



understanding of the complex propagation mechanisms prevalent in the high latitude regions. The signal characteristics (time dispersion, frequency dispersion and, in particular, the directional characteristics) will be parameterised in terms of frequency, geophysical conditions, time of day, time of year, etc. The increased understanding of the propagation mechanisms and the signal characteristics will then be employed in developing physically realistic models incorporating directional information of signal behaviour as a function of frequency, time of day, time of year and geophysical conditions.

b) Investigating the applicability of spatial filtering to reduce the level of apparent Doppler and delay spreading at the receiver output and hence to increase the available data throughput of digital communications links.

The work to be undertaken in this investigation is of international interest and will be the subject of collaborations within the new European COST-271 initiative on the effects of the upper atmosphere on terrestrial and earth-space communications. *Value Reported in May Bulletin*

ENGINEERING, PHYSICS & ASTRONOMY, MATHEMATICS & COMPUTER SCIENCE

Prof A C F Cocks, Dr S P A Gill, Dr P A Maksym, Dr B J Leimkuhler

A Mixed Atomistic-Continuum Model for Crossing Multiple Length and Time Scales

This is a multi-disciplinary project to develop mathematical modelling techniques for problems at the interface between molecular dynamics (MD) and continuum mechanics (CM). The behaviour of crystalline solids at high temperatures is often strongly dependent on the behaviour of atomic scale defects. These irregularities in the crystal lattice can be modelled using accepted MD methods. It is not possible to model entire systems at the atomic scale, however, due to the prohibitively large number of atoms involved. Fortunately, the vast majority of these atoms are in a regular lattice structure and so their response can be accurately predicted by CM.

This research intends to address this dilemma by embedding a number of small atomic simulations within a continuum framework. The main complexity is ensuring consistent transfer of information between the two approaches, which operate at different length and time scales. The principal focus of this work will be the evolution of epitaxially strained surfaces and thin films.

£222,468 EPSRC

EPIDEMIOLOGY & PUBLIC HEALTH

Dr A Arthur

Improving Uptake of Influenza Vaccination Among Patients Aged 75+

This project aims to examine whether the uptake of the influenza vaccination can be improved by offering it within the over-75 health check. A randomised controlled trial will be carried out, with patients randomised to receive one of two approaches: the first approach being a personal letter of invitation to the vaccination clinics held at the surgery and the second approach combining the offer of an over-75 health check with the offer of influenza vaccination carried out in the patient's home by a practice nurse. At the end of the trial, a qualitative study will be undertaken to investigate older people's beliefs about influenza vaccination and their reasons for non take-up. The results of this study will provide those in primary care with better strategies to meet government targets for influenza vaccination rates.

Value Reported in May Bulletin

GENERAL PRACTICE

Prof R Baker

Evaluation of Alternative Forms of Intermediate Orthopaedic Services

The NHS plan envisages the creation of intermediate services, in which general practitioners and other staff provide services that would formally have been undertaken in hospitals. Leicester City Central Primary Care Group has set up an intermediate orthopaedic service. Patients referred with orthopaedic problems may be seen in one of two centres that form part of this service. One centre is based in the hospital, and the other in the community. These new forms of service must be evaluated. In this study, patients attending either of the two intermediate centres will be asked their views on the care they have received and their outcomes will be monitored. The findings will provide useful guidance on the operation of intermediate care services in the future.

Value Reported in May Bulletin

Reducing Leakage of Prescription Drugs

Drugs prescribed by general practitioners can sometimes fall into the hands of drug abusers. Careful procedures need to be followed by general practitioners and pharmacists to minimise the risk of this occurring. The study has been commissioned to enable a review of procedures in operation in Leicestershire. In collaboration with Professor David Upton of the Centre for Pharmacy Practice Research at De Montfort University, an investigation will be

undertaken in general practices and pharmacies throughout the county. The findings will be used to bring forward recommendations on how procedures could be improved in the future.

