PREFACE

Beginning with the unveiling of the Lamborghini Miura on March 10, 1966, at the Salon de l'Automobile in Geneva, Carrozzeria Bertone became the design house showcasing the most intriguing of all cutting-edge automobiles for the next decade. The Miura was followed by the amazing Lamborghini Marzal, and its no-less dramatic successor, the Espada as well as the achingly beautiful Alfa Romeo Montreal, the cutting edge Alfa Carabo, the cute and delightful Autobianchi Runabout, and that ultimate of all concept cars, the space-age Lancia Stratos Zero.

And even if the Pininfarina-designed Ferrari Modulo, Italdesign's Alfa Iguana and Maserati Boomerang concepts of 1969-71 were interesting flights of fancy, none matched the extraordinary Bertone dream machines that followed. The launch of the Lancia Stratos HF and the Maserati Khamsin, and the unveiling of the Citroën Camargue, the NSU Trapeze and the Lamborghini Bravo concepts in the first three years of the 1970s not only cemented the belief that Bertone was the most audacious, but also that it was arguably the most progressive and the best of the important Italian styling studios which had already built up a reputation of being world leaders in automobile design.

Though owner Nuccio Bertone took most of the credit since he was the person interviewed by the press, explaining why there were slats on the rear window of the Miura, why the lamps were suspended within the glass aperture of the Khamsin, and so on, in certain magazine articles another name kept cropping up — that of Marcello Gandini. In time it became obvious that the man who had really designed these cars was in fact Marcello Gandini, Bertone's chief designer until 1979. Thereafter he became an independent consultant, the star designer, who by the late 1980s, became the first choice for every budding supercar maker for the designs of their exotics, for cars like the Cizeta-Moroder V16T, the Maserati Chubasco, the Lamborghini Diablo, the Bugatti EB110, IsoRivolta Grifo 90, the Maserati Shamal and the Quattroporte.

A true stalwart and hero for many automotive enthusiasts, Marcello Gandini is not an easy man to catch. Thus it took a while and a lot of effort *(see My Pilgrimage to Turin, page 11)* for this author to meet him, and establish that contrary to all that has been said about him, Marcello Gandini is not a recluse. It is simply that Gandini believes that talking about himself or his work is a useless exercise. He is exceptionally self-effacing and a tad reserved, and prefers to maintain a low profile. He does not care much for motor shows, and is not comfortable in or around crowds. He feels no need for any form of self-promotion or public relations exercises, discretion being the overriding trait of his character. At the same time, Gandini is an extremely generous person exuding gentility.

Despite designing some of the most celebrated and glamorous of automobiles in the last five decades, there is very little material available on Marcello Gandini, let alone a book. Also, most of the information to be found on the internet or the rare article or two about the cars Gandini designed (and several that he has not but yet have mistakenly been attributed to him) are not only sketchy, but are also often factually incorrect. And then, not helping matters, several of his designs have been conveniently appropriated by others.

Like many other enthusiasts, this author too believed that a book on Marcello Gandini was long overdue, but the ace designer was against the idea. However, after a couple of controversial and poorly-researched articles surfaced in 2012 and 2013, Claudia and Marzia

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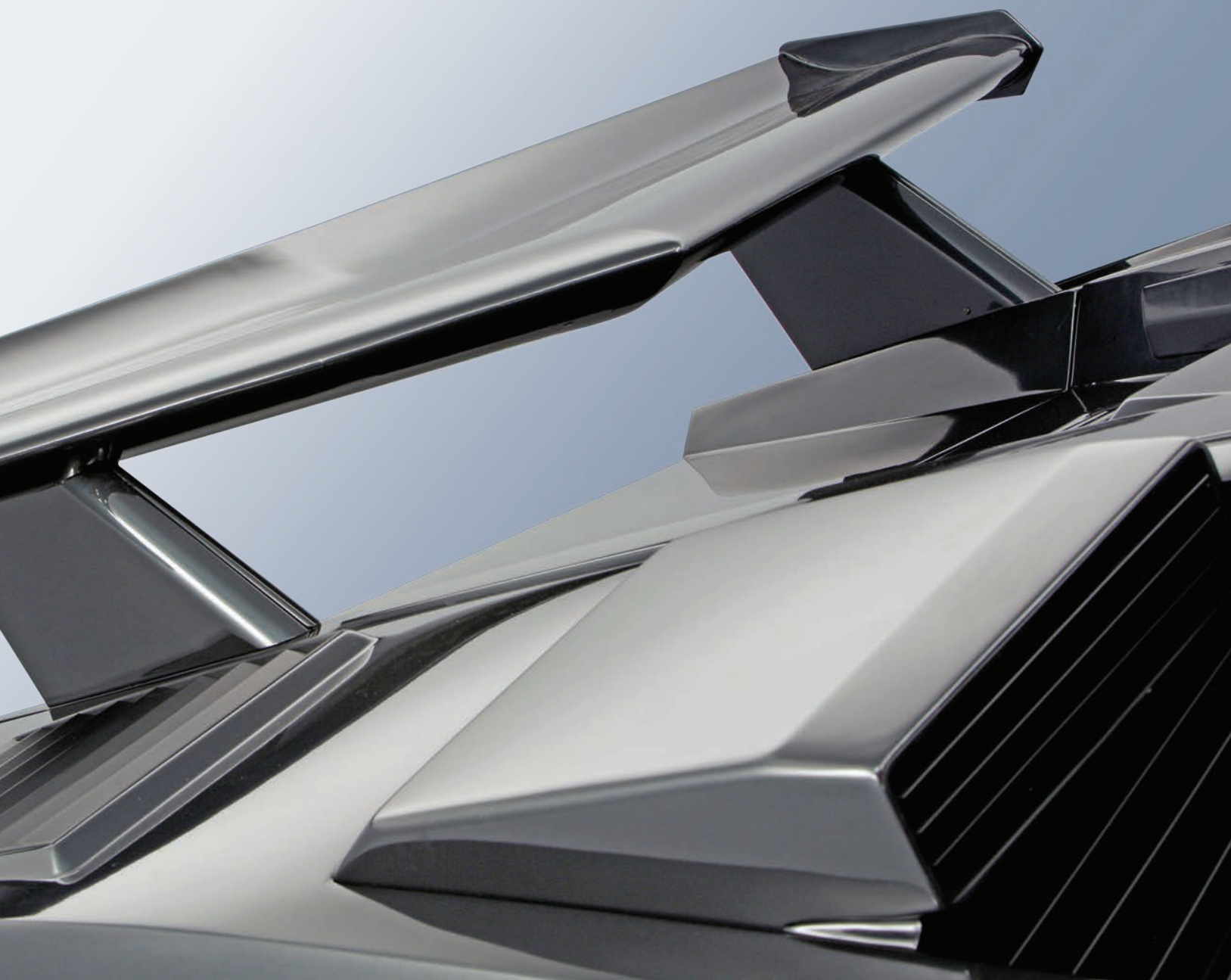
Gandini, Marcello's wife and daughter respectively, agreed that a book was indeed in order, that myths and untruths needed to be dispelled, the truth told, and the facts recorded. It was they who finally convinced Gandini. The only condition was that the book had to be about the cars he designed, and not his personal life.

Gathering all the information for this book, though, was not easy, as Gandini does not believe in maintaining any records from the past. He has virtually no sketches, renderings, drawings or photos of his designs. With hundreds of proposals over the years, he does not always recall the finer details, yet for certain facts, dates and figures, some from more than four decades ago, he is amazingly accurate.

The author managed to connect with several former colleagues of Gandini, from his Bertone years, from Renault and other periods – all very talented individuals – who have been most forthcoming with information, details, stories, anecdotes, photos and images. As well as Stile Bertone, the design house where Gandini worked for many years, graciously allowing full access to their archives, most of the manufacturers associated with him, including Alfa Romeo, Audi, BMW, Citroën, Fiat, Lamborghini, Maserati, Mazda, Nissan, Renault, SEAT and Volkswagen have also been very cooperative. A list of all who helped follows in the Acknowledgements section.



ACKNOWLEDGEMENTS

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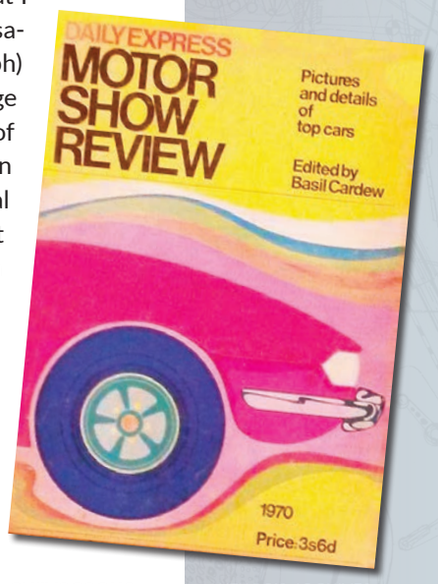
PILGRIMAGE TO TURIN

My Personal Journey:

As a child growing up in small-town India – thanks to the constantly transferable job of a father who was a doctor with the Indian Army – the only 'foreign' cars that I had seen by 1970 apart from the ubiquitous Indian-built Hindustan Ambassador, the Fiat 1100 (later the Premier Padmini) and the occasional Standard (Triumph) Herald, were: a blue be-winged Chevrolet Impala of 1959 vintage, a bright orange VW Beetle, which our Dutch neighbors owned, a grey Volga and a couple of Moskvitches for the use of Russian expatriates living behind our house. But when my father was transferred to Calcutta* in 1971, not only did I come across several fascinating 'foreigners' (from a spanking new lime green AMC Hornet Sportabout to an elegant black Nissan President) but also discovered a publication that was a real revelation: the 1971 edition of *The Daily Express Motor Show Review*.



AUTHOR'S ARCHIVES

For the first time in my life I had a reference book that illustrated most of the more important cars in production in the Western world at that time, and it was the publication that went on to define my early biases – European machines over their American counterparts, sports cars over sedans or estates, and Lamborghini over Ferrari. With a low-angle front three-quarter shot of a menacing-looking Jarama (see page 202 for the exact photo), and a dramatic black and white picture of the sweepingly low Espada, Lamborghini became my favorite marque, ahead of Ferrari. Somehow, the striking Daytona could not quite make up for the curvaceous, but noticeably aging Dino 246 GT, and the flowing, but ultimately underwhelming 365 GTC/4. Even Maserati's Ghibli and Indy were more modern.

In Calcutta I also came across my first car magazines, even if a few months out-of-date, like the *British Autocar*, *Motor* and later, *Car*, and American publications *Car and Driver*, *Road & Track* and *Motor Trend*. All my pocket money went into buying those very expensive (in the Indian context) publications. But they were worth every rupee as I would spend my spare waking hours poring over them, lapping up every little piece of information several times over, and my sleeping hours dreaming of the cars I had seen on those pages.

