

# SAH Journal



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## Billboard

**2015 Valentine Award:** *Bob Ewing*, Valentine Award Chairman, sends this report for the SAH SoCal Chapter:

For the past seventeen years the Southern California chapter of the Society of Automotive Historians has honored writers with the James Valentine Memorial Award. Mr. Valentine was one of the founders of the chapter, but also an expert on the development of the automobile industry in California. The award winners are judged on criteria such as originality of concept, documentation and use of illustrations or photos and, most importantly, the material's deep connection to California and the western United States. At first the focus was purely on books as entries, but it soon became obvious that there were many fine stories being told in other formats, so the award was expanded to include both periodicals and electronic media.

The award winners for 2015 were honored on August 22nd at a luncheon at the Odyssey Restaurant in Granada Hills, followed by a tour of the Nethercutt Collection and restoration shops in nearby Sylmar. The winner in the Periodical Division was

*Louise Noeth* for *A Century of Speed*, which members will recall was published in the *SAH Journal*, issues 270 to 272. Ms. Noeth has won the award several times in the past for both book and periodical entries. And in the *Book Division* we honored Charles Seims and Alan Darr for *Roar With Gilmore*, a history of one of the most famous companies in the oil industry not only in California but most of the western United States. Seims and Darr were the first team of authors since our very first award to the team of Harold Osmer and Phil Harms, who collaborated on *Real Road Racing*, which dealt with the Santa Monica road races of the early 20th century.

**2015 IAMC Awards:** The *SAH Journal* was honored with the *International Automotive Media Competition's* bronze award for issue #270 in the category of "Total Issue Writing/Newsletter." The IAMC program recognizes and encourages excellence in all forms of automotive media. This honor belongs to our contributors—all of whom earned this award for the Society of Automotive Historians.

*continued on page 3*

### Submission Deadlines:

Deadline:	12/1	2/1	4/1	6/1	8/1	10/1
Issue:	Jan/Feb	Mar/Apr	May/Jun	Jul/Aug	Sep/Oct	Nov/Dec
Mailed:	1/31	3/31	5/31	7/31	9/30	11/30

**Note:** the SAH Journal is a bimonthly publication (printed 6 times a year) and there is a two-month horizon for submitted material before it is mailed (e.g., material submitted by February 1st appears in the Mar/Apr issue and is mailed on or before 3/31.) All letters, manuscripts, and advertisement submissions and inquiries go to the editor.

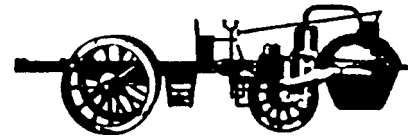
**Front cover:** Google's December 2014 prototype self-driving car makes its way down the road without a driver. Credit: google.com/selfdrivingcar/

**Back cover:** An ad for "America's Electric Light and Power Companies" from a 1950s issue of the *Saturday Evening Post*. The caption reads: "ELECTRICITY MAY BE THE DRIVER. One day your car may speed along an electric super-highway, its speed and steering automatically controlled by electronic devices embedded in the road. Travel will be more enjoyable. Highways will be made safe—by electricity! No traffic jams . . . no collisions . . . no driver fatigue." Credit: The Everett Collection

# SAH Journal

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An Affiliate of the American Historical Association



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*Join, renew and more right on-line!*

SAH Journal • September / October 2015

## President's Perspective



It is hard to believe that my two years as President of the Society of Automotive Historians are almost over! It was an honor and privilege to serve you during this time; and I am confident that current vice-president Andy Beckman will carry on with excellence. As it turned out, I was blessed with a stellar group of board members, past-presidents, and others who did much to shepherd the numerous award categories, dramatically improve the website and *Journal*, and organize the Biennial Automotive History conferences.

There are pressing challenges that remain, however. First and foremost is recruiting new members. Last Saturday morning I took my 1971 Porsche 911 to a cruise-in in nearby Kettering/Beavercreek, Ohio, called "Cars and Coffee." I got there a bit late, and much to my surprise the place was mobbed! But what really struck me was

how many young people and women were there, quite unlike a Friday night cruise-in held in Beavercreek where predictably many of the old dogs show up. My point is simple—the old car hobby remains healthy despite fears to the contrary, and these folks are all candidates to become one of our SAH members. Yes, they need to be sold on our perspectives concerning cars and history, not so much object-oriented but rather textual, and broadly contextual rather than single-marque focused. But the fields are ripe for plucking. What I am saying is that we all need to be evangelists for our cause.

A second area for development has to be in engaging already paying members and convincing them to be active. We are a volunteer organization and there are many more needs than members poised to meet those needs. We need academics to serve on the Academic Committee that plans American Historical Association panels; marketing persons to plan and execute our outreach; financial folks to work on fundraising campaigns; everyday all-around servants to help with tasks including the Book Signing at the October Hershey meeting; and authors willing to share their work in our publications and at the Biennial Conference. Won't you consider these opportunities?

I won't be going way after October 9, but rather will serve *ex-officio* as a member of the board for the next two years. I will be backing off work for a while, as I plan on getting knee replacement surgery after this fall term, and getting my mobility back after a frustrating year of getting around with plenty of knee pain. But I do plan, painful as it might be, to walk the field at Hershey, where I hope to see you at the tent and awards dinner! Thanks to all of you who I met and had the opportunity to interact with!

—John A. Heitmann

### Billboard continued from page 2

**SAHB:** The autumn edition (No. 82) of the *SAHB Times* arrived and continues the use of color that started with No. 79. This was particularly appreciated in the article *Élégance et l'Automobile*, with its "evocative glance into the world of the fair sex and the motorcar" (too bad the pictures on page 21 were not in color). Some pictures can't be in color, such as this one (from a family album covering 1898 to 1905) with a line of motorcars, drivers and passengers, labelled "the ACGBI



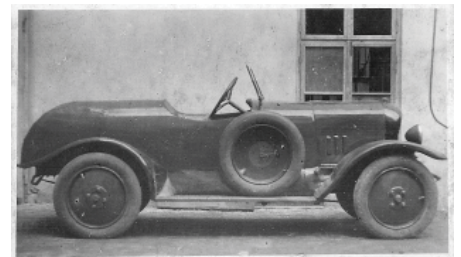
Side Slip Trials." If anyone knows the date of the event, and the identity of car number 12, please contact Peter Card at [peter@tc-auctions.com](mailto:peter@tc-auctions.com). On another note, your editor caught up with Bruce Meyers, pictured below with his 1964 Meyers Manx "Old Red" dune buggy and Chad McQueen (actor Steve McQueen's son, right) at the Carmel-by-the-Sea Concours on the Avenue (CA) on August 8th. Meyers was delighted



to learn that an organization of British historians (SAHB) covered the history of the dune buggy in their publication.

**Contact SAH Member #165:** George Tesar writes from Wisconsin: "Going through my collection I found a picture

of a car that was never identified and after all these years it still bothers me. I was told long time ago that it was possibly a Steyr



from early 1920s. I wonder if someone in the Society would know? I am also liquidating all my collection of sales literature that ranges from about 1958 to 2006. I have a complete list available." If you can help with identifying this car, and/or would like to obtain the list of literature, contact George at +1.608.233.8077 or [gtesar@chorus.net](mailto:gtesar@chorus.net).

**Looking for a picture:** *The Virtual Steam Car Museum* has acquired all the steam car material from the John A. Conde Collection. The VSCM is searching for a good photo of John Conde. Please contact Don Hoke, [vscm@virtualsteamcarmuseum.org](mailto:vscm@virtualsteamcarmuseum.org) and don't forget to ask Don about the H.H. Stewart Biography challenge grant!