Value Reported in May Bulletin

GEOGRAPHY

Dr F Mayle

Quaternary History of the Chiquitano Forest, Bolivia

Tropical dry forests constitute one of the most threatened ecosystems in the world. The Chiquitano forest in eastern Bolivia is a critical global conservation priority because it constitutes the largest intact block of seasonal dry forest on Earth (120,000 km²) and has been identified as exhibiting some of the highest levels of biodiversity for Neotropical dry forest. The long term, Late Quaternary history of this important forest needs to be elucidated in order to properly understand the origin of its floristic composition and high biodiversity.

To test the following widely accepted, but as yet untested, hypotheses:

- 1) The Chiquitano dry forest constitutes an ancient biological refugium that was once the central core of a much more widespread formation (the 'Pleistocene Dry Forest Arc') during the last glacial period; and
- 2) The high biodiversity of this forest is due to its long history as a stable, undisturbed ecosystem, extending back to the last glacial period.

£13,356 National Geographic Society

GEOLOGY

Prof A D Saunders

Chair of Isotope Geology

£360,558 NERC/British Geological Survey

HISTORY

Dr J Coffey

Persecution, Religious Violence and Toleration in 17th Century Britain

£1,000 British Academy

Dr I Thatcher

Leon Trotsky: A Political Life (Fellowship)

A one-volume account of Trotsky's political life, based upon primary and recent secondary sources. It will place Trotsky's activities in their proper context. At its most basic level it will report what Trotsky was doing at a particular period and why. From it a completely new picture of Trotsky's standing in Russian social democracy will emerge. The relevance of Trotsky's thought for contemporary developments, including ethnic strife in the



Balkans, issues surrounding European unity, and tensions between Europe and America, will be an important part of the study.

Value Reported in May Bulletin

HISTORY OF ART

Prof A W Yarrington, Dr P Lindley

Visiting Professorship - The Trade in Marble and Sculpture between Tuscany and England: The Wentworth and Watson-Wentworth Collections - Visiting Scholar - Dr Cinzia Maria Sicca

£2,691 *British Academy*

MATHEMATICS & COMPUTER SCIENCE

Prof R Raman

Highly-Efficient Data Structures

£3,582 *British Council*

MUSEUM STUDIES

Prof E Hooper-Greenhill, J Dodd

Evaluation of Outreach/Access Programmes, Open Museum, Glasgow

£5,000 *Heritage Lottery Fund*

OPHTHALMOLOGY

Prof I Gottlob, Prof J Thompson

Leicestershire Nystagmus Register

Nystagmus is an eye condition, where the eyes are moving constantly and can cause visual problems. The cause of nystagmus is poorly understood. It is unknown how many people have nystagmus, as it could be between one in one hundred or one in one thousand. In this study, we aim to record how many people in the area of Leicestershire have nystagmus and to classify their type of nystagmus. This register will be able to act as a wider model for other counties and provide an indication of nystagmus sufferers nationwide. It will provide a database that can be accessed and used with the potential to research into nystagmus in other areas, for example genetics and health care provision. This project is part of the on-going research interests of the Ophthalmology Department into nystagmus, which will hopefully provide a better understanding and knowledge into the condition.

Value Reported in May Bulletin

ORTHOPAEDIC SURGERY

Mr C Esler, A J Best

Ten Year Outcome of Total Knee Arthroplasty Across a Single English Health Region

£5,000 *The Wishbone Trust*

PHYSICS & ASTRONOMY

Dr C Binns

High Moment Films

This grant was awarded by Seagate Technology to the Condensed Matter Physics (CMP) group in the department of Physics and Astronomy to investigate new high performance magnetic materials for use in digital magnetic recording on hard disk drives. The nanocluster research section of the CMP group has developed a new process for producing thin metal films by depositing pre-formed size-selected clusters of atoms rather than individual atoms. This is an important new class of materials that exhibit novel behaviour including exceptionally high performance as magnetic materials. The project will investigate the properties of such 'cluster-assembled' films and assess their utility in ultra-high density recording. £30,000 *Seagate Technology*