**Renamed Kolkata in 2001.*

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The stars of my dreams were of course the Lamborghinis. The recently-unveiled Urraco and Countach were breathtakingly stunning, and then I came across photos of the already four-year-old Marzal and the even older, but beautiful Miura. And there were others: the Alfa Romeo Carabo, the svelte Montreal, the delightful Autobianchi Runabout, the elegant Iso Rivolta Lele, and the space-age Lancia Stratos Zero.

The common thread amongst them was that they had been designed by one Italian coachbuilder, Carrozzeria Bertone. It was only years later that I realized that all my favorite cars had actually been designed by a certain Marcello Gandini. Then in 1990 I made my first trip to Turin, Italy, to try to meet Gandini and my many other design heroes and make a serious shot at visiting the famous ateliers. I managed to enter the hallowed temples of Italdesign, Pininfarina, Stile Bertone, and even I.De.A Institute. Yet a meeting with Marcello Gandini remained unattainable: no, he was not easily reachable, he was busy with projects and did not have the time. There was also the problem of a common language, as Gandini spoke only Italian and French, no English please.

I returned to Italy again in 1994, before moving lock, stock and barrel to Paris in 1996. After that my trips to Italy became more frequent, each visit culminating in meeting with a design luminary

The author and Marcello Gandini at the Festival Automobile International in Paris, on January 26, 2016.
XAVIER DE NOMBEL

or two, yet Gandini continued to elude me. People who claimed to know him, or know of him, told me that he was a recluse, a hermit in his distant retreat, somewhere in the hills north of Turin, impossible to get to - simply difficult to meet. It was only into this millennium, soon after I launched the Indian edition of BBC's *TopGear* that I managed to connect with Marcello Gandini's daughter Marzia regarding a design competition that we were organizing in India, and it was thanks to Marzia, I was finally able to meet my hero. Since then, over the best part of the last decade, I have had the great good fortune of seeing him several times every year.

Though Gandini is reluctant to talk about his past work, he enjoys discussing matters automotive, and we have spent hours analyzing and arguing about the social impact of the automobile, its influence on emerging markets, and the future of this much-reviled, yet much-loved moving force of the 20th century.

There have been occasions when, with my French improving, we have discussed and spoken at length about his designs, the choices made, the aspects and issues that influenced the shapes, forms and architecture of some of the most iconic of all cars in the history of the automobile. But whenever I suggested, as many other fans and writers have done in the past, that all these thoughts and the cars designed should be recorded in a book, his response invariably was: "I can't stop you from doing one if you so wish, but I just don't see the point in it." Of course, out of my respect for him, I would drop the idea immediately.

But then fate intervened, in a manner of speaking. After a couple of controversial articles surfaced in 2012 and 2013, Marzia and Claudia Gandini (Marcello's wife), agreed that a book was indeed needed. The records must be set straight, they insisted, to which the designer finally relented. There was of course a pre-condition: I should write only about his cars, and not his personal life. Only too happy to comply, I immediately went to work.

Having read my story so far, you will not be the least bit surprised to know that this book is a dream project. The Gandini family has been extremely supportive and helpful, and I could not be more honored that they entrusted me with recording Marcello Gandini's monumental career. Yet they have made no demands about reading the book before publication – instead preferring that I drew my own conclusions about his work, for better or for worse. This fact alone speaks volumes about the greatness of the man that I have been so fortunate to befriend over the past many years and I hope that you, as the reader, will feel in the end that I have done justice to the career of this giant of an automobile designer.

Gautam Sen
June 2016

FOREWORD

beauty, function, Imagination

In the time I've been in the automobile industry — more than six decades now — my principal interest has been in car body design. As both a practitioner of the art and a critical observer, I have had the good fortune to meet and work with dozens of designers, and to talk with literally hundreds of others. Naturally I have favorites, and of them all, Marcello Gandini stands out for the extraordinarily imaginative cars he has designed. One of them is the single car of all I have ever seen that I would most like to own, the Lancia Stratos HF.

I have talked with Gandini only twice in the past thirty years. The first time was at a Car Design Awards dinner in Torino organized by *Auto & Design* magazine, where we were by pure chance seated together and found we had in French a common second language. I remember the conversation well, because Gandini told a highly amusing self-deprecating story about the execution of his very first car design, a one-off re-body of a racing OSCA one of his friends had crashed.

Knowing nothing of common practice, not even that large sheets of paper existed on which one could draw a car full-sized, Gandini had taped together many small sheets and, with a certain amount of trepidation took his patchwork drawing to Giovanni Raniero, the best-known and most capable *modellista per carrozzeria* in Torino. As young Gandini stood, by his own account trembling with anxiety for almost ten minutes in an oppressive silence, Raniero finally spoke: "I understand nothing!" It turned out that in his innocence, Gandini had drawn the right side of the shape he wanted, which made no sense to anyone who knew that by convention, cars are always presented with the front end to the left. Once the error was understood, the job was done to the mutual satisfaction of the neophyte designer and the grizzled old hand.

That provided an element of common ground, as the wooden model of the first car I'd had made in Italy was shaped by Raniero in 1965. Gandini stressed that Raniero was famous for always being willing to remove material at the designer's direction, but would never add new wood so Gandini was not completely content with that car. Of course I wanted to know what it looked like, and I immediately ran into a key fact of Gandini's working life: he doesn't care anything about the past, doesn't keep photos, drawings or written records of most of the things he does, and prefers not to talk about his work. The past is dead to him, and the future work is of course secret and only he and his clients are privy to it.

Our second conversation took place in his magnificent home in the mountains well outside Torino seven years ago. He was more reserved than he'd been at dinner a decade earlier, but he knew I was there to gather information for a personal profile in the American publication *Automobile Magazine*, so he was a little wary. As affable as ever, as pleasant a conversational companion as he'd been a couple of decades back, he was nonetheless a bit less forthcoming. Gandini doesn't like to talk about himself, his private life is pretty much off limits, yet he was amiable and helpful. Again points of convergence came up, this time in terms of light aviation, which has been important to both of us at various times in our lives. Although he created several Citroën production and concept models, he apparently was unaware that Citroën had, like himself, built a helicopter that was aimed at production until Peugeot bought the firm from Michelin and put an immediate stop to the project. The prototype was shown at Retromobile in Paris a few years back, but Gandini does not do motor shows of any kind, ever.

Something that came out of the visit to Gandini's studio was spotting a beautifully photorealistic image of one of his earlier projects, a corner torn off. It was not a print but the actual original piece of artwork, evidence of yet another exceptional skill the man possesses. I am certain

there are many others, but I suspect most of them will never be known to the world. Like most admirers of the man's known body of work, I wish there could be a comprehensive biography to study, but that is surely not to be. So we can all be grateful that this book exists, a labor of love by a man inspired by the amazing body of Marcello Gandini's automotive work long ago.

Enjoy it, as I expect to, because it is likely all we will ever have on the brilliant designer who, like the famed actress Greta Garbo, just wants "to be left alone."

Robert Cumberford
Automotive Design Editor
Automobile Magazine

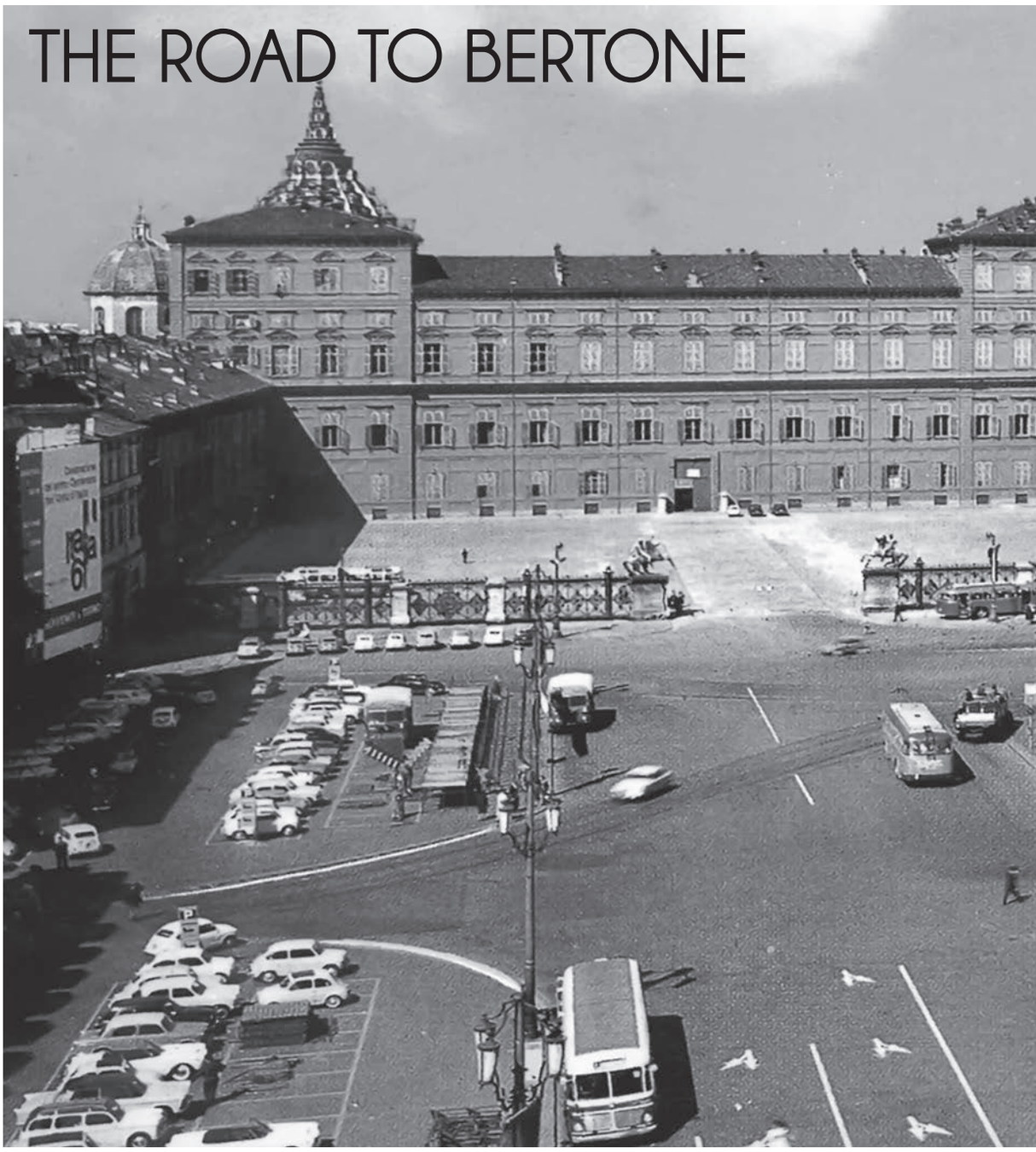
Robert Cumberford with designer, Marcello Gandini. TIM ANDREW