# HISTORICAL RESEARCH AND FORENSIC EVALUATION INFORMS THE RESTORATION OF A 1943 ALFA ROMEO (PART II)

*Editor's Note: In Part I of this article (see SAH Journal #275) we learned about one of the twenty-eight Alfa Romeo 6C2500 Super Sport Cabriolets that were built exclusively for Mussolini's close friends and associates—mostly high-ranking German officers—and the process undertaken to meticulously research the car's history, provenance, and construction documentation to inform an authentic restoration. Part II explains the rationale behind key restoration decisions. Author David Cooper describes Cooper Technica's use of cutting-edge technology (i.e., laser scanning, digital imaging and 3D printing) to determine the Alfa's original shape; and then the use of traditional "trailing-edge" construction techniques to restore that shape. Using archival photos from 1943 and 1945 as guides, and a unique approach with innovative methods, the author concludes that his firm achieved "a restored body shape within two millimeters of the original—a level of precision never before possible." As explained in Part I, the aim here is to illustrate how the discipline of automotive restoration continues to evolve (through the perspective of a specific case), particularly in the increased attention to preservation, and the range of questions that should be explored to define the nature and degree of the restoration that is to be undertaken in a given case. For more on David Cooper and Cooper Technica, visit: [coopertechnica.com](http://coopertechnica.com).*

## When preservation is not an option, what then?

As both historians and restorers, our first goal is to preserve the car as-is, rather than to restore it. When the Alfa Romeo (chassis 915522) arrived at Cooper Technica, restoration had already been started by the previous owner. The paint had been stripped, exposing the original aluminum body skin. It was evident that various repair jobs and past alterations had left the body in poor condition. Given that that car was no longer in its original condition, preservation was not a viable option.



The 1943 Alfa Romeo as it arrived at Cooper Technica's Chicago studio, prepared for laser scanning.

The decision to restore the Alfa Romeo rather than to preserve it raised a number of questions. First, considering the car's long history and the changes it underwent, to which moment in time should we restore it? As it was delivered to von Richthofen in 1943, or as it was modified for racing the Mille Miglia in 1948? In the end, we elected both options. We are restoring the car to its original, 1943

specifications. However, the future owner will be able to convert from the 1943 to the 1948 configuration simply by removing the bumpers, front windshield, convertible top and side windows, and fitting the correct Brooklands type racing windscreens that we will furnish.

With that in mind, the question came as to whether the car's body should be addressed cosmetically, leaving only the appearance of the original, or whether it should be restored to its original shape, finish, and materials. Many restorers and collectors choose the most expedient and easiest path—i.e., focusing primarily on the cosmetic treatment. But when it comes to a car that is this significant, mere cosmetic restoration will fail to capitalize upon the car's highest value, inherent to its original form and functionality.



For the 1948 Mille Miglia, the Alfa's bumpers, front windshield, convertible top, and side windows were removed, and Brooklands style racing windscreens were installed.

Assuming the future owner decides to drive the Alfa Romeo in the annual recreation of the Mille Miglia, then full mechanical functionality and reliability are essential. However, racers are less concerned with originality and are often willing to substitute modern components. This can devalue the car when it is shown at a Concours d'Elegance. Instead, we chose the more expensive route of preserving or restoring the original mechanical components as accurately as possible, including the engine, drivetrain and suspension. Since the Alfa was an exceptional performance car in its day, our approach will allow it to perform as well as it did when new, without compromising its value.

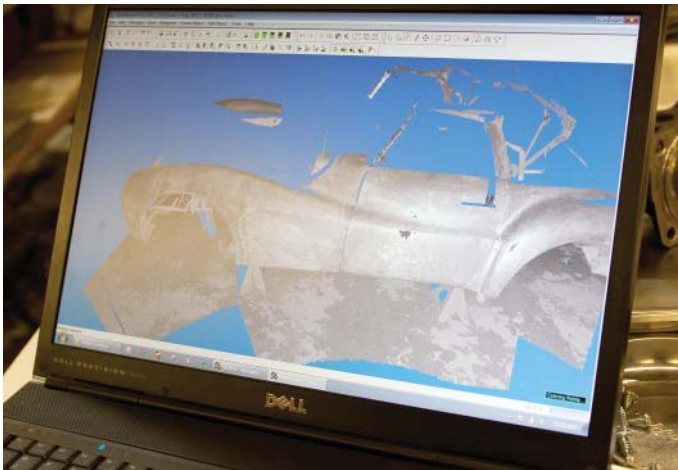
## Planning with cutting-edge technology

Our process of body restoration began with laser scanning, digital imaging and 3D printing—all cutting-edge tools that Cooper Technica has incorporated into an innovative and unique approach to high-end automobile restoration. The first step, a 360-degree laser scan of the car, generated a 3D digital image of the full body and



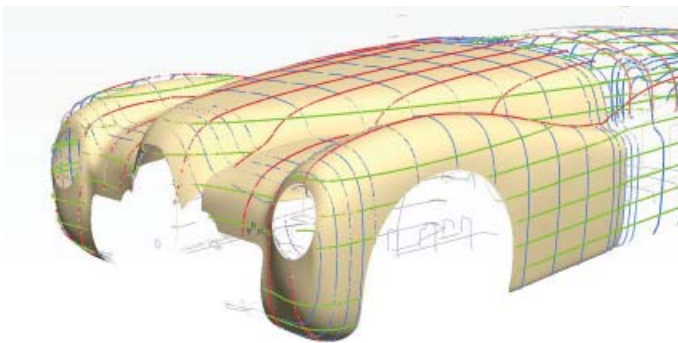
The laser scanner is positioned at various points around the car to capture a 360-degree digital image of the body and chassis.

chassis. These scans are so detailed that excess data must be carefully stripped from the image in order to produce a clean, digital representation of the car as-is.



The raw laser image of the body, before pruning extraneous data.

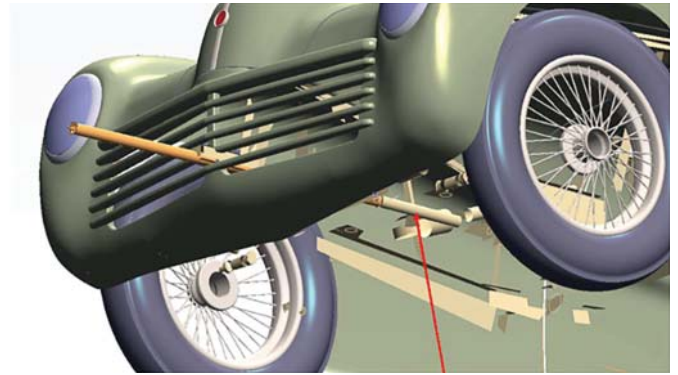
Next, we overlaid the clean, 3D image of the existing body (augmented through our CAD program to replace missing sheet metal sections) with digitized versions of the original photographs from 1943. This allowed us to compare the existing shape to the original and to identify any discrepancies between the two. Because photos are subject to the normal camera distortions of focal length and perspective, we first distorted our own digital images to match the focal length, angle, and proportions of the original photos. When we overlaid the images and added a virtual light source to our image that matched the angle and strength of the original, we could see whether the light reflections in the digitized image matched those in the original photo. Only when those reflections match can we know that the digital body shape is true to the original.



The clean digital image of the front fenders and hood, shown with the guidelines used to form the bucks.



The digital image compared with the original photograph to verify shape.



Though the grille and the front valence below the grille were missing, the CAD program allowed us to digitally render this area to original proportions.

Finally, to further validate the digitally-corrected body shape, we also made a 1/12 scale 3D printed model of the car. This model enabled us to physically study the shape, and photographing it from different



Rear three-quarter view of the 3D model.

angles gave us another way to compare our rendering to the original.

