# The British Academy

# 'That full complement of riches': the contributions of the arts,

## The British Academy

10 Carlton House Terrace London SW1Y 5AH

Telephone: 020 7969 5200 Fax: 020 7969 5300

Email: secretary@britac.ac.uk

Web site: www.britac.ac.uk

© The British Academy 2004

Some data has been reproduced by permission of the Higher Education Statistics Agency Limited.

HESA does not accept responsibility for any inferences or conclusions derived from the data by third parties.

Cover: Leading Prophet © Royalty-Free/CORBIS.

#### **Foreword**

The British Academy, as the United Kingdom's academy for the humanities and social sciences and as co-founder of the Arts and Humanities Research Board, has a direct and longstanding interest in seeking to ensure that the arts, humanities, and social sciences receive their proper recognition in national life. Too often government statements and official pronouncements refer approvingly to the undoubted contributions made by the natural sciences, engineering and technology to wealth generation, economic prosperity, knowledge transfer, innovation, and the development of new businesses, products and services, while failing to acknowledge the equally important contributions made by the arts, humanities, and social sciences.

Cultural, social, and economic well-being depend on the successful interplay of all subjects. Creativity and innovation are as much to be found and celebrated in the Academy's fields of interest, and the boundary between the natural sciences and the social sciences and humanities is in any case becoming increasingly fluid as research at the frontiers of knowledge becomes increasingly inter- and multidisciplinary.

The present Review marshals the arguments and presents evidence to demonstrate the wide range of contributions to the nation's wealth made by the arts, humanities, and social sciences. Our hope is that it will raise the awareness of policy makers regarding the vital role these subjects play in sustaining and developing the UK's knowledge-based society and economy.

We were extremely fortunate that Professor Paul Langford accepted the invitation of the Council of the Academy to chair this Review and I express my warm thanks and appreciation to him. It was he who served as the founding Chairman and Chief Executive of the Arts and Humanities Research Board which is soon to become a full Research Council sitting at the table alongside the existing Councils, and we could not have found a more appropriate person to undertake the present exercise. I am also very grateful to the distinguished members of his Review Committee and to the members of the staff of the Academy who have contributed significantly to this report.

Lord Runciman, CBE, FBA

President of British Academy

## **Contents**

Foreword	iii
Preface	vi
Executive Summary	vii
Report	
Introduction	1
Cultural and Intellectual Enrichment	3
How do the arts, humanities and social sciences contribute to our cultural and intellectual enrichment?	3
Economic Prosperity and Well-being	14
How do the arts, humanities and social sciences contribute to economic prosperity and well-being?	14
Major Challenges Facing UK and Wider World	27
How do the arts, humanities and social sciences contribute new knowledge and understanding of the major challenges facing both the UK and the wider world?	27
Public Policy and Debate	38
How do the arts, humanities and social sciences contribute to public policy and debate?	38
Benefits of an Education in the Arts, Humanities and Social Sciences	51
What are the benefits of an academic education in the arts, humanities and social sciences?	51
Conclusions and Recommendations	62
Recognising and maximising the potential of the arts, humanities and social sciences: conclusions and recommendations	62
Appendix 1: The Reviewing Committee	67
Appendix 2: List of Respondents	68

### **Preface**

'That full complement of riches' is a phrase coined by Adam Smith in his *Wealth of Nations* of 1776 to describe the success of certain nations in achieving their full economic and social potential. Today, when governments devote so much time, energy and resource to the same priority of realising potential, it is frustrating that they often focus on a narrow and incomplete sector of the knowledge which ultimately drives the economy and a great deal else. Smith's phrase has a powerful resonance for this Review, which insistently draws attention to the part played by arts, humanities and social sciences in wealth creation and in national prosperity in every sense.

This Review demonstrates that the arts, humanities and social sciences provide high-level skills and ground-breaking research essential to a knowledge-based economy. It also shows how the cultural, intellectual and social well-being of the UK depends on the nurturing of these branches of knowledge. And not least it asserts their complementary function within the spectrum of intellectual discovery. Studying human beings as creative individuals and as social creatures is crucial not only in its own right but is also crucial to the study by natural scientists of human beings in terms of their biology and physical environment. The central point is not simply that every branch of knowledge makes an important contribution to the whole, but rather that no branch of knowledge contributes effectively unless the others are granted the same recognition.

The Review concludes that a broader research and training vision needs to be embraced by government and other bodies, so that arts, humanities and social sciences are taken fully into account in all strategic thinking and planning, and also fully represented in the forums that consider such matters. Investment in these disciplines has a relatively high benefit-to-cost ratio. But that benefit will only be secured if the UK is properly funded to maintain its world-class teaching and research. It is not by neglecting arts, humanities and social sciences that other advanced societies are growing and prospering.

Professor Paul Langford, FBA

Chairman of the Review Committee

## **Executive summary**

The Review was established by the British Academy to demonstrate the value of the study of the arts, humanities and social sciences in relation to the nation's wealth. Study and training in these disciplines provide the high-level skills required to sustain an increasingly knowledge-based society and economy, at a relatively low cost, representing an efficient and economical investment. They also contribute to the UK's cultural, intellectual, and social enrichment and well-being.

## The Review examines five key functions of arts, humanities and social sciences:

- 1 Contributing to cultural and intellectual enrichment
- **2** Contributing to economic prosperity and well-being
- **3** Contributing new knowledge and understanding of major challenges facing both the UK and beyond
- **4** Contributing to public policy and debate
- **5** *Providing a rigorous, beneficial and fulfilling education.*

#### The main findings are summarised below

#### 1 Contributing to cultural and intellectual enrichment

#### The arts, humanities and social sciences:

- lead directly to numerous forms of cultural performance, exhibition and enlightenment, through both teaching and research
- provide crucial expertise to support museum and gallery collections, as well as the historic environment
- lead the way in promoting understanding of the nation's history and other cultures, religions and societies, thereby helping to sustain national identity, multicultural tolerance and interaction
- foster public debate and enhance public engagement with the complexities of modern life, especially those which involve conflicting moralities, traditions and beliefs
- provide, through their commitment to analytical rigour and humane values, crucial support for civic virtues and open, accessible government, on which any civilised society depends.

#### 2 Contributing to economic prosperity and well-being

#### The arts, humanities and social sciences:

- contribute to understanding and developing the performance, productivity and innovative development of business
- help companies to develop new products and build and maintain effective relationships with customers and employees, contributing to innovation and improved factor productivity
- equip employers and employees with key generic skills, and with high-level expertise to develop specific economic sectors and activities
- contribute critically to rapidly expanding and strategically significant sectors of the economy, notably creative and cultural industries, and more selectively, heritage and tourism.

# 3 Contributing new knowledge and understanding of major challenges facing both the UK and the wider world

#### The arts, humanities and social sciences:

- address major social, cultural, ethical and economic challenges, including the impact of scientific and medical advances, the management of international relations, development and security, and the effects of globalisation
- develop new research insights research supported by steadily growing income from external research grants, private sources and contracts
- contribute decisively to today's recognition that modern society depends on the whole range and interconnectedness of knowledge rather than the privileging of a few academic disciplines.

#### 4 Contributing to public policy and debate

#### The arts, humanities and social sciences:

- inform public debate on current problems and issues, by initiating enquiry, providing relevant evidence and promoting critical discussion
- impact directly on government departments as diverse as the Home Office, the Treasury, the Department of Media, Culture and Sport, the Department of Trade and Industry and the Department for Work and Pensions
- develop concepts, provide evidence and evaluate outcomes that underpin legislation
- provide a relevant background and training for leadership of public enquiries, and key membership of various non-governmental organisations, agencies and semi-public bodies.

#### 5 Providing a rigorous, beneficial and fulfilling education

#### The arts, humanities and social sciences:

- enhance the lives of individuals
- assist the formation of critical minds to bear on a wide range of crucial issues, resulting in a flourishing public culture, committed to respect for knowledge and intelligent debate

- encourage values and skills which sustain participatory democracy and responsible government
- contribute importantly to lifelong learning needs
- offer a very favourable social rate of return on public investment
- give career benefits to individuals broadly comparable to those from other (often more expensive) subjects
- attract at an increasing rate highly motivated students investing in their own future.

Failure fully to appreciate these contributions can result in misunderstandings. Subjects that are taught, studied and researched by many individuals attracted by their inherent interest sometimes suffer from a prejudice that what is often evidently enjoyable is unlikely to be useful. They are also marginalised by the notion that the knowledge they enhance is less important than what is loosely defined as 'science', though natural scientists themselves rarely take this view. Finally, these disciplines pursue methods of enquiry that often do not permit predictable and measurable returns. Like more 'scientific' disciplines, their intellectual contributions cannot be easily measured as public service targets, but this does not make them less important to the economy and society.

The Review argues that broader criteria and definitions of value-adding teaching, scholarship and areas of research are essential. It also asserts that a more coherent and wider teaching and research vision should be embraced, so that the arts, humanities and social sciences are included at the very beginning of strategic thinking on issues related to the future development of the UK's research and training base.

#### Recommendations

The Review investigates the value of the arts, humanities and social sciences across a great range of activities and benefits. Many public and private bodies have a stake in this large subject domain, or exercise influence over its doings, or use its diverse products and outcomes. Detailed recommendations on all the issues that are touched upon in this report are not attempted. Instead the Review focuses on three areas in which progress is essential if the full benefits of arts, humanities and social sciences to the nation's wealth, in its fullest understanding, are to be realised.

- 1. More inclusive *concepts*, *language* and *terminology* are essential. The concept of the 'research base' rather than the 'science base' should be treated as the starting point for all considerations of policy by government and other bodies. The language and concepts used by government to encourage the development of research and innovation are often derived unthinkingly from now outdated assumptions that seriously impede the full exploitation of the arts, humanities and social sciences, and the information they yield.
- 2. It is clear that *productive investment* in arts, humanities and social sciences is achieved at a high benefit to cost ratio, but that this is insufficient to maximize their potential. Failure to fund these subjects properly lessens the effectiveness of investment in other subjects, including the sciences, with which there are interdisciplinary or complementary links. Funding bodies and agencies, as well as employers of teachers and researchers in these

- subjects, should re-examine the basis on which resources are allocated, in order to provide proper support for the arts, humanities and social sciences, particularly with a view to encouraging the development of the new economy and to cultural and social improvement.
- 3. Social sciences have long had their Research Council (the Economic and Social Research Council ESRC), and the Arts and Humanities now have a comparable body in the Arts and Humanities Research Board (AHRB) which is soon to become the Arts and Humanities Research Council (AHRC). But representation of these subjects remains inadequate, weakening the effectiveness of much European, British, regional, and institutional policy-making. Institutional frameworks should be reviewed with this in mind. Any new bodies or collaborative activities should be initiated with the intention of providing adequate representation of the arts, humanities and social sciences.

## Introduction

- 1. The arts, humanities and social sciences make key contributions to the intellectual, political, economic, cultural and social well-being of the nation, and provide the high level skills required to sustain and enrich an increasingly knowledge-based society and economy. The term 'creativity' is widely used within government and business circles and is increasingly understood as the mainspring of successful enterprises. "The emerging economy puts a premium on skills and knowledge at all levels but particularly on creativity and the ability to innovate". This report demonstrates the range and importance of the contributions made by the arts, humanities and social sciences, and shows how creativity and innovation in these subjects have far-reaching benefits both in the UK and the wider world.
- 2. The reviewing committee has consulted widely in order to identify the main areas of focus for the review, and also to obtain evidence and illustrations of the contributions made by the arts, humanities and social sciences. A list of the bodies consulted is shown in Appendix 2. On the basis of this consultation, the committee has concentrated its attention on five questions.
  - 1. How do the arts, humanities and social sciences contribute to cultural and intellectual enrichment?
  - 2. How do the arts, humanities and social sciences contribute to economic prosperity and well-being?
  - 3. How do the arts, humanities and social sciences contribute new knowledge and understanding of the major challenges facing both the UK and the wider world?
  - 4. How do the arts, humanities and social sciences contribute to public policy and debate?
  - 5. What are the benefits of an academic education in the arts, humanities and social sciences?

In the concluding section, the review identifies factors that prevent the full benefits of the arts, humanities and social sciences from being realised. The report recommends three areas where action must be taken in order to address these concerns.

3. It should be noted that the supporting evidence provided in this report is necessarily extremely diverse. The committee sought to examine the ways in which the outputs of higher education teaching and research in the arts, humanities and social sciences achieve a great range of economic, educational, social and cultural benefits. Some of these outputs lend

<sup>1</sup> Opportunity for All in a World of Change, DTI, 2000.

#### 2 INTRODUCTION

themselves to quantitative demonstration. Others require qualitative judgments which defy statistical or tabular comparison. Hence the mixture of statistical and discursive methods of substantiation, including the individual case studies employed for illustrative purposes. Further information on the case studies is on the British Academy's web site – www.britac.ac.uk

## **Cultural and Intellectual Enrichment**

# How do the arts, humanities and social sciences contribute to our cultural and intellectual enrichment?

#### **Summary of main findings:**

#### The arts, humanities and social sciences

- lead directly to numerous forms of cultural performance, exhibition and enlightenment, both through teaching and research
- provide crucial expertise to support museum and gallery collections, as well as the historic environment
- lead the way in promoting understanding of other cultures, religions and societies, thereby helping to sustain multicultural tolerance and interaction
- foster public debate and enhance public engagement with the complexities of modern life, especially those which involve conflicting moralities, traditions and beliefs
- through their commitment to analytical rigour and humane values are crucial to civic virtues and to open, accessible government, on which any civilised society depends.

#### Cultural activities - performance, exhibition and enlightenment

- 4. Today's society is measured by the quality of its cultural life. Directly or through their students, academics in the arts, humanities and social sciences have made a great contribution to our cultural and intellectual well-being as these subjects help us to understand our heritage and culture, and that of others. Classics, for example, plays an important part in what it means to be British and to be European, since Greece and Rome are an important part of British heritage in particular and of the European heritage in general. In the past British and European literature, architecture and painting drew widely on classical themes. In today's world these themes are additionally used in cinema and television. Subjects in the arts and humanities help us to understand what is distinctive about our own culture and how to place it within a wider context.
- 5. Teaching and research activities undertaken in the arts contribute directly to activities such as art exhibitions, concerts, theatrical performances, festivals and literary productions. These not only enrich our lives, but also generate important consumer products.

The MA in Creative Writing at the University of East Anglia was established to enable aspiring writers to learn and develop their craft. The course led the way for other institutions to develop similar courses.<sup>2</sup> Early students were Ian McEwan and Kazuo Ishiguro. McEwan's writing career spans nine novels, two collections of short stories and three screenplays for which he has won several prizes including the Whitbread Prize for Fiction and the Booker Prize. Similarly, Ishiguro won the Whitbread Award for Fiction in 1986 and the Booker Prize in 1989. In 2001, half the runners-up for the Booker Prize had a UEA connection. This tradition of turning students into published writers continues. For instance, Tracy Chevalier's "Girl with a Pearl Earring" has been translated into 26 languages and is a huge bestseller: in America alone 130,000 hardback copies plus 1.3 million paperbacks have been sold. Film rights have been sold and the film is due to be released in England in January 2004.<sup>3</sup>

6. Researchers in the arts and humanities contribute to culture at many different levels. For instance, the research undertaken by scholars in a wide range of fields to analyse and reinterpret Shakespeare has done much to sustain and enrich public interest in his work. This not only enhances cultural vitality but can be of significant financial value, spanning not just the revenues made by the RSC and from tourism in Stratford, or by the Globe Theatre in London, but also those arising from publishing, media activity, educational products and the wider heritage industry.

The Shakespeare Institute at the University of Birmingham has a close relationship with the Royal Shakespeare Company. Over the years, the Institute's Directors and Fellows have been General Editors of the New Penguin, the New Cambridge, the Oxford and the Arden electronic editions of Shakespeare. The annual *Shakespeare Survey* (Cambridge University Press) is edited by two of the Institute's former Directors.

7. These activities can be especially important at local and regional levels. For instance, research and teaching in the fields of literature, history, music and film often play a vital part in enhancing the role of the host city or region as a local centre of culture. This in turn helps to develop a sense of local identity and a community's self-image. Literature, history, music, art, film and drama departments in universities often have active links with local and national cultural events and organisations. For example, there are close links between the Department of Drama and Theatre Studies at Lancaster University and the Nuffield Theatre, and there are similar links between departments of contemporary art practice and theatre festivals at Nottingham Trent University, Manchester University, and Warwick University.

 $<sup>2\,</sup>$  There are now over 30 postgraduate MA and PhD programmes in creative writing available in the UK as well as 279 undergraduate courses in which creative writing is a key component.

<sup>3</sup> Example drawn from a case study prepared by Debbie Hicks.

The School of English and American Studies at the University of Nottingham hosts the Media Archive for Central England (a repository for images which are studied by scholars, and used in all forms of media, educational or entertaining). Research projects on the role of local cinema inform the understanding – and the promotion – of urban regeneration. Local arts activities (e.g. exhibitions, literary festivals, poetry readings, the Nottingham "Culture Club", film festivals and screenings) are recognised as having an effect upon social exclusion, property development, local politics, the attraction of new businesses, tourism and food tourism. They clearly help to enhance the economic prosperity of the region.

8. Academics in the arts, humanities and social sciences disseminate their work through radio and television, locally and nationally, feeding the national appetite for popular but well-informed history, political comment, literary adaptations and reviews, and musical performance. For example, the dramadocumentary broadcast on BBC One on 20 October 2003, 'Pompeii: the Last Day', was informed by Roman historians such as Professor Andrew Wallace-Hadrill, and drew an audience of 9.5 million. Broadcasters often complement these programmes with online activity. The BBC has launched a new World War Two web site, to supplement forthcoming programmes such as 'Dunkirk' (February 2004) and the 60th anniversary of D-Day (June 2004). The web site encourages audiences to write their own personal wartime memories, and the BBC hopes that it will become a significant national archive of people's history.

Professor Steven Mithen, an archaeologist at the University of Reading, contributes notably to widening public access to the latest discoveries and theories of in his field. He has recently appeared on Melvyn Bragg's Radio 4 programme *In our time* to discuss the nature of human creativity, filmed contributions to BBC TV science/archaeology programmes *Road to Riches, Ape Man, Brain Story, Testing God, Ice World,* and was consultant on *Walking with Cavemen*. His 1996 book *The Prehistory of the Mind* achieved academic praise and also entered the science best-seller lists.

Professor Sir Christopher Frayling, Rector of the Royal College of Art and Chairman of Arts Council England, has been a major pioneer in the study of popular culture and a tireless advocate of the importance of design both as a cultural force and an economic driver. He is also well known for the contributions he has made to TV and radio as a presenter, writer and critic. Professor Sir Christopher Frayling won an award at the New York Film and Television Festival for a six-part Channel 4 series about advertising, *The Art of Persuasion*. At the Royal College of Art, he promoted joint postgraduate courses with the Victoria and Albert Museum (Design History), Imperial College of Science, Technology and Medicine (Conservation), and the Arts Council and Tate (Curating Contemporary Art). He was recently awarded the Sir Misha Black Memorial Medal 2003 for Distinguished Services to Design Education in recognition of his influence as a cultural historian.

9. It has long been recognised that the arts and humanities are an important tool in enabling disadvantaged and marginalised people and communities to find new means of expression. Improvements in education and employment opportunities often result.

Manchester Metropolitan University's Faculty of Art and Design runs a programme called START 3D Design. START is a project using art practice to develop interpersonal skills and promote general personal development for people suffering from mental health problems. Many of these students move on from START into employment which would not have been possible otherwise.

