

Research & Innovation



***High-impact
originality***

The unusual ways in which arts and
humanities research changes society

THE UNIVERSITY *of York*

A WORLD TOP 100 UNIVERSITY



Welcome

This issue of **Research & Innovation** focuses on work in the arts and humanities. Many universities – including York – have used funding from government and industry to strengthen the infrastructure for science and technology in recent years. It is a bigger challenge to support researchers and innovators engaged in arts and humanities subjects. But it is a challenge that the University of York has responded to with energy in a series of major investments.

Developments in the last few years include a specialist humanities library, a state-of-the-art building for one of England's most significant archives, new academic departments, and research facilities for postgraduates in the humanities. These facilities allow our staff and graduate students to pursue world-class research.

The Research Assessment Exercise, which measures the quality of research in British universities, demonstrated our pre-eminence in humanities subjects – first in the country in English literature, and high rankings for subjects as diverse as Archaeology, Music, Linguistics and History of Art.

Our research in the arts and humanities is not only excellent, but it brings a wide range of benefits to society. The excitement and impact of this work is explored in this issue of **Research & Innovation**, starting with the discussion on page 2 on the nature of impact in the arts and humanities.

I hope you enjoy reading this issue. Please get in touch if you would like to know more about our work in any of these areas.

Dr Chris Henshall

Pro-Vice-Chancellor for External Relations

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Cover: Making sculpture sing

Research into surround sound technology conducted at the University of York is at the heart of a spectacular contemporary art project.

The Morning Line is a striking aluminium structure, eight metres high and 21 metres long, featuring a complex sound system developed specially by the University's Music Research Centre.

It was unveiled at the Seville Biennial of Contemporary Art last year and is set to feature in leading galleries around the world.

The Morning Line was conceived by New York-based artist Matthew Ritchie, working with architects

Aranda/Lasch and civil engineers Arup AGU, and was commissioned by the Thyssen-Bornemisza Art Contemporary foundation (T-B A21) headed by Francesca von Habsburg, one of the leading figures in the world of contemporary art.

Dr Tony Myatt was given the task of making the structure striking in auditory as well as visual terms.

He and his team precisely calculated the appropriate locations for 53 speakers in the structure and devised a computer system and software to co-ordinate them, in order to produce a flawless three-dimensional surround sound experience.



The Morning Line
Matthew Ritchie
with Aranda\Lasch
and Arup AGU
Photo: © Germán Leal
Commissioned by
Thyssen-Bornemisza Art
Contemporary

Answering society's burning questions

Quantum physicists are helping us design the next generation of computers. Medical scientists discover new ways to treat disease. So what do researchers in the arts and humanities have to offer us?

“Britain’s greatest natural resource is brainpower,” said the Government’s science minister Lord Drayson this year. This is as true in the fields of arts and humanities as it is in science and social science research.

The influence of academia is often direct – shaping public policy, influencing thought and enhancing understanding. Sometimes it is more diffuse, through dialogue with opinion-formers and practitioners, or influence on ideas over a period of time.

Now the role of researcher as a contributor to society is critical. The knowledge economy is centre-stage as the driver of future growth, with universities taking a leading role.

“There’s a lot of talk about knowledge transfer,” says Dr Chris Henshall, York’s Pro-Vice-Chancellor for External Relations.

“But what really goes on is knowledge exchange. Of course we aim to translate our work into results that society puts to good use – but the flow of information and expertise is two-way.

“This changing environment brings new challenges for arts and humanities researchers. Impact is no longer a positive by-product of academic work; it is an objective of such research, along with the traditional aims of scholarship and pure research, whose benefits are less tangible but more readily acknowledged,” he explains.

At York, the impact of arts and humanities research on society is rich and varied. Art historians curate leading international exhibitions (including the recent Hogarth exhibition held in London and Paris), and conservationists influence the management of our cultural heritage.

A productive dialogue between research and practice brings benefits to both communities, with researchers providing information and insights, and society helping to frame searching questions.

Society has no shortage of urgent questions. Take the fact that the majority of countries in the world today have at least two widely-used languages, while multilingual people now vastly outnumber speakers of only one language. What implications does this have for how societies function? This was part of the impetus for a Worldwide Universities Network project between researchers at York and partners in Europe and North America. The project examines the cultural implications of widespread multilingualism in the Middle Ages, looking for deeper historical understanding

to help us today. This highlighted the importance of ‘code-switching’ – where speakers intersperse words and phrases from different languages, something which gives us insights into the practical language use of multilingual people.

The increasingly rich exchange of ideas across academic boundaries and with different users is changing research practice.

“Researchers are becoming more versatile,” says Dr Henshall. “We go out of our way to cultivate links with all kinds of people at an early stage – from cultural and heritage institutions to local and national government.”

Working with partners at Cambridge, the University of York has launched a national network to collect and study examples of successful interaction between humanities researchers and other sectors of society. Called THiNK, the new network also works with policy-makers.

“Governments and funding bodies want to support research that has real impact,” says Philip Morris of York’s Research and Enterprise Office, who helped to set up the network. “The network provides examples of how that is happening, and how it might happen in the future, so we can all understand better how knowledge exchange in the humanities is most effective.”

One project involved Mike Beaney, a philosopher at York, whose studies of innovation through history formed the basis of a problem-solving workshop with Northern Rail.