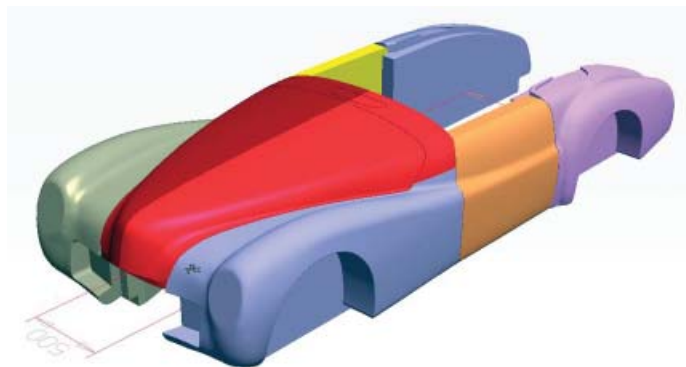
With the correct body shape verified, we designed and built a series of full-sized forms, called "bucks," over which we re-formed the existing sheet metal panels back into their original shapes. Though bucks are critical as a tool to preserve the original aluminum panels, most restorers today do not make them. Instead, they take the easier and less costly approach of fabricating new panels to resemble the originals. We believe it is more faithful, and adds value to the car, to preserve as much of the original body sheet metal as possible.



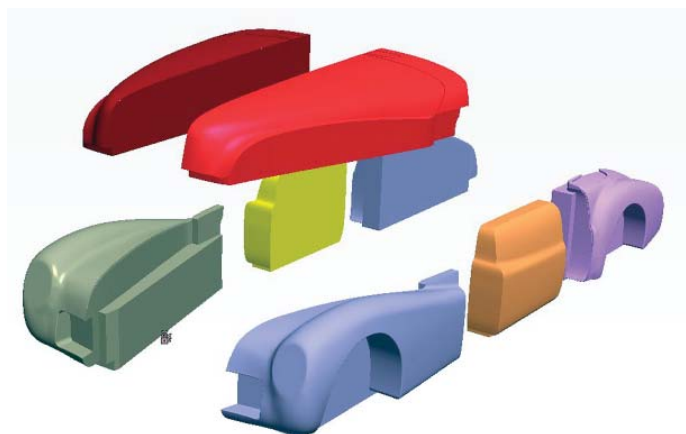
Front view of the 3D-printed, 1/12 scale resin model, built to show the car's actual shape and to verify the digital renderings.

In this case, our bucks were made of polystyrene foam machined

on a 5-axis milling machine, each one corresponding to one of the car's body panels. To protect the foam from crumbling as the original aluminum panels were test-fitted, the bucks were undersized to accommodate the fiberglass skin. The fiberglass was applied in layers, coated with resin, and then vacuum-sealed. After a 24-hour curing process and light sanding, the hardened work surface was accurate to the inside dimensions of the original panels.



The design of the bucks, with each body panel in a distinct color.



Design of the individual buck components.



The bucks were individually machined on a 5-axis milling machine and test-assembled into the full-size body shape.



Applying the fiberglass and resin to the bucks.



The finished buck shown next to the body, which is mounted on a rotisserie fixture in Cooper Technica's Chicago studio.

### Execution with traditional techniques

Although Cooper Technica used high-tech tools to determine the correct shape of the Alfa's body panels, the actual restoration process required traditional techniques and the very same processes that the Italian craftsmen used at Pinin Farina in 1943. To form the body panels, the Italian metal workers would begin by cutting, shaping, and then welding together a series of aluminum panels. The primary tool the Italians used to shape these panels was a power hammer, supplemented with hand hammering and planishing. Throughout this process, they repeatedly test-fitted the body panels over the bucks, continually reshaping them until they matched the bucks. In our studio here in Chicago, we used these same techniques, with our own bucks as guides, to reshape the Alfa Romeo's panels back into their original form.

Next, the body panel sections were butt-welded together, again with the same techniques used in 1943: aluminum was painstakingly tacked, then welded with a small oxygen-acetylene hand torch, which leaves a minimal welding bead and minimizes distortion to the sheet metal. Modern welding equipment, by contrast, hardens the joined panels along the welded seam, which makes them harder to shape and necessitates the extra step of annealing. Using traditional welding techniques and the original seams as guides has allowed us to preserve over 70 percent of the Alfa Romeo's original sheet metal.

### Hand-rubbed lacquer paint

While European coach-built cars of the 1930s and 1940s were painted with nitro-cellulose lacquer, most restorers today use water-

based catalyzed urethane enamels. The difference between enamel and lacquer is analogous to the difference between coffee and tea. Enamel, like coffee, is a solution in which the paint molecules bond with water molecules to produce an opaque solution, the color of which is perceptible on the surface. By contrast, lacquer paint, like tea, is a mixture of colored molecules floating among water molecules, *through which* the color is perceived. While modern enamel jobs give the illusion of depth by applying clear coats over the paint, with lacquer the depth is inherent in the paint itself. And, because lacquer is harder than enamel, polishing gives it a smooth glass-like finish—not the orange-peel finish typical of modern paint.

There is a common misconception that lacquer is no longer available. This is not true. Lacquer requires extra time and labor, and paint fumes and waste must be handled carefully to meet modern environmental laws. Lacquer is applied in very thin layers, each of which is allowed to air dry for days before being wet block sanded to prepare for the next coat. Though a traditional lacquer paint job takes weeks, it has a depth and luster that can never be achieved with modern paints. For this Alfa, Cooper Technica is making the investment in authentic lacquer paint, matched from remnant spots to the original 1943 dove grey color.

### Restoration of mechanical components

Because the Alfa's successful participation in the 1948 Mille Miglia makes it eligible to compete in the annual recreation of the race, Cooper Technica has chosen to restore the mechanical components so that the car can compete equally well today. For the future owner to drive the car vigorously it must function reliably and handle well; this means all mechanical systems must be restored. To take the play and wear out of the engine, transmission, drive train, suspension, brakes and steering, the internal components, seals, bearings and bushings have been restored or replaced. The electrical systems have been made to work properly. We make one concession away from originality, and modify the engine to allow it to run on modern, unleaded fuels.



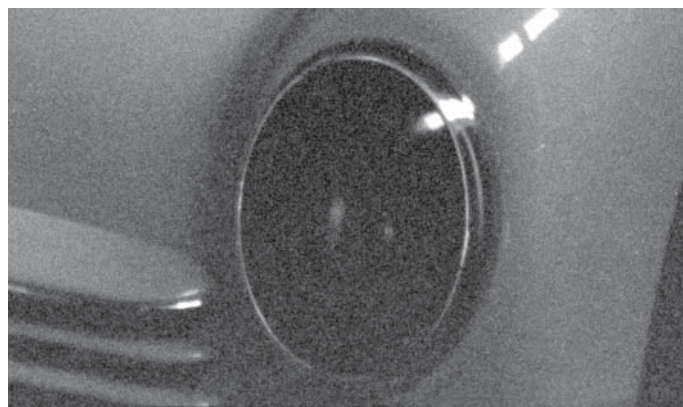
To restore the front suspension for the recreated Mille Miglia, we rebuilt the original forged suspension members with new bushings, needle bearings, thrust bearing, and seals. Protective seal covers were re-manufactured to the original specifications.

Cooper Technica's approach to mechanical parts follows our approach to the restoration of the body: we restore the original parts wherever possible, and fabricate accurate replacements as necessary. If we do not have the tools necessary to make replacement parts, then we design the tools first. Whenever original parts are missing, then we seek original replacement parts before fabricating accurate replacements. For example, the Alfa was missing its original



The original oil pump was worn, and its excessive clearance between the gear and the housing caused erratic oil pressure, risking engine damage. To restore proper clearances, we developed special tools to re-machine the inside of the original housing and fabricated a new gear set with the correct profiles and clearances for an oil pump.

oval-shaped fluted glass headlights. Alfa only used these particular headlights during the war, when their traditional Bosch headlights were unavailable. With extensive searching, we found a pair of NOS war-time headlights in Argentina. Because the 1943 photos show these headlights fitted with blackout screens for war-time use, we equipped them with screens, as well. The Alfa was also missing its original horizontal six-slat front grille. But in that case, since only one such grille was ever made, a new one, true to the original, was fabricated from bucks that we made based on our analysis of historical photographs.