10. The arts and humanities also bring personal fulfilment. For instance, research findings have shown that many of the most intense emotions experienced by people come from their engagement with music. This engagement has a wide variety of positive effects on development, socialisation, and intellectual activity.

#### Providing high-level expertise for the arts and heritage sectors

#### Museums and galleries

- 11. The arts, humanities and social sciences provide the expertise to understand, explain, manage and conserve museum and gallery collections, and in so doing contribute directly to the social and cultural well-being of the nation. Malcolm Cooper, Regional Director of English Heritage, states: "The heritage sector employs a high proportion of humanities graduates in subjects such as art history, archaeology, geography, history, and planning".
- 12. University museums and collections are a key part of the UK's Museum provision. There are 73 University Museums and Collections, including major designated museums/collections at Oxford, Cambridge, Birmingham, Manchester, Newcastle, Reading and London. The Ashmolean in Oxford was the first 'public' museum in the UK. The relationship between academic research, teaching in a wide variety of arts and humanities disciplines, curation, collection care and stewardship, and the wider public education and cultural functions of these facilities should not be underestimated. University museums and collections are an important means of disseminating the latest developments in research. They also provide a focus for high-level education in a range of scholarly and curatorial skills. These engagements help to sustain the international reputation of the UK's museums and galleries which are highly regarded for the quality and range of their collections, and for the research-based, technical and curatorial skills of museum and gallery professionals.

The Arts and Humanities Research Board (AHRB) Research Centre for Studies of Surrealism and its Legacies<sup>4</sup> brings together two universities and one of the most powerful cultural institutions in the country: Tate.

<sup>4</sup> The University of Essex, the University of Manchester, and Tate are partners in the AHRB Research Centre for Studies of Surrealism and its Legacies. It was established in June 2002.

Research, study days and workshops are being targeted towards the Tate's own collection, and are geared to a variety of different audiences from general public to postgraduate students. The Centre is working to produce a catalogue of Tate's surrealist holdings which will go onto the web and a database of all holdings of dada and surrealist works in public collections in the UK. It also aims to make it easier for the public to access a number of key surrealist writings which have never been translated.

The AHRB Centre for the Study of the Domestic Interior<sup>5</sup> aims to provide a forum for high-level, cross-disciplinary research into the changing character of the domestic interior in Europe and North America from 1400 to present. Its staff are drawn from the fields of art history, history, musicology and English literature. The Centre has organised a series of symposia and conferences, drawing contributions from scholars in a wide range of international universities and museums, and publications arising from these events are planned. It has also used its partnership with the V&A Museum to contribute to major exhibitions at the Museum (e.g. *Art Deco, 1910–1939* (March–July 2003), and will do so for *Modernism* in Autumn 2006 and *The Renaissance At Home* in 2006). Such exhibitions in a major venue for design and the decorative arts bring the Centre's work to a wide public in a context in which informal and lifelong learning are as important as more conventional forms of knowledge transfer.

The Bill Douglas Centre for the History of Cinema and Popular Culture at the University of Exeter<sup>6</sup> contains both a public museum and an academic research centre, housing one of Britain's biggest public collections of books, prints, artefacts and ephemera relating to the history and prehistory of cinema. It holds the largest film archive outside the British Film Institute, serving both national and international researchers and audiences.

13. A number of important economic and social benefits flow from this relationship. Museums and galleries have a clear link with education – it is seen as central to the mission of UK museums and galleries. Museums and galleries provide a key resource for schools. School pupils are the section of the population (37 per cent) most likely to attend a museum or gallery, and 29 per cent of schoolchildren believe that a museum is 'the best place to learn out of school.' An example of how informed arts, humanities and social science activity can extend the awareness of our cultural heritage, as well as create socially relevant material for use in general education and heritage areas is shown below.

<sup>5</sup> The Centre was established in September 2001. It brings together the Royal College of Art, a totally postgraduate Art and Design institution; the Victoria and Albert Museum, the national museum of design and the decorative arts, and a major History faculty from a traditional university, Royal Holloway, University of London.

<sup>6</sup> The Bill Douglas Centre opened to the public in autumn 1997 as part of the British celebrations of the centenary of cinema.

<sup>7</sup> Visitors to Museums and Galleries in the UK, MORI for RESOURCE, 2001.

Over the past four years the SAPPHIRE project (Scottish Archive of Print and Publishing History Records)<sup>8</sup> has undertaken two major projects investigating the social history of the Scottish print and publishing industry. The project, which is run jointly by several universities and heritage organisations, has created and funded posts to undertake project research and development resulting in permanent and touring exhibitions, learning packs for schools, popular and academic publications and contributed to community development work in Edinburgh and its environs.

14. It is acknowledged that museums raise public awareness of their entire community, and can integrate, represent and promote wider community perspectives, potentially developing greater social cohesion. By collecting and exhibiting objects and artefacts of relevance to a particular community, they help these people to take pride in their past, as well as stimulating learning about aspects of communities that have perhaps been marginalised or ignored.

#### The Historic Environment

15. The Planning Minister, Keith Hill, recently said: "The historic environment makes a vital contribution to the quality of everyone's life and is central to our sense of local, regional and national identity. At the moment we have an ambitious challenge to build dynamic, sustainable communities across the country – but that's not just about new build alone. We need to make sure we conserve those historic places which give our towns and cities their uniqueness and character." Subjects such as archaeology, history, geography and planning help to safeguard against the unwitting destruction of important evidence about the past and present environment.

The Kircaldy burgh survey – 'Historic Kircaldy' was prepared by the Centre for Scottish Urban History at the University of Edinburgh. It is a blueprint of the historical, archaeological and geographical environment of the Fife burgh and is intended primarily for use by planners and regional archaeologists. The main aim of the survey is to identify those areas of the present and historic burgh which are of archaeological interest and require sensitive treatment in the event of proposed development. The survey is also available in book form and is available to schools, local historians and other interested residents of the town.

16. The term 'historic environment' is used to cover all the historic aspects of the environment that have been created through the cultural and economic activities of the people who settled the land: archaeological sites, historical landscapes, standing buildings, parks and gardens and so on. In a recent

<sup>8</sup> SAPPHIRE is a consortium with Napier University, University of Edinburgh as the lead institution, and Queen Margaret University College, Edinburgh, as its collaborative partner.

<sup>9</sup> For an example of this view, see the report entitled *Releasing the Potential: The Case for the Cultural Services*.

report the National Trust stated: 10 "The historic environment is not just about the past ... it is about the present and the future. It is the countryside, village, town or city in which we live, work or choose to visit, and can be what gives a place a character, shapes our perceptions and gives people a sense of place and identity in a changing world. It is also an important educational resource for both children and adults, can generate income and employment through tourism and marketing, and can contribute to our quality of life."

17. A MORI survey in 2000 found that 76 per cent of people thought that their lives were richer for having the opportunity to visit or view the historic environment, and 88 per cent believed that it was important in creating jobs and boosting the economy. 11 Subjects such as history and archaeology clearly have enormous economic potential here. They also spread the economic spending potential of tourism, and dilute its potentially detrimental impacts, by attracting tourists from the cities to the countryside.

The Iron Bridge, spanning the River Severn at Ironbridge in Shropshire, is universally recognised as a potent symbol of the Industrial Revolution. The establishment of the Ironbridge Gorge museums and associated Trust showed that with imagination and skill, a whole historic landscape could be conserved and managed for the benefit of residents and visitors, and interpreted as primary evidence of the Industrial Revolution. As a mark of these achievements, the Ironbridge Gorge was inscribed a World Heritage Site by UNESCO in November 1986. In 2001, tourism spend totalled £16 million and had created 15,000 jobs in the Ironbridge Gorge. The Ironbridge Institute, a partnership between the University of Birmingham and the Ironbridge Gorge Museums Trust, builds on this experience of heritage management to provide postgraduate courses in heritage management and industrial archaeology. Staff at the Institute are frequently asked for advice on issues such as the designation of UNESCO World Heritage Sites and the appropriateness of proposed museum developments.

18. The historic environment is vulnerable to damage and loss. The work by archaeologists in mapping and analysing ensures that the significance of sites or buildings are fully understood, so that they can be properly managed and conserved. According to the Archaeology Training Forum (ATF), there are about 4,425 archaeologists working in about 614 organisations, and ATF research has indicated growth in employment in the sector. Of these, 644 work in 72 HEIs; 1,341 work for archaeological contractors; 680 for national heritage agencies and 605 as local government curators. These professionals have close ties with the work of the academic research community. English Heritage is the national archaeology service for England and it also funds a number of scientific specialists based in UK HEIs. This sector is therefore underpinned by research and scholarship undertaken by subjects in the arts.

<sup>10</sup> Archaeology and the Historic Environment, Historic Landscape Survey Guidelines, The National Trust.

<sup>11</sup> Power of Place, English Heritage, 2000.

Professor Roberta Gilchrist is Professor of Medieval Archaeology at the University of Reading, and for the past ten years has also been Archaeologist to Norwich Cathedral, with responsibility for all aspects of archaeology within the 42-acre precinct. She is closely involved with conservation and development projects at the cathedral totalling several million pounds, including a £10 million visitor and education centre currently under construction. She advises the cathedral chapter and works with teams of architects, engineers, archaeologists and conservators. The results of her fieldwork and research are published for an international audience, but also inform local planning decisions and educational programmes. Norwich Cathedral is a major heritage attraction; with 500,000 annual visitors, it contributes substantially to the economic, social and spiritual well-being of the region.

The Silchester Town Life project was established by the Department of Archaeology at the University of Reading in 1997. The project is both a training field school and a research excavation located in the heart of *Calleva Atrebatum*, a major Roman *civitas capital* situated in the heart of the modern Hampshire village of Silchester. The excavation is tracing the Iron Age origins, subsequent Roman development and eventual abandonment of about one third of Insula IX, believed to have been a part of the commercial and residential part of the town. As well as providing a focus for academic research and archaeological fieldwork training, the site holds popular public open days. Hampshire County Council promotes The Silchester Town Trail as a visitor attraction, which follows the entire circuit of the complete Roman town walls. Finds from earlier digs at Silchester are displayed in the Silchester Gallery which was opened at the Museum of Reading in 1995.

#### Promoting an understanding of other cultures, religions and societies

- 19. The arts, humanities and social sciences are clearly crucial for promoting that measure of understanding which is necessary for a peaceful, tolerant and religiously diverse society. A wide range of subjects in the arts, humanities and social sciences make direct contributions in this way.
- 20. For instance, it has been argued that, "the issues of racism and xenophobia in contemporary Germany can only be understood in the context of a longer understanding of twentieth-century German History, including historic patterns of citizenship entitlement, the tensions between East and West Germans following unification in 1990, and the ways in which Germans sought to 'overcome' both the Nazi past and the more recent communist dictatorship." At the opposite end of the historical spectrum, it has been observed that one particular strength of prehistory in education is that "it deals with the history of our species in terms of global rather than national cultures, and the similarities and diversities of human experience within our common historical trajectory worldwide: the peopling of the globe at the time of the most hostile environments ever faced by our species, the ensuing global

<sup>12</sup> Professor Mary Fulbrook, Professor of German History, University College London.

- change from hunting-gathering to farming, and then the rise of civilisations and empires in all continents."<sup>13</sup> Thus prehistory plays an important role in building mutual cultural awareness and tolerance since it emphasises 'our common humanity'.
- 21. The interplay between the arts, humanities and social sciences addresses many of these issues. For instance, an MA in Refugee Studies at the University of East London draws on cultural studies, law and social sciences, and provides an academic knowledge and appreciation of the context, problems and policy issues related to the growing global problem of 'forced migration' confronting many professional and voluntary sector workers. Another example of the role of the arts and the social sciences in addressing such issues is that of the work of the political theorist, Professor Lord Parekh, who has done so much to defend, and think through the requirements for, genuine equality amongst British citizens of different racial origins. Professor Lord Parekh has been prominent in the public life of both Britain and India, notably as Deputy Chair, Commission for Racial Equality 1985–90 and Chair, Commission on the Future of Multi-Ethnic Britain.
- 22. In the arts and humanities, the study of languages and literature provides not only knowledge of other cultures, but also insights into UK society and culture as well. It is our view that any form of bilingualism can assist in the making of a more tolerant, pluralistic society. Similarly, few cultures can be understood without reference to their religious and spiritual traditions. Professor Jorgen Nielsen has said: "Time and again one has seen both in the UK and elsewhere how, when religion is ignored it reappears to strike back from unexpected directions".<sup>14</sup>
- 23. The way in which university teaching and research in this field can have an impact on the local community is demonstrated by the BA in Islamic Studies at the University of Birmingham. This programme has extensive links with the local Muslim community from which the majority of its students come. Many of its graduates have gone on to become teachers both in community and mainstream schools.

#### Foster public debate and enhance public engagement

#### Encouraging public debate

24. Many academics have helped to stimulate and encourage rational debate in the media about matters of public concern. Their contributions to major reports and debates about cultural and social matters, especially via press, TV and radio programmes on all aspects of intellectual and academic enquiry, have been significant in shifting national and international agendas.

The 2002 Reith Lectures 'A Question of Trust' by the philosopher, Baroness Onora O'Neill, sparked a wide debate on accountability and trust, especially in the public sector, the professions and the voluntary sector.

<sup>13</sup> Professor Graeme Barker, President of the Prehistoric Society.

<sup>14</sup> Professor Jorgen Nielsen, Director, Graduate Institute for Theology and Religion in the Department of Religion at the University of Birmingham.

They showed that criticism of target setting, performance indicators and certain forms of 'transparency' were well grounded, and that the supposed crisis of trust followed logically from the introduction of these supposed remedies. In the subsequent year, Baroness O'Neill promoted discussion of more effective forms of accountability, especially among professional groups and the public sector. Her research in ethics and political philosophy was developed and presented in forms which numerous audiences recognised as relevant to their concerns.

25. A further example is the way in which the media have used the Institute of Fiscal Studies (IFS) as a source of informed, impartial comment on fiscal matters. The IFS is renowned for its economic analysis of the UK tax system and considers the likely impact of fiscal policy on all parts of the UK's population. Academics at the IFS regularly brief MPs and civil servants and hold meetings with Cabinet and Shadow Cabinet Members.

#### Fostering public understanding of scientific and technological advances

- 26. When scientific knowledge comes into the public domain it is often presented in conjunction with ethical and judicial considerations, and quality of life measures, all of which are the product of research in the arts, humanities and social sciences. The importance of placing technological and scientific developments within a social and cultural context is becoming generally accepted. Recent public concerns about developments such as GM crops demonstrate the importance of mediating scientific discoveries through the arts, humanities and social sciences. The debate about genetically modified crops cannot be based simply on scientific evidence about their benefits and negative effects. It also needs to take into account public perceptions of food safety and quality are constructed. This is a topic well within the domain of the arts, humanities and social sciences.
- 27. Scholars working in fields such as the History of Science and Medicine are able to place contemporary concerns about medical and scientific advances in a historical context. For example, the recent crisis over the MMR vaccine has led to an increase in academic interest in vaccination, as well as a wider debate about the public understanding of the risks and benefits of mass childhood immunisation. Historical findings point to ways in which current policy-makers can learn from the past, <sup>16</sup> drawing on the history of immunisation measures.
- 28. The arts, humanities and social sciences also analyse the way in which people learn from the media, not least by monitoring and assessing the ways in which past scientific developments have been presented by the media and

<sup>15</sup> Baroness Onora O'Neill gave numerous keynote speeches, lectures and talks to the public sector, professional and charitable and corporate bodies and political groupings ranging from Actuaries to Public Health Physicians; Insurance CEOs to University administrators; Teachers to Psychoanalysts; Education and Medical Charities; Church groups and wider publics.

<sup>16</sup> For example, see paper by Ms Pru Hobson-West: Resistance to vaccination in England: Science, history and risk.

understood by the public. A recent example is the work of Professor Hargreaves, Professor Lewis and Tammy Speers, <sup>17</sup> whose findings suggested that the presence of more scientists or science specialists was unlikely to increase the public understanding of science, or to generate public engagement.

#### The promotion of civic virtues

- 29. There is a strong tradition of British work in political science and political education. The British Election Surveys, started by David Butler and Donald Stokes in 1963, continue to contribute to political behaviour as well as political understanding. Falling levels of electoral participation allied to related concerns about social cohesion and social exclusion have given this tradition a new currency and also opened up new directions of citizenship related work in the arts, humanities and social sciences. In most Western countries, levels of trust in politicians have dropped over the past years. Fewer people turn out to vote, and political apathy is said to be most marked among the young. In addition, constitutional reform and devolved government are changing the relationship between local, regional and national government in ways which may impact on political participation.
- **30.** Academics in the arts, humanities and social sciences are active in addressing these concerns. For instance, the e-government project conducted at University College London and LSE is intended to contribute to the accessibility of government to citizens and its effectiveness. Another example is the work of the sociologist, Professor Nikolas Rose, whose innovative method of analysing political power and social regulation in advanced liberal democracies has been used by researchers worldwide.
- Subjects in the arts, humanities and social sciences also make a substantial 31. contribution to the moral health of society. For instance the study of law has had an important impact on the development of a human rights culture. This is illustrated by the publication, Human Rights, the 1998 Act and the European Convention, 18 which is helpful to students and academics alike because it brings together three aspects of the subject which are not normally treated in one volume: the constitutional dimension of incorporating the Convention rights; an analysis of the Human Rights Act itself, set against the relevant domestic law background; and a detailed discussion of the jurisprudence of the European Court of Human Rights itself. Similarly, it might be argued that the publications on gender and sexuality by scholars such as Professor Germaine Greer, Professor Juliet Mitchell, Professor Sheila Rowbotham, Professor Lynne Segal and Professor Jeffrey Weeks have set the agenda for an understanding and redefinition of masculinity and femininity within modern society.

<sup>17</sup> Professor Ian Hargreaves, Professor Justin Lewis and Tammy Speers Science and the Media: towards a Better Map, ESCR, 2003.

<sup>18</sup> Duffy P, Grosz S, Beatson J, Sedley D, Human Rights: the 1998 Act and the European Convention, Sweet and Maxwell, 1999.

## **Economic Prosperity and Well-being**

# How do the arts, humanities and social sciences contribute to economic prosperity and well-being?

#### **Summary of main findings:**

#### The arts, humanities and social sciences

- contribute critically to expanding and strategically significant sectors of the economy, notably creative and cultural industries, and more selectively, heritage and tourism
- contribute to understanding and developing the performance, productivity and innovative development of business
- help companies to develop new products and build and maintain effective relationships with customers and employees, contributing to innovation and improved factor productivity
- equip employers and employees with key generic skills, and with high-level expertise to develop specific economic sectors and activities.

#### The new economy

- 32. Whereas the dominant global industries of the past focused on manufacturing industry, the key corporations today are increasingly active in the fields of communications, information, entertainment, leisure, science and technology. The 1998 White Paper *Our Competitive Future* showed that knowledge, creativity and skills were changing the way that firms competed and the sources of comparative advantage between nations. It defined the knowledge driven economy as "one in which the generation and exploitation of knowledge has come to play the predominant part in the creation of wealth. It is not simply about pushing back the frontiers of knowledge: it is also about the more effective use and exploitation of all types of knowledge in all manner of economic activity." (emphasis in the original).
- Professor Ken Peattie has said: "Over the last twenty years, the increasing pace of technological diffusion has combined with techniques such as benchmarking and total quality management to narrow rapidly the technological and 'objective' differences between products in many markets. Sustainable competitive advantage is very rarely generated from technological excellence alone. Today, in markets which many people might assume to be dominated by technological issues, including cars, home computers and mobile phones, it is actually 'soft and subjective' factors like

<sup>19</sup> Professor Ken Peattie, Director of the ESRC Research Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) at Cardiff University.

design, branding or customer service that are ultimately crucial in delivering and sustaining competitive advantage. These factors are very strongly rooted in the arts, humanities and social sciences."