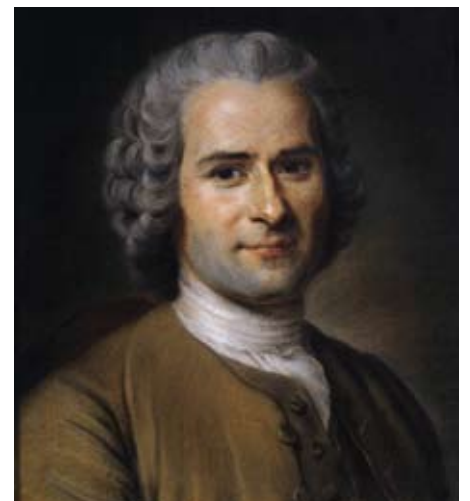
“The definition of impact is a broad one,” comments Dr Henshall. “No single project can provide all the answers. It’s easy to overlook one of the most important ways in which researchers can make a difference – by providing a springboard for further research in other fields. And it’s those kinds of links that can prove the most productive of all.”

“We go out of our way to cultivate links with all kinds of people at an early stage – from cultural and heritage institutions to local and national government”

A new translation of the Qur’an in 1734 transformed the way in which the West viewed Islam. Dr Ziad Elmarsafy of York’s Department of English has traced intricately the politics of western translations in an acclaimed book, which shows how great figures of the Enlightenment were influenced by the principles of Islam in formulating their ideas.



Voltaire, Napoleon and Rousseau were among the great figures of the Enlightenment who were influenced by George Sale’s translation of the Qur’an



The Enlightenment and the Qur'an

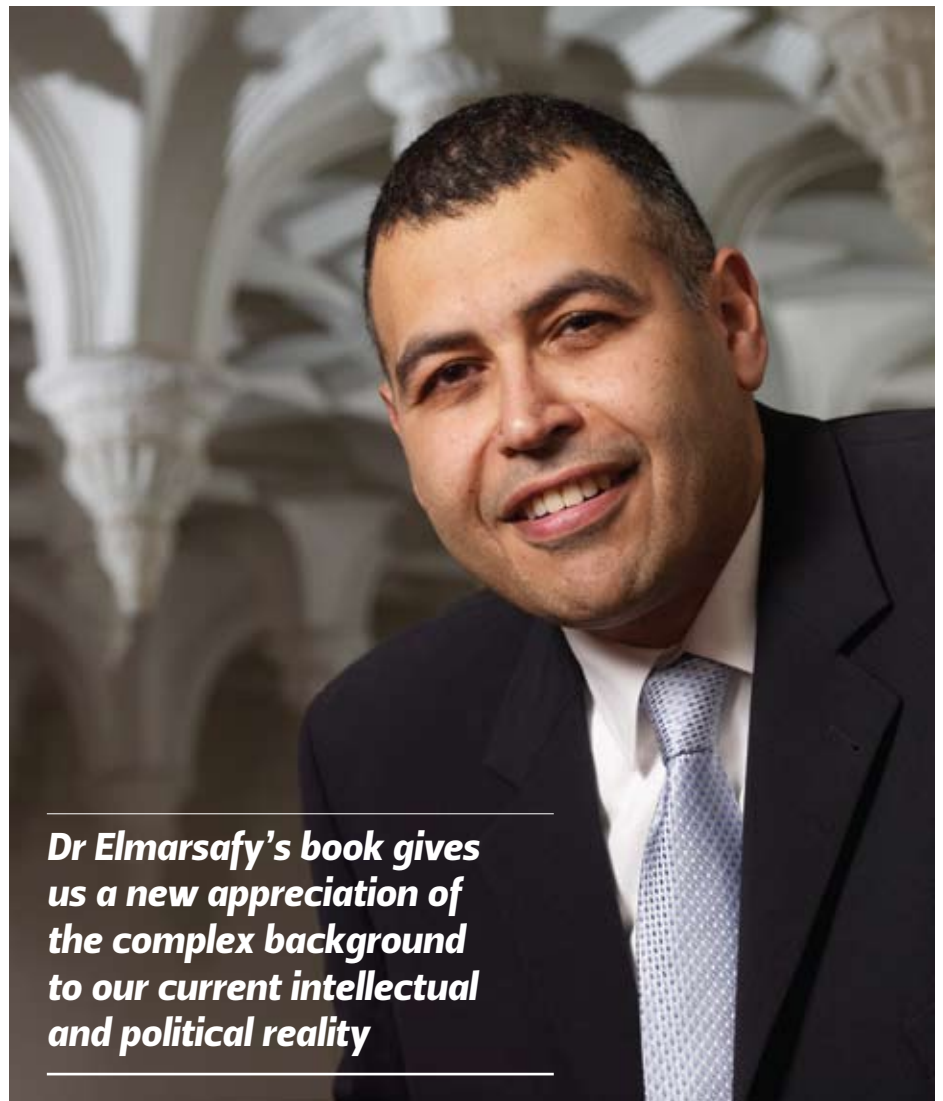
Reason' is the word most associated with the European Enlightenment, a time when religion was laid open to public criticism for the first time. In an enlightening piece of scholarly research, Dr Elmarsafy challenges this accepted wisdom to argue that religion was still hugely influential in the era. But the religion in question wasn't Christianity - it was Islam. His book, *The Enlightenment Qur'an*, will spark debate and interest among all who are concerned with the influence of Islam in modern society.

In 1734 an Englishman named George Sale published a new translation of the Qur'an. This translation "stopped at nothing to produce a balanced and informative rendition of the Qur'an" - a startling development, given the distortions that marred prior translations, some of which seemed more interested in 'protecting' Christendom from the sacred text of Islam.

The legacy of Sale's work, which was translated into other European languages, was evident in its impact on some of the great figures of the Enlightenment, including Voltaire, Goethe, Rousseau and Napoleon.

