UABDIVULGA
BARCELONA RECERCA I INNOVACIÓ

20/10/2017

“Environmental historians are uniquely equipped to contribute to the emerging research domain of Anthropocene studies”

Stefania Barca, senior researcher at the Centre for Social Studies of the University of Coimbra, participated in an international workshopheld at the Centre for the History of Science (CEHIC) at the UAB, titled *At the Intersection of Disciplines: History of Science and Environmental History*. In this interview she speaks of environmental history and the role it can play in current Anthropocene studies, as well as of her research in topics as common uses and properties, genre approach, o the relationship between labour, health and environment.

Stefania Barca is senior researcher at the Center for Social Studies of the University of Coimbra. She obtained a laurea magistralis in Humanities – History Major at the *Istituto Universitario Orientale*, Naples, and her PhD in Economic History at the *Università degli Studi di Bari*. She was visiting scholar at the Program in Agrarian Studies of Yale University (2005-2006), and ‘Ciriacy Wantrup’ postdoctoral fellow at UC Berkeley (2006-2008); she was Guest Researcher at the Pufendorf Institute for Advanced Studies of Lund University in 2015-2016.

She served as vice-president of the European Society for Environmental History (ESEH) between 2011 and 2013, and now serves as member of the editorial board of the journal *Environmental History*. She has published articles in national and international journals in the fields of Economic History, Environmental History, Ecological Economics, and Political Ecology and is the author of three books. Her *Enclosing Water. Nature and Political Economy in a Mediterranean Valley, 1796-1916*,was awarded in 2011 the Turku Book Prize - best book in European Environmental History. Her current research interests cover the environmental impact of industry in the Anthropocene, the relationship between labour and the environment, environmental justice, degrowth and commoning.

1.- This past June you participated in the International Workshop “*At the Intersection of Disciplines: History of Science and Environmental History*”, held at the CEHIC, at the UAB. As an environmental historian, what do you take from it?
It was a great opportunity to explore conceptual and methodological intersections among two research fields, environmental and science history, that are contiguous and sometimes overlapping. These meetings are very important because they help us to step outside our hyper-specialized research domain and ‘look around’, so to speak, sharing ideas that may help us to rethink our research questions and hypotheses in new perspectives, or encouraging us to experiment new, hybrid ones. This is how research advances in all fields. I especially welcomed the opportunity to reflect on the dual political implications of historical research on science/environment intersections: on the one hand, we need to apply a critical approach to the production of scientific knowledge, contextualizing and revealing the hidden agendas or implicit biases of all scientific research; on the other hand, we need be aware of the social context in which our own research develops – e.g. climate change denialism in our current epoch, which is pushing scholars on a defensive position in regards to not only climate science, but to natural science in general. The workshop made me learn a great deal on the implications of this historical dialectic between science and politics in different areas.

2.- You and Marco Armiero are considered among the founders of environmental history in Italy. In 2004, you both publish the book *La storia dell’ambiente. Una introduzione*. What was the main aim of this book?
It was, I believe, the first Environmental History textbook ever published in Italy: there were no university courses devoted to this discipline, nevertheless the book was quite successful and was adopted in a number of courses in different study areas. Its main addition to the existing literature was that of introducing the Italian public to a vast body of environmental history literature in English language, published in the US, UK, Australia and in international journals. In short, the idea was that of connecting the emerging Italian EH studies to a broader scholarly debate that was then more than two decades old. But of course we also gave our own original imprint to shaping the field, by giving large space to the connections between environmental history and other social sciences (ecological economics and environmental sociology in particular). This was quite new even among environmental historians, who at the time were much more concerned with the natural sciences.

3.- In 2011, your book *Enclosing Water. Nature and Political Economy in a Mediterranean Valley, 1796-1916* was awarded the Turku Book Prize – best book in Environmental History. What is the book about?
Initially, my scientific interest lay in the history of waterpower as the first energy source of the Industrial Revolution; however, I soon realized that this was inextricably a part of the question of

the “transition to capitalism,” with its social and ecological contradictions. I analyzed the transformation of water into waterpower based on four processes of material and symbolic violence: 1. war/colonial domination (to bring about the “liberation” of nature and labour from feudal control); 2. mechanization of labour (people being forcibly taken out of their homes and put to work under the factory discipline; women’s work being devalued and disempowered in the process); 3. transformation of the landscape (via river enclosures and flooding); and 4. naturalization of the new landscape and social order via art and literature. What emerged was that “the political” was structurally embedded in the story of waterpower as the result of a class struggle—that of the emerging industrial bourgeoisie against the aristocracy for control over nature and labour. A great transformation, in the Polanyian sense, whose ecological implications had to be understood as part and parcel of its social costs.

4.- In this book you also talk about communal properties and uses regarding water, but also forests, which disappeared when this area was industrialized. What consequences did this process have?

