The Science Museum and the University of Leicester
AHRC Collaborative Doctoral Studentship

Science, Technology and Road Safety in the Motor Age

The Science Museum, London, and the University of Leicester are pleased to invite applications for a three-year plus six months AHRC Collaborative Doctoral Partnership PhD Studentship, available from 1 October 2017. This doctoral award is funded through the Arts and Humanities Research Council (AHRC). The award is made by the Science Museums and Archives Consortium, which is part of the Arts and Humanities Research Council’s Collaborative Doctoral Partnership scheme. The thesis will be jointly supervised by Professor Simon Gunn and Dr Sally Horrocks at Leicester and by Dr Oliver Carpenter, Curator of Infrastructure, and Dr David Rooney at the Science Museum. The successful candidate will undertake a thesis on Science, Technology and Road Safety in the Motor Age that centres on analysis on a number of artefacts in the Science Museum collection. There is scope for the successful student to develop this project in ways that complement and extend their existing skills-set and interests.

HISTORICAL CONTEXT

In February 1966 Barbara Castle, the Labour Minister for Transport, warned parliament that the country ‘faces something like a holocaust in the next ten years’ resulting from road casualties. ‘Hitler did not manage to kill as many civilians in Britain as have been killed on our roads since the war’, she pronounced. Statistics bore her out. Between 1945 and the mid-1960s about 150,000 people were killed and several million injured on Britain’s roads; the peak for road deaths and injuries was 1965/6, reflecting the surge in motorization over the previous decade.

Barbara Castle’s warning mirrored wider concerns about the cultural context of the car and traffic in Britain at this time. In 1960 the planner Colin Buchanan was appointed to head a Study Group by the Conservative government which resulted in the important report, Traffic in Towns, published in 1963, which proposed a raft of measures to mitigate the ‘effects’ of cars on everyday life, from the design of a new ‘traffic architecture’ to the creation of traffic-free ‘environmental areas’. Government also invested heavily in research to improve the design of vehicles to enhance the safety of both occupants and pedestrians.

Numerous innovations influencing the management of automobiles in Britain, from the driverless car to congestion charging, can be traced to research carried out in the 1960s and
1970s. Much of this research was performed by the Road Research Laboratory (RRL), under the supervision of the Department of Scientific and Industrial Research from 1933 and the Ministry of Transport from 1965. After the Second World War the work of the Laboratory was divided between a Materials and Construction Division at Harmondsworth and a Traffic and Safety Division at Langley. In 1960 the RRL opened a new test track at Crowthorne, where its operations were gradually consolidated by 1966. At its height in the mid-1970s the RRL employed nearly 1,100 people. As well as government and ministries, the Laboratory worked with related agencies such as the Motor Industry Research Association (MIRA), which had close connections to vehicle manufacturing through organizations such as the Society for Motor Manufacturers and Traders.

These decades were also characterised by a significant shift in how road safety was conceptualised and understood. Rather than accidents being seen as the fault of the driver, as a consequence of poor maintenance or as a problem with the road surface, they also came to be viewed as a result of poor automobile design, both of the mechanical features of the car and of the interior fittings. The responsibility for safety thus shifted from the driver/council maintaining the roads to the manufacturers, who in the UK were subject to the involvement of the Road Research Laboratory in designing and testing new safety devices.

THE PROJECT
This project begins with the collections assembled from the Road Research Laboratory, specifically the objects related to road safety held at the Science Museum’s stores at Blythe House and Wroughton. The outstanding objects to be investigated are the Citroen DS19 automatically guided car, 1960 (Inv. 1973-377); the Royal Enfield ‘Super Meteor’ motorcycle fitted with anti-lock brakes, c.1958 (Inv. 1976-387); The Foden/Rolls Royce Quiet Heavy Vehicle, 1978 (Inv. 1996-8); and a collection of c.200 smaller safety devices (including seatbelts, cats-eyes, towing periscopes and child safety seats) – all emanating from the Road Research Laboratory and now stored in the Science Museum’s collections. Also utilised will be collections of testing instruments used to monitor the performance of experimental vehicles and air sampling equipment for use on the road-side. Through analysis of these objects, and the systematic research that went into their conceived ‘need’, their design, their production and their testing, the PhD will create new knowledge and insights into the growth of road safety (including atmospheric and noise pollution) technology in Britain in the most intense phase of its activity. This phase lasted roughly between 1960, when the driverless car was first built and trialled, to 1975, the peak year for employment at the RRL.

The purpose of the project is to understand how the activities of the Road Research Laboratory and its related agencies helped to bring into being a new road safety culture in Britain during the 1960s and 1970s. As well as the artefacts in the Science Museum collections the student will investigate the papers of the Road Research Laboratory and other relevant institutions concerned with road safety held at the National Archives and elsewhere. Historians and others have studied the framework of government reports, policies and acts that gave legislative form to this new safety culture, but what is much less clear is the scientific research that informed and shaped it, and understanding of the material artefacts that this research created.