Voltaire is often quoted in the crises of religious difference in modern-day France, for example, in the debate over the wearing of headscarves. He is seen as the founder of secularism - 'la France de Voltaire' is the cry of many in defence of those principles. But Dr Elmarsafy identifies Voltaire as a serious student of religion - not only does Islam operate, for him as for many other Enlightenment thinkers, as something that is "good to think with", but it also becomes something that defines this Protean thinker.

Perhaps even more surprising is Napoleon's strong identification with Muhammad. Napoleon recognised in him "a great captain, eloquent, a great man of state", and one who - tellingly - had created a new people and a new power in the middle of the Arabian desert.



Dr Elmarsafy's book gives us a new appreciation of the complex background to our current intellectual and political reality

Napoleon also saw him as a great leader of people. "The men who have changed the universe," observes Napoleon, "never did so by winning over the leaders, but always by moving the masses." There are aspects of Napoleon's approach to campaigns - whether battles or mass communication - that arguably he modelled on Muhammad's approach. There was a particular resonance with someone who preached a "radically egalitarian doctrine, leading armies

against established powers".

The European Enlightenment witnessed the birth of modern Western society and thought. Dr Elmarsafy's book gives us a new appreciation of the complex background to our current intellectual and political reality. The importance of Islam in influencing a number of key enlightenment figures may make us review our current approach to Islam within Europe, and Western relationships with Islamic countries - the heart of geopolitics today.

A joint approach to cultural discovery

The University of York's thriving humanities research community now covers every period from late antiquity to the present day in a series of inter-disciplinary centres. Examining the same period through the different lenses of archaeology, philosophy or literature yields exciting insights which are relevant to today's life and culture.



The exchange of ideas across a wide range of historical periods is already producing some striking results – not least of which is a project which promises to shed light on six hundred years of wealth and poverty.

The York Archaeological Trust is currently leading archaeological excavations in the city's Hungate district, the largest ever undertaken in the city. Alongside this work, three research



students are investigating ordinary people's material possessions – specifically, how branded goods came into existence and were marketed, how people traded and circulated artefacts, and what we can learn about the historical character of York and its people from its residents' possessions.

The three Arts and Humanities Research Council-funded studentships mark a new chapter in the close collaboration between the University

and the York Archaeological Trust, which has already appointed a York graduate, Dr Jayne Rimmer, as the full-time historian on the excavation project.

The results will feed into public displays at the Trust's four major visitor attractions in York – Dig, Jorvik, Hungate and Barley Hall – which between them attract some half a million visitors annually.

"There's always a risk in historical research that you focus too closely on a single period," says Dr Sarah Rees-Jones of the Centre for Medieval Studies, who supervises the project. "You can never be quite sure whether the lessons you learn

Multidisciplinary media professionals

The Department of Theatre, Film and Television was created in 2007 to bring together artistic, scientific, theoretical and historical perspectives on performance media.

"The media we deal with – both stage and screen – are changing," explains Professor Andy Tudor, TFTV's Head of Department. "It's not just the obvious rapid evolution of technology that makes a difference. It's also the fact that creative personnel are moving between theatre, film and



TV more freely than ever. By creating a multi-disciplinary department, we set out to respond to this."

The Department's youth means that it has focused most of its energies so far

in developing an innovative curriculum, especially for postgraduates. The results are impressive, with four Masters programmes already in place and eight PhD students working on areas as diverse as contemporary

from one period are specific to that period or can be applied more widely. The great thing about this kind of broad, interdisciplinary work is that we're looking at how things changed over a very long period of time, from multiple angles, so we can overcome that kind of difficulty."

Quite apart from its historical interest, the value of this work to modern society is that it promises to help us understand the world we live in today. As Britain's commercial and industrial base developed, so too did its economy and its living standards, and these changes were reflected in the way ordinary people viewed their material possessions. The project involves examining modern ideas of credit and trust, setting them in a historical context and tracing their evolution over time.

Less than a year into the three-year project, some interesting questions are already being addressed. When did people stop buying goods locally? How and why did the concept of 'the brand' – so central to modern marketing in every sphere – originally evolve? And why does there seem to be so little correspondence between the objects that are being found and the objects that are mentioned in surviving documents such as wills?

political theatre, verbatim acting, and TV serial drama. One student works jointly in TFTV and the Department of Archaeology, studying the interaction between theatrical productions and the buildings that house them.

Thanks to funding from the Samuel Storey Trust, the Department is also home to an impressive and growing archive of source materials for teaching and research. Uniquely, the archive includes not only finished playscripts but also manuscripts of works under preparation. "Much of our teaching and research links scripts to performance," says Professor Tudor, "so the ability to study writers' redraftings of their work, and their negotiations with directors, companies and censors is absolutely invaluable." Among the thousands of documents in the archive are the complete works of the screenwriter Charles Wood, responsible for *Iris* and *The Charge of the Light Brigade* as well as controversial anti-war theatre.



Grand designs to forge new partnerships

Castle Howard is the focus of just one of the many research collaborations fostered by York's Centre for Renaissance and Early Modern Studies, the largest interdisciplinary centre in Britain to be devoted to the study of the 16th and 17th centuries.

Within three years of the launch in 2005 of the new Centre for Renaissance and Medieval Studies, the University of York was identified by BBC *History* magazine as one of the top universities in Britain for Renaissance studies.

The Centre's director is Professor Bill Sherman. "There's a growing synergy of research across the departments who participate," he says. "We're particularly strong on the history of religion, history of books and history of ideas – but we also have clusters of expertise in areas such as landscape and the environment, violence and crime, editing and performance, and European court culture."

Originally founded as a partnership between the Departments of English, History and History of Art, the Centre now boasts more than 30 experts from fields as diverse as music, politics and philosophy. Not content with this broad base, staff at the Centre work with local partners, including the Borthwick Institute for Archives and the cathedral library at York Minster.

