Another busy term has ended...it’s been a term full of interesting events, research and activities organised by members of our research clusters and academics within Keble. And what a great variety there has been; from a fascinating (and understandable!) talk on possible shapes of the Universe, to the creativity underpinning 800 years of harpooning technology in Greenland, to aspects of Renaissance memory theatre, to the reasons why soap bubbles are spherical!

This newsletter describes some of these events, provides news on Keble research in the wider media spotlight, and presents interviews with some of our distinguished academic visitors and Fellows. It also lists upcoming events we have scheduled for Trinity term, and beyond. Anyone interested in knowing more about these events is encouraged to consult our ASC web pages at keble-asc.com.

We encourage you to come along and get involved and see what is happening in the often unpredictable but never uninteresting world of interdisciplinary research at Keble College.

Complexity Cluster Activities

**Professor Gui-Qiang Chen**, is currently the organiser, alongside Prof. Henrik Hahgholian (Stockholm) and Juan Luis Vázquez (Madrid), of a half-year programme of the Isaac Newton Institute for Mathematical Sciences on Free Boundary Problems and Related Topics, 6 January-4 July 2014. A brief description and more information can be found at: [http://www.newton.ac.uk/programmes/FRB/index.html](http://www.newton.ac.uk/programmes/FRB/index.html)

**Dr Apala Majumdar**, Fellow by Special Election at Keble College, has been invited to speak at the forthcoming International Conference on the Mathematical Theory of Liquid Crystals and Related Topics in Shanghai, China, in June 2014.
**International Media Attention for Networks Cluster Research**

*Sophie Kay describes the recent media attention given to research by Dr. Felix Reed-Tsochas of the Networks Cluster.*

Research from Dr. Felix Reed-Tsochas of the Networks Cluster has enjoyed international media attention in recent weeks, as a result of collaborative work published in the scientific journal PNAS. His paper, entitled, “Persistence of social signatures in human communication”, is the result of an ongoing collaboration between researchers at Aalto University, Finland and the Universities of Chester and Oxford in the UK.

This work represents the culmination of an 18 month study, in which 24 high school students agreed to have their phone communications tracked and analysed in detail. Analysis of phone data was coupled with extensive surveys of the participants at the beginning, middle and end of the study, allowing researchers to determine the type of individuals called (e.g. friend, relative) and to account for face-to-face interactions away from the phone.

Data from each of these components were then used to construct the “social signature” of each participant, incorporating information such as the frequency of calls to a given individual and the strength of that relationship. These social signatures demonstrate that although an individual’s friendships may change over time – for example, during the social transitions typical of early adulthood – the fundamental structure of their friend network remains surprisingly stable. Such stability is believed to arise from three constraints, namely: the time to maintain friendships; the finite reserves of an individual’s “emotional capital” and the cognitive limitations of the human brain.

Interested readers can find Dr. Reed-Tsochas’ own account of the research in his article for the US-based news site, the Huffington Post. Publications including Science, The Economist, The Times, and The Independent all ran articles in early January; the work also proved a hot topic for many other news outlets worldwide.

Much of the global media attention naturally focused on the social interaction aspects of the work. Nonetheless, Dr. Reed-Tsochas believes the fine-grained data produced by the study will also deliver new insights into the interpretation of large-scale data in the field of social networks research:

“It has become very fashionable to proclaim the dramatic changes that we should expect in an age of big data, with access to unprecedented information about the activities of large numbers of people. However, it is often difficult to interpret the observed patterns [in social networks], because although we know who interacts with whom, our lack of information about the nature of the individuals concerned and the types of relationships that they are involved in hampers our ability to understand why they connect. Smaller studies [such as ours], where we have highly detailed information on both individuals and the nature of their relationships, can therefore play an extremely useful role. By extracting systematic patterns of behaviour from the small group of participants that we studied, we hope to build a kind of Rosetta Stone that can help us decode and understand the patterns that we find in large social data.”

So far, Dr. Reed-Tsochas’ research has stirred media interest as far afield as India (Telegraph India, Economic Times), Australia (The Australian), Germany (Der Spiegel, Aponet), Austria (Science-ORF), the USA (The Atlantic Cities, Medical Daily, Venture Beat) and the Netherlands (De Volkskrant).
This term saw a number of brilliant researchers visit the ASC at Keble, and further evidence the ground-breaking research within the Keble community. Some of these individuals took time out of their busy schedules to talk to the ASC.

