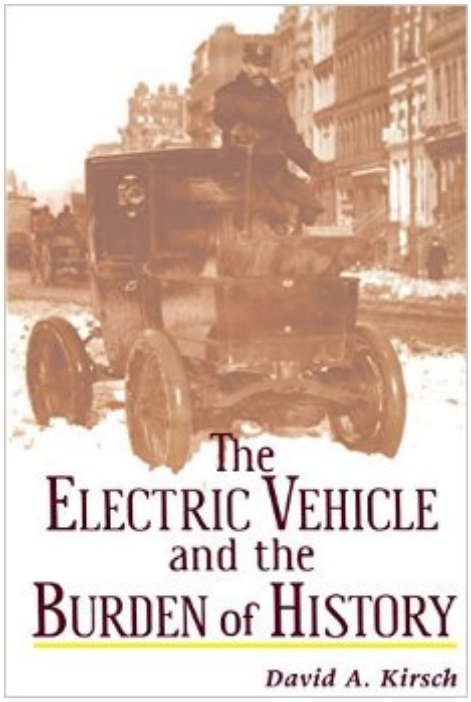
The Electric Vehicle And The Burden Of History



Synopsis

In the late 1890s, at the dawn of the automobile era, steam, gasoline, and electric cars all competed to become the dominant automotive technology. By the early 1900s, the battle was over and internal combustion had won. Was the electric car ever a viable competitor? What characteristics of late nineteenth-century American society led to the choice of internal combustion over its steam and electric competitors? And might not other factors, under slightly differing initial conditions, have led to the adoption of one of the other motive powers as the technological standard for the American automobile?David A. Kirsch examines the relationship of technology, society, and environment to choice, policy, and outcome in the history of American transportation. He takes the history of the Electric Vehicle Company as a starting point for a vision of an â œalternativeâ • automotive system in which gasoline and electric vehicles would have each been used to supply different kinds of transport services. Kirsch examines both the supportâ ”and lack thereofâ ”for electric vehicles by the electric utility industry. Turning to the history of the electric truck, he explores the demise of the idea that different forms of transportation technology might coexist, each in its own distinct sphere of service.A main argument throughout Kirschâ ™s book is that technological superiority cannot be determined devoid of social context. In the case of the automobile, technological superiority ultimately was located in the hearts and minds of engineers, consumers and drivers; it was not programmed inexorably into the chemical bonds of a gallon of refined petroleum. Finally, Kirsch connects the historic choice of internal combustion over electricity to current debates about the social and environmental impacts of the automobile, the introduction of new hybrid vehicles, and the continuing evolution of the American transportation system.

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Customer Reviews

Electric Vehicles giving way to the Internal Combustion Engine was not a given at the turn of the 20th century.In the US, Electric Vehicles (EV) outsold the Internal Combustion Engine (ICE) significantly in 1900, and by WW2 the ICE was dominant and the last passenger EV company closed up shop. What happened? Why? Was this a foregone conclusion given what we know today?This book examines the transportation network as it existed, and how EV’s fit into it, the first book section detailing the ill-fated electric taxi monopoly (didn’t fail because of the ICE, but a combination of mismanagement and poor quality) and the second talking about the foray into passenger cars. A large part of the market failure of EV’s had nothing to do with the limitations of the battery technology as most people think.Interesting to note that the ICE required both cheap fuel, and a purpose built transportation network **both didn’t exist** in the early days. Through uniting the portions of the economy that feed into the cars and those that were to create its infrastructure network they managed to create a system where the ICE was to dominate. Once cheap oil was discovered in Texas, Henry Ford created the assembly line for the Model T, the stage was set for the highway building boom started in the 1920’s. At that point the EV’s didn’t stand a chance - they had blown it by failing to achieve the level of united purpose 20 years earlier with their suppliers, the utility companies and the rest of the public infrastructure. The advantages of the ICE’s technology weren’t nearly the factor that we gather, since the infrastructure required to make the ICE successful was so much larger than the EV’s at the time - the EV industry simply "blew it." (Though if the EV industry had succeeded we would have a very different transportation network than we do today)We are at another crossroads - the assumptions and reasons for the ICE’s dominance are under question. Petroleum prices have never been higher and promise to climb higher still, and the supply is less certain than ever given the current international situation. The combustion of oil over the last 100 years in service of transportation has created global climate change as well as severe air pollution in some metropolitan areas. We are seeing interest in electric, hybrid-electric and Fuel Cell based vehicles as possible "solutions" to these issues. Are we seeing the beginning of another period of change like the early 1900’s? This book certainly offers an interesting perspective, as we challenge our infrastructure and question the decisions we have made for the last 100 years.

At the turn of the twentieth century, the prospect of a society centered on personal vehicules propulsed by internal combustion engines would have been unimaginable. It seems all the fairies were around the new miracle technology, electricity. The expectations ran very high in the general urban population. This book, through in deep research, brings clues to what really happened.How the marvel energy was put aside by the one that we still have today, using concepts like pistons, crankshafts and generous heat, that are easier to understand. How the general population was drawn to the dream of touring, even though it was an exceptional use of the automobile.How in the prospect of First World War the central governments gave generous subsidies for the development of the use of internal combustion engines for the truck industry.A must read for anyone interested in the history of the electric car.

It is an excellent overview of the history of Electric Vehicles (EV) I recommend anyone interested in the subject. The book suggests an idea how EVs could have become a standard transport and why they hadn’t.

This is the original "Who Killed The Electric Car" story. It was killed about 1915 to 1920.The story has unexpected twists and turns. It should be required reading for all students of the history of technology.

Very well researched, this book is a must read for public officials, EV advocates and fans, and energy and transportation professionals.There are plenty of lessons learned here, and now we are listening the same really old centennial arguments: range anxiety, lack of recharging infrastructure, and higher cost than internal combustion engines.Among many surprising facts, you will also learn, believe it or not, that the automobile was the environmentally-friendly solution to the unsustainable problem being suffered by big cities such as New York and London.PS: If you enjoyed this book, I highly recommendÂ A History of Electric Cars, published in 2013. Not only covers the early days of electric cars but it goes all the way through the Prius and Nissan Leaf.

BORING

Electric Pressure Cooker Cookbook: 25 Best Electric Pressure Cooker Recipes for Busy People The Complete Electric Bass Player - Book 3: Electric Bass Improvisation Jeep: The History of America's Greatest Vehicle The Benefit and The Burden: Tax Reform-Why We Need It and What It Will Take The Burden of Office: Agamemnon and Other Losers The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good Global Health Risks: Mortality and Burden of Disease Attributable to Selected Major Risks The Body Bears the Burden: Trauma, Dissociation, and Disease The Burden of Proof Samuel Zwemer: The Burden of Arabia (Christian Heroes: Then & Now) The Burden of Freedom Full Body Burden: Growing Up in the Nuclear Shadow of Rocky Flats The Burden of Sympathy: How Families Cope With Mental Illness The Burden of Visual Truth: The Role of Photojournalism in Mediating Reality (Routledge Communication Series) Insider Secrets to Collision Repair: What Smart, Safe, and Satisfied Vehicle and RV Owners Know About Collision Repair and Why It Matters Panzerkampfwagen IV and Its Variants 1935-1945, Book 2 (Spielberger German Armor and Military Vehicle)