Dr A D Holland

Analogue ASICs for Advanced X-ray Detectors

Space instrumentation techniques require the most up to date electronics to enable the highest scientific performance for lowest power and size. This 3 year project, is to develop analogue application-specific integrated circuits (ASICs) to be used with the advanced detectors currently under development in the laboratory. The work is funded through PPARC's PIPSS scheme which promotes collaboration with industry. In this case we will work closely with an electronics micro-enterprise specialising in analogue ASIC design. This project will greatly enhance the Space Research Centre's ability to provide state-of-the-art instrumentation into future satellite projects.

£146,265 *PPARC*

Dr C L Nicklin

Platinum Surfaces Studied under High Gas Pressure by Surface X-Ray Diffraction

This grant will support a twelve day synchrotron radiation study of the effect of carbon monoxide on an ordered platinum crystal. This system is typically used as a model for catalysis, although most measurements are not performed under real catalytic conditions. The aim of this experiment is to study how the surface of the platinum crystal rearranges when the sample is subjected to relatively high gas pressures, closer to those found in industrial processes. X-ray diffraction techniques will allow us to accurately determine any structural changes at the

atomic level, enabling the details of the catalytic process to be investigated.

£300 *CLRC*

SOCIOLOGY - CENTRE FOR LABOUR MARKET STUDIES WITH INSTITUTE OF EDUCATION

Prof L Unwin

The Role of Knowledge in Vocational Qualifications (2000-2002)

This project, funded for 2 years by City & Guilds, examines how the role of knowledge in vocational qualifications is changing given: the move away from narrow competence models; the expansion of 'knowledge intensive' jobs; the higher levels of academic attainment amongst young people; the implications of lifelong learning; and the introduction of 'Foundation Degrees'. The research will focus on two previously under-researched questions: what form should the knowledge component of vocational qualifications take; and what should be the relationship between the experiential or tacit knowledge gained in the workplace, and the codified knowledge acquired in formal education and training settings. Particular attention will be paid in the project to the development of vocational qualifications in four sectors: engineering; photography; retail; and care.

£12,000 *City & Guilds via Institute of Education*

SURGERY

Mr I Loftus, Mr R Naylor, Mr M M Thompson

The Relationship between COX-2 Metalloproteinases and Inflammatory Markers in Plaque Instability

£73,478 *Stroke Association*

LET THE BULLETIN COVER YOUR BOOKS

The Bulletin welcomes news of recently-published books written or edited by University staff. The book cover, together with any other relevant details, should be sent to Barbara Whiteman, Press & Publications Office (2676, ara@le.ac.uk).



Notice

Bulletin SUPPLEMENT
University of Leicester
June/July 2001

ATTENTION: ALL USERS OF WINDOWS 3.1, WINDOWS 95, WINDOWS 98 OR MACINTOSH SYSTEMS

IF YOU use the MacFS or PCFS services for email, file storage or for applications software you should have plans to modify your working methods. **The NetWare services (PCFS and MacFS) will cease at the end of September 2001.** It will be very costly to continue support for these services and it should not be expected that the Computer Centre will be able to extend their availability beyond this deadline.

Anyone still using these services, even if just for email, is urged to move off them as soon as possible. Please pass this message on if you know anyone else in this situation.

These services have been replaced by the Windows 2000 service (CFS). See www.le.ac.uk/cc/cfs/ for details of the new service and guidance on conversion. Background of the Windows 2000 project is available at www.le.ac.uk/cc/spar/ntstatus.html. This has proved very successful, to the extent that its functionality and reliability are taken for granted - quite an achievement given the University of Leicester's lead role in Windows 2000 deployment. CFS is now supporting over 14,000 users and over 3,000 Windows 2000 PCs with over 1,800 users concurrently logged in at times of peak usage.