**Visiting Researcher: Prof. Lina Bolzoni**

Lina Bolzoni is a Professor of Italian Literature at the Scuola Normale Superiore in Pisa, where she has also served as Dean of the Classe di Lettere e Filosofia. Since 2000, Professor. Bolzoni is the director of the Centro per l’Elaborazione Informatica di Testi e Immagini nella tradizione letteraria. Her research focuses on the relationship between literature and philosophy in the sixteenth and seventeenth centuries, as well as on the utopian tradition, medieval vernacular preaching, the relationship between the figurative arts and literature, and the art of memory.

During Hilary Term, Professor Bolzoni spent time at Keble as a Visiting Research Scholar. Whilst here, she gave a lecture to the ASC Medieval and Renaissance Studies Cluster entitled “Memory Palaces: the Renaissance and the Contemporary World” in which she discussed the memory theatre of Guilo Camillo, situating it within the longer tradition of mnemonic devices and Camillo’s artistic and intellectual surroundings. Professor Bolzoni explored the wider use of visual mnemonics in the fifteenth and sixteenth centuries, and ended by discussing the use of architecture, image, and memory in the twentieth century.

**WHAT WERE YOU WORKING ON WHILST AT OXFORD?**

I am here to finish my book concerning the art of memory in the renaissance. I am providing a new edition of the text of the Idea of Theatre, along with an introduction and commentary. I am very interested in the relationship between literature and the figurative arts in the renaissance, and this analyses the two.

**WHAT DREW YOU TO THIS AREA?**

The renaissance understood the power of images, and there is a relationship between the literary and figurative arts, seen in the use of images by preachers as mnemonic tools. This relationship can also be seen in the works of famous renaissance artists such as Titian. I was originally interested in literature and philosophy, and was a researcher in this area in my earlier graduate work, before looking at the poetics of the Renaissance for my PhD. From this I discovered a concept of a universal model for poetics, in Francesco Patrizi, which drew me into the theory of language and introduced me to the idea of an encyclopaedic theatre of memory.

(Contd on page 4)
HOW DOES THIS WORK DOVETAIL WITH OTHERS AT KEBLE AND IN OXFORD?
There are scholars at Keble, such as Nicola Gardini, who share my interests and study the area, and I have had several interesting conversations with graduate students. But I feel it is extremely important to discuss this topic and research with other scholars, to see how the Renaissance, words, and images are studied and thought about elsewhere, and by those in other disciplines.

THAT IS ONE OF THE KEY AIDS OF THE ASC.
Yes. It is also fascinating to approach this topic from a specific point of view, but to interact with others and to gauge an idea of how others, from different disciplines, understand and study the concept of memory, literature and art. That way one finds a rich perspective.

WHY DID YOU CHOOSE TO COME TO OXFORD, ESPECIALLY KEBLE?
I have visited Oxford before and stayed at All Souls and Christ Church. Oxford is a beautiful place to conduct research, with the Taylorian and Bodleian so close, and with lots of resources, including the manuscripts. And it’s a great place to meet people and discuss their work. Keble itself is quite different from the other colleges, and has a very friendly feel.

WHAT ELSE WILL YOU BE DOING WHILST IN THE UK?
Whilst here, I will also visit London to see some renaissance painting collections and to visit former students, who work at UCL.

AGAIN CREATING THOSE LINKS TO SCHOLARS AND OTHER WAYS OF THINKING.
Yes, exactly.

HAVE YOU ENJOYED YOUR TIME HERE?
I have been enjoying my time here, but it is too short! I hope to come back soon.

