identify facets of the university environment that students perceived as causing difficulty, any response tends to be factual, i.e. a feature either does, or does not, cause such a problem to be experienced. Thus there is relatively little opportunity for misrepresentation to occur.

To facilitate the return of the survey form, an addressed envelope was included. This could be posted in the University-run internal mail system at no charge. This was used as it had been observed that enabling return of a questionnaire to be made more easily removed some resistance to response.³⁰ Fifty-six of the hundred forms issued were returned. As the survey was conducted immediately after examinations and only a matter of two weeks before the official end of the academic year, the response rate of a little over a half can be explained. Some students had gone down prematurely. A number of replies were received via the Royal Mail from towns some distance from Durham supporting this view. These responses also indicated that some students were sufficiently interested in the nature of the survey to return their forms from home. Other students may have forgotten about the survey or misplaced the form in the general confusion of social activities that mark the end of term. What may be ruled out as an explanation for a relatively low level of response is the survey instrument not reaching the member of

the sample for whom it was intended. Each questionnaire was delivered by the author, being placed in each student's appropriate pigeon-hole at college. Finally, it is unlikely that the forty-four non-respondents had experienced no problems as ten of the fifty-six respondents expressed that fact. It seems likely that lack of interest was the cause of few responses, associated with the survey being conducted so close to the end of term.

Response rates varied from college to college and according to the sex of the respondent. Letters of reminder were not sent to non-respondents for a number of reasons. Firstly, this would have been prohibitively expensive as the GPO would have been the only means of contacting students after the end of term. Secondly, students' home addresses were not known and it was likely that a number of students would not have been at home, but away for vacation employment or on holiday, the third reason for not issuing reminders. Many forms may have been left behind at Durham which would have compounded the situation. It was considered unlikely that in this context any reminder would have elicited a greater response than that shown below.

College	Sex	Number	% of those sent
Hatfield	Male	13	43%
Collingwood	Male	10	50%
St Mary's	Female	18	60%
Collingwood	Female	15	75%
Total		56	56%

Of the fifty-six respondents, forty-six indicated that at some time or other they had experienced at least one problem as a consequence of being a first year student. These students must not be regarded as those "with problems". Their response indicates only that at some time certain facets of the university environment had caused them to experience difficulty. From their responses it was clear that solutions had been found. Many problems had been seen as trivial, while others reported more serious difficulties. Some respondents replied briefly, while others wrote at great length and in great detail. There were references to 216 individual problems. These were classified into the five environmental spheres in the following proportions:

Environment	Number	% of total
Academic	106	49.1%
Human	41	19.0%
Institutional	36	16.7%
Physical	18	8.3%
Personal	15	6.9%
Total	216	100.0%

The aspect of the university environment most frequently referred to, the academic, was mentioned 106 times. Only eight (17.4%) of the forty-six respondents failed to mention any difficulty arising from the academic environment. It was apparent that problems from this sphere were more likely to be reported by female students than by males as Table 1 shows.

TABLE 1

References to the academic environment according to college and sex differences of respondents in the preliminary survey

College	Sex	Number of students not referring to academic envnt.	Number of students referring to the academic envnt.	Individual references to acad. envnt.	Average/person
Hatfield	M	2 } 5	7 } 13 (34%)	20 } 28 (26%)	2.9 } 2.2
Collingwood	M	3 }	6 }	8 }	1.3 }
Collingwood	F	0 } 3	13 } 25 (66%)	39 } 78 (74%)	3.0 } 3.1
St Mary's	F	3 }	12 }	39 }	3.3 }
Total		8	38	106	2.8

74% of references to the academic environment came from only 66% of the respondents. The majority of these references fell into one of two groups: either to do with study habits, of which there were 55 individual references, or new teaching methods and courses, with 24 references. Other topics mentioned were lack of guidance (9 references), the volume of work (6), other students being more intelligent (4) and examinations (3). A list of all individual references, with an indication of the college from which the respondent came, for the academic and remaining four environmental spheres can be found in Appendix B, V. II, p 240.

In terms of the number of references made to it, the second most important category was that including problems arising from the human environment. This area was mentioned by fewer students, only 20 (43.5%) of the forty-six respondents. There were only forty-one individual references to specific aspects of the human environment. Those most commonly mentioned were the inadequacy of staff-student social contacts (10), living with so many people (5) and making new friends (5). The Table on p 76 summarises these references to aspects of the human environment according to the respondents' college and sex.

The third most referred to category contained problems arising from the institutional environment. There were thirty-six individual references from twenty-nine (63%) of the forty-six respondents. The most commonly cited institutional factor was college or institutional life, mentioned by fifteen respondents. As Table 3 on page 77 shows, it was the male student who tended

TABLE 2

References to the human environment according to college and sex differences of respondents in the preliminary survey

College	Sex	Number of students not referring to human envnt.	Number of students referring to the human envnt.	Individual references to hum. envnt.	Average/person
Hatfield	M	5 } 11	4 } 7 (35%)	5 } 13 (32%)	1.3 } 1.9
Collingwood	M	6 }	3 }	8 }	2.7 }
Collingwood	F	6 } 16	7 } 13 (65%)	19 } 28 (68%)	2.7 } 2.2
St Mary's	F	10 }	6 }	9 }	1.5 }
Total		27	20	41	2.1

TABLE 3

References to the institutional environment according to college and sex differences of respondents in the preliminary survey

College	Sex	Number of students not referring to instit. envnt.	Number of students referring to the instit. envnt.	Individual references to instit. envnt.	Average/person
Hatfield	M	3	6	8	1.3
Collingwood	M	6	3	5	1.7
Collingwood	F	6	7	9	1.3
St Mary's	F	2	13	14	1.1
Total		17	29	36	1.2

to cite problems arising from the institutional environment more frequently than females. This had not been the case where the academic and human environments had been concerned. In both of these cases female students were more likely to refer to having experienced a problem than were males. The two remaining spheres of the environment, the physical and personal, were also more frequently referred to by female students.

The fourth sphere was the physical environment. Within this category were grouped such problems as having to share a room (4) and lack of privacy (3). Problems arising from the physical environment were mentioned by only twelve (26%) of the forty-six respondents. These few only mentioned eighteen separate problems. A breakdown of these references, according to the respondents' college and sex, is found in Table 4 on page 79.

The final category, the personal environment, was mentioned by only fourteen (30.4%) of the respondents, slightly more than had referred to the physical environment. However, there were only fifteen individual or different references, of which nine (60%) were concerned with separation from home. Table 5 on page 80 shows the breakdown of references to the personal environment according to the respondents' college and sex.

TABLE 4

References to the physical environment according to college and sex differences of respondents in the preliminary survey

College	Sex	Number of students not referring to physical envnt.	Number of students referring to the physical envnt.	Individual references to phys. envnt.	Average/person
Hatfield	M	5 } 14	4 } 4 (33%)	8 } 8 (44%)	2.0 } 2.0
Collingwood	M	9 } 14	0 } 4 (33%)	0 } 8 (44%)	0.0 } 2.0
Collingwood	F	9 } 20	4 } 8 (67%)	4 } 10 (56%)	1.0 } 1.3
St Mary's	F	11 } 20	4 } 8 (67%)	6 } 10 (56%)	1.5 } 1.3
Total		34	12	18	1.5

TABLE 5

References to the personal environment according to college and sex differences of respondents to the preliminary survey

College	Sex	Number of students not referring to personal envnt.	Number of students referring to the personal envnt.	Individual references to pers. envnt.	Average/person
Hatfield	M	6 } 14	3 } 4 (29%)	3 } 4 (27%)	1.0 } 1.0
Collingwood	M	8 } 14	1 } 4 (29%)	1 } 4 (27%)	1.0 } 1.0
Collingwood	F	9 } 18	4 } 10 (71%)	4 } 11 (73%)	1.0 } 1.1
St Mary's	F	9 } 18	6 } 10 (71%)	7 } 11 (73%)	1.2 } 1.1
Total		32	14	15	1.1

3.7 Conclusions obtained from the preliminary survey

The most obvious conclusion to be drawn from the preliminary survey is that the academic environment is the most important of the five environmental spheres in the eyes of students at Durham. Separation from home appeared to be of relatively minor importance. In the transition from school to university the problems students experience seem to be more concerned with the academic side of their new life rather than dislocation of relationships with former friends or family. Furthermore, each of the transitional problems could be classified into one of the five environmental spheres, suggesting the validity of the five-fold classification could be accepted.

The students involved in the preliminary survey gave information concerning their age, home area, type of course (i.e. arts or science; honours or general) and family ties with university, i.e. whether any member of the family had been to, or was at, university. No significant relationships were found to exist between numbers of problems mentioned and any of the following variables:- type of course, arts or science, honours or general, age and family links.* What was of great interest was the lack of significance when the respondents' sex was considered, which contradicted findings of workers in this field who have noted how female students report problems more frequently than males.³¹ There was no indication that female students experienced more

* Statistical results can be found in Appendix C,V.II, p 246

problems than males. This may be explained by male students preferring to keep to themselves any information concerned with their possibly having experienced transitional problems.

The preliminary survey showed that problems mentioned by students may be classified into one of the five spheres of the environment that have been outlined above: the academic, human, institutional, physical and personal. The survey also suggested that physical features of Durham university were not seen to be sources of difficulty, certainly not to any great degree. This may indicate the versatility of students in being able to adapt and adjust to a new physical situation. Their greatest problems, however, appeared to arise from the academic environment and, to a lesser degree, from the human environment.

Notes and references:

- 1 Hopson, B. New ways of trying to meet the occupational thinking and needs of students A Paper presented at the Student Counselling - New Directions Conference, Aston University, February 21st 1975.
- 2 Palmer, F. C. Student guidance (Longmans, 1965) p 3 and Bryant, B. and Trower, P. E. Social difficulty in a student sample (Brit.Journ.Ed.Psych. Vol 44, 1974) pp 13 - 21
- 3 Ryle, A. Student casualties (Pelican, 1969) p 24
- 4 Scott, J. H. MacC. Dons and students: British universities today (The Plume Press Ltd., 1973) p 10 and The University Grants Committee Annual Survey 1974 - 1975 (HMSO, 1976) p 20
- 5 Jones, G. Guide to student life away from home (David and Charles, 1981) p 15
- 6 Dale, R. R. From school to university (Routledge and Kegan Paul, 1954) p 199 where Dale refers to failure being a result of "lack of application to work".

- 7 Strom, R. D. The dropout problem in relation to family affect and effect in Mental health and achievement: increasing potential and reducing school dropout edited by Torrance, E. P. and Strom, R. D. (John Wiley, New York, 1965) pp 24 - 31
- 8 Daws, P. P. Issues in the development of counselling services A Paper presented at the Student Counselling - New Directions Conference, Aston University, February 21st 1975.
- 9 Ryle (1969) p 14
- 10 Newsome, A., Thorne, B. J. and Wyld, K. L. Student Counselling in practice (University of London Press, 1973)
- 11 Malleson, N. The university student, 1953, a profile (UQ, 13(3), 1959) pp 387 - 398
- 12 Thompson, D. and Thompson, J. Nightline - a student self-help organisation (Brit.Journ.Guid.Couns.,2(2), 1974) p 209
- 13 Miller, G. W. Students' needs and counselling (UQ, 22(4), 1974) p 464
- 14 Ryle (1969) p 14
- 15 Newsome et al (1973) Chapter 2
- 16 Daws (1975)
- 17 Newsome et al (1975) have stated that counselling is essentially concerned with self-knowledge and self-determination, so with fullness of living. It is not remedial treatment for "lame ducks", though this is sometimes the case. p 7
- 18 Still, R. J. Health and the student: the prevention of psychological illness among students (UQ, 9(1), 1954) p 36
- 19 Brothers, J. B. and Hatch, S. Residence and student life (Tavistock Publications, 1971)
- 20 Abbott, J. Student life in a class society (Pergamon, 1971)
- 21 The strain imposed on students by the break-up of a love affair has been noted by Still (1954) p 36; Olsen, F. J. Failure in first year university examinations (Australian Journal of Education,1(3),1957) ; Priestly, R. The mental health of university students (Melbourne Studies in Education 1957 - 1958, University of Melbourne Press, 1958); Schonell, F. J., Roe, E. and Meddleton, I. G. Promise and performance (Watson, Ferguson and Co, Brisbane, 1962) and Daws (1975).

- 22 See Dale (1954) p 174; Malleeson (1959) ; Neave, G. R. How they fared (Routledge and Kegan Paul, 1975)
- 23 See Malleeson (1959); Schonell et al (1962) p 145; Cohen, L. and Child, D. Some sociological and psychological factors in university failure (Durham Research Review, 5(22),1969) pp 365 - 372; Beard, R. M., Levy, P. M. and Maddox, H. Academic performance at university (Educational Review, 16(3), 1964) p 168.
- 24 See Malleeson (1959); Palmer (1965) p 9; Lucas, C. J., Kelvin, R. P. and Ojha, A. B. Mental health and student wastage (British Journal of Psychiatry, Vol 112, 1966) p 277; Clarke, J. and Jones, A. The transition from school to college (Youth Couns.Bull.,1(4),1975); Daws (1975) and Neave (1975) all of whom refer to students studying and following a course they later decide is wrong for them
- 25 See Olsen (1957); Malleeson (1959); Schonell et al (1962); Watson, G. Happy college years Report on specialised counselling programme - mimeo. (Brooklyn College of the City University of New York, 1963); Clarke and Jones (1975) and Daws (1975).
- 26 Zweig, F. The student in the age of anxiety (Heinemann,1963) p 6
- 27 A full rationale of sampling procedures and a justification of systematic random sampling as used in this study can be found in Chapter 4, Section 4.6, p 96 .
- 28 The introductory letter issued with the survey instrument referred to separation from home, different teaching methods and residential life as examples of aspects of the university that may give rise to problems. Many students subsequently referred to these, even to say they had not experienced any difficulty in these areas. It seems that even a brief reference in a covering letter may influence responses.
- 29 Moser, C. A. and Kalton, G. Survey methods in social investigation (Heinemann, 1971) This excellent survey of social investigative methods was of great value in outlining many of the problems and difficulties to be overcome in social surveying.
- 30 Scott, C. Research on mail surveys (Journal of the Royal Statistical Society,A,124,1961) pp 143 - 205
- 31 Neave (1975)

PART TWO : RESEARCH METHODOLOGY

CHAPTER FOUR

SELECTION OF DURHAM AND LOUGHBOROUGH AND SAMPLING

CHAPTER FOUR

SELECTION OF DURHAM AND LOUGHBOROUGH AND SAMPLING

4.1 Introduction

A study of this nature had to be restricted in size and this was determined by the limited resources and time available. Practicalities, therefore, influenced the number of universities invited to take part in the survey. An intensive investigation of a limited number of universities was seen to be of potentially greater value than a relatively superficial survey of many. This would also satisfy the need for more comparative research in higher education.¹ The size of the project was determined, therefore, by the quantity of data that the author was able to collect and analyse alone, and the desire to conduct a comparative study. An intensive investigation of first year students at two universities, Durham and Loughborough, satisfied both requirements. The

resulting survey would be of manageable proportions and would also alleviate, to some degree, the dearth of observational data concerned with higher education.² Durham and Loughborough had been selected for essentially two reasons: the high proportion of students in residence at both institutions and their similar size in terms of student numbers.

During the early stages of preparation for this work it had been intended to include a third institution, the University of Newcastle. Two reasons suggested the inclusion of Newcastle as reasonable: firstly, because earlier work had compared Durham with Newcastle,³ and as the results of the survey could well vary where size and proportion of students in residence were different. However, permission to conduct the survey was not forthcoming as co-operation from both the Registrar and the Students' Union was not apparent. It is possible that the inclusion of a third institution would have made the volume of data too great for a single person to manage. Hence, when Newcastle withdrew, no alternative was included. This meant that the two universities remaining in the study, Durham and Loughborough, had two factors in common: the number of students and the proportion in residence. These similarities are important.

4.2 The similarities between Durham and Loughborough

In an investigation of the potency of environmental factors on transition and attrition it is vital that some elements of the environments remain constant. The two universities selected to participate in this study exhibit two fundamental similarities.

The first of these is the size of the two universities in terms of matriculated students. In the academic year 1974 - 1975 student numbers at Durham were 4,060 compared with 3,398 at Loughborough.⁴ The parity between the two universities was shown most clearly the following session when the first year intake in October 1975 was 1,156 at Durham and 1,133 at Loughborough.⁵

Size was maintained as a constant factor, therefore, at both universities. It was considered unlikely, because of this, that variations in results could be attributed to any modification in the number of students at the university. In universities of greater size, with vast numbers of students, it may be possible for a student to feel lost and socially isolated.

The second reason why the two universities were chosen was that they showed an amazing degree of similarity in terms of the proportion of students in residence. This was the second factor held in common at both universities. The average percentage of students living in university accommodation has been assessed as 44%.⁶ The league leader, as it were, with 81% of its students in residence, is Keele. This is followed by Loughborough with 78% and both Durham and Cambridge with 74%. These figures are of interest as they show a relative decline in the proportion of resident students at Keele, and an increase at Durham when compared with figures given in evidence to the Robbins Committee.⁷

4.3 The differences between Durham and Loughborough

The many differences that exist between the two universities are essentially the result of differential foundation and

development. A brief historical account of each university may clarify this.

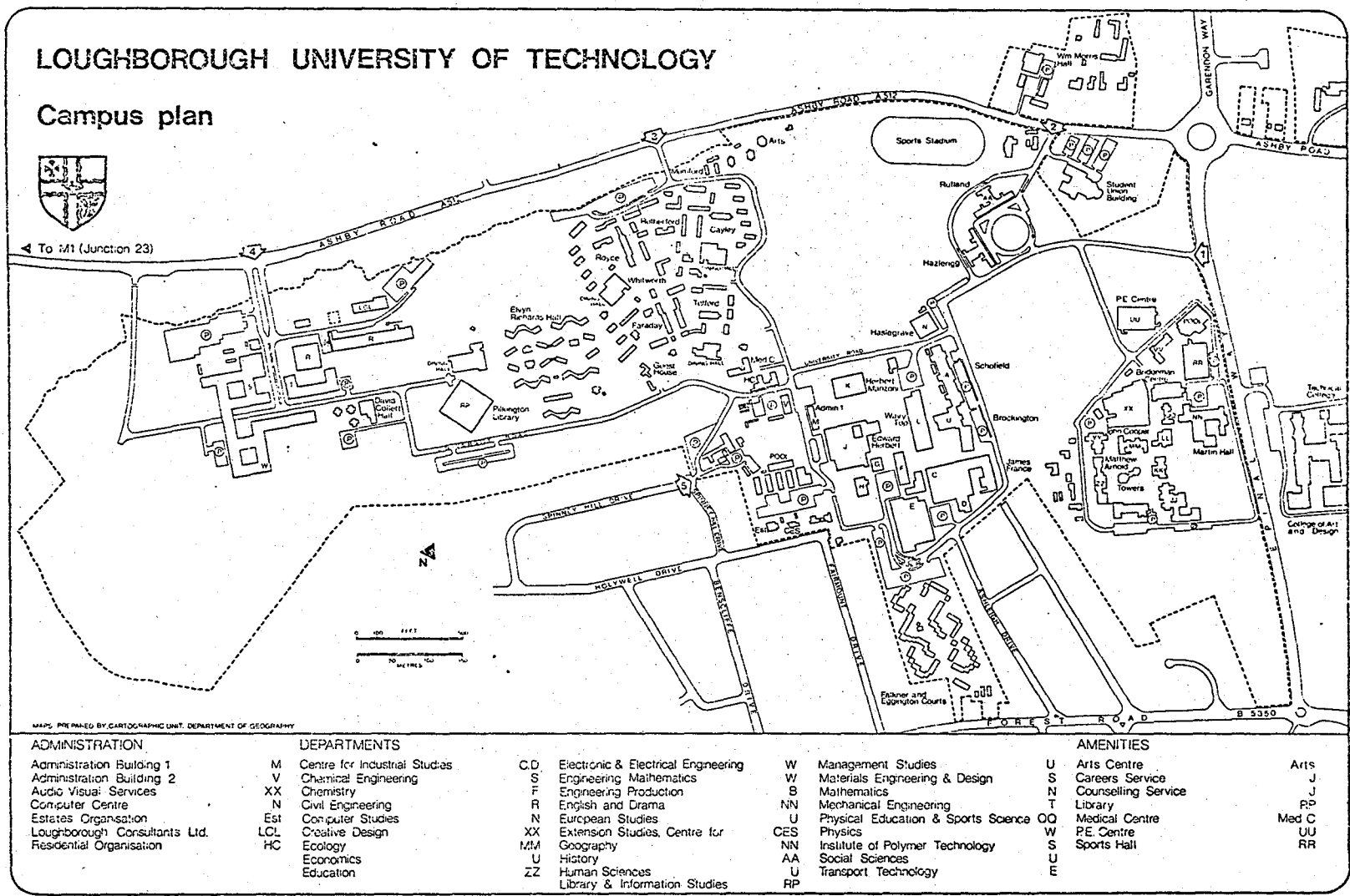
It was in 1832 that the University of Durham was founded as a result of the efforts of the Bishop of Durham, William Van Mildert, and the Dean and Chapter of Durham. At the time of the Dissolution and, again, in the Commonwealth, attempts had been made to establish a college at Durham. Opposition from the existing universities, Oxford and Cambridge, did much to prevent the establishment of Durham University in earlier times. From its foundation the University was to have a system of residence similar to the one used at both Oxford and Cambridge. The emergence of the present college system followed the establishing of separate halls of residence. Until 1963 part of the University existed in Newcastle after the Medical School there had become part of the University in 1852. The granting of a charter to the University of Newcastle in 1963 removed the "Newcastle Division" from the University of Durham. The Durham Colleges, which have increased in number with the newest being built in 1973, continue as the University of Durham.⁸

Loughborough was one of the former CAT's granted a charter in 1966 (see page 4 above).⁹ In the era of post-Robbins expansion of the university sector, Loughborough flourished. There is a distinctive campus with a concentration of academic, residential and administrative buildings in an area of 56.7 hectares to the south of the town of Loughborough. Accommodation is provided in halls of residence in the student village, a complex of separate halls, each with its own dining facilities, recreational

and sleeping accommodation. Self-catering flats have been added. A more modern addition has been new a new hall of residence on the "golf course" site, the Elvyn Richards Hall (see Map 2 on page 90). The relative youth of Loughborough and the short span of time over which expansion has taken place, have both led to the development of a campus university that contrasts with the situation found at Durham.

Durham has developed over a longer period of time, in a more haphazard fashion, so the university is scattered and diffused throughout the City, extending over an area of at least 270 hectares. It is true that there is a concentration of academic departments and new colleges to the south of the River Wear. The "Science Site", as it is called, and its adjacent colleges could be recognised as a campus in miniature. Yet it is the scattering of colleges and academic departments throughout the City, with administrative offices and other facilities being equally distributed that makes Durham so different from Loughborough. At Durham the university is very much a part of the City, not just an appendage.¹⁰

This differential foundation has also led to the two universities being described in different ways. Durham is seen as either "older civic"¹¹ or "larger civic - redbrick".¹² Its collegiate structure has resulted in its being likened to the older institutions of Oxford and Cambridge. However, in the latter the college structure is not solely residential, so the comparison may not be valid. In terms of age and structure, as well as the physical nature of the university situation, there are differences between Durham and the new technological university at Loughborough.



The student population also varies greatly at each place. Though universities are sensitive about public feeling concerning the background of their students and are, therefore, reticent about publishing information such as the social background of their students, there is some evidence to suggest differences exist in the student population at both Durham and Loughborough. A higher proportion than average of independent school leavers was found at Durham,¹³ though this is subject to annual fluctuation. More students were found to come from the south of England than from the Midlands and the North.¹⁴ Though the proportion of upper-middle class students at Durham was not higher than the average at university in general this did not necessarily alter the ethos or image of the place.¹⁵

At Loughborough the narrow range of courses offered, though there have been recent attempts at diversification,¹⁶ was reflected in the high proportion of engineers and applied scientists in the student population, and the low proportion of female students that is associated with this.¹⁷ Like most technological universities offering essentially vocational courses in engineering, pure and applied sciences and business or commercial subjects, upper-middle class students were typically under-represented.¹⁸

A further difference between the two universities was concerned with selection and admissions. At Durham admission to the University was dependent upon gaining membership of a constituent college.¹⁹ The main selecting agents in each college were, therefore, the Principals and Senior Tutors, subject to

an academic department admitting the student. Over recent years there has been a high degree of consistency in the A-level scores possessed by entering students at each college.²⁰ This tends to refute the contention that some colleges admitted students with inferior A-level scores but great sporting or other skills. At Loughborough admission was to a department and was on academic grounds.²¹ The vocational nature of courses offered attracted a large number of students from overseas as well as mature students from industry.