#### **Intellectual Property**

- 34. The generation of intellectual property, notably but not exclusively copyright, is a major contribution of the arts, humanities and social sciences. It is fundamental to many activities at the heart of British economic life, such as education, media, tourism, leisure, and all the manufacturing, production and service industries which support them. The value of intellectual property in these sectors depends upon their ability to generate new ideas rather than to manufacture commodities. These are the fastest growing sectors of the global and the UK economy.
- 35. Copyright protects not only literary, dramatic, musical and artistic works, but also related work such as publishers' copyright in their products, films, sound recordings, broadcasts and cablecasts. Literary works include anything that is written, spoken or sung so long as it is recorded in material form; they also include choreology, computer programs and databases, and other material made available on the internet. Artistic works include paintings, drawings, photographs, maps, plans, sculptures, works of architecture and 'works of artistic craftsmanship'. A great many of the products of teaching and research in the arts, humanities and social sciences are covered by copyright, providing the basis on which the intermediary industries such as publishing, analogue and digital, broadcasting, film, sound recording, and retailing of the products to consumers operate.

#### Contributing to the development of the creative and cultural industries

- 36. The full economic value of the arts and humanities has only begun to be more fully recognised in recent years. In 1997, the European Task Force on Culture and Development reported that the arts and culture were the main source of content for the creative and cultural industries, the media and value-added services of the telecommunications industries. At about the same time, organisations such as the European Commission and the World Bank, as well as national and local government recognised that such industries were a major force in the global economy, whose importance was likely to increase as a growing service sector and changing social trends resulted in heightened demand for leisure activities. Indirect economic impacts were also observed. The European Task Force on Culture and Development said that works of art and cultural products created national and international stocks of ideas or images which could be exploited by the creative and cultural industries (e.g. in advertising or cultural tourism). It also emphasised the capacity of the arts to add value to the built environment.
- 37. Measuring the size and growth of the creative and cultural industries has proved difficult because they do not fit the employment categories used by the Office of National Statistics. The Department for Culture, Media and Sport (DCMS) defines the creative industries as 'those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property'. The DCMS Mapping Exercises in 1998 and in 2001 defined these

industries as: Advertising, Architecture, Arts and Antique Market, Crafts, Design, Designer Fashion, Film and Video, Interactive Leisure Software, Music, Performing Arts, Publishing, Software and Computer Services, Television and Radio. In 2001, the DCMS estimated that these industries accounted for 5 per cent of GDP and were growing faster than the economy as a whole.

- **38.** Higher education has an important part to play in supporting the creative and cultural industries:
  - as a provider of cultural infrastructure and services
  - as a key partner in the development of local economies and local/regional CCI specialism
  - as a provider of research and research and development in applied and non applied subjects
  - as a provider of skilled graduates with skills in industry specific applied technical/vocational skills
  - as a provider of skilled graduates with higher level skills and understanding in arts and humanities subjects
  - as specialist conservatoires in performing and visual arts.
- 39. Many businesses in this sector are of small or medium size, and heavily dependent upon the resource that higher education can provide through the arts, humanities and the social sciences. The creative industries equate to four main domains: visual arts, performance, audio-visual, and the printed word. They have links to the wider cultural sector, notably, sport, heritage, leisure and tourism. Their outputs fall broadly within three categories: artistic and cultural expressions; economic activity as measured by employment and turnover; and social indicators relating to health, social exclusion, regeneration and education. These outputs are not mutually exclusive.
- **40.** The arts and humanities often feed directly into creation, product design, exhibition and advertising, whilst the social sciences contribute to production, planning, marketing and dissemination. Furthermore, the pace of technological advance makes this sector particularly reliant on the expertise of social scientists both in devising new business models and practices, and in protecting intellectual property rights.
- 41. The economic contributions of the creative and cultural industries at regional level are often striking. A recent study by GLA Economics found that the creative and cultural industries were the second largest sector in London, behind business services, employed one in five Londoners and were the second fastest growing industry in the capital with growth rates estimated at 9 per cent per annum.
- 42. The recent competition to be European Capital of Culture 2008 demonstrated the likely economic impacts for the six cities/regions that were shortlisted. One of the cities shortlisted, Newcastle Gateshead, estimated that, if successful, it would attract some four million new visitors with £700 million to spend in the local economy, and generate 17,000 jobs, along with £100 million more through conference business. These dividends in turn would cascade throughout the whole region. As part of the bid, Newcastle University planned a reconfiguration of its museums, gallery and other cultural outreach activities into its own Cultural Quarter. The other five cities

short-listed – Birmingham, Bristol, Cardiff, Liverpool (the winner), and Oxford – all provided evidence of predicted economic impact of an 'urban renaissance' driven by cultural regeneration. They also demonstrated the benefits to the UK as a whole of cultural tourism. The short-listed cities have all been designated Centres of Culture by government to assist the development of appropriate programmes and policies.

#### Specific sectors of the creative industries

**43.** *Design* The Prime Minister has hailed the UK as 'the design workshop of the world' and according to a survey by IDEO Europe for the Design Council, international purchasing managers ranked UK design capabilities within the top six worldwide across all design disciplines. The DCMS report, *Design in Britain* – 2001/2002, demonstrated a rise in export earnings from £350 million in 1995 to £1 billion in 2000. British businesses spent a total of £26.7 billion on design in 2000–2001, representing nearly 3 per cent of the UK's total corporate turnover.

Agriculture	£1.7 billion
Consumer services	£4.9 billion
Construction, transport, storage and communications	£6.3 billion
Financial and business services	£8.7 billion
Manufacturing	£5.1 billion

Research undertaken for the Design Council has found that UK businesses see design as contributing to increased profit, better quality services and products, improved communications with customers and an enhanced company image.

44. Universities have a central role in encouraging all areas of design through their research and teaching activities. Forty per cent of UK designers hold at least a degree or equivalent qualification and there has been a year on year increase in the number of design undergraduates in UK universities. UK's design education system is held in high regard internationally; overseas student numbers grew by 112 per cent between 1994/95 and 1998/99. These activities also impact upon the delivery of public services. In a recent speech in the House of Lords Diana Warwick said: "The universities already make an enormous contribution to improving the delivery of public services. They train the professionals on whom we rely ... the designers and architects whose creative vision provides modern hospitals with specialist equipment, attractive living accommodation in towns and the countryside, bridges across our rivers, new transport systems, and so on."

The Jewellery Industry Innovation Centre (JIIC) at the Birmingham Institute of Art and Design was established to assist companies within the Jewellery Industry and allied trades, by providing research and development, and new technological applications pertinent to the Industry. The Centre is nationally and internationally recognised, forming global partnerships in a wide range of new technology and research based projects and networks.

- 45. Computer Games Collaboration between science and technology and the creative arts is currently being harnessed in the development of degrees in computer games, one of the largest and fastest growing sectors of the economy. In the US, entertainment has displaced defence as the driver of new technology take-up; earnings from computer games and associated products generate more profit than Hollywood. This sector is still seeking effective business models and the means of understanding audience demand, as well as the social and cultural use of new technology. Subjects such as media and cultural studies have focused on issues such as the changing nature of production and consumption of media content and the associated technologies of delivery.
- 46. In 2002, the UK computer games industry had sales of over £1 billion. Success in this industry is increasingly dependent upon the quality of content, and is now driven as much by skills and knowledge from the arts and the humanities as from computer science. In digital media industries, universities are developing research expertise, business 'outreach' and start-up incubator support. Such incubator units have been developed at the Universities of Northumbria, Teesside, Lincoln, and Huddersfield. Research Centres into digital technologies and their creative applications include the International Centre for Digital Content at John Moores University, the Digital Media Research Centre at the University of the West of England, the Virtual Reality Centre at the University of Teesside, and the National Centre for Computer Animation at the University of Bournemouth. The Royal College of Arts and the colleges of The London Institute are also running a wide range of research and development projects based around the creative application of new technologies.
- 47. Publishing Publishing is a major UK industry with revenues of £18,484 million, exports of £1,654 million, and an estimated 280,000 UK employees. Employment has grown significantly in recent years and, according to Publishing NTO Skills Foresight Research, is set to continue doing so, especially in book and magazine publishing. The number of new and revised book titles published in the UK rose by 17 per cent in the five years from 1996 to 2001. Forty-eight per cent of all new book titles in 2001 (academic and non-academic) were within the arts, humanities and social sciences. Figures from the Publishers' Association show that in 1999 (latest year available) home and export sales of academic and professional publications were worth £850 million.
- 48. The UK's universities have a high profile in academic and educational publishing many with their own presses. Oxford University Press is one of the largest publishers in the UK and is the largest academic press in the world. It publishes more than 4,500 new books a year, has a presence in over 50 countries and employs around 3,700 people worldwide. Similarly, Cambridge University Press publishes over 2,000 books and 150 journals a year, which are sold to some 200 countries. These two presses depend upon the direct input from researchers in the arts, humanities and social sciences. The same is true of many non-academic publishing houses. Contributing to the British Library's recently commissioned independent economic impact study, Lord Evans, Chairman of Faber and Faber, market leader in film and drama publishing, observes that 'Contemporary publishing depends upon the research and scholarship of the past... At Faber and Faber, we and our authors remain heavily dependent on the British Library's resources to provide well researched, authoritative new writing'.<sup>21</sup>

49. Television and Radio The UK TV industry has a strong international reputation. It impacts on the economy in many ways, having close links with the advertising industry and sharing with the arts and other creative industries a set of interrelating technical and creative skills. It has been estimated that its revenues are £12,136 million, with exports of £44 million. The sector is estimated to have grown by 50 per cent in total size between 1994/95 and 1999/2000. Subjects such as art, history, literature, music, cultural studies, the performing arts and archaeology figure very heavily in current programming by terrestrial broadcasters such as the BBC and Channel 4, as well as the satellite channels such as the History Channel and the Discovery Channel. Public interest in historical research in particular appears to be high and has been encouraged by well-established TV programmes such as Channel 4's Time Team, BBC's Meet the Ancestors and A History of Britain. Several developments, particularly those supported by the BBC, lead viewers or listeners from the relatively popular, high profile documentary programme to the network of printed and electronic resources which underpin the subject and encourage the interested public to invest time and money in 'finding out more about it'.

The North West Film Archive developed from the needs of social historians at Manchester Polytechnic (now Manchester Metropolitan University) for primary material for their research. The Archive ensures the long-term survival of moving images about the region and has more than 23,000 items dating back to the 1890s, making it the largest public film collection outside London. It is used by the academic community, the commercial and media sectors, as well as the public. In 1996–97, 82 television programmes broadcast material from the Archive.

of its music output, ranging from popular music to classical orchestral music. Its conservatoires in particular are renowned for the quality of training they offer to musicians. University music departments have seen a substantial increase in student numbers, a growth of 17 per cent in the period from 1996–67 to 1999–2000. The economic value of the music industry to the UK is substantial. In 2002, the National Music Council's *Counting the Notes* valued total domestic spending on music at just under £5 billion in 2000, resulting in a contribution to the economy of about £3.6 billion. Overseas earnings yielded a net surplus of £435 million. The report stated that young people between the ages of 12 and 20 spend more of their free time and more of their disposable income on music and music related activities than any other single activity.

The first UK TCS programme<sup>22</sup> in the arts and humanities was established at the University of Wales, Bangor in collaboration with Sain Records Ltd. The Programme sought to preserve Welsh musical heritage for future

<sup>21</sup> Measuring our Value, forthcoming, quotation from Website summary.

<sup>22</sup> The TCS programme (formerly known as the Teaching Company Scheme) is a UK Government Scheme through which long-term partnerships are formed between universities and companies. Based on an innovative project which is central to the strategic development of the company partner, a TCS Programme provides funding to introduce a high calibre graduate into the company for 2 or 3 years with joint university/industry supervision.

generations, and won the prize for 'Best Application of Technology and Knowledge'. Sain Records held an archive of 5,000 musical items, extending as far back as the 1940s and 1950s, but stored on outdated analogue tapes with an estimated lifetime at most of 50 years, and showing signs of degradation. Sain's Managing Director, Mr Dafydd Iwan, said: "through TCS we've now converted this unusable legacy into a digital sound resource, fully accessible via a database catalogue with a production potential of 400 new CDs (or £2.6 million) over a period of 10–15 years. This TCS partnership has revolutionised my company's ability to extend its markets and deliver record-breaking levels of profitability". The programme also opened the way for many other projects with companies in the region.

Much of the pioneering work in the Early Music sector was undertaken in higher education music departments. Editorial work, concert giving, the study of instruments, editorial work and instrument manufacture are all underpinned by research and teaching in the HE sector. Early music is recorded and broadcast widely in the UK and abroad. The 2003 Early Music Yearbook lists over 175 record companies whose output includes 'a significant proportion of recordings of early music'. In addition to the live or 'recorded product', the sector generates value through publishing, instrument manufacture (there are over 90 UK-based early music instrument manufacturers), and sponsorship.<sup>23</sup>

#### **Heritage and Tourism**

- 51. The DCMS Mapping Exercise on the creative industries (see paragraph 37) did not include the wider cultural sector of libraries, archives, museums and galleries, and the built heritage. These are areas to which the arts, humanities and social sciences make major contributions. Tourism is one of the largest industries in the UK, worth approximately £76 billion. Figures from the DCMS show that there were 2,056,200 employees in tourist-related industries in March 2002, representing 7 per cent of the national work force. Tourist-related industries employ more workers than either construction or transport.
- 52. Many subjects within the arts, humanities and social sciences contribute directly to this sector, including, history, archaeology, arts management and administration. The promotion of Britain's culture and history feeds into the tourism and leisure industries. For example, the development of tours of Scottish film locations, the promotion of 'Catherine Cookson Country' or 'Thomas Hardy's Wessex', and other such tangible products of literary and mass culture activity, testify to the manner in which the creative and cultural industries utilise the arts for economic benefit. And the research such activities draw upon for their success often derives from the work done by academic researchers employed by diverse agencies, as well as universities. At national level, organisations such as the National Trusts for England and

<sup>23</sup> Drawn from a case study provided by Nick Wilson, Lecturer in Small Business and Entrepreneurship, Kingston University.

- Wales, the National Trust for Scotland, English Heritage and its counterparts elsewhere in the UK play a vital role in expanding, sustaining and marketing the tourism product.
- 53. In the *State of the Historic Environment* Report 2002, it was reported that a 1996 survey into the reasons why overseas visitors came to the UK found that the single most important factor influencing their decision was, at 37 per cent, the UK's heritage. Other factors included: exploring historic towns or cities, 29 per cent; visiting museums, galleries and heritage centres, at 29 per cent; and watching the performing arts, at 18 per cent. In 1996, the British Tourist Authority *Survey of Overseas Visitors* found that 62 per cent of overseas visitors visited museums during their stay, and that a further 34 per cent visited galleries. Research undertaken by MORI found that 28 per cent of the UK public had visited a museum and/or gallery in the 12 months prior to the publication of the survey in 2001. It concluded that a higher proportion of the public visited museums and galleries than almost any other types of places and events to visit, including sports venues.
- 54. The number of visits to the six museums and galleries sponsored by the DCMS in London that had previously charged for admission increased from 4.3 million for the December–June period 2000–2001 to 7 million for the same period in 2001–2002, representing an increase of 62 per cent. The takings of these museums, which do charge for admission, represent only a tiny fraction of average total spend per visitor head, since successful museums and galleries have a key role to play in delivering secondary economic impacts in the retail, catering, tourism and hospitality sectors of the economy for example. In 2001, 163.1 million trips were made by UK residents within the UK generating revenues of £26 billion. In the same year, there were a total 22.8 million trips by overseas residents generating £11 billion in revenues.<sup>24</sup>
- 55. The heritage industry is also a powerful generator of wealth and prosperity. The report, *The UK Cultural Sector*, revealed that there were 68.3 million visits to historic properties in the UK in 1998, and that 35 per cent of overseas visitors visited these properties. Total revenues were £338 million. According to MORI research in 2001, 25 per cent of the UK public had visited an historic building/castle/palace in the 12 months prior to the survey. The National Trust's study into the impact of its work in the South West concluded that 21 million visitors spent £4.6 billion a year and created 225,000 jobs in the regional economy.

#### Other sectors

56. It is not easy to determine the size of some of the sectors to which the arts, humanities and social sciences make a contribution because they fall within the service sector, where the economic categories are rather 'broad brush' in comparison to those used for the production industries. Some of the clearer examples follow. It should, of course, be borne in mind that the sciences also make substantial contributions to some of the sectors shown below, most notably retail and healthcare.

57. Educational industries In 2001, turnover for this sector was £14.9 billion, which was 5.7 per cent higher than the previous year. The gross value added of educational industries was £5.3 billion. In recent years, there has been growing recognition of the role played by higher education as a wealth creator for the UK, not least by attracting overseas students to study in this country. The report on the impact of HEIs on the UK economy that was commissioned by Universities UK in 2002 said that "in many ways overseas students are analogous to long-stay tourists; while their per diem expenditure may not be as high as a short-stay tourist, they stay for a much longer time and their overall expenditure therefore represents a significant injection into the economy". It produced the following estimates of the contribution of overseas students to the UK economy:

Total personal expenditure (off campus)	£1.3 billion
Expenditure on UK goods and services	£933 million
Knock-on output generated throughout UK economy	£2 billion
Knock-on household income generated	£499 million
Knock-on employment generated	22,157 full time equivalent jobs

HESA figures show that a high proportion of overseas students (58 per cent in 2001–2002) at UK universities study subjects in the arts, humanities and social sciences.

- 58. The arts and humanities also make a significant contribution to the international export business through the study and teaching of the English language. It has been estimated that the international demand for specialist courses of English as a second language will multiply sixfold by 2025, and that most of the increased demand will be satisfied by UK, US and Australian providers.
- **59.** *Legal Services* The legal sector generates £1 billion of foreign earnings a year and provides jobs for about a quarter of a million people. <sup>25</sup>
- **60.** *Translation Services* In the past decade there has been a huge expansion in the worldwide demand for translation services, and the computerised tools created to help meet these demands are increasingly powerful and sophisticated. A recent survey by industry analysts IDC estimates that the econtent localisation market worldwide is set to grow to 11.7 billion euro by 2005. The fastest growing sub-sector is centred on linguistic tools for translation and content management, which are projected to grow to 325.4 billion euro by 2005. The EU and US markets represent some 78 per cent of this total, with an expected EU turnover of 5.5 billion euro in 2001–2004.
- **61.** Financial Services Financial services account for nearly 7 per cent of UK GDP, employing over 1 million people. London is the largest international financial centre in Europe. The arts, humanities and social sciences provide many of the personnel who work in this area. Research undertaken by prominent economic and financial research centres, such as the Institute for Fiscal Studies, SPRU at Sussex, BHPS at Essex and CRIC at Manchester have made a major impact on this sector.

<sup>25</sup> Figures from the Law Society.

- **62.** *Retail* This sector accounts for one in nine of the UK's workforce, representing 2.5 million employees. Retail sales turnover was £200 billion in 1999, contributing about 11 per cent to the UK's GDP. Subjects such as business studies, economics, planning, occupational psychology, education and design all make direct contributions.
- **63.** *Healthcare* This sector has a turnover in excess of £45.6 billion and employs over 3.3 million people making a £14.5 billion GVA (gross value added) contribution to the UK economy. Whilst it is primarily dependent upon scientific and medical advances, the contribution of subjects such as psychology, social work, ethics, planning and cultural therapy programmes should not be overlooked.