PART ONE

Marcello Gandini

AT BERTONE:
THE FORMATIVE YEARS

THE ROAD TO BERTONE



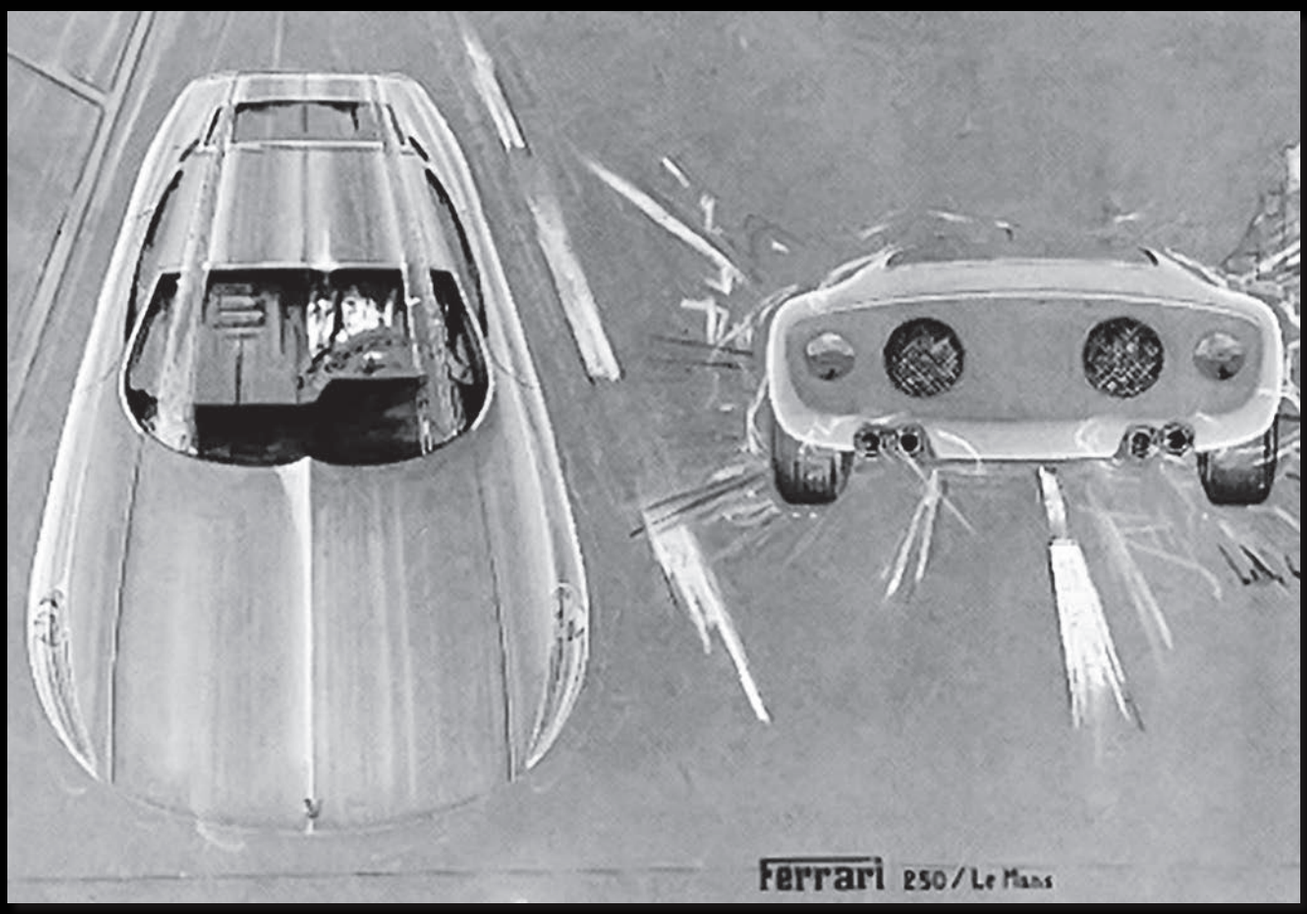
Born on August 26, 1938 to an aristocratic family in Turin, Marcello Gandini grew up deeply immersed in the arts. Marco Gandini, his father, was a director of an orchestra, having graduated from the Conservatoire with a degree in music. Marcello Gandini's grandmother, who was of French origin, was instrumental in introducing the late 19th century-early 20th century French composer Claude Debussy to Italy. As Marco Gandini had inherited a pharmacy that provided a steady income, he could indulge in his love for classical music and the appreciation of art and culture. When Turin became the target of Allied bombing during World War II, the Gandini family took refuge in the resort valley of Lanzo, some thirty miles northwest of Turin. Although growing up in the tranquil foothills of the Italian Alps far from Italy's cultural centers, Gandini's father ensured that his son was exposed to music and the fine arts. Marco taught him to play the piano with the hope and ambition that his son would follow in his footsteps, and become a musician. Thus

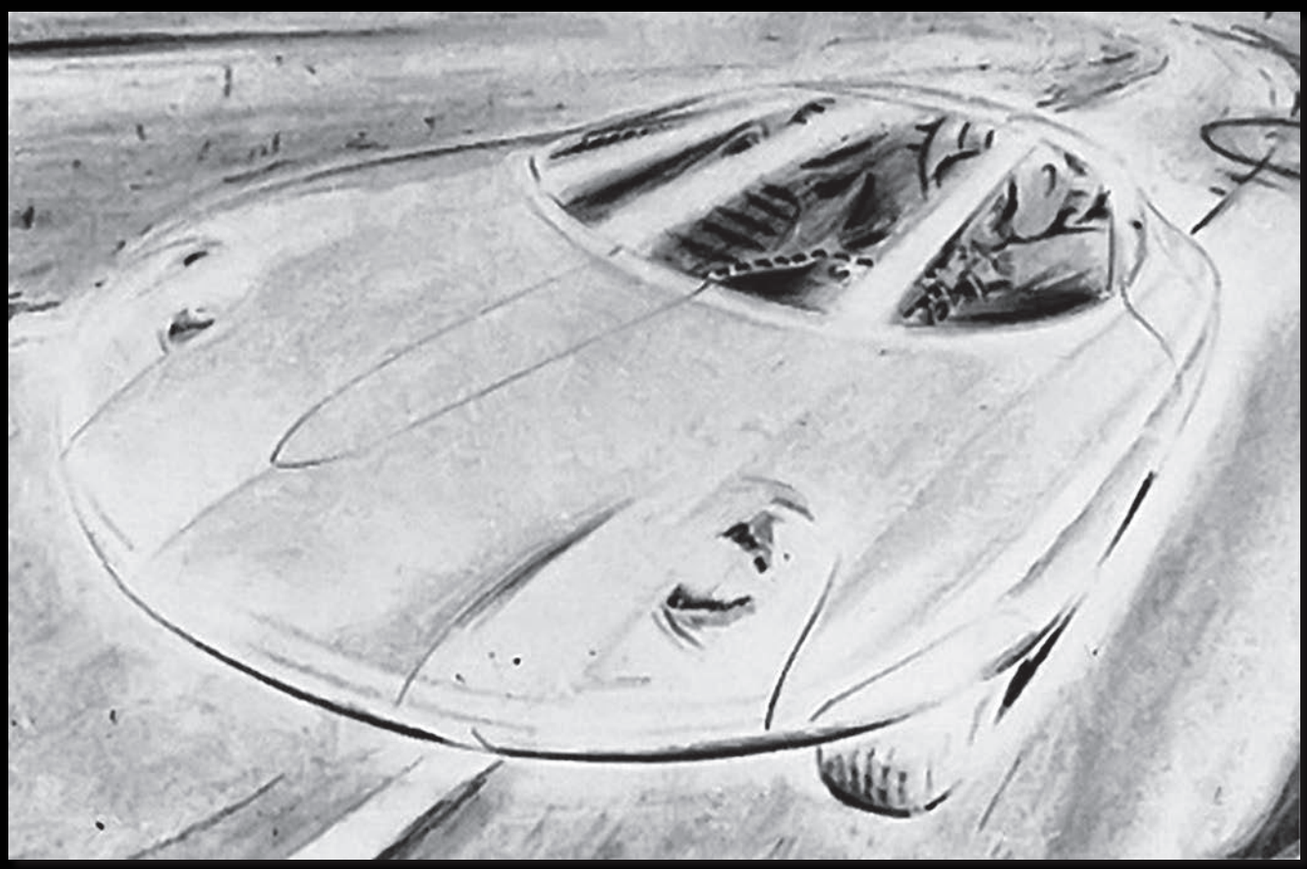
By the 1950s, Turin had become the center of European design and coachbuilding. HARIT TRIVEDI ARCHIVES

Marcello Gandini was gently coerced by his parents to join a 'liceo classico', a cultural school in Turin, after his intermediate school years.

Marcello Gandini's passion, though, was for an art of a very different kind: the art of mechanics, of engineering, and machines. A chance encounter with a coffin-nosed Cord (designed by Gordon M. Buehrig), with its pop-out hidden headlamps had young Gandini completely fascinated by the automobile and its compelling mix of form and function, of design and desirability, of the mechanical with the practical. Soon, he knew that he wanted to be part of the world of the automobile.

Giving up on University and a formal education in classical literature and the arts, Gandini decided to strike out into the big bad domain of the automobile. It was not easy. Without an engineering degree, or a formal art education, jobs were not forthcoming, but Gandini had a natural talent for drawing and an instinctive grasp of things mechanical, plus an excellent


Ferrari 250 / Le Mans



understanding of the interaction of forms and materials. Fortunately, Turin could not have been a better place for a car crazy youth to commence an automobile design career. The city was full of coachbuilders – the traditional carrozzerias – of all sizes and types, as well as many businesses designed to support them. Turin was Italy's major car culture center. Yet it was not easy to convince the famous (or, for the matter, not-so-famous) coachbuilders to take him on and give him an opportunity, a job.

To survive and eke out a living, Gandini resorted to all kinds of odd jobs. He repaired damaged cars for friends, redesigned cars for competition, and even did some interior design work, of which a nightclub, the Crazy Club, was a rather memorable project. "It must have been horrible, as the nightclub was a big commercial success," quips Gandini.

One of his first design exercises was to chop off the tail of a friend's hill-climb special to make the car lighter, creating a Kamm tail (named after German aerodynamicist Wunibald Kamm), with chicken-wire covering the 'hole' at the rear. After several such makeshift modifications, in 1959, when Gandini was 21-years-old, the opportunity came to design and make a complete body for a friend's 1.5-liter OSCA Barchetta. Unfortunately (and rather typically for the designer), no images or drawings survive of this, Gandini's very first design. The car, in all likelihood, has not survived either.

Along with clothing the bodies of cars or modifying them, Gandini was also able to indulge in the tuning of engines, adjusting suspensions, playing with the mechanical elements, changing chassis bits, and having some good old automotive fun. But all the while he wanted to design cars, so he spent hours drawing, doodling and imagining complete new vehicles.

