certain cultural norms. Charles Darwin was by no means alone in his attempt to validate it through recourse to atavism, in his *Variation of Animals and Plants under Domestication*. And speaking of this book, Ritvo's foreword to it, reprinted here, is probably the most succinct account of Darwin's changing, and non-neo-Darwinian, conceptions of evolution that I have read. Ritvo offers a similarly definitive account of human/animal *différance* in the paper 'Our animal cousins'; together with Schiebinger's work in the early modern period, it is an authoritative summary of the multiple and often surprisingly tenuous animal mappings between 'us' and 'them'.

In many ways the *Variation* is the key intertext for this collection. Ritvo's accounts of animals in human culture cumulatively reassert artificial breeding as synecdoche for evolution, not merely its metonym or analogy. Her volume constitutes a counternarrative to the traditional Darwinian history; she demonstrates that beliefs and practices of animal husbandry as craft have a long tale (/tail) of their own, ramifying into diverse areas of culture, of which 'science' is merely the tip of the iceberg. We cannot separate, Ritvo implies, the stories of humans and animals, whether those stories masquerade as 'historical' or 'scientific'.

Ritvo comments that when she began her career 'it was considered both unusual and eccentric' to study animals (p. 1). Reassembling Ritvo's essays in chronological order, one sees how she has been able to grow increasingly specific and go deeper as time went by. In her later pieces Ritvo no longer has to scope out the ground, but can indulge in species-specificity – in detail, in complexity and in ambiguity. That some of this collection now appears to be common knowledge amongst historians of biology is testimony to the authority and influence of Ritvo's *oeuvre* thus far. Her newer work on environmental history gestures at a historical imbrication of humans and animals that comes to terms both with history and with science: neither naively biologized nor wilfully humanized as cultural history. Ritvo's is a rapprochement that is of great value in these days of environmental crisis.

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Christopher Pinney, Photography and Anthropology. London: Reaktion Books, 2011. Pp. 174. ISBN 978-1-86189-804-3. £17.95 (paperback). doi:10.1017/S0007087412000921

Christopher Pinney, in this richly illustrated and sharply focused monograph, highlights the intersection between two tools for investigating the cultural and natural worlds of the nineteenth and twentieth centuries. As Pinney effectively points out, photography and anthropology grew up together, and an investigation which deconstructs their contexts of use brings out some very useful insights into the construction of an anthropological way of looking and the application of a technology for looking. While Pinney's analysis spans the construction of an anthropological discipline from the establishment of the Ethnological Society of London in 1843 to the field of visual anthropology at the time of the book's publication, he is able to tell a compelling story in a relatively short space about the shifting mobilizations of photography for the study of human diversity. While photography and anthropology each have complex theories of use, the strength of this monograph is the way in which Pinney is able to navigate through these choppy waters with clarity, using a thick description of visual and textual materials.

Photography and Anthropology, importantly, sits within a successful series by Reaktion entitled Exposures, which investigates the relationship between photography and another aspect of technology, geography or culture. Other monographs in the series, which will be of particular interest to historians of science, include Kelley Wilder's Photography and Science (2009) and François Brunet's Photography and Literature (2009). In its entirety this series acts as an important addition to the historiography of photography—in addressing photography through microhistories this series is able to speak to much larger questions about the epistemological,

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technological and visual value of photography to the respective sciences, places and modes of cultural production it discusses.

The Exposures series, in addition to presenting novel aspects of the history of photography, functions as a collection of introductory texts for those interested in the history of photography, visual anthropology or any of the other juxtapositions placed under scrutiny. One of the key strengths of Pinney's analysis is the way in which he integrates complex problems in the history of photography – such as the photograph as an icon or an index; the relationship between the photographic image, verisimilitude and trust; and the value of photographs in networks of exchange – with examples from the history of anthropology. This form of explication allows Pinney to root contested questions regarding the interpretation and value of the photograph in clear language and in situated contexts.

Like much of the growing literature in the history of photography and visual anthropology, the way in which Pinney utilizes and displays images in *Photography and Anthropology* makes it both enjoyable to read and a valuable example in how to integrate the reading of an image with a close reading of its value and use. The book has ninety illustrations, the majority of which are photographs. These are not superfluous to the text which surrounds them, but are used as visual evidence which motivates the narrative Pinney is able to tell between the photograph as an object of representation and an object that constructs, and has constructed, ways of looking at these representations.

Though Pinney skilfully deals with photography and photographic images, the main pitfall of this monograph is to be found in the story told about the history of anthropology. Many anthropologists continue to mythologize a history of anthropology which highlights an epistemological break between the 'armchair' anthropologist of the nineteenth century and the field anthropologist of the twentieth century, personified by Bronislaw Malinowski. Pinney, in particular, gives Malinowski the role of repositioning photography for anthropology from a visual object which is primarily an object of evidence to one which is an object of contemplation and reflection (pp. 50-62). This epistemological break ignores the broad range of nuanced visual and textual observational practices which were developed by ethnologists and anthropologists throughout the nineteenth century and which scrutinized the value, efficacy and role of photography for the study of human variety. Historians of anthropology and science should look to the recent work of Efram Sera-Shriar - his doctoral thesis 'Beyond the armchair' (Leeds, 2011) and his 'Ethnology in the metropole', Studies in History and Philosophy of Biological and Biomedical Sciences (2011) 42, 486-496 - which speak to the problems associated with reading the history of anthropology as breaking between the nineteenth and twentieth centuries.

Bearing this in mind, *Photography and Anthropology* is still a valuable addition to the historiography of both of these sciences, and should appeal to many historians of science interested in visual culture, the communication of the sciences and the sciences of human diversity.

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CHRISTOPH GRADMANN and JONATHAN SIMON (eds.), Evaluating and Standardizing Therapeutic Agents 1890–1950. Basingstoke: Palgrave Macmillan, 2010. Pp. xiv+266. ISBN 978-0-230-20281-8. £60.00 (hardback).

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In *Evaluating and Standardizing Therapeutic Agents*, Christoph Gradmann and Jonathan Simon add new and important insights into the role of standards in pharmaceutical and medical practice, thus complementing a growing literature concerned with the part played by standards in building communities of scientists from the end of the nineteenth until the middle of the twentieth century.