Now a series of high-profile research conferences is helping to cement the Centre's position at the top of its field. Next year, York's historic King's Manor will host the annual conference for the national Society of Renaissance Studies. And in 2011 a major international event

will celebrate the 400th anniversary of the King James Bible.

York researchers are opening up new areas of academic study too. In 2007, the Centre brought together experts from the USA, Japan and Ireland to analyse the prison writings of notables such as John Bunyan, Walter Raleigh and John Frith, all of whom were incarcerated for long periods. To set the mood, delegates were taken on a tour of York's historical prisons before settling down to two days of intensive and fruitful discussion. One result of the project is a Special Issue for the *Huntingdon Library Quarterly*.

Plans for the Centre's future are equally exciting. "We have a number of collaborative projects in the pipeline," says Professor Sherman. "One of the most exciting is a PhD studentship focusing on the library at Castle Howard. We want to reconstruct as much as we can about the intellectual world of the third Earl of Carlisle, the man who built it.

"This kind of collaboration between researchers, curators and visitors has serious potential. It will not only advance our knowledge of one of Europe's grandest country houses, but change the way the heritage sector and academia work together for the future, exploring the potential benefits – both intellectual and financial – that such partnerships can create."

Nations, borders, identities

A research project in the Department of History sought to define the impact of a major European war on people's mindsets, on the loyalties they provoked, and on how they defined themselves and others.

The three-year 'Nations, borders, identities' project, funded by the Arts and Humanities Research Council, took the case of the French Revolutionary and Napoleonic Wars of the late 18th and early 19th centuries, when most of Europe became embroiled in a conflict that also spread across Europe's colonial world. For some of the belligerents – notably Britain, France and Austria – these wars lasted for a whole generation, at a time when warfare was assuming a recognisably modern form. These were wars between peoples, between nation-states, fought by mass armies. They had far-reaching effects not just on soldiers and their officers but on civilians, men and women alike.

"The project sought to define these effects and to see how they became integrated into collective memory," said Professor Alan Forrest, one of the lead researchers in the Department. "To do

so, we used a wide variety of personal writings – letters, diaries, memoirs and other autobiographical writings from the war years and from the immediate post-war period. French artillery officers, German pastors, and Scottish noblewomen – all expressed different views of what war had meant for them."

Traditionally this period is presented as one of nation-building, when Europeans began to think of themselves as citizens of nation-states and wars turned into wars of liberation by entire peoples.

"We thought it important to question such stereotypes, and to show the diversity of human reactions. Did contemporaries really see things in such clear-cut terms? Did soldiers adopt the language of the politicians, or the inhabitants of occupied territories demonstrate a ready-made sense of national identity?"

"These conflicts helped to define the national identities and national

borders that form the basis of discussions on collective action in Europe now," he explained.

The evidence of the writings they left behind shows that people identified themselves differently according to circumstance. Mothers talked of war in terms of family tragedy, merchants lamented a community destroyed by blockade, villagers overrun by war commented on violence and pillage. Soldiers identified with their nation at one moment, and with their village or local community at another. Many Germans could as easily fight for Napoleon as against him, and saw troops from other German states as their enemy. Indeed, there are clear signs that a shared culture united army officers across Europe. They respected each other, even when they were on opposing sides. To a Prussian or Austrian the French appeared civilised, something they would not say of the Poles or East European Jews. But a sense of cultural alienation could also lead to disdain. In the Peninsula everyone – French, Germans and British alike – shared the same low opinion of Spaniards.

The project has involved close collaboration between researchers in York and colleagues from the Free University of Berlin, who were funded by the Deutsche Forschungsgemeinschaft. They have met to discuss their findings in a series of workshops and interdisciplinary conferences and the principal outputs will appear as three monographs and four collected volumes, in Palgrave's series on 'War, Culture and Society, 1750–1850'.

"These conflicts had far-reaching effects that are still felt today in Europe. They helped to define the national identities and national borders that form the basis of discussions on collective action in Europe now," said Professor Forrest. "They also led millions of people to know more about their neighbours and contributed to the sense of a European world and a shared European experience."



Many modern European nations face identity and border issues which emerged in the late 18th century



New partnerships between museums and audiences

“Although some considered the bicentenary to be a cause for celebration, it was also about a traumatic period of history that continues to divide contemporary society”

The 1807 abolition of the British slave trade is widely recognised as an important moment in the country’s history, but its 200th anniversary provoked a range of reactions.

The sensitivities surrounding the anniversary posed a particular challenge to the museums which had a responsibility to explain the events of 200 years ago to a diverse audience with very different perspectives.

“Although some considered the bicentenary to be a cause for celebration, it was also about a traumatic and not often recognised period of history that continues to divide contemporary society,” said Dr Geoff Cubitt, of the University’s Department of History.

Academics have spent the last two years examining these exhibitions, speaking to curators and interviewing museum visitors to understand and gauge the reaction they provoked.

Their research is helping museums to be better prepared to tackle similarly sensitive subjects in the future.

The researchers worked in close partnership with seven museums in Britain, including the British Museum and the National Maritime Museum, and conducted a survey of a further 60 different exhibitions that took place in 2007. They also interviewed around 1,500 exhibition visitors.

“Broadly, those people who identified themselves as from a white British background found the exhibitions

distressing but looked to distance themselves from this period, while those from an Afro-Caribbean British background were more engaged with the social commentary it provoked,” said Dr Laurajane Smith, of the Department of Archaeology.

“Many curators found it very difficult dealing with a period they were not confident about and where there were high expectations among potential visitors. While museums wanted to engage with communities and better understand their perspectives, not all had developed the networks or had the resources.”