Though Gandini had never had any formal training in design, drafting or drawing, he had an innate talent for making sketches and renderings that managed to capture well the essence of the form he was trying to express. And periodically he would visit the various Torinese coachbuilders to show them his renderings and drawings, but without much success. One of the coachbuilders he met through a friend was Nuccio Bertone of Carrozzeria Bertone, one of Turin's more important carrozzerias. Bertone recognized the innate talent of the budding designer, despite the drawings not being in the same league in terms of finesse and professionalism as those of his in-house designer, Giorgetto Giugiaro. "Nuccio Bertone seemed to like what I had shown him and he said that he would get back to me," explained Gandini, "but he didn't." Sometime later, in 1963 the young man bumped into Bertone at the seaside, and, a little embarrassed, Nuccio apologized for not calling back, explaining that hiring Gandini would surely cause him to lose the star designer he already had.

Soon thereafter Gandini was offered a job with Carrozzeria Boano, but it fell through when Fiat took over the loss-making coachbuilder. Meanwhile, Gandini took on several freelance projects for the many small coachbuilders in Turin and other cities. In 1965 he began working with Carrozzeria Marazzi, a small enterprise started in the early 1950s by Carlo Marazzi, together with his sons Serafino and Mario, in Milan. A master sheet-metal artisan, Carlo Marazzi had trained and worked at Carrozzeria Touring and Zagato, before branching off on his own. By the mid-1960s, when Gandini was consulting with Marazzi, the Milan-based coachbuilder was not an insignificant player, with carmakers like Alfa Romeo and Lamborghini as future clients.

It was in the autumn of 1965 when Gandini finally received a telephone call from Nuccio Bertone. Apparently he had tried calling several times, but had not managed to connect as Gandini was away in Milan at Marazzi's. Nuccio Bertone had a job offer for Marcello Gandini: Carrozzeria Bertone's chief designer Giorgetto Giugiaro was quitting, so would Mr. Gandini like to join one of Italy's more important coachbuilders as its design chief?

It was an offer that Gandini could not refuse, but as he had an ongoing project with Marazzi, Gandini suggested that he start off on a consultancy basis, which Bertone accepted. He joined the carrozzeria full-time from November 1, 1965, triggering a period in the history of automotive design that is today recognized as perhaps the most innovative, the most fascinating and the most controversial: the golden years of amazing shapes, styles and automotive architecture.

OPPOSITE TOP: A Gandini take on what the Ferrari 250 LM could have looked like. ARCHIVIO GIANCARLO PERINI

OPPOSITE BOTTOM: A rendering of an imagined Abarth by Marcello Gandini before he joined Bertone. ARCHIVIO GIANCARLO PERINI

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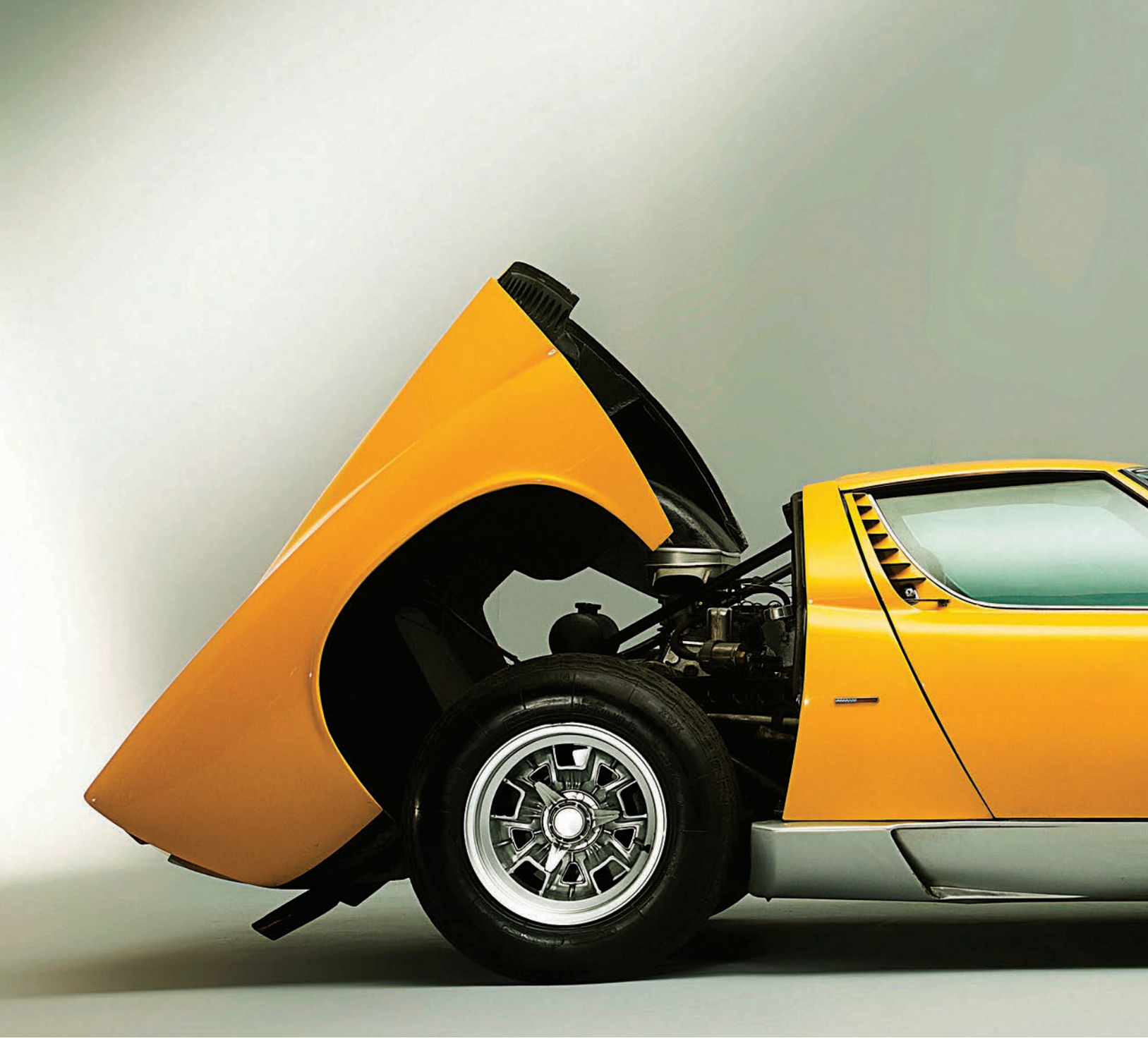
LAMBORGHINI MIURA



It was at the 1963 edition of the Turin motor show, the Salone dell'Automobile di Torino, on October 30th that the world discovered a brand new high performance sports car marque, Lamborghini. Just four days earlier, on October 26, 1963, industrialist-entrepreneur Ferruccio Lamborghini held a press event to unveil his all-new car, the Lamborghini 350 GTV, followed by its official presentation at the show. Though the specifications were exciting, the car's styling of sharp edges topped by a rounded-out greenhouse — by legendary designer Franco Scaglione — received a rather lukewarm response.

The Lamborghini 350 GTV was a non-runner when it was presented at Turin. Designed in twelve months, the 350 GTV featured a V12 engine of 3464cc (211cu in), the work of brilliant ex-Ferrari engineer Giotto Bizzarrini. The 360bhp double overhead camshaft powerpack with six twin choke Webers was displayed beside the 350 GTV prototype at Turin, as the engine could not fit into the car. Though the engine specifications had everyone excited, the body's styling was deemed as underwhelming, and Automobili Ferruccio Lamborghini SpA received relatively limited press coverage.

Ferruccio Lamborghini realized that his intended Ferrari-rival needed to evolve, to be more

Not dissimilar to the Ford GT40, the Miura's front section tipped forward, the rear section, rearward. ARTCURIAL

practical and sensible. As the body was redesigned to softer contours and the chassis altered for street use, the engineering and development team within Automobili Ferruccio Lamborghini — chief engineer Giampaolo Dallara, his assistant Paolo Stanzani and New Zealand test driver Bob Wallace — went about detuning the engine to a more sensible 270bhp at 7000rpm.

The reworked and redesigned Lamborghini 350 GT was unveiled at the 1964 edition of the Geneva Motor Show (Salon de Genève), on March 12, and straight away the car was better received, which encouraged Ferruccio Lamborghini to start delivering the first Lamborghinis — out of a brand new state-of-the-art factory in Sant'Agata Bolognese, in Italy — from May 1964. Markedly more sophisticated than the Ferraris of the era, the Lamborghini 350 GT did receive good press — most magazine road test drivers were impressed by this new bolide — with sales totaling a modest 120-odd over two years until 1966, when it was replaced by the more powerful 400 GT and the slightly reworked 400 GT 2+2.

But soon after May 1964, when series production of the Lamborghini 350 GT had begun, chief engineer Giampaolo Dallara — ex

"...the undisputed star of the show was the amazing new Lamborghini, the Miura".

of Ferrari and Maserati, with racing ambitions running in his blood — along with Stanzani and Wallace, began toying with the idea of a mid-engined sports-racing car for Lamborghini, no doubt inspired by the recently unveiled Ford GT40 endurance racing machines, as well as all the mid-engined racers from the likes of Ferrari (the 246SP and the 250P, which won the 1964 edition of the 24 Hours of Le Mans) and Maserati (the Tipo 63). But unlike all these cars, Dallara believed that by placing the engine transversely with the gearbox and transaxle mounted at the 'rear' of the engine, in unit with the crankcase — not unlike the arrangement of the tiny front-engined, front-wheel-drive Mini — the wheelbase of the car could be kept within a manageable 2.5 meters (97 inches).

Dallara and his colleagues doodled on sheets of paper, making rough sketches of the chassis layout, using the Bizzarrini-designed engine as the central point to the concept, but it was only in January 1965 that they began work on the mid-engined car project in all seriousness. It took close to six months for Giampaolo Dallara and Paolo Stanzani to complete the detailed engineering drawings of the very innovative chassis, with the engine — now grown to 3929cc — located amidships. "The drawings of the chassis and powertrain were completed by June 1965," explained Dallara[1], "and the start of the making of the chassis by Marchesi" was by August 1965.

Of course, all this was happening in strict secrecy. The first time anyone outside Automobili Ferruccio Lamborghini had any indication of this new project was when engineer Paolo Stanzani — with the approval of Ferruccio Lamborghini — approached the coachbuilder of the 350 GT, Carrozzeria Touring to propose a design to clothe the chassis for project Tigre as it was called, on September 14, 1965. Touring showed a color rendering to Ferruccio Lamborghini and his engineers on October 26, 1965, and they were asked to ready a scale model. A couple of weeks later Touring presented two scale models, with asymmetric sides, for a total of four 'proposals', none of which impressed Lamborghini or his team.

On November 3, 1965, when the Turin Motor Show opened, show-goers were taken aback by the beautifully crafted monocoque 'punt' chassis with the V12 engine located amidships, race-car style, at the Lamborghini stand. Yet when Ferruccio insisted that the chassis-mechanical combo was a serious attempt at making a very high performance limited production sports car for the streets, directly inspired by the mid-engined racers that had then begun dominating the world of motorsport, enthusiasts and industry experts did not take the project seriously. As designer and writer Robert Cumberford[2] reminisces: "What I particularly remember from this period was the notion that the Lamborghini chassis was not serious, because a car couldn't be built around it." Or so it seemed.

