

Tinkering: Consumers Reinvent the Early Automobile. By Kathleen Franz. Philadelphia: University of Pennsylvania Press, 2005. 224 pp. Illustrations, notes, index. Cloth, \$35.00. ISBN: 0-812-23881-8.

Reviewed by Timothy Whisler

Tinkering: Consumers Reinvent the Early Automobile by Kathleen Franz uses the motor car to study popular culture in the United States from about 1900 until 1939. Utilizing material culture and theories of cultural and technological change, Franz presents a work that will interest not only scholars of those disciplines but also the general reader. Business and economic historians, particularly those investigating the automobile industry, should consult the work. It must be noted that the book does not shed new light either on industrial organizational theory or on the U.S. automobile industry. The book's value lies in Franz's contribution to the growing body of literature that emphasizes the wider social, cultural, and psychological influences of companies and their products. Franz's use of this contextual approach and her clear organization and highly readable prose makes this a worthwhile volume. It would be a fine addition to research libraries.

Most automotive histories of this period focus on Henry Ford and his engineering team's mass production of the Model T and on General Motors' development of flexible mass production. Franz concentrates on the product itself. More specifically, she examines what consumers did with and to their automobiles. Franz contends that the relationship of owners and vehicles moved quickly from a simple one involving mobility to one marked by social and cultural overtones and technological interaction, which Franz refers to as "tinkering." Citing contemporary social and political commentaries from 1910 to the 1930, she notes that American car owners regarded the automobile and the "open road" as an ideology. The car represented the quintessential consumer good in a society that equated technology with modernity. A vehicle became the technological means to solve cultural and social problems. Cars provided their owners an escape from the filth and congestion of cities jammed with real (and imaginary) alien immigrants, unrefined workers, and disreputable political activists. Franz suggests that owners saw their cars as capsules of privacy that promised adventurous travel to an exotic location.

The destination was often a rural spot, where nature would cleanse people of their urban afflictions. Such motor vacations and trips spawned motels and campgrounds.

Franz argues that the car came to symbolize American democracy. Theoretically, the opportunities offered by a car were open to all, regardless of gender, race, and social class. Yet, as Franz notes, the reality of American society and culture often belied the rhetoric of equality. By the 1920s, the car was becoming a status symbol as owners differentiated themselves socially and financially from nonowners. A new car designated its owner as solidly middle class. The relatively small number of African-American car owners discovered that the “open road” led to lodges and restaurants that were as segregated as their neighborhoods. From 1910 into the early 1920s, women fared better. In a chapter devoted to gender experiences, Franz contends that popular magazines and serial novels, such as *Automobile Girls*, reflected the reality of women embracing the car for its liberating and adventurous potential. Early on, female drivers were just as likely as males to repair or modify car bodies or engines. By the late 1920s, however, this equality in mechanical “tinkering” withered in the face of a romantic revival and the backlash against suffrage. Popular literature assured women that men, by nature and inclination, understood automotive technology far better than they ever could. Relegated to the passenger seat and to being the butt of driver’s jokes, most women passed the car keys and tools to men in the 1930s.

Men had always tinkered with the automobile, Franz notes. The relatively crude designs, simple construction, and problematic reliability encouraged owner modification and repair of early cars, particularly the Model T. This tinkering, Franz argues, allowed ordinary Americans to interact with and influence the new automotive technology. “Shade-tree mechanics” frequently invented accessories to increase the comfort and convenience of their cars. The growing cult of amateur ingenuity, nourished by a flourishing range of popular literature, resulted in mechanical innovations, such as signals, heaters, gauges and starters, as well as practical additions, such as upholstered seats, luggage boxes, beds, tents, and hot plates.

Franz found in the Ford Motor Company archive numerous letters from these inventors suggesting design modifications or offering to sell the company their innovations, which had often been patented. These practical men and women, Franz

suggests, were trying to gain fame and fortune in a society shaped by engineering, scientific, and industrial leaders, such as Henry Ford. Few were successful. The car companies rarely offered contracts. Some innovators offered their patented accessories in a turbulent aftermarket. Most settled for simply customizing their vehicles for personal use. Franz's chapter on Earl Tupper illustrates the determined, but ultimately futile, pursuit of riches through automobile-accessory invention. Plastic containers, not rumble-seat covers, eventually brought Tupper success.

In a chapter devoted to the reaction of manufacturers, Franz suggests that the interaction between individuals and automobile technology changed dramatically in the 1930s. Pointing to publicity campaigns by General Motors and Ford, she states that the firms cast themselves as technological and scientific innovators. The message, echoed by engineering societies, stressed that professional designers and systematic research had advanced technology beyond the grasp of the amateur. Cars featuring new, streamlined body designs built of hardened steel and standardized accessories seemed to support the marketing campaign. Franz contends that the technology was not new, but she points out that the advent of body styling and convenience features reduced tinkering. Consumers complained that the cars were higher priced and difficult to repair and modify. The golden era of the amateur gave way to systematic consumer research and professional engineers. Franz suggests that the legacy of the tinkerer remains in the tension between what consumers want in their vehicles and what engineers design, a divide that is often articulated in the current National Public Radio program, *Car Talk*.

Franz's dense, but short, work is best at demonstrating how the car and culture came to represent the prevailing, and sometimes contradictory, American values of community, freedom, equality, and technological achievement. She skillfully uses popular literature and corporate archives to support her convincing case of the car owners' enthusiastic embrace of automotive technology and customizing. Her argument that consumers influenced the design changes of the 1930s is slightly weaker. Franz admits she cannot prove that the manufacturers incorporated accessories in response to amateur suggestions and instituted new body styles to prevent modifications. An examination of the repair-shop sector would have augmented her circumstantial evidence for the decline in tinkering. A rise in the number of mechanics in the 1930s would

suggest that amateurs did indeed require professional assistance. A concluding chapter that brought together her numerous themes would have been more satisfying than her decision to leap into a discussion of current consumer frustration with car design. These weaknesses, however, do not undermine an otherwise fine piece of scholarship.

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