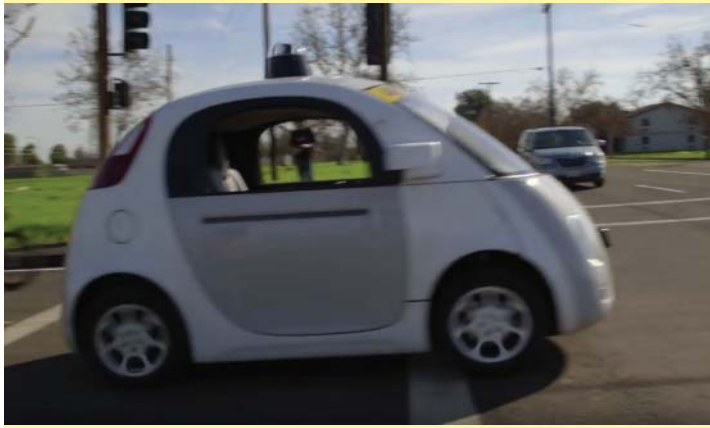


Detail of the war-time headlight with the blackout screen, based on a photo of the car as it was first delivered to Field Marshall von Richthofen in October, 1943.

### Conclusion

At Cooper Technica, Inc., we consider our restorations to be functional *art*, and we are honored to restore cars such as the 1943 von Richthofen Alfa Romeo. These cars represent the finest work of some of the most brilliant designers of the 20th century, and to be true to the art, an authentically restored car must be both accurate and functional. Too many cars are restored cosmetically while the mechanical components remain tired and neglected. Others are over-restored to the restorer's idea of "better" or different than new. Neither practice is faithful to the original. Cooper Technica's innovative blend of new technologies and traditional methods permits restorations of peerless accuracy and functionality.

—David Cooper



smuhberger.blogspot.com

Left: Google's December 2014 prototype self-driving car makes its way around without a driver. Right: probably the last vehicle before the Google prototype to have a proficient self-driving capability (and the only image in this article not to come from google.com/selfdrivingcar/).

## AN AUTOMOTIVE HISTORY JOURNAL ENTRY: EXIT THE STEERING WHEEL

The age of the horse-drawn carriage is filled with accounts where the horse's good sense "saved the day." For example, there were many accounts of drunken coachmen falling asleep, only to awake at their front door because their horse knew the way home and completed the journey. Of course horses could be spooked, and the outcomes of that would often be catastrophic. Today, falling asleep at the wheel and drunk driving can be and often are fatal. And even while wide awake, many have accidentally hit the accelerator instead of the brake and ended up going through storefront windows, among endless examples of human error ending in catastrophe. But what if we could bring back the horse, just without the horse? The folks at Google have been working towards the goal of developing a self-driving car, and in December 2014 they unveiled their first complete prototype.

To be clear: this is not an advocacy editorial, but it is a moment in automotive history to journalize. The day where the technology to make a credible attempt to produce a self-driving car has arrived.

Even with the horse, one could argue that there was still a driver (steering wheel notwithstanding). Perhaps a chauffeur is a better comparison, because with a self-driving car, all driving duties are ascribed to a set of redundant systems of sensors and computers to chauffeur a vehicle, whether or not someone is actually in the vehicle. For those who are blind or otherwise physically challenged, this development would make independent personal transportation available. A host of other possibilities also arise, for example: no available parking?—just send your car home and call it back when you're ready to go. Just home from your vacation?—have the car come and pick you up at the airport. The social impact could be revolutionary. Equally, the impact to issues of responsibility and liability—however reliable the technology—would likely force a

reformation of the statutory structure that applies to road travel.

For a glimpse into their objectives, here's an excerpt of five FAQs from Google's self-driving car website:

**Q:** Why is Google working on fully self-driving cars that don't require human intervention at all?

**A:** Our goal is to transform mobility by making it easier, safer and more enjoyable to get around. We believe that the full potential of self-driving technology will only be delivered when a vehicle can drive itself from place to place at the push of a button, without any human intervention. For example, there are many people who are unable to drive at all who could greatly benefit from fully self-driving cars.



A blind man experiences the prospect of self-reliant transportation with a smile.

**Q:** Which partners is Google working with to build the new prototype vehicle?

**A:** It takes a lot of parts to build a car—especially a fully self-driving one. To build our prototype, we worked with established automotive partners from around the world including Roush, Bosch, Continental, FRIMO, LG Electronics, Prefix, RCO, ZF Lenksysteme and many

others. We look forward to working with these partners and others to bring this technology into the world safely.

**Q:** What's next for the project?

**A:** We're currently testing and refining our technology in Mountain View, California, and Austin, Texas. In coming years, we'd like to explore other cities that can teach us about different types of challenging weather and terrain. We'd also like to run small pilot programs with our prototypes to learn what people would like to do with vehicles like these.





The Google car's "brain" in action, as it weaves together data interpreted by its cameras, as well as other sources, to navigate through a construction zone.

Q: How do you plan to bring the technology to market?

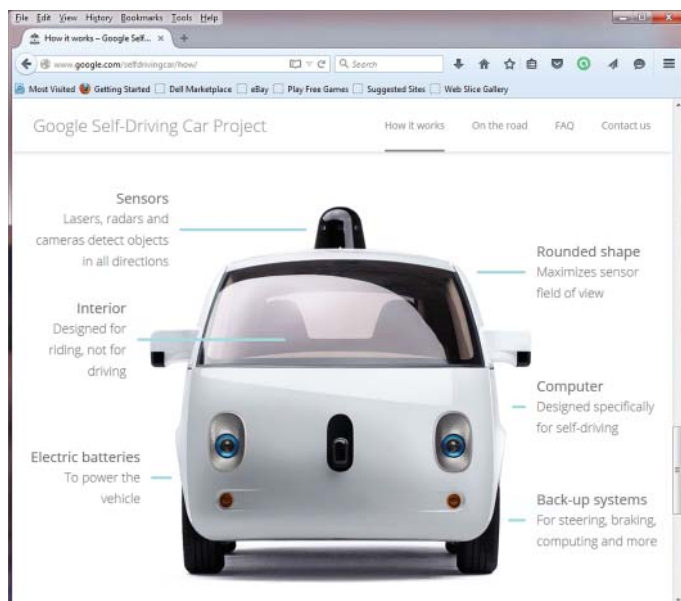
A: We're going to learn a lot from our testing in the coming years, including how people might like to use self-driving technology in their daily lives. If the technology develops as we hope, we'll work with partners to bring this technology into the world safely.

Q: How do the vehicles behave on the road? What should I expect?

A: Here's what to expect:

Our cars are experienced drivers. Since we began testing six years ago, we've self-driven over 1 million miles and have accumulated the equivalent of 75 years of driving experience on the road (based on a typical American adult driving about 13,000 miles per year).

Each prototype's speed is capped at a neighborhood-friendly 25mph. The cars drive conservatively. For example, they pause 1.5 seconds after the light turns green at an intersection because many accidents happen during this time.



For now, we have safety drivers aboard with temporary controls that allow them to take over driving if needed. Safety drivers also provide feedback to our engineering team, helping to make the ride smoother and more comfortable.

Q: Will Google's self-driving cars get into accidents? Have they gotten into accidents before?

A: Safety is our top priority. In the 6 years of our project, we've been involved in a small number of accidents in more than 1.8 million miles of autonomous and manual driving combined. Our vehicles have not caused any accidents while in self-driving mode. For more information, view our monthly reports.

Q: I saw a prototype vehicle with a special design on the door. What's this initiative (Paint the Town) about and can I participate?

A: This is for an initiative called "Paint the Town," a moving art experiment inviting artists in California to submit art to be featured

on our cars, on our website and at an "Open Garage" community event in the fall where up to 10 selected artists will get a ride in the self-driving car. As our prototype vehicles start to cruise the streets of Mountain View, California, we want you to make these cars your own and help transform them into public art! To learn more, please visit the Paint the Town website.