Since the designs of Carrozzeria Touring had failed to excite the core team at the sports car maker, it was open to other proposals and by the end of the first day at the Turin Motor Show just about every coachbuilder worth his salt had dropped by the Lamborghini stand, offering their services. Except for one — Carrozzeria Bertone, one of the most preeminent automotive design houses in the world, whose owner Nuccio Bertone, along with his head of communication, Enzo Prearo, sauntered by late that evening.

The story goes something like this: apparently Lamborghini asked Bertone what took him so long to get to the Lamborghini stand, to which Bertone replied that he wanted to wait until the crowds had cleared before coming across. And then expressing his admiration for the compact chassis, Nuccio added: "I will pen the perfect shoe to fit such a wonderful foot."

Lamborghini immediately agreed that Bertone should be the selected coachbuilder, but with a rider — that the fully clothed prototype be ready in four months' time, for a Geneva Motor Show unveiling the following March 1966. According to Dallara, the core Lamborghini team had taken a fancy to the Alfa Romeo Canguro concept that Bertone had showcased at the 1964 edition of the Paris Motor Show and they believed that Bertone could provide the perfect riposte to Pininfarina's exquisite designs for arch-rival Ferrari. At that time the Lamborghini team did not know that ace designer Giorgetto Giugiaro, who had created the voluptuous Canguro, had quit Bertone. "It was exactly on October 5, 1965, when I was in Paris for the motor show there that I received the news that Giugiaro had put in his papers," confirms Enzo Prearo[3].

As mentioned already, from November 1, 1965,

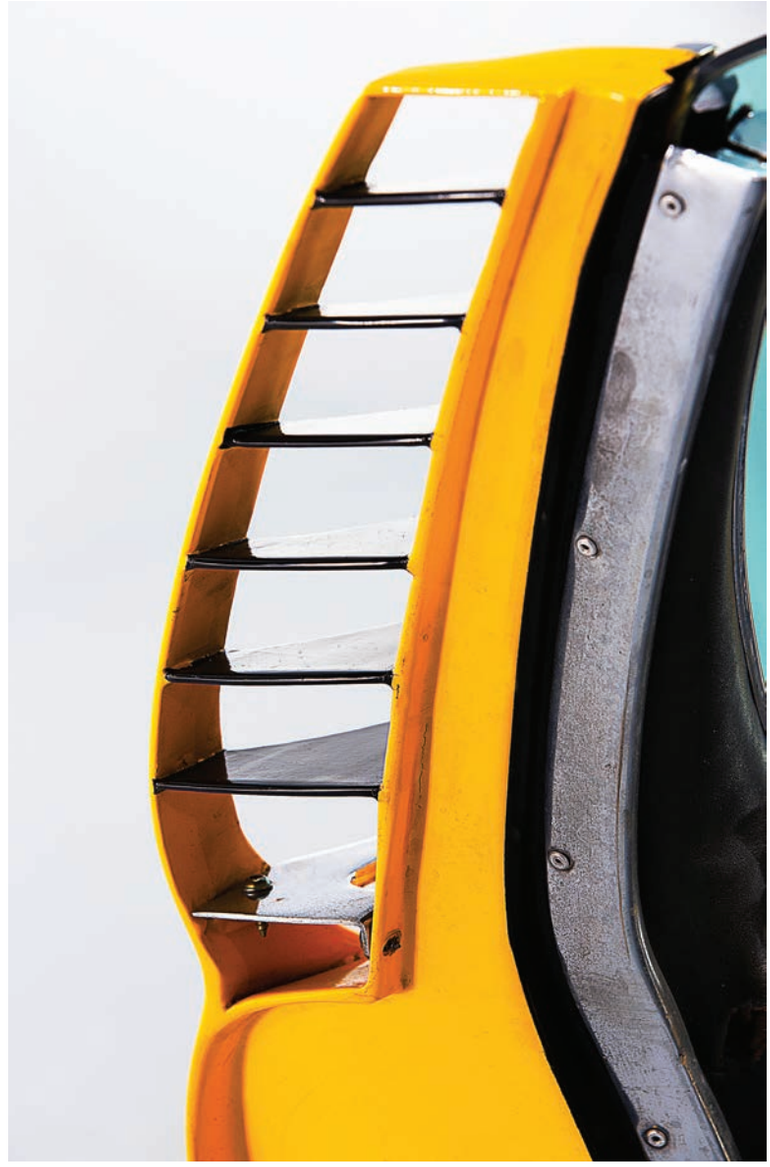
OPPOSITE: Gorgeous eyelashes amongst the many details that made the Miura one of the most beautiful cars ever.
ARTCURIAL

Striking details included the air intake slats at the trailing edge of the door; but it was the interior that had the look of a jet fighter's cockpit.
ARTCURIAL

a young 27-year-old unknown new designer by the name of Marcello Gandini would be officially on the rolls of Bertone, though he had begun working on a part-time basis a couple of months earlier. Gandini had agreed to join up by November, as his project with Marazzi was expected to be over by then.

Thus when Lamborghini and Bertone shook hands over the new mid-engined car project, in November, 1965, Marcello Gandini was already installed as Bertone's chief designer. By the end of the Turin Motor Show Carrozzeria Bertone was given the drawings of the P400 and work began in late November 1965 to design the body of the car.

Assisting Gandini as a junior designer to work on the details was another young man, Piero Stroppa, a 19-year-old enthusiast, who had



The lowermost slat is the lever for opening the door.
ARTCURIAL

joined Bertone as an assistant to Giugiaro in April 1965, and was confirmed as a full-time employee from July 1. Stroppa[4] has said that there was an intervening period when he was alone in the studio, between Giugiaro's departure and Gandini's full-time employment.

It was Stroppa who readied the side elevation drawings of the chassis, powerpack and hard points, once Bertone had received the chassis plans of the new mid-engined car from Automobili Ferruccio Lamborghini, and these were complete by December 20, 1965. As time was very tight, Gandini sketched a profile of the proposed design for the new car directly on to Stroppa's outline. His orthogonal drawings of the front, side, rear and top of the car, along with the full scale model, were ready by Christmas Eve. "I guess it was either December 28 or 29, 1965," remembers Dallara[1] that the engineer and Ferruccio Lamborghini were shown the drawings by Nuccio Bertone and Enzo Prearo. "And the drawing was approved immediately." According to Dallara[1], only very minor changes in details were added later.

Paolo Stanzani[5] confirms this part of the story

in an email written to Marzia Gandini: "Ferruccio Lamborghini accepted Nuccio Bertone's proposal of collaborating together at the Turin Motor Show and a few days later we provided the indications and data necessary to the development of a styling proposal. In the first meeting, at Bertone we, that is Ing. Dallara and I, expressed to Marcello Gandini our points of view on how our new car should be and in particular what we had in mind for the body: a race car… for the road! We mentioned the Ford GT 40, as that was the non plus ultra at that time. A few days later Gandini presented some sketches and renderings of his styling proposal. Ferruccio Lamborghini and all of us were absolutely enthusiastic and did not want any changes. From that moment on we commenced the development of the project."

Work began on constructing the body of the prototype in January 1966 and there was not even time to do proper drawings of the interior according to Stroppa[4]. Gandini's rough sketches became the basis for an interior to be constructed 'on the run', whilst Stroppa worked on the design of the wheels and the famous Miura logo with its two horns on the M and the tail coming out of the A.

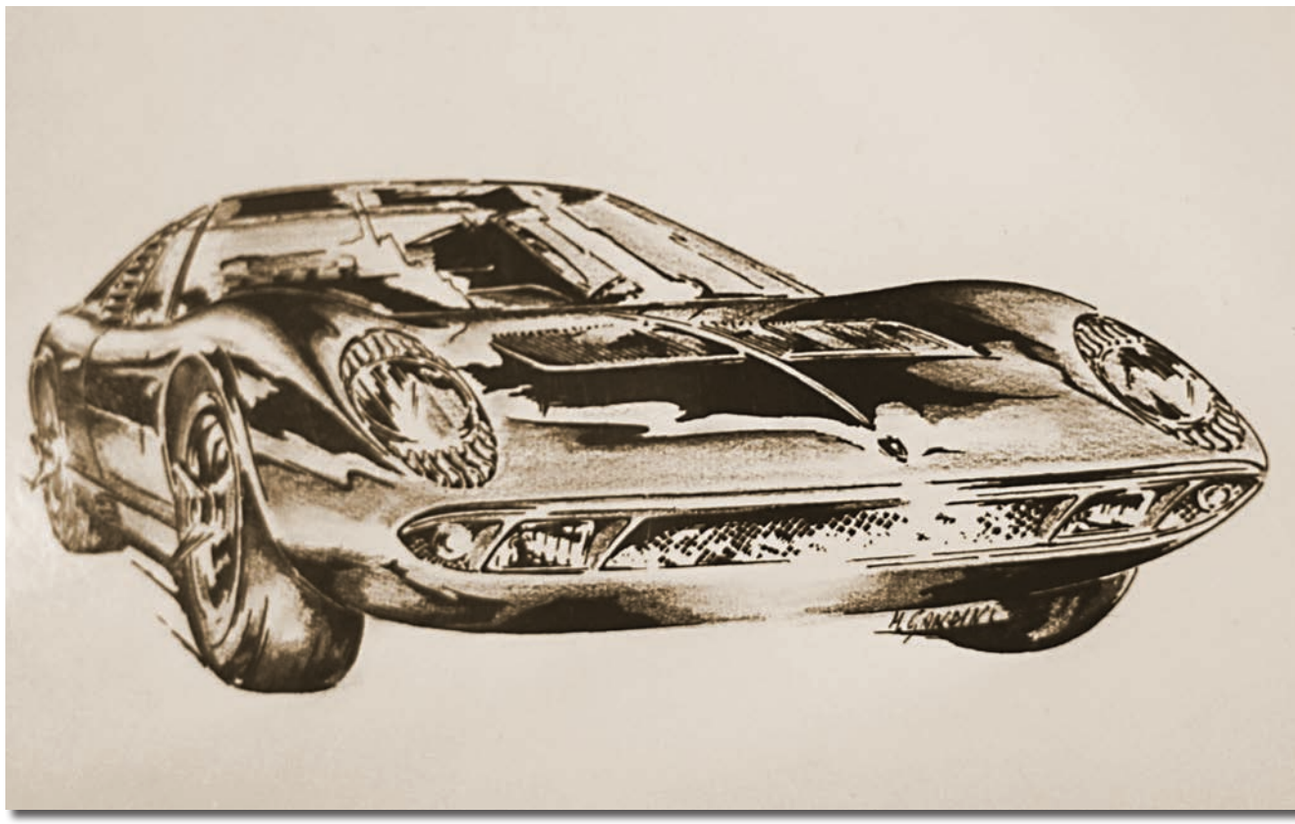
Though the usual process of prototyping a new design in the tradition of the Italian coachbuilders of the epoch was followed, several activities happened almost simultaneously. As the 1:1 scale full-sized body profile drawings were being developed by draftsman Venanzio de Biase from Marcello Gandini's 1:10 scale orthogonal drawings, work had also begun on readying the wooden cross-sectional buck from which the steel body panels were to be formed by the age-old method of beating out the shape.