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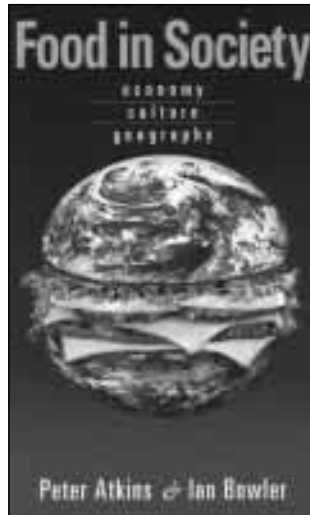


FOOD IN SOCIETY: Economy, Culture, Geography

Peter Atkins and Ian Bowler (Department of Geography)
Arnold, London, March 2001, £45.00 (hardback)

Available from the Bookshop
ISBN 0 340 72003 4

Contemporary 'mad cow' and foot and mouth diseases have instigated a reappraisal of how food is produced and consumed in the United Kingdom. This timely book brings together a range of social science perspectives for such an appraisal, covering economic, cultural and geographical issues. The scope of the book is wider than just the United Kingdom, however, for much can be learned from understanding the place of food in other societies.



The book is divided into six parts. Following a synthesising introduction, attention is devoted in turn to the political economy of the supply chain, global and geopolitical issues, the political ecology of food, and food consumption. Each part is sub-divided into thematic chapters, such as: food habits, beliefs and taboos; food and health; food ethics, food policies and civil society; food marketing and the consumer; and globalization and food networks.

The authors show how and why food production and consumption systems have become increasingly hazardous and unsustainable, not just in the United Kingdom but elsewhere in the world, and argue that a new 'social contract' is required between food producers, including manufacturers, food retailers, consumers and governments. To be successful, such a contract will need to reflect regional and national differences in the place of food in society and incorporate more local rather than global dimensions.

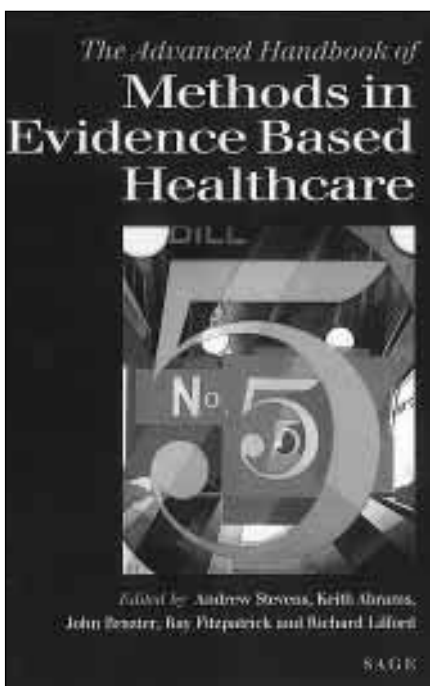
- *Dr Peter Atkins is a Reader in Human Geography at the University of Durham.*
- *Professor Ian Bowler is a Professor in Human Geography at the University of Leicester.*

ADVANCED HANDBOOK OF METHODS IN EVIDENCE HEALTH CARE

Edited by Andrew Stevens, Keith Abrams (Department of Epidemiology and Public Health), John Brazier, Ray Fitzpatrick and Richard Lilford

Sage, October 2000, £69.00 (hardback)

Available from the Bookshop
ISBN 0 7619 6144 5



The 'effectiveness revolution' both in research and clinical practice, has tested available methods for health services research to the limit and has raised a number of important questions.