Precisely: the second part of the book describes how the enclosure of the river led to significant changes in the dynamic equilibrium between water, soil, and all life forms in the river basin, bringing about a regime of hydraulic instability and significant loss of biodiversity, which impacted human communities with recurrent flood risk, waterborne diseases, and loss of access to fish and recreational resources. But the appropriation of water was only one side of the double movement of enclosing and *commoning*. On the opposite side, even if not entirely visible, was the social struggle to create and defend the commons: the most historically grounded alternative to both capitalist and centrally planned economies, and the object of much radical ecological discourse and social practice today. This convinced me of the importance of reflecting on the political implications of what environmental historians do.

5.- Among your current research interests, there are environmental justice and the relation among work, health and environment. What results or conclusions have you reached?

Environmental Justice is a concept first applied to sociological research concerning the unequal distribution of pollution and toxicity across the United States, affecting disproportionately African American, Latino and Native American communities - an inequality mostly ascribed to structural racism. Environmental injustice is much less mentioned in the literature about pollution and toxicity in Europe, even though there is evidence of ample inequalities in the distribution of these social costs within and across European nations. As I am interested in finding the root causes of environmental injustice in Europe, I have been studying working-class communities in mono-industrial towns and in de-industrialized areas as an example of structural environmental inequality, which can be generally ascribed to economic dependency (the jobs blackmail). But economic dependency can also be understood as an effect of deeper historical patterns, two of which seem to me the most relevant: 1) the capitalist regime, which accumulates and expands by creating spatial inequalities and territorial (or colonial) divisions of labour; 2) the patriarchal regime, which has given men the role of breadwinners who need to ‘sacrifice’ for their families’ livelihood, and women the role of reproducers and care-givers whose work is devalued and subordinated to that of men. Both are deep structural causes of environmental inequality, but the second – I believe – has a truly foundational role in it, because it subordinates people’s and ecosystems’ wellbeing to the imperatives of industrial production, thus forcing working-class communities to bear the social costs of pollution and toxicity.

6.- You have also done research from the perspective of gender. What does this approach provide?

As I mentioned already, looking at the sexual division of labour helped me to identify a deep historical cause of environmental injustice. This has convinced me of the importance of bridging fields of research that too often proceed separate, such as women’s or gender history and environmental history.

7.- The concept “Anthropocene” generated a lot of controversy when it was proposed in 2000, but it is now very much used. Could you explain its meaning and your research in this field?

The Anthropocene concept has been put forward by natural scientists to describe the current epoch as geologically distinct from the Holocene, in so far as it is characterized by anthropogenic climate and earth-system changes (including a new wave of mass extinctions), mainly caused by CO2 emissions, as well as by nuclear and chemical contamination related to industrial activities. Public awareness of this new geological epoch is generating an official Anthropocene metanarrative which is profoundly affected by a Western/masculinist ethos: it tells a story of how western (and male-dominated) science and technology has become capable of mastering nature, with unwanted consequences that nevertheless can only be remediated via more science and technology. This view is consistent with that of the highly contested but still hegemonic Ecological Modernization theory, i.e. a combination of technical and market solutions to all sustainability problems, now solidly reinstated as the guiding principle of global climate politics. This metanarrative obscures the fact that science and technology are mere instruments guided by social forces and structural processes, which must be addressed directly as root causes of the problem. I have been developing a new research project which aims at telling a more accurate story of the Anthropocene, with the aim of influencing climate policies towards a global environmental justice perspective.

8.- You were vice-president of the European Society for Environmental History. How do you see environmental history in Europe? And in the world?

Environmental History is now a broad and diverse field of research with worldwide reach, featuring a number of macro-regional EH societies and a World EH consortium that meets every five years (the next meeting taking place in Brazil in 2019). I believe the greatest achievement of EH, in its now three decades long existence, is that of having proven how human history is made via inextricable entanglements between human and non-human forces, and how social processes, from local to global scales, reflect these entanglements. European environmental historians have been mostly working on the history of urban/industrial pollution, on the one hand, and of conservation on the other; large part of this history connects Europe to the rest of the world via colonialism, trade and development, and (more recently) sustainability and climate policies. I believe tracing these global connections in a more systematic way is the next frontier for European EH. Globally speaking, I think environmental historians are uniquely equipped to contribute to the emerging research domain of Anthropocene studies – as they have already done in fundamental ways. Climate, pollution, biodiversity, population, technology – the *stuff* of the Anthropocene – are what environmental historians are most used to deal with in their research. The greatest value that can be derived from EH research consists in its unique potential to makes sense of the complex connections between single aspects of earth-system change: a potential that can best be realized via collective and coordinated efforts.

Judit Gil Farrero

Centre for the History of Science (CEHIC)
Universitat Autònoma de Barcelona
juditgil@gmail.com

View low-bandwidth version