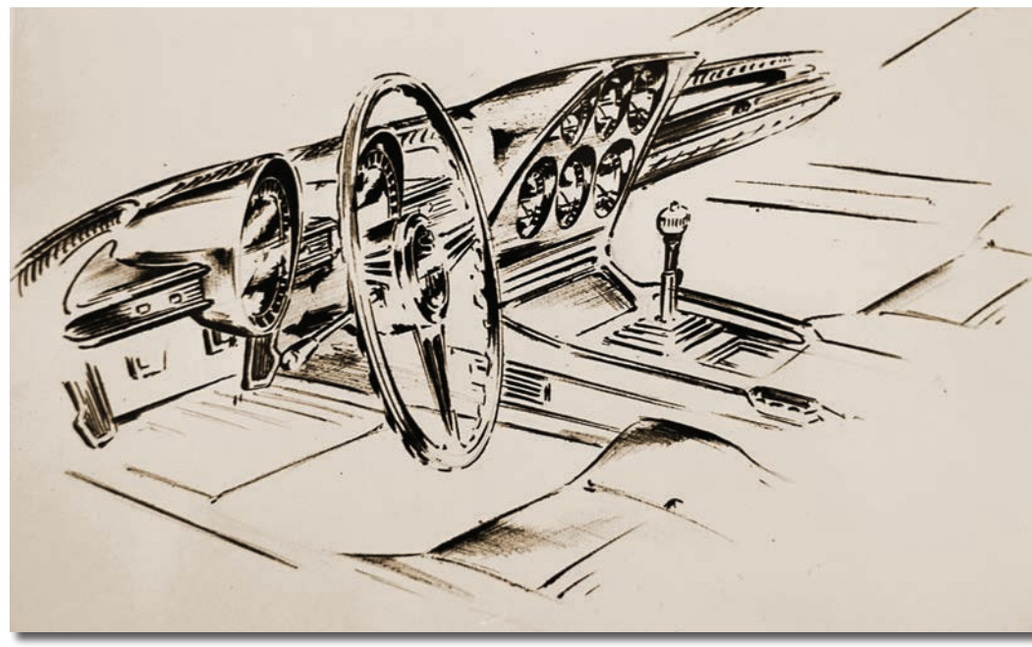
Gandini had also suggested the relocation of the radiator to Lamborghini's engineering team. "The radiator was at a rather high horizontal position," he explained and he thought that "it should be lowered to a more vertical aspect further forward, to which the engineering team agreed."

This helped in making possible a lower, chisel-like front end. Nuccio Bertone was keen that the new design incorporate components from bodies that Carrozzeria Bertone was producing at that time, and so Gandini had to take that into account. "Nuccio Bertone was very insistent that components such as headlamps and tail

Though the Miura was the first production car to feature venetian blind-like slats over the engine, the idea wasn't new — inspiration was from the Chevrolet Monza SS GT, a concept car that Gandini admired very much. ARTCURIAL

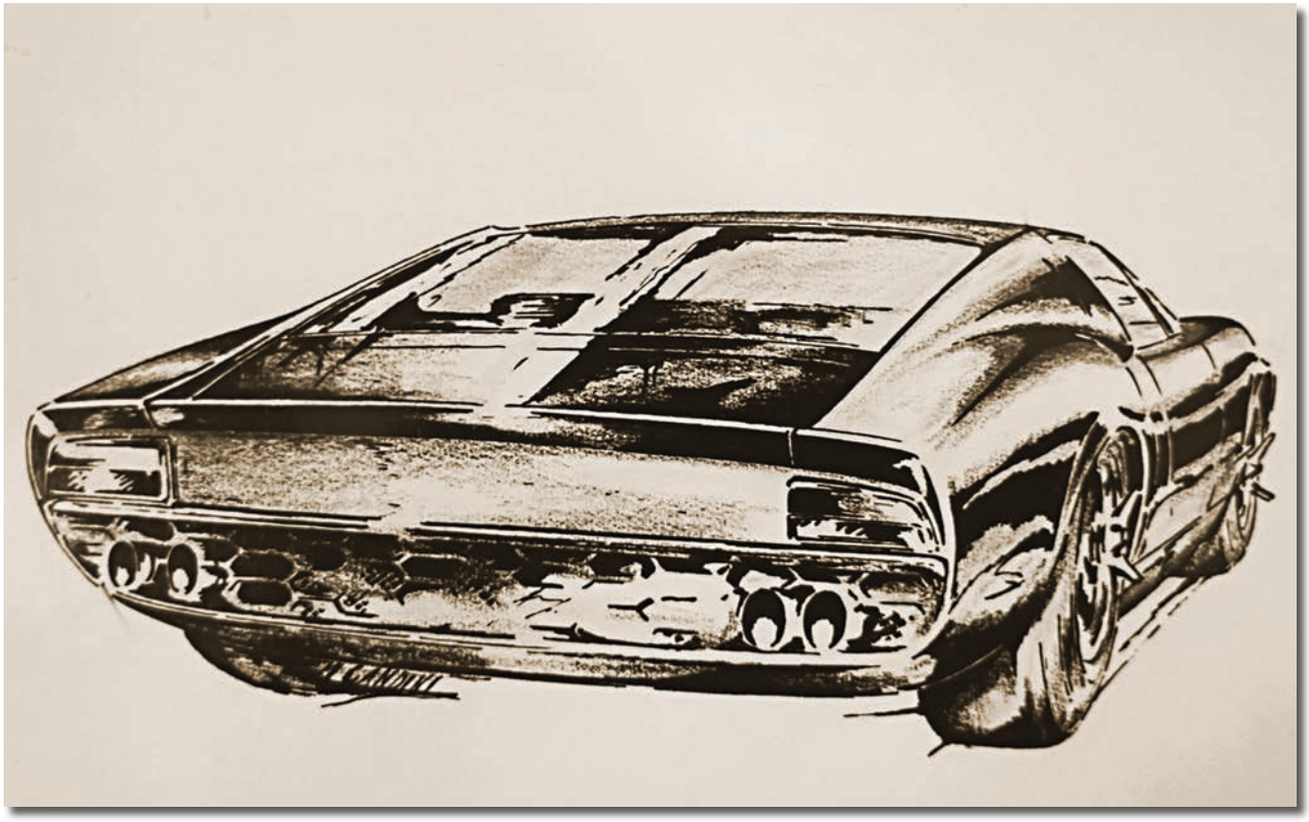
Miura
S

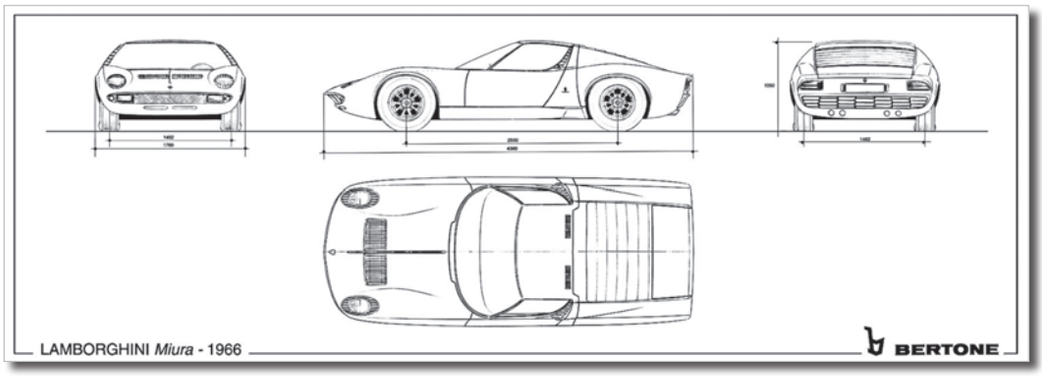




ABOVE & OPPOSITE TOP: Quick on-the-go sketches by Marcello Gandini which convinced the Lamborghini management to go ahead with the design; following these were the detailed orthogonal drawings, from which the full size 1:1 scale drawings were drafted. Incidentally, in these same Gandini sketches when provided by Stile Bertone in recent years, the designer's signature is mysteriously missing… ARCHIVIO STILE BERTONE/ AUTHOR'S ARCHIVES

RIGHT: The sketch for the interior was used as a reference only; in this version – Gandini's signature just below the passenger side of the fascia has been whitened off. ARCHIVIO STILE BERTONE





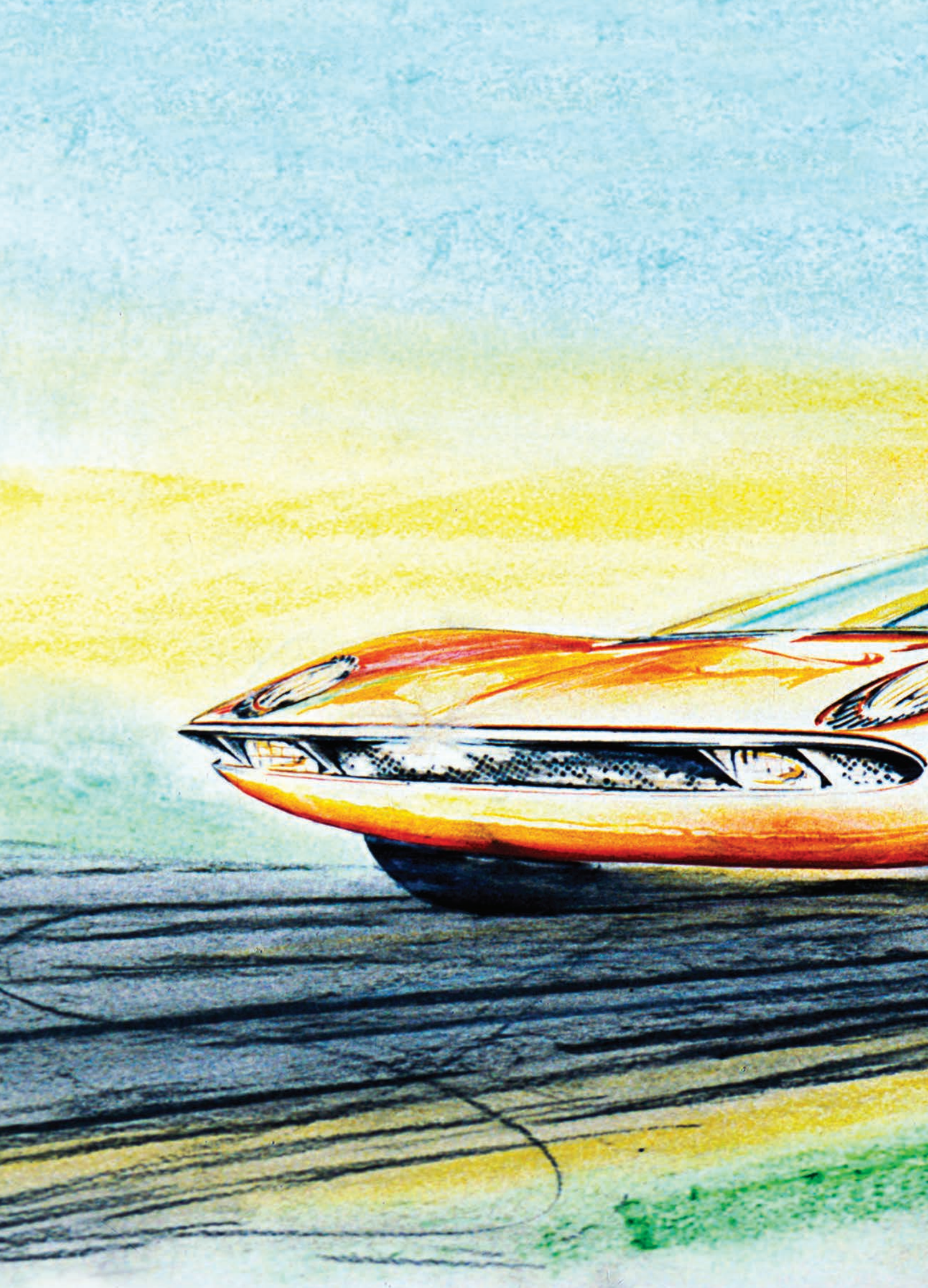
LEFT: Orthogonal drawings of the Miura, issued by Bertone for press purposes post-launch (and after the production version with slats had been signed off) and not the one originally executed by Gandini. ARCHIVIO STILE BERTONE