Specifically, the project will ask:
• What were the processes by which road safety technologies were designed and developed - the scientific practices that brought road safety technologies into being?
• What was the iterative relationship between research, development, testing, design and implementation – how was governmental research on vehicles and traffic translated into material products?
• What were the networks that connected scientific and technological research, government and private industry at the period – the organizational matrix of expertise and decision-making?
• What were the ways in which scientific and engineering research carried out by the RRL was related to and deployed during the process of policy making?
• What was the role of the RRL as an international leader in road safety research and in promoting road safety outside the UK?

The project will develop the research skills and knowledge base of the successful student, who will become expert in techniques of artefact-centred analysis as well as historical archival research. At the same time the student will benefit from training and working in a world-leading museum. The student who emerges will make a contribution to the knowledge base of modern history and to curatorship in science and technology.

The student will join the vibrant academic community at Leicester. They will be part of the internationally recognised Centre for Urban History which currently has five academic staff, two postdoctoral fellows and a dozen PhD students; the Centre also houses its own library and is host to the journal Urban History. History at Leicester, was ranked 12th for research outputs in the Times Higher REF2014 tables, and with the highest percentage of 3*/4* research (87.5%) among UK History departments in that evaluation. Overall, the School is home to a lively postgraduate community of around 80 doctoral candidates in History.

The School runs several other current collaborative doctoral projects with organisations including the British Library, The National Archives, English Heritage, the Marylebone Cricket Club, and the National Maritime Museum. There are a range of postgraduate seminars and events (including the New History Lab and the annual postgraduate conference). The student will also be expected to present their findings in seminars and conferences beyond Leicester and, as their work progresses, to publish papers in academic books and journals. They will automatically become part of the UK-wide CDP development scheme (http://www.ahrc-cdp.org/category/activities-for-students/), which will provide training in a range of skills needed for research within museums, archives, galleries and heritage organisations.

The student is expected to be based at Leicester for the first year, at the Science Museum in the second year, and in Leicester for the final year, although they will be expected to go regularly between the two sites during the course of research.


PERSON SPECIFICATION
We are seeking to recruit a highly promising student who will relish the opportunity of combining academic research with the experience of working as part of a professional team of curators and researchers. This studentship is likely to appeal to individuals with a background in modern history, history of science and technology, or related fields in sociology and geography. Prior experience of archival research will be an advantage. A commitment to communicating the results of research to a wider public audience is a key asset in the context of the Science Museum’s exhibition programmes.

Eligibility

Residency Criteria – applicants are required to meet the RCUK residence criteria as follows:

- British nationals who have lived in the UK and Islands all their lives are eligible.
- Also eligible are non-British nationals who have settled status AND have been resident in the UK for 3 years immediately prior to the date of the start of the course.
- EU nationals who have been ordinarily resident in the UK and Islands for three years immediately prior to the date of start of the course are eligible.
- EEA and Swiss nationals (EEA migrant workers) should refer to the full RCUK guidelines to check eligibility and may be eligible for a fees only award.

If you are unsure about your eligibility please email pgradmissions@le.ac.uk and we will be happy to make an assessment for you.

Academic Criteria – Applicants are required to hold a Bachelor Degree at 2:1 or better in a relevant subject (e.g.: history, history of science and technology, sociology, geography) and hold or are expected to hold a relevant Master’s degree by September 2017.

Funding Information

The studentship is available for full-time study, and applicants must be able to commence their studies in October 2017. The standard tuition fees and stipend (maintenance grant) will be paid by the ARHC to the award holder subject to the eligibility criteria outlined by them. The AHRC stipend for 2017/18 is £14,553. For more information please see http://www.ahrc.ac.uk/documents/guides/training-grant-funding-guide-2015-16/

In addition the Science Museum will provide:

Up to £1000 per annum for research-related costs and staff-level access to the Science Museum collections, expertise and facilities, plus dedicated desk space alongside. The student also benefits from the dedicated programme of professional development events delivered by the Science Museum in tandem with the other museums, galleries and heritage organizations affiliated to the CDP scheme. Additional Student Development Funding (equivalent to an additional 6 months of funding per studentship) is available to allow time for the student to take up further training and skills development opportunities that are agreed as part of their PhD programme.

How to Apply

To apply you need to complete the standard University of Leicester online application form here: http://www2.le.ac.uk/study/research/phd/history. In place of the research proposal requested on this form, you should provide a statement of up to 1,000 words on:
1. How you would like to develop the project theme, how your education and experience to date has prepared you for this research position, and how you will develop the opportunities offered by working with the Science Museum team.

Applicants should also submit:

2. A piece of scholarly writing which you think best reflects your academic abilities and aspirations (e.g.: an essay or dissertation)

Informal Enquiries
Informal enquiries can be sent to Professor Simon Gunn: sg201@le.ac.uk

Closing Date: Monday 10 April 2017, 17:00 (London time)
Interview Date: Thursday 4 May 2017 at the Science Museum, London