

INTERVIEW WITH PROFESSOR DAVID EDGERTON, CHoSTM (IMPERIAL COLLEGE LONDON)

Jaume Valentines Álvarez, Jaume Sastre Juan
jaume.valentines@upc.edu, jaume.sastre@uab.cat

In previous issues, *Quaderns d'Història de l'Enginyeria* has devoted attention to David Edgerton, Hans Rausing Professor at the Centre for the History of Science, Technology and Medicine (CHoSTM), at Imperial College, London. Edgerton is one of today's most original and well-known historians of technology, and his work challenges both the standard views on technology and the history of technology. In 2004, *Quaderns* translated into Spanish his shocking "Ten (eclectic) theses on the history of technology"¹. These theses became a starting point for writing his most famous book, *The Shock of the Old. Technology and global history since 1900* (Profile Books, 2006), which was translated into Spanish as *Innovación y tradición. Historia de la tecnología moderna* (Crítica, 2007). An extensive review of the book appeared in this journal in 2008².

The Shock of the Old gave a new narrative for the history of technology in the twentieth century that stressed the need to differentiate technology-in-use from innovation. The picture we obtain if we look at the material composition of the twentieth century from this point of view is one that will have to include as crucial elements the poor world, women, maintenance and recycling, old technologies, etc. Apart from *The Shock of the Old*, David Edgerton has written other books that reassess twentieth-century British history in terms of the material, such as *Warfare State* (Cambridge University Press, 2005) and *Britain's War Machine* (Allen Lane, 2011).

-
- 1 EDGERTON, David (2004) "De la innovación al uso: diez tesis eclécticas sobre la historiografía de las técnicas" *Quaderns d'Història de l'Enginyeria*, VI, 1-23. Previous versions: (1998) "De l'innovation aux usages. Dix thèses éclectiques sur l'histoire des techniques". *Annales. Histoire, Sciences Sociales*, 53 (4-5), 815-837; (1999) "From Innovation to Use: ten (eclectic) theses on the history of technology", *History and Technology*, 16, 1-26
 - 2 VALENTINES ÁLVAREZ, Jaume (2008) "Tecnologia criolla, femenina, pobra i vella. Una revisió de la imatge de la tecnologia del segle XX", *Quaderns d'Història de l'Enginyeria*, IX, 313-324 <<http://upcommons.upc.edu/revistes/bitstream/2099/8065/1/recensio1.pdf>>.

Now, *Quaderns d'Història de l'Enginyeria* brings out an interview with professor Edgerton by Jaume Sastre and Jaume Valentines, PhD students that carried out a research stay at CHoSTM in 2009 and 2010, respectively. The interview has been done in connection with David Edgerton's participation in the seminar series "Communicating Science: Pleasures and Pitfalls of Historical Narrative" organized by the Societat Catalana d'Història de la Ciència i de la Tècnica (2010-2011)³. The talk took place on December 20th 2010 through videolink due to the snow storms that collapsed British airports⁴.

When it comes to assess its moral features, technology is sometimes associated with the mythical figure of Janus, the double-faced Roman god of the beginnings and the endings. The form of this interview can also be somehow related to the dual nature of Janus. Each topic is addressed through a question that turns out to be two questions. Heads and tails: it is as if we had thrown a Roman coin every time we posed a question, so that maybe we would thus be able to explore its different faces. *Alea jacta est*.

1.- Pleasures and Pitfalls.

HEADS. What was the biggest pleasure in writing "The Shock of the Old"?

It was learning about the histories of lots of things in many different countries, and feeling a big story emerge. Ships, Fray Bentos, rickshaws, delving into literatures I didn't know – textbooks on maritime economics, studies of Dhaka...

TAILS. What was the biggest pitfall in writing "The Shock of the Old"?

Being overwhelmed with cases, the tension between thematic and chronological development, in short, nothing special...

3 The seminar series "Communicating Science" (2010-2011) reflected on the pleasures and pitfalls of producing major introductory works in history of science, technology and medicine. The speakers were David Edgerton, José Bertomeu, Antonio García Belmar, Peter Bowler, Agustí Nieto, Patricia Fara, José Pardo, and Paola Govoni. Series were coordinated by Josep Simon and Jaume Sastre <http://schct.iec.cat/pdf/plaers_i_obstacles_dossier_ANG.pdf>. Another version of the interview with professor Edgerton was previously published in the blog of the Societat Catalana d'Història de la Ciència i de la Tècnica, *Ictineu* (date: 08/07/2011) <<http://blocs.iec.cat/ictineu/2011/07/08>>.