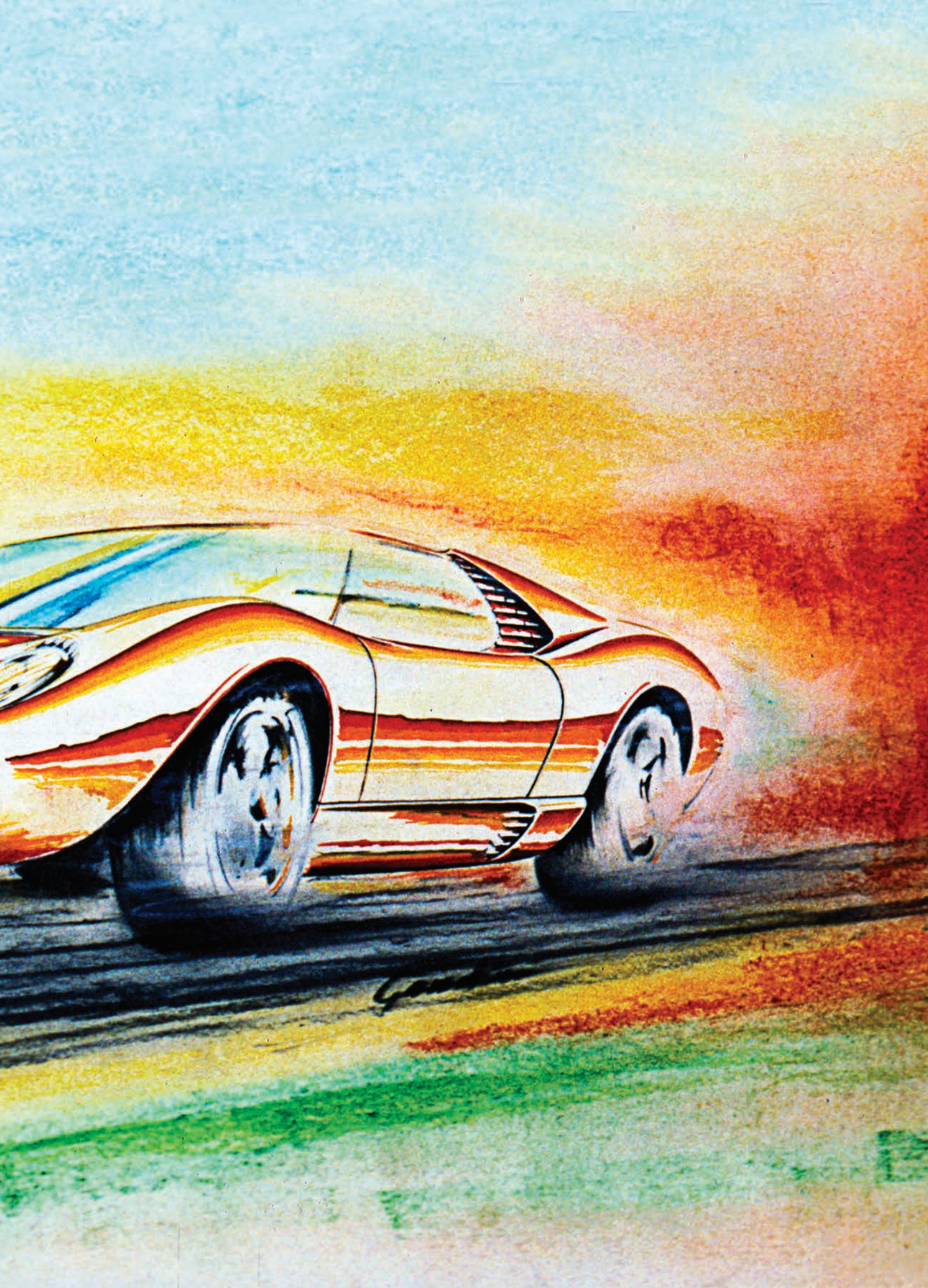
OVERLEAF: Gandini's color rendering of the proposed design that convinced Ferruccio Lamborghini and his engineers Giampaolo Dallara and Paolo Stanzani. ARCHIVIO STILE BERTONE

lamps from the Bertone 'parts bin' should be designed into the new car," adds Gandini. "Though it was the first time that I was working full-time in a proper coachbuilding firm, I was most impressed by the professionalism of the team at Bertone, both at Centro Stile, which was the styling center, as well as the prototyping shop," remembers Gandini, adding, "Not only were they able to interpret my drawings very rapidly, but everyone could multi-task, as we had two other on-going projects, along with the Lamborghini, with the same deadline of launching at the forthcoming Geneva Show."

"We worked through Christmas and the New Year, weekend after weekend, without a break," remembers Gandini, "till the day before the show was to open. And it was really a race down to the last minute that the three cars were completed and sent by truck to Geneva, just in time for the show's opening."

The 1966 edition of the Geneva Motor Show opened on Thursday, March 10. Though there were scores of new models from Alfa Romeo to Zagato, the car that was the undisputed star of the show was the amazing new Lamborghini, the Miura. Ferruccio Lamborghini, born under the astrological sign of the Taurus, adopted the charging bull as the emblem of his marque,





Note the stylized Miura logo, with the horns on the 'M' and a tail off the 'a', a delightful detail by Piero Stroppa. ARTCURIAL

taking on the prancing horse of Ferrari S.p.A. Esercizio Fabbriche Automobili e Corse, and adding a certain element of drama and tension in the cars that he made, cars that have always been strong, wilful, proud beasts, only partly tamed. The Miura was the first in a series that took the name of a famous breed of fighting bulls from Spain.

The Miura was a car with everything and more: a powerplant that was the ultimate in its time (the Miura developed 350bhp, whereas Ferrari's best, the 275 GTB managed only 300bhp), an engine layout that was a revolution, a performance potential (V-max of over 270km/h or 168mph) that was second to none, an appropriately poetic name and a styling that had the world stunned. Decades later, the Lamborghini Miura remains arguably the most beautiful car in the world, the most gorgeous form that ever

crouched between four wheels. A car that is an automotive orchid on the outside with a watch-like precision of intricate engineering inside, and the perfect synthesis of beauty and beast, silk and steel, art and science.

A car that epitomizes how an infinite series of exquisite details together can create an effect of total harmony, where fine points like the slightly bulging air intakes on the B-pillar, along with the wide, almost bumperless front grille, merge perfectly with the horizontal slats on the rear window and the hexagonal grille under the rear bumper.

"The Miura stands for a kind of beauty that lies in merging opposites," explained its designer, "It is a body with lots of muscles, but they are the muscles of a beautiful woman, not a male body builder. It is wicked, but with some gentle touches. It has lots of edges but all the curves in the right places. The stare is

aggressive, but tempting, the car is intimidating, but attractive." And impossible to resist.

Putting the engine behind the driver — race-car style — was special enough. Installing a hugely powerful and carefully crafted V12 amidships was sensational. But that body, that daring, spirited, lithe, sexy piece of automotive sculpture was the ultimate icing on the cake. Undoubtedly, one of the most gorgeous silhouette of all times, defined by that smooth flowing line, starting way down at shin level, travelling up, with a slight indent that hints at that scoop defining the headlamp, moving over those chunky front wheels, sweeping down slightly to a not-so-pinched waist, then one line diverting up to meet the roof in an arch, another sweeping over the hump that describes the rear wheels, ending on a short tail with a slight upturn, the hint of a spoiler.

Look at the door and there is no obvious handle. But look carefully, and there it is: those louvers along the pillar, the bottom louver: that is the handle. Pull it and the door opens, the louvered section opening out with it — giving the effect of two horns of a bull with the two doors wide open.

Drop inside, into the body-hugging bucket seat and through the leather-wrapped steering wheel that is small and neat, the driver can see two big white-on-black dials: the speedometer, calibrated up to 320km/h (200mph) on the left, and the tachometer on the right. There are six other minor dials on the center console, although they are difficult to read from the driver's seat. But look up and into the headlining, along the center are a gaggle of toggle switches aircraft-style, for the lights, fans, etc., but they are unmarked, as are the switches along the gearshift gate, which is a square aluminium piece with six fingers, five slots for the five forward speeds and one for reverse: hardly practical, but in the end, jewel-like in detail and aesthetics.