Visiting Researcher: Dr. Heather Dalton

Heather Dalton is an Honorary Fellow in the School of Historical and Philosophical Studies at the University of Melbourne. Since her PhD was awarded in 2008, Dr Dalton has been associated with the Universities of Melbourne and Sheffield, and is a member of The Cabot Project at the University of Bristol. The primary focus of her research is merchant networks in the fifteenth and sixteenth century Atlantic. On her most recent visit to Keble and the ASC during Michaelmas and Hilary terms 2013-14, Dr Dalton was a Visiting Research Scholar as part of the Collaborating Research Scholar scheme.
WHAT WERE YOU WORKING ON HERE IN OXFORD?
The current focus of my research is transnational relationships and family ties in fifteenth and sixteenth century Atlantic trading networks and voyages of discovery. I am looking at the extended merchant family in its widest sense - encompassing wives and mistresses, children (legitimate and illegitimate) apprentices, factors, servants and slaves. By combining investigations of British records with research in Iberian trade and notary archives, I have begun to locate merchant families from the British Isles in a global network made up of other Europeans, Africans and people from lands recently discovered and settled by Europeans. My work in Oxford contributed to my understanding of how intermarriage, the accumulation of wealth, and the sharing of capital and knowledge, privileged these merchant families. I aim to build our understanding of how such networks impacted upon the localities within their trading reach and influenced emerging ideas of trade, ‘discovery’, settlement, colonization and race in the British Isles.

WHAT DREW YOU TO THIS AREA?
The subject of my PhD thesis was the English merchant Roger Barlow. He presented a cosmography to Henry VIII in 1541, having lived and traded from North Africa and Seville and explored the River Plate in South America with Sebastian Cabot. By following rather than concentrating on Barlow, I investigated the overlapping and interlinked networks he belonged to throughout his life. In doing so, I realised that merchants like Barlow and his English and Genoese trading partners had a knowledge of the world and its opportunities that was extraordinary for this period. While recent studies explore the interplay between networks and metropolitan economies from the late sixteenth century, my aim is to look at those who provided the groundwork for the Elizabethan ‘Age of Discovery’. Moreover, as studies of European trade in the early modern period tend to focus on trading patterns and to overlook the relationships and practices of individual merchants, I am drawn to investigating the emotional as well as economic ties that bound those in merchant networks.

IN WHAT WAYS DOES THIS RESEARCH DOVETAIL WITH THAT OF OTHERS AT THE ASC?
My research dovetails with that of Dr Ian Archer and Dr Tracey Sowerby in particular. My work on merchant networks, and the transfer of knowledge and development of ideas, connects with: Dr Archer’s interest in the history of early modern London - its guilds and its merchants; and Dr Tracey Sowerby's interest in early modern diplomacy and the interactions between politics, religion, print culture and intellectual developments.

A KEY ASPECT OF THE ASC IS THE INTERACTION BETWEEN DIFFERENT DISCIPLINES, WAS THIS OF USE TO YOU WHILE AT OXFORD?
Yes it was. I was able to take part in the 'Textual Cultures' colloquium at the centre (my paper was Trading in Words: Roger Barlow, Robert Thorne and the communication of New World 'discoveries' in England prior to 1550). I also delivered the ASC Medieval & Renaissance Lecture: A Sulphur-crested Cockatoo in fifteenth century Mantua: Rethinking symbols of sanctity and patterns of trade. At both events I benefited from meeting people from different academic specialisms. Moreover, as an Associate Investigator at the ARC Centre of Excellence for the History of Emotions at the University of Melbourne, I found it particularly valuable to be able to discuss this work with members of the ASC. For example, I was able to converse about the interaction of faith and emotion with Dr Mark Philpott (who is currently researching bearded women saints) and material culture, innovation and emotion with Dr Lambros Malafouris (whose cross-disciplinary research bridges archaeology, philosophy, anthropology and neuroscience).
Dr James Palmer is a tutorial fellow in Human Geography at Keble College. He obtained his PhD in Geography from Downing College, Cambridge. His current work builds upon his doctoral research to examine the interplay of science, evidence, knowledge and power in European policy processes related to the governance of sustainable energy systems and the environment. Dr Palmer also remains heavily involved with on-going work examining geoengineering governance at the Institute for Science, Innovation and Society (InSIS).

**LET’S START WITH YOU TELLING ME A LITTLE BIT ABOUT YOURSELF**
I started at Keble a year ago, in Hilary term 2013. I spent my Undergraduate and Postgraduate career focusing on Geography at Downing College, Cambridge. My doctoral research examined biofuel policy on the European level. The EU’s policy towards biofuels originally grew out of the concern for the environmental impact of road transport, especially regarding climate change. The use of biofuel by the European Union appeared to offer solutions to a number of problems at that time, including agricultural reform, the decrease in subsidies for older members as an alternative source of income, and energy security. It was seen as a silver bullet to these issues.