There were differences between the two universities on many grounds, therefore. In terms of the students at each institution, or according to the human environment, there was variation between Durham and Loughborough. In the physical position and siting of the universities there were further differences causing the physical environments to differ. Institutionally there were also dissimilarities. At Durham each college had its own social and recreational facilities. These included a licensed bar. The need for a central students' union, common to most universities, was felt less strongly at Durham. Though such a building existed, Dunelm House, (see Map 1 on page 67 and Fig 1 on page 68) this was not the centre of student social life. At Loughborough, typical of the majority of English universities, it was the Students' Union building that formed the social centre for the student. At Loughborough a new Union has recently been opened. A further institutional difference lies in another area. A university-appointed student counsellor provides a much-used service at Loughborough. Such a facility is not found at Durham.

4.4 Institutional responses to the study

At Loughborough this project was undertaken with help and full co-operation from the Student Counsellor, Dr Bernard Ratigan, and the Students Records Officer, Mr Christopher Gash. It was from the latter that lists of students' names were obtained. It was also his office that confirmed whether students had withdrawn from the university. Facilities for questionnaire collection were made available by the Student Counsellor.

At Durham permission to conduct the survey was given on a collegiate basis by each Principal or a representative of the Head of House. Co-operation varied from college to college, but interest in the study was expressed, as it had been at Loughborough.

It is interesting to note that each Durham college was seen as a special case by the college officers concerned. Relative physical isolation or communal living with Certificate of Education students were mentioned as special factors at one college. Furthermore, the character of each college was often mentioned, indicating the individuality of each. The college may have been seen as small, like a "large family" or sporty and more boisterous. In most cases there was also much to indicate that the college's own tutor system was seen as adequate by the college officers. Students' difficulties were being coped with: there was no real need for a survey of the nature being proposed by the author. It was also suggested that students would not respond to a survey such as this, or if they did, their integrity and honesty would be doubtful.

In two colleges, one all male and the other all female, permission to conduct the survey was conditional. It was felt at one that having "Department of Education" (at which the author was a student) printed boldly at the head of introductory letters was intimidating for students. It was feared that they would feel under an obligation to respond to the questionnaire that was to be issued. Some apprehension was expressed concerning students being asked to question their motives and reasons for coming to university. So the study was conducted in these two colleges on the condition that an escape clause be added to the introductory letter.* Both colleges agreed, rather reluctantly, to participate in the survey with an additional clause, and it remained an interesting experiment to see if response rates at these two colleges would differ from those at the other colleges.

In each college Senior Tutors and Principals stressed that a happy and congenial atmosphere prevailed. Students were considered unlikely to find any difficulty as long as they were prepared to enter into the spirit of the college and to "muck in". The tutor system was seen as beneficial, helping students settle and get to know at least one member of staff well. There was some intimation, however, that this research was seen as a threat. Colleges believed that they dealt with students' problems successfully and the possibility that research could, perhaps, prove otherwise appeared threatening. It was hinted on more than one

* See Appendix D, V. II, p248 for a copy of the introductory letter and the escape clause, with further discussion of this matter.

occasion that a failing student was the result of failure on the part of the college tutor or college officer in not fulfilling his, or her, obligations. The suggestion was that it is human relationships alone that encourage adaptation and adjustment. If environmental factors are significant in leading to termination, the tutor system must, necessarily, be unable to prevent this.

4.5 The validity of comparative studies

It has been suggested that comparative studies are of little value.²² This assertion has been based upon the premise that the very difference between two places is a major factor in determining the different events and behaviour within them. Indeed this seems to be more than likely. Individuals react differently in varied environments, for example the leisurely and restful holiday of a hot climate is not possible in sub-Arctic conditions without a change in behaviour and dress. It is true that the Universities of Durham and Loughborough both have their own distinctive environments. However, this is the reason why a comparative study is valid, for it highlights the effect of environmental factors on transition, the aim of this research.

Most criticism of comparative studies stems from the fallacious conclusions that have been made from these studies. Comparing A-level grades obtained from pupils at a former Grammar school, now turned Independent, with those obtained by pupils at an inner-urban comprehensive school, to take an extreme example, would superficially support the hypothesis that one school is more able to produce well-qualified school leavers. The conclusion would be that one school was better than the other. The weakness of comparative studies lies in the fact that consequences,

in this case A-level grades, are not necessarily the result of alleged causes, the type of school in the example given. There may be many other variables that need to be taken into consideration. The influence of social class on the ability to learn has been well documented²³ and could explain variation in performance more adequately than different types of school. There is a danger, therefore, that comparative studies become superficial. However, being aware of this danger and by preventing superficial and facile conclusions from being made, this does not invalidate the use of comparative techniques.

It seems to be the advantage of the comparative approach that where there is congruence and agreement within two diverse institutions then there is the suggestion that the cause of such behaviour is a factor held in common. Where there is divergence, then one looks closer at the differences for the likely cause. Holding two variables constant, size and proportion in residence, comparison between Durham and Loughborough is possible. One would expect the two differing environments to produce different sets of difficulties for first year students. The variation in environment should lead to students perceiving different problems in adjustment, if environmental factors exert any influence at all.

4.6 Sample selection

Having chosen the two universities to participate in the study, one of the greatest problems in social research had to be overcome: the size of the sample. This difficulty has not yet been resolved.²⁴ The validity of results in social research

is not determined by, nor dependent upon, the size of the sample alone. If results of a specified degree of precision and accuracy are required, or if the degree of error is to be limited to a known amount, then sample size may be mathematically calculated.²⁵ Any reduction in sample size could then lead to inaccuracy; a greater size of sample would not produce any greater degree of precision. In most cases of social research it is not these sound, philosophical factors that determine sample size but rather economic restrictions.²⁶ The size of sample is more likely to be determined by the number of people able to analyse the data and by the need to restrict such work to manageable proportions. This pragmatic approach is justified simply on the grounds that there is little value in conducting social research with a sample so large that data cannot be analysed adequately. Furthermore, the pragmatic approach has been supported by the suggestion that the optimum size is that used by other workers in a similar field with sufficient success and accuracy.²⁷

Research in higher education has been conducted with samples ranging from as little as 15%²⁸ to as great as 50%.²⁹ It is not just the proportion that needs to be taken into consideration but also the absolute numbers involved if a manageable workload is to ensue. The sample size chosen for this project was based on both pragmatic and rational grounds. It was imperative that the sample be of a size that would enable the author to cope with data analysis. A sample of 25% would yield nearly 300 students at each of the two universities. This was considered to be a manageable figure. Furthermore, there has been a precedent set of a 25% sample of Durham students.³⁰

Having determined the size of the sample the method of its selection was based on common practice. The various techniques of sample selection have been discussed elsewhere³¹ yet some explanation of the technique employed in this study is necessary. It was not possible to select a representative sample. It is debateable whether such a sample really exists or whether it is an idealised, and philosophically impossible to realise, concept. The amount of knowledge needed about the population from which the sample is to be taken would be too vast. Indeed, prior to any survey who can tell what characteristics or variables have to be considered? In the case of this study, it was impossible to ensure that variables such as sex, age, country of origin and so on, were taken into consideration when the sample was selected. Therefore a stratified sample was out of the question. The fact that a stratified sample involves an element of judgement in determining which individual, or rather which type of individual, is to be included is a major criticism of this technique in a survey such as the one described here.

A purely random sample, where every member of the population has an equal probability of being selected was not adopted because, essentially, a random sample has only one quality and that is that it was selected randomly. It is theoretically possible to have a randomly chosen sample in which all members are females, for example, or residents of Cumbria. It is also possible, if every time an individual is selected every member of the population has an equal chance of being chosen, that the same individual be chosen each time, or at least more than once.

Such a sample has been selected at random, for the epithet refers to the method of selection and not to the characteristics of the members of the sample, yet it would not be considered a satisfactory sample to use. Perhaps it is because of this that random samples are less frequently used in social research than systematically selected ones.³² The bureaucratic nature of contemporary society and its associated listing of most populations lend themselves to systematic random sampling. Such a sample is spread evenly across the population and hence combines both the stratified and the random types of sample.³³

Where the population from which the sample is to be selected is listed alphabetically then there is a close correspondence between the systematically selected sample and random order.³⁴ Criticism of this technique is made if a periodic arrangement of the population exists in the sampling frame. If such a periodic arrangement were to coincide with the sampling fraction the resulting sample would be far from representative. Alphabetic lists furnished by the Students Records Office at Loughborough and the various colleges at Durham contained no periodic arrangement. They were suitable sampling frames.

It was decided that a slight refinement of the technique would be employed. Rather than selecting the first member of the sample by random from the first four names on the list and then every fourth name thereafter being selected, which would give a 25% sample, a variation was used. Every member of the population was numbered and a number from that

list was picked at random. In this way every member of the population had an equal chance of being selected. After the initial random choice had been made inclusion in the sample then depends on the position on the list.

4.7 The Loughborough sample

The Student Records Office provided the author with a computer printout of all registered students from which first year students' names were taken. Care was exercised to exclude not only second year students and those in subsequent years but also students registered for a one year, pre-degree course in English. These students, all from Algeria, were resident in the university but attended Loughborough Technical College. All were intending to commence degree courses at the university following successful completion of the course in English. It was hoped that only first year students would be selected from the list that had to be returned within a short space of time. When survey instruments were distributed it was found that three students had been included in error who were not first year students. These were removed from the sample. Furthermore, some students registered as October 1975 entrants were in industry and did not enter the university until January 1976. These students, numbering five, could not be contacted so were rejected from the sample on these grounds.

The original list numbered 1,116 students and a figure between 0001 and 1116 was selected at random to be the origin of the systematic sample. After exclusion of January entrants and the few second year students the original sample of 279 was

reduced to 271, which comprised 23.9% of the first year students. At a much later stage it was found that some students had been listed elsewhere alphabetically. These were students with complex names of foreign origin. Thus the regular pattern of every fourth student being included in the sample was disrupted on later print-outs. This reordering did not take place till a year after the sample had been selected. It is not considered that it would have had any great effect upon the sample.

The sample was selected, therefore, purely on the position each name occupied in the alphabetical list of first year students. As the sex of the student was not indicated and fore-names are no certain indicator of gender, there was no attempt to ensure that equal proportions of male and female students were included that reflected the population at large. Neither was the type of course taken into consideration. The sample was considered to be acceptable as it yielded an even spread of individuals throughout the alphabetically arranged list.

4.8 The Durham sample

A similar technique was employed at Durham, where the sampling frame was the alphabetical list of first year students at each college. No discrimination was made for sex to ensure consistency with the Loughborough sample where no preference had been given to either sex. College lists were used rather than a list of all university students as admission was generally on a college basis and this would ensure a 25% sample of each admitting agent would be included in the sample as a whole.



Students re-sitting their first year were excluded from the lists, as were American students on a one year Institute of European Studies (IES) course, that did not lead to a degree. Each list was numbered 1 to 'n' and a number between these two extremes was selected at random. From this origin every fourth name was chosen. Of the 294 names selected one was found to be a second year resident, though she was starting a first year course. Another had withdrawn from the university after selection but before the survey was conducted. Thus the Durham sample was reduced to 292 students, which comprise 24.9% of the first year population.

4.9 Sample characteristics

Once the sample had been systematically selected it was compared, where possible, with the population as a whole. This was done to ensure that at the outset at least, the sample did represent the whole population. In terms of the proportion of male and female students there was only a slight difference between the sample and the population as a whole at Loughborough, and no significant difference at Durham. These relationships are shown in Tables 6 and 7 respectively.

TABLE 6

Proportion of male to female students in the population at large and the sample at Loughborough

Sex	Population	Sample
Male	856 (77.3%)	195 (72%)
Female	252 (22.7%)	76 (28%)
Total	1108	271

$$\begin{aligned}x^2 &= 4.423 \\df &= 1 \\p &= 0.05\end{aligned}$$

TABLE 7

Proportion of male to female students in the population at large and the sample at Durham

Sex	Population	Sample
Male	664 (57%)	179 (61%)
Female	492 (43%)	113 (39%)
Total	1156	292

$$\begin{aligned}x^2 &= 2.36 \\df &= 1 \\N.S.\end{aligned}$$

At Loughborough departments are grouped into Schools of Study rather than faculties. There are four of these: the School of Engineering, the School of Pure and Applied Science, the School of Human and Environmental Studies and the School of Educational Studies. Comparison of the sample with the population at large was possible as this information was readily available from the Students Records Office. No significant

difference was found to exist as Table 8 shows.

TABLE 8

School of Study at Loughborough and the number of students in the sample compared with the population

School	Population	Sample
Engineering	445 (40.2%)	102 (37.6%)
P. & App. Sci.	217 (19.6%)	46 (16.9%)
Hum. & Envnt. Studs.	365 (32.9%)	98 (36.2%)
Educ. Studs.	81 (7.3%)	25 (9.2%)
Total	1108	271

$\chi^2 = 3.63$
df = 3
N.S.

Information concerning the faculty to which students at Durham belonged was not available at the time, so it was not possible to check the representativeness of the Durham sample. It was also impossible to do this later as the necessary information was not made available.

Notes and references:

- 1 Entwistle, N. J. Students and their academic performance in different types of institution in Butcher and Rudd (Eds) Contemporary problems in higher education (McGraw Hill, 1972) p 59
- 2 Stringer, P. Student personality in Butcher and Rudd (1972) pp 159 - 169
- 3 Abbott, J. Student life in a class society (Pergamon, 1971)
- 4 Statistics of Education Vol 6 Universities (HMSO, 1974) Table 5, pp 14 - 15

- 5 Figures were obtained from the Registrar's Office, Durham University and the Students Records Office, Loughborough University of Technology.
- 6 Based on figures included in Statistics of Education Vol 6 (1974) Table 5, pp 14 - 15 and a comment by Dent, H. C. in Education in England and Wales (Hodder and Stoughton, 1977) on p 42 and again on p 147.
- 7 Higher education A Report of the Robbins Committee (HMSO, 1963) Cmnd. 2154 Appendix II(A) p 176
- 8 The University of Durham Calendar
- 9 See Cantor, L. M. and Matthews, G. F. Loughborough from college to university (Loughborough University of Technology, 1977) for a history of higher education at Loughborough.
- 10 Discussions with both students and academics at Durham and Loughborough revealed that though the physical situations of the two universities varied enormously in relation with the town especially, so-called "town-gown" relations were similarly poor. Open hostility between local youths and students was often reported at both Durham and Loughborough. Whether students were justified in feeling local people were resentful cannot be discussed here, but there was the opinion that many people were not glad that students were present. See also Chapter 10 of this work where students relationships with local people are discussed.
- 11 Scott, J. H. MacC. Dons and students: British universities today (The Plume Press, 1973)
- 12 Watts, A. G. Diversity and choice in higher education (Routledge and Kegan Paul, 1972) p 20
- 13 Ramsey, S. A study of applicants to a university II (Durham Research Review, 5(20), 1968) pp 254 - 271
- 14 Universities Central Council on Admissions (UCCA, 1967) referred to by Ramsey (1968) *ibid.*
- 15 According to Ramsey (1968) there was no significant difference between the proportion of students of upper-middle class origin at Durham and that at other universities. Though this may have been the case Abbott (1971) found that students perceived the situation differently.
- 16 There is a much wider range of subjects for students to study to first degree level. See the Loughborough University of Technology Undergraduate Prospectus 1983 - 1984.

- 17 Watts (1972) referring to statistics from UGC, 1971 on p 28 and p 29.
- 18 Watts (1972)
- 19 The University of Durham Calendar, notes for Undergraduates, (i) General says:- "To be admitted to the University of Durham candidates must be accepted into membership of one of the constituent colleges of the University. They must be able to satisfy the general matriculation requirements and the course requirements."
- 20 Circular issued by the Registrar, Durham University "A survey of A-level scores obtained by candidates 1971 - 1976 by college, faculty and main subjects"
- 21 Loughborough University of Technology Calendar, Ordinances state:- "To be admitted as a student of the University it is necessary that a person pass an examination approved for the purpose by Senate or be exempted from such an examination by the Senate."
- 22 Jahoda, M. A sociological-psychological approach to the study of culture (Human Relations, 14(1), 1961)
- 23 Goodacre, E. School and home (NFER, 1970)
- 24 Kish, L. Survey sampling (John Wiley, New York, 1965) and Moser, C. A. and Kalton, G. Survey methods in social investigation (Heinemann, 1971) both contain passages concerned with the difficulties encountered in choosing the size of sample and both are essentially based on the major work Sampling techniques by Cochran, W. G. (John Wiley, New York, 1963) and the consensus is that cost is an important determinant of sample size, as is that small enough to allow sufficient precision with the results.
- 25 Moser and Kalton (1971)
- 26 Cochran (1963) and Moser and Kalton (1971)
- 27 Kish (1965)
- 28 Maclay, I. A random sample of university undergraduates (UQ, 23(1), 1968) pp 80 - 94
- 29 Startup, R. The impact of university on students' relationships (UQ, 26(2), 1972) pp 195 - 207
- 30 Abbott (1971)
- 31 See Moser and Kalton (1971) for an over view of the research in this area.

- 32 Sjoberg, G. and Nett, R. A methodology for social research
(Harper and Row, New York, 1968) p 148
- 33 Cochran (1963) p 206
- 34 Yates, F. Sampling methods for censuses and surveys (Charles
Griffin and Co, 1960) p 29

CHAPTER FIVE

THE MAIN QUESTIONNAIRE SURVEY

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5.1 Introduction

The data collecting instrument used in the main part of the study of transitional problems was a specially compiled questionnaire.* Questionnaire surveying is one of two methods of data collection used in social research, the other being the use of interviews. It was decided that a questionnaire survey would satisfy the special demands made by the topic under study. The use of a questionnaire to obtain the bulk of the information was made all the more suitable by use being made, at a later date, of interview techniques, though of a smaller sample. The information obtained from the questionnaire survey would be supplemented by that gathered in one-to-one interviews. Furthermore, observational data would be included as a result of the author experiencing

* For a copy of the questionnaire see Appendix E, V.II, p251

life at both universities at first hand.¹ The use of both quantitative and qualitative data has been successful elsewhere.²

The major reason why a questionnaire was used in preference to interviewing all students in the sample was the fact that it facilitated fuller data collection in the shorter space of time, and at a fraction of the cost.³ This was considered crucial in a study of transitional problems which may be overcome and resolved with the passage of time. The time it would have taken to interview almost three hundred students at each university would have made the results unreliable. There would have been too great an interval of time between the first person being interviewed, and the last. Thus, the results of the first interview would have been incommensurable with those obtained from the last. A questionnaire overcomes this difficulty in so far as it may be delivered simultaneously to all members of the sample. Any distortion effected by the passage of time can be reduced to a minimum.

A second justification of the use of a questionnaire is based upon the fact that the sample being surveyed was of a high level of intelligence. This meant that relatively little guidance and help would be required to ensure accurate completion of the survey instrument. As long as the questionnaire was relatively straight-forward, with simply worded questions, no great problems would be posed for respondents to overcome. This would reduce the need for interviewers. It has also been shown that non-response is a consequence of low levels of intelligence among

the sample⁴ so in a survey of university students such an investigation should yield a high rate of response.⁵

A further advantage of the questionnaire over interview surveying is the unavoidable relationship that is formed between the interviewer and interviewee. There is reason to believe that the nature of this relationship may affect response.⁶ An element of detachment and impartiality is introduced by a questionnaire. The respondent is not affected by interaction of his personality with that of an interviewer. Another advantage lies in the fact that each respondent can spend a moment of time thinking about the questions. In an interview this period of time would be reduced to seconds and there would be subtle pressure upon the interviewee to respond which may put the validity of responses in doubt.

There is well documented social research methodology that proved valuable in devising and refining the survey instruments used in this study.⁷ However, the lack of absolutes in the area of social research has meant that the techniques thought to be most appropriate have been adopted.

5.2 Questionnaire surveying

The advantages and inherent disadvantages of mail questionnaires have been summarised by Moser and Kalton.⁸ This survey did not involve posting questionnaires through the Royal Mail but as the instrument was delivered to students' pigeonholes and was to be returned via internal mail services, it must

be considered as a post or mail survey. Therefore the lack of evidence as to the effect assurance of confidentiality, colour of stationery or even length of questionnaire⁹ have upon rates of reply apply. Obviously a long form would take longer to complete than a shorter one. This could deter students from completing the questionnaire were it too long. White paper is the most readily available, and often the cheapest, so it was used. Confidentiality was promised, but none of these factors was expected to increase the rate of response.

The disadvantage of mail questionnaires, that does encourage low rates of response, lies in placing the onus to respond and return the form on the shoulders of the person being surveyed. The inclusion of addressed envelopes does make the return more easy, but the lack of financial inducement, even in terms of a postage stamp, was a potential cause of low response.¹⁰ It is this aspect of mail surveys, non response, that is cited as their major disadvantage. This may be counteracted to some degree by ensuring the instrument is easy to read and understand, is pleasantly laid out, neatly presented and of suitable length. In a student context it was considered desirable that the aim of the study and the content of the questionnaire should be seen to have some intrinsic value. It was bearing this fact in mind, as much as any other, that determined and affected the compilation of the questionnaire.

5.3 Questionnaire compilation

Certain factual information had to be obtained from each

student that may not have been available to the research worker, although this information would have existed on university records. To safeguard against this eventuality it was decided that such information as home area, age, academic attainment and course of study be obtained by simple questions contained within the body of the questionnaire as a whole. The inclusion of these questions strengthened, rather than weakened, the continuity and flow of the questions from one topic to another. From the outset, compilation of the questionnaire was determined and affected by the types of questions that were to be asked. There were the straightforward descriptive questions mentioned, eliciting information concerning age and sex, for example. A second group of questions would have to gather information regarding the students' attitudes. The third set of questions were to be ones obtaining information concerning the cause of certain behaviour where many alternatives had been suggested in the literature. The inspiration for most questions, therefore, was found in earlier work in the field of student life.¹¹ Checking research findings was one objective. Other questions were prompted by the results of the preliminary survey.

Once the type of question had been determined it was relatively easy to decide the style of that question. The possible alternatives were "open-ended" or "closed" questions, and the decision to opt for "closed" questions was based on the rationale offered by Oppenheim.¹² A discussion of the relative merits of each may be found in Moser and Kalton.¹³ As data were to be analysed by computer, pre-coding was advantageous so closed questions

leant themselves to the study. The survey sought to obtain information concerning which of a number of alternatives had influenced students in the past. A closed question, listing the possible causes suggested in the literature, was the obvious choice. Though open-ended questions give the respondent a great deal of freedom, the replies often tend to be so complex they are difficult, if not impossible, to code and classify. The closed question was, therefore, considered to be the most suitable form for inclusion in the study.

Attitude seeking questions were based on the Likert scale¹⁴ which has been shown to be a suitable technique by its frequent use in social research.¹⁵ The scales were of usual form, ranging from "strongly agree" through a neutral "undecided" to "strongly disagree", or from "very satisfactory" to "very unsatisfactory", with a neutral category mid-way. In some questions the scale was reduced to two components, either "true" or "false". In the latter case there was no neutral category. If an individual indicated some mid point between these two extremes such a response could be coded and taken as a valid one. Likert scales enable cumulative values for each respondent to be calculated and facilitate comparison between the two universities on prevalent attitudes.

It was decided that the Semantic Differential technique¹⁶ was inappropriate in the main survey. What was sought was the students' attitudes towards certain aspects of the university environment and a measure of these rather than conceptual meanings.

The Semantic Differential was used, however, in the supplementary survey and is discussed below on page 147 . The Likert Scale attitude questions that were used in the main survey, even those with a collapsed true/false scale, were not only used to ascertain students' attitudes. They were also a guide and measure of internal consistency.

The questions selected for inclusion in the questionnaire were those of a great pool of attitudinal statements, multiple-choice and single-answer questions that remained after ambiguous and duplicated items had been purged. Thus the number of questions was reduced to the barest minimum which were then arranged in order. The questionnaire began with a simple introduction and instruction. The survey instrument used at Durham was identical to that used at Loughborough save for the inclusion of three questions concerned with college preference and appropriate rewording, for example "college" was used at Durham, while "hall" replaced it on the Loughborough form. Attitude questions were arranged throughout the questionnaire interspersed with factual data collecting questions.

The final draft was typed within the Education Department at Durham University. The University Reprographics Department printed the questionnaires on white A4 paper, also collating and stapling them ready for distribution. All forms were designed with subsequent card punching in mind.

5.4 Questionnaire administration

Each member of the sample, at both Durham and Loughborough, received a copy of the questionnaire towards the end of November 1975. Accompanying each questionnaire was a covering letter, individually addressed to each student. There is no evidence to suggest that the wording or method of salutation used on covering letters has any effect upon response.¹⁷ Where these were known, forenames were used on covering letters, so introducing a less formal element. At Loughborough this was possible for all save five of the sample. Forenames were known for members of only one mixed and two female colleges at Durham. The rest of the Durham sample and the five students at Loughborough received more formal greetings, therefore.*

Questionnaires were delivered to students' pigeon-holes in their hall or self-catering block of flats at Loughborough over the week-end November 22nd - 23rd 1975. A limited number were posted to students living in lodgings and private addresses outside the university. At Durham questionnaires were delivered to college pigeon-holes during the week beginning November 24th 1975. All questionnaires were delivered within a week. Thus the survey was conducted after six to seven weeks of the first term had elapsed, giving students time to settle in and experience transitional problems. Delivery of forms was conducted within a short space of time so enabling some control to be kept over time which may help the solution of transitional problems.