- *How far can observational methods, routine data and qualitative methods be used in healthcare evaluation?*
- *What cost and outcome measures are appropriate, and how should data be gathered?*
- *Have frequentist statistics been rendered obsolete by Bayesian methods?*
- *How should area-wide technologies be evaluated?*
- *How should the evidence from multiple trials be meta-analysed?*
- *What are the practical and ethical limits of clinical trials?*
- *How can new healthcare technologies be assessed in their early stages?*

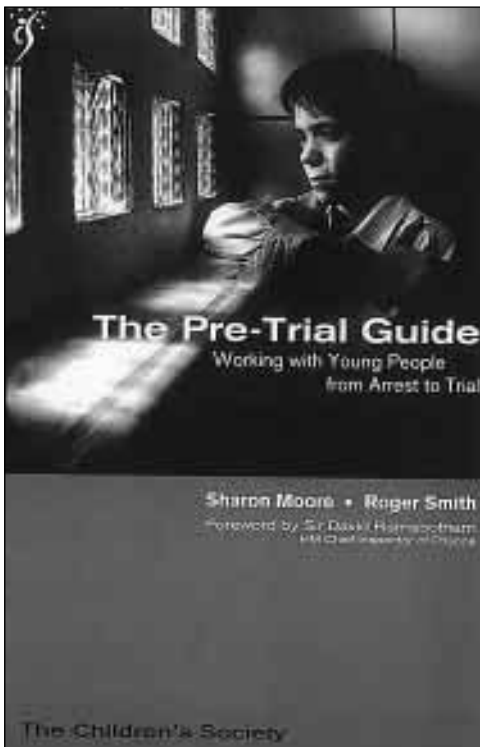
The product of the British Health Technology Assessment Research Programme, this Handbook both provides a synthesis of all of the existing knowledge in these areas and sets the agenda for future debate and research. The authors have been

'A volume that is technical and authoritative but also readable and accessible ... this handbook will set new standards for those undertaking health technology assessments as well as map out the next generation of methodological challenges.'
Dr Ruairidh Milne, Scientific Director, National Co-ordinating Centre for Health Technology Assessment

selected through a careful process of peer review and their chapters form a coherent and thorough approach to the field.

Presenting a unique collaboration between clinicians, statisticians, epidemiologists, social scientists, health economists and ethicists, this text provides the most authoritative resource for a state of the art review of methods of evaluating healthcare. It is required reading for anyone involved in health services research and management.

- *Dr Keith Abrams is Reader in Medical Statistics in the University's Department of Epidemiology and Public Health. He is also a contributor to this volume.*



initial charge, to procedures at the police station, in court, bail support and remands into custody or local authority accommodation – is illustrated with case studies from The Children’s Society’s youth justice project work.

The practice and policy implications of these procedures are explored, from the perspectives of both professionals and young offenders, making The Pre-Trial Guide an indispensable reference book for YOT members, magistrates, solicitors, probation officers and all voluntary agencies providing youth justice services.

The authors, Sharon Moore and Roger Smith, have extensive experience of working with young people in the judicial system as practitioners and managers, and of campaigning with The Children’s Society for better treatment and conditions for children in trouble with the law.

- *Roger Smith is a Lecturer in the University’s School of Social Work and Course Director on Social Work qualifying and PhD programmes. He was previously Head of Social Policy at The Children’s Society, where he developed key initiatives in the field of child welfare. He qualified as a Probation Officer in 1980 and worked in the Probation Service for seven years, both as a practitioner and manager.*

THE PRE-TRIAL GUIDE:
Working with Young People from Arrest to Trial
Roger Smith (School of Social Work) and Sharon Moore
Foreword by Sir David Ramsbotham, HM Chief Inspector of Prisons
The Children’s Society, January 2001, £12.95 (paperback)

Available from the Bookshop
ISBN 1 8997 8333 4

Based on the Children’s Society’s nationally acclaimed work in bail support and remand management, this accessible handbook sets out good practice for youth justice professionals working with young people in the lead up to trial.