**YOUR RESEARCH PROJECT IS ENTITLED “THE DRIVE FOR SUSTAINABLE ROAD TRANSPORT: SCIENCE, EVIDENCE, POLITICS AND POWER.” CAN YOU TELL ME WHAT THIS IS ABOUT?**
The grant is a Fell Fund Grant, and the research is currently in its early stages. My main interest is in the relationship between expertise and evidence on the one hand, and policy and policy-making on the other. For some years now there has been a big push in Europe, and in the UK, for ‘evidence-based policy-making’, especially regarding the environment. But there is a two-way street between evidence and policy; how you define the problems that need to be addressed impacts on the types of evidence that are sought out and taken seriously. Within the realm of road transport policy for instance, there is a widespread assumption that more investment in road-building and other infrastructure helps to stimulate economic growth, and so any evidence that helps us to identify which roads to build and which investments to make is deemed valuable. Yet, at a different level, one could also ask whether Gross Domestic Product is the best way of measuring transport’s potential benefits to society. A different perspective here would highlight quite different types of evidence and expertise as important in the successful governance of our road transport system. It is this relationship between evidence and politics that is at the heart of my research. At a more pragmatic level, another reason why I’m interested in EU road transport policy at the moment can be found in a recent proposal made by the European Commission, who’ve stated that there will be no more targets for the reduction of greenhouse gases or enhanced renewable energy use in the road sector after 2030. Because road transport contributes so significantly to the EU’s total GHG emissions at present – about 18% or so in 2009 - this is a huge deal. It raises huge questions about how the road transport sector will pull its weight in the wider push to mitigate climate change. It’s a very interesting time in this field.

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YOU TALKED A LOT ABOUT EVIDENCE AND POLITICS, BUT WHAT ABOUT SCIENCE AND POWER, THE TWO OTHER ELEMENTS IN YOUR PROPOSAL?

Well, science is a type of evidence, not necessarily distinct, but it is certainly a special case. Science comes with extra authority, even though other less formal kinds of evidence, that provide different perspectives, can be just as important in defining problems and formulating solutions. The association of power and politics, and how the two relate, is already well-known. What I really mean by the two terms though, can be understood through a consideration of the ways in which any given policy comes into being. On the EU’s website for instance, there is a very elegant flow chart that shows the formal political process, which comprises many stages of assessment, review and re-drafting. What it doesn’t show, however, are the informal, behind-the-scenes processes, things like lobbying, discussions that take place over drinks or over lunch, the skill involved in knowing how to influence the right person in the right place at the right time. This was an important element in my PhD too, biofuels and road transport policy are arguably as much – if not more - the result of informal than formal politics. So in a way, the distinction between terms like science/evidence and power/politics is all semantics, but they can be useful for considering all angles relating the formulation of policy.

HOW DOES THIS FIT INTO YOUR WIDER RESEARCH?

Well, my overall interests are, as I said, in the way evidence and politics relate in a mutually constitutive way; the process of policy making, and how credible evidence is defined in contrast to subjective opinion. I am also interested in the role of uncertainty regarding the interaction between research and policy. Issues of uncertainty are clearly critical to debates over issues such as genetically modified food or nanotechnologies, indeed there are often inherent uncertainties regarding these sorts of technologies, especially in the long-term. The same can be said for geoengineering. I am very interested in the involvement of the public in debates about these kinds of issues, and in what uncertainties mean for the act of gaining public consent to take one course of action over another. I am actually involved at present in some work with the Institute for Science, Innovation and Society, which looks at the implications of geoengineering precisely for public engagement. I am interested in how involved the public is in designing and deciding how to use this process, what they think is most effective, in other words, in democratising the process of how we decide what to do as a polity.

YOU IDENTIFY YOUR PROJECT AS BEING INTER-DISCIPLINARY. IN WHAT WAYS DOES IT FIT THIS CRITERION?

Firstly, the ideas this project focuses on will draw on and contribute to a number of different disciplines. Firstly, to geography. The Department of Geography at Oxford contains a Transport Studies Unit, which aims amongst other things to focus more on policy and politics of transport, particularly in Europe, in the coming years. This research though will also be of use to political science, and to science and technological studies in the analysis of the relationship between science and technology and society. Science is often presented as something which takes place in a vacuum, but in the case of many scientific advances, such as GM crops, it is hard to decouple it from wider social processes and potential applications.