Dr Cubitt added, “Museums were very effective at engaging audiences by documenting the connections between the slave trade and their local area but quite a lot of the exhibitions were saying the same things. More co-ordination might have led to the exploration of more angles or more depth.”

Detailed reports were prepared for each of the partner museums and workshops held to discuss the findings with museums, the Heritage Lottery Fund, the Museums, Libraries and Archives Council and the Department for Culture, Media and Sport.

Their work has also led to the production of four toolkits aimed at assisting museum curators preparing

exhibitions on sensitive subjects.

The research was funded by the Arts and Humanities Council and conducted through the Institute for the Public Understanding of the Past (IPUP), led by Professor Helen Weinstein. The Institute was created by the University of York three years ago to promote academic partnership projects across museums, galleries, heritage and the media.

IPUP has embarked on an ambitious programme of research that examines the myriad ways the past is represented, recalled, exhibited, and understood in the public sphere. This includes Professor Weinstein’s leadership role in the London Mayor’s Heritage Diversity Task Force.

“Our research is fundamentally geared towards exploring the ways in which a wide variety of people use the past to help them understand who they are in the present,” she explains.

“Our interest in the nature of audiences for museums and galleries lies in work that seeks to understand the role of participatory history in a multicultural society. York is a perfect location to ground this research, with its long history of migration and settlement stretching right back to the Romans.”

IPUP’s other research projects include analysing the ways in which history and cultural heritage are presented on television, especially in terms of national identities. Earlier this year, the Institute brought presenters, producers, art gallery curators and academics to mark the 40th anniversary of the landmark television series *Civilisation*.

York's credentials in collaborative arts and humanities research have been boosted to £10 million in the past six years – and by 2010 this record level of investment will have more than doubled.

When the Borthwick Institute for Archives opened in new purpose-built premises in 2005, it was just one more development in a series of important investments in the arts and humanities at the University of York.

The Institute's collection of historical documents – one of the most significant in Europe – moved from an overcrowded medieval building in York city centre into a specially designed facility in the new Raymond Burton Humanities Research Library. Priceless documents such as Charlotte Brontë's will and William Wordsworth's marriage bonds are now housed in climate-controlled strongrooms where changes in

atmospheric moisture and temperature can be carefully regulated. And, for the first time, researchers and the public can access the collection without an appointment, providing a superb resource for genealogists.

It's not just historical research at York that has benefited from the latest technological advances. A week-long electronic music festival heralded the opening of the Music Research Centre with Britain's premier performance space for reproduced and synthesised sound at its heart.

Like the archives, the Music Research Centre is a purpose-built facility, designed from the ground up to provide the best possible environment for modern

Building an intelle



researchers. Laboratories, composition rooms and recording studios are fitted out with state-of-the-art computer technology, while the central Rymer Auditorium has its own separate architectural foundations to provide complete acoustic isolation from the surrounding rooms.

“The Centre was designed to support contemporary creative work of international significance,” explains Professor Jonathan Wainwright, Head of the Department of Music. “The acoustic specifications of the new building have completely transformed music research at York.” York’s Department of Music has a strong tradition of performance and composition, producing composers and

performers of international stature.

Now the University is investing millions more to create a central base for interdisciplinary research in the arts and humanities. Named after Berrick Saul, the Vice-Chancellor who presided over York’s rapid growth in research expertise in the 1980s, the new building is situated at the heart of the existing campus.

But even these substantial investments pale into insignificance next to the £66 million project that will form the heart of the University’s new expanded campus by October next year. The Heslington East project, as it has become known, will almost double the size of the existing campus and provide a wealth of new teaching and research facilities

alongside public amenities for sports, leisure and parkland. The first phase of development will include new buildings for the Departments of Computer Science and Theatre, Film and Television as well as the Law and Management Schools.

The new home of the Department of Theatre, Film and Television is one of the University’s biggest investments. It features a suite of state-of-the-art facilities to ensure that York students are trained to be at the forefront of new media and creative development in the years to come. These include two theatres, a cinema, interactive media laboratory – to support film and television post-production – audio suites, television studios and video-mastering suites. As with the University’s state-of-the-art scientific facilities, facilities for arts and humanities research are available for use by private and public sector external partners, and form a key platform for the development of Science City York’s Creative York Cluster.

Actual vision



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1 The Berrick Saul building at the heart of the campus is a hub of interdisciplinary research in the arts and humanities

2 Priceless documents are kept under perfect climatic conditions in the Raymond Burton Humanities Research Library and Borthwick Institute for Archives

3 The wide range of facilities in the new Department of Theatre, Film and Television will ensure York students receive first class training

4 The University’s Heslington campus is expanding by 117 hectares and will include a wealth of new teaching and research facilities

5 The Music Research Centre houses Britain’s premier performance spaces for reproduced and synthesised sound



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Ancient coastlines hold many secrets of early human history, and now a major new project led by archaeologists at York is seeking to uncover them.

Archaeology's

An international collaboration led by archaeologists at York is examining the submerged European continental shelf to provide new insights into how the earliest European society emerged. The project is looking for information about the survival and dispersal of Europe's earliest Stone Age inhabitants, the extinction of the last Neanderthals and their replacement by modern humans from Africa and the early development of prehistoric societies.

It will also examine the early methods used in fishing and seafaring, the spread of human communities into Britain and Scandinavia after the last Ice Age, the initial dispersal of agriculture from the Near East, and the founding of the earliest civilisations.