# Understanding and developing the performance, productivity and innovative development of business

64. It has been argued that business is as big and as globally influential as government. The United Nations estimates that there are 60,000 multinational corporations; according to the Financial Times, 37 of the top economies of the world are corporations. Subjects in the arts, humanities and social sciences make a substantial contribution to understanding and developing business processes and strategies, and in so doing help to maximise corporate performance. The social sciences analyse the performance and productivity of businesses, and develop innovative practices to help businesses to respond effectively to the growing demands of the global economy and technological advancement. Educationalists promote understanding about issues related to the most effective ways of raising skill levels. Geographers and planners inform decisions about business location. An example of an individual researcher's contribution to understanding the processes involved in the formulation of strategies in organisations is that of Professor Andrew Pettigrew.

Professor Pettigrew has systematically examined the links between external factors, internal processes, and outcomes. He studied private and public sector organisations. He exploded the myth of the 'great leader' and demonstrated the role of teams. He then moved on to comparative case study work, asking why similar firms have different degrees of success. The answer turned on the interaction of five factors, with the embedding modes of behaviour over time as the central theme. He was one of the first researchers to ask why in a single organisation such as the NHS the pace and direction of change varies so much. He showed that time is needed for receptiveness to change to emerge, and that this trust is easily destroyed.

## Helping to develop new products and build and maintain effective relationships

65. Subjects in the arts, humanities and social sciences also evaluate the ways in which the global economy will affect the economic future of the UK. The challenges posed by the global economy have meant that it can no longer be argued that economic success is dependent upon technological innovation alone. Professor Ken Peattie says: "Rather, it requires an eclectic mixture of disciplines and ideas in the process of developing new products. In cases

where this process is informed by a mixture of technical excellence, sound economics, clear understanding of consumers and their psychology, behaviour and lifestyle, an appreciation of design aesthetics and branding, awareness of the commercial implications of the product – the result is usually a success."

- 66. In the changed circumstances in which business now operates, new responsibilities have to be assumed. Corporate responsibility has become a theme of all the leading transnational firms. The arts, humanities and social sciences across a number of disciplines including ethics, law, sociology, geography, business and management studies are particularly well placed to help business meet these challenges.
- 67. Recent crises, such as the collapse of Enron and other well-known US companies and problems in the UK pensions industry have meant that official regulatory bodies and companies have become increasingly aware of their need for a greater understanding of risk.

The Economic and Social Research Council (ESRC) Centre for the Analysis of Risk and Regulation (CARR) is a multidisciplinary centre at LSE, drawing upon the expertise of those working in law, sociology, political science, accounting, economics, geography and environment and operational research. It pursues academic research into risk management and regulation and provides partners (including BP; PwC; Deutsche Bank and Aon) with a stream of knowledge transfer on operational, environmental and compliance risk management in both the public and private sector. Staff at the Centre engage actively with policy makers and practitioners both in the UK and abroad. In the UK, staff have advised policy makers in the Cabinet Office, DTI, Environment Agency, Health and Safety Executive and Treasury. They have also engaged with the Committee for Standards of Public Life, National Audit Office, Commission for Health Improvement, Strategic Rail Authority, Railtrack and so on. Engagements abroad include government organisations and policy-makers in Canada, Italy, Japan and Jordan and the World Bank.

68. A company's ability to build and maintain good relationships with customers often determines its success. This ability is closely related to the social, ethical and psychological issues that are informed by the arts, humanities and social sciences. The findings of a recent MORI poll showed that four in five people surveyed did not believe that directors of large companies could be trusted to tell the truth. Companies themselves are increasingly concerned about such intangibles and the way in which environmental and social credibility could impact on them in the future. A recent survey undertaken by the Judge Institute of Management of the Chief Executives from the Global Fortune 500 found that in spite of the recent financial scandals, the CEOs who responded believed that in the near future social credibility would be as important as financial credibility, and that environmental credibility would only be marginally less important.<sup>26</sup> For companies seeking to generate faith in

<sup>26 34</sup> per cent of those surveyed responded (the revenues of the companies they represented amounted to almost US\$5 trillion). For further information, see *Forecasting the Impact of Sustainability Issues on the Reputation of Large Multinational Corporations*, Judge Institute of Management, 2003.

themselves and their brands and products, this is not going to be accomplished by further technical and scientific innovations.

#### Equipping employers and employees with key skills

- **69.** One major economic contribution made by the arts, humanities and social sciences is the education of graduates with the skills necessary to sustain a knowledge driven economy.
- 70. Findings from surveys of the first destinations of arts, humanities and social science graduates, together with findings from the Labour Force Survey on the longer-term career paths of graduates, show that a significant proportion of graduates in a wide range of subjects within the arts, humanities and social sciences enter careers in management. The skills and qualities that employers seek from these subjects are sometimes discipline-related but often draw on the broader critical, creative and personal aptitudes and training that run through the arts, humanities and social science spectrum.
- The importance of business education to the health of the economy was 71. highlighted in the report, Raising our Game, by the Council for Excellence in Management and Leadership. It found that there was a large market for management education. It is understood that there are roughly 4 million managerial jobs in the UK, and that the UK needs 140,000 new managers each year. Business and management studies is an important entry route into these careers, and is extremely popular with students. UCAS figures showed that it was the most popular subject at degree level for full-time students starting in autumn 2001, with new enrolments up nearly 7 per cent on the previous year and more than 20 per cent higher than the next most popular subject. MBA awards have almost trebled since 1990, and 1 in 5 taught postgraduate students study Business and Management. It has been reported that UK Business Schools earn well over £500 million a year in teaching students from overseas. Furthermore, universities are actively involving business in the development of undergraduate and postgraduate programmes related to their sectors.

In 1997, the Ford Motor Company and the Business School at Loughborough University launched what was believed to be the world's first BSc in Retail Automotive Management. This was soon followed by an MSc programme and Diploma and Certificate courses. The aim of the partnership was to improve management within the dealership network of the Ford Motor Company. The curriculum is underpinned by university-led research that also receives funding from Ford. The success of the partnership has led to courses being offered to Volvo, Jaguar and Mazda with additional research being undertaken in conjunction with Vauxhall, Peugeot, Toyota and many of the major dealership groups.

**72.** A first-hand knowledge of foreign languages and cultures facilitates wealth creation by encouraging international trade. Industry relies heavily on languages graduates. These needs are likely to intensify in the immediate short term. The Institute of Export's annual survey recently sought information on developing markets and the number of UK companies trying

- to increase activity in these markets. The results were as follows: Latin America (76 per cent), the Middle East (68 per cent), and the Far East (67 per cent). In addition, it is anticipated that the growth in the multilingual population in the UK will increase the demand for linguists to work in the public services such as Health, Law and Local Government.<sup>27</sup> The economic importance of the tourist sector is expected to grow significantly.
- 73. There is an evident crisis in the recruitment of students and academic staff in languages departments as a result of the decline in language teaching in secondary schools, and the financial pressures under which the universities are working. A number of university language departments have closed in recent years (see also paragraphs 92–94).
- 74. Research by the DTI has shown that for every 1 per cent increase in export activity, £2 billion is added to the UK economy. The larger businesses surveyed said that 20 per cent of export orders were lost due to a lack of linguistic competence. These results also appear to apply to SMEs. Since May 2000, the Languages NTO has undertaken audits of language skills provision and skills use and demand by employers for five of the English Regional Development Agencies, and also in Wales. It found that the results were remarkably similar across the regions:
  - Between 16 per cent and 22 per cent of respondents were aware that they had lost, or failed to secure, business as a direct result of a lack of language skills.
  - Between 45 and 54 per cent recognised language as an inhibiting factor in conducting overseas trade.
  - There was a growing recognition that inter-cultural awareness can be as important as linguistic skill in a world where, for the Englishspeaking business, it may not be possible to cover all the possible language permutations. Approximately 16 per cent of respondents saw cultural differences as inhibiting business.

### **Major Challenges Facing UK and Wider World**

How do the arts, humanities and social sciences contribute new knowledge and understanding of the major challenges facing both the UK and the wider world?

#### **Summary of main findings:**

#### The arts, humanities and social sciences

- address major social, cultural, ethical and economic challenges, including the impact of scientific and medical advances, the management of international relations, development and security, and the effects of globalization
- develop new research insights supported by steadily growing income from external research grants, private sources and contracts
- contribute decisively to today's recognition that modern society depends on the whole range and interconnectedness of knowledge rather than the privileging of a few academic disciplines.

## The ways in which the arts, humanities and social sciences help us to address many of the most pressing questions facing society today

- 75. Dr Adam Swain<sup>28</sup> says: "Our uncertain future has to be dealt with now in terms of our response to immediate questions. How do we educate our children? How can we understand and deal with the problems of multiculturalism, both internationally and in our own community? Have we evolved transferable problem-solving strategies in dealing with human problems and can we put them in historical context (the essential diachronic dimension in a society obsessed with the present)? All these are matters central to the activities of arts, humanities and social science teaching and research and to the long-term productivity of our society."
- 76. The arts, humanities and social sciences have had a major impact on policy and policy debate in a wide variety of areas, often leading to issues being reframed or refocused in significant ways. Research in these subjects is crucial in exploring the nature of the communities within which we live and the communities with which we might interact. Their findings are seen as central to issues such as the effective delivery of public services and the proper organisation of the welfare state, and the formation of international aid policy and foreign policy.
- 77. These subjects also have an important role to play in challenging widely held assumptions and beliefs. "A society which does not examine, question and re-assess its foundational beliefs and presuppositions will before long become a sick society. The arts, humanities and social sciences enlarge our

- understanding of ourselves, and also strengthen civil society through the stimulus they provide to individuals to reflect upon their relations to others and to the community."  $^{29}$
- 78. The arts, humanities and social sciences initiate new lines of enquiry and explore potential developments before they arise. An example here is the work undertaken by scholars at the Centre for Socio-Legal Studies at the University of Oxford. Long before the Enron crisis hit the headlines, the Centre was exploring, and exposing, the 'creative accounting' methods Enron employed to mislead the market and their employees.

Dr Doreen McBarnet, who heads the programme, said: "We didn't wait for Enron to do work on creative accounting, but instead came across the practice long before and began investigating. We try to be ahead of the game, rather than just responding to, for example, a government policy initiative. That's why it's important to have independent funding, so we can take the initiative on issues ... rather than respond after the event."

#### The funding of research in the arts, humanities and social sciences

79. The Dual Support System Figures on the levels of public funding for research in the arts, humanities and social sciences show that it represents an efficient investment for the government. The quality of research in these subjects has been revealed by the results of the 2001 Research Assessment Exercise. Whilst, 32 per cent of all research-active staff were in the arts, humanities and social sciences, 30 35 per cent of staff in five-starred departments were in the arts, humanities and social sciences. These results have been achieved with much lower levels of public sector funding than the sciences as can be seen from Table 1 below.

Table 1: Funding from the Funding and Research Councils (£ thousands)

	OST RC Councils and AHRB <sup>31</sup>	QR <sup>32</sup>	Total	%
Arts, humanities and social sciences 33	45,127	218,404	263,531	16
Sciences	716,642	714,213	1,430,855	84
Total	761,769	932,617	1,694,386	

Source: HESA, HEFCE, SHEFC, HEFCW, DELNI

**80.** *Income from external grants and contracts* The arts, humanities and social sciences attract significant sums of money to fund research that has an impact upon society and the economy. This is evidence of their productive engagement with many of the most pressing issues facing society today. The

<sup>29</sup> Comment made by a member of the National Committee for Philosophy.

<sup>30</sup> RAE units of assessment falling squarely within the subject remit of the British Academy, so excludes some units within the creative and performing arts and the social sciences.

<sup>31</sup> Figures for 2001–02. Figures exclude Psychology and Geography because these subjects straddle the sciences as well as the arts, humanities and social sciences, and it was not possible to obtain the necessary disaggregation.

<sup>32</sup> Figures for 2003–04. Figures exclude Psychology and Geography.

<sup>33</sup> RAE units of assessment falling squarely within the subject remit of the British Academy.

income from external research grants and contracts (excluding the income from the research councils, the AHRB and the British Academy) has risen steadily for the arts, humanities and social sciences in the most recently reported full financial years between 1996 and 1999. The increase was, at 41 per cent, particularly striking. (Science and technology, from a far higher base, experienced an increase of 23 per cent.)

- 81. The data show that funding from UK central government bodies is the most important source of external income for the arts, humanities and social sciences, representing 40 per cent of the total income from these sources. The demand on the part of UK central government bodies and UK-based charities for research and consultancy in the arts, humanities and social sciences increased by 48 and 49 per cent respectively in the period 1996–1999. Following the 1999 White Paper on Modernising Government, government departments have demonstrated a greater commitment to, and engagement with, research, and their research budgets have been increased. As a result, research funding from UK central government bodies has continued to rise since 1999.
- **82.** An analysis of these figures broken down by individual units of assessment shows that some subjects in the arts, humanities and social sciences experienced particularly sharp increases in the income that they received from these sources including:

English: 192 per centMusic: 137 per centDrama: 111 per cent

• Theology, Divinity and Religious Studies: 87 per cent

• Social work: 83 per cent

• Law: 74 per cent

Art and Design: 68 per centHistory of Art: 64 per cent

Politics: 64 per cent

Middle Eastern Studies: 58 per cent

## Examples of the issues which the arts, humanities and social sciences are uniquely placed to address

- **83.** Key illustrative issues which the arts, humanities and social sciences are uniquely placed to address include:
  - utilising the potential of each new generation
  - understanding the impacts of globalisation (which are political, technological and cultural, as well as economic)
  - · advancing our understanding of change in other countries
  - developing policies to further international understanding and foreign policy.

These areas are explored briefly below. Further information on the examples used in the report can be found on the Academy's web site, www.britac.ac.uk

#### Widening access and enabling people to reach their full potential

- 84. Economic development depends first and foremost on utilising the full potential of each new generation. The social sciences play a critical role in identifying how and why the full potential is not being developed and offering effective initiatives. Longitudinal analysis is an important part of this work. Paul Johnson, chief economist at the Department for Education and Skills, has been quoted as saying that the whole point about education is not "what it does for you today but what it does for you in the long term". It is vital therefore to see the impact of education on people over time to know what works and what it is worth. Longitudinal analysis is also valuable in providing information to the public, for example, on the added value of different schools.
- 85. The government has attached high priority to creating a more highly skilled workforce, in order to raise the UK's productivity levels and narrow the gap with those of its main industrial competitors. It has been estimated that the existence of poor skill levels in a significant proportion of the UK workforce accounts for up to a fifth of the productivity gap and also contributes to the UK's comparatively low performance in levels of innovation and capital investment. Christopher Duff, chief executive officer of the Sector Skills Development Agency has said, "The productivity gap is explained to quite a large extent by the skills gap. Improving skills could help to narrow that gap".
- **86.** There is a long and well-respected tradition of research in the social sciences which seeks to address the concerns raised above. Some of the most influential has been in the field of education.

After the Second World War access to academic grammar schools was opened fully to a competitive examination and fees were abolished. It was widely held that this had significantly widened opportunities for working class children and increased social mobility. The work of Professor Halsey and Professor Jean Floud' challenged this view, showing the continuity of social class advantages and creating a new field of strongly grounded educational sociology that won international recognition. Halsey became an adviser to the Minister of Education, C.A.R. Crosland, in the mid-1960s. He went on to pioneer action research and the rigorous evaluation of government programmes in his work on educational priority areas. He played a large part in the influential report on inner city problems produced by the Church of England (*Faith in Our Cities*). Halsey and the group of sociologists and social policy analysts he inspired showed how such research could be used as the basis for policy and how social science could become (almost unrecognised) a part of everyday informed thought and debate.

#### Globalisation

**87.** The growth of world markets and associated social, political and cultural changes creates new opportunities and challenges for businesses. The arts, humanities and social sciences thus assume a new role helping policy makers, enterprises and individuals to understand, and respond effectively to, globalisation.

Researchers working on the Globalisation Research Programme at the ESRC's Centre for Economic Performance (CEP) at LSE have been examining the drivers of globalisation, in particular the role of new technologies, and its impact. Their work looks both at the long historical record of globalisation and economic performance, and at the impact of globalisation on current income differentials on poverty. The Programme's Director, Professor A Venables, advises a Lords Committee on globalisation issues and the Treasury on regional issues.

The Global Dimensions programme at LSE was created with the aim of developing policy responses to issues of governance raised by the erosion of national boundaries. It brings together statesmen, policy advisers, academics and members of civil society, in order to draw together a range of expertise and experience in an international forum. Its seminars have attracted, among others, Bill Clinton, Kofi Annan, Gro Harlem Brundtland. The programme also hosts international business-policy-academe roundtables on trade policy issues, holding events in New York, Delhi, Shanghai, Moscow, Hong Kong and Singapore.

#### The contributions to international debate and policy making

**88.** The arts, humanities and social sciences also help to shape international debate and policy making. These subjects foster our understanding of the social, cultural, economic and political processes of change in other countries.

Queen Elizabeth House at the University of Oxford aims to advance understanding of change in countries in the poorer parts of the world. Its research priorities include the study of the economic causes and costs of conflicts; the causes and consequences of refugee movements; ways of understanding and tackling poverty; and environmental issues. It takes a multidisciplinary approach to these issues, drawing on expertise in political science, anthropology, psychology, sociology, economics and law. Recent successes include:

- the award of a £2.5 million grant from the Department for International Development to establish a Development Research Centre on Inequality, Human Security and Ethnicity (DfID). DfID supports such Centres in order to strengthen the foundations for policy formulation aimed at reducing poverty in developing countries.
- the award of the Queen's Anniversary Prize to its Refugee Studies Centre in recognition of the influence that it has had both in the developed and developing worlds.

The demographer, Professor Cleland, through his work on the complex variety of ways in which societies move from high fertility and mortality to low levels of both, has played a major role in shaping policies that have promoted the rapid reductions of population growth in developing countries, such as Bangladesh. His recent research on the role of high-risk behaviour in HIV/AIDS epidemic in sub-Sahara Africa is proving similarly influential.

The Department of Social Policy and Social Work at the University of Oxford has been helping the South African government to review social security provision in the post-apartheid era, by evaluating the programmes that they have in place to help them deliver services more efficiently.

### The development of policies to further international understanding, development and security

89. Work on international politics, peace and war remains a major theme for scholarship in the arts, humanities and social sciences. The practical importance of this body of work is obvious. The arts, humanities and social sciences anticipate potential new threats and assess how they might be handled. Research on their underlying causes and the promotion of an understanding of other societies and cultures also encourage sensitive and flexible international relations policies.

In May 2002 the Centre for International Studies at the University of Cambridge launched the Programme for Security in International Society, to undertake a fundamental re-examination of the nature of instability and insecurity facing the global community in the wake of September 11. The Programme draws together scholars in fields such as political science, history, international relations, economics, theology, psychology and law. The diversity of these fields reflects the complexity of a global society in which social, cultural and religious factors have become as important as political, commercial and military ones. The Programme's initial activities will include studies of suicide bombers; how informal, illegal transnational networks affect institutional systems; the religious and political tensions in Saudi Arabia, and the role of risk management in insecure economic and political environments.