My project is in its early stages, but there are a number of people I hope to work with over the next two years, and my aim is for this to be a collaborative project. By the end, I would also like this research to go beyond academia, and to produce something for the policy-making community. It would be bizarre not to feed back this research to the policy-makers and the public. Whether the policy-makers have the appetite for this research is another question though!

(Contd on p 8)
WHICH AREAS OF THE ASC DO YOU FEEL YOUR WORK COMES TOGETHER WITH?

I think the work of the Creativity Cluster would be a useful area to explore, especially regarding my own interests. Prof Sarah Whatmore is a member of the ASC Creativity Cluster, and Head of the Geography Department, and her work looking at the relationship of knowledge and governance of evidence overlaps with some of my fundamental research interests.

Hilary Term Meetings and Events

Medieval and Renaissance Cluster Lectures

On 24th January, Professor Stephen Walters gave a lecture entitled “Warping the Weft of History: Orlando furioso, canto 15”. The lecture focussed on the theme of dismemberment as represented by the figure of Orrilo and on the image of the capturing net which Ariosto took from the classical tradition. With virtuoso ability, Stephens showed the rich intertextuality of the canto, illuminating the complexity of Ariosto’s creative process and mnemonic appropriations.

Professor Lina Bolzoni discussed the memory theatre of Guilo Camillo situating it masterfully in both the longer tradition of mnemonic devices and Camillo’s artistic and intellectual milieu. We were introduced to the visual mnemonics of the later fifteenth and sixteenth centuries, before hearing how Camillo’s vision was a more ambitious project than his contemporaries. Professor Bolzoni suggested that the architectural framework for mnemonics, which for Camillo was intellectual, has broader cultural resonances as demonstrated by Marino Auriti’s Encyclopaedic Palace. Finally, she introduced us to her new project, which explores the architecture, image and memory in the twentieth century, focussing on figures such as the artist Achilles Rizzoli who produced architectural portraits of his friends and family.

Dr Jason Peacey (UCL) gave a lecture that drew on material from his new research project on the transnational dynamics of English print culture. His paper focussed on links between English and Dutch print in the later seventeenth century and dealt with the ways in which the English government monitored and tried to use the Dutch presses through diplomatic channels. One the one hand, English diplomats kept an eye on the presses in order to identify and try to suppress any illicit material being printed (whether in English or translation) by English ‘fanatics’. On the other, they promoted material, including diplomatic memorials, in the Netherlands in an effort to engage the interests and sympathies of the Dutch political elite and win them to the English cause. Overall, the lecture made a strong case that understanding a national print culture in isolation was insufficient and that it is only by appreciating transnational concerns and connections we will be able to understand English print culture.
Trinity Term Meetings and Events contd. ...

Complexity Lectures

On 18th February 2014 Professor Stefan Friedl gave a lecture to the advanced Studies Centre entitled “Possible shapes of the Universe”. In this fascinating talk, Prof. Friedl identified the potential different shapes of a 1-dimensional, 2-dimensional, and 3-dimensional universe, and the features and differences that might exist between them. Notes from the lecture can be found on the ASC website: http://www.keble-asc.com/?id=1112

Professor Stefan Friedl

On the 27th February, Dr Filippo Cagnetti delivered a lecture to the Advanced Studies Centre, “Isoperimetric Inequality: Why are soap bubbles spheres?” In the lecture, Dr Cagnetti successfully attempted to explain the Isoperimetric Inequality principal in a way accessible to non-mathematicians.

Dr Filippo Cagnetti (centre) with the lecture’s attendees

Creativity Cluster Seminar & Book Launch

On 3rd March, Dr Matthew Walls gave a Creativity Seminar entitled “800 years of harpoon throwing in Greenland: environmental feedback and creative flow in the building of intergenerational knowledge”. The seminar used videos and photos from Dr Walls’ ethnoarchaeological work in Greenland in order to characterize the forms of knowledge and learning involved in throwing a harpoon – a seemingly simple act that has been practiced by Inuit hunters in Greenland since their ancestors first arrived as a part of the Thule migration. Dr Walls proposed that understanding the inherent creativity through which knowledge is re-grown in the experiences of each generation of hunters allows for a more nuanced archaeological narrative of how the past unfolded in Greenland as a uniquely Inuit story. For more information on Dr Walls’ ethnoarchaeological work in Greenland, you can visit his project page: http://www.qajaq.utoronto.ca/english_site/en_overview.html