North Sea trawlers frequently scoop up the fossilised remains of prehistoric animals – such as this mammoth head – which once roamed land now covered in water

final frontier

“This collaboration provides an ideal framework for sharing knowledge and developing expertise”

Led by Professor Geoff Bailey at York, researchers from across Europe are setting up a new consortium known as SPLASH (Submerged Prehistoric Landscapes and Archaeology of the Shelf), with the aim of developing cross-border cooperation in science and technology. The partnership has been funded to the tune of €500,000 by a European Union research fund and has already received expressions of interest from experts in 27 European countries.

Members of the consortium – which includes archaeologists, marine geophysicists, environmental scientists and industrial organisations – will share and discuss the results of their studies across more than three million square kilometres of ocean floor.

As well as significantly developing our understanding of our European cultural heritage, the project is helping researchers to develop new interdisciplinary and international research proposals.

“We want to provide guidance to policy-makers, heritage and government bodies about the relevance of our research,” explains Professor Bailey. “It’s not just

historically important. If we can learn more about how human settlements responded to sea level changes historically – especially how people’s lives were affected in the transition periods when levels were rising relatively rapidly – we can gain vital new understanding of the impact and social relevance of possible similar changes in the future.”

Modern sea levels only stabilised about 6,000 years ago. Up to 3.2 million square kilometres of the European continental shelf

– which adds up to about 40 per cent of the total European land mass – were exposed as dry land during the periods of lower sea level that persisted throughout the Ice Ages, and which may hold invaluable clues about the history of Europe’s earliest settlers.

“We’re all aware that a decisive step forward in exploring the continental shelf, especially the more deeply submerged areas, will require large-scale funding, international research collaboration, and engagement with industry,” adds Professor Bailey. “This collaboration provides an ideal framework for sharing knowledge and developing expertise. Together we are meeting the challenges of archaeology’s last frontier.”

Left: Geoff Bailey (pictured right with his dive team) has brought together specialists engaged in underwater research from all over Europe to take part in the SPLASH project
Right: Map showing proposed areas of investigation by the SPLASH project





New perspectives on the modern world

THE ROUTE FROM CONFLICT TO RECONCILIATION

In 2008, Professor Sultan Barakat, director of the University's Post-war Reconstruction and Development Unit, led a six-person team which conducted the most comprehensive strategic conflict assessment of Afghanistan to date.

The study involved interviews with members of the Afghan security services, former Taliban members, high ranking Afghan officials, foreign diplomats, NATO military commanders and many others in Kabul, Helmand, Kandahar and Herat provinces as well as in Pakistan and Uzbekistan.

The study took a more detailed look at the groups and individuals frequently referred to collectively as 'the insurgency' or 'the Taliban'. The researchers uncovered a tendency to attribute all violence to the Taliban, which made efforts to target military and humanitarian aid less effective.

The team concluded that in fact as many as half of violent incidents resulted from long-standing inter-community disputes,



Prince Hassan of Jordan (second from left) is welcomed by Professor Sultan Barakat (left), the University Vice-Chancellor Brian Cantor and Professor Haleh Afshar on one of his frequent visits to York's Post-war Reconstruction and Development Unit

from inequitable access to government services and public positions, and from opposition to internationally-funded poppy eradication efforts – rather than from pro-insurgent sentiments.

The study also provided an opportunity to dispel additional myths concerning conflict in Afghanistan – including the idea that Al-Qaeda is playing a direct and leading role, and that the insurgency could not continue



Although the cultivation of poppies for the narcotics trade provides funding for the arms traffickers, it also a lifeline for impoverished farmers, and efforts to eradicate it lead to resentment of the international forces, according to researchers in York's Post-war Reconstruction and Development Unit

without narcotics trafficking to finance it.

"It's good to see our research having a tangible effect on British and international policymaking and to have received positive feedback from the British and Afghan governments," said Professor Barakat.

PRDU grew out of the York Charter for the reconstruction of human settlements developed by Professor Barakat in the 1990s, and his work on cultural heritage and reconstruction following conflict. It is an interesting example of the way in which research in the arts and humanities can develop and impact on other research traditions and society. Research and consultancy in many countries, including Iraq and Bosnia, has now followed. Recognising the need for specific training for professionals, the PRDU launched a Masters in Post-war Recovery Studies in 1996, which welcomes students from all over the world.

TOLERATION – CAN SOCIETY STAND IT?

How far should we stretch our commitment to freedom of speech? Do we have to tolerate actions and ideas that people find offensive? What about controversial issues like pornography or holocaust denial?

The Morrell Centre for Toleration at the University of York brings careful analysis and academic rigour to bear on some of modern society's most urgent, emotive and potentially messy debates.

"Questions of toleration have always been important in the modern world, but perhaps never more so than today," says the Centre's director, Professor Matthew Festenstein. The belief that we have plenty of lessons to learn from history underpins the work of staff and research students.

"Revisiting the 17th-century debates about toleration helps to cast light on the problems of our own age," says Professor Festenstein.

"Early modern ideas of toleration were developed in an attempt to accommodate religious ideas and passions that seemed – and often were – dangerous to one another. Now the wheel seems to have turned full circle, and contemporary liberal societies are again grappling with

the fears and opportunities generated by religious diversity.

"This is the only research centre of its kind in the UK, and it has become the foremost global centre for research into toleration, providing a forum for cutting-edge intellectual exchange on problems of fundamental social and political importance."

Generously supported by the C and JB Morrell Trust, the Centre hosts an annual memorial address, delivered last year by the former Bishop of Oxford, Lord Harries, on the controversial issue of religious tolerance in the post-9/11 world.

The Centre has combined historical background with path-breaking research in the contemporary philosophy of toleration, including work on freedom of speech, pornography, multiculturalism, and toleration in international politics.