The Department of Peace Studies at the University of Bradford was established in 1973–74 and is one of the largest university centres for peace studies in the world. Its staff and students focus primarily on the following areas: International Politics and Security Studies, Development and Peace, Regions in Conflict, Conflict Resolution, Politics and Society, International Politics and the Environment. The Department is a source of advice for a wide range of public bodies, and staff are consulted on issues of peace and conflict by parliamentary select committees and politicians of all parties. Its staff maintain close links with government departments and institutions, and also act as consultants and advisers for many nongovernmental organisations in the field.

Individual academics in the arts, humanities and social sciences also play an important role in providing objective advice to government ministers and policy makers.

Professor Archie Brown played an important role in helping the Thatcher government to reappraise its policy towards the Soviet Union. The late Sir Anthony Parsons said that the Chequers seminar held in September 1983 at which academics advocated engagement at all levels within the Soviet Union – from dissidents to General Secretary – "changed British foreign policy". Thatcher first heard of Gorbachev, as the most reform-minded member of the Politburo, from Professor Brown at that time and invited him to Britain as a result. The Thatcher/Gorbachev relationship proved important because she was uniquely placed to persuade Reagan that this was a different kind of Communist leader, one with whom you could 'do business'.<sup>34</sup>

**90.** In addition, the arts, humanities and social sciences have an important role to play in the provision of high level training of the military.

Since the Cold War, the requirement for command and defence decisionmaking has undergone considerable change, necessitating a new approach to military education. The War Studies Group at King's College London was recently awarded a Queen's Anniversary Prize in recognition of its achievements in this area. The Group comprises the Department of War Studies, the Defence Studies Department at the Joint Services Command and Staff College (JSCSC) and the International Policy Institute. At JSCSC, an academic-military partnership has been established whose mission is to 'provide command and staff training at junior, advanced and higher levels for all three Services to a world-class standard'. Education and training is provided by academics from King's College, together with military staff who are seconded for a term of duty. Members of the War Studies Group assist in the development of defence and security policy, working with governments, international organisations and NGOs. This includes from studies supporting the 'New Chapter' of the Ministry of Defence's Strategic Defence Review, advice to countries in Africa and Asia seeking to assert civilian control over their military establishments, and comment and analysis for the world's media.

91. To understand developments in a particular region, we need a depth of expertise in other languages and cultures, translation skills that go beyond an understanding of the histories and traditions. For our own region, the Falklands War is recent enough in time to remind us that the failure to interpret threats because they are far away and of little interest to the press and current public interest can carry a disproportionate human cost. A number of subjects in the arts, humanities and social sciences, including

<sup>34</sup> Margaret Thatcher devotes two and a half pages of her memoirs on this seminar with eight academics that was held at Chequers on 8 September 1983. The academics all wrote eight-page papers for it, and were given twenty minutes each for their oral presentations.

- languages and literatures, history, anthropology, politics and economics, have a role here. Professor Fulbrook <sup>35</sup> says: "the attacks of September 11 immediately raised questions, not only about contemporary terrorism, but also about interpreting the present in the context of a wider historical understanding, with widespread references back to Pearl Harbor in the public debate following the twin tower attacks".
- 92. There is growing evidence that several languages of strategic national importance are under threat because specialist university centres and departments have been closed recently in the face of financial pressures (see paragraphs 73–74). Both government and industry rely heavily on specialist languages, whether in terms of output of graduates or availability of experts who can be consulted as and when required.
- 93. In Middle Eastern Studies, for example, it is apparent that the UK's expertise in this field is under threat. Some important Middle Eastern languages (including Kurdish, Central Asian and some Afghan languages) are not now being taught at all in the UK. The UK's security services, which have a nationality requirement, are finding it increasingly difficult to attract candidates with a training in Middle Eastern languages. It is currently experiencing a particular shortage of speakers of North African Arabic and urgently needs individuals with other Middle Eastern expertise as well as indepth knowledge of the geography, historical background and other socioeconomic and political trends of the region. Linguists are crucial to the work on counter-terrorism, serious crime and counter-proliferation.<sup>36</sup> The Review is concerned that the difficulties experienced by Middle Eastern Studies apply also to a wide range of other languages.
- 94. In the United States, on the other hand, the events of September 11 have highlighted the need for a better understanding of the Middle East. Funds have been set aside to develop expertise in the languages, societies and politics of the Middle East and the Muslim world. Large sums are being devoted to studentships, programmes and institutes, not only for Middle Eastern but also for other non-Western European languages including Chinese, Arabic, Persian and Russian. There is an obvious lesson for the UK government in these developments.

#### The interplay of knowledge in all subjects

95. Many pressing issues face our society. These are likely to gain even greater prominence as the century progresses, as they rely on the close interaction between science and technology and the arts, humanities and social sciences. The full implications of technological, medical and environmental developments can only be understood if all disciplines are able to work together. Lord May, the President of the Royal Society, said in 2002:

"Science does no more than set the stage, providing and clarifying the choices. Our values and feelings about the society we wish to build, in this wiser world of tomorrow, will then write the play. But whence the values? What shapes them? What guides the subsequent choices? These are hugely

<sup>35</sup> Professor Mary Fulbrook, Professor of German History, University College London.

<sup>36</sup> For further information, see *A Challenge for Government, Industry and the Academic Community,* published by the British society for Middle Eastern Studies, June 2002.

difficult, yet utterly fundamental questions. Ultimately the answers, insofar as there are answers, will illustrate better than anything else just how indivisible is the continuum from the arts, humanities and social sciences through to the biological and physical sciences."

- **96.** The pace of scientific and technological developments will often throw up political and social problems, in which many subjects within the arts, humanities and social sciences, including law, economics, sociology and philosophy may play important roles in generating solutions. Such issues are increasingly seen as central to the policy agenda, and also have an important bearing on commercial success, on quality of life, and on the future of civil society.
- 97. Medical Developments Health services are naturally based upon biological and clinical sciences but it is now widely understood within the health professions and the broader society that effective care also depends upon psychological, social and ethical foundations. The arts, humanities and social sciences have now rightly secured a place at the heart of health care, and make important contributions to health policy, by advising on issues such as
  - the spread of disease
  - the social, economic and environmental factors affecting health
  - medical ethics
  - genomics.

For the last 30 years, two geographers (Professor A D Cliff and Professor P Haggett) have cooperated on a long-term project to map some of the most important epidemic-prone diseases affecting humans. In the last half of that period, they have been joined by Dr M Smallman-Raynor. Much of the group's work has been based at non-British research centres: the World Health Organization (Geneva), the US Centers for Disease Control (Atlanta), and the Icelandic Ministry of Health (Reykjavik). Members of the research group have served as consultants and advisors at both WHO and CDC, working closely with medical and statistical researchers. The group's objectives have been threefold: first, to give geographical precision to the changing spatial distribution of particular diseases over time; second, to identify and measure the factors controlling that spread; and finally, to develop statistical models which allow the geographical and temporal likelihood of epidemic outbreaks of diseases to be estimated. This last objective has had direct policy implications for those responsible for developing control programmes to handle these outbreaks.

98. It is clear that an understanding of the economic and social history of health and illness has an important role to play in the development of health policy. Current health priority areas are influenced by social, environmental and economic factors. The government has recently recognised the need to adopt a much wider and more inclusive understanding of the major influences or determinants of health and well-being, and the need to understand the interrelationships between health and education, housing, employment, crime and regeneration. Hazel Blears, the Minister for Public Health, said recently: "I know in the Department of Health alone that across the NHS and Social

- Care contexts there are many ways over many years that the arts have made direct and indirect contributions to individual and community health."
- 99. Health policy-makers and managers often have to make ethical decisions about the allocation of health care. As the population ages, questions relating to the ethical principles for the allocation of resources will become even more pressing. Ethical review and philosophical analysis is now seen as indispensable part of health care. (See Academy's web site, www.britac.ac.uk, for further examples on work in these areas.)
- 100. Momentous developments in genetics have demonstrated a need for close collaboration between all subjects. For instance, the recently established Genome Knowledge Park at the University of Cambridge appointed researchers in philosophy, sociology and law to work closely with the scientists involved and with many others in the University and its surrounding community who are engaged in this field.

The AHRB Research Centre for Studies in Intellectual Property and Technology Law, which is based at the University of Edinburgh and was established in 2002, is taking the lead in the development of the legal and ethical framework for Generation Scotland – an interdisciplinary research project designed to investigate the role of genetics and environment in the onset of the diseases that most affect the Scottish population. Public engagement and education is crucial to the success of the endeavour, as is sufficient income generation from the research resource (genetic database) that will be developed. The Centre is also working on the protection and appropriate exploitation of personal data in healthcare, to provide a context and parameters for bioinformatics research. The NHS is taking a close interest in this work.

**101.** *Environmental concerns* Environmental issues lie at the heart of the most pressing contemporary socio-economic, political and cultural questions. The role of the arts, humanities and social sciences is crucial for such issues. For instance, a historical perspective is needed to assess the ways in which human activity shapes, and is shaped by, the environment, thereby providing a contextual framework within which the scientific disciplines can operate with more than theoretical relevance.

The AHRB Research Centre for Environmental History, which was established in October 2002 at the Universities of Stirling and St Andrews, focuses on two core themes: waste management and waste lands. The former Minister for the Environment, Michael Meacher, described dealing with the UK's increasing piles of rubbish as 'one of the biggest challenges facing the UK'. The current crisis in agriculture exacerbated by foot and mouth has opened up the debate on whether or not the countryside itself is going to waste. The work of the Centre has a direct impact on the evaluation of conservation issues, in terms of both 'built' and 'natural' environments. It informs analysis of landscape in both its supposed 'natural' and 'designed' manifestations and provides historical depth as well as cross-disciplinary breath to such analysis. As the medium for

exploration of how current conditions have been achieved and for modelling past regimes, it permits informed testing of scenarios for regeneration.

**102.** This inter-disciplinary collaboration can crucially enhance the knowledge base of a long accepted public policy and achieved the shift to one that answers the requirements of both scientific accuracy and social needs.

From its foundation in 1919 to the 1980s the Forestry Commission pursued a policy of planting coniferous forest to expand the national stock of woodland as rapidly, productively and profitably as possible. This policy sometimes conflicted with ecological prudence in its interaction with both natural conditions and human factors and gave rise to concern for its detrimental impact on social appreciation and effective management of the landscape. Professor Oliver Rackham wrote two books in the 1970s which interwove historical, archaeological and ecological method. His work was instrumental in shifting policy away from this narrow and self-defeating concentration on short-term productivity. Expertise in the humanities made possible what ecologists alone could not have achieved, a clear understanding of why, how, and where broadleaf woodlands might be preserved and reinstated. Under parliamentary and governmental scrutiny, the Forestry Commission accepted the need for a policy that would provide benefits across the widest range of users, and put in place a sustainable forest economy. Targets and codes of practice for sensitive restoration of traditional coppice-forestry were adopted by private as well as public bodies.

103. There is growing evidence that much of the most innovative and ground-breaking research is likely to occur at the interfaces between the disciplines. Many scientists are seeing the value of applying the distinctive approaches used by arts, humanities and social science researchers to their own fields. One example of this is the involvement of philosophers and logicians in the fields of Cognitive Science and Artificial Intelligence. Philosophers' insights into thinking and reasoning are now seen as essential contributions to increased understanding in these fields.

### **Public Policy and Debate**

## How do the arts, humanities and social sciences contribute to public policy and debate?

#### **Summary of main findings:**

#### The arts, humanities and social sciences

- inform public debate on a great range of problems and issues, by initiating enquiry, providing relevant evidence and promoting critical discussion
- impact directly on government departments as diverse as the Home Office, the Treasury, the Department of Media, Culture and Sport, the Department of Trade and Industry and the Department for Work and Pensions
- provide a relevant background and training for leadership of public enquiries, and key membership of various non-government organisations, agencies and semi-public bodies.

#### Informing public debate

- 104. The arts, humanities and social sciences inform decision-making at every level. For instance, many academics within these disciplines have expertise and perspectives that are of interest and value to politicians and ministers who are otherwise dependent on their own officials or immediate circle. An example here is the contribution made by Professor Sir Adam Roberts to the study and practice of international relations. His contributions over the past few years include (inter alia):
  - Memorandum (4 December 2001) for the House of Commons Foreign Affairs Committee Inquiry into Foreign Policy Aspects of the War Against Terrorism.<sup>37</sup>
  - Memorandum (28 October 2002) to the House of Commons Defence Committee Inquiry into the New Chapter to the Strategic Defence Review. A further memorandum (31 March 2003) was sent to the Committee at its request.
  - Briefing for new Deputy UK Ambassador to the United Nations, 22 July 2002.
- **105.** Such contributions are not limited to the politics and policies of the UK. For instance, Professor Helen Wallace is (along with six economists) a member of a High Level Group for the European Commission on the future of the European economy.

<sup>37</sup> Published in its report, Foreign Policy Aspects of the War Against Terrorism, Seventh Report of the Session 2001–02. References to Sir Adam Roberts' evidence in the body of the report are at paragraphs 132–4 and the text of his evidence is at pp. EV 84–7.

106. Academics in the arts, humanities and social sciences also play an important role in helping to raise public awareness of the challenges facing today's society, sometimes to the extent of pioneering processes or founding organisations.

INFORM<sup>38</sup> (Information Network Focus on Religious Movements), founded by the sociologist Professor Eileen Barker, provides information that is as objective and up-to-date as possible. It was set up in response to concerns about the unnecessary suffering that had resulted from ignorance and/or misinformation about the new religions. INFORM receives enquiries from relatives of members, ex-members, the movements themselves; the media; British and overseas government agencies (local and central); the police and various social services; academic researchers; students; lawyers; the medical profession and hundreds of other individuals. The contribution of social sciences to the network of specialists and experts has meant that enquirers can get reliable information, which has prevented some of the unfortunate reactions to minority religions that have occurred elsewhere in the world. The network alerts people to potential problems; as well as providing advice and reassurance.

#### Informing government policies

- **107.** Research in the arts, humanities and social sciences has a direct impact on government policy concerning health, family, education, crime and punishment, environment, transport and economic development. Subjects within the arts and humanities often frame the context within which social science (and other) investigations take place involving questions of ethics, political theory, history and the interpretation of past and present cultures.
- **108.** Subjects apparently removed from modern life can nevertheless make a substantial contribution to contemporary understanding. Medieval history, for example, is a canvas for the exploration of long-term social and economic change; the paths that different regions of the world had to tread to arrive at major economic transformations of capitalism are incomprehensible without an understanding of the other regions of the world which did not move in this direction. Recent comparative analyses which provide instructive lessons are Christopher Dyer, *Making a Living in the Middle Ages: the People of Britain 850–1520* (Yale 2002), and Michael McCormick, *Origins of the European Economy: Communications and Commerce, A.D. 300–900* (CUP 2002).
- 109. Historical research can play a part in correcting senior errors of contemporary understanding, as in May 2002 when historical demographers showed that Western governments were seriously underestimating how long their citizens were likely to live, with major implications for health, welfare and pension systems. Andrew Dilnot, former Director of the Institute of Fiscal Studies has said:

<sup>38</sup> It is supported by the Home Office, the mainstream churches and various other bodies (though not the religions about which it gives information).

"Studying past experience of policy and policy-making provides insight into the practical questions of what does and doesn't work, and into the conceptual and theoretical underpinnings of policy. To ignore the past would be as foolish as to ignore the current experiences of other countries."

- 110. The social sciences have as their explicit agenda the understanding of patterns of social change with respect to both social life and social and organisational aspects of the economy. This involves the study both of changing attitudes, as in the Census, the Labour Force Survey, the General Household Survey and NOMIS (National On-line Manpower Information Service), and changing social formations and the impact in relation to them on social and economic decision-making and policy development. Recent examples are the study of change in the context of families, racial and ethnic minorities, and women at work.
- 111. It is recognised that the best policy making is that informed by evidence, where its impact has been evaluated and subjected to independent scrutiny. Some of the government's most successful recent initiatives the Sure Start initiative, aimed at helping to develop young children from deprived areas, the New Deal programme for the unemployed, and policies to tackle child poverty were inspired by such research in the social sciences.
- 112. The full impact of research in the arts, humanities and social sciences can become manifest more quickly than some would assume. A recent case is the work by three economists, Professors Layard, Nickell and Jackman, on the causes and cures of unemployment that underpinned the thinking behind the New Deal in Britain, and also influenced the employment policies of other countries.

Twenty years ago many people considered high unemployment inevitable, seeing it either as a product of technology or as a result of a growing work force. Even in 1985, the main economic models in Britain gave no coherent account of how unemployment was determined. Professors Layard and Nickell began developing a model in the 1980s to understand where the problem actually lay. In identifying the key supply-side influences two general points became clear. First, a bigger labour force does not of itself increase unemployment – jobs do respond, so that unemployment cannot be blamed for example on immigration. Second, higher productivity does not increase unemployment – technology is not the main problem. Layard and Nickell focused on vacancies. Their findings showed that the UK was failing to mobilise the unemployed to fill the jobs which were available, and that high inflation resulted from unfilled vacancies. The 'mobilisation failure' was traced to changes in the way unemployed people were treated at benefit offices and job centres.

During the 1990s Professors Layard, Nickell and Jackman's analysis of the causes and cures of unemployment was increasingly accepted by European policy-makers. In the European countries that adopted this approach (Denmark, Holland, Britain), unemployment fell sharply from 1993 and has now reached its 1975 level. This was not simply due to extra

demand, but depended on supply-side changes, which kept vacancies at relatively low levels. In those countries that did not (France, Germany, Belgium), unemployment is still double its 1975 level – even though vacancies remain higher than they were in 1975.

- 113. The way in which the arts, humanities and social sciences usefully inform public policy is revealed in this report by examining the policies, objectives and measures of five different government departments: the Home Office, the Department for Work and Pensions, the Department of Trade and Industry, Her Majesty's Treasury and the Department of Culture, Media and Sport. All five rely on a broad range of subjects within the arts, humanities and social sciences to provide the knowledge and evidence relevant to their objectives. Most departments have in-house analysts whose role is to undertake research, commission research and maintain close contact with the wider research community. No department relies entirely on the skills of its own analysts: all have budgets for commissioning external research and so utilise the skills of the wider academic and consultancy professions.
- 114. The ways in which the arts, humanities and social sciences contribute to policy vary greatly. Sometimes, these subjects will provide answers to very specific questions through, for example, modelling or evaluations. In other cases they may map and monitor changing social trends, as in the use of the new socio-economic categories in the 2001 Population Census in the UK, which had been devised by the ESRC's Longitudinal Studies Centre following its analysis of the terms and conditions of employment. They may also provide comparative or benchmarking knowledge as with the DTI's competitiveness review. In addition, the arts, humanities and social sciences play an important role in providing independent scrutiny of government initiatives and developments.
- 115. Thus, concepts developed and researched by the arts, humanities and social sciences inform objectives. Such research also helps to characterise policy issues analysing the cultural industries, industrial innovation, macro-economic management. Some policy measures have been developed with the help of arts, humanities and social science based knowledge. And evaluation of policy and programme outcomes is a major component of departmental research.
- **116.** In this way, some separate elements of policy development and delivery can be distinguished, highlighting those elements of public policy where arts, humanities and social science knowledge and skills can and do contribute:
  - objectives expressive of political ideologies and values
  - issues appearing on policy agendas and which need to be identified, understood and characterised ...
  - measures which can be used to address those issues
  - agents organisations which deploy the measures
  - outcomes changes which succeed (or not) in ameliorating the problematic issue.

The arts, humanities and social sciences also examine the ways in which the public sector is managed. Issues such as the effective delivery of public services in areas like health and education are central to all levels of government.