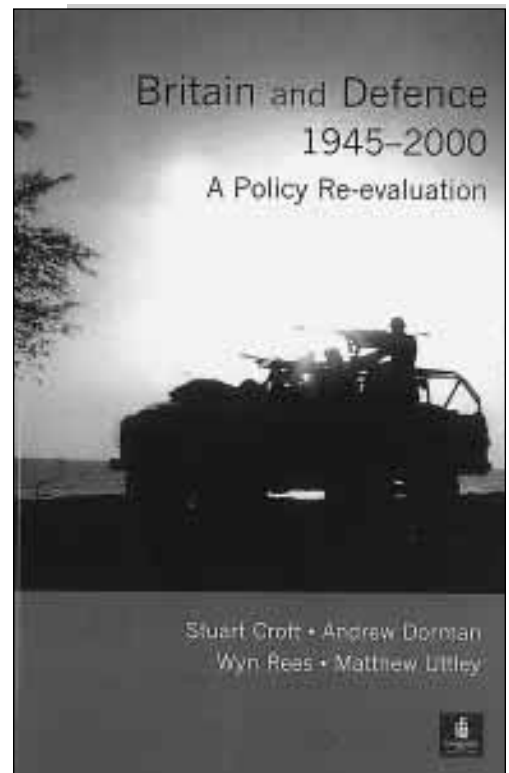
Each stage of the process – from

‘This publication is to be welcomed ... I fear that if those who have to work with young people at this difficult time do not understand all the implications, the conditions for young people will be even worse.’

Sir David Ramsbotham, HM Chief Inspector of Prisons

BRITAIN AND DEFENCE 1945-2000 – A Policy Re-evaluation
Stuart Croft, Andrew Dorman, Wyn Rees (Department of Politics) and Matthew Uttley
Longman, April 2000, £18.99 (paperback)

ISBN 0 582 30377 X
Available from the Bookshop



Britain and Defence 1945-2000: A Policy Re-evaluation aims both to provide the reader with an understanding of the major issues in British defence policy since 1945 and to question some of the traditional approaches to the study of this subject. The chapters provide surveys of the main subject areas in post-war British defence, including its global and European commitments, its nuclear weapons policy, the management and politics of its defence and the country’s procurement policy. Also interweaved within the analysis are questions about the extent to which a ‘declinist’ thesis is appropriate in understanding the evolution of defence policy; the importance of the concept of ‘change’ and the inter-relationship between international and domestic spheres of British policy.

- *Dr Wyn Rees has lectured in International Relations at the University of Leicester since 1991, where he is also Deputy Director of the Centre for European Politics and Institutions.*



NINE WOMEN, NINE MONTHS, NINE LIVES

Dr Sandra L Wheatley
(Department of Psychiatry)
Potent, 2001, March £9.99
(paperback)

ISBN 0 9540012 0 6

Available from the Bookshop

You've heard of the saying 'from the mouths of babes...'? Well here's the truth from the mouths of the mothers of those babes!

- *Nine women reveal frankly what pregnancy and motherhood was really like from the moment they saw the blue line on the pregnancy test up until their child's first birthday.*
- *The research hits the self-destruct button of many myths of motherhood – particularly the 'rose-tinted' perceptions about becoming a parent for the first time.*

In the *first* and only book of its kind, their new lives and how they feel about them are uniquely presented as *they told them* to University of Leicester Research Associate, Dr Sandra L Wheatley.

In the introduction, Dr Wheatley writes: Many of the hundreds of women I have spoken to over the years just want to know 'is it normal to feel like I do?' She said: "This book illustrates that there are many ways to be normal in this situation. There are extremely few ways to be perfect. Getting a balanced picture of how ones day-to-day life is likely to change is important to reduce the likelihood that you will feel shocked or out of your depth when the baby arrives. After all, forewarned is forearmed! This may sound like common sense to

most of us but then why have so few books been published where real women describe their real experiences? There is a demand – where is the supply?"