Further on the "social side" of the equation: the University of Michigan Transportation Research Institute found that 57 percent of people would ride in either a fully automatic self-driving car or a partially self-driving car with only occasional control by the driver. Demographically, the study showed that the strongest support for the self-driving car is with males under 45... another case of boys and their toys?

—R. Verdés

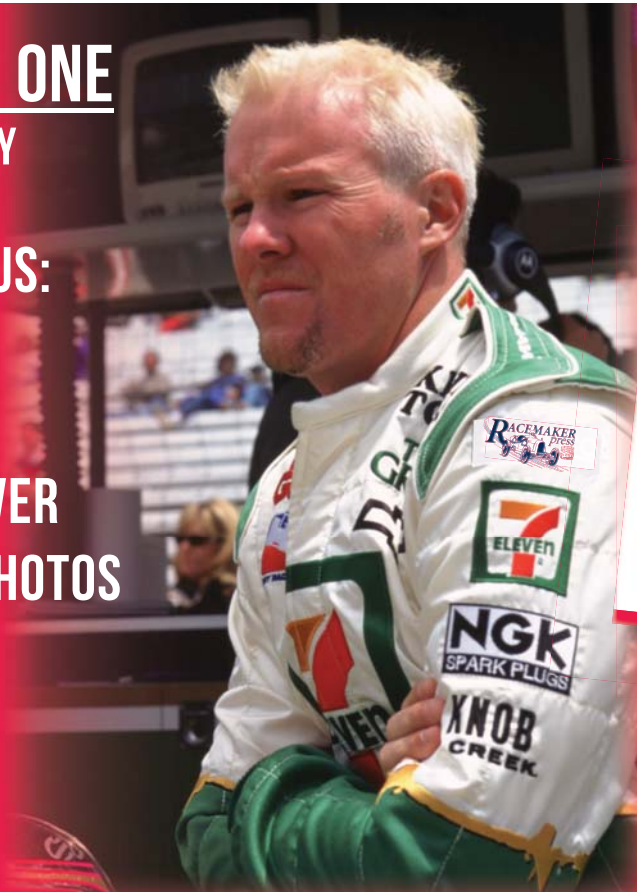
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# Book Reviews

## Atlantic Automobilism: Emergence and Persistence of the Car, 1895-1940

by *Gijs Mom*

Berghahn Books (Dec. 2014)

berghahnbooks.com/ +1.800560.8663

768 pages, 6" x 9" hardcover

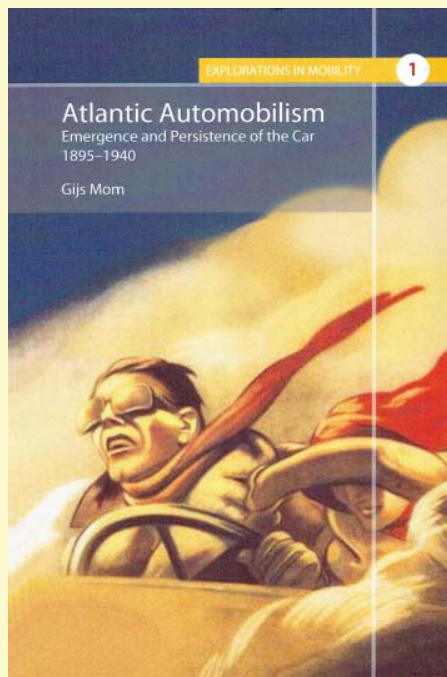
37 illustrations, 3 tables, indexed

Price: \$150/£95

ISBN-10: 1782383778

ISBN-13: 978-1782383772

eISBN: 978-1782383789



The author, a professor at the Eindhoven University of Technology in the Netherlands, opens by stating that “this is the work of a lifetime...” Thus, I wish to give it considerable respect. Certainly *Atlantic Automobilism* is one of the most important books dealing with automobile history to be published within the past twenty years. However, it is not without limitations and flaws. For an academic scholar working in the field it is a “must read,” but I have to qualify what is meant by “read.” Going through this book requires patience and rumination. My own feeling is that reading this was a battle, and

SAH Journal • September / October 2015

I have reviewed more than 60 books during my 30-year career. It is not the genre of automobile history that one takes to the beach or on an airplane.

My respect for Mom came easily, since his monograph totals 752 pages, including a bibliography of some 76 pages! The co-founder of the International Association for the History of Transport, Traffic and Mobility, Mom’s monograph is the first in an envisioned series entitled “Explorations in Mobility,” and it sets a high bar of scholarship for what undoubtedly will follow.

Mom particularly wants to answer the question of “Why? Why the car (and not, say, the bicycle)? Why in the North-Atlantic realm, and not elsewhere initially?” During the course of seven intense and lengthy chapters that are further divided into two parts (1895-1918 and 1918-1940) Mom goes deep into motives as to why the internal combustion engine car has come to dominate our lives. These include masculinity and adventure; tourism; male violence and aggression; pleasure and consumption; encapsulation in closed vehicles and the cyborg relationship between driver and the machine; thrills and risks; gender and family structures; tinkering and maintenance; and finally competing technological systems involving the flexible motor vehicle and rail. Mom’s work is fundamentally a cultural history, drawing on both non-fiction and fiction. Yet more than that, it represents one slice of a total history, with a subsequent history of motor vehicle technology slated to appear later this year.

While the author’s drive toward completeness is the book’s strength, it is also a weakness. Rather than sharpen the narrative by making selections of evidence that historians must inevitably do, so much material (virtually a mountain!) is presented that the reader is overwhelmed with detail. True, all of this detail supports the idea that Americans and Europeans were exposed to a wealth of cultural influences that helped shape attitudes and decisions concerning the automobile as both a pleasure vehicle and a necessity. But perhaps by limiting information, a more effective set of arguments could be made that as a result would engage general readers and undergraduate students. This is a book written by a scholar for scholars, and thus readership will be limited. And by taking on so much material, errors are more likely to creep in. For example, on page 474 the author speaks of Remarque and his novel *Three Comrades*, claiming it was set in the

early 1930s. That is not so, for the novel was set in the immediate post WWI years in Germany, a time characterized by economic and social dislocations and street violence. From time to time other statements did not seem quite right, but in a work this expansive I do not want to quibble. Let others do that if they wish.

Rather, I want to focus on what was most enjoyable during my read. Certainly Chapter 3 on World War I and the use of motor vehicles by the allies as compared to the reliance on rail by the Germans proved most enlightening, and timely given centennial interest in this major historic watershed. And Mom’s historiographical account in his introduction is outstanding, ambitious, and assertive.

In sum, this is a study that will continue to be of value for decades. By incorporating a vast variety of German, French, British, American and Dutch sources, the author has pioneered a mode of cultural analysis that spans traditional national histories of the automobile. Mom’s effort augurs well for the future of mobility studies.

—John A. Heitmann

## Riverside International Raceway: A Photographic Tour of the Historic Track, Its Legendary Races, and Unforgettable Drivers

by *Pete Lyons*

Spry Publishing LLC (Mar. 2015)

sprypub.com/ +1.877.722.2264

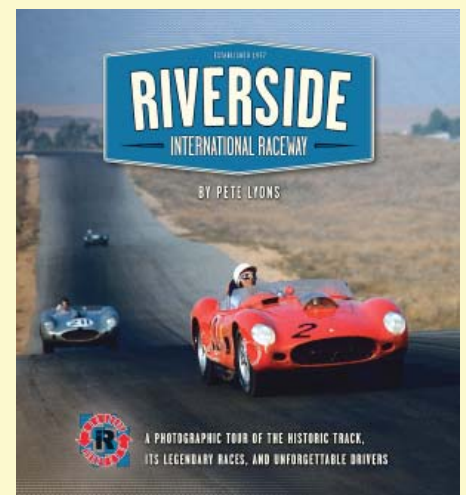
208 pages, 10¾" x 11¼" hardcover

219 color & 284 b/w images, indexed

Price: \$49.95

ISBN-10: 1938170113

ISBN-13: 978-1938170119



It was a sprawling place. Built in 1957 when its location was out in the middle of nowhere, by the time it was closed in

1989 it was surrounded by housing developments and the land it occupied coveted for construction of still more houses.