The Home Office The Home Office has seven objectives that are concerned with crime prevention, criminal justice, drug abuse, immigration control, equal opportunities and voluntary action. Underpinning these objectives is a concern with such fundamental concepts as: civil society, social capital, citizenship and public order. For instance, the concept of social capital has been explored by the social sciences since the 1920s, and is now increasingly incorporated into policy thinking as shown by a recent Cabinet Office report (Performance and Innovation Unit, 2002). This noted current and potential policies which could promote the beneficial accumulation of social capital, including:

- at the individual level the new Connexions service providing advice and mentoring to 13–19 year olds, support for families and parenting as in the Sure Start programme, encouragement to volunteering;
- at the community level community ownership (legal and psychological) of public assets, urban design to foster neighbourliness, the planned introduction of citizenship into the school curriculum.

Department for Work and Pensions The Department has four objectives, three of which focus respectively on children, people of working age, and pensioners, and the fourth on service delivery. As with the Home Office, research in the arts, humanities and social sciences has helped to frame the concepts that inform policy. The very creation of the Department for Work and Pensions was expressive of the thinking that welfare payments should be offered not just as compensation for misfortune, but, wherever possible, as work incentives. It is known as the concept of 'welfare to work', and involved a reappraisal of the role of paid work – not just as a necessary contribution of labour to enterprise and a source of personal income, but also a foundation of individual self-esteem.

Department of Trade and Industry (DTI) The DTI has four objectives – one expresses its responsibility for the public support of science and technology (including at present the social sciences and prospectively the arts and humanities); the other three reflect long-standing policy concerns with the performance of UK business. Its policy over the last decade or more has focused on improving the productivity of UK business that has consistently lagged behind that of major competitors. After assessing research findings from the arts, humanities and social sciences, it has developed five key areas of action to improve productivity performance: investment in plant, machinery and infrastructure; human capital; innovation; competition; and enterprise. All five of these concepts have been long and thoroughly researched by the arts, humanities and social sciences. As a result of their work on innovation, there has been a reconceptualisation of this concept, moving away from the traditional idea of a linear process towards a more interactive process in which products or services are improved in ways stimulated by changes in market demand, technological options and, increasingly, regulatory requirements. This has led to a much broader approach to innovation policy in the DTI. The Department is currently developing an action plan for innovation, which builds on research into its drivers, its potential obstacles as well as the success or failure of existing policies both at home and overseas.

Her Majesty's Treasury (HMT) The Department's prime concern is the macroeconomy, but the Treasury has also declared commitments to the quality of public services, the regulation of financial services and world poverty. Of all the fields of public policy, macro-economic management is probably unique in the sophistication of the theory sustaining it. The theory has been operationalised in a number of econometric models for analysis, forecasting and evaluation of policy options, including models developed by HMT, the Bank of England and academic centres at the National Institute of Economic and Social Research, the London Business School, and the Universities of Cambridge, Warwick, Liverpool and Glasgow. The Economic and Social Research Council invested heavily and over a long period in the development of macro-economic modelling and put the UK at the forefront in this field.

The Department of Culture, Media and Sport (DCMS) The DCMS was established in 1998 in recognition of the growing social and economic importance of cultural activities and the increasing role of public policy in promoting and regulating them. Its aim is to improve the quality of life for all through cultural and sporting activities, to support the pursuit of excellence and to champion the tourism, creative and leisure industries. The DCMS has drawn on the skills and knowledge in the arts, humanities and social sciences to inform its policy work, and has been actively strengthening its connections with other funders of research, notably the AHRB and the ESRC, and with researchers working in its field who can contribute to its knowledge needs.

### Some examples of the ways in which the arts, humanities and social sciences have helped the government to address specific concerns and objectives

- 117. Crime Crime is both a social and an economic problem. The social sciences increase understanding of the factors influencing crime, and articulate ways in which they might be combated. Two scholars whose work has helped bring about major reforms in the criminal justice system are Dr Roger Hood and Professor Joanne Shapley. Dr Hood's work demonstrated the existence of racial bias in prison sentencing, whilst Professor Shapley's work placed new emphasis on the experience of the victims of crime, instead of the traditional focus on offenders. Research undertaken by the ESRC's Violence Research Programme on the analysis of crime reports has helped the Metropolitan Police Force to decide which 999 calls about incidents of domestic violence required the speediest response. The research undertaken by the psychologist, Professor Graham Davies, has influenced policy on the way in which child witnesses are interviewed.
- 118. The contributions of the arts and humanities in the prevention and deterrence of anti-social behaviour can be very direct. For example, the Design Against Crime Research programme (undertaken by the Universities of Salford and Sheffield Hallam, supported by the Home Office, the DTI and the Design Council) aims to use 'the creative, innovative and holistic nature of the design process to address crime reduction and related social issues', to create

- a safer environment, improved business performance and social inclusion. It promotes best practice in the field and has encouraged a range of designled initiatives from cutting in- store crime in a major supermarket chain to reducing vandalism through high quality design in schools and bus shelters which have direct economic impacts.
- 119. Ageing Most countries now recognise that there is a clear need to reform their pensions system in the context of an ageing population. Figures produced for the OECD as a whole estimate that the dependence ratio of older people (i.e. those aged 65 and over as a proportion of those aged 20–64) will rise from the current figure of 22 per cent to 46 per cent in 2050. In view of this, it will be essential to have as many people working as possible - young people, women and especially older workers. This will entail a fundamental shift in attitudes. Businesses will have to change the way in which they view older workers, and be encouraged to invest in their training and adapt working hours and conditions to fit their needs. Similarly, older workers will have to adapt to the idea of longer working lives, possibly undertaking several different jobs towards the end of their careers. Steps will also have to be taken to ensure that older workers have real employment prospects, so that they are encouraged to stay in employment for extended periods. Academics in demography, sociology, social policy, law, education, business studies and economics advise governments on the reform of their pension systems. In the UK, the ESRC, the EPSRC, the MRC and the BBSRC have jointly established an interdisciplinary initiative to advance the understanding of the dynamics of ageing, and the influences shaping them (biomedical, clinical, technological, economic, social and behavioural). It also intends to harness inputs from a wide range of disciplines to reveal the dynamic interplay between ageing individuals and their changing technological, social and physical environments – local, national and global.
- **120.** *Social cohesion and inclusion* Building social capital and reducing social exclusion are now seen as fundamentally important policy agendas. Social inclusion has been recognised by the European Union, through its Framework 6 Programme, as important in the development of the European Knowledge-based Society. At the national level, the government has created the Special Exclusion Unit, now a part of the Office of the Deputy Prime Minister. Research in the arts, humanities and social sciences advances our understanding of the factors influencing social change. An example of an area where research has made an immediate contribution is the impact that an event organised by the ESRC Centre for Analysis of Social Exclusion (CASE)<sup>39</sup> with the Treasury in late 1998 on 'Persistent poverty and lifetime inequality' had on subsequent government policy. This initiative was later widely quoted by a Treasury paper that launched the government's major initiatives against childhood poverty, *Tackling Poverty and Extending Opportunity*.
- **121.** It has been argued that there is a global revolution going on in how we think of ourselves and how we form ties and connections with others. <sup>40</sup> Politicians routinely raise concerns that have to do with the building blocks of society: family, faith, community, ethnicity and so on. A wide range of subjects in the arts, humanities and social sciences can help in addressing such concerns.

<sup>39</sup> CASE is located at the LSE.

<sup>40</sup> Comments made by Professor A Giddens in Reith Lectures, 1999.

Understanding of human society has been opened up in recent years by whole new areas of academic enquiry: notably through cultural and communication studies (with the work of Professors Raymond Williams, Stuart Hall, Angela McRobbie and The Glasgow Media Group), women's, gender and gay studies (Sheila Rowbotham, Juliet Mitchell, Lynne Segal, Jeffrey Weeks, Alan Sinfield and Jonathan Dollimore), film and television studies (Laura Mulvey, Richard Dyer, Thomas Elsaesser, Charlotte Brunsdon, Steve Neale) and critical theory (Terry Eagleton, Catherine Belsey, Raman Selden). All these have helped us define, understand and analyse such phenomena as postmodernism, youth cultures, race and class issues, gay culture and the AIDS crisis, masculinity and femininity, domestic labour, the history and significance of spectatorship.

Professor Raymond Williams is well known for pioneering the study of popular culture and the media. His work widened the accepted definitions of literature and culture, and helped to establish media studies as a recognised subject. His publication, *Culture and Society*, which was published in 1958 opened up debate in the field, and challenged many of the pre-existing ideas of the time about popular culture and the perceived crisis of values that threatened the moral and cultural fabric of society.

The ESRC Research Group on Care, Values and the Future of Welfare (CAVA) at the University of Leeds was set up to examine changes in parenting and partnering and the implications for these for future social policies. It brings together experts from social policy, sociology, geography, psychology and socio-legal studies. Whilst there is a view that associates the social changes that have taken place since 1945 in the family unit (i.e. increases in cohabitation, divorce, single and step-parenthood and so on) with a 'loss of moral values' or with an increase in self-seeking 'individualism, CAVA's research findings have shown that people, in general, demonstrate moral commitments in weighing up their own, their partner's and their children's needs. In addition, its work on people's 'values' provides important indicators as to the principles which sustain citizenship. These findings have helped to advance our understanding of the diversity of people's lives and the implications of these for health, education, welfare and legal practitioners and policy-makers.

The lawyer, Mr John Eekelaar, has a particular interest in the socio-legal approach to family law, and has published influential work on family law and social policy. He is much in demand by policy-makers both in the UK (where he has carried out influential work for the Lord Chancellor's Department and other departments) and overseas (his work for the Commonwealth Secretariat on International Conventions dealing with Child Abduction being one example).

**122.** Regeneration of urban and rural areas The arts and the social sciences have an important role to play in developing and enhancing the physical and cultural environment. The social sciences can, for example, help us to understand the

factors that support a flourishing region or locale, and the arts and humanities, for example, can contribute directly to area development. A wide range of subjects thereby make major contributions. For instance, economics helps to foster understanding of city and regional economies; many fields of geography address questions such as urban structures and the location of facilities; and interdisciplinary fields such as health and transport studies are clearly important. Similarly, arts and humanities projects can aid the regeneration process by providing residents with an improved perception of, and pride in, their neighbourhoods, as well as by enhancing the relationship between culture and community.

- **123.** The social sciences have contributed extensively to the development of urban policy. For instance, the Government's White Paper on urban policy, *Our Towns and Cities*, drew extensively on research from the ESRC's Cities: Competitiveness and Cohesion Research Programme. And the ESRC Centre for Neighbourhood Renewal is reviewing and developing evidence on local social processes and neighbourhood change, in order to inform urban policy and neighbourhood renewal programmes in England, Wales and Scotland.
- 124. There is much evidence of the role of subjects such as geography, demography, sociology and economics are important in achieving an understanding of how cities and regions work. Approximately 80 per cent of the UK's population live in urban areas. Their quality of life will be influenced by the way in which physical structures relate to the social structures of cities, as well as the quality of key services like education, health care, policing, housing, transport and communication networks. The expertise of demographers, economists and geographers are vital to the rigorous analysis of where people live, work and shop; where organisations are located and how they are connected to their supply networks. The understanding of all these interactions is fundamental to understanding how cities and regions work. This knowledge is used in a variety of planning and policy contexts.

In the 1950s and 1960s research developed transport flow models in response to growing congestion in American cities in the 1950s. The initial problem, however, was to model travel for a variety of purposes for a given land-use structure, to aid the planning of future network development. However, the models used were not very effective predictors and ad hoc adjustments had to be made. Sir Alan Wilson's research overcame this problem and led to the notion of a family of spatial interaction models which facilitated model building in a wide variety of circumstances, and helped to provide an understanding of the workings and development of cities and regions. In addition, through model-based research, it proved possible to introduce a proper measure of a catchment population for a facility. In this way, a set of effective delivery indicators could be generated to evaluate service provision. These indicators were applicable in both the private and public sectors. Predicted consumer use at each location allows commercial profitability to be estimated. In terms of public utility, indicators such as hospital beds per head of population can be generated. The models have had extensive and important application in many sectors: transport, retail sectors, water, energy, health, education, and ports.

- **125.** Other examples of the ways in which the social sciences have influenced government planning include the work of:
  - Sir Peter Hall on regional strategies, London development and transport strategy
  - Professor Brian Robson on urban deprivation indices
  - Professor Peter Lloyd on micro credit institutions
  - Professor Michael Parkinson on partnerships
  - Professor John Goddard on IT in the regional economy.

Following the publication of revised household projections showing that an additional 4.4 million households would be required in England by 2016, the government was faced with the problem of how this need should be met. But the government seemed unwilling to recognise the scale of the effort needed and the degree to which housing production was falling short of need. Through a series of lectures and papers <sup>41</sup> and in conference presentations, Sir Peter Hall argued for planned strategic provision for greenfield housing in sustainable urban clusters along selected major transport corridors radiating from London. He succeeded in influencing the government to develop a policy of sustainable greenfield development on selected transport corridors in Southern England, and the policy document, *Sustainable Communities* (2003), produced by the Office of the Deputy Prime Minister largely accepted the case for this development in three major corridors (M1/A6, M11 and A2/M2 Thames Gateway).

126. Cultural projects can play an important role in enabling people from marginalised or disadvantaged communities to gain access to education. One example is *Arts and the Learning City*, a collaborative project between arts organisations, educational institutions, and London Arts involving many diverse arts organisations and artists across London. Another is the Art of Regeneration project which works with various institutions (including the Education Department of the Royal National Theatre, Goldsmiths College and the University of Surrey, Roehampton), in order to explore ways in which drama and theatre in particular can be used to build self-esteem and raise personal and social skills in at risk groups of young people.

#### Informing policy at a regional level

127. The regional dimension to public policy is important. Devolution has resulted in changes in which the arts, humanities and social sciences are used to inform policy in the different countries and regions that make up the United Kingdom. In the regions there is often a closer relationship between the Universities and the policy makers, yielding particularly clear evidence of the direct connection between research and the policy outcome.

<sup>41</sup> These lectures and papers were summarised and brought together in the author's *Sociable Cities* (co-authored with Colin Ward, 1998).

The Research Institute of Irish and Scottish Studies focuses on the history, literatures and languages and cultures of the two countries. The Institute regularly receives approaches from the Northern Ireland, the Irish governments and the Scottish executive, and Institute staff are asked to participate in 'think-tank' discussions in these countries. Institute staff have also been involved, inter alia, in the Secretary of State for Scotland's initiative to connect with key and influential members of the Scottish diaspora in North America, Australasia and S.E. Asia. In 2001, the Institute's Director, Professor Devine, was awarded the Royal Gold Medal of the Royal Society of Edinburgh. The citation specifically referred to the importance of the Institute's work for the Northern Ireland 'Peace Process'.

Professor Anne Power's long-term programme of research on the management of social housing led to her being invited to chair the Independent Commission on the Future of Council Housing in Birmingham. The Commission drew extensively on research evidence to make radical recommendations for decentralization of housing management and adoption of varied delivery organisations at local level in its 2002 report, *One Size Doesn't Fit All*. These recommendations are now being implemented by Birmingham City Council.

The Northern Ireland Social Attitude Research study is carried out through the collaboration of the University of Ulster and Queen's University, Belfast. Their annual surveys have established longitudinal trends and short-term policy evaluations. A service has been established whereby the NI Assembly, the Civil Service and community and voluntary groups can request data from the surveys on any topic covered by it. Briefing sessions are held with policy-makers to discuss social trends arising from the data and training sessions are held with civil servants in techniques of secondary data analysis.

#### **Public Service**

**128.** A significant number of academics in the arts, humanities and social sciences have been called upon as specialist government advisers and to lead or contribute to major national enquiries or to the work of various standing commissions. Some examples of such contributions on the part of individual scholars in the arts, humanities and social sciences are shown below.

<sup>42</sup> The Research Institute of Irish and Scottish Studies was established at the University of Aberdeen in 1999. In 2001, the Institute incorporated an important unit within the broader Institute, the AHRB Centre for Irish and Scottish Studies which combines the academic resources of staff based at Aberdeen, Trinity College, Dublin and Queen's, Belfast.

<sup>43</sup> The Royal Gold Medal of the Royal Society of Edinburgh is Scotland's highest academic accolade for 'intellectual endeavour which has had a profound influence on people's lives world-wide'.

The philosopher, Baroness Warnock, chaired the Committee of Inquiry into Human Fertilization 1982–84. The Warnock report, published in 1984, underpinned the Human Fertilization and Embryology Act of 1990. The Act, following the report's recommendations, outlawed the only form of human cloning thought feasible at the time, using embryos fertilised in vitro.

The economist, Mervyn King, has made major contributions to the understanding of investment and company financial behaviour. He is Governor of the Bank of England and is Chairman of the Monetary Policy Committee. He was previously Deputy Governor from 1998 to 2003, and Chief Economist and Executive Director from 1991.

The lawyer, Dame Brenda Hale, was appointed to the office of Lord Justice of Appeal in 1999. She is the first person appointed to the High Court bench from a primarily academic background (she was an academic at Manchester University for 18 years). As a Law Commissioner from 1984 to 1994, she was largely responsible for the conception of the remarkable example of the codifier's art which became the Children Act 1989. She is the author, inter alia, of the influential text *The Family, Law and Society*. Dame Brenda has also been recently appointed to the House of Lords as Lord of Appeal in Ordinary. She is the first woman to reach the highest court of the United Kingdom.

The sociologist, Lord Runciman, chaired the Royal Commission on Criminal Justice in England and Wales which was appointed in March 1991 and presented its Report to Parliament in July 1993. The final Government Response was published in June 1996, and the majority of the Commission's recommendations, including notably the creation of a Criminal Cases Review Commission to consider allegations of miscarriages of justice, have been successfully implemented.

The economist, Mr John Flemming, was a member from 1995 until his death in August 2003 of the Royal Commission on Environmental Pollution. His contributions to this commission were especially cited when he was appointed CBE in 2001.

Professor Julian Le Grand, an economist by training and Richard Titmuss Professor of Social Policy at the LSE, has acted as adviser to the World Bank, the European Commission, the World Health Organisation, No 10 Downing Street, and the Departments of Health and Social Security on welfare reform, health policy and social exclusion. He has recently been seconded to the Prime Minister's Strategy Unit. This Unit aims to improve Government's capacity to address strategic, cross-cutting issues and

promote innovation in the development of policy and the delivery of the Government's objectives.

The educationalist, Professor Michael Barber, has been Chief Adviser to the Prime Minister on Delivery and Head of the Prime Minister's Delivery Unit since the Unit was first established in June 2001. It was established to monitor progress on and strengthen the Government's capacity to deliver its key priorities across education, health, crime and transport. Following the Spending Review 2002, the role of the Delivery Unit was widened to include the other main domestic service delivery departments.

The philosopher of religion, Lord Sutherland of Houndwood, chaired the Royal Commission on Long Term Care of the Elderly which reported in March 1999. The majority of recommendations were accepted, but one major recommendation on the funding of personal care has been implemented only in Scotland, although accepted in principle by the Welsh and Northern Ireland Assemblies. He also chaired the Committee on Appeal Court Procedure (Scotland) which examined the implications of the Runciman Royal Commission for Scotland. The recommendations of the Committee, published in 1996, were all implemented.

The lawyer, Professor Sir Roy Goode, chaired the Pension Law Review Committee in 1992, which was set up in the wake of the Robert Maxwell scandal the government set up the Pension Law Review Committee in 1992. The Committee was established to conduct the first comprehensive review of the law and practice relating to occupational pensions. The great majority of its recommendations were adopted by the government and implemented in the Pensions Act 1995 and regulations.