Its distinctive MA in Political Philosophy – The Idea of Toleration – expresses this commitment to studying both the past and present dimensions of toleration. Attracting a wide range of students, the MA and PhD programmes have trained many of the most eminent political philosophers in the UK.



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The subject of toleration has drawn a long line of eminent people to speak at York, among them, **1** Sir Mark Tully, **2** Helena Kennedy QC, **3** Caryl Phillips and **4** Dame Julia Neuberger



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Why research matters in education

Researchers at York are providing evidence to improve the quality of school teaching across the country, using the latest experimental methods to derive robust results, and distilling decades of studies into advice for teachers and parents.



York's Institute for Effective Education is doing for education what specialist groups at York are famous for doing for health policy: setting out to answer the question 'What works?' The Institute develops educational programmes for pupils from nursery through to secondary school in literacy, numeracy and science. These are innovative, often enhanced by technology, and crucially they are evaluated using rigorous scientific methods.

One of the Institute's biggest projects to date is a programme to investigate whether co-operative learning – that is, learning in which pupils work in groups and 'teach' each other – improves achievement in mathematics. If the results are favourable, this approach could offer a promising solution to the relative underachievement of British schoolchildren in maths compared to those in European countries.

With 40 primary schools involved across Britain, the project contrasts sharply with previous small-scale studies conducted elsewhere which have been of variable quality. Professor Bob Slavin, the IEE's director since its founding in 2007, calls it "one of the largest controlled experiments in education ever conducted in the UK".

Alongside cutting-edge research, the Institute works to make its results accessible to teachers around the world. It recently launched a new magazine on both sides of the Atlantic, *Better*, which provides practical advice for teachers based on the latest developments in education research. Co-developed with the Centre for Research and Reform in Education at Johns Hopkins University in Maryland, where Professor Slavin also holds a directorship, each issue features accessible articles from some of the most respected educational researchers in the world. Most importantly, all articles are rooted in rigorous evidence-based research on what really works in the classroom.

How children are taught science has undergone dramatic improvements thanks to York's Science Education Group which has an international reputation for innovative research-informed curriculum development and which has had a real impact on practice in the UK and beyond

Judith Bennett, Bob Slavin and John Holman, respectively Heads of Educational Studies, the Institute for Effective Education and the National Science Learning Centre, were part of a partnership meeting at leading US university Johns Hopkins, to discuss evidence-based reform in education, health policy and practice, and new developments in medical and science education.



When it comes to humanities research, few areas have the potential to impact so directly on the way practitioners work, and few researchers can command such interest from policy-makers as those who work in an area which is invariably close to the heart of politicians and the general public alike. Or at least that's how it should be. In fact, as the Head of York's Department of Educational Studies, Professor Judith Bennett, reports, "Much past educational research has been criticised for *not* making an impact on policy and practice."

She should know. Since 2003, Professor Bennett and colleagues at York have reviewed and assessed large numbers of past studies. Their specific focus has been on evidence-based research into English, maths and science teaching in schools – all areas in which the Department has a reputation so strong that it has been made lead reviewer for the government-funded Evidence for Policy and Practice Information Centre.

According to Professor Bennett, the first thing you notice when you do a systematic review is the sheer variety of studies. Take, for example, context-based approaches to science teaching, in which science ideas are developed in the context of everyday life rather than abstractly – so learners might be introduced to Newtonian physics by thinking about the forces that are applied to their bikes as they cycle to school. Of over 60 studies identified by the York team in a range of countries, fewer than one third had used any kind of experimental design, and not one had used a randomised controlled trial, or RCT.

RCTs are classic experimental design. One randomly-chosen group of people is given the treatment that you want to test – a new drug, say, or a new teaching method – and the results are then compared with another group, the 'control' or 'baseline', which received no such treatment. In medical research, such trials are well established and regarded as the gold standard for reliable evidential results.

Today's teachers inspire tomorrow's scientists

Teachers know that keeping their subject knowledge and classroom skills up-to-date is a major challenge, especially when training involves leaving school for days on end. But the need to adopt new techniques won't go away for fast-changing subjects such as science.

The National Science Learning Centre at York, which opened in 2006, has a mission to reinvigorate science education in Britain. Funded by the Wellcome Trust, its task is to reach out to science teachers across the UK.

Highly developed residential courses put teachers in touch with the cutting edge of modern scientific research as well as helping them to develop effective communication skills. The courses can vary widely but the underlying principle is always the same – the best way to inspire tomorrow's scientists is through today's teachers.

The result is that over the past three years the Centre has had more than 3,000 delegates through its doors.

"One of our goals is to reach out to at least one teacher in every secondary school in the country," explains Centre Director, Professor John Holman. "It sounds ambitious, but it's perfectly achievable and next year we'll be more than doubling our outreach."

The experience has immense value for all concerned. But schools have to budget for the course, travel and accommodation costs, and

cover the resulting teaching commitments.

The result is Project ENTHUSE, funded by up to £10 million from leading British companies, matched by £10 million from the Wellcome Trust and the same again from the Government. This money provides bursaries so that no teacher can be denied the opportunity of a course at the National Science Learning Centre for financial reasons.

The Centre has now taken on a co-ordinating role for the Government's 'STEM cohesion programme', representing technology, engineering and mathematics as well as science education. Alongside the National Science Learning Centre, 2010 will see the launch of a National STEM Centre at the heart of which will be a uniquely definitive resource centre – the 'British Library of STEM education'. This is a home for many thousands of books and teaching resources, which will be available online too.

Alongside these developments, the National Science Learning Centre was also awarded an £18 million government contract to operate England's existing regional Science Learning Centres. These institutions, located across the country, had previously been run independently.