The myriad events, drivers and memories at the Southern California track named Riverside International Raceway are nicely captured by Pete Lyons in his new book titled simply *Riverside International Raceway*. Lyons has wisely let the camera do most of the “talking,” sourcing in excess of 500 images from some of the best racing photographers of the time, among them his father Ozzie Lyons, plus Dale von Trebra, Pete Luongo, Bob Tronolone and others.

The challenge of organizing the vast amount of images and information generated over 32 years of year-round racing that involved series ranging from the Formulas, (One and 5000), USAC and Cart Indy cars, motorbikes, drags, NASCAR, IROC, off-road, the “Am’s” (Trans-, Can- and Can-Am II) plus various SCCA series into a clear and unconfused presentation was handled splendidly by Lyons and page designer Richard Baron, one-time art director at *Road & Track*. Baron’s deft hand is visible in subtle graphics, such as the way he chose to indicate the years a particular series ran at Riverside, the graphic chapter indicators and series summary sidebars, all of which convey information without one having to read more words. That said, Lyons has written just enough, and just the right words to keep it all in context.

And Michigan-based Spry Publishing executed its role, ensuring the slightly oversized book is beautiful with fine quality paper for best reproduction of the 219 color and 284 black-and-white photos. The end papers just inside the cloth-covered hard covers are notable and worth lingering over as reproduced there are fifteen or so of the Riverside race event posters.

This is the sort of book you’ll go back to again and again sometimes just for the pleasure of leafing the pages and looking. Other times you’ll read and reread the text, too, just as has your commentator.

Whether you want to relive your own memories of Riverside or learn for the first time about the legendary track and the cars and people who made those legends, this fine book “fits the bill” admirably.

—Helen V Hutchings

## The Early Days: The Launch of the Rolls-Royce Silver Cloud, Bentley S Series and Continental

by Davide Bassoli

Nubes Argentea, 2015

info@nubesargentea.com

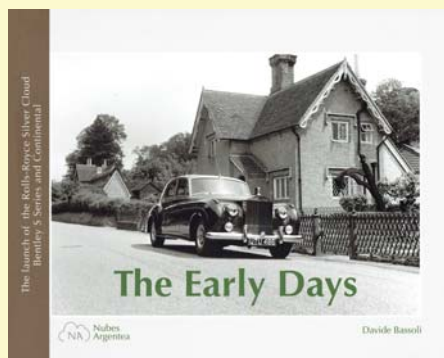
100 pages, 12" x 9½" softcover, case

105 b/w & 21 color illustrations, 8 drawings

Price: €125

ISBN-10: 8890957123

ISBN-13: 978-8890957123



*Editor's Note: Author Davide Bassoli was the recipient of the 2014 Nicolas-Joseph Cugnot Award of Distinction for his book Every Cloud Has a Silver Lining: The Definitive history of the Rolls-Royce Silver Cloud and Bentley S Series including Coachbuilt and Continental versions. The following review is courtesy of SpeedReaders.info, written by the site's owner.*

The first all-new postwar Rolls-Royce/Bentley model is 60 years old this year and has attained a firm, iconic place in the world of automotive design. To recognize that anniversary with proper pomp and circumstance, Davide Bassoli published last year an opulent (and award-winning) book that surely ranks as the definitive work on the subject. It tells you everything you need to know about the Silver Cloud/Bentley S.



But . . . “just” knowing isn’t enough. We can’t travel back in time, but Bassoli wants today’s reader to really get a feel for how people back in the day who had never seen this car reacted when it was launched—to its esthetic impact, technical features, build

quality etc. The next best thing to being there is this highly elaborate box set of reproductions of launch and other period materials, down to a printed lunch menu from the 1955 motor show. This set was produced just in time for a commemorative event that the author had organized in his role as the Rolls-Royce Enthusiasts’ Club’s Register for this model at the very place and on almost the same day the original media launch had taken place in April 1955.

The core of the set is a conventional-looking book—landscape format, softcover—that summarizes the genesis of the model, the business case, and its place in the Rolls-Royce universe. Period road tests, reviews, quotes from customers and dealers and Rolls-Royce staff, a quick look at the five surviving British coachbuilders of the day, and market analysis and sales figures paint a rich picture of the car’s place in the world. Without the book, the whole kit would probably only appeal to hard-core enthusiasts but with it, the whole affair is a perfectly competent stand-alone introduction to the car. But it specifically concentrates on that one year, so much so that every single photo here is from 1955. This is all the more remarkable as many of the photos have not appeared in print before.

Now, the goodies. Think of this as a pop-up book for adults. The three-panel “case” has pockets on each panel that contain reproductions of the original 1955 press release complete with three b/w glossies, a folded drawing of H.J. Mulliner’s design no. 7400, a card that would have been attached to the dashboard explaining the various controls (comes on an actual piece of string), and the motor show lunch menu. The pocket on the center panel houses the book, and to gauge the attention to detail consider that the pocket is cut with a curve

at the top that follows the swage line of the car. Only when you pull the book out does the top half of the car become visible. That Bassoli found a printer willing to do this sort of thing is simply astonishing. Bentley folk will surely notice the Bentley green endpapers (and pockets); it is not implausible to speculate that this is not a random choice: in the

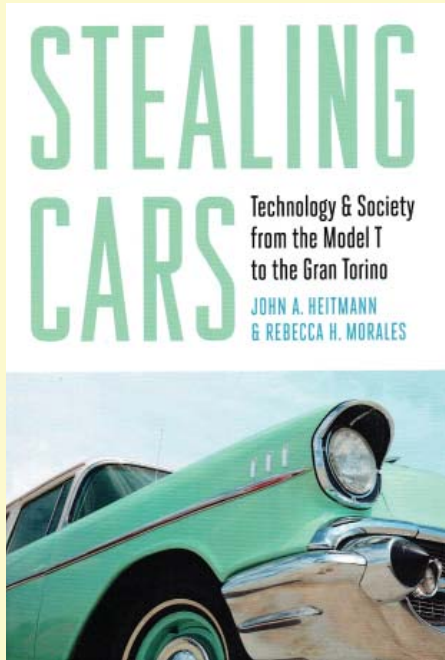
early days to which this book owes its title the Bentley version did outsell the Rolls-Royce.

Signed copies are available from the author.

—Sabu Advani

**Stealing Cars: Technology and Society from the Model T to the Gran Torino**

by John A. Heitmann and Rebecca H. Morales  
Johns Hopkins University Press (May 2014)  
press.jhu.edu  
232 pages, 6¼" x 9¼" hardcover  
12 b/w images, appendix, notes, indexed  
Price: \$29.95  
ISBN-10: 1421412977  
ISBN-13: 978-1421412979



With a quick first glance, one may think this is a savvy guide for car buying techniques—but its title is quite literal: authors Heitmann (professor of history at the University of Dayton, Ohio, and current SAH president) and Morales (Ph.D., urban and regional planning, from MIT) examine the broad range of factors in play over the history of car theft in the United States.

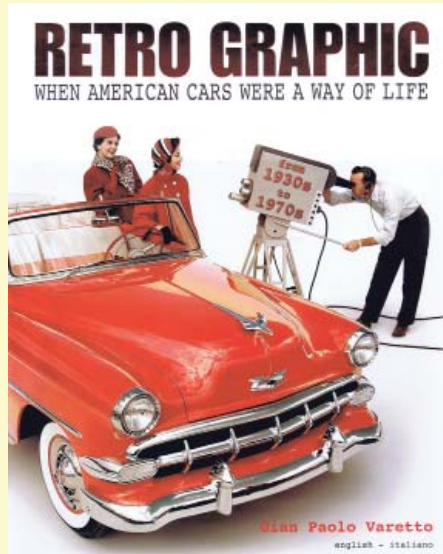
This is likely to be the road less traveled in historical automotive literature. The authors painstakingly examine a long list of conceivable societal, governmental, and technological characteristics in historical and modern contexts with scholarly deliberativeness to cover the subject. While digesting all the material, this reviewer kept recalling the 1978 movie *The Great Train Robbery* when the judge asked Edward Pierce (Sean Connery), “Why did you conceive, plan and execute this dastardly and scandalous crime?”—to which he replied while verbally stretching each word: “I wanted the money.”