# Benefits of an Education in the Arts, Humanities and Social Sciences

## What are the benefits of an academic education in the arts, humanities and social sciences?

#### **Summary of main findings:**

#### The arts, humanities and social sciences

- attract at an increasing rate highly motivated students investing in their own future
- give career benefits to individuals broadly comparable to those from other (often more expensive) subjects
- offer a very favourable social rate of return on public investment
- contribute importantly to lifelong learning needs
- enhance the lives of individuals
- assist the formation of critical minds to bear on a wide range of crucial issues, resulting in a flourishing public culture, committed to respect for knowledge and intelligent debate
- encourage values and skills which sustain participatory democracy and responsible government.

#### The place of the arts, humanities and social sciences in higher education

129. Student numbers The numbers graduating in the UK grew steadily during the 1980s and accelerated further in the following decade, more than doubling between 1989 and 1998. The recruitment of undergraduates and post-graduates to study subjects in the arts, humanities and social sciences has been buoyant. Figures drawn from HESA show that the number of first-year full-time first degree students in the arts, humanities and social sciences increased by 16 per cent in the period from 1994/95 to 2001/2002, compared to an increase for all other subjects of 8 per cent. In 2001/2002 53 per cent of all first-year full-time students were studying first degrees in the arts, humanities and social sciences.

Table 2 Numbers of first-year full-time students undertaking first degrees

	1994/95	2001/02	% change
Arts, humanities and social sciences	153,402	178,250	16
Science and Engineering	114,718	128,650	12
Total	302,296	339,145	12

Source: HESA

**130.** Similarly, figures from HESA show that the number of all first-year full-time students studying for a postgraduate qualification in the arts, humanities and social sciences rose sharply in the period from 1994/95 to 2001/2002.

1994/95 2001/02 % change Masters Research Masters Research Masters Research Arts, humanities and 20.311 3.782 36.870 5.675 81 50 social sciences Science and Technology 12,463 7,999 18 965 9.610 52 20

Table 3 Numbers of first-year full-time postgraduates

Source: HESA

It is clear that the arts, humanities and social sciences have played an important part in the drive to increase student numbers entering higher education, and reflect these young peoples' positive views on the value of an arts, humanities and social science basis for their future careers.

131. The recruitment of non-UK students in the humanities and social sciences Table 4 shows that 48 per cent of all first-year and continuing students (undergraduate and postgraduate) in 2001/2002 were studying subjects in the arts, humanities and social sciences. These disciplines attracted a significant proportion, far greater than the average, of non-UK students, suggesting that these disciplines are held in high esteem overseas. Indeed, 58 per cent of all overseas students were studying subjects in the arts, humanities and social sciences.

Table 4 The number and domicile of students in the arts, humanities and social sciences in 2001/2002

	All HE students (first-year and continuing)	UK	Other EU	Overseas
Arts, humanities and social sciences	1,003,025	866,045	47,115	88,125
Total	2,086,075	1,843,320	90,135	152,625
% total	48	47	52	58

Source: HESA data

The ability of the humanities and social sciences to attract such large numbers of overseas students to study in the UK has clear economic, social and cultural benefits, some of them of enduring significance. For instance, former overseas students will often act as 'ambassadors' for the UK once they have completed their studies and returned home, by promoting the UK in their home country and encouraging business links and trade.

**132.** *The size of the academic community* The number of academic staff, however, has not kept pace with the rise in student numbers over the last decade. Pressures on staff have increased as staff student ratios have risen steadily. Table 5 shows figures for the numbers of full and part-time academic staff in the arts, humanities and social sciences.<sup>44</sup>

<sup>44</sup> HESA collects data on the departmental cost centres in which academics are working. There are 57 departmental cost centres, of which thirteen cover subjects in the arts, humanities and social science: psychology and behavioural sciences; catering and hospitality management; geography; social studies; librarianship, communication and media studies; design and creative arts; education; language based studies; humanities; French, Spanish and German modern languages; other modern languages and archaeology. These categories are far more broadly defined than the subject categories used for student records, and cannot be broken down any further. As a result, the data will include some academics working in areas that fall outside the subject scope of the review.

Table 5 Full and part-time numbers of academic staff

	1994/95		2000/01		
	Full-time	Part-time	Full-time	Part-time	
Arts, humanities and social sciences	41,053	6,841	42,315	11,107	
Total	102,701	12,020	116,405	23,535	
% total	40	57	36	47	

Source: HESA

- 133. Figures from the OECD show that the UK's ratio of staff to students in all subjects is much lower than that of other nations such as Japan and USA, and that as a result the UK is ranked in the bottom five of the 25 OECD nations. This suggests that while teaching in the UK is very good value, there is a real risk that we will be rendering ourselves less competitive as regards quality. A recent report from the Council for Industry and Higher Education (CIHE) stated: "To ensure the UK continues to evolve a diverse range of higher education that is truly world-class while increasing participation levels requires substantial additional resources. The UK cannot continue to get world-class higher education 'on the cheap'."
- 134. The costs of teaching are much lower in the arts, humanities and social sciences compared to the sciences. Table 6 below sets out the Higher Education Funding Council's for England (HEFCE) prices for each of its four subject groups. The majority of subjects within the arts, humanities and social sciences fall within the lowest of these price groups, price group D, whilst a large number of programmes within science and technology fall within price group B.

Table 6 The cost weights and rates set by the HEFCE for teaching in 2003/04

Price group	Description	Cost weight	Rates for each price group for 2003/04
Α	The clinical stages of medicine and dentistry courses and veterinary science	4.5	£12,636
В	Laboratory-based subjects (science, pre- clinical stages of medicine and dentistry, engineering and technology)	2.0	£5,616
С	Subjects with a studio, laboratory or fieldwork element	1.5	£4,212
D	All other subjects	1.0	£2,808

Source: HESA

Again, these figures should be seen in an international context. OECD figures show that the UK spent only 0.6 per cent of GDP on the core services of higher education in 2000 against 2.26 per cent by the USA and 0.96 per cent as the mean of OECD countries.<sup>46</sup>

<sup>45</sup> The Value of Higher Education, CIHE, October 2003.

<sup>46</sup> Ibid.

#### **Career prospects**

- 135. The variety of subjects within the arts, humanities and social sciences means that different subjects will relate to employment in different ways. Graduates of subjects such as law, economics and business studies will often enter employment that has a clear and direct link to their subject of study. The starting salaries that these graduates can command are often high. For other subjects within the arts, humanities and social sciences, the link may be less direct and the transition from graduation to employment may be longer and more complex. But graduates with a non-occupation-specific degree are suitable for a wide variety of employment and are less pressurised to find work that exactly fits their training because they have skills that are applicable to a large number of different sectors.
- 136. Research has shown that UK graduates in 'non-vocational' subjects in the arts, humanities and social sciences have much better prospects than their counterparts in other EU countries because UK employers recognise that these graduates have developed skills that are applicable to a wide variety of careers. The Institute for Employment Studies has also found evidence of an increase in and broadening of the skills needed within occupations. It believes that employers are looking for a flexible and responsive workforce which can meet often ill-defined challenges and customer needs, and that employers will increasingly seek to recruit people with the right non-subject-based attributes. Analyses of graduate vacancies show that around 50 per cent of all graduate jobs do not specify a degree subject.<sup>47</sup>
- 137. It has repeatedly been stressed that graduates have to be able to articulate their skills and aptitudes to employers. It has also been argued that academics in many subjects falling within the arts, humanities and social sciences are not always aware of the extent to which the skills that graduates gain whilst studying for their degree are valued by employers. A pilot study undertaken last year by the CIHE examined employers' perceptions of such skills in three areas (English; Engineering; Hospitality, Tourism and Sport), and the extent to which these were reflected in the benchmark statements<sup>48</sup> published by the QAA. The study<sup>49</sup> showed that a number of the respondents believed that studying English developed qualities that were not listed in the benchmarking statements: persuasiveness, conceptual thinking and confidence.
- **138.** Graduates in the arts, humanities and social sciences enter very diverse employment sectors. A recent report<sup>50</sup> found that among all the graduates with first degrees in 1999 and 2000, 20 per cent of humanities graduates were working in education, 19 per cent in finance and real estate, 11 per cent in public administration, and 10 per cent in publishing, media and the cultural

<sup>47</sup> Analysis of advertisements in the graduate vacancy publication *Prospects Today*.

<sup>48</sup> Benchmarking groups were established for individual subjects, to outline the learning outcomes of first degrees in specific subjects. The statements represent general expectations about the standards for the award of qualifications at a given level. The Quality Assurance Agency (QAA) has published 43 benchmark statements. The benchmarking groups have also identified subject and generic skills that they expected graduates to have obtained during their studies.

<sup>49</sup> CIHE extracted the competences outlined in the benchmark statements for these three subjects, and it sought the views of its members on the extent to which they agreed with the skills identified by the benchmarking groups. The CIHE received responses from 26 of its employer members who between them typically recruit around 6,000 graduates a year.

<sup>50</sup> Report by Sin Yi Cheung on graduate employability, 2001.

- services sector. 25 per cent of social science graduates were working in health care and social work, 22 per cent were in finance and real estate, 14 per cent in public administration and 11 per cent in education.
- 139. It is, however, inherently difficult to assess the outcomes of increasingly diverse programmes and institutions of higher education. Degrees relate to employment in different ways. As noted above (see paragraph 136), it may take longer for graduates with less obviously vocational degrees to take up graduate level jobs or they may have an initial period of employment after graduation. In addition, both short and longer-term changes in the economic climate can affect the demand for graduates in specific areas.
- 140. Most of the data on graduate employment are collected six months after graduation. But these data are not good indicators of long-term prospects. Studies of long-term career paths tend to show a convergence in the levels of occupational attainment obtained by all graduates regardless of subject studied. For example, Figure 1 shows that the occupational attainment of graduates in the humanities, the social sciences and the sciences is not markedly dissimilar.

40 Humanities 35 Social sciences 30 Sciences 25 20 5 0 Intermediate Self employed **Employers** Professionals Junior manua non-manual workers workers

Figure 1 Socio-economic groups of graduates in 1999–2000

Source: Report by Sin Yi Cheung on the Labour market performance of humanities and social science graduates

141. It may take a little time for graduates in some subjects to establish themselves in their fields. HESA's first destination statistics may be deceptive when they reveal that the number of people who could earn a living as writers, artists, designers, musicians is static, and that current graduates are not fully employed. Several longitudinal destination studies of the careers of graduates in art and design and music have shown that in the longer run a high proportion establish careers in these fields. One longitudinal destination study <sup>51</sup> conducted by fifteen art and design institutions found that after two years 80 per cent of the cohort surveyed had established themselves in their chosen field. Two-thirds worked for small to medium enterprises, with half involved at some point in a form of self-employment, including freelance and project contracted work, as well as business start-up which often created employment opportunities for others.

<sup>51</sup> Blackwell A and Harvey L, Destinations and Reflections: careers of British art, craft and design graduates. Birmingham: University for Central England, 1999.

142. Graduates in the arts, humanities and social sciences achieve leading roles in public life. History, for example, is the third most popular subject studied by the main board directors of the FTSE top 100 companies. Currently, seventeen of the twenty-one Cabinet Ministers hold degrees in subjects falling wholly within the arts, humanities and social sciences. Dr John Reid who has a PhD in History and is now Secretary of State for Health, formerly Northern Ireland Secretary, has been quoted as saying, when he was in Northern Ireland, that History presented a context and a perspective on one of the longest-running conflicts in European history - 'if you have some interest in the history of Ireland, it certainly helps you to appreciate why some of the present problems seem intractable to those on the outside'. Indeed, historians in this field such as Professor Roy Foster, Professor Marianne Elliott and Professor Paul Bew have sought to show the nuance and uncertainty of much that had previously been taken as predetermined in the Anglo-Irish relationship, and the points at which things could have gone differently: also, the immobilisation into national myth of situations that were, at the time, fluid, and the way that contingency, muddle and ineptness were often represented later as deliberate malevolence.

#### The financial benefits for the individual

- 143. The report published in October 2003 by the CIHE, The Value of Higher Education, reported that OECD figures<sup>52</sup> showed that UK graduates enjoyed the highest financial returns of any OECD country. The value of an arts, humanities and social science degree is considerable both to the individual as well as to society. We recognise that measuring this is difficult. Care has to be taken when considering the findings of research into graduate earnings. Certain professions, such as teaching and nursing, are not known for high levels of pay. It should also be remembered that financial advantage is not the only or main reward associated with graduate employment. Expectations of employment with regard to salary vary according to the subject, gender and type of institution. For example, the proportion of education graduates who believed that their degree had enabled them to earn a good income was much higher than the comparable proportions for those who had graduated in maths and computing, engineering and medicine. 53 There is also a direct link between gender and earnings, with men consistently earning more than women, regardless of the subject studied. A high proportion of students in the humanities and social sciences are female: in 1999/2000, 62 per cent of all first-year full time students on first degree programmes in languages, humanities, social, economic and political studies, and law were female.
- 144. The reviewing committee considered two analyses on the financial and the social rates of return on a degree qualification.<sup>54</sup> The first the financial rates of return to the individual measured the gross hourly earnings gap in percentage form. The second the social rates of return measured the real rate of return for society on its financial investment in different degree subjects. The findings show that the differential between the financial and social rates of return for graduates in the sciences as compared to those in the humanities and social sciences is minor.

<sup>52</sup> Education at a Glance, OECD, 2002.

<sup>&</sup>lt;sup>53</sup> A finding of Moving On, Graduate careers three years after graduation.

<sup>&</sup>lt;sup>54</sup> Professor Stephen Nickell, FBA, provided the two analyses on the financial and social rates of return.

- 145. Financial rates of return The aim of this kind of analysis is to compare the earnings of individuals with degrees with the earnings of 'similar' individuals with 2+ A levels but without a degree. The extent to which the former exceeds the latter is then taken to be the 'consequence' of possessing a degree. Much research has been undertaken in order to ascertain whether this method overstates the 'true' consequences because people who pass their A levels and go on to university may be, on average, cleverer than those who pass their A levels but do not proceed to higher education. By and large, the conclusion of this research is that the method described does not overstate the 'true' returns.
- **146.** *Some earnings gaps* These are based on regressions undertaken with UK Labour Force Survey data for England and Wales, 1993–99. The samples consist of those with 2+ A levels with controls for marital status, age, age<sup>2</sup>, race, union membership, health and region. Degrees have been divided into two main groups, science (maths, natural science, engineering) and humanities/social science (accountancy, business, economics, humanities, languages, law, other social sciences). Other subjects controlled for are medicine, nursing, architecture, education and other. The results are in Table 7.

Table 7 Percentage earnings gaps

Degree subject	Women	Men	
Science	41	32	
Humanities/Social sciences	39	26	

Note: These are the gaps relative to those with 2+ A levels. They are reasonably precisely estimated, the standard errors being around 4.

147. Women with a science degree will, on average, earn 41 per cent more, per hour worked, than a woman with 2+ A levels but no degree, controlling for the list of variables reported above, and the comparable figure for the humanities and social sciences is 39 per cent. The figures in Table 8 show how these numbers differ between those working in the private sector and those working in the public sector.

Table 8 Percentage earnings gaps

Degree subject	Women		Men		
	Public	Private	Public	Private	
Science	26	55	20	36	
Humanities/Social sciences	30	46	17	30	

Note: These are the gaps relative to those with 2+ A levels. They are reasonably precisely estimated, the standard errors being around 4.

148. The numbers in Tables 7 and 8 reveal that in all cases there is a substantial earnings differential between those with degrees and those with 2+ A levels. The differential is somewhat larger for men than women and substantially larger in the private sector than in the public sector, in part because conditions of service (pensions, retirement age etc) are rather better in the latter. The differential is slightly higher for those with science degrees but remains very much in the same order of magnitude.

### The economic benefits for society of an academic education in the arts, humanities and social sciences

- 149. Economic success is increasingly dependent on having a large pool of people in the workforce capable of thinking about and analysing new problems, developing creative solutions and implementing them. "Every single person in business needs the ability to change, the self confidence to learn new things and the capacity for overview ... Its breadth of vision, the ability to understand all the influences at work ... that holds the key". 55 Furthermore, the knowledge economy requires that its citizens have a broad range of knowledge. Professor Quah said: "Skilled, discerning consumers and increased levels of broad based education for encouraging improved uses of technology, for raising labour productivity, for pushing back the frontiers of science and technology are what will drive economic growth, one way or another".
- 150. The UK economy is moving from one that is based in the industrial sector to one that is dominated by the service sector: in 2000, the traditional manufacturing and agricultural production occupations accounted for less than 15 per cent of all employment. Many of the most versatile people in the economy are coming from the arts, humanities and social sciences because the skills of analysis, research and presentation acquired by graduates in the arts, humanities and social sciences can be applied in a wide variety of non-discipline-specific areas.

#### The social rates of return

- 151. The idea of a social rate of return is to capture the real rate of return on a pound invested by the government in the provision of higher education. The benefits consist of the higher pre-tax earnings accruing to graduates of the higher education system relative to those non-graduates who are eligible for higher education on leaving school (2+ A levels). These benefits include pension and national insurance costs paid by employers and take account of the differential unemployment rates faced by the two groups and the fact that non-graduates start earning three or more years earlier except for 'vacation' earnings. The costs include the direct costs of higher education provision per student adjusted for costs allocated to research and take account of wastage rates. These are differentiated by subject.
- 152. Rates of return computed on this basis are reported in Belfield et al (1997),<sup>56</sup> Appendix B, Table 1, and refer to 1985 graduates. Social rates of return by subject are reported in Table 9. The findings show that the real rate of return is well above the risk-free real borrowing rate faced by either the government or households (on secured debt) which is of the order of 3 or 4 per cent. The social rates of return also differ very little across subjects, indicating that the lower earnings gap generated by a humanities degree relative to an engineering degree, for example, is effectively offset by its lower cost.

<sup>55</sup> Sir John Harvey Jones quoted in *All Our Futures, Creativity, Culture and Education*, National Advisory Council on Creative Education, 2000.

<sup>56</sup> Belfield C R, Bullock A, Chevalier A N, Fielding A, Sibert W S and Thomas H R, *Mapping the Careers of Highly Qualified Workers*, HEFCE Research Series, University of Birmingham, 1997.

Degree subject	Social rate of return	
Medicine	10.0	
Science	9.3	
Engineering	10.5	
Social sciences	10.3	
Humanities	9.6	

Table 9 Social real rates of return (%), by subject

Notes: (i) The data are taken from the HEFCE survey of 1985 graduates augmented by the General Household Survey.

