informal social structures. In addition, it illustrates the ways in which intimacy has become linked with issues of ethnicity, sexuality, race, class, and other power relations in the context of globalization as well as continued socio-political and economic transformations.

Marina de Regt

TULLY, JOHN. The Devil's Milk. A Social History of Rubber. Monthly Review Press, New York 2011. 480 pp. Ills. \$24.95; doi:10.1017/S0020859011000605

The author begins by describing the surprise of his friends that he should be writing a history of rubber. Academics might rather ask whether another history of rubber is really needed, but Tully's approach is novel, in that he sets out to write a social history, rather than repeating the economic or technological stories that have prevailed to date. An unashamed Marxist, who has himself worked on the shopfloor of a rubber factory, John Tully conceives of social history in a particular way. His story tends to pit grasping and greedy planters and industrialists against a combative and heroic workforce. There is little room here for cross-class unity emerging from loyalty to commodity and firm, despite some occasional evidence for such very different scenarios.

The writing is clear, and pitched at the general reader, albeit with some bonuses for a more specialized audience. The author has criss-crossed the world in search of archives. In Akron, Ohio, he has used university archives, as company papers, unfortunately, have either been destroyed, or are not open to researchers. In Europe, he has relied heavily on the former Public Record Office, and on less obvious sources, such as the State Museum in what was formerly Auschwitz. Unlike other authors on global or south-east Asian rubber, Tully has included bits and pieces on Papua New Guinea in his story, exploiting colonial archives from his base in Australia, and this is most welcome.

However, this is no general social history of rubber. Tully ends in 1945, with only a short epilogue to bring his story up to date. Moreover, the book dwells at great length on a limited number of cases, leaving out much else in the field. One might respond that nobody can cover everything, and that the book is already very long. However, Tully wastes a great deal of space unnecessarily, by covering old topics in a very traditional manner. There is little or nothing new in the sections on pre-colonial Mesoamerica, the early development of the Western rubber industry, or the gutta-percha saga, on which he has already published a separate article. The writing is enlivened by illustrations and anecdotes, but the latter sometimes become excessive and anachronistic. The reader might also wish to be spared repeated long lists of what rubber was used for.

That said, there is a welcome emphasis on the role of rubber in World War II, which has generally been omitted in the veritable avalanche of publications on that titanic conflict. Unfortunately, however, Tully misses a crucial and well-known point, namely that synthetic rubber did not entirely substitute for natural rubber. For large tyres, in particular, natural rubber remained essential. Unfortunately, he has not consulted Peter Morris's magisterial D.Phil. thesis of 1982, "The development of acetylene chemistry and synthetic rubber by I. G. Farbenindustrie Aktiengesellschaft, 1926–1945", which points out this basic fact. In addition, Tully states that American synthetic rubber was made from coal and oil in the war years, whereas it came mainly from surplus grain, a little from oil, and not at all from coal. It is unfortunate that he does not refer to Mark Finlay's important book, Growing American Rubber: Strategic Plants and the Politics of National Security (New Brunswick, NJ [etc.], 2009), which has a chapter on this topic.

Tully's chosen focus on social history tends to falter when considering World War II, except when he concentrates on the horrific story of the projected Nazi synthetic rubber factory at Auschwitz. While this is generally well researched, Morris's thesis is again missing, and there is no mention of Diarmuid Jeffreys, *Hell's Cartel: I.G.Farben and the Making of Hitler's War Machine* (London, 2008), which covers much the same ground. Also, whether the term slave labour is accurate is a moot point, as this was really forced labour, albeit with the macabre twist of planned extermination through work.

The grisly story of Auschwitz's Buna rubber factory, only completed by communist Poland, is an important one to tell, but it was in no way representative of the wider European rubber industry, or even of the German rubber industry under Nazi rule. Surprisingly, neither French nor British tyre companies figure more than marginally in this book, although much has been written about them, especially Dunlop and Michelin.

In contrast, Akron, Ohio, the former US capital of the rubber industry, looms very large. There are some interesting, even moving, passages on Appalachian and Southern poor white workers. Also revealing are the actions of the Klu Klux Klan against African Americans, in what was the Klan's northernmost bastion in the 1920s. However, Akron was not representative of the North American scene, and too much space is probably devoted to the history of the town, especially when the author surveys the well-trodden field of the growth of labour unions and the outbreak of strikes. Here and there, Tully notes that the major tyre companies responded to union militancy in the 1930s and 1940s by setting up new factories elsewhere, in regions where unions were weaker. However, he goes no further than making occasional asides on this topic, which is a great pity.