* For a copy of the introductory letter see Appendix D, V.II p248

Replies were to be returned via the system of internal mail at Durham, which was well-known and efficient. Collecting points existed at each college so the return of completed questionnaires, in the addressed envelopes provided, was a relatively simple affair at Durham. At Loughborough students were asked to return completed forms to a box provided for that purpose in the Careers and Appointments Office in the Edward Herbert Building. The lower rate of response at Loughborough* may be a result of this slight difficulty in returning completed questionnaires. In interview at a later stage a number of students commented upon the fact that they were not aware of the location of the office. It is worth noting that it is from the same office the Student Counsellor operates.

5.5 The questions and their sources

Doubting the validity of either sociological or psychological factors in causing termination of studies and transitional problems, it was necessary to control for these two aspects of university life. To this end questions were included in the survey to assess the importance of the students' home backgrounds and their personal make-up. The bulk of the questions referred to various aspects of the five-fold classification of the university environment.

Simple statements were devised relating to each of the five environmental spheres. Students were asked to indicate

* Response rates of the surveys are discussed in Chapter 8, p 155

whether, in their view, these statements were a true or false description of either Durham or Loughborough. A further group of statements was compiled, each referring to a facet of the university environment, with a Likert scale ranging from "strongly agree" through a neutral category to "strongly disagree". On each scale students were invited to indicate their reaction to these statements. Similar scales were used to measure satisfaction with various facilities at the university.

Where work in similar fields had suggested causal connections or relationships between various factors and attrition on the one hand, or degree success on the other, these references were included in the structured questions. Other questions owe their origin to references made by students in the preliminary survey.

The questionnaire may be sub-divided into a number of sections. The first deals with reasons students give for choosing to go on to higher education, their selection of Durham or Loughborough, their subjects, the type of accommodation and their satisfaction with it. A series of attitudinal questions, based on the five-fold classification of the university environment, then follows. The next section, though no physical division is made on the form as these sections are conceptual, deals with the students' school background and academic attainment prior to university admission. A short section of attitude statements concerned with satisfaction with university facilities separates school background from home background. After these questions

on home area, frequency of visits home and so on, there is a short section specifically concerned with problems students face at university. This is followed by a series of questions selected to give a measure of personal adjustment, to facilitate screening any students with apparent personality problems. The questionnaire is completed by a series of questions concerned with career aspirations, qualifications sought, age and sex of respondent.

The first section, reasons for going to university, was prompted by the assertion that students who have made a conscious decision to attend university and study a course of their own choosing would be more likely to adapt to the rigours of a new environment. This is mainly because of the positive motivation that such students would have: certainly higher than those who went to university because they could think of nothing better to do. The first question, therefore, asked for the major reason influencing the student's decision to go on to university. Pressure afforded by parents and schools has been mentioned by Abbott¹⁸ and so were obvious choices as possible responses in this multiple-choice question. The desire for academic qualifications was also mentioned as a reason in the same study. Startup¹⁹ included many social reasons, here grouped together, and he also referred to the wish not to commit oneself to a career straight from school. A similar question had also been asked by Maclay.²⁰ Underlying this question is the assumption that it will give an indication of motivation, perhaps pointing to later degree success.

The second question focuses the attention on more

specific matters, the preference given to Durham or Loughborough on UCCA application forms. No relationship has been found to exist between degree performance and the position in which the university was placed on application.²¹ However, it is possible that students not at their first choice university may be less likely to adapt, feeling less positively motivated than those for whom Durham or Loughborough was their first choice. This is linked with the next question asking what the first preference university was, where appropriate. It is reported that a large proportion of Durham students are "Oxbridge rejects". This question was included to ascertain the truth of such a statement.

Following the practice often used in social surveys of funnelling questions towards specific topics²² the following questions asked for the major reason influencing the decision to apply to Durham or Loughborough and also to read the subject chosen. Underlying both of these questions is the assumption that maturity in decision making prior to coming to university enables adjustment to be made more smoothly, as motivation is high. Where immature reasoning or school or parental pressure influenced such decisions there may be insufficient motivation to overcome some of the hurdles presented in the transitional period. A similar question was asked by Maclay.²³ The multiple-choice responses offered include Abbott's references to family tradition, school pressure and the academic reputation of the place.²⁴ With Durham and Loughborough both having a high proportion of students in residence it was considered likely that this may be a relevant factor affecting the decision.

Startup²⁵ has noted selection of a course for its own sake or for reasons of a subsequent career. It seems reasonable to assume that a student choosing the subject merely because it was the one most enjoyed at school, or at which he was most successful, has made an immature decision. Degree work is rarely comparable with that covered at A-level and students ought not, perhaps, enter university expecting their subject to be a mere extension of that covered at school. The recent assertion that students enter university without having made a conscious decision to do so and who terminate their studies, thus making their first ever decision,²⁶ encouraged the inclusion of the response that the school had recommended the course of study.

The final question in the first section asks for the subject studied. Brothers and Hatch²⁷ used a similar question, specifically coded to facilitate extraction of those in certain faculties. This practice was also followed in this study. It is debatable whether more problems are experienced by students in certain subjects. What is more interesting is the possibility that those courses that are vocationally oriented may pose fewer problems for students following them. It is possible that students following less vocational courses, where career prospects are less clear cut, are more prone to experience difficulties.

A series of questions was asked only of Durham respondents to ascertain the proportion of students in their first preference college. Although the fact that Durham students have to be admitted as a member of a constituent college prior to

admission to the university is made clear in the university prospectus, many students do not apply for membership of a specific college. Other colleges are over-subscribed and some applying for membership have to be transferred elsewhere. One would assume that students having selected the college to which they belong would be more likely to adapt and be content. The possibility always remains, however, that the college may not live up to expectations, hence transition is made difficult.

Students at both Durham and Loughborough were asked in what type of accommodation they lived. Maclay's survey had included a similar question.²⁸ Knowing the type of accommodation was considered necessary as sharing a room could be a potential source of difficulty. Also students, isolated in lodgings or digs, may experience difficulties. Satisfaction with one's accommodation was requested as dissatisfaction would make adjustment to other spheres more difficult. This short section on accommodation was concluded with a question asking to which hall, at Loughborough, or college, at Durham, the student belonged. It was never intended that this information would be used to discover whether members of specific halls or colleges reported more difficulties. This fear was expressed by college officers during pre-survey consultation and assurance was given that the information would not be used in this way. It was anticipated that response to this question would enable some check to be made of the representativeness of the respondents.

A series of attitudinal statements followed from which

students were asked which were true or false of the university at which they studied. No midpoint was offered as a neutral position may encourage students to be indecisive and avoid making a choice. Respondents who felt sufficiently strongly that they were unsure about the truth or falsehood of a specific statement and who indicated this on the form had made a decision. These respondents had overcome the obstacle and pressure to reply in a restricted way imposed by the structure of the question. These responses would be seen as positive decisions to select a neutral category and so would be taken into account.

Most of the attitude statements were suggested by the preliminary survey. Others were mentioned not only by students in that survey but also in other research work. Each question sought the student's attitude towards certain aspects of the university environment. Statements referred to each of the five classifications of the university environment.

In the second series of attitude statements there were two questions that differed between the two universities. No organised Freshers' Week activities existed at Loughborough, unlike Durham, where a vast number of events were planned and freshers were expected to be in residence before the remainder of the students. Therefore it was decided to ask whether a Freshers' Week would help students get to know each other at Loughborough. At Durham this question was modified to assess the efficacy of Freshers' Week in helping students get to know each other. The second question that varied between Durham and

Loughborough referred to the students at the latter being free to choose their hall of residence. Students are assigned a hall at Loughborough, unlike Durham where there is an element of choice. There is no opportunity to select to which hall a student may belong so Loughborough students were asked whether this should be possible. In the Durham questionnaire this question was replaced with one asking for the student's attitude towards the usefulness of Freshers' Week as discussion with Union officers had hinted that these activities could be curtailed.

All of the following topics that were included in the section of attitude statements, perception of social isolation, the university being too far away from home, the sense of community spirit, staff-student contacts, the impersonal nature of life, feeling homesick, the size of the university, the inadequate range of recreational facilities, new teaching methods and students being taught how best to study, were all mentioned in Malleison's early work.²⁹ They were also mentioned in the preliminary survey. Ryle³⁰ had referred to students feeling like small fish in a big pond so this was included as a likely indicator of transitional shock and potential lack of adaptation. This had not been mentioned in the preliminary survey, however. Lack of feedback and information concerning courses and academic standards were frequently mentioned in the preliminary survey and had also been referred to by Musgrove.³¹

Following this important section of the questionnaire was a group of questions specifically related to school background.

These began with the type of school, and were all based upon a series of questions used in Brothers and Hatch's survey of residence in student life.³² The wording of one concerning the educational establishment where A-levels had been obtained prior to university was crucial as it was known that many Loughborough students obtained A-levels at Technical College. It was a difficult question to phrase. Many different versions were tested before the one chosen was included in the questionnaire. Some respondents found it difficult to answer this question, indicating both the type of school attended and the place where A-levels had been obtained, where these differed. The question was not ambiguous and was clear. Those not possessing A-levels would, by virtue of this, have been mature students. So, having been a member of the working population would have had a broader range of experience than the student coming straight from school or college. This would not mean transitional difficulties would be made less great in any way. Similarly, if entry qualifications had been obtained at Technical College then this period in further education acts as a bridge between school and university, broadening the student's experience, perhaps making adaptation easier. What the question sought was information concerning the type of school from which students had come straight to university, or with a short time off in between. Those obtaining A-levels, or other qualifications, at places of further education can then be separated from the bulk of respondents.

The series of questions concerning A-level subjects and grades provided sufficient space for up to four A-levels. This

information is of importance as the view that termination is a consequence of poor selection is still aired, coupled with the idea that if standards were raised attrition could be reduced. The date left school gives an indirect measure of maturity, though it is admitted that chronological age is no measure of maturity. The so-called "year off" in between school and university is indicated by response to this question, and the value of this one year has been seen as doubtful.³³ Though delayed entry students may be able to adapt more easily because of their broader and more rich experience, this could, in itself, lead to transitional difficulties.

The educational background of the student is indicated by responses to questions asking whether the school had been single-sex or mixed, whether the student had been a boarder or day pupil and so on. Participation in school sports and societies, as well as contentment with school, would complement this information. It would be of interest to discover whether those unhappy at school are more likely to adjust to university life more easily, being happier anywhere else, or whether their being unsettled at school indicates later unsettled feelings at university.

The next section of the questionnaire listed aspects of university life, mentioned in the preliminary survey, and to which students' sense of satisfaction was sought. A Likert scale was used ranging from "very satisfied" to "very dissatisfied". This attitudinal section divided those questions concerning the students' school background from those concerned with family connections.

The section asking about family links began with a question taken from the survey of student residence.³⁴ There has been reference made to the fact that first generation students are more likely to experience difficulties, but the evidence is not clear.³⁵ Separation from home has been mentioned and this can be measured, not only by direct reference to it, but also indirectly by the number of visits made to the home and by those planned. When this information is combined with the means of travel and time taken for the journey it may be possible to calculate an index of separation. Where journey times are over-estimated this may indicate a feeling of being too far away from home. On the other hand one could argue that those feeling most isolated from home would know the exact time taken for the journey. Clearly this is an area of uncertainty.

The questionnaire continues with a section referring to a list of six problems frequently mentioned in the preliminary survey. Students were asked to rank these in order of importance or of seriousness as difficulties. The problems included are: loneliness, settling into a routine of private study, making new friends, separation from home, separation from old friends at home and school, and balancing time spent between work and social life. There was also an opportunity for students to indicate whether any other aspect of the university environment had presented them with difficulties, and where this would be ranked with the six already mentioned.

The penultimate section comprised sixteen statements to which the students' reaction was required on a Likert scale

that ranged from "strongly agree" to "strongly disagree". Each statement contained in this section referred to aspects of the students' personality and self-esteem, such as confidence in one's own abilities, social competence and self-worth. Extreme negative response to these statements would suggest the possibility of personality or psychological problems. Therefore these questions would act as a screen to isolate such students. Furthermore, some of these statements could be checked with responses to earlier statements so checking internal consistency.

The final section of the questionnaire asked for factual information concerning career aspirations, the qualification sought, age and sex. Also the student was asked whether he would be prepared to be interviewed in the first few weeks of the second term. The complete questionnaire covered eight sides of A4 at Loughborough and nine sides at Durham.

Notes and references:

- 1 Being a student at Durham University in the Department of Education and a member of a constituent college of the University the author spent a number of years as a post-graduate student, participating in student life. At Durham, therefore, student life was observed and experienced. Frequent visits to Loughborough during the time spent on this research gave the author time to observe, though not participate to the same degree, in student life at Loughborough too.
- 2 In her work Student life in a class society Abbott, J. (Pergamon, 1971) supplements results gained from surveys and interviews with her own observations of student life.
- 3 The cost in this context was essentially interview time as Social Science Research Council funding would not run to the employment of interviewers. It has not been

disputed that the saving in financial terms is sufficient to justify conducting a questionnaire survey in preference to interviewing the same sample. See Oppenheim, A. N. Questionnaire design and attitude measurement (Heinemann, 1966) pp 30 - 35

- 4 Scott, C. Research on mail surveys (Journal of the Royal Statistical Society, A,124, 1961) pp 143 - 205
- 5 See Chapter 8 of this work for a discussion of response rates
p 155
- 6 Williams, J. A. Interviewer-respondent interaction: a study of bias in information interviews in Cochrane, R. (Ed) Advances in social research (Constable, 1973) p 230
- 7 Moser, C. A. and Kalton, G. Survey methods in social investigation (Heinemann, 1971) provide an over view; Oppenheim (1966) was also valuable; other researchers in higher education who had conducted a questionnaire survey were of great help:- Malleon, N. The university student - 1953, a profile (UQ, 13(3), 1959) pp 387 - 398; Marris, P. Students' experience of university (Interim Report of the Institute of Community Studies, 1962); Maclay, I. A random sample of university undergraduates (UQ, 23(1), 1968) pp 80 - 94; Abbott (1971); Brothers, J. and Hatch, S. Residence and student life (Tavistock Publications, 1971); Startup, R. Why go to university? (UQ, 26(3), 1972) pp 317 - 332.
- 8 Moser and Kalton (1971) Chapter 11 pp 256 - 269
- 9 The lack of evidence supporting or refuting the alleged relationships between these variables and response rates is mentioned in Moser and Kalton (1971) pp 265 - 266. With reference to the length of questionnaire, for example, a mail questionnaire survey of GP's used two questionnaires of different length producing varying rates of response, greater for the shorter form. However, it is also noted that additional questions in the longer questionnaire covered emotive topics and this may have caused response rates to be lower rather than questionnaire length alone. See Chapter 8 for a discussion of the effect variation in questionnaire length had on response rates in this study, p 158
- 10 Scott (1961)
- 11 Malleon (1959); Marris (1962); Maclay (1968); Startup (1972)
- 12 Oppenheim (1966) pp 40 - 44
- 13 Moser and Kalton (1971) pp 341 - 346

- 14 Likert, R. A technique for the measurement of attitudes
(Archives of Psychology, No 140, 1932)
- 15 Oppenheim (1966) p 133
- 16 Osgood, C. E., Suci, G. J. and Tannenbaum, P. H. The measurement of meaning (University of Illinois Press, 1957)
- 17 Moser and Kalton (1971) p 265
- 18 Abbott (1971)
- 19 Startup (1972)
- 20 Maclay (1968)
- 21 Maclay (1968)
- 22 Kahn, R. L. and Cannell, C. F. The dynamics of interviewing; theory, technique and cases (John Wiley, New York, 1957)
- 23 Maclay (1968)
- 24 Abbott (1971)
- 25 Startup (1972)
- 26 Clarke, J. and Jones, A. The transition from school to college
(Youth Counselling Bulletin, 1(4), 1975)
- 27 Brothers and Hatch (1971)
- 28 Maclay (1968)
- 29 Malleson (1959)
- 30 Ryle, A. Student casualties (Pelican, 1969) p 22; the concept of "small fish in a big pond" was also the basis of an article by Werts, C. E. and Watley, D. J. A student's dilemma: big fish-little pond or little fish-big pond? (Journal of Counseling Psychology, 16(1), 1969) pp 14 - 19
- 31 Musgrove, F. What worries students (Educational Research, 12, No 1, 1969)
- 32 Brothers and Hatch (1971)
- 33 Brown, E. M. and McComisky, J. G. Ex-national service and 'schoolboy' undergraduates: a comparative study of academic performance (British Journal of Educational Psychology, 25, 1955) pp 55 - 59 who believed immediate entry was better than delayed; Venables, Sir P. in an Oration delivered at Birkbeck College, London (UQ, 24(4), 1970) pp 375 - 391 felt that a year-off had little to commend it though benefits from social service work could be gained; Walker, P. The university performance of mature students (Research in Education, 14, 1975) pp 1 - 13 found that, generally, younger students

performed better than older ones. However this was found to be reversed at Warwick. Though not directly relevant the general findings are that any delay between school study and university study is harmful to the process of academic performance, though delay may produce more rounded persons.

34 Brothers and Hatch (1971)

35 The fact that many new students are "first generation" students having no help or guidance from the family has been mentioned by Collier, K. G. in New dimensions in higher education (Longmans, 1968) p 5 and it has been implied that this is a source of difficulty leading to inferior academic performance. Read, J. C. had stated earlier in Psychiatry and the undergraduate (UQ, 9(1), 1954) pp 39 - 45 that difficulties in being an undergraduate were greater for first generation students. This was seen by Abbott (1971) as a less influential variable. Indeed, evidence offered to the Robbins Committee also suggested first generation students need not be more likely to terminate, see Robbins Report Higher Education Appendix II(A) (HMSO, 1963) p 135 Elsewhere it has been noted that although first generation students are not necessarily more prone to termination they do need more help than they receive. See Vernon, P. E. The pool of ability (The Sociological Review Monograph No 7: Sociological Studies in British University Education, University of Keele, 1963) pp 45 - 57.

CHAPTER SIX

THE I N T E R V I E W S

CHAPTER SIX

THE INTERVIEWS

6.1 Introduction

Following the precedent set by Abbott¹ interviews were conducted to supplement data gathered from the main questionnaire survey. Some respondents had commented on the apparent inflexibility of the questionnaire. This apparent rigidity imposed by the questionnaire could be compensated for by enabling some students to talk more freely about their feelings and reactions to the environment. There was opportunity on the questionnaire for students to express themselves should they feel confined and limited by the multiple-choice options available. The instructions at the head of the questionnaire expressly stated respondents should write immediately below any question any additional comments. Only a few did so. It was considered beneficial to conduct some interviews, on a one-to-one basis, to explore more deeply some of the areas of concern raised by the questionnaire survey.

The results obtained from the questionnaire survey, essentially quantitative in nature, concerned with facets of the university environment that have been seen as sources of difficulty by students, are inadequate on their own. In an area of study such as this, concerned with people and the problems they face, it is important that people, individuals, play a part in the research. It is too easy to manipulate statistics in an impersonal way and lose sight of the essence of the study: students in transition. The attitudes and feelings towards aspects of the university could be explored more deeply using interviewing techniques. This could provide specific case material and examples of transitional difficulties and their resolution.

In order that comparison between Durham and Loughborough could be maintained, an essential point of the exercise, it was necessary to have a structured interview schedule so this was devised. The focused interview, as it has become known, is more formal than the completely free interview.² The use of an interview guide ensures that the same information is obtained from all respondents. It also means that questions act as prompts to the interviewee, encouraging a response. During the course of interviews some questions were rephrased slightly and the order modified. However, the schedule was always used as a last resort if the interviewee seemed reticent.

6.2 Selection for interview

Although a systematic random sample produced the bulk of students invited to attend for interview there can be no doubt that the group of potential interviewees was a self-selected one.

Only those indicating, by a positive response to the appropriate question in the questionnaire, a willingness to be interviewed were considered for selection. This group was further reduced in size by the exclusion of those who had specified dates and times that were incompatible with the author's schedule. It was, therefore, from this highly selected sub-set that a systematic random sample was selected. This yielded a sample of 50 students at Loughborough and 58 at Durham. To these were added a number of students who had indicated on their questionnaires that specific difficulties had been encountered or they wished to clarify some of the responses they had made. It was considered that the further twelve students at Loughborough and fourteen at Durham would be "extras" or "reserves" who would take the place of any in the sample who did not turn up for interview. If time allowed they would all be seen.

Each potential interviewee was contacted and invited to participate, being reminded of their willingness to participate the previous term.* The venue, date and time were left to the interviewee to choose, as much as possible. A map, showing the exact location of the author's room, whether at Durham or Loughborough, was also sent to each interviewee with confirmation of the time, date and place the interview was to be conducted.

It is interesting to note that although the group of interviewed students was a self-selected one, it was certainly the majority of respondents that showed a willingness to be interviewed. At Loughborough only thirty-two students (18%)

* A copy of the introductory letter is in Appendix G, V. II p262

declared that they had no desire to be interviewed. At Durham a smaller proportion, 14%, or thirty-four students were unwilling to be interviewed. The greater proportion of students at both Durham and Loughborough had been potential interviewees.

6.3 The interview schedule*

Structured or focused interviews were used to ensure comparability of results between the two universities. The schedule was virtually identical, with obvious modifications according to the location. It was used to initiate the interview. There was no attempt to interrupt, nor to confine the interviewee rigidly to talking about the subject under discussion. Interviewees were free to talk as much, or as little, and as wide-rangingly as they wished. If any topic had been covered adequately the relevant question was omitted when it came later in the schedule.

The interview began with an invitation to express, in the student's own words, his thoughts about the time he had spent at either Durham or Loughborough. This was followed by a request for information concerning his expectations of the first few weeks of university life. Students were asked what they liked and disliked about university. The very general nature of the question enabled the degree of response to be up to the interviewee. The student was next asked for his views concerning the function of a university in general. Following this students were asked how successful Durham or Loughborough had been in fulfilling that function. The next question asked whether students would still go on to university if they had the chance over again, and if they

* A copy of the Interview Schedule can be found in Appendix H, V.II p264

would still go to the same university.

A series of questions concerning student newspapers followed, with others about the Students' Union, clubs and societies. The number of hours time-tabled for lectures and tutorials then preceded an enquiry of how spare-time and week-ends were spent. Freshers' Week activities and induction programmes were recalled before enquiry was made about the students' relationships with various people.

The amount of preparation for university, whether at home or school, was next discussed. Students were then asked what they had most gained from university life. Views on the advantages and disadvantages of campus sites, as at Loughborough, or universities spread throughout the town, as in Durham, were sought. Then similarly contrasting types of accommodation, hall of residence as opposed to colleges, were discussed. After describing their accommodation, students were asked how satisfied they were with it. The final question was concerned with the student's course.

The schedule was a frame of reference, an outline of topics that were to be covered. It was never considered as a straight-jacket, controlling the course of the interview. A great degree of flexibility was maintained throughout the interview. The schedule acted as a reminder to the interviewer, it was seen as a check-list, and not a rigid guide. The five spheres of the environment were also reflected in the topics discussed.

6.4 Interview management

It is necessary to subdivide the interviews into two categories which need to be discussed separately. This division is not based upon their being conducted in Durham or in Loughborough, but rather whether they took place on the student's home ground, as it were, or in the author's office. This subdivision is necessary as the roles of "guest" and "host" were reversed in one context from those performed in the other. The burden of making the interviewee feel confident and relaxed was more markedly on the shoulders of the interviewer when his office was used, whether this be at Durham or Loughborough. There was a real sense in which students seen in their own rooms were more relaxed at the outset, and this was perceived at both universities. It has been suggested that interviews conducted in the interviewee's own home, in this context within the student's study-bedroom, are more satisfactory.³ It is difficult to measure this and prove whether such interviews were more satisfactory than those conducted, say, in an impersonal office. The perception on the author's behalf of a more relaxed atmosphere in students' rooms is purely subjective. It may well be that the real level of tension was not reduced. On the other hand there may have been a more relaxed air but this could have been caused by some other variable, such as the rapport between interviewer and interviewee, rather than the venue itself.

If the success of an interview is taken to be linked with the length in time of its duration then the following tables show that the variable most affecting the length, and hence the success of the interview, was not the venue but rather the sex

of the respondent.

TABLE 9

Differences in sex and venue of interview according to average length of interview in minutes

Durham				Loughborough				
	Office	n	Own room	n	Office	n	Own room	n
Male	39.5	21	38.5	15	40.7	25	32.1	11
Female	26.9	17	29.7	6	28.3	4	26.6	11
Average	33.9		36.0		39.0		29.4	

At both Durham and Loughborough male students were rather more talkative than females. This seemed to be relatively unaffected by the location of the interview. Durham males tended to be less talkative in their own rooms, as had both male and female students at Loughborough. It was the female student at Durham who tended to talk longer in her own room than in the author's office.