"For the first time," says Professor Holman, "we have a true network of Science Learning Centres with York at its hub."



The National Science Learning Centre has attracted national and international figures because of its work

But the relative rarity of RCTs in educational research raises interesting questions. Why are they used so infrequently? And if studies don't use these trials, does the evidence they gather have any value? In fact, Professor Bennett argues that a carefully-designed study can yield useful results with a different methodology.

"In the end, a lot depends on the question you're asking. An RCT aims to

answer the question 'What works?', and if the results for a particular teaching method are positive then we can be happy with that. But sometimes a more useful question to ask is 'What works and why?' – or perhaps, 'Are there some circumstances in which it seems to work better than others?' And here, the answers are more likely to come from qualitative, in-depth studies."

IN BRIEF: arts and humanities news

EXPERT ON THE HUMAN VOICE

The tenor voice has been long held in esteem by music lovers around the world for its rich and mellifluous tone. The major changes in the way tenor singing is regarded as well as the development of the technique itself has been described in a new book, *Tenor: History of a Voice*, by Dr John Potter of the Department of Music, the culmination of four years' research.

In it he traces the history of tenor singing from the 16th century, when singers were first identified as tenors, to the early recordings of performers such as Enrico Caruso, Richard Tauber, and latterly the 'Three Tenors', Pavarotti, Domingo and Carreras, who performed at the 1990 football World Cup.

"In some ways, tenor singing has gone full circle. Tenors would once have been carried through the streets by crowds after a performance, but in the 20th century audiences started to consider their performance in more artistic terms.

"We have now reached a point where the biggest stars are spending very little time in opera houses but are singing arias from classical opera and recent pop songs to filled stadia," he said.

John Potter coaching music students at the University of York



Curating major exhibitions

Experts in the Department of History of Art are involved in numerous national and international art exhibitions as curators and consultants. Most recently, Professor Mark Hallett is lead investigator on a three-year project with Tate Britain, supported by a major grant from the Arts and Humanities Research Council. 'Court, country, city: British art 1660-1735', will explore a number of key themes in a relatively little-studied period of art history stretching from the Restoration to the emergence of William Hogarth.

Bringing drama to the city

The Theatre Royal, in the heart of the city of York, is a regular venue for productions by the Out of the Blue theatre company. Founded by Professor of Modern Drama Mary Luckhurst, of the Department of Theatre, Film and Television, the company's most recent performance was *Celebrity* which examined the contemporary view of high profile personalities through film, music and theatre. Professor Luckhurst was awarded a National Teaching Fellowship in 2006.

Making film historically accurate

Academic historians are often disappointed by the inaccurate interpretation of historical events on film. Now a pioneering project led by Dr Hannah Greig of the Department of History, and Peter Kershaw of Duchy Parade Films, will link academic research with the production of a feature film. *The Last Coiner*, which tells the story of a notorious group of 18th-century counterfeiters, will have an historically-accurate script thanks to a series of research workshops, involving academic historians, specialists from Yorkshire museums and the film's production team.

Boost to postgraduate funding

Arts and humanities departments across the University of York have successfully applied to the Arts Humanities Research Council for 178 Masters and Doctoral level studentships to be offered over the next five years. The AHRC has graded York as an 'Excellent' institution in terms of its supervision and training provision for postgraduates. These awards recognise the University's excellent track record in postgraduate teaching and research degrees and will ensure that departments and centres in the arts and humanities will continue to attract the very best postgraduate students.

Advising the Government on ethics

Professor Tom Baldwin of the Department of Philosophy is a member of the expert committee which advises the cross-Government programme 'Healthy Weight, Healthy Lives'. This addresses the public health issues raised by current levels of obesity in the UK, and he is speaking about the difficult moral issues raised by public policy in this area at a major conference in the autumn. Professor Baldwin is also a member of an informal group advising the new Secretary of State for Health about the State's role in relation to public health.

The growth of railway advertising

Marketing, advertising and branding have been critical to the development of rail travel in Britain and their influence is the subject of a major research project which culminates in an exhibition at the National Railway Museum. Funded by the Arts and Humanities Research Council, Professor Colin Divall of the Institute for Railway Studies is looking at railway travel in three critical periods in history: the late Victorian period, when third-class travel became widespread, the inter-war years, when the railways faced increasingly stiff road competition, and the 1960s and 1970s with the construction of the motorway network.



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“A judicious and relevant mix of disciplines can significantly enhance a research project by providing different perspectives on the challenge”



Philip Morris is the Business Development Manager for Arts and Humanities. Based in the Research and Enterprise Office, his role is primarily to foster research and knowledge exchange activities in the arts and humanities.

Philip joined the University of York in 2005, bringing with him a wide experience and personal interest in the humanities. With an MA in Philosophy, an MSc in Computer Science, and public and private sector experience in broadcasting, publishing, government and higher education, Philip believes passionately in the importance of arts and humanities research and in particular the benefits to research accruing from interdisciplinarity.

“A judicious and relevant mix of disciplines can significantly enhance a research project by providing different perspectives on the challenge and by enhancing both the magnitude and the quality of the impact on society,” he says.

The role of the Research and Enterprise Office is to support all areas of research activity and impact at the University. Phillip contributes to this by helping academic staff to apply for and manage research grant proposals and projects, promoting knowledge exchange and developing commercial opportunities for those associated with arts and humanities at the University.

Philip is currently involved in projects promoting artists from the Department of Music, developing workshops on Impact with Cambridge University, assisting in the development of Continuing Professional Development in creativity and innovation with the Department of Philosophy, and preparing the Higher York Creative Hub for the campus expansion at Heslington East.



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