Dr Nicola Gardini

The 6th March saw the ASC sponsor the launch of Keble Fellow Dr. Nicola Gardini’s latest novel “Fauci” described as “A musical novel, set in mid-eighties Milan, starring a hysterical soprano, a heroic dog, two friends who desperately try to become lovers, and numerous weird extras, including maids, art critics, corporals, dwarfs, and hideous adolescents.” The book launch involved a detailed discussion of the themes of the book by Dr. Gardini, as well as Dr Matthew Reynolds and Professor Guido Bonsaver. Dr Gardini read passages from the novel, in both Italian and English.
Have you missed an ASC lecture? Many of the lectures are available as podcasts. You can find these and other Keble recordings at: http://podcasts.ox.ac.uk/units/keble-college

Coming events

ASC events: (all ASC events are listed on www.keble-asc.com)

ASC Lectures

Professor Paul Newman Lecture
On 28th April, Professor Paul Newman, BP Professor of Information Engineering and Keble Fellow, will be giving a lecture in the O’Reilly Theatre at 5pm. For more information please visit the ASC website.

Dr James Palmer Lecture
On 11th June, Dr James Palmer at 5pm in the Pusey Room. For more information please visit the ASC website.

Medieval & Renaissance Cluster: Lecture Series

Professor Brian Richardson “Oralising Early Modern Italian Literature”
On 6th May Professor Brian Richardson will speak in the Arco Roof Room on “Oralising Early Modern Italian Literature”. How and how far did orality play a part in the circulation of literature in early modern Italy? The literary culture of the period can be seen, in the terms of Walter Ong, as ‘residually oral’, since many kinds of compositions were diffused through the voice, in speech or song, as well as, or rather than, in writing. This paper will consider which kinds of texts might be performed, the occasions on which they were performed in public or in private, the professionals or amateurs who performed them, how and in which varieties of languages they were performed, using evidence from contemporary accounts and from the texts themselves. It will also suggest possible answers to the more difficult question of what the perceived benefits of performance might have been for the performer and the audience.

Mini-Colloquium on Medieval Illuminated Manuscripts
On 16 May the Medieval and Renaissance Studies Cluster will host a mini-Colloquium on medieval illuminated manuscripts. This event will feature papers by experts on illuminated manuscripts, including Keble MS17 and a broader discussion on the uses of such beautiful sources. Speakers include Dr Julia Walworth and Dr Helen Swift. Several items from the College’s unique collection of illuminated religious texts will be on display. Discussions will be followed by afternoon tea. All are welcome, but to avoid disappointment please contact Tracey.Sowerby@keble.ox.ac.uk to book a place.
Coming events contd...

Brown Bag Seminar

This year the Medieval and Renaissance Studies Cluster has introduced a new, collective enterprise: lunchtime work in progress seminars. Once a term we get together with Keble graduate students working on Medieval and Renaissance topics to hear an informal paper by one of our colleagues about the research they are currently undertaking; this is followed by a collegial discussion about the issues the paper had raised. In the most recent seminar, Dr Purkiss discussed her work on manuscript versions of Marvell's satirical painter poems, which encouraged us to reflect on the transmission of texts, the relationship between manuscript and print, and the (sometimes changing) meaning of verse miscellanies. The sessions aim to foster a greater sense of collective endeavour among those engaged in Medieval and Renaissance research, whatever their stage of career.

Medieval & Renaissance Workshop: “But how shall we converse? Dialogue and Debate from Late Antiquity to Late Byzantium”

On 4th-5th July, Professor Averil Cameron (Keble) and Professor Niels Gaul (Central European University, Budapest) will be organizing a workshop entitled “But how shall we converse? Dialogue and Debate from Late Antiquity to Late Byzantium”. The workshop will focus primarily on Greek and Syriac dialogues, exploring the different types of text, their features, and looking at what they tell us about the culture they come from.

Prepared by Elizabeth Brophy, ASC Administrator
Comments or suggestions, please contact: elizabeth.brophy@keble.ox.ac.uk