By the end of the Geneva Motor Show, many of the rich and the beautiful had lined up to order a Miura, Ferruccio Lamborghini bet

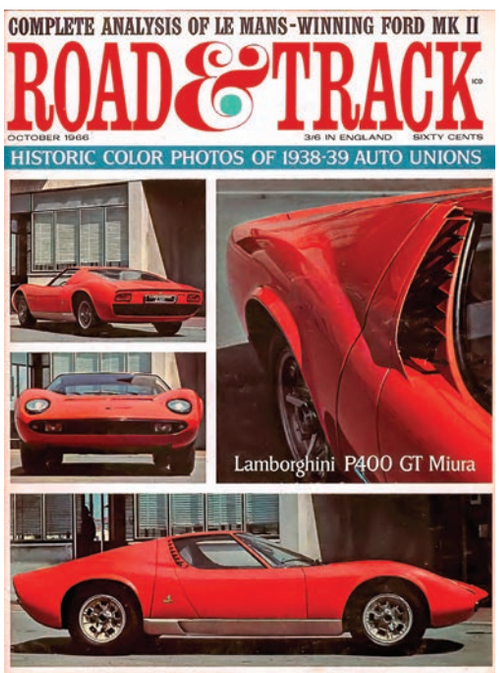
ABOVE: Period press photos with two models posing on the beautifully finished wooden buck used to beat out the panels for the Miura prototype. ARCHIVIO STILE BERTONE

OPPOSITE: As the saying goes, God is in the details… ARTCURIAL

RIGHT: The Miura was on the cover of most major magazines across the globe in 1966: *Road & Track* featured a detailed eight page article in their October 1966 issue, note the Plexiglas rear window of the prototype. AUTHOR'S ARCHIVES

Nuccio Bertone that he would sell a total of about 50 of his exotic supercar. Despite his admiration for the project, Nuccio Bertone expected that no more than 20 units would be made. Both men were wrong. Lamborghini built 765 Miuras eventually.

Demand was so strong that some 475 cars were sold in less than three years. As the car went into production with very little development, there were a many teething problems, and so, an extensively improved model, the P400 S was launched in 1968. One hundred and forty of the S were made until 1971, when a more potent version, the P400 SV was unveiled. With decidedly chunkier tires — Pirelli Cinturatos specifically developed for the car — a wider track and a more tweaked engine that took maximum power to 385bhp, the SV was the ultimate Miura.



Just 150 of these were made in the next year, when Lamborghini prematurely pulled the plug and the Miura was withdrawn from the market, apparently to make way for the marque's next supercar, despite the fact that it was another two years before the Miura's replacement went into production.

Five decades ago, the Miura was radically new, with innovative styling details, yet incorporating the culture and the history of Italian sports cars of the 1950s and the early 1960s. A Plexiglas cover at the rear over the engine was a brilliant idea that appeared — in production form — some two decades later in the Ferrari F40. Unfortunately, cooling issues forced Gandini to redesign the Plexiglas rear window of the prototype Miura to trendsetting slats for the production version — a feature first seen on the 1962 Chevrolet Corvair Monza GT concept, "a design that I have a lot of admiration for," confesses Gandini.

Though the sloping headlamps came from the Fiat 850 Spider that Bertone was manufacturing and the system of canting it further and having it raised electrically may have been inspired by erstwhile Bertone-designer Giugiaro's Chevrolet Testudo concept from 1963, the idea of placing them within ovaloid concave 'dishes' framed by 'eyelashes' was delightfully original. Gandini explained: "With the headlamps popping up partially we needed to keep enough space ahead and aft of the lamp, so the best way to fill up that area visually was to design those eyelashes."

The Testudo's air-intake slats aft of the side window may also have been the inspiration for the air-intake slats of the Miura, but the treatment was much more sensuous. As an-

other great automotive designer, American, Tom Tjaarda[6] points out: "To me the big innovation style-wise of the Miura is the rear quarter panel, the air intake that slightly breaks away from the body and then flows into the side and rear in a very elegant way. The eye is drawn to this portion of the car and in my mind this makes it one of the most beautiful of all classic cars."

The use of black chrome for the bumpers, bonnet grille, window surrounds and the air-intake slats — parts which were traditionally chromed — was also very new, as was the highlighting of the rocker panels with a different metallic color, emphasising the chassis aspect of the car.

Tjaarda[6], who has spent his working life in Turin designing for several major ateliers such as Ghia, Pininfarina and even a young Italdesign (with Giugiaro), points out: "The difference between a good and mediocre design is not only in the details but also the overall proportions of the car. The Miura has survived for more than 40 years as an outstanding design. Some small detail or proportion can make a huge difference."

It is the combination of the subtle with the

With its wider track and improved stance, the Miura P400 S looked even better than the first gen.
ARTCURIAL

bold that has made the Miura one of the greatest automotive designs of all times and it was "from the stunning Miura onwards that the Lamborghini — almost any Lamborghini — was to be a bedroom-poster symbol of supercardom" according to author Anthony Pritchard in his book *Lamborghini Supercars from Sant'Agata*. He continues, "Launched at a time when Ferrari was tentatively emerging from years of ironmongerish conservatism, this was the supercar redefined as a heady amalgam of high technology and rolling artwork."

Pete Lyons of *Consumer Guide* wrote in his book *The Complete Book of Lamborghini*: "In the opinion of many Lamborghini lovers, the P400 Miura was one of the most compellingly beautiful and technically appealing cars built, not only at Sant'Agata, but anywhere, anytime." And to that he added: "But in every exquisite, inspired detail the Miura is the product of an exciting young talent," namely Marcello Gandini. The Lamborghini P400 Miura announced the appearance of a brilliant designer of automobiles, who for the next five decades would have an extraordinary influence on the design and development of the automobile.

It all began when the eminent journalist Peter Robinson suggested in the December 1996 issue of *Classic & Sports Car* that the origin of the design of the Lamborghini Miura may have been Giorgetto Giugiaro's, after the latter showed Robinson some sketches he had made before he left Carrozzeria Bertone. "When I left Bertone I didn't have the chance to follow the building of the car, but the originals of these drawings stayed behind," Robinson quoted Giugiaro as saying, "Gandini took my sketches and finished the car — 70 percent of it is mine."

Joe Sackey, in *The Lamborghini Miura Bible* published in November 2008, also states that the drawings that Giugiaro showed him must have been the 'preliminary drawings for the' Miura — though he later took a different view, of which more anon.

In the September 29, 2008 issue of *Automotive News Europe (ANE)*, journalist Luca Ciferri wrote: "Fabrizio Giugiaro provided his father, legendary designer Giorgetto, with a unique gift for this 70th birthday. Drawing inspiration from his father's original sketches, Fabrizio secretly had a full-sized styling model done of the car that would become the Lamborghini Miura. The car is important to Giorgetto because he was working on it before he left Carrozzeria Bertone to join rival Carrozzeria Ghia. The mid-engine sports car was supposed to go to tiny Italian automaker Bizzarrini, but Bertone CEO Nuccio Bertone offered the car to Lamborghini instead. Giorgetto's successor at Bertone, Marcello Gandini, completed the car, which debuted at the March 1966 Geneva auto show. The Miura is considered one of the most beautiful sports cars Lamborghini has ever done and Giorgetto's contribution to the car is often overlooked."

The implication from the quote above is that the real designer of the Miura must have been Giugiaro, and that Gandini has been taking credit for a design that was not really his. Gandini's lawyers sent a legal notice to *ANE* and Luca Ciferri soon after and in the March 2, 2009 issue of the journal, Ciferri wrote that Giugiaro "was happy to set the record straight for *Automotive News Europe* about where he feels the credit for the Miura is due."

"Gandini designed the Miura and I have never said anything different to this simple statement, so I have nothing to deny," Giorgetto Giugiaro told *ANE*.

It looked as though matters had been settled, until the October 2012 issue of *CAR*, where Giugiaro once again showed the drawings to journalist Guy Bird, implying that Gandini must have copied his design, and was quoted as saying: "Since I left some drawings there, maybe he saw them, I don't know. Before the Miura, what did Gandini design? You are influenced by what you see, but each person has his own personality, you learn and create your own style. Gandini is an excellent designer but unfortunately he didn't go on and develop his own profession further."

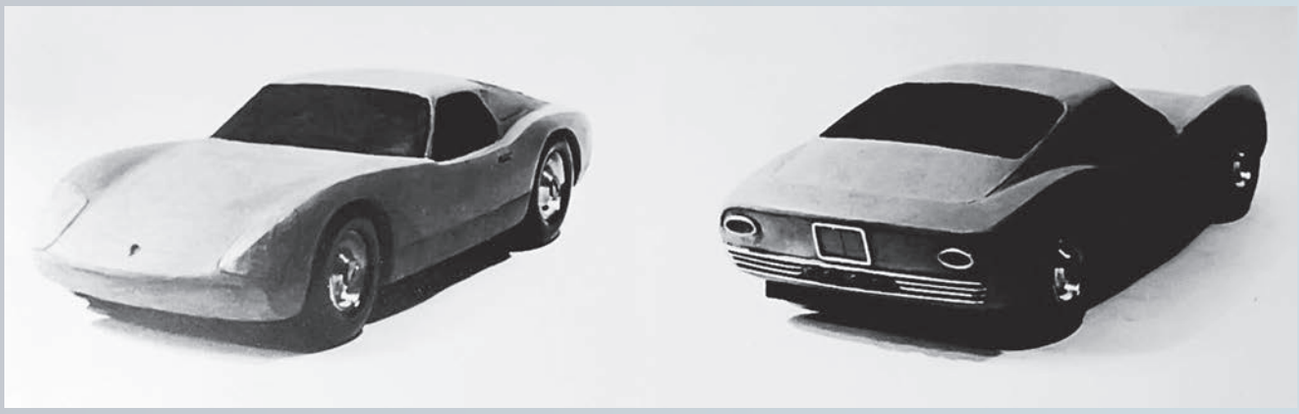
So who is the real designer of the Lamborghini Miura? Is there any truth in the assertion that the Miura owes more to the drawings of Giugiaro than those of Gandini? A simple look at the dates and the evidence provided by the several people who worked on the Miura confirms that Gandini is indeed the designer of the Lamborghini Miura. Most importantly, certain dates are worth noting.

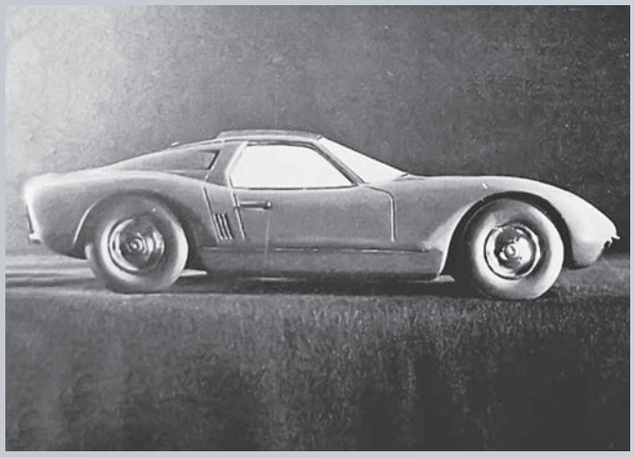
October 16, 1964 was apparently the date on the Giugiaro drawing, according to the March 2, 2009 article in *ANE*. In the *CAR* magazine article, Guy Bird claims that the sketch shown by Giugiaro was dated November 3, 1964. The latter date has also been confirmed by automotive historian Paul Frère[7] to the author, who saw the drawing in April 2013. Either way, the latest date that the sketch seems to be from is November 1964, and not any later. Giugiaro claims that the sketch was for a proposal for Bizzarrini, for whom Giugiaro/Bertone had in 1964 designed a front-engined sports car, the Iso Grifo AC3/C, which later became the Bizzarrini 5300GT.