For an authoritative perspective and an understanding of the history of car theft, and more, this book delivers.

—R. Verdés

**Retro-Graphic: When American Cars Were a Way of Life**

by Gian Paolo Varetto  
Edizioni GP (2015)  
info@americandrive.net  
452 pages, 9½" x 12¼" hardcover  
233 color & 396 b/w images  
Price: \$98  
ISBN-10: 8894080609  
ISBN-13: 978-8894080605

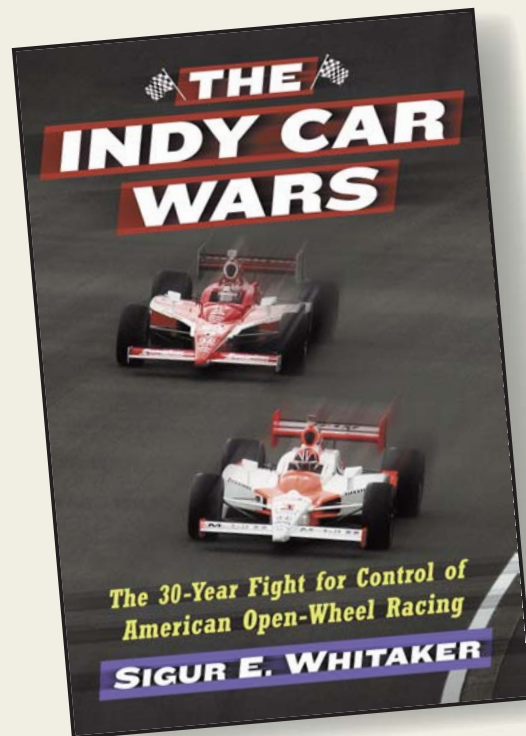


The book starts by invoking the adage: “a picture is worth a thousand words”—and what follows is a lover’s tribute to American cars of the 1930s through the 1970s—a story told in period publicity shots and proprietary photography.

Author Varetto is an Italian journalist and the book draws its images from his own collection and the media archives of General Motors, Ford, and Chrysler. All the text and captions are presented in English and Italian. The book is divided into five chapters, one for each decade starting with the 1930s. Each chapter starts with a short one-page summary of the decade from an automotive perspective. While most of the shots show random people and models, there are shots with celebrities such as Clark Gable, Rita Hayworth, Marilyn Monroe, James Dean, Elvis Presley, Jayne Mansfield, and Paul Newman. There is no photo index, so you’ll need bookmarks to track your favorites.

The book is printed in Italy and has all the hallmarks of fine bookmaking, from its binding to the heavy paper stock and quality printing. Buy the book and enjoy losing yourself in the time warp of its pages.

—R. Verdés



Facing skyrocketing costs in the 1970s, a group of Champ Car team owners formed Championship Auto Racing Teams (CART) in 1978 to increase purses and win lucrative television contracts. Soon after, CART split from its sanctioning body, the United States Auto Club (USAC). Holding most of the top teams and drivers, CART drove a wedge between the track owners and the USAC. Tension ebbed and flowed until all parties realized that reunification was needed in 2008. This book details the 30-year fight over control of Champ Car racing.

\$35 softcover (6 x 9)  
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## Lord Montagu of Beaulieu (1926-2015)

*Editor's Note: Edward John Barrington Douglas-Scott-Montagu, 3rd Baron Montagu of Beaulieu, was born on October 20, 1926. He was an English Conservative politician, and like his father, a champion of automotive causes—most well known for founding Britain's National Motor Museum, and all the automotive events at his Beaulieu ancestral estate. His SAH membership (No. 67) was announced in the February 1970 issue of this publication, and he received the 1997 Friend of Automotive History Award. The following tribute by his long-time friend and colleague Michael Ware appeared in prewarcar.com.*

With the death of Lord Montagu on Monday 31st August the world of heritage and historic vehicle preservation has lost a mighty champion. He was 88 and had been suffering indifferent health for some time. Problems with his legs had resulted in him using a mobility vehicle for journeys around the grounds of Palace House and into the rally fields to view events such as the annual Autojumbles. Latterly he had to use a wheel chair, but this did not stop him from travelling to his London flat each week and attending the House of Lords.

Lord Montagu's father introduced the motor car to Beaulieu. In the summer of 1898 he purchased a new 2 cylinder Daimler (which was crashed and turned over by his chauffeur). The following year he bought the first 4 cylinder Daimler to come out of the Coventry factory. As the Member of Parliament for the New Forest he would speak up for the motorist when most were taking the opposite view. He was a pioneer motorist with a number of firsts to his credit. He competed in the Daimler in the touring car class of the Paris Ostend race of 1899 where he finished third in his class. It was a gentleman's sport in those days, and he took his chauffeur Teddy Stevens as his mechanic! Later Lord Montagu's father became a Director of the Brooklands race track. Neither Lord Montagu nor the writer has been able to find any reference to Lord Montagu's father having any keen interest in museums as such. He obviously had an interest in early vehicle preservation as he donated his 1899 4 cylinder Daimler to the Science Museum and an early horse-drawn fire engine from the Beaulieu estate to the go-ahead industrial museum in Kingston Upon Hull, where it still resides. Lord Edward Montagu never actually answered my question to him "Is your interest in all motoring matters inherited from your father, or self-inflicted?"

Lord Montagu's father died in 1929 when Edward Montagu was just three.

His early years were spent on the Beaulieu estate, but for part of the war he was evacuated to Canada, before attending Eton. He did his National Service in the Grenadier Guards, some of it in Palestine. On returning to Civvy Street, against some family advice he joined the top London public relations and advertising firm Colman, Prentice and Varley (CPV). One of his first jobs was to help launch "The Eagle." He later became an Account Executive, a grounding which was to influence so many of the decisions taken at Beaulieu in the years to come. In 1951 at the age of 25 he inherited the 10,000 acre Beaulieu estate. He returned to Beaulieu to an estate which had been underfunded since the death of his father.

In order to increase the estate's income he decided to open Palace House to the public. The remains of Beaulieu Abbey, which had been partly restored by his grandfather, were attracting some 30,000 visitors a year so he had a basis on which to build. The house opened on 8th April 1952. Right up until the last minute Lord Montagu kept the secret that the front hall of Palace House was devoted to his father's memory and included six old cars as part of the display. I have seen a memo dated a few months before the opening which talks of "my motor museum." 1952 was just a taster for what was to come. Many people have expressed the view that it was the opening of Palace House with its old cars (soon to be known as the Montagu Motor Museum) and the film *Genevieve* a year or so later, which lit the touch paper for the explosion of interest in preserving our motoring heritage.