The two offices concerned varied in detail. At Durham the author occupied a large room, with fitted carpet, in a converted house which was, at the time, being used by the Department of Education. It was well furnished, with three desks, numerous chairs, book shelves and an occasional table. The room was sufficiently large to arrange a couple of chairs adjacent to a low table in one part of the room. This avoided the situation where the interviewer would be seated behind a desk. Potted plants were arranged on the book shelves and the low table. An ashtray was provided for those students who wished to smoke during the course

of the interview. The seating arrangement, with only a low table between the chairs, was felt to be more conducive to conversation, being less formal, than if the desk were to act as both physical and conceptual barrier between interviewer and interviewee.

At Loughborough the Economics Department kindly offered the use of Room A/1/10 (now demolished) in the Schoffield Building. The room was a temporary construction of wood and glass, being one of four modular units built into a vast, little-used room. With many glass panels and white paint-work the rather clinical character of the room was modified by potted plants and posters. Being of much smaller dimensions than the office at Durham, the room at Loughborough, with desk, table, three chairs and a telephone, was crowded. In an attempt to place the interviewee in a comfortable position a similar seating arrangement to that employed at Durham was used. There was less room, however, to manage a truly relaxed arrangement. An ashtray was also provided. It is interesting to note that only a small proportion of students smoked during the course of the interview. Most smokers lit their cigarettes as soon as the interview was officially terminated, though this did not necessarily mark the end of the conversation.

In Durham and Loughborough the sequence of events involved in the interview was kept to the same order as much as possible. Each interviewee was greeted on arrival at the office, invited to enter while coats and scarves were removed. Both offices had heating of sufficient calibre to necessitate the removal of out-door clothes. After being asked to sit down, each interviewee was asked if there was any objection to the convers-

ation being recorded. A portable tape recorder was placed on the table between the interviewer and interviewee. No one objected. It was explained that the recording was being used to ensure no detail was missed in writing up after the interview. The lack of finances meant that after each interview had been written up the tape would be used again, so no tape recording would be kept of an actual interview. A further justification, not explained to interviews however, was that the author could then devote more effort to listening to what was being said. He could be seen to be listening to what was being said, not frantically writing scribbled notes. It was felt important that the interviewee feel he was being listened to and that interest was being paid to what was being said. After the initial question had been asked the interviewer would often interject with, "uhuh" or "mmm" to give some feedback, without interruption, and to encourage the interviewee to continue talking. It has been suggested that the latter signifies agreement and that the former is preferable as it is more neutral.⁴ It was felt that such a fine distinction was debatable and the two terms were used synonymously. What was interesting was the occasional relaxation of tension when the recorder was turned off and the interview was officially ended. This had been observed in other studies so was not unexpected.⁵

The tape recorder was also used when interviews were conducted in students' rooms, but with less success. The seating arrangement was often unsatisfactory and the recorder was rarely placed between the interviewer and interviewee. Thus, some of the recording was faint and indistinct. This meant that greater concentration had to be paid to making notes rather than being

seen to be listening. It was also interesting to observe that there were other differences between interviews conducted in students' rooms and those in the author's office. A noticeable difference was that interviewees were more likely to move around the room during the interview on their home ground than they were in the author's office. The interviewee would often sit on the bed or in an armchair. Sometimes a desk would be used. The interviewer was usually invited to sit in an armchair or on the seat at the work surface or desk. Although movement during the course of the interview was extremely rare, the few occasions it did occur were in students' rooms. This usually involved retrieving material to show the interviewer in order a question could be answered more fully or a point made. It may have involved pointing out a feature of the room or the view from the window. There was purpose in the movement. It did not seem to be meaningless, restless movement. It was clearly less likely to take place in the author's office. No doubt those interviewed in the author's office felt inhibited, as "guests", to move in unfamiliar territory until the interview had been concluded.

Once all the ground had been covered and the last question answered, each respondent was thanked for his participation. The tape recorder was switched off and the interviewer stood up. This symbolically signified the end of the interview. It would be at this point that additional comments were often made, as throw-away remarks while putting on hat and coat or while being shown to the door. The remarks tended to be about specific members of staff and of relationships between staff and student. It seemed that students were reticent while a recording was being made but were

more open when the official interview had been ended. Where appropriate some of these comments were noted immediately after the interviewee had left.

Interviews were conducted in a series of blocks alternating between the two universities. This meant that not all interviews at Durham, for example, were conducted at the beginning or end of the term. The first period began on January 21st 1976 at Loughborough and continued until January 29th. The next fortnight, from February 1st to 14th, was spent interviewing at Durham. A further period was spent at Loughborough, from February 16th to February 21st, completing the interviews there. The last series of Durham interviews were conducted during the period March 2nd to March 12th 1976.

Overlapping of interviews between the two universities meant that some control was maintained over the passing of time. It was important that the passage of time, a potent variable, be controlled for two reasons. On the one hand there is the problem of memory and recall. It is unclear whether it is memory itself that deteriorates over time or the ability to recall events that is affected. Discussion and research have not led to conclusive answers.⁶ What is clear is the fact that for some reason attitudes and feelings are recalled less accurately as time passes. By interviewing some of the Durham students early in the session, then some Loughborough students before returning to Durham respondents meant that responses to interview questions could be comparable between the two universities. The second reason, on the other hand,

is more concerned with the object of the study, transitional difficulties. Problems arising from the transition from school to university may be resolved as familiarity with the place increases. Overlapping of interviews reduces the amount of time in which adjustment could take place so making the responses comparable. It must be remembered that the time scale involved was two months. Although this may not be a great period of time in general it could well be a great period for the student who spends only three ten-week periods a year at university.

The interviews were valuable in providing an insight into the students' attitudes and their perceptions of the environment. Much information was gained that enriches the data gathered in the questionnaire survey. There seemed to be no difference in content of the interviews, time taken to complete them or in ability to recall the first few weeks of the year, whether the interview had been conducted in early January or later in March. Whenever the interview was conducted, and where ever the venue, it provided qualitative data to supplement quantitative data. In this area, therefore, the scheme was a valid one. It was also most enjoyable for the author was able to spend extended periods of time in close association with students at both Durham and Loughborough.

Notes and references:

- 1 Abbott, J. Student life in a class society (Pergamon, 1971)
- 2 The focused interview, developed by Merton, R. K. and Kendall, P. L. in The focused interview (American Journal of Sociology, 51, 1946) pp 541 - 557, concentrates on a specific or particular topic, though an unstandardized interview is used i.e. the interviewer is free to ask

whatever questions he feels appropriate. Standardized or structured interviews with an interview schedule are more formal in style than the completely free technique. There has been some confusion as the term "focused interview" has also been used by Jahoda, M., Deutsch, M. and Cook, S. W. in Research methods in social relations (Dryden Press, 1951) where they refer to a semi-structured interview. This is more formal than the completely free interview as a guide ensures the same information is obtained from each interviewee. An overview of the techniques of interviewing can be found in Moser, C. A. and Kalton, G. Survey methods in social investigation (Heinemann, 1971) pp 296 - 301

- 3 Macfarlane Smith, J. Interviewing in market and social research (Routledge and Kegan Paul, 1972) p 113
- 4 Macfarlane Smith (1972) p 115
- 5 Wilson, A. The assessment of industrial markets (Hillary, 1969) Tape recorders were found to inhibit respondents, but once these were turned off there was a reduction in tension and the interviewee was seen to bounce back. This is referred to by Macfarlane Smith (1972) p 117
- 6 A seminar to discuss problems associated with retrospective and recall data was held at the Institute of Education, London University on April 21st 1978. The papers presented at the seminar, with comments from the floor, have been published in The recall method in social surveys edited by Moss, L. and Goldstein, H. (NFER, 1979) and they contain some interesting discussions on the topic, reflecting some of the most recent research in this area.

CHAPTER SEVEN

THE SUPPLEMENTARY SURVEY

CHAPTER SEVEN

THE SUPPLEMENTARY SURVEY

7.1 Introduction

The Supplementary Survey, conducted during the second term of the students' second year, was devised with four specific objectives. The first was to discover how students had resolved transitional problems. For specific problem areas within the five-fold classification of the environment this question was asked directly. The second objective was to assess the degree of attitude change and adjustment that had been made since the first term of the first year. Information needed for this analysis was, again, asked for directly. The third aim was to identify the most frequently cited transitional problems. Students were asked for information concerning each of these three aims directly. The fourth objective was, however, conceptually different.

As has already been mentioned a few times in the background to this study some workers in the area of guidance and counselling have observed that termination of study may be a positive and beneficial step.¹ It was considered important to discover whether students concur on this matter. The fourth objective was, therefore, to discover students' attitudes towards terminating students. This was to be achieved by using the Semantic Differential.²

The two-page questionnaire was simple and easy to complete. Printed on white, A4 paper at the University of Durham Reprographics Department, it was sent to every member of the sample save for the few who were known to have withdrawn from the university. A similar system was employed for the return of completed forms as had been used in the first, main survey. An addressed envelope was included with each questionnaire. The internal mail system was used at Durham, and a collecting box was placed in the Careers and Appointments Office, Edward Herbert Building at Loughborough.

7.2 Supplementary questionnaire compilation

The Supplementary Survey Questionnaire* was kept simple by grouping questions together. The first section sought information concerning the change in students' attitudes over time. Students were asked to indicate their degree of agreement with a number of statements, each referring to a specific aspect of the environment. Only three categories were used "agreed during 1st

* A copy of the Supplementary Questionnaire can be found in Appendix I, V.II, p 266

term of first year", "agreed at end of first year" and "agree now". Students were able to select more than one response and so a range of answers, from "always agreed" to "always disagreed" was possible. This section was followed by a Likert scale series asking for a measure of the students' satisfaction with three aspects of the university environment: academic, institutional and human.

The section that followed used a collapsed Likert scale, asking for agreement or disagreement with a series of statements. Students were invited to respond "as a direct result of having spent a year" at either Durham or Loughborough. In this way the students' reaction to certain areas of the university environment could be calculated.

A departure from the style of question used in the Main Survey and those used thus far was made in the next section, when the Semantic Differential was used. Students were asked to consider contrasting pairs of epithets or concepts, and to rate themselves on a five-point scale relative to each epithet. A similar question was used later, using the same pairs of contrasting epithets. Students were invited in the second section to rate those students who terminated their studies on the same scale. Splitting these two questions, to ensure each was on a different side of the same sheet of paper, was deliberate. It was hoped that response to the latter would be less influenced by the former,³ so between them was a question asking students to indicate how they would resolve a problem in the academic, accommodation and emotional

spheres. Also between the two sections of the Semantic Differential questions was a problem check list, containing twenty frequently cited transitional problems. Students were asked to indicate whether any had been a "problem" or a "serious problem" during their first year. The questionnaire ended with questions asking for information concerning the type of accommodation in which students lived and their sex.

7.3 The Semantic Differential

Two assumptions have been made in the development of the Semantic Differential as a measure of attitudes. The first is that the polar adjectives are equidistant in semantic space. Secondly, these polar adjectives are in opposite directions from the neutral category or origin, i.e. they are positive and negative.⁴ These assumptions were taken as the guiding rules in compiling the Semantic Differential questions used in the Supplementary Survey. In as many places as possible the negation of a statement was used to indicate the opposite concept, equidistant from the origin as the positive statement. Indeed a number of paired epithets were selected and used in pilot studies. Students at Durham, in the Palace Green Library, in Dunelm House, the Students' Union Building, and the streets in between the two were approached and asked to complete a draft Semantic Differential sheet. Some paired concepts were found to be unsuitable. These were either slightly ambiguous or tended not to be logical opposites. Some pairs of epithets encouraged much discussion as to their meaning and so made completion of the scale difficult. A few students suggested that they were unable to generalise about students who terminate

their studies. It was noted that students were able to rate themselves very easily. The lack of homogeneity amongst students who terminated their studies was cited as the cause for an inability to rate these students. When such a difficulty was expressed there was a tendency for responses to cluster about the neutral category. This phenomenon has been observed and noted as a disadvantage of this technique.⁵ The use of many extreme responses is also cited as being indicative of psychological disorder.⁶ In a study of highly selected students one would expect few, if any, consistently selecting extreme responses.⁷

The original scale had seven points, but five were chosen in the present study. It was felt that as students had reported some difficulty in generalising about students who leave prematurely in the pilot survey, they would find a seven point scale more confusing than a more simple five point one.*

Concepts employed in the test were listed in random order so that positive attributes were not all on one side. There was no pattern of alternating positive and negative statements. Thus there was no guide to the respondent as to what sort of response could be considered desirable. The two scales, the one for self-assessment and the other for rating terminating students, were identical.

The success of the semantic differential in measuring attitudes rests on the position of the polar adjectives in semantic space, as opposites. In each of the ten pairs one component is the opposite of the other. Each is equidistant from the neutral

* See Appendix K,V.II p271 for a discussion of the pilot survey

category. Thus a positive inclination towards one element can be seen as a negation, of equal strength, of the opposite element.

In the Supplementary Survey the use of the Semantic Differential made the variety of question style greater and so helped make the questionnaire more interesting. It was hoped this would encourage response. The use of the Semantic Differential also reflected the different concepts being investigated and its suitability in measuring the same.

7.4 Sources of questions in the Supplementary Survey

For the sake of simplicity relatively few questions were included, only nine, but these tended to comprise many sections. Within the first question, for example, there were twelve sub-questions or components. Seven of these had been used in the main survey. Using virtually the same wording in the subsequent enquiry the degree of attitude change could be assessed. Two of the five remaining elements had also been mentioned in the main survey. These had been included as two of the six problems students had been asked to rank in order of severity. (see page 126) The three additional elements had been mentioned by students in the course of interviews and were included to ascertain their potency and how widespread they were.

The second question sought assessment by the student of his performance in three spheres of the university environment: the academic, institutional and human. Students have indicated various reasons for embarking on courses of higher education,

some being social, some cognitive or academic in nature. It is of interest to discover whether the level of satisfaction with performance in these spheres is related to the type of reason given for going onto university.

The third question used a collapsed Likert scale asking for agreement or disagreement with ten statements. Some of these had been specifically devised to give an indication of the student's self-confidence and development as a person. By comparing results gained from a series of questions along similar lines in the Main Survey with those obtained in the supplementary enquiry a measure of personal development could be made. One would expect greater confidence and less concern about the social environment as growth and development occurred. With development as a person being advocated as one of the aims of university education (see page 13) it is of interest to see how successful this is.

The next question involved the Semantic Differential. The polar adjectives were selected as those most appropriate and applicable to a student survey. These were:- immature/mature; brave/cowardly; failing/successful; popular/unpopular; hard working/lazy; strong character/weak character; unpleasant/pleasant; sociable/unsociable; responsible/irresponsible; unintelligent/intelligent. At the head of the question an introductory and explanatory statement stated clearly that self-assessment was required. The question was laid out in exactly the same way when it appeared on the reverse of the sheet as question seven. The only difference was the explanatory statement that stressed terminating students in general were to be assessed or rated.

Separating these two questions that used the Semantic Differential were two specifically concerned with transitional problems. The fifth question listed a number of possible sources of help in the solution of problems. Students were invited to indicate where they would seek help in order that a problem may be resolved in any one of the following three areas:- one concerned with academic work, one with accommodation and the other with emotional matters. Question six, on the other hand, listed twenty frequently cited transitional problems. These had been referred to by students in the main survey as other problems that had been experienced. The interviews re-inforced the fact that some problems seemed to have been experienced at both universities. By distinguishing between those references to mere problems as opposed to more serious problems, and by weighting the latter, a total score of transitional problems could be calculated for each respondent. It must be remembered that this index would be a measure of problem reportage rather than of experiencing problems per se. The relationship between high scores in problem reportage and first year examination results, or later degree results for that matter, must not necessarily be interpreted as a relationship between "having problems" and academic success.

Finally, the Supplementary Survey had two simple questions, one asking for the respondent's sex and the other for information concerning the type of accommodation in which the student lived. The former would have helped indicate any inaccuracy or possible superficiality in response. If, for example, a respondent had indicated his sex as male in the first

survey but in the Supplementary Survey this had been indicated as female one may doubt the seriousness or accuracy with which questions had been answered. In fact no one did contradict themselves in this way. Indeed there was much evidence that students had responded with much thought and, hopefully, accuracy. In one instance a student had indicated his sex in the Main Survey as male and this was repeated in the subsequent enquiry, though with the added comment adjacent to the question: "Biological or psychological? You figure that one out."

7.5 Supplementary Survey administration

The supplementary questionnaire was compiled after a review of responses to the main survey and after interviews had raised a number of interesting points. The questionnaire was printed and ready for use during the first term of the students' second year. It was not issued until the beginning of the next term for a number of reasons.

Firstly, it was considered wise to give as long a time as possible for completion and subsequent return of the forms. Furthermore, the second term of the second year is the mid-point of a three-year course, an appropriate point to conduct a follow-up survey. In interviews it had often been reported that there had been a feeling of anti-climax on return to university after the Christmas vacation. If this were to be experienced in the second year as well then the questionnaire may be seen in a more positive light, as something to relieve the deflated sensation, and so response rates could be improved. However, the possibility still

remains that students would not be predisposed to completing the form if sensations of anti-climax and mild depression are being experienced.

The Student Records Office at Loughborough and each college at Durham were able to indicate which students had terminated their studies by this time, and these were not included in the Supplementary Survey. There were eight students from Durham and thirty-three from Loughborough excluded in this way. Every other member of the sample, even those not responding to the first survey, was sent a questionnaire and an addressed envelope. These were delivered, in person by the author, to each student's pigeon-hole in hall at Loughborough and college at Durham. The first questionnaires were delivered at Durham between February 26th and 28th 1977. Those at Loughborough were delivered a few days later on March 2nd and 3rd 1977. The few students living out at both universities were sent questionnaires by post.

It was expected that a greater response would occur at Durham, where the internal mail system would make the return of completed forms relatively easy. At Loughborough, where students were obliged to take completed forms to the Careers and Appointments Office, the response rate was expected to be a little lower because of this unsurmountable difficulty.

Notes and references:

- 1 Clarke, J. and Jones, A. The transition from school to college (Youth Counselling Bulletin 1(4), 1975);
Embling, J. A fresh look at higher education -

European implications of the Carnegie Commission Report
(Elsevier Scientific Publishing Co., Amsterdam, 1974);
Hayes, S. Pressures contributing to the decision to
dropout - comparison between dropouts and persisters
(The Australian Journal of Education, 18(2), 1974)
pp 138 - 148

- 2 Osgood, C. E., Suci, G. J. and Tannenbaum, P. H. The measurement of meaning (University of Illinois Press, Urbana, 1957)
- 3 When pre-testing it was observed that students referred to their own position on the scale printed at the head of the sheet before rating terminating students. This action could not be ruled out when students completed the questionnaire in the privacy of their own rooms. By printing each scale on opposite sides of a sheet of paper in the questionnaire some attempt was made to isolate responses to the latter from the influence of response made to the former.
- 4 Malmstrom, E. J. and French, G. M. Scale symmetry and the semantic differential (American Journal of Psychology, 76(3), 1963) pp 446 - 451
- 5 Gibbins, K. Response sets and the semantic differential (British Journal of Social and Clinical Psychology, 7(4), 1968) pp 253 - 263
- 6 Arthur, A. Z. Response bias in the semantic differential (Brit.Journ.Soc.Clin.Psych., 5(2), 1966) pp 103 - 107
- 7 Ryle, A Student casualties (Pelican, 1969) Ryle notes that a very small percentage of students experience severe psychological disorder. In a 25% sample it would be unlikely, though not impossible, to find such students.

PART THREE : RESULTS

CHAPTER EIGHT

RESPONSE RATES

CHAPTER EIGHT

RESPONSE RATES

8.1 Introduction

This investigation of the environment, sub-divided into the five-fold classification as outlined by the author in Chapter Three of this work (see page 58), was conducted to assess the potency of environmental factors in leading students to experience transitional problems. The results from the two questionnaire surveys, the Main Survey and the Supplementary Survey, and a series of interviews form the bulk of this section. It is with the data here presented that the potency, or lack of it, of the physical environment and those four environmental spheres outlined above can be assessed.

The volume of data involved, with almost 500 respondents and nearly 200 variables, necessitated computer analysis. Both questionnaires had been designed and pre-coded to this end. Card

punching staff at the Durham University Computer Unit (DUCU) transferred data from both survey forms onto 80-character punched cards. This information was then fed into NUMAC¹ the Northumbrian Universities Multiple Access Computers with the two main frame IBM 360/67 and IBM 370/168 computers being housed at Newcastle. Direct access to NUMAC was by means of terminals at Durham. Analysis was conducted using one of the most widely utilised statistical packages, the Statistical Package for the Social Sciences, known as SPSS.²

With data obtained from the two universities of Durham and Loughborough, cross-tabulation was the most clear method of showing whether any relationship existed between variables. Use of the chi-square test was considered to be the most appropriate as data were in frequencies or "counts" and this statistic enabled the degree of association between variables to be assessed. Many varied statistical manipulations were possible with the vast wealth of data collected. As the essential aim of the research was to compare the environment at Durham with that at Loughborough, in an attempt to identify those environmental elements affecting student performance and behaviour, the chi-square test was the one statistical technique ideally suited to the purpose. References obtained from the interviews add greater depth and insight to information collected from the two questionnaire surveys. These are interspersed with the quantitative data at appropriate and relevant points.

Cross-tabulation tables are included in the text either

if a significant difference in the distribution between variables was found, or if the lack of any significant difference is seen to be important. All other cross-tabulation tables referred to in the text that were not significant have the chi-square value and degrees of freedom entered as footnotes. The figure in parenthesis refers to the Table number in Appendix L where these tables are located.(see V.II p 273)

This chapter is divided into a number of sections. The first deals with response rates in general. The second discusses the measure of student performance used in this study: degree results. This is followed by discussion of a measure of transitional problem reportage that was calculated from data collected in the surveys.

8.2 Response rates

Rates of response were variable. By the beginning of February 1976, when the last completed questionnaire from the Main Survey had been received, 84% of Durham students and 66% of those at Loughborough had replied. It is possible that this differential rate of response may be explained in terms of the author having been a student at Durham University Department of Education, using University of Durham headed note-paper for the introductory letter. This may have encouraged students at Durham to respond. It would have been less impressive in the eyes of a student at Loughborough.

Response rates were also expected to be lower at Loughborough than at Durham because of the greater difficulties

encountered in returning completed forms at the former. It may be assumed that a number of students at Loughborough failed to respond because of difficulties met in returning the forms. With no system of internal mail students at Loughborough had to walk to the Edward Herbert Building and deliver their completed forms in person. Some students were unaware of the location of the Careers and Appointments Office within the building, in which the collecting box was situated. Only those students actively interested in the survey would have been likely to make enquiries as to its whereabouts. Those lacking any enthusiasm over the content of the survey would be less likely to discover the location of the Office yet alone make a special journey there merely to return a questionnaire form. Others may have seen a personal visit to the Office as a breach of confidentiality. At Durham it was relatively much easier for students to return completed forms. The envelope only needed to be placed in internal mail collection boxes or handed to a college porter.

It seems that the slightly longer questionnaire issued to Durham students did not deter them from responding. Neither did the use of more formal salutations on the introductory letter. Table 10 shows the significant difference in rates of response according to site, i.e. Durham or Loughborough. The proportions of respondents and non-respondents when length of questionnaire and salutation on introductory letter are considered are very similar, as Tables 11 and 12 show respectively. The implication of this is that Durham students responded more frequently than did those at Loughborough, irrespective of the length of the

questionnaire or type of salutation used.

TABLE 10
Response rates in the main survey by site

Site	Respondents	Non-respondents	Totals
Durham	246 (84.2%)	46 (15.8%)	292
Loughborough	179 (66.3%)	91 (33.7%)	270
Totals	425 (75.6%)	137 (24.4%)	562

$\chi^2 = 24.556$
df = 1
p 0.001

TABLE 11

Length of questionnaire in the main survey and response rates

Length	Respondents	Non-respondents	Totals
Long	246 (84.2%)	46 (15.8%)	292
Short	179 (66.3%)	91 (33.7%)	270
Totals	425 (75.6%)	137 (24.4%)	562

$\chi^2 = 24.556$
df = 1
p 0.001

TABLE 12

Salutation on introductory letter and response rates (Main Survey)

Salutation	Respondents	Non-respondents	Totals
Formal	221 (84.4%)	41 (15.6%)	262
Informal	204 (68.0%)	96 (32.0%)	300
Totals	425 (75.6%)	137 (24.4%)	562

$\chi^2 = 18.79$
df = 1
p 0.001

It is possible that one could argue that a lower rate of response was to be expected at Loughborough because of the subject base of the university, with a large proportion of engineering and applied science students. However, although it is true that applied scientists and engineers tended to respond less frequently than did social scientists, this difference was not significant, as Table 13 shows. It cannot be argued, therefore, that lower rates of response at Loughborough had been significantly affected by the subjects being studied.