In terms of the collection of wild rubber, there is a fine chapter, partly archivally based, on the great scandal of the Putumayo region, disputed between Colombia and Peru, where enslaved and coerced Amerindians died in their thousands. But the Putumayo region was not typical of the Amazon. Tully does not grasp how the extraction of wild rubber from the Amazon followed on from the prior collection of wild cocoa from the seventeenth century onwards. Moreover, he cites Barbara Weinstein's fine book on the Amazon, while inexplicably leaving out Weinstein's truly innovative material on commercial intermediaries, including Moroccan Jews and "Syrian" Christians.

Turning to Africa, Tully seems unaware of a growing contradiction at the heart of the literature on the Congo's rubber experience. Jelmer Vos and others are currently demonstrating that much wild rubber was voluntarily and enthusiastically collected in areas beyond the reach of the Force Publique, most obviously in Portuguese Angola, but also in zones that were theoretically part of the Congo Free State. Moreover, the suggestion of genocide seems ill-conceived, given that King Leopold depended absolutely on African workers to make anything out of his ramshackle Central African kingdom.

The treatment of plantation rubber is biased towards French Indochina, on which Tully has written important works before, although Liberia also receives some attention. Neither area was at all typical of the bulk of plantation production of *Hevea*, which occurred in Indonesia and Malaya. Even on Indochina, Tully relies far too heavily on the single account of Tran Tu Binh, *The Red Earth: A Vietnamese Memoir of Life on a Colonial Rubber Plantation* (published in English, Athens, OH, 1985). Strangely, Tully seems aware that Tran became a highly placed communist official, and thus probably presented a view that accorded with the party line, whatever Tony Reid might say to the contrary. Tired old clichés about plantations as "total institutions", which engaged in the

Book Reviews

"super-exploitation" of labour, do little justice to the subtle historiography that has developed in recent decades in the field of plantation labour, and it even robs "coolies" of their human agency. Indeed, Tully unfairly disparages the pioneering Ph.D. thesis of Webby Kalikiti, my former doctoral student, "Plantation Labour: Rubber Planters and the Colonial State in French Indochina, 1890–1939", submitted in 2000. Kalikiti's scholarly archival and oral research patiently and carefully showed up many of the weaknesses of the official Vietnamese line, although, sadly, his thesis remains unpublished. Calling this path-breaking research an "apologia" for planters, which it certainly is not, will do nothing to hasten its much overdue publication.

Most disappointing is the fact that smallholders hardly figure at all in Tully's narrative, even though they produced nearly half the world's natural rubber by the outbreak of World War II. As early as the late 1940s, Peter Bauer's seminal *The Rubber Industry: A Study in Competition and Monopoly* (London, 1948), demonstrated that smallholders were far more efficient producers of rubber than planters, and that the latter only survived because they were propped up by foolish and racist officials. There have been fine studies of the social world of the smallholder, for example, Bambang Purwanto's 1992 Ph.D. thesis, "From *Dusun* to Market: Native Rubber Cultivation in Southern Sumatra, 1890–1940", which is not cited here. Sadly, the reader learns nothing from Tully about the crucial processes whereby smallholders amassed land and labour, and how they allied with Chinese and other traders to run rings round the plantocracy. Instead, readers are treated to hoary old stereotypes about smallholders as part-time producers.

In short, this book is something of a missed opportunity. It would be wonderful to have a global social history of rubber in the modern era, but what we get here is no more than disparate building blocks towards such a project. Nevertheless, some of these building blocks are truly useful. Time and again, I found myself reaching for my pen to take notes, and, almost invariably, this was when Tully had quarried some valuable nugget of information from neglected archival sources.

William G. Clarence-Smith

El exilio científico republicano. Ed. Josep L. Barona. Universitat de València, Valencia 2010. 427 pp. Ill. (Incl. CD-Rom.) € 35.00; doi:10.1017/ S0020859011000617

Emigration and forced exile have been common phenomena throughout human history. In the past century, the persecution and banishment of two religious groups in particular in premodern and modern Europe has received a great deal of interest from historians. The banishment of Jews from the Iberian peninsula (from Spain in 1492, and from Portugal in 1507), and of Protestants from France in 1685 were preceded by a time of intensive political and religious propaganda and increasing violence against the persecuted groups.

After the rise to power of the Nazi Party in Germany in 1933, the same tactics were used against political opponents and German Jews as a group, and the results were the same: mass emigration by those who were able to flee. Historians have shown so much interest in those German exiles that a separate branch of historical studies, *Exilgeschichte*, has come into being. Most of that initial interest was devoted to Jewish exiles from Germany to the US, but nowadays other groups of German exiles, such as the intellectuals