Soon with Lord Montagu's enthusiasm Beaulieu had the world's first motorcycle museum (the first Curator of which was Graham Walker, father of commentator Murray Walker). The collection of cars expanded into buildings on the grounds and in 1959 Lord Brabazon of Tara with Stirling Moss opened a new building in which the Montagu Motor Museum was housed. By the mid 1960s over half a million visitors a year



Lord Montagu, pictured with his 1909 Silver Ghost (chassis 60939), was the recipient of the Lifetime Achievement Award at the 2012 International Historic Motoring Awards.

were coming to Palace House and the Museum. The museum was full to overflowing with exhibits and on most summer days visitors as well. Plans were drawn up for a complete rethink in the way in which the visitors were handled and this included a new Leonard Menassah and Partners designed motor museum building. I am told that when Lord Montagu and his advisors sat down to decide whether or not to go ahead with the museum all the advisors were against the project, but Lord Montagu overruled them knowing that he could make it work. A charitable trust was set up to raise money to build and run what was to become the National Motor Museum. The museum building was opened by HRH the Duke of Kent on the 4th of July 1972. Throughout the formative years of this new museum Lord Montagu very successfully led the fund raising team. He had been chairman of the Trustees of the National Motor Museum Trust from its earliest beginnings until quite recently. His interest in the museum's collection of cars (of which only a third were his) never flagged. He was instrumental in setting up in 1960 the now famous Motoring Reference Library at the Museum, followed two years later by a photographic library (now the Motoring Picture Library) and later the Film and Video Archive.

Lord Montagu's father owned and edited the magazine *The Car Illustrated* from 1903 until 1914. His son took over the ailing *Vintage and Thoroughbred Car* magazine in 1956, renamed it *Veteran and Vintage Magazine* and edited it until it was sold in 1979. He was the author of a number of motoring books (many diligently researched by the late Michael Sedgwick, a former curator of the museum) these included *Rolls of Rolls-Royce*, *Lost Causes of Motoring (Britain and Europe)*, *Jaguar: A Biography*, and *The Gordon Bennett Races*; all of these with ones by other authors were published by Cassell & Co. as the Montagu Motor Book series. He co-wrote a number of other titles with some of Britain's top motoring historians.

He was President of the Federation of British Historic Vehicle Clubs (and the Historic Vehicle Clubs Joint Committee before that). He worked tirelessly for that organization, making many journeys into Europe for meetings with FIVA and European Parliament. He was a very active member of the House of Lords, often speaking or asking questions in relation to the heritage and historic vehicle matters. He did a great deal of work behind the political scene to make sure that there was freedom to use old vehicles on the roads. He was responsible for making sure that the historic vehicle was excluded from capital gains tax, and when a tax on possession

of a motor was being widely talked about he took the then Minister of Transport on the Brighton Run and lobbied hard for exemption for the older vehicle. Lord Montagu was very keen on old car rallying both at home but more particularly abroad. He took part in the London to Brighton Veteran Car Run almost every year until well into his 80's and went as a passenger until recently.

Lord Montagu also had a high profile in the wider world of the heritage. Palace House Beaulieu became one of the most visited stately homes. In the early years there was great rivalry between Lord Bath of Longleat, The Duke of Bedford, from Woburn, and Lord Montagu. It made great media copy, though Lord Montagu would have preferred it if the Duke of Bedford did not refer to the Museum as his "garage."

Lord Montagu was involved in founding the Historic Houses Association and became its president. Later he became President of the Museum Association of Great Britain, in the writer's opinion perhaps his greatest achievement; he was probably the first non-professional to hold that position. It was a shame in one way that part way through his term he was offered the chance to be Chairman of the Historic Buildings and Monuments Commission, which he quickly renamed as English Heritage. This too was a great achievement. He certainly went a long way to overhaul this organization, but even Lord Montagu with



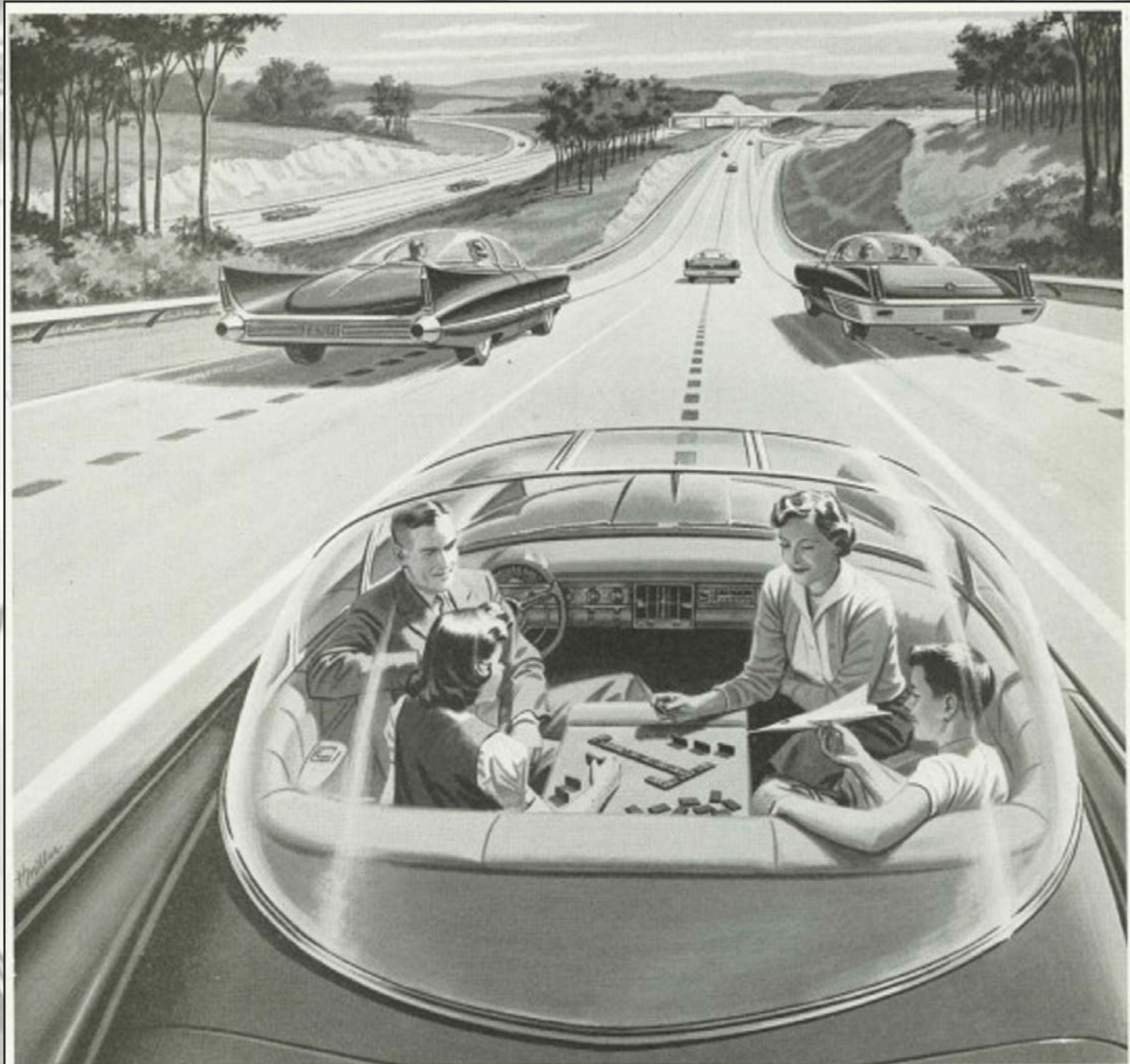
Lord Montagu at Beaulieu Palace House circa 1962

all his skills could not solve the problem of how Stonehenge could best be re-presented in a modern way to the thousands of visitors that flocked there every year. He lived to see this finally happen many years later.

He was a great lover of opera, jazz and the theatre. He had many friends in the show biz world, many of whom came to visit at Beaulieu. In 2000 he published his autobiography *Wheels Within Wheels: An Unconventional Life*. This included a very frank account of those matters I am sure the general press will pick up on in their obituaries. My disappointment with this autobiography is I felt he played down his part in the success of the Montagu and National Motor Museums at Beaulieu and the work he had done for the old vehicle movement. Working for Lord Montagu for 38 years I had many opportunities to see just how much time he spent working for the old vehicle movement.

We extend our sympathies to Belinda Lady Montagu and Lady Fiona Montagu, his son Ralph, who inherits the title, to Mary and Jonathan.

—Michael E. Ware



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