4 The interview has been done via email in April 2011.

2.- Innovation and Tradition in “The Shock of the Old”.

HEADS. What is new in “The Shock of the Old”?

It would take more than a few sentences to give a convincing answer, but I would say much more than meets the eye. I am often assumed to be claiming novelty for this I don't consider original about the book, while what I do consider original is ignored. There are many different kinds of novelties in the book. Some things are novel in some disciplines and not in others; some things are novel in the fact that I was the first to stop the problem, to note the significance for what we know. Also there are lots of novel arguments about lots of historical episodes, that is to say particular historian claims. Overall the big novel claims are that in a wide range of literatures the material is treated in systematically unsatisfactory ways, relying not on historical evidence but a general understanding handed down from the past. I claim that we need to understand this literature, and its influence on professional historical writing.

TAILS. Are historiographic appropriation, maintenance, and recycling, ways of innovating?

Yes, most definitely, but especially because conditions of academic production have encouraged approaches which systematically downplay what should be standard methods for generating novelty in particular cases. We have much history writing which claims great ruptures from past understanding, claims which are dependent on the authors' and readers' ignorance of past understanding, and of the understanding in other areas.

3.- Global History (I).

HEADS. “The Shock of the Old” has shocked historians of technology because of its project on global history. Does global history go far beyond from the sum of local histories and from the traditional “big pictures”?

Really? Why should historians be shocked by a global history?

I can't answer in general, but in my case I can be very clear: “The Shock of the Old” is not a sum of local histories of technology, nor a traditional big picture. For two reasons. First, local histories are usually embedded in big

pictures, often old-fashioned ones: big pictures of history and big pictures of the disciplines in which they arise. Secondly, the book was an attack on standard big pictures of the twentieth century – whether focused on the economy, war, production, or science or technology.

TAILS. What is the place of the individual, and that of social minorities, in global history?

It obviously depends on the history and the historian –there are any number of global histories. I don't see why the question would be any different if it were about national or regional or local histories. Where the issue can become relevant is in this: at global level the important individuals and social minorities are different from those in European national histories. In global histories whites should be treated as a social minority, for example.

4.- Global History (II).

HEADS. And what is the place of the poor countries in global history?

Again it depends what you mean. Do you mean what the place is in actual global histories, or what should it be in ideal global histories? Global is sometimes used as an euphemism for poor countries.

In my view too many accounts of global world history of the twentieth century ignore the significance of the point that most of the world's population is poor, and that the history of these poor regions has not replicated that of rich regions. The second half of the twentieth century has seen the emergence of a new poor world.

TAILS. And the place of historians of the poor countries in global history? Other ways of knowing and doing history are possible from there?

Yes of course, but there are dangers of conflating historians of poor countries with historians from poor countries, and of where the history is being written. We need to recognise that there are all sorts of histories being written in all sorts of places already. But we need to recognise the extraordinary dominance of models of history generated in elite universities in the rich world, and that includes innovations which have led to very new ways of writing history, including provincialising Europe, and so on. These ironies are not lost on historians from the poor world.

Having said that I do think that our accounts of the rich world are very unsatisfactory, and that we would get a better account by starting with parts of the poor world – many of the practices which we highlight in the poor world (imitation, maintenance, dependence, transfer) are also hugely significant in the rich world, if much less visible.

5.- History of Things.

HEADS. You have stated that you intend to do a history of things, not a history of technology. Why do you think it is better to speak about things instead of technology?

I am not interested in either the history of things or the history of technology – in fact I have no idea what such beasts would look like. My interest is in thinking about the material in history, which involves the history of the material of course. I don't know what technology is, but I do know thanks to the work of scholars like Eric Schatzberg, that it is a concept with radically changing and complex and misunderstood meanings. 'Technology' today means something very limited while appearing to be something very general, it is also associated with general, often moralistic arguments of a very unhelpful sort. My point is that when we think of 'things' we think of them in a more intelligent, reflective and empirical way than when we think of 'technology'. To think of things is to get at the history of the material in a much more effective way than to think of 'technology'.

TAILS. What is the place of the emotions, ideas, immateriality in this history of things?