TABLE 13

School of Study at Loughborough with a comparison of the total population and respondents to the Main Survey

School	Population at large	Respondents	Totals
Engineering	445 (40.2%)	63 (35.4%)	508 (39.5%)
P. & App. Sci.	217 (19.6%)	28 (15.7%)	245 (19.1%)
Hum. & Envnt.Studs.	365 (32.9%)	70 (39.3%)	435 (33.8%)
Education	81 (7.3%)	17 (9.6%)	98 (7.6%)
Totals	1108	178	1286

$$\chi^2 = 4.914$$

$$df = 3$$

N.S. (1 missing observation)

Response rates at Loughborough were probably lower, over all, because it was only at Durham that reminders were sent out to non-respondents. Yet even at Durham not every non-respondent was reminded of the need to respond. The presence of an internal mail system enabled follow-up of those students at Durham failing to return their completed questionnaires with no postal charges being incurred. This was impossible at Loughborough. At the start of

December 1975 only sixty-seven students at Durham had failed to return their forms. Half of these were contacted and reminded to return the questionnaire.* After a random choice to commence selection, every other name on the list was chosen. By the time the last completed questionnaire was received in February 1976, there was a significant difference in response between those reminded and those not, as Table 14 illustrates.

TABLE 14

Response rates of Durham students who were reminded and those not reminded to return forms

	Respondents	Non-respondents	Totals
Reminder sent	16 (47.1%)	18 (52.9%)	34
No reminder	7 (21.2%)	26 (78.8%)	33
Totals	23 (34.3%)	44 (65.7%)	67

$\chi^2 = 4.8979$
df = 1
p 0.05

It seems likely that had reminders been sent to students at Loughborough the response rate may have been increased slightly. However, the rate of response at Durham had been considerably higher than at Loughborough in the first instance, before reminders were issued. The inherent difficulty in returning completed forms at Loughborough would still have discouraged some students from responding.

* A copy of the letter sent to students to remind them to return the questionnaire can be found in Appendix F, V.II, p261

There are two other features of response rates about which some comment should be made. The first concerns the additional paragraph or escape clause that had to be affixed to the introductory letters sent to members of St Aidan's and University Colleges at Durham. (see page 94 and Appendix D, V.II p 248) Response rates were high at both colleges, 88.5% at St Aidan's and 88.0% at University College, which is often known as Castle as it is located in Durham Castle. (See Map 1, page 67 and Fig 1, page 68) When compared with response rates from students at Durham not having this extra paragraph on their introductory letter there was no significant difference.*

The second feature of response rates was the effect upon these played by the students' gender. At Durham the proportion of males to females who responded to the Main Survey was very close to that found in the population as a whole. The survey results can be said to be truly representative as a whole where sex of the students is concerned for there was no significant difference between male and female students whether in the population as a whole or amongst respondents.**

At Loughborough a significant difference was found to exist between the proportion of male students in the population at large and the females with those responding to the survey. This

* $\chi^2 = 0.717$ df = 1 N.S. (1)

** $\chi^2 = 0.612$ df = 1 N.S. (2)

meant that respondents at Loughborough were less representative of the population in general, unlike those at Durham, where the respondents' gender was concerned. Female students were over-represented, as Table 15 shows.

TABLE 15

Sex differences among respondents to the Main Survey and the population at large at Loughborough

Sex	Population as a whole	Respondents	Totals
Male	856 (77.3%)	123 (68.7%)	979 (76.1%)
Female	252 (22.7%)	56 (31.3%)	308 (23.9%)
Totals	1108	179	1287

$\chi^2 = 3.3493$
df = 1
p 0.1

Over-representation of female students in the response was probably a result of two factors. Firstly, the sample had a slight bias in favour of female students, as was shown in Table 6 on page 103 of this work, and this introduced a slight element of error that was compounded by the second factor. This second consideration is that females tend to be more willing to respond to surveys of this nature than do males.³ Thus, it was not surprising to discover the proportion of female respondents was greater than the population would suggest.

Response rates varied greatly from college to college at Durham, as well as by the students' gender. In general female students at Durham responded at a greater rate, 86.7%, than did

males, of whom 82.7% responded. At Loughborough the proportions were 74.7% and 62.8% respectively. In both cases it was the female students who were more likely to respond. Table 16 shows the response rates for each college at Durham. These have been listed in descending order according to the total percentage response rate, that is both male and female.

TABLE 16

Response rates to Main Survey according to sex and college at Durham

College	Sample			Respondents		
	Male	Female	All	Male	Female	All
1	-	2	2	-	2 (100.0%)	2 (100.0%)
2	12	2	14	11 (91.7%)	2 (100.0%)	13 (92.9%)
3	30	-	30	27 (90.0%)	-	27 (90.0%)
4	26	9	35	22 (84.6%)	9 (100.0%)	31 (88.6%)
5	-	26	26	-	23 (88.5%)	23 (88.5%)
6	25	-	25	22 (88.0%)	-	22 (88.0%)
7	-	24	24	-	21 (87.5%)	21 (87.5%)
8	25	11	36	21 (84.0%)	10 (90.9%)	31 (86.1%)
9	6	5	11	5 (83.3%)	4 (80.0%)	9 (81.8%)
10	-	28	28	-	22 (78.6%)	22 (78.6%)
11	17	6	23	13 (76.5%)	5 (83.3%)	18 (78.3%)
12	12	-	12	9 (75.0%)	-	9 (75.0%)
13	26	-	26	18 (69.2%)	-	18 (69.2%)
Tot.	179	113	292	148 (82.7%)	98 (86.7%)	246 (84.3%)

Colleges:- (1) Neville's Cross; (2) St John's; (3) Grey;
 (4) Collingwood; (5) St Aidan's; (6) University; (7) Trevelyan;
 (8) Van Mildert; (9) Bede-Hild's; (10) St Mary's; (11) St Cuthbert's;
 (12) St Chad's; (13) Hatfield.

Response rates for the various Loughborough halls are shown in Table 17. These have been arranged in descending order according to the total percentage response rate, as were the colleges at Durham.

TABLE 17

Response rates to the Main Survey according to sex and hall at Loughborough

Hall	Sample			Respondents		
	Male	Female	All	Male	Female	All
1	10	-	10	8 (80.0%)	-	8 (80.0%)
2	21	17	38	15 (71.4%)	12 (70.6%)	27 (71.1%)
3	17	13	30	12 (70.6%)	9 (69.2%)	21 (70.0%)
4	6	4	10	3 (50.0%)	4 (100.0%)	7 (70.0%)
5	30	9	39	18 (60.0%)	9 (100.0%)	27 (69.2%)
6	14	5	19	10 (71.4%)	3 (60.0%)	13 (68.4%)
7	19	8	27	11 (57.9%)	6 (75.0%)	17 (63.0%)
8	29	14	43	17 (58.6%)	10 (71.4%)	27 (62.8%)
9	8	-	8	5 (62.5%)	-	5 (62.5%)
10	18	5	23	11 (61.1%)	3 (60.0%)	14 (60.9%)
11	19	-	19	11 (57.9%)	-	11 (57.9%)
12	5	-	5	2 (40.0%)	-	2 (40.0%)
Tot.	196	75	271	123 (62.8%)	56 (74.7%)	179 (66.1%)

Halls:- (1) Hazlerigg-Rutland; (2) Royce; (3) Rutherford; (4) Falkner & Eggington Courts; (5) Cayley; (6) The Holt; (7) Telford; (8) Faraday; (9) Longcliffe; (10) Lodgings, home, private flats, etc.; (11) Forest Court; (12) Forest Hall.

The Supplementary Survey, which was conducted in February and March 1977, was sent only to members of the original samples who were still members of either Durham or Loughborough universities. Having obtained information from the Examinations Office at Durham and the Student Records Office at Loughborough concerning students who had withdrawn from the universities, the Supplementary Survey was conducted on a slightly smaller scale than the Main Survey had been done. At Durham 284 supplementary questionnaires were issued, with 237 being sent to students at Loughborough.

Students at both universities tended to be less willing to respond in their second year than they had been in the first term of their first year. At Durham, as Table 18 shows, the response rate was 54.2%, while at Loughborough it was as low as 46.4%. These low rates of response must reflect the general disinterest shown by students in transitional matters when they are, themselves, half way through their degree course.

TABLE 18

Response rates to the Supplementary Survey by site

Site	Respondents	Non-respondents	Totals
Durham	154 (54.2%)	130 (45.8%)	284
Loughborough	110 (46.4%)	127 (53.6%)	237
Totals	264 (50.7%)	257 (49.3%)	521

$\chi^2 = 3.159$
df = 1
p 0.1

The significant difference between the two distributions shown in Table 18 above is less great than that existing between the two universities where the Main Survey was considered, as Table 10 showed. The apparent lack of interest in the subsequent survey is made all the more curious by the fact that six students at Durham responded to the Supplementary Survey having declined to reply to the Main one. Thus 14.3% of non-respondents to the Main Survey were sufficiently interested in the subsequent enquiry to respond. At Loughborough there were sixteen, 21.1% of the non-respondents to the Main Survey, in a similar position.*

If students indicating a willingness to be interviewed after the Main Survey were taken to be those most interested in the content of the surveys, then response to the Supplementary enquiry was not related to level of interest. The proportion of students who had shown no desire to be interviewed but who had replied to the Supplementary Survey was not significantly different to that of students who had.** Generally, it appeared that students at Durham were slightly more interested, and so replied to the subsequent enquiry, than were their counterparts at Loughborough.

* With 16 respondents to the Supplementary Survey at Loughborough and 6 at Durham who had not replied to the Main Survey the maximum number of cases or students to be included in any analysis varies. If respondents to the Main Survey alone are considered there is a maximum of 425 cases. If analysis is of students replying only to the Supplementary Survey then the maximum number is 264. When students who replied to both surveys are in analysis the maximum is 242.

** $\chi^2 = 1.2752$ df = 1 N.S. (3)

8.3 A measure of student performance

The use of class of degree obtained in final examinations as a measure of student success at university is a manifestation of the prominence given to the cognitive rather than the affective outcomes of a student's experience. It may also be related to the relative ease with which an academic measure of student performance may be made. Philosophical justification of such a cognitive measure is derived from a restrictive view of the aims and objectives of university education as the review of the literature showed. (See pages 11 - 15 of this work.) Although there is a school of thought that sees higher education as more than the acquisition of cognitive skills and intellectual training, being concerned with the development of the individual as a person, no satisfactory empirical measure may be made of such development. Degree class appears, at first sight, to give an objective measure of a student's success at university and is thus more likely to be used.

However, the issue is more complex. There are certain assumptions that have to be made when degree class is taken as a measure of university success. It is important that these assumptions be appreciated, even if their validity cannot be proven.

Firstly, there is the meaning of the term "success" in a university context. As it has been observed (see page 22) there is controversy and debate in this area. Attainment or progress in academic terms may be only one aspect of success. There is some doubt of the validity of discussing degree results and equating them with success in a university situation.

Secondly, there is the assumption that each class of degree, whether it be a First or a Lower Second, reflects equal merit, signifying an equality of attainment from one discipline to another. Thus, a Third in, say, Biology, is equal to the same class of degree in Arabic Studies, for example. This is made more complex by the tacit assumption that classes of degree awarded at one institution are comparable with those of the same class, but awarded by another university. In this study, for example, does a First in mathematics at Durham indicate an identical standard as that attained by a first class honours degree holder in mathematics at Loughborough? It is debatable whether degree classifications are commensurable within a single institution, yet alone amongst different universities.

Finally, a set of values is employed by most people that places a first class honours degree in a superior position to a Second or Third. Thus a student with a second class honours degree is considered to have been more successful than another who may have a Third or Pass degree. Where no consideration is taken of the student's expectations or desires then it is possible to make few valid value judgements of this nature. A student obtaining a higher class of degree is considered to be more successful. The student concerned, if he had aimed for a Third at best, wishing to experience certain cultural and recreational activities while at university, may regard himself as more successful, having attained his aims, than many others who may have obtained higher classes of degree. This is especially true where the latter student had aimed for, or expected to attain, say an Upper Second, but was awarded a lower second instead.

Students' expectations of university may differ, as has been discussed above (see pages 38 - 40 of this work). It may be erroneous, therefore, to consider the holder of a second class honours degree as being more successful than another with a third or pass degree, a commonly held view. By placing one class of degree superior to another, a value judgement has been made. Such a system of values, taking no consideration of students' expectations, measures success in narrow, academic terms. Yet students enter higher education for many varied reasons. Class of degree may not, therefore, be an adequate measure of success at university. The question remains, however: Why use degree performance as a measure in analysis of results obtained in this study?

Degree results are an outward, tangible manifestation of institutional assessment of a student's performance. It may well be true that there is much of value that can be gained by even a short spell as an undergraduate. However, the fact that this declaration is made at all implies that greater benefit may be obtained by successful completion of a degree course. Possession of a degree is the primary objective of most undergraduates. It is also true that the current economic recession is making it increasingly more difficult for graduates to find employment. The imminent decline in the number of eighteen year old school leavers, as school rolls fall, may affect the number of university applicants with subsequent cut-backs in university provision. It is possible that both may encourage the need for a more efficient and cost-effective use of resources and will encourage those seeking an empirical measure of worth and value. Class of degree will probably be given greater emphasis in the

near future as a consequence of these many varied facets of the contemporary economic scene. Degree class is a measure to which society as a whole tends to give value and credence, even though its validity as such may be doubtful.

At both Durham and Loughborough degree results were published in classes for Honours, ranging from First, through Upper Second and Lower Second, through Third to Pass at Loughborough and General at Durham. It was possible to discover which students had terminated their studies and which had failed examinations and had been expelled, by contact with the respective offices at each university. Thus students at both Durham and Loughborough could be compared in terms of their degree class obtained in final examinations. Academic attainment as measured by the institution may be taken as an indicator of cognitive progress, one facet of development as a whole. Thus there is some justification in using degree class as a measure. The validity of inter-varsity comparability must remain dubious.

An inherent disadvantage with the use of the chi-square test of association is found when expected frequencies are less than five in value. In this instance the validity of results is put into doubt. Some have noted that one cell may contain an expected frequency of less than five without affecting the reliability of results.⁴ When the number of observations is low, as indeed when the numbers of Firsts and terminating students are concerned, there is a recognised practice to overcome this dilemma. Categories are grouped together, making fewer cells, until none contains an expected frequency below the critical value. In this study the combination of First and Upper Second degrees, when

appropriate, was considered satisfactory. These good honours degrees are the ones generally required for admission to research so the two are compatible.

Students either terminating their studies or failing examinations and being expelled from university were also grouped into a single category. Similarly, those students receiving an Ordinary, Pass or General degree were grouped with those receiving a Third. In the hierarchy of degree classes the lowest honours classification and the unclassified degree were most suitable for re-grouping. In some instances, where the numbers of students who had either failed or withdrawn or who had obtained lower classes of degree were very low and expected frequencies would have been below five, it was necessary to regroup and amalgamate these two categories. This regrouping was used only when necessary. All other cross-tabulations contain two separate classes of terminators and exam failures, and those with Thirds and unclassified degrees. Such a combination may be less than satisfactory but as the cross-tabulations show there were few students in the lower categories. Whether these had obtained unclassified degrees or thirds, or were those who had terminated, as a group they differed from those obtaining Second or First class honours degrees.

8.4 A measure of transitional problem reportage

A further measure used in analysis of results was concerned with the number and severity of problems reported by respondents. In the Supplementary Survey students had been asked to indicate from a list of twenty problems which they had experienced as a result of being a first year student. (See page 151)

If the problem had been perceived to have been of a serious nature this was indicated by underlining rather than merely checking the item. Using this information a variable of problem reportage, known by the eight-character name that was computer-identifiable, PROBSCOR, was computed. Indication of a serious problem was given double weighting. Thus a maximum score of forty was possible had all twenty items been perceived as serious problems. PROBSCOR, a measure of both frequency and severity of some transitional problems, was classified into three categories: low, less than a score of four; medium, with a score of four to six inclusive; and high, with a score in excess of six. Occasionally re-grouping was necessary where there were very few respondents in one category.

The variable PROBSCOR is a measure of problem reportage. It is high for those students who were aware that they had experienced certain transitional problems and who had reported this fact. It is low for those who reported few transitional problems. PROBSCOR does not measure those who had problems but the willingness to mention having experienced them.

These two measures, PROBSCOR and degree classification, are used to indicate the potency of environmental factors upon first year students in the transition from school to university. Each of the five areas of the university environment, examined in turn in the next five chapters of this work, is examined and the strength of any environmental factor is taken as the effect this has upon either degree performance or PROBSCOR.

Notes and references:

- 1 Introduction to NUMAC 4th Edition, August 1979. See also U.D.C.U. Guide No. 1 Guide to the computing service edited by Smith, R. F. (University of Durham Computer Unit, October 1980)
- 2 Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K. and Bent, D. H. SPSS - Statistical Package for the Social Sciences 2nd Edition (McGraw-Hill Book Co., 1975)
- 3 Neave, G. R. How they fared (Routledge and Kegan Paul, 1975)
Neave found more problems were reported by women (54%) than men (48%). He found that "transition appears more upsetting for girls than it does for boys, but appears to be a general feature in other research."
- 4 Maxwell, A. E. Analysing qualitative data (Methuen, 1961) p 99

CHAPTER NINE

THE PHYSICAL ENVIRONMENT

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9.1 Introduction

The first of the five spheres of the university environment is that concerned with the physical features of the university situation. It is in this category that the type of accommodation, the catering facilities, size of the university, amount of travel and general attitude towards the place are all examined. Each of these various aspects of the physical environment is examined separately and the relationship, if any existed, between degree results and attitude towards the physical environment, and between PROBSCOR and the same attitudes are also included. Interspersed with the tables and discussion of the survey results are quotations and references to the interviews. It is these comments that throw light onto the various tables and that enhance the survey results.

9.2 Type of accommodation

The type of accommodation in which students at Durham and Loughborough lived differed, with two interesting anomalies. Similar proportions, however, were found to be in single study bedrooms in either hall or college. At Durham very few students were in lodgings or rented accommodation with the bulk of those not in single rooms living in doubles. At Loughborough, as Table 19 shows, 11% were in lodgings or self-catering accommodation with a smaller proportion in double rooms than had occurred at Durham. Students living in their own or the parental home were few in number at both universities with four (1.6%) at Durham and three (1.7%) at Loughborough.

TABLE 19

Type of accommodation by site

	Durham	Loughborough	Totals
Single room	128 (52.3%)	94 (52.5%)	222 (52.4%)
Double room	100 (40.8%)	43 (24.0%)	143 (33.7%)
Lodgings/flat	13 (5.3%)	20 (11.2%)	33 (7.8%)
Miscellaneous	4 (1.6%)	22 (12.3%)	26 (6.1%)
Totals	245	179	424

$\chi^2 = 32.3714$

df = 3

p 0.001 (1 missing observation)

The bulk of anomalies between students' responses at Durham with those at Loughborough were furnished by the system of accommodation provision found at the latter. A few students indicated in the Main Survey that they were "double bunked". This

referred to the practice of the university whereby students were temporarily placed in double rooms at the start of the academic year, using bunk beds. Reaction to this arrangement was variable. In interview in the second term one student, still "double bunked", was unconcerned about this as having bunk beds was seen as beneficial, giving more "floor space". Other interviewees were less favourably disposed. Though all had been moved subsequently to larger, single rooms in the student village, they referred to the unsettling and unsatisfactory period spent at the immediate start of their university careers. Uncertainty over the length of time to be spent in this temporary situation made them unwilling to unpack as one was always expecting to move soon. Once the move to larger and more permanent accommodation had been made the situation was seen to improve rapidly. There was some indication that had "double bunking" lasted for any longer than the two weeks it did, the situation would have been "unbearable" for some students. Students who had indicated that they were "double bunked" were included in the miscellaneous category in Table 19, rather than the double room class, as the rooms were generally not of sufficient size, neither were they permanently double rooms.¹

A further anomaly resulting from the unique residential provision at Loughborough was referred to by a number of students as their living "three to a room". This "triple room" situation was where three students shared a communal lounge/study, from which three small, separate bedrooms provided a degree of privacy. This arrangement was common in the student village and most students resident in this sort of accommodation indicated they

were in single rooms. Students indicating "three to a room" were thus re-grouped for analysis into the single room category.

The significant difference in distribution of students amongst the various types of accommodation was not matched with a similar variation in satisfaction with that accommodation. In fact there was a high degree of consensus, with about 90% of students at both universities expressing satisfaction with their accommodation. There was no significant difference between the two universities when satisfaction with accommodation was considered.*

An important aspect of the physical environment that is related to accommodation is catering. At Loughborough 61.5% of the respondents to the Main Survey were satisfied with the catering facilities, which compared favourably with Durham's 64.1%. Indeed, there was no significant difference between the two universities.**

The large numbers of students at both universities satisfied with both their accommodation and the catering facilities indicated general support for university provision of accommodation. At both Durham and Loughborough, where such a high proportion of students are in residence, a quarter of all those students who were dissatisfied with their accommodation were resident in

* $\chi^2 = 1.0672$ $df = 1$ N.S. (4)

** $\chi^2 = 0.8001$ $df = 2$ N.S. (5)

lodgings or self-catering flats. However, in spite of feelings of dissatisfaction with accommodation there was no likelihood that these students would obtain low class degrees or even terminate. It appears that initial problems may be ironed out or are resolved during three years stay at university or they are not sufficiently potent to cause poor degree performance. There was no significant difference between students who had been satisfied with their accommodation and those dissatisfied when degree results were taken into consideration.* Students' dissatisfaction with their accommodation did, however, make it more likely that transitional problems would be reported. This must be related to the fact that a number of these would have been problems with accommodation. As Table 20 shows, students who had expressed dissatisfaction with accommodation tended to report more transitional problems.

TABLE 20

PROBSCOR by satisfaction with living accommodation

PROBSCOR	Satisfied	Dissatisfied	Totals
Low <4	57 (26.6%)	3 (13.6%)	60 (25.4%)
Med 4-6	75 (35.1%)	4 (18.2%)	79 (33.5%)
High >6	82 (38.3%)	15 (68.2%)	97 (41.1%)
Totals	214	22	236

$$\chi^2 = 7.464$$

$$df = 2$$

$$p = 0.05 \quad (6 \text{ missing observations})$$

$$* \chi^2 = 3.7206 \quad df = 2 \quad \text{N.S.} \quad (6)$$

Catering facilities, with which a greater proportion of students at both Durham and Loughborough had been dissatisfied, seemed to have the opposite effect. No significant relationship was found to exist between satisfaction with catering facilities and problem reportage.* However, students with this negative affiliation towards the physical environment, where catering facilities were concerned, seemed to perform less well at degree level, as Table 21 shows.

TABLE 21**

Degree results by satisfaction with catering facilities

	Satisfied	Undecided	Dissatisfied	Totals
1/2i	94 (35.2%)	11 (22.0%)	23 (21.5%)	128 (30.1%)
2ii	104 (39.0%)	22 (44.0%)	51 (47.7%)	177 (41.8%)
3/P	45 (16.9%)	9 (18.0%)	26 (24.3%)	80 (18.9%)
F/W	24 (9.0%)	8 (16.0%)	7 (6.5%)	39 (9.2%)
Tots	267	50	107	424

$$x^2 = 12.664096$$

$$df = 6$$

$$p = 0.05 \quad (1 \text{ missing observation})$$

In the Supplementary Survey students were asked again for an indication of their satisfaction with their accommodation in the first year. Interesting anomalies were found when responses were compared with those obtained from the Main Survey. Very small

$$* x^2 = 2.88401 \quad df = 4 \quad \text{N.S.} \quad (7)$$

** In tables showing degree results classes are abbreviated thus: First (1); Upper Second (2i); Lower Second (2ii); Third (3); Pass, General or Ordinary (P); Academic failure (F); Withdrawal or termination (W).

proportions of students, 3.9% at Durham and 2.7% at Loughborough, claimed they had always been dissatisfied with their accommodation. By far the majority had, at some time, appeared satisfied. The constancy of satisfaction with accommodation over the first year was very similar at both universities, with no significant difference occurring between the two.* However, the proportion of students who claimed they were dissatisfied with their accommodation at the start of the year but later became satisfied with it, 18.9% at Durham and 18.1% at Loughborough, is much greater than that expressed in the Main Survey, 8.1% and 6.7% respectively. Thus, although the majority of students expressed satisfaction with their accommodation during their first term of the first year, their recollection of the same phenomenon more than a year later proved to be less flattering: a larger number believed they had been dissatisfied.