The nine women who took part in the research for the book felt, with the benefit of hindsight, that far too little information was given to them about what to expect to feel when having a first child. Many of these women found the first few months of motherhood were a time of mixed emotions, which they had not expected. The joy of having

the baby they had been carrying for nine months in their arms at last, was often combined with the everyday worries of meeting the needs of this little, but very loud, stranger who hadn't had the courtesy to arrive with a set of instructions!

We all know that women are often their own worst enemies. This research found that relatives, friends and most shockingly, health professionals (for example, doctors, midwives, health visitors) and voluntary organisations (for example: The National Childbirth Trust, LeLeche League, playgroups) often continue to perpetuate the image of the mother as a woman who is truly fulfilled. These nine women are exceptions not enemies – here they have spoken out about the reality of life with a young baby as illustrated by the quote from one of the nine women below."

"I really do think that people should be more honest about it all. About everything... like the absolute joy of it all, but also like the downfalls of it... to explain that everybody feels like it, it's not just you!" – Julia.

When asked about her own plans for a family, and whether writing the book has changed her perceptions of having children of her own, Sandra Wheatley says: "I always thought I'd have children when I was 28 but then I've been rather busy with writing and publishing this book recently – in fact I think it would be fair to say that it has become my baby! I have learnt so much from researching and writing this that I would like to think that I now feel that to be a good-enough mother will be more of an achievement than to be a 'good' mother. I'll let you know!"

- *Log on to www.potent.uk.com for more information about the book (extracts from the first chapter can be read online).*





PASSING RHYTHMS – LIVERPOOL FC AND THE TRANSFORMATION OF FOOTBALL

Edited by John Williams (Sir Norman Chester Centre for Football Research, Department of Sociology) Steven Hopkins (Department of Politics) and Catherine Long

Berg, March 2001, £14.99 (paperback)

ISBN 1 85973 303 4

Available from the Bookshop

Liverpool Football Club, in stark contrast to some of its competitors, remains largely locally owned, not a conglomerate or media business. Until recently, the Liverpool club has been loathe to pursue global markets for merchandising - though it attracts a huge fandom

around the world – and its ambitions remain resolutely fixed on footballing success. No football club has ever had such an extended period of dominance in the English game, nor extended that dominance to Europe so effectively.

Many of the current crop of top young players are locally born and are a central feature of the city's nightlife, as well as national icons in the pop/football/youth culture. But there are fears that the Club's great days have now passed. At the height of its powers in the 1980s, Liverpool FC was involved in two catastrophic crowd disasters, which effectively transformed the sport and added to wounding perceptions about the city's alleged sentimentality, fatalism and irreversible decline.

The legacy of the Heysel and Hillsborough tragedies continues to shape the self-image of the Club and those who support it. A seething rivalry with nearby corporate giant Manchester United is a constant reminder of football's new order.

Addressing all of these concerns, this book takes an original approach to the study of football by examining its links with other important popular

The Sir Norman Chester Centre for Football Research

- Established in the Sociology Department at the University of Leicester in April 1987
- Funded entirely by the Football Trust
- Engaged in a wide range of research projects for the football authorities and other organisations which have an interest in the game
- The Centre's staff have published widely on issues connected with football, though the Centre has a special expertise in the subject area of spectator behaviour.

culture forms. It also examines, in the main, the transformation of football in England and the very special meaning and recent trajectory of football in the city of Liverpool.

- *John Williams is the Director of the Sir Norman Chester Centre for Football Research at the University of Leicester, and he has published widely on football fan cultures and the structure and future of the game, including *Is it All Over: Can Football Survive the Premier League?* (1999). He is currently writing *Into the Red*, a book based on Liverpool FC and the 2000/2001 League season in England. As well as jointly editing *Passing Rhythms – Liverpool FC and the Transformation of Football*, John Williams also provides several contributions.*
- *Stephen Hopkins teaches in the University's Politics Department and is an associate member of the Sir Norman Chester Centre for Football Research. He is a Liverpool season ticket holder and his main research interest is in the politics of Northern Ireland. He has also contributed to the book.*