### The role played by the arts, humanities and social sciences in the promotion of lifelong learning

- 153. Lifelong learning is crucial for a productive society. Government has identified it as a key objective. The arts, humanities and social sciences have an important role to play by encouraging the acquisition of skills and personal development that contribute to the developing cultural life of the nation. The White Paper on Higher Education stated that "Lifelong learning implies a fundamental shift from a 'once in a lifetime' approach to higher education to one of educational progression linked to a process of continuous personal and professional development". It is now recognised that adults should be enabled to return periodically to learning throughout their lifetimes, if the challenges of the knowledge society are to be met. Furthermore, recent changes in the pattern of professional employment and retirement have meant that the UK has a younger retired population, many in their early to mid-50s, as physically and mentally vigorous as those in full employment. All the predictions for demographic change in the UK point to a significant growth in the older population and a decline in the younger population. The Henley Centre predicts that the age groups 45–54 and 55 –64 will increase in the period from 2000 to 2010 by 17.8% and 28% respectively.
- 154. The arts, humanities and social sciences within higher education play an important role in sustaining the lifelong learning needs of individuals, professional groups and employers through the provision of a range of Continuing Professional Development (CPD) programmes. For example, Birkbeck's School of Economics, Mathematics and Statistics provides tailor-made training to meet the needs of staff at HM Treasury. Topics included markets in action, consumer choice, information problems, risk and uncertainty and so on. It has also provided bespoke training for staff at the Governmental Department for International Development (DFID), HM Customs and Excise and the Bank of England.
- 155. A high proportion of mature students undertake academic qualifications in the arts, humanities and social sciences. Figures from UCAS for 2002 entry show that 54 per cent of all applicants aged 30 and over wanted to undertake an undergraduate qualification in the arts, humanities and social sciences. Similarly, data from the DfES on the subject of GCSE and GCE A level qualifications undertaken by mature people show that 70 per cent of them were in the arts, humanities and social sciences. The demand is also

<sup>(</sup>ii) Graduates are assumed to have a 4% unemployment rate and to work 10 weeks per year when at university at 80% of the non-graduate wage. Non-graduates are assumed to have an 8% unemployment rate.

illustrated by the fact that subjects such as art, history, literature, music, cultural studies, the performing arts and archaeology have become increasingly popular with the media, particularly television, as well as film and theatre.

The Open University has a long-standing relationship with the BBC. In November 2002, the two organisations signed their fifth agreement which aimed to expand the university's general educational presence on peak time BBC TV, marking a move away from the tradition of broadcasting specific course programmes for OU students towards inspiring a wider general public to learn. The arts and humanities are central to OU programming. For example, the series *Renaissance Secrets* was broadcast at peak time and attracted audiences up to 3 million.

156. These activities contribute to the nation's social and economic well-being in a variety of ways. Recent findings have drawn attention to the health benefits of continued learning through life, especially in the later years, and point up the positive effects for quality of life, lessening dependency and reducing care costs. In addition, many of these people go on to contribute their time and acquired knowledge to a variety of voluntary, unpaid functions: National Trust guides, Citizens' Advice Bureaux, social services of various kinds, the Museum Education Service, festival boards, school boards and university councils and so on.

### The non-material value of a qualification in the arts, humanities and social sciences

- 157. There is a danger that the pressure that has been exerted in recent years by policy-makers for subjects to show their 'relevance', as well as clear and direct links to economic well-being fails to exploit the wider benefits of academic study. Freedom to ask challenging questions, regardless of immediate 'relevance' is essential to any intellectual discipline. It is also a feature of arts, humanities and social science subjects which attract students of high calibre, develops their analytical skills and promotes original thought. We should not, therefore, lose sight of the other wider benefits of higher education for both the individual and for society.
- **158.** Engagement with the study of the subjects falling within the arts, humanities and social sciences contributes vitally to the cultural life and health of the nation. It is not just that the subjects are themselves of absorbing interest and are life-enhancing to individual citizens, but that they help in the formation and training of well-informed, culturally aware critical minds which can be brought to bear on diverse crucial issues. They provide a framework for the advancement of understanding of our own and other cultures and societies, past and present, and promote informed reflection and decision-making on the wide range of challenging choices cultural, social, political and economic confronting society.
- **159.** The true well-being of the nation depends on a flourishing public culture based on respect for knowledge, understanding of the use of evidence, and commitment to intelligent debate. The active and disciplined study of the

arts, humanities and social sciences, driven by the spirit of trained enquiry and the aim of achieving deeper understanding, has a major part to play. Participatory democracy and responsible government draw heavily on the values promoted and skills inculcated by the study of arts, humanities and social sciences.

- **160.** That students well understand these arguments is clear from the buoyant demand for qualifications in the arts, humanities and social sciences. The results of a survey of graduates <sup>57</sup> about whether their qualification had enabled them to become a widely-educated person showed that graduates in languages, humanities, arts and law ranked themselves most highly in this respect. Similarly, the results of the OST's Survey of Postgraduate Study Intentions showed that personal development was seen by final-year undergraduates as the single most important factor influencing whether or not they undertook doctoral study.
- **161.** But above all there is the personal fulfilment that derives from an active, enquiring mind. Arts, humanities and social science are all centred in the life and culture of human beings, a continuing source of productive fascination to such a mind.

#### **Conclusions and Recommendations**

## Recognising and maximising the potential of the arts, humanities and social sciences

#### Conclusions

- 162. The contributions made by the arts, humanities and social sciences are substantial. The report demonstrates that these subjects have an important role to play in the education of individuals, and also contribute to the understanding of our society, culture, and social well-being in its widest sense. They enhance the context in which issues are seen and discussed, and raise and answer fundamental questions facing society today. They make a large and diverse contribution to public policy. But their impact should not be measured solely in terms of immediate changes in policies. These subjects also lead to much deeper changes in the way in which policy-makers and others view the world. Such research is important in its own right. It is part of a scholarly function which sustains a strong tradition of analysis and investigation extending beyond the immediate needs of the economy, and underpinning a culture of open and informed debate essential in a democracy. No civilised society can be without it.
- 163. The arts, humanities and social sciences also make key (and as yet underappreciated) contributions to the economy, and facilitate wealth creation in a wide range of tangible and intangible ways. Moreover, research findings have shown that capitalist economies function best and with greatest stability under certain political and cultural conditions, and it is to the provision of these conditions that arts, humanities and social science teaching and research markedly contribute.
- 164. In spite of these major contributions, the UK could be better positioned to reap the full benefits of what the arts, humanities and social sciences have to offer. The social, cultural, intellectual and economic benefits of teaching and research in the arts, humanities and social sciences are not always given due recognition by government, which often appears to focus on the needs of the science base instead of supporting the research base as a whole. In addition, the levels of funding for arts, humanities and social science teaching and research do not appear to be sufficient to meet the challenges that the UK will have to face as the century progresses. Arts, humanities and social science are a productive investment, and one that has further improved its productivity in recent years. But there comes a point when cost-cutting is counter-productive, not least when it curtails activities which contain the seeds of future growth and improvement, and when it reduces the quality of the product to a point that makes it inferior to what is produced in other advanced economies.
- **165.** It is plainly right that the state should only invest public funds if they will yield a real return. But it is illogical and damaging to equate a real return solely with a measurable, immediate economic return. The value of

knowledge goes far beyond such narrow definitions. Supporting top-quality higher education, for example, is not merely or mainly a matter of meeting the needs of a knowledge-based economy; it is fundamental to a civilised, liberal and enlightened society.

- 166. Even when investment in academic research and teaching is designed with specifically economic gains in view, it should also be deployed sensitively to take account of the processes by which knowledge is gained and exploited. In arts, humanities and social sciences, just as in science and technology, quantifying the impact on society and the economy is not always straightforward. Research studies into the exploitation of science and technology have shown 'that there is no simple and direct link between knowledge production in scientific and technological fields, and its exploitation in successful innovation, wealth creation and improvement in the quality of life'. These studies have called into question presumptions that public sector research would produce impacts in a smooth, predictable and 'linear' manner. Instead they show that the most important outcomes are often indirect, and might only appear late and often differ from those initially expected.<sup>58</sup>
- **167.** It is also a characteristic of some of the most pioneering and path-breaking research that it challenges existing paradigms and presumptions which may be built into conventional terms of utility. Much of the most significant social science research is in this category.<sup>59</sup>
  - Broader criteria and less constricted definitions of value-added teaching, scholarship and research areas are essential.
- 168. And how can we decide what is useful knowledge and what is not? We fear that those who try to second guess what is 'useful', and what is less useful, knowledge may make the wrong decisions. Predicting which areas will prove to be the most important and most valued in the future is in its nature difficult, perhaps impossible. It is essential that the UK is able to adapt and respond to unexpected problems and developments that may arise. A report from Universities Scotland said recently:<sup>60</sup>
  - "Any strategy for knowledge cannot be about planning what to explore and what not to explore or about guessing what is worthwhile and what is not. The history of learning and discovery shows that it is best to set teachers and thinkers free to make the discoveries. Applied research and solving specific problems will always be important for our academics, but restricting what they can explore or how they will explore it will only restrict our horizons. Creativity must be encouraged and supported even where we cannot see immediate results."
- **169.** The outcomes of original research can never be predicted in advance, and if they could there would be little point in research in the first place. The nature of research and scholarship is to challenge current thinking and practices and develop new approaches, by taking risks and exercising intellectual creativity.

<sup>58</sup> Faulkner W, Senker J and Velho L, Knowledge Frontiers: Public Sector Research and Industrial Innovation in Biotechnology, Engineering Ceramics and Parallel Computing, Oxford, Clarendon Press, 1995.

<sup>59</sup> Bechhofer F, Rayman-Bacchus L and Williams R, The Dynamics of Social Science Research Exploitation.

<sup>60</sup> The Knowledge Society, Universities Scotland.

**170.** More often than not it is 'blue skies' research that makes the greatest impact on our lives. Research studies <sup>61</sup> have found that 'blue skies' research often has unforeseen practical implications. This is as true of arts, humanities and social science as it is of science and technology.

The ESRC Centre for Economic Learning and Social Evolution (ELSE) at University College London was established to undertake basic research on game theory. Researchers at the Centre subsequently persuaded the government to auction mobile phone licences, after devising the rules for the exercise. They established the key role of domestic versus non-domestic bidders, the relationship between the number of licences and the number of incumbent operators, and the timing and form of the auction. It has been estimated that the figures generated were thirty times higher than the government had originally anticipated. The bidding process among rival phone companies netted the Treasury £22 billion in April 2000. The Treasury's investment in the research underpinning the auction was in the order of tens of thousands of pounds.

In 1997, a project was initiated at the University of Oxford by the Centre for the Study of Ancient Documents (Professor Alan Bowman) in conjunction with the Department of Engineering Science (Professor Mike Brady), to develop a new computer-based image-enhancement technique to decipher ancient stone inscriptions and writing tablets. The technique they developed has broken new ground in this field, so that tablets and other categories of incised material, which have been illegible for years, can now be read. This not only leads to significant advances in our understanding of ancient artefacts, but had other benefits as members of the team of engineers realised that the imaging technique could be used to improve methods of analysing mammogram images for early detection of breast cancer.

171. The UK's cultural, intellectual, social and economic well-being is dependent upon the complementary contributions made by the teaching and research activities of all subjects, as well as the successful interplay of all aspects of knowledge. But the current structure of research funding does not facilitate this approach. At present, the six research councils (including the research council for the social sciences – the Economic and Social Research Council – ESRC) and the Royal Society fall under the auspices of the Office of Science and Technology. Whereas, the Arts and Humanities Research Board (AHRB) and the British Academy fall under the Department for Education and Skills. This division works against successful collaboration between the different disciplines, and it also has meant that the arts and humanities have not always had access to the same sources of funding as other disciplines. The Review very much welcomes therefore the decision of the Government and the devolved administrations to establish an Arts and Humanities Research Council under the OST.

<sup>61</sup> Bechhofer F, Rayman-Bacchus L and Williams R, The Dynamics of Social Science Research Exploitation.

- 172. Substantial emphasis has been placed on Foresight initiatives through the DTI. The arts, humanities and social sciences have not been fully or effectively involved in these initiatives. But if such large and important areas of knowledge and creativity are excluded, then any attempt at 'foresight' will be useless.
  - It is vital to adapt and embrace a more coherent and wider teaching and research vision, so that the arts, humanities and social sciences are included at the very beginning of strategic thinking on issues related to the future development of the UK's research and training base.

#### Recommendations

- 173. The preceding chapters lead us to three key observations on the relations between the arts, humanities and social sciences, science and government. The first is that the world has moved beyond the limiting view of research as solely scientific, and an integrated concept of the research base as being inclusive of science, technology, medicine, the arts, humanities and social sciences will serve society better. The second is that knowledge itself is increasingly cast in an interdisciplinary mould, and funding policies should encourage and enable interdisciplinary developments across the whole research base to a yet greater extent than at present. Finally, it is now incumbent on the arts, humanities and social sciences to look beyond their current boundaries, to maximise their own contribution to the intellectual, political, economic, cultural and social integration on which the success of our increasingly knowledge-based society so depends.
- 174. The Review investigates the value of the arts, humanities and social sciences across a great range of activities and benefits. Many public and private bodies have a stake in this large subject domain, or exercise influence over its doings, or use its diverse products and outcomes. Detailed recommendations on all the issues that are touched upon in this report are not attempted. Instead the Review focuses on three areas of recommendations in which progress is essential if the full benefits of arts, humanities and social science are to be realised.
- 1. More inclusive concepts, language and terminology are essential. We recommend that the concept of the 'research base' rather than the 'science base' should be treated as the starting point for all considerations of policy by government and other bodies. The language and concepts used by government to encourage the development of research and innovation are often derived unthinkingly from now outdated assumptions that seriously impede the full exploitation of the arts, humanities and social sciences, and the diverse kinds of knowledge they yield.
- 2. It is clear that *productive investment* in arts, humanities and social sciences is achieved at a high benefit to cost ratio, but that this is insufficient to maximise their potential. Failure to fund these subjects properly lessens the effectiveness of investment in other subjects, including the sciences, with which there are interdisciplinary or complementary links. We **recommend** that funding bodies and agencies, as well as employers of teachers and researchers in these subjects, should re-examine the basis on which resources are allocated, in order to provide proper support for the arts,

- humanities and social sciences, particularly with a view to encouraging the development of the new economy and to cultural and social improvement.
- 3. Social sciences have long had their Research Council (the Economic and Social Research Council ESRC), and the Arts and Humanities now have a comparable body in the Arts and Humanities Research Board (AHRB) which is soon to become the Arts and Humanities Research Council (AHRC). But representation of these subjects remains inadequate, weakening the effectiveness of much European, British, regional, and institutional policymaking. We recommend that institutional frameworks should be reviewed with this in mind, and that the formation of new bodies or collaborative activities should take full account of it.

### **Appendix 1**

#### **The Reviewing Committee**

The Review's work has been carried out by a committee of 14 members, appointed by the British Academy and drawn from the arts, humanities and social science academic community. Under the chairmanship of Professor Paul Langford, the Committee met on a regular basis between September 2002 and October 2003 to oversee the direction of the Review and to consider the evidence.

#### Chairman

Mr P W H Brown

Ms Vivienne Hurley

Professor Paul Langford	Professor of Modern History and Rector of Lincoln College	University of Oxford				
The other members of the Committee						
Professor Robert Bennett	Professor of Geography	University of Cambridge				
Professor Alan Bowman	Camden Professor of Ancient History	University of Oxford				
Professor Richard Bowring	Professor of Japanese Studies	University of Cambridge				
Professor Vicki Bruce	Vice-Principal and Head of the College of Humanities and Social Sciences	University of Edinburgh				
Professor Martin Daunton	Professor of Economic History	University of Cambridge				
Professor Howard Glennerster	Professor Emeritus of Social Administration	London School of Economics				
Professor Martin Jones	George Pitt-Rivers Professor of Archaeological Science	University of Cambridge				
Professor John Laver	Deputy Principal	Queen Margaret University College				
Professor Hector MacQueen	Dean of Law	University of Edinburgh				
Professor Stephen Nickell	Monetary Policy Committee	Bank of England				
Dame Janet Ritterman	Director	Royal Academy of Music				
Professor Helen Taylor	Head, School of English	University of Exeter				
Sir Alan Wilson	Vice-Chancellor	University of Leeds				
Secretariat						

Secretary

Secretary

The British Academy

The Review Committee

### **Appendix 2**

#### **List of Respondents**

The Respondents came from the following institutions:

#### **Higher Education Institutions**

Aston University
Cardiff University
Courtauld Institute of Art
De Montfort University
Goldsmiths College
Heriot-Watt University
Keele University
King's College London
Lancaster University

London School of Economics Manchester Metropolitan University

Middlesex University Open University

Queen Margaret University College

Queen's University Belfast Robert Gordon University Royal Academy of Music Royal College of Art Royal College of Music School of Advanced Study Sheffield Hallam University Staffordshire University

The Arts Institute at Bournemouth

University College London
University of Aberdeen
University of Bath
University of Birmingham
University of Bristol
University of Cambridge

University of Cambridge
University of Durham
University of Dundee
University of Edinburgh
University of Glasgow
University of Gloucestershire

University of Greenwich University of Hertfordshire

University of Kent
University of Leeds
University of Leicester
University of Liverpool
University of Newcastle
University of Nottingham
University of Oxford

University of Paisley
University of Reading
University of Sheffield
University of Southampton
University of St Andrews
University of Stirling
University of Strathclyde
University of Surrey

University of the West of England, Bristol

University of Ulster University of Wales, Bangor University of Warwick University of York

#### **Subject Associations**

University of Sussex

Academy of Learned Societies for the Social Sciences

Association for Scottish Literary Studies Association for the Study of Modern and Contemporary France Association of Art Historians

Bibliographical Society

British Association for Jewish Studies British Association for Slavonic and

East European Studies

British Association of Japanese Studies

British Psychological Society British Sociological Association

Council of University Classical Departments

**Economic History Society** 

Graduate Institute of Theology and Religion

Hegel Society of Great Britain

Historical Association

History at the Universities Defence Group

Institute of Field Archaeologists International Association for the Study

of Irish Literatures

Media, Communication and Cultural

Studies Association

Modern Humanities Research Association National Committee for Philosophy Political Studies Association of the UK

Prehistoric Society Royal Historical Society Royal Society of Literature

Scots Philosophical Club

Social Research Association

Society for Post-Medieval Archaeology

Society for South Asian Studies

Society for the Promotion of Hellenic Studies

Society for the Promotion of Roman Studies

Society of Architectural Historians of Great Britain

South-Eastern European Studies Association

Standing Committee on Modern Greek in the Universities

Standing Conference of Arts and Social Sciences

Standing Conference of Centres and Institutes of Latin American Studies

Standing Conference of Heads of European Studies

Standing Conference of National and University Libraries

Subject Committee for Archaeology

UK Council of Deans of Arts and Humanities

University Council for Modern Languages

#### **Funding Bodies**

Arts and Humanities Research Board (AHRB)

Department for Education and Skills (DfES)

Department for Employment and Learning Northern Ireland (DELNI)

Department for Media, Culture and Sport (DCMS)

Engineering and Physical Sciences Research Council (EPSRC)

Economic and Social Research Council (ESRC)

Higher Education Funding Council for England (HEFCE)

Higher Education Funding Council for Wales (HEFCW)

Medical Research Council (MRC)

Scottish Higher Education Funding Council (SHEFC)

The Leverhulme Trust

The Nuffield Foundation

#### **AHRB and ESRC Research Centres**

AHRB Research Centre for Cross-Cultural Music and Dance Performance

AHRB Research Centre for Environmental History

AHRB Research Centre for Irish and Scottish Studies

AHRB Research Centre for Research in Intellectual Property and Technology

AHRB Research Centre for Studies of Surrealism and its Legacies

AHRB Research Centre for the Study of the Domestic Interior

ESRC Centre for Analysis of Risk and Regulation (CARR)

ESRC Centre for Business Relationships, Accountability, Sustainability and Society (BRASS)

ESRC Centre for the Analysis of Social Exclusion (CASE)

ESRC Research Centre - Complex Product Systems Innovation (COPS)

ESRC Research Centre on Skills, Knowledge and Organisational Performance (SKOPE)

ESRC Research Centre on the Study of Care, Values and the Future of Welfare (CAVA)

#### Other organisations

One NorthEast - The Development Agency for the North East of England

Yorkshire and Humber Regional Development Agency