It may be possible that satisfaction with accommodation is affected by familiarity, as the novelty of the situation passes so dissatisfaction increases. Perhaps the inconvenience of sharing a room, or the problems arising from internal noise along corridors or between rooms, or the frustration that ensues from working, sleeping and socialising in the same room, each may help overcome the initial enthusiasm for the accommodation. What is clear is that after a year had elapsed there was a slight reduction in the proportion of students feeling satisfied with their accommodation. In terms of transition from school to university it is the initial sense of

* $\chi^2 = 1.9297$ $df = 2$ N.S. (8)

satisfaction that is important, facilitating adjustment and adaptation. The effect of constancy of satisfaction on degree performance is shown in Table 22 and a number of interesting points can be indicated.

TABLE 22

Degree results by constancy of satisfaction with accommodation

	1/2i	2ii	3/P/F/W	Totals
Always dissat. or became dissat.	11 (23.9%)	23 (50.0%)	12 (26.1%)	46
Became satisfied	10 (22.2%)	24 (53.3%)	11 (24.4%)	45
Always satisfied	62 (41.1%)	64 (42.4%)	25 (16.6%)	151
Totals	83 (34.3%)	111 (45.9%)	48 (19.9%)	242

$\chi^2 = 8.75084$
df = 4
p 0.10

Students reporting they had permanently been dissatisfied with their accommodation or who later became dissatisfied with it were most likely to obtain a Third, Pass degree, to terminate or fail. Such students may obtain a lower second slightly more readily than those who had always been satisfied with their accommodation. It was this latter group, those always being satisfied with their accommodation who performed most successfully. Clearly positive affiliation towards the physical environment or lack of dissatisfaction with it appears to be conducive with satisfactory degree performance.

Responses to the questions in the Supplementary Survey from

which constancy of opinion was taken were re-defined as in Table 22 to indicate either a permanent positive regard or a permanent negative regard to the particular environmental topic, when no change in opinion or attitude was indicated. Where there had been a change in opinion this could either be interpreted as a positive or a negative change in attitude. When attitude changed from dissatisfaction with accommodation to satisfaction, that was regarded as a positive change of attitude. Each of these questions was redefined in a similar way and apart from constancy of feeling satisfied with accommodation, no other aspect of the physical environment had any significant relationship with degree performance.

Frequency and seriousness of transitional problems reported were seen to be significantly related to constancy of satisfaction with accommodation, as Table 23 shows. This suggests that accommodation is an important aspect of the physical environment and that those who were dissatisfied with their accommodation at the start of their course reported more transitional problems.

TABLE 23

PROBSCOR by constancy of satisfaction with accommodation

PROBSCOR	Always dis- agreed or did later	Later agreed	Always agreed	Totals
Low <4	10 (21.7%)	12 (26.7%)	40 (26.5%)	62 (25.6%)
Med 4-6	13 (28.3%)	8 (17.8%)	59 (39.1%)	80 (33.1%)
High >6	23 (50.0%)	25 (55.6%)	52 (34.4%)	100 (41.3%)
Totals	46	45	151	242

$\chi^2 = 10.29082$
 $df = 4$
 $p = 0.05$

9.3 Size of the university

An important aspect of the physical environment is the size of the university. At both Durham and Loughborough similar proportions of students felt the university was not too large: 97.6% and 92.1% respectively. This is of interest as the actual physical distances involved differ greatly, as the maps on pages 67 and 90 show. A slightly significant difference between the two sites was found to exist with Durham students feeling the university was not too large slightly more frequently than their Loughborough counterparts, as Table 24 shows.

TABLE 24

Truth or falsehood of statement that the university is too large

Site	True	False	Totals
Durham	6 (2.4%)	240 (97.6%)	246
Loughborough	14 (7.9%)	163 (92.1%)	177
Totals	20 (4.7%)	403 (95.3%)	423

$$x^2 = 5.678$$

$$df = 1$$

$$p = 0.05 \quad (2 \text{ missing observations})$$

Students believing the university was too large, giving an indication of a less than positive affiliation towards the place, were no more, or less, likely to perform well at degree level than those believing the opposite. There was no significant difference in the distribution of degree results.* In a similar way, students feeling overwhelmed by the size of the university were not more likely

* $x^2 = 0.09374$ $df = 2$ N.S. (9)

to report transitional problems than those not so affected by its size.*

Thus, at Durham and Loughborough, both markedly different environments in terms of physical location, spacing of departments and residential provision, there was a difference in the degree of agreement that the university was too large: a slightly larger proportion of the students at Loughborough felt this way. The more compact, campus university was the place one would expect students to feel this was not so. At Durham, where departments and colleges were spread throughout the city, there was a more positive affiliation towards the university, seeing it as not being too large.

Another indicator of the size of the university, though an indirect one, was the amount of daily travel that was necessary. When referring to this there was another significant difference between the two universities, as Table 25 shows. It was at Loughborough that a greater proportion of the students felt that there was too much daily travel, re-inforcing the finding that suggested students at Loughborough considered the university to be too large.

Slight differences between Durham and Loughborough students when perception of this aspect of the physical environment, the amount of daily travel, was concerned were further reflected in degree performance. Students agreeing that there

* $\chi^2 = 0.4929$ $df = 1$ N.S. (10)

TABLE 25

Too much daily travel to do by site

Site	Agree	Undecided	Disagree	Totals
Durham	39 (15.9%)	12 (4.9%)	194 (79.2%)	245
Loughborough	39 (21.8%)	2 (1.1%)	138 (77.1%)	179
Totals	78 (18.4%)	14 (3.3%)	332 (78.3%)	424

$$x^2 = 6.472$$

$$df = 2$$

$$p = 0.05 \quad (1 \text{ missing observation})$$

was too much daily travelling to do were those most likely to obtain third class honours or pass degrees. Such students were, surprisingly, slightly less likely to fail or withdraw. The difference in distribution of degrees was statistically significant and is shown in Table 26.

TABLE 26

Degree result by belief that there was too much daily travelling

	Agree	Disagree	Totals
1	4 (5.1%)	20 (6.0%)	24 (5.9%)
2i	17 (21.8%)	83 (25.0%)	100 (24.4%)
2ii	33 (42.3%)	143 (43.1%)	176 (42.9%)
3/P	18 (23.1%)	53 (16.0%)	71 (17.3%)
F/W	6 (7.7%)	33 (9.9%)	39 (9.5%)
Tots	78	332	410

$$x^2 = 11.789129$$

$$df = 4$$

$$p = 0.05 \quad (15 \text{ missing observations})$$

Fourteen students who had not made a firm decision were excluded along with one who had failed to respond. The result is

that a negative attitude towards the physical environment is likely to lead to underachievement rather than attrition.

Students holding the physical environment in negative regard so far as daily travel is concerned tended to report a greater frequency and seriousness of transitional problems. This ought to be interpreted as two separate manifestations of the same phenomenon. A belief that there is too much travel to do, dissatisfaction with the physical environment in terms of its size, reflects a sense of negative affiliation. It is most likely that students dissatisfied with their university experience transitional difficulties, and this was found to be the case. As Table 27 shows, students agreeing that there was too much daily travel reported more problems than those with an opposing view.

TABLE 27

PROBSCOR by belief that there was too much daily travelling

PROBSCOR	Agree	Disagree	Totals
Low <4	6 (13.3%)	54 (29.0%)	60 (26.0%)
Med 4-6	15 (33.3%)	62 (33.3%)	77 (33.3%)
High >6	24 (53.3%)	70 (37.6%)	94 (40.7%)
Totals	45	186	231

$$\chi^2 = 5.6542$$

$$df = 2$$

$$p = 0.10 \quad (11 \text{ missing observations})$$

The size of the university would have an effect upon the student's ability to feel lost in the university itself. Students

who had always felt that they did not believe themselves to feel lost in the university, those positively affiliated, were no more likely to perform well at degree level than those who had originally felt lost but who later grew to know the place. It was interesting to observe how every student eventually became positively affiliated towards the university so that by the end of the first year none felt lost. The difference between Durham and Loughborough was one of degree for, at Loughborough, fewer students had felt this positive regard having indicated, as Table 28 shows, that a feeling of being lost had been experienced by 41.9% at the outset, in contrast with Durham's 29.7%.

TABLE 28

Constancy of feeling lost in the university by site

	Durham	Loughborough	Totals
Always disagreed	104 (70.3%)	54 (58.1%)	158 (65.6%)
Later disagreed	44 (29.7%)	39 (41.9%)	83 (34.4%)
Totals	148	93	241

$$\chi^2 = 3.2472$$

$$df = 1$$

$$p = 0.10 \quad (1 \text{ missing observation})$$

It cannot be claimed that initial experiencing of a sensation of being lost in the university, or on the other hand, a smooth and confident entry into the physical environment, encourage or discourage better degree performance. There was no significant difference between those who had always disagreed with feeling lost

and those who had not.*

9.4 Pleasantness of the place

Another aspect of the physical environment was investigated in the Supplementary Survey. Students were asked to indicate whether they agreed or disagreed with the statement "This is a pleasant place". Agreement was interpreted as a positive response. Disagreement was indicative of a negative attitude towards the university. A more positive response to the pleasantness of the place was evoked from Durham students than those at Loughborough. As Table 29 shows the difference in degree of positive affiliation was statistically significant.

TABLE 29

Agreement with the pleasantness of the place by site

Site	Agree	Disagree	Totals
Durham	136 (96.5%)	5 (3.5%)	141
Loughborough	75 (83.3%)	15 (16.7%)	90
Totals	211 (91.3%)	20 (8.7%)	231

$$\chi^2 = 10.3567$$

$$df = 1$$

$$p = 0.01 \quad (11 \text{ missing observations})$$

Though over 80% of Loughborough students agreed that the physical environment was pleasant, there were few enthusiastic comments to this effect made during interview. Students tended to refer to the campus, rather than the town, in favourable terms:

* $\chi^2 = 2.34166 \quad df = 2 \quad \text{N.S. (11)}$

"I'm very taken with the buildings and everything"

(Male - Civil Engineering - 18 yrs - L)

"The university is in nice surroundings"

(Female - Library Studies - 19 yrs - L)

"It is nice here. It is a nice place. I like it here."

(Male - Human Biology - 18 yrs - L)

Some referred to the surrounding area in positive terms, but this was rare amongst Loughborough interviewees.

"I like the scenery, the buildings. Loughborough town had more than I expected. I thought it was only a small town. It has a wider range of shops."

(Male - Library Studies - 19 yrs - L)

"I like the campus, it is so picturesque. You can see the forest and the hills. It's terrific, beautiful the weather seems better here than at Manchester."

(Male - Education & Economics - 18 yrs - L)

Most students failed to refer to any aspect of the physical environment that they felt was pleasant. The vast majority referred only to the accommodation and the facilities provided, even then in a critical way in general.

At Durham there were many students who enthused about the place. The majority of interviewees commented on the city and its environs. They did not restrict themselves to references to colleges alone. Typical comments were:

"It is nice on the peninsula, with the Cathedral and Castle. It has got a touch of class about it."

(Male - General Arts - 18 yrs - D)

"I love the town to be in such a beautiful place, I like that."

(Female - Sociology & Soc.Admin. - 19 yrs - D)

"I like the beauty of the city, not being very big, not a big urban area."

(Male - Geography - 18 yrs -D)

"I like the surroundings and the city. Durham is unique as a city, an old centre that is used. The fact that an ancient building like the Castle has been put to modern use appeals."

(Male - Politics & Soc.Admin. - 26 yrs - D)

"I fell in love with the place when I came. I like the famous buildings."

(Male - Classics - 18 yrs - D)

"I like the city. It is 'olde worlde'. I like the atmosphere of the place."

(Female - Physics - 18 yrs - D)

"I like the town. I like Durham. I like the place. I like the Cathedral and things like that. They are pretty."

(Female - French - 18yrs - D)

Agreement that the university and its environs were pleasant, an indication of holding the physical environment in positive regard, did not affect degree performance. There was no significant difference in distribution of degree results amongst those in agreement or disagreement with the statement that either Durham or Loughborough was a pleasant place.*

Students who did not believe Durham or Loughborough were pleasant places were very likely to report transitional problems. Those with a positive affiliation towards the place tended to report problems in proportions closer to those expected.

* $\chi^2 = 0.98417$ df = 2 N.S. (12)

As Table 30 shows, a negative view of the physical environment seemed to encourage greater reportage of transitional problems.

TABLE 30

PROBSCOR by agreement with the pleasantness of either Durham or Loughborough

PROBSCOR	Agree	Disagree	Totals
Low <4	60 (28.4%)	0 (0.0%)	60 (26.0%)
Med 4-6	74 (35.1%)	6 (30.0%)	80 (34.6%)
High >6	77 (36.5%)	14 (70.0%)	91 (39.4%)
Totals	211	20	231

$\chi^2 = 11.02934$
df = 2
p 0.01 (11 missing observations)

9.5 Links with the town

Students at both universities tended to have very little contact with the local town in which the university was situated. Over three-quarters of students at both places failed to take part in local activities. This suggests that for most students the university, whether it be a campus as at Loughborough, or spread throughout the town as at Durham, is the source of most stimulation. There is very little contact, or even need for such contact, with the local town. The self-contained nature of the campus at Loughborough, situated at the edge of the town, made this state of affairs understandable. Common remarks were made during interview of the campus being "cut off from the town". It is surprising to find that there was no significant difference between Durham and Loughborough students when the degree of their

participation in local activities was concerned.* The consensus view, that local activities afforded by the town were rarely used, tended to conflict with the view that students gave in interview, which was to support and affirm the qualities inherent in the type of university at which they studied. Thus, Durham students advocated the type of university scattered throughout the town. At Loughborough the consensus was that campus universities were superior. There were indications that those in a campus situation preferred that type of university. This could be a result of students that applied to campus universities being those already possessing a preference for self-contained universities. On the other hand, students could assimilate the ethos of campus universities on arrival. The same may be true of Durham, where students may assimilate a non-campus ethos or were already aware of their preference for a non-campus university.

Though Loughborough students agreed that the campus situation was better there were indications that its flaws were apparent. It was often mentioned that many students never left campus until the end of term. Typical comments were:

"You tend not to get off campus, save (for) an occasional trip to town. You ought to get off once a week. You get bored with the place, but there again, there isn't much in Loughborough."

(Male - Civil Engineering - 18 yrs - L)

"There is a great danger you could stay on campus, with no real need to get off, meeting people from (the) 17 - 25 age group all the

* $\chi^2 = 0.33485$ $df = 1$ N.S. (13)

time. It's good to get off and meet people from the area."

(Male - Electrical Engineering - 18 yrs - L)

"It's probably true that some never get off campus, especially the foreign students."

(Male - Civil Engineering - 18 yrs - L)

"You don't just pop into the town for a packet of fags. We've got shops here. For some students the campus is their world. It is for quite a few people."

(Male - Auto Engineering - 20 yrs - L)

"It tends to be a community on its own, self-sufficient, with banks and shops. You don't really have to go outside if you don't want to."

(Female - Library Studies - 19 yrs - L)

It was evident that students did not become involved with the local community for two reasons. On the one hand the campus provided everything the student could possibly need. On the other, more negatively, Loughborough town was often referred to as having "little to offer" or of being "dead". There was "no reason to go into town". Lack of involvement with the local community was inevitable and not lamented by many.

"Not knowing what's going on (outside campus) is irrelevant as it (the campus) has all the facilities I want."

(Male - Financial Management - 18 yrs - L)

The campus, with its own services and facilities, catered for every need of the student. There was no need for students to become involved with the local community and many restricted their contact with the town to a weekly social visit, to visit public houses, night clubs and cinema, or to go shopping.

Physical distance further emphasised the social distance perceived between the university and the town. At Durham, where the physical environment was considerably different, similar responses were found when degree of involvement with the city was concerned. Some three-quarters of respondents had not participated in any local activity. They also indicated in interview that, like their counterparts at Loughborough, the danger of a campus university was of students not mixing with and in the town. Most interviewees mentioned the ability of mixing with the town and of being a part of it as advantages of the university being spread out through the city. It is ironic that although many students referred to mixing with the town in interview, very few had indicated that they actually did so. Typical comments made at Durham concerning the advantage of a non-campus university were:

"It is much better spread out through the town. You get to know the town walking from A to B. You can go to a campus and never know the city nearby."

(Male - Chemistry - 18 yrs - D)

"The ones (campuses) I know are horrible. It is particularly true of 'X'. They all stay on campus and all they see is the university. A friend in the first year only went into 'X' twice. We don't mix all that much, but I do go into town and see something else."

(Female - Psychology - 18 yrs - D)

"Campus is too closed. There is no connection with the town. At least you have a little more contact with the town if you are spread out."

(Female - Biology - 18 yrs - D)

"It is better spread out. It integrates it more with the town. I would be completely cut off on a campus and you'd never really go into the town."

(Female - General Science - 17 yrs - D)

"With a campus you can't really get away. You've always got the university around you. You don't make contact with the town. At Durham you're not in contact with the university all the time."

(Male - Geography - 18 yrs - D)

"I don't like campuses. They are an immediate physical barrier to mixing with the town."

(Male - General Arts - 19 yrs - D)

"I like it as it is, spread throughout the town. That is one of the great things about Durham. In Durham there is a mixture of town and university, and that mixture is good. If you have a campus you are isolated and I don't think that is so good."

(Female - General Science - 19 yrs - D)

The two contrasting environments, a campus university on the one hand and one spread throughout a relatively small city on the other, encouraged positive and supportive comments from respondents resident in each. Which ever university system a student experienced was the one said to be superior. Criticisms of campus universities were recognised by students at both Durham and Loughborough, but those from the former were hardly more likely or more willing to mix with the town. Lack of any significant difference in the amount of local participation displayed by Durham and Loughborough students suggests that intellectual assent is given to the theory, though this is rarely put into practice.

Participation in local activities, though practised by a quarter of the respondents at each university, was not significantly related to either degree performance* or problem reportage.**

* $\chi^2 = 0.6228505$ $df = 3$ N.S. (14)

** $\chi^2 = 2.24454$ $df = 2$ N.S. (15)

9.6 Knowing the location of departments within the university

In spite of the small size of both universities, over two thirds of respondents at Durham as well as Loughborough claimed they did not know the location of every department. There was no significant difference between the two.* It is doubtful whether a student would know the location of every department; perhaps a majority may be located but rarely all. However a large proportion considered that they possessed such intimate knowledge of the physical environment.

There was no significant difference between knowing the location of departments, i.e. knowing one's way about the university, and performance at degree level.** In a similar way, problem reportage was no greater by those lacking an intimate knowledge of the university environment than those knowing the location of each department.***

The response from this question can be compared with that from another, both taken from the Supplementary Survey, which shows that though students may not know where every department is located this need not make them feel lost. As Table 28 (page 188) showed all students, at both universities, overcame any feeling they may have had that made them think themselves as being lost in the university. As many claimed in the same survey that they did not

*	$\chi^2 = 0.01008$	df = 1	N.S.	(16)
**	$\chi^2 = 2.07982$	df = 2	N.S.	(17)
***	$\chi^2 = 3.76678$	df = 2	N.S.	(18)

know where every department was located this suggests that a student who has no need to know where, for example, the Business School or Department of Human Biology are located, does not feel lost because of this. The student's physical environment is essentially those areas with which he has dealings. Anything outside of that can be ignored with no feeling of being lost or of being at a disadvantage.

9.7 Problems from the physical environment

Four of the twenty transitional problems used to compile the measure of problem reportage known as PROBSCOR arose from the physical environment. Students were asked to indicate which had been a problem in their first year. The problems arising from the physical environment were: lack of privacy, sharing a room, having no where quiet to work, and the room in hall or college being claustrophobic. Only the latter two evoked a response from students at Durham that differed significantly from that given by Loughborough students. As Table 31 shows a smaller proportion of Durham students felt that finding somewhere quiet to work had been a problem than had those at Loughborough.

TABLE 31

Students finding somewhere quiet to work a problem by site

Site	A problem	No problem	Totals
Durham	15 (9.7%)	139 (90.3%)	154
Loughborough	23 (20.9%)	87 (79.1%)	110
Totals	38 (14.4%)	226 (85.6%)	264

$$\begin{aligned}x^2 &= 6.55979 \\df &= 1 \\p &= 0.05\end{aligned}$$

Conversely, a greater proportion of Durham students indicated that the claustrophobic nature of their rooms in college had been a problem. At Loughborough this was reported by a smaller proportion of respondents. Table 32 illustrates how this difference was statistically significant.

TABLE 32

Students finding rooms claustrophobic a problem by site

Site	A problem	No problem	Totals
Durham	35 (22.7%)	119 (72.3%)	154
Loughborough	14 (12.7%)	96 (87.3%)	110
Totals	49 (18.6%)	215 (81.4%)	264

$$x^2 = 4.22379$$

$$df = 1$$

$$p = 0.05$$

Students at Durham were no more likely to report a lack of privacy as a problem than those at Loughborough. There was no significant difference between the two universities.* The same was true when problems arising from having to share a room were concerned. There was no significant difference between the proportion of Durham students finding this a problem as those at Loughborough.** However, thus far, no indication has been made of the seriousness of the problem, only the number of respondents indicating that a problem had been experienced.

$$* x^2 = 0.08874 \quad df = 1 \quad \text{N.S.} \quad (19)$$

$$** x^2 = 1.03798 \quad df = 1 \quad \text{N.S.} \quad (20)$$

When a problem was referred to as having been serious it was given a score of two. If a problem had been merely checked and was thus of minor importance it was given a score of one. Thus, double weighting was given to serious problems. If a student did not indicate a problem had been a cause of concern, even only of a minor sort, a score of zero was allocated to it. Thus, each problem possessed a cumulative score. These cumulative scores per problem emanating from the physical environment are shown in Table 33.

TABLE 33

Scores of transitional problems emanating from the physical environment by site

Problem	Durham	Loughborough	All
Sharing a room	39	31	70
Lack of privacy	40	25	65
Claustrophobic room	40	14	54
Finding somewhere quiet to work	16	24	40
Average	33.75	23.5	57.25

The rank position physical features of the environment had when all five environmental spheres are considered is discussed in V.II* p 98. What may be inferred at this stage is that the physical environment was reported less frequently or less severely by students at Loughborough than at Durham. Had every one of the 264 respondents to the Supplementary Survey indicated that each of these four elements of the physical environment had caused them to experience even a minor problem, then the average score would have

* Volume II

been 264. There seems little evidence to suggest that with a low average score of 57.25 these four aspects of the physical environment were perceived by many students as being sources of transitional difficulty.

9.8 Sources of help in the solution of problems emanating from the physical environment

In the Supplementary Survey students had been asked to indicate who, from a list of many possibilities, they would seek help to solve a problem concerned with accommodation. Providers of help in this context differed for students at Durham, where the most commonly cited sources of help were "domestic staff", mentioned by 20% of the respondents, and for those at Loughborough. At Loughborough over 27% of respondents indicated they would seek help from the "Hall Committee". The equivalent body at Durham, the Junior Common Room (JCR) Executive was placed sixth in importance and was mentioned by only 7% of the respondents. These variations are shown in Table 34. Only the top ten or those ranking highly are included.

Though students at Durham would have sought help from different quarters than those at Loughborough there was no significant difference in response from students at each university when asked whether it was possible to change accommodation.* Only two interviewees referred to changing accommodation. One at Durham had not only changed accommodation but had also changed college.

* $\chi^2 = 1.138$ df = 2 N.S. (21)

TABLE 34

Sources of help in the solution of an accommodation problem by site

	Source	N	%		Source	N	%
1	Dom. staff	29	20.6	1	Hall C'ttee.	26	27.4
2	DSU Exec.	25	17.7	2	Dom. staff	17	17.9
3	Fellow student	22	15.6	3	Hall Warden	13	13.7
4	Self	19	13.5	=4	Stud.Union Exec.	8	8.4
5	Tutor	17	12.1	=4	Self	8	8.4
6	JCR Exec.	11	7.8	6	Fellow student	5	5.3
7	Parents	6	4.3	7	Tutor	4	4.2
8	Acad. staff	4	2.8	=8	B-G friend	3	3.2
9	B-G friend	3	2.1	=8	Counsellor	3	3.2
10	Senior Tutor	2	1.4	=8	Appoints.Officer	3	3.2
				=8	Parents	3	3.2
	DURHAM				LOUGHBOROUGH		

At both universities there seemed to be some difficulty inherent in changing accommodation. This was referred to in interview.

"I had to fight to change accommodation. If a straight swap hadn't come up I'd still be at 'X' and not as happy as I am now."

(Male - Civil Engineering - 20 yrs - L)

"My old accommodation was squalid ... I never realised you could change college. I did that as a friend did. It was bad."

(Male - Geography - 18 yrs - D)

The frequency of reporting transitional problems was

significantly related to students' perception of the difficulty in changing accommodation. As Table 35 shows, those aware of some difficulty in changing accommodation reported transitional difficulties more frequently than those who did not. This may be a result of students perceiving transitional problems are those less positively affiliated towards the university. It is likely that it is these students who would be most likely to believe any change in accommodation would be difficult to achieve.

TABLE 35

PROBSCOR by difficulty perceived in changing accommodation

PROBSCOR	Agree	Undecided	Disagree	Totals
Low <4	32 (31.4%)	20 (24.7%)	9 (15.8%)	61 (25.4%)
Med 4-6	40 (39.2%)	23 (28.4%)	16 (28.1%)	79 (32.9%)
High >6	30 (29.4%)	38 (46.9%)	32 (56.1%)	100 (41.7%)
Totals	102	81	57	240

$$\chi^2 = 12.73563$$

$$df = 4$$

$$p = 0.05 \quad (2 \text{ missing observations})$$

Of greater interest was the lack of any significant difference in distribution of degree results according to the attitude students showed towards the ease with which accommodation could be changed. Students thinking this was difficult, and so generally being considered as regarding the physical environment in a negative way, were no less likely to perform well at degree level.*

* $\chi^2 = 7.38553$ $df = 8$ N.S. (22)

What the interviews showed most clearly was the full extent of general satisfaction with university-provided accommodation. The box-like nature of rooms, especially the more recently built ones that closely corresponded to minimum specifications, was always qualified and accepted as inevitable when reference was made to rooms. Most students would find fault with the provision of facilities, such as washing and drying machines, or hot-plates and kettles. Yet these were often seen as being the fault, not of the university so much, as of some of the students using them. Typical comments were:

"I wish we had a spin drier. There's only one airing cupboard. It soon gets very full. There are no irons, just an ironing board. There is a washing machine in hall."

(Female - Library Studies - 19 yrs - L)

"We used to have an iron in the block, but that disappeared. We're well provided for washing and drying clothes."

(Male - Library Studies - 19 yrs - L)

"Washing clothes is a bit difficult. I'm too lazy to walk over to the laundrette. We didn't have an iron for the block for six weeks till I got one from home. But it's okay. The airing cupboard gets a bit full. There is a washing machine in hall, but it is never working."

(Male - Electrical Engineering - 18 yrs - L)

"What is bad here is there is no where to dry clothes. We've put a line up in the bath room. We've only one kettle, which is a bit silly for twenty-seven of us. We've got a mini-grill, but only one kettle in the block, and I don't even know what floor it is on."

(Female - Business Administration - 18 yrs - L)

"My room is a square box but it's got my basic needs. It's good and I'm satisfied.... There's a big airing cupboard that twelve of us share. You can do it (washing) if it's raining or dry. As for material needs they provide everything."

(Male - Economics - 19 yrs - L)

"The room is very good....The facilities in hall are not very good at the moment. We are getting a washing machine in this week or next. All halls have washing machines that never work; they are all over-used. I haven't found the laundrette yet in EHB."*

(Male - Electrical Engineering - 18 yrs - L)

"There is a washing machine somewhere in hall and a drying cupboard next door. We generally wash stuff in our sinks. There's a hot plate and kettle in the kitchen next door."

(Male - Civil Engineering - 18 yrs - L)

"I'm very satisfied with my room....We go down the town to do our washing. The hall has an automatic washing machine, but drying facilities are spread around the place. So we drop all the clothes in the laundrette when going into town and pick them up on our return. I'd be lost without my car."

(Male - Mechanical Engineering - 18 yrs - L)

"The rooms are like pigeon-holes in which you sleep and wash....My room seems smaller than the others."

(Male - Chemical Engineering - 18 yrs - L)

"I gave up using the washing machine because it took too much trouble booking it and other things going wrong. So I ended up washing by hand. I use the iron occasionally and the kettle. The rooms don't have a proper plug to heat a kettle. There are 2 amp fuses in the plugs."

(Male - Modern European Studies - 20 yrs - L)

"I like my room. My room is brilliant....They could do with a washing machine on the Golf Course.** There's one in hall, but it's a long way to go with wet clothes."

(Male - Civil Engineering - 18 yrs - L)

At Durham, students tended to refer to facilities in a similar way, with general agreement that their rooms were suitable. There were occasionally complaints about cleaning and cooking equipment. Typical comments made during interviews are quoted overleaf.

* Edward Herbert Building (EHB) which at the time housed Union facilities such as the laundrette, bar, cafeteria and shop.

** Golf Course was the former name of the Elvyn Richards Hall complex soon after construction, when residents were nominally members of existing halls.

"My room is all right. They are all basically quite good....Facilities are very good."

(Female - General Science - 19 yrs - D)

"The beds are a bit hard. It is a bit uncomfortable. All the rooms are the same, everything is exactly the same....It is perfectly reasonable. It is what you would expect of a student shoe box. You've got your own washing facilities and a decent-sized room. There is a laundrette with two machines, and one is always broken, for all the college. It is used a lot....I do some washing in the basin. I've no real complaints. I use the radiator or hang things over the sink."

(Male - Engineering Science - 19 yrs - D)

"The accommodation is quite good compared to a lot of universities. You have got everything you want. I didn't expect to come and live in a luxury flat. It annoys me when some complain about the rooms being boxes. What do they expect? Some families don't live in things this good. The facilities are good. I get all my washing and drying done in an hour. College is good in that respect."

(Male - Geography - 18 yrs - D)

"The facilities could be better. There are three washing machines, one spin and one tumble drier and half 'X' come and use it as it's cheaper than theirs. There are no cooking facilities in our bit, and only one bath for eighteen of us."

(Male - Chemistry - 18 yrs - D)

"I have a very large room, considered the best room in college. It's very nice. It looks out onto the river, onto the lawn. It is new accommodation....It's a very cheerful place....Power points are in the usual places, round corners and half way up walls. The heating is very good. Bathroom facilities are all right. There are very good washing machines and a drier, ironing boards, etc., but on the other side of college. We learn to live with that."

(Male - Classics - 18 yrs - D)

"I'm in a double room in East Wing, the only room in college without a sink. It is a very big room....As far as I can gather there are two washing machines and two driers, coin operated at 5p each, not bad at all."

You don't need any more. They could do with a few rings or electric kettles. We have a ring, gas or electric, on each floor, (though) no utility room as such....We've only got a few showers, but an ironing board for all of East Wing."

(Male - Maths & Physics - 18 yrs - D)

"Our double room is quite big and has a sink. Not all of them have sinks. The laundry is fairly abominable. There is one laundry place for the whole college, one washing machine and one drying machine for 130, which is disgusting. They are over-worked and you have to get up early at 6 am to use them. The chap next door to the wash rooms reckons it is going all hours of the day. There should be more facilities."

(Male - General Arts - 18 yrs - D)

"I have a very old room in the Bailey. It is eighteenth century, not modern, but has a character of its own. It has been fairly recently decorated, and is a large room....There is a laundrette on the ground floor with two washing machines and two tumble driers. There is a large sink outside my room and a radiator so (I) can hang things there to dry."

(Male - General Arts - 18 yrs - D)

Two other features of the physical environment were frequently mentioned in interview, food and noise. The latter was often mentioned in terms of it being less a problem than had been anticipated. "It is a bit noisy" was a common assertion. Very few students were seriously affected by noise levels. Food was by far a more common source of complaint, though many students had nothing but praise for catering at hall or college. At Durham negative comments tended to be concerned with either food getting cold as a result of cafeteria systems being introduced, or the expense of waitress service.

"Things get cold so quickly. If they could find some means of keeping things warm."

(Male - Music - 20 yrs - D)

"Every time you sit down it is waitress served, you don't do anything. It's all done for us. Sometimes it's okay and sometimes it is abominable, but we're not paying for the food but for the staff."

(Male - General Arts - 19 yrs - D)

"It's bad. I wish we got chips more often.... When you get the meal everything is stone cold."

(Female - English - 19 yrs - D)

The number of waitress-served meals has been reduced greatly as a direct consequence of increasing costs and financial cut backs. Most Durham colleges now have self-service cafeteria facilities, with the occasional waitress-served "formal" meal during the week. It is unlikely that the situation will differ greatly from that experienced by students at Loughborough at the time this survey was conducted, when self-service meals were the rule of the day. Some students felt that the standard was low:

"I've gone off the food. It wasn't all that good when we started, and has got steadily worse."

(Male - Auto Engineering - 20 yrs - L)

"It's not up to the standard I'd expect, but they are catering for a mass....I don't think I'd like more than I'm getting. I'd rather a bit less of the quantity and better quality."

(Male - Chemical Engineering - 18 yrs - L)

By far the most common comments were of a favourable nature, especially considering the numbers for whom catering was being arranged, and the cost. At both universities there were many comments on the wide choice of meals available. There was some controversy, however, as to whether institutional food encouraged the putting on of weight, or the opposite.

"In the main it's very good. It's a bit cold, but that's the problem with canteen food. I've put on about half a stone since I've been here."

(Male - Mechanical Engineering - 18 yrs - L)

"It's not bad. Cooking for large numbers you can't expect 'cordon bleu'. It's eatable. I've lost a stone since I came here."

(Male - Economics - 18 yrs - L)

"It's good, considering the cost....There is quite a lot of choice and you can have as much as you want. We have real roast meat more than I thought we would."

(Male - Ergonomics - 18 yrs - L)

"A lot complain about the food, but having spent ten years at boarding school I've known it (institutional cooking) at its worst. It is better than what I've been used to. Sometimes it is terrible, but you expect that when cooking for 250 people."

(Male - Engineering Science - 17 yrs - D)

"It's pretty good on the whole, especially when they are catering for such large numbers."

(Female - French & German - 19 yrs - D)

"It's great. A lot of people don't like it, but the choice they've got is amazing. I just like food anyway. It's nice and fresh."

(Female - French - 18 yrs - D)

"Food is very good. I like the food....I don't seem able to stop eating. The selection is excellent."

(Female - Financial Management & Accounting - 18 yrs - L)

"The food is pretty excellent, three three-course meals a day. Some people grumble about it, but I don't think there is anything to grumble about."

(Male - Engineering Science & Technology - 18 yrs - L)

In response to questions in both surveys and in comments made during interview, there seemed to be, in general, a sense in which students at both Durham and Loughborough were prepared to accept the imperfections of their physical environment. These

imperfections were not seen as serious difficulties. Indeed, in most cases there was positive regard for the physical aspects of the university environment.

Notes and references:

- 1 Loughborough University of Technology, Undergraduate Prospectus
1977 - 1978 (June, 1976) p 204

CHAPTER TEN

THE HUMAN ENVIRONMENT

CHAPTER TEN

THE HUMAN ENVIRONMENT

10.1 Introduction

The human environment comprises the student population along with both academic and domestic staff. These various people are those with whom the first year student interacts. No undergraduate may pass through university in a vacuum: some human contact is unavoidable. From the moment he arrives to the time of his graduation, the student has to relate with other human beings. The university is a social system and its participants interact. Relationships formed may well be superficial and extremely transitory in nature. Others may be of greater depth and longevity. The unique collection of people associated with each university makes the human environment as important a facet of the university environment as a whole, though perhaps a less tangible one, as the physical environment.

Being of a more variable nature, with personnel changing each year, the human environment is in a state of flux. Certainly it is arguable that as buildings are renovated, or demolished and replacements built, even the physical environment is flexible and possesses an element of the dynamic. However, capital investment is not sufficiently great to allow rapid change in the physical environment: certainly not to the extent that changes occur within the human environment with a new intake of students each year.

In general terms the success with which students mix and mingle at university, the degree of social interaction, will affect the feeling of not being socially isolated and of being in a place that is not impersonal. It is these two elements of the human environment that this discussion of results begins with.

10.2 Social isolation and an impersonal place

Where human contact is made easily and warmly one is unlikely to feel socially isolated. Furthermore, it is unlikely that there will be a sense of life being impersonal in such a situation. Students at Loughborough seemed to be more likely to feel socially isolated than were those at Durham. This difference was only slightly significant, being a matter of degree. At a place where everything and everyone is new it is not surprising to find large numbers agreeing that it is possible to feel socially isolated. Students, perhaps away from home for the first time, are bound to find initial social contacts difficult. The general reticence that prevails may make it easy for an individual to stay in his room, sensing a degree of social isolation. As Table 36 shows, most students felt it was possible

to feel socially isolated, with this being more apparent at Loughborough.

TABLE 36

Possibility of feeling socially isolated by site

Site	Possible	Not possible	Totals
Durham	153 (62.4%)	92 (37.6%)	245
Loughborough	126 (70.4%)	53 (29.6%)	179
Totals	279 (65.8%)	145 (34.2%)	424

$$\chi^2 = 2.889$$

$$df = 1$$

$$p = 0.10 \quad (1 \text{ missing observation})$$

It was also at Loughborough that a greater proportion of students felt that life was too impersonal. As Table 37 illustrates, Loughborough students were more aware of inadequate human contact than their counterparts at Durham.

TABLE 37

Feeling that life is too impersonal by site

Site	True	False	Totals
Durham	37 (15.1%)	208 (84.9%)	245
Loughborough	42 (23.7%)	135 (76.3%)	177
Totals	79 (18.7%)	343 (81.3%)	422

$$\chi^2 = 5.067$$

$$df = 1$$

$$p = 0.05$$

Where these aspects of the human environment were concerned there was no significant relationship between viewing the human environment in a negative way and degree performance. Students who felt it was possible to feel socially isolated were just as likely as those with an opposing view to obtain a good honours degree or to terminate.* Similarly, those students believing that life at university was possibly too impersonal were as likely to perform well as those with a more positive outlook.**

There was also no significant relationship between students believing life to be too impersonal and the frequency with which transitional problems were reported.*** However, there was a likelihood that students who had believed it was possible to feel socially isolated would report more transitional problems. This is shown in Table 38.

TABLE 38

PROBSCOR by the possibility of feeling socially isolated

PROBSCOR	True	False	Totals
Low <4	33 (20.9%)	29 (34.9%)	62 (25.7%)
Med 4-6	51 (32.3%)	28 (33.7%)	79 (32.8%)
High >6	74 (46.8%)	26 (31.3%)	100 (41.5%)
Totals	158	83	241

$\chi^2 = 7.37754$
 $df = 2$
 $p = 0.05$

* $\chi^2 = 4.881334$ $df = 4$ N.S. (23)
 ** $\chi^2 = 2.8422337$ $df = 4$ N.S. (24)
 *** $\chi^2 = 3.86313$ $df = 2$ N.S. (25)

10.3 Staff - student relations

Thus far it has been Loughborough students who have seen aspects of the human environment in a slightly more negative light than their counterparts at Durham. This was not the case when staff - student relations were considered. The relationship between student and academic staff is very important. Social contact between teacher and taught may enhance the effectiveness of the professional relationship. At both universities there were strong indications that social contact between students and academic staff was unsatisfactory. Comments from students at both Durham and Loughborough were made to support this negative regard with which staff - student social contacts were held.

"Some make themselves totally inaccessible. It depends on the lecturers."

(Male - Financial Management - 18 yrs - L)

"In hall you don't really get to know them. In the department they don't go out of their way."

(Female - Library Studies - 18 yrs - L)

"I think they are embarrassed by socialising with students. They make the effort but I think it is because they are obliged to. In hall we have, every now and then, a student who has to eat at top table with various members of staff. I'm not quite sure what the future of this even is, as a few members of staff were there when I was, who didn't really want to be there at all."

(Female - Sociology - 22 yrs - L)

"The teaching staff are not so friendly as they could be."

(Female - Management Science - 18 yrs - L)

"Most don't bother to get to know you. They are quite aloof."

(Male - History - 19 yrs - D)

"In college they are non-existent....In the departments there is no contact outside lectures. I don't think they know any of us personally, well not many of them do. It is only to be expected. Students are probably just a bit of a pain for them."

(Male - Maths & Physics - 18 yrs - D)

"It's okay, but a bit limited. You come to realise lecturers here aren't really concerned about us. They are getting their income, writing their books and doing research."

(Male - Economics & Politics - 19 yrs - D)

Cynical comments like the latter were relatively rare.

However, there were a number of students who remarked on the lack of social skills exhibited by academic staff.

"The Principal always vaguely smiles as you walk past, but that's about it. The tutor system is terrible. I went up for coffee and there were long embarrassed silences. They didn't seem interested, so I gave up."

(Female - Biology - 18 yrs - D)

"Staff don't go down to the JCR. I've only seen my tutor about twice. More effort should be made on their side. They can come and meet us but we can hardly go and meet them."

(Female - Geography & Botany - 17 yrs - D)

"In college I have a tutor I have met once and have no desire to meet again. We all sat and asked questions and he said "Yes" or "No". There is no two-way system."

(Male - Engineering Science - 19 yrs - D)

There were many very positive comments that were made by students concerning staff - student relations. What was most encouraging was the mature approach to this topic that was exhibited by some interviewees.

"They are very good. Students have to make the approach. It's not like school, it's much better."

(Male - Economics - 18 yrs - L)

"They're what you make of them. Some lecturers and tutors treat you on a more personal level."

(Female - Sociology & Soc. Admin. - 18 yrs - D)

Some students were also confident that academic staff were approachable. They were seen as potential problem solvers. This attitude was more prevalent at Loughborough than at Durham.

"They are very good. All staff I know are very nice. If I get stuck there is at least one person I can go to."

(Female - Library Studies - 19 yrs - L)

"If I had problems I wouldn't be worried about going to talk to them. In the department they are quite human."

(Female - Library Studies - 19 yrs - L)

"Some staff are more friendly than others. If you have any problem you know they'll sort you out."

(Male - Civil Engineering - 18 yrs - L)

"If you go to staff with problems they are very helpful."

(Female - Sociology - 22 yrs - L)

It was at Durham that most critics of academic staff and their relations with students were found. The apparent distance and aloofness of staff did not foster much faith in their ability to solve students' problems. This was typified by the following comment.

"In college I haven't seen my moral tutor at all. He didn't turn up in the first week. If I had problems I wouldn't talk to him, whoever he was,

I would talk to friends or work it out myself."

(Male - English - 19 yrs - D)

Although the responses to questions concerning staff - student contacts were variable during the interviews, there had been a marked degree of agreement between Durham and Loughborough students on the unsatisfactory nature of this relationship. As Table 39 shows, more were dissatisfied than satisfied. A larger proportion were undecided, suggesting some doubt in the students' minds as to the success with which academic staff had related with their students.

TABLE 39

Satisfaction with staff - student social contacts by site

Site	Satisfied	Undecided	Dissatisfied	Totals
Durham	43 (17.6%)	104 (42.6%)	97 (39.8%)	244
Loughborough	34 (19.0%)	86 (48.0%)	59 (33.0%)	179
Totals	77 (18.2%)	190 (44.9%)	156 (36.9%)	423

$$\chi^2 = 2.07$$

$$df = 2$$

N.S. (2 missing observations)

As the above table shows, there was no significant difference between the two universities. Students at both Durham and Loughborough were similarly disenchanted with staff - student social contacts. It was in this area of human relationships, however, that a number of anomalies were found to occur. The same type of question, for example, appearing elsewhere in the survey may evoke a different response. A large proportion of

Durham students declared that it was not true that academic staff were keen to know students socially. As Table 40 shows, students at Loughborough were more evenly matched. This difference between the two universities was statistically significant.

TABLE 40

Academic staff are keen to know students socially by site

Site	True	False	Totals
Durham	76 (31.4%)	166 (68.6%)	242
Loughborough	72 (40.5%)	106 (59.5%)	178
Totals	148 (35.2%)	272 (64.8%)	420

$\chi^2 = 3.696$
 $df = 1$
 $p = 0.10$ (5 missing observations)

A variation on this response was obtained when the question was put another way. A greater proportion of Loughborough students exhibited a positive attitude, believing that academic staff were interested in students as people. As Table 41 shows the differences between the two universities were more marked.

TABLE 41

Academic staff are not interested in students as people by site

Site	Agree	Undecided	Disagree	Totals
Durham	30 (12.2%)	83 (33.9%)	132 (53.9%)	245
Loughborough	12 (6.7%)	49 (27.5%)	117 (65.7%)	178
Totals	42 (9.9%)	132 (31.2%)	249 (58.9%)	423

$\chi^2 = 6.937$
 $df = 2$
 $p = 0.05$ (2 missing observations)

When degree performance was compared with these various aspects of the human environment it was found that satisfaction with organised staff - student social contacts (see Table 39, page 218) and belief that academic staff were keen to know students socially (see Table 40, page 219) did not produce any significant relationships. Dissatisfaction with organised staff - student contacts did not mean lower class degrees would be obtained.* In a similar way, belief that academic staff were not keen to know students socially did not imply a low class of degree was to be attained.**

However, a variable response, yielding no clear cut relationship was afforded by students' perception of academic staff not being interested in students as people. Where students felt this was so, there was a tendency for these students to obtain fewer Firsts and also fewer failures or terminations. Those students believing academic staff were interested in them as people tended to obtain marginally more Firsts, as did those who were undecided, and also have more terminating and failing students in their ranks. This is shown in Table 42. Perhaps the striking difference in the distribution shown is that students perceiving this aspect of the human environment in a negative light, those in agreement, obtained a much smaller proportion of good honours degrees than one would expect.

Students' satisfaction with organised staff - student social contacts was not significantly related with frequency with

* $\chi^2 = 7.5717877$ $df = 8$ N.S. (26)
** $\chi^2 = 3.4800786$ $df = 4$ N.S. (27)

which transitional problems had been reported.* This was also true where students' belief that academic staff were keen to know them socially** was concerned, as well as where students perceived academic staff as being disinterested in them as people.***

TABLE 42

Degree results by students' perception of academic staff not being interested in them as people

	Agree	Undecided	Disagree	Totals
1/2i	8 (19.0%)	42 (31.8%)	79 (31.7%)	129 (30.5%)
2ii	21 (50.0%)	50 (37.9%)	104 (41.8%)	175 (41.4%)
3/P	11 (26.2%)	32 (24.2%)	37 (14.9%)	80 (18.9%)
F/W	2 (4.8%)	8 (6.1%)	29 (11.6%)	39 (9.2%)
Tots	42	132	249	423

$$x^2 = 11.28275$$

$$df = 6$$

$$p = 0.10 \quad (2 \text{ missing observations})$$

As has been stated there were variations in the way students perceived staff - student relations, and these tended to be related to the passing of time. Adjustment to university was made; this was made manifest by 23% of Durham students who had originally felt that academic staff did not mix socially with students, later agreeing that this social mixing had improved. This contrasted with the 8% of Loughborough students who had changed their attitude in a similarly positive way. As Table 43 shows, a greater proportion of Loughborough students had modified their views in a negative way than had those at Durham. It was

$$* \quad x^2 = 1.9756 \quad df = 4 \quad \text{N.S.} \quad (28)$$

$$** \quad x^2 = 0.67963 \quad df = 2 \quad \text{N.S.} \quad (29)$$

$$*** \quad x^2 = 7.65654 \quad df = 4 \quad \text{N.S.} \quad (30)$$

also at Loughborough that a greater proportion of students had always seen social mixing of staff and students in a positive light.

TABLE 43

Constancy of feeling that academic staff mix socially with students by site

	Durham	Loughborough	Totals
Always disagreed	91 (62.3%)	58 (62.4%)	149 (62.3%)
Agreed then disagreed	10 (6.8%)	12 (12.9%)	22 (9.2%)
Disagreed then agreed	34 (23.3%)	8 (8.6%)	42 (17.6%)
Always agreed	11 (7.5%)	15 (16.1%)	26 (10.9%)
Totals	146	93	239

$\chi^2 = 13.09184$
 $df = 3$
 $p = 0.01$ (3 missing observations)

In spite of this significant difference between the two universities there appeared to be no relationship between constancy of feeling that staff mixed socially and either degree results* or frequency of reporting transitional problems.**

The other members of staff with whom students come into contact are the domestic staff, the cleaners, kitchen assistants, porters and non-academic employees. At both Durham and Loughborough

* $\chi^2 = 7.00167$ $df = 6$ N.S. (31)

** $\chi^2 = 3.95718$ $df = 6$ N.S. (32)

approximately three quarters of all students agreed that non-academic staff were friendly. There was no significant difference when this response was related with site.* Students who felt domestic staff had not been friendly and those who had not decided were no more, or any less, likely to perform differently at degree level than those with opposing views. There was no significant difference in the distribution of degree results.**

There was a tendency, however, for students who had either made no decision or who had felt domestic staff were unfriendly to possess higher scores in transitional problem reportage. This is shown in Table 44.

TABLE 44

PROBSCOR by belief that domestic staff were unfriendly

PROBSCOR	Agree	Undecided/ disagree	Totals
Low <4	51 (27.6%)	10 (17.9%)	61 (25.3%)
Med 4-6	66 (35.7%)	14 (25.0%)	80 (33.2%)
High >6	68 (36.8%)	32 (57.1%)	100 (41.5%)
Totals	185	56	241

$$\chi^2 = 7.4477$$

$$df = 2$$

$$p = 0.05 \quad (1 \text{ missing observation})$$

10.4 Peer relations

Students at both Durham and Loughborough felt that students had much in common with each other. 95% of those at

$$* \quad \chi^2 = 3.89085 \quad df = 2 \quad \text{N.S.} \quad (33)$$

$$** \quad \chi^2 = 4.5833079 \quad df = 4 \quad \text{N.S.} \quad (34)$$

Loughborough and 98% at Durham were sure that students had some common ground. This may be taken as evidence that the vast majority of students regard their peers in a positive way. A very small proportion of undergraduates felt that there was no common ground upon which relationships could be built. There was no significant difference in response between students at Durham and those at Loughborough.* This attitude also seemed to have no effect upon degree performance. As so few students held negatively oriented views statistical significance is of dubious value and validity. In this case there was no significant difference.**

Regrouping transitional problem reportage scores to overcome the problem inherent in so few respondents holding a negative view suggested that students feeling they had nothing in common with their peers were more likely to report transitional difficulties. This statistically significant difference is shown in Table 45.