Let us find out, but let us get a much better sense of the range of things first.

6.- History of STM (Science, Technology, and Medicine) or History?

HEADS. "The Shock of the Old" has confronted other accounts of history. Which benefits can "other histories", or history, take from history of STM? And viceversa?

I think one needs to disentangle the corpus of work associated with history of STM and its relationship to the wider corpus of historical scholarship

from the question what can the study of STM in history contribute to our understanding of history. To both questions there are many and varied answers, but they are not the same ones. My answer to the second question is that it will change our understanding of history, not because STM is absent from history, but because much history assumes dubious accounts of STM. A richer engagement with history as discipline will help the history of STM, by helping to make clear that there is a great difference between the worthy project of using case studies from the past to illustrate the nature of STM, and writing the history of STM.

TAILS. Should history of STM disappear once it is inserted in a "single" history without subdivisions? What about the genealogies and languages of each subdiscipline?

Again it depends what you mean. If one takes a particular historical question, say how Britain fared in the Second World War, and one wanted to write a book about it, it would be good to see the economic, political, scientific, material issues addressed in a single interconnected book. But that is a different, though related, issue from how one organises the training and work of professional historians. I think it essential for the serious study of knowledge and the material that we have specialised training, specialists working together, in specialist departments and centres focused on particular issues of concern. There are also many important issues concerning the relationship of historical studies to the modern profession most concerned with it. What might be the most productive relations between professional soldiers, military academies and military historians, between diplomats and historians of foreign policy, between scientists and historians of science?

7.- Popularisation and Politics.

HEADS. You have criticized the scientific and political consequences of what you term "technofuturism". Should historians aim at changing popular ideas on technology or the elite's ones? Among which audiences do you think historians could have a biggest political impact?

I assume your question is directed towards influence on popular ideas and elite ideas outside a pedagogical context, but it needs to be understood that this is central. Historians are employed largely by schools and universi-

ties to teach, and exert their greatest influence in that way. Some historians will write books which will affect what is taught by other historians, which can have a huge direct and indirect audience. Teachers of history are perhaps the most important audience for historians who want to change how the world thinks.

As far as the non-pedagogical context is concerned I think there is no 'should' for historians as a whole. Some historians may wish to write to reinforce existing popular and elite ideas; others may simply wish to earn a little extra income. Some historians will wish to try and change the ideas of the mass of the population (good luck to them!), others might wish to change elite views. None will really succeed, for history will form only a tiny input into what people know and believe.

To the extent that particular authors want to reach out to wider publics, choice of medium is a key issue. Books necessarily reach tiny numbers (though may have very substantial indirect effects); television is much more important, obviously, with museums in between.

TAILS. In what sense, if any, is writing for a general public a political act?

All historical writing is to some degree a political act, though usually of miniscule political significance.

8.- History and Ethics.

HEADS. If you were to write a deontological code for historians, which sentence(s) would be your first one(s)?

Historians are experts on the future; they know the most important thing about it, that it hasn't happened yet, that no one is ahead of their time (or behind it) and that what will happen is highly uncertain. Forgetting this is a serious offence.

TAILS. What is not ethical in history?

(...) I can't think of anything that is unique to history.

9.- History of the Past.

HEADS. What books would you recommend as good narratives for a general public in history of technology? And in any other academic field?

In Britain we are blessed with high quality history books for the general public written by specialists. Generally speaking – outside the area of contemporary British history – general history for the general public is dominated by specialists. In military history, transport history, history of science, history of technology, the position is quite different. I can't think of a narrative history of technology I would recommend, partly because I don't like narrative histories, and in the history of technology and science they are all too likely to be a collection of clichés. Mercifully there are good accessible histories of technology for the public to read and learn from: Tom Hughes's *American Genesis* is an underrated example in this respect.

TAILS. Which author would you not recommend?

I would never recommend that someone not be read but all works should be treated critically. Alas when we study the history of science and technology a deep knowledge of bad books is indispensable.

10.- The Future of the History of Technology.

HEADS. What do you think are the most promising fields or urgent issues to explore in the history of technology?

Most answers to such questions (and their analogues concerning science and engineering) are unoriginal and misleading and well past their sell-by date.

TAILS. Which are the less promising and urgent ones?

I don't know, but probably a significant proportion of those currently being studied and believed to be promising and timely.