TABLE 45

PROBSCOR by feeling that students have nothing in common

PROBSCOR	True	False	Totals
Low <4	0 (0.0%)	62 (26.5%)	62 (25.6%)
High >4	8 (100.0%)	172 (73.5%)	180 (74.4%)
Totals	8	234	242

$$\begin{aligned}x^2 &= 2.7563 \\df &= 1 \\p &= 0.10\end{aligned}$$

* $x^2 = 2.10435$ $df = 1$ N.S. (35)

** $x^2 = 2.87108$ $df = 2$ N.S. (36) Two (33.3%) of the cells have expected frequencies of less than five.

As the transitional year passed only small proportions of students at both Durham and Loughborough constantly felt it was difficult to make friends, or changed their views to accommodate this negative feeling. As many students, proportionately, at Durham had always held a positive view as were found at Loughborough: 78.9% and 79.8% respectively. Similar proportions in each category meant that no significant difference existed between the two universities.* There was also no significant difference in constancy of feeling it was difficult to make friends when degree results were taken into consideration.** This suggests that students who did experience difficulty in making friends were not at a disadvantage when it came to degree performance. However, students with such a negative disposition towards this aspect of the human environment were more likely to report transitional problems, as Table 46 shows.

TABLE 46

PROBSCOR by constancy of feeling it was difficult to make friends

PROBSCOR	Always disagreed	Agreed then disagreed	Always agreed or did so later	Totals
Low <4	57 (29.8%)	4 (3.3%)	1 (5.0%)	62 (25.7%)
Med 4-6	68 (35.6%)	7 (23.3%)	5 (25.0%)	80 (33.2%)
High >6	66 (34.6%)	19 (63.3%)	14 (70.0%)	99 (41.1%)
Totals	191	30	20	241

$$\chi^2 = 17.7092$$

$$df = 4$$

$$p = 0.01$$

$$* \quad \chi^2 = 2.39446 \quad df = 2 \quad \text{N.S.} \quad (37)$$

$$** \quad \chi^2 = 4.5768 \quad df = 4 \quad \text{N.S.} \quad (38)$$

One would expect students who felt it was difficult for them to make friends and to develop human relations with their peers to report transitional problems more frequently. This was mainly because many of these problems were concerned with aspects of the human environment. The trend for no significant difference existing between Durham and Loughborough respondents when aspects of the human environment were being considered was found to continue. Less than 20% of students agreed that they had made fewer friends than they had expected to make. This distribution was not statistically significant.* Furthermore, students feeling they had made fewer friends, and thus regarding this aspect of the human environment in a negative way, were not less likely to perform well at degree level.** One would expect these students, dissatisfied with their relationships, to report transitional difficulties more frequently than their counterparts not experiencing the same lack of human contact. As Table 47 illustrates, this was the case.

TABLE 47

PROBSCOR by feeling that fewer friends had been made

PROBSCOR	Agree	Disagree	Totals
Low <4	4 (10.3%)	56 (28.3%)	60 (25.3%)
Med 4-6	10 (25.6%)	70 (35.4%)	80 (33.8%)
High >6	25 (64.1%)	72 (36.4%)	97 (40.9%)
Totals	39	198	237

$$x^2 = 11.21812$$

$$df = 2$$

$$p = 0.01$$

$$* \quad x^2 = 0.00251 \quad df = 1 \quad N.S. \quad (39)$$

$$** \quad x^2 = 0.12411 \quad df = \quad N.S. \quad (40)$$

A smaller majority of students felt that it was easier for them to talk to new people after a year as an undergraduate than it had been at the start of their courses. This indirect measure of social skills and self-confidence was unaffected by site.* There was also no indication that those students who lacked this confidence in their own abilities were any more likely to perform unsatisfactorily at degree level than those with a positive view. When degree results were taken into consideration there was no significant difference in response.** There was, again, a tendency for students feeling it was not easier to talk to new people than it had been at the start of the first year, to report the experiencing of transitional problems more frequently. This difference was only slightly significant and is shown in Table 48.

TABLE 48

PROBSCOR by feeling that it was easier to speak to new people

PROBSCOR	Agree	Disagree	Totals
Low <4	46 (27.4%)	14 (21.2%)	60 (25.6%)
Med 4-6	59 (35.1%)	17 (25.8%)	76 (32.5%)
High >6	63 (37.5%)	35 (53.0%)	98 (41.9%)
Totals	168	66	234

$$x^2 = 4.71071$$

$$df = 2$$

$$p = 0.10 \quad (8 \text{ missing observations})$$

The reality of the human environment as a facet of the total environment to which students need adapt was most clearly

$$* \quad x^2 = 0.12087 \quad df = 1 \quad \text{N.S.} \quad (41)$$

$$** \quad x^2 = 0.45984 \quad df = 2 \quad \text{N.S.} \quad (42)$$

evident in the comments concerning the male:female ratio of Loughborough students. At Durham, where the ratio was virtually one to one, there were no comments of this nature. At Loughborough it was not only the male students who were dissatisfied with the overwhelming number of men.

"I don't like the male:female ratio. I suppose it was flattering at first, but it gets on your nerves after a while. It's un-natural. It's all competition (for the boys as) there are so few females around....We used to get pestered a lot at the beginning."

(Female - Accounting & Financial Management - 18 yrs - L)

"The proportion of male to female students is inevitably going to cause problems....The lads have to demonstrate their masculinity perhaps over much in a male university."

(Female - Social Psychology - 37 yrs - L)

"There aren't too many girls about. We'd be better off if there weren't so many engineers. It would be a good idea to have more of the other courses. The male:female ratio speaks for itself really: one girl on our course and ninety-one of us."

(Male - Mechanical Engineering - 18 yrs - L)

"The male:female ratio is a bit of a problem. If there were more arts departments that would import some girls. There's a lack of atmosphere if you've only got fellows, especially in an engineering university as engineers tend to be, mundane's the wrong word; engineers work hard."

(Male - Civil Engineering - 18 yrs - L)

Apart from the simple declarations that there were not enough girls at Loughborough and that this tended to inhibit the development of simple, ordinary friendships with the opposite sex, as distinct from special courting relationships, a few of the female students were still favourably disposed to being in the minority and to being the centres of attention.

"Boys dislike the fact that there are hardly any girls, but it's all right for me. I suppose I really like it that way."

(Female - Social Psychology - 18 yrs - L)

"The male:female ratio is quite good really."

(Female - Business Administration - 18 yrs - L)

Another aspect of the human environment that is a further facet of peer relations was the north:south dichotomy, which was occasionally mentioned by some students. This was seen to be the cause of some difficulty at both Durham and Loughborough. However, not all references were in agreement as to which section of the community were the culprits. There was some controversy as to who discouraged interaction and which were the more unfriendly, those from the north or those from the south. Clearly the views of students were variable and were reflections of their own prejudices and backgrounds.

"Northerners mix with northerners. There's a lot of this "north" and "south". We northerners all have the same sense of humour and we don't consider the southerners do. They are a bit reserved."

(Male - Chemical Engineering - 18 yrs - L)

"Most students are from the south with a completely different culture."

(Female - General Arts - 19 yrs - D)

"The town's people are more friendly than those down south, it is said. It's not true. They go around not smiling, very sullen. Northerners are very sad people."

(Male - Law & Politics - 18 yrs - D)

"Up here in the north, they seem much friendlier than they would be in a town of the same size in the south."

(Female - French & German - 19 yrs - D)

"It might be difficult for people from down south to get on with people from the north. It might be strange for a person from Kent or Surrey to have someone coming straight away and being cheerful and open. I have no real problem, coming from Liverpool: it is about halfway."

(Male - Classics - 18 yrs - D)

Some students were aware of class distinctions amongst them, thus hindering peer relations. This was evident at both Durham and Loughborough. There seemed to be an attitude that those from independent schools "kept themselves to themselves", like those students from overseas. Others, generally from the lower social levels, commented on the exaggerated behaviour of the "well-off" and the "public school types".

"There is slight evidence of pretentiousness I don't like."

(Male - Politics & Soc.Admin. - 19 yrs - D)

"People are a bit posher here, most of them, than at other universities."

(Male - Geography - 18 yrs - D)

"A few of the people seem to be stuck up. They won't talk to many people, keep themselves to their own group of friends. Quite a lot have a lot of money and come from rich backgrounds and you can tell, they usually stick out a mile."

(Female - Management Science - 18 yrs - L)

"Public school and other school types are not mixed: there are public school cliques, which suits me to a certain extent."

(Male - Economics & Politics - 19 yrs - D)

"There's a bit of a class barrier in various places. Castle is supposed to be the high class one as its pupils are proper high class people, but I'm not really conscious of it too much."

(Male - Zoology & Botany - 18 yrs - D)

Most comments of this nature were aimed against the apparently wealthy and those of higher social status, but not all were. One interviewee, from a Durham college that had many Certificate of Education students, felt himself to be in the minority:

"There are not so many people of my type, from public school and doing a degree."

(Male - General Arts - 18 yrs - D)

These comments generally referred to specific types of people, with little interaction being perceived between the two where independent and maintained-school students were concerned. Although there were indications that a few students felt strongly about this aspect of the human environment, there were relatively few at either university that mentioned social background.

What was apparent during interview was the mature outlook some students had on relationships. They often talked of their conscious decisions to conduct their social life in such a way as to maximise their relationships. One student had deliberately refrained from building friendships with fellow students following the same course:

"I've got no great buddies on the course. None of my close friends is on the course. It's deliberate because I don't want to spend all my time with them."

(Male - Electrical Engineering - 19 yrs - L)

Others were more aware of the way friendship networks expand and develop. Introductions could be made to a wide range of people.

"People introduce you to their friends. You're not isolated in your year. You do mix with other years and they have to mix with you because we are so small a college."

(Male - Classics - 18 yrs - D)

One described the haphazard nature of developing social contacts and how chance played a large part. In this one example it is clear that once a small step has been taken by the individual, social interaction tends to occur of its own volition, especially in the human environment of a university.

"In the last two weeks of term I made a lot of friends, a lot more friends, mostly in the hall. It was the general festive (Christmas) spirit. I got involved with rag. I went all over the blocks selling raffle tickets and got to know a lot of people. One night I just happened to pop up to see how the decorations for Hall Ball were going and I got involved in that. All coincidence really....Wherever you go there's always going to be somebody there that you know, like at the bar at night."

(Female - Business Administration - 18 yrs - L)

The interviews suggested that most students are able to overcome the initial difficulties in getting to know other students and to develop new friendships. In the majority of cases there was an enthusiasm and appreciation of the opportunities given them that was marked by suitable comments.

"I like meeting people....I can talk to people I don't know without cringing or being on my guard. I have changed. It is fantastic, especially meeting people, people from South Africa for example, or who have been around the world before coming here."

(Female - French - 18 yrs - D)

This supports the notion that students develop as people. They change and grow as they become more self-confident and socially competent. There were, obviously, many other areas where peer relations could be developed and the student's self-confidence could flourish. The two groups of students within the university situation that respondents could interact were, firstly, College of Education students who were present at both universities, and secondly those students from overseas. These two areas of peer relationships were discussed during the interviews.

Contrasting and contradictory views were expressed about overseas students. Most were believed to be "getting on okay", as the commonly used phrase put it. There was a tendency, however, for overseas students to "keep themselves to themselves", forming small friendship groups along national lines. One student interviewed, from Hong Kong, blamed his inability to form friendships on his relatively poor English.

"I don't mix very well. I do not know how to get along with other people....I can't be friends with others because there is my English. It's not good. I don't know what to say. I don't know how to express myself. I don't have any friends."

(Male - Transport Management & Planning - 21 yrs - L)

At Loughborough there were large numbers of students

from Asia, especially Malaysia and Hong Kong, which meant language difficulties could make social interaction a problem. It was, therefore, not surprising to find very few Loughborough students from Britain who had much social contact with students from overseas. On the other hand, at Durham there were considerably fewer degree students from overseas. There were a number of Americans on a one-year exchange and these students tended to mix very easily, according to those interviewed. The human environment differed greatly at Durham from that at Loughborough where overseas students were concerned.

There was greater consensus when interaction between university and College of Education students was concerned. At both Durham and Loughborough there was much talk of impending mergers between university and teacher training institutions. There was the view that there was very little interaction between the two types of students, and this was held at both universities. It was expressed that there would be greater levels of co-operation and interaction when mergers had been completed. There were three attitudes expressed. The first, and most common, was that university students had "never really met any" students from the colleges of education. Others just did not know any. It was often claimed that one could not distinguish the two types of student.

The second attitude expressed was concerned with an apparent sense of "inverted snobbery" on the part of the college of education students and of university students being "superior". Views on this aspect of the human environment were held at both universities.

"They (College of Education students) are definitely thought of as the thicker side of Durham."

(Male - Engineering Science - 17 yrs - D)

"There's a sort of inverted snobbery on their part. University students are looking down on them, thinking themselves more intelligent. I don't think it's really true, as university students don't think like that."

(Female - English - 19 yrs - D)

"(They do) not (mix) very well at all. I think they feel we are superior and we do feel superior, which is wrong really."

(Female - Banking and Finance - 18 yrs - L)

"They do not mix very well at all. I don't know whether it is college students' imagination or if it really happens, they think the university people look down on them. Lots of university people do think that."

(Female - Management Science - 18 yrs - L)

"There's a certain animosity, friendly rivalry and I think people have tended to think of them as inferior because they are not at the university."

(Male - Library Studies - 19 yrs - L)

This last reference to the apparent dichotomy as a result of feelings of superiority also included mention of animosity between the two types of institution. There was a sense of ill-feeling towards college of education students and a number of interviewees made reference to this. Some were antagonistic as college students mis-behaved in the few combined lectures, or entered lectures after physical exercise and so caused the place to smell. Such relatively trivial, but negative, views were often expressed. Others referred to the sense of rivalry between the two types of student and the apparent sense of resentment that was perceived.

"Lots pretend it's not there, but it is, this resentment. One university lad had to leave (this college). He couldn't take it. He thought they (College of Education students) were all too rough in the bar. He had to join another college."

(Female - General Arts - 19 yrs - D)

"There's a lot of friction between the two."

(Male - Civil Engineering - 18 yrs - L)

However, a number saw only the friendly rivalry, believing there to be no resentment at all. What was clear from the interviews was that, although perception of the university student - college of education student interaction varied, very few had ever made any personal contact. Most did not know any one from the colleges of education at all. These were two separate institutions comprising two completely different and rarely interacting groups of students.

Since this research was conducted the changes in provision for teacher training have meant that there are no non-degree courses for potential teachers. The introduction of B.Ed. degree courses and the abolition of Certificate of Education courses will mean that the greatest barrier to interaction, the fact that they were not university students, will be removed. What was apparent was the optimism expressed by many students who felt that education students and the rest of the student population would mix more when mergers had been completed. Thus, peer relations could be enhanced.

10.5 Relations with local town's people

Relationships with local people were, in general, seen as unsatisfactory. At both Durham and Loughborough there were comments

that suggested local people and students did not mix well.

"I suppose they just don't like seeing the town over-run by students. Students are pretty unpopular with those who haven't been to university, and you can expect this even more when concentrated in one area."

(Male - Economics & Politics - 20 yrs - D)

"I went into a pub last night which was definitely anti-student. We walked in and everything went quiet so we had a quick half and out. The next one was very friendly."

(Male - Maths & Physics - 18 yrs - D)

"I was told when I came for interview that the natives were hostile, but I went on a bus to Leicester and was talking to a woman who said that I didn't come from around here as the local people aren't very friendly and people around here don't talk at all."

(Female - Accounting & Financial Management - 18 yrs - L)

There was a feeling that local youths were very resentful of students. There were tales of violence and trouble that were reported at interview.

"There seem to be lots of gangs going around beating up students. There's some resentment against us because we have all the facilities and they don't have anything in the town."

(Female - Library Studies - 18 yrs - L)

"Relationships are pretty appalling. I would not go (into town) with less than two or three friends. A couple of friends were attacked the other night coming out of a pub."

(Male - Economics - 18 yrs - L)

"Students have a strong dislike of town youths because when they come up here (on to campus) they attack people, but you don't really see much of them."

(Male - Library Studies - 19 yrs - L)

These views were expressed by students at Loughborough only. There were no suggestions that local youths were violent at Durham. In spite of the university being scattered throughout the city of Durham there was a tendency for students there to "never come across local people". There was a similar view expressed at Loughborough: both groups kept themselves to themselves, with relatively little interaction.

"I don't actually meet many town's people. I don't realise they are there most of the time."

(Female - English - 19 yrs - D)

"I don't think they mix at all well. Around most of the colleges there isn't any town anyway. I don't know anybody who lives in Durham."

(Male - Engineering Science - 18 yrs - D)

"We exist side by side, where we are. Neither makes much impression on the other."

(Female - Library Studies - 19 yrs - L)

"I don't know anyone from the town. There is no sort of mixing."

(Female - Social Psychology - 18 yrs - L)

Indeed, at Durham there were occasional references to an apparent dividing line within the city. This was perceived to separate the area most frequented by students from that seen as mainly the reserve of town's people.

"(Students and town's people do) not (get on) very well at all. It's quite funny, over Framwelgate Bridge* it's the dividing line. This side it is all students and on that side it is all the town's people."

(Female - Psychology - 18 yrs - D)

* See Map 1 on page 67

This strong awareness of territorial boundary lines was possessed by a number of Durham students who tended to restrict their visits to the far side of Framwelgate Bridge to as few as possible. There was no apparent territorial distinction mentioned by Loughborough students. Where there was similarity was in the fact that the only local people students knew, whether at Durham or Loughborough, were the cleaners and other domestic staff. In a few cases this was supplemented by local people met in neighbouring churches.

10.6 Satisfaction with human relations formed in the first year

With the exception of staff - student relationships, there were generally favourable reactions to the human environment and its varied facets. Indeed, over 70% of students at Durham expressed satisfaction with the human relationships formed while first years. At Loughborough a greater proportion, 80%, expressed their satisfaction. There was a significant difference in the distribution of satisfaction when site was taken into consideration, as Table 49 shows.

TABLE 49

Satisfaction with human relationships formed in the first year by site

Site	Satisfied	Undecided	Dis-satisfied	Totals
Durham	108 (73.0%)	21 (14.2%)	19 (12.8%)	148
Loughborough	76 (80.9%)	14 (14.9%)	4 (4.3%)	94
Totals	184 (76.0%)	35 (14.5%)	23 (9.5%)	242

$\chi^2 = 4.94443$
df = 2
p 0.10

Durham students were shown to be more likely to be critical of the relationships formed than students from Loughborough, who were more satisfied with them. It is possible that Durham students had higher expectations than those at Loughborough and had foreseen their forming a greater number and, perhaps, more deep friendships. This would account for their greater dissatisfaction.

Students who did express some dissatisfaction with the relationships they had formed in their first year were not more likely to perform badly at degree level. There was no significant difference in the distribution of degree results.* Those who had expressed satisfaction with human relationships, on the other hand, were less likely to report transitional problems with the frequency with which those holding an opposing view did. This is shown in Table 50.

TABLE 50

PROBSCOR by satisfaction with human relationships formed in the first year

PROBSCOR	Satisfied	Undecided	Dis-satisfied	Totals
Low <4	57 (31.0%)	4 (11.4%)	1 (4.3%)	62 (25.6%)
Med 4-6	63 (34.2%)	11 (31.4%)	6 (26.1%)	80 (33.1%)
High >6	64 (34.8%)	20 (57.1%)	16 (69.6%)	100 (41.3%)
Totals	184	35	23	242

$\chi^2 = 17.78362$
df = 4
p 0.01

* $\chi^2 = 3.16244$ df = 4 N.S. (43)

Most students expressed their satisfaction with the relationships they had formed during their first year. Indeed, in interview a number referred to making friends as the most valuable aspect of university life. These comments, which had been made by students at both Durham and Loughborough, are represented by the following typical examples:

"Friendships are what I've most got out of university life."

(Female - Business Administration - 18 yrs - L)

"The best thing is the friends I've made."

(Female - Library Studies - 19 yrs - L)

"What I've most got out of university is making new friends."

(Male - Politics - 19 yrs - D)

"What I've most got out of university are friends for life. It's a worthwhile experience for a person. You get to know so many different people with different ideas."

(Male - Classics - 18 yrs - D)

"What I've most enjoyed is the friendship of others and a chance to meet so many different kinds of people."

(Male - General Arts - 18 yrs - D)

The formation of friendships and the development of satisfactory human relationships were considered important by most students. It was clear that the majority had been pleased with the success with which their attempts at making friends had been rewarded.

10.7 Problems from the human environment

Four of the twenty problems listed in the Supplementary Survey that were used to calculate the PROBSCOR index were concerned

with aspects of the human environment. One of these was loneliness. The others were the ratio of male to female students, the superficiality of friendships and the difficulty of finding a special boy or girl friend. Only one of these, the problems arising from the male:female ratio showed any significant difference between the two universities, as illustrated in Table 51.

TABLE 51

Students finding male:female ratio a problem by site

Site	No problem	A problem	Totals
Durham	145 (94.2%)	9 (5.8%)	154
Loughborough	45 (40.9%)	65 (59.1%)	110
Totals	190 (72.0%)	74 (28.0%)	264

$\chi^2 = 90.3748$
df = 1
p 0.001

There was no significant difference between students' responses from each university when any other of the human environment problems were considered.* These aspects of the human environment did score more highly than those arising from the physical environment, especially with serious problems being given double weighting. It was interesting to note that the most frequently cited problem at Loughborough was the one least referred to at Durham. Cumulative scores per problem emanating from the human environment are shown in Table 52.

* Loneliness $\chi^2 = 1.20702$ df = 1 N.S. (44)
Superficiality of friendships $\chi^2 = 0.199445$ df = 1 N.S. (45)
No special boy or girl friend $\chi^2 = 0.5942$ df = 1 N.S. (46)

TABLE 52

Scores of transitional problems emanating from the human environment by site

Problem	Durham	Loughborough	All
Loneliness	69	42	111
Male:female ratio	10	75	85
Superficiality of friendships	44	34	78
Not having a boy-girl friend	43	32	75
Average	41.5	45.75	87.25

There was a tendency for students at both universities to view aspects of the human environment as more problematic than those arising from the physical environment. (See and compare Table 33 on page 200.) Social interaction and human relationships appeared to be more likely to cause students difficulties in the transitional period than living accommodation, poor food or inadequate laundry facilities. This may be because students see these aspects of the human environment as being of greater importance and thus more of a problem if not satisfactory. Unpleasant surroundings may be endured more easily, it appears, than lack of social contacts and friendship.

10.8 Sources of help in the solution of problems emanating from the human environment

When asked, in the Supplementary Survey, who they would seek help from in the solution of an emotional problem derived from human relationships, students at Loughborough indicated sources

of help completely different from those suggested by Durham students. At Durham the majority of students, 43.5%, would have sought help from a "fellow student". The most common solution at Loughborough, referred to by 39.6% of the respondents, would have been obtained from themselves; they would have sorted out the difficulty by themselves without seeking the help of anyone else. This self-help approach to an emotional problem was the second most common source of a solution at Durham, being mentioned by 29.7% of the respondents. The variations in source of help are listed in Table 53. All of the responses mentioned by Loughborough students are listed. Only the top five from Durham are included, with the lowest two being mentioned by only five and two students each. Five other sources of help were referred to by individual students and these, a member of the academic staff, a Chaplain, the Moral Tutor, a wife or husband and "letting time take care of the problem" are all excluded.

TABLE 53

Sources of help in the solution of an emotional problem by site

	Source	N	%		Source	N	%
1	Fellow student	60	43.5	1	Self	38	39.6
2	Self	41	29.7	2	B-G friend	25	26.0
3	B-G friend	25	18.1	3	Fellow student	24	25.0
4	Parents	5	3.6	4	Parents	7	7.3
5	Pray	2	1.4	5	Stud. Counsellor	2	2.1
	DURHAM				LOUGHBOROUGH		

The different characteristics of the two universities that

are manifest in responses to this question are, firstly, the existence of "church" colleges at Durham, St John's and St Chad's with their prospective ordinands, so the student would seek Divine help thus indicating that prayer would be the source of help; the second is the presence of the Student Counsellor at Loughborough, to whom two students indicated they would go for help. The remaining students all indicated one of the four common sources of help, though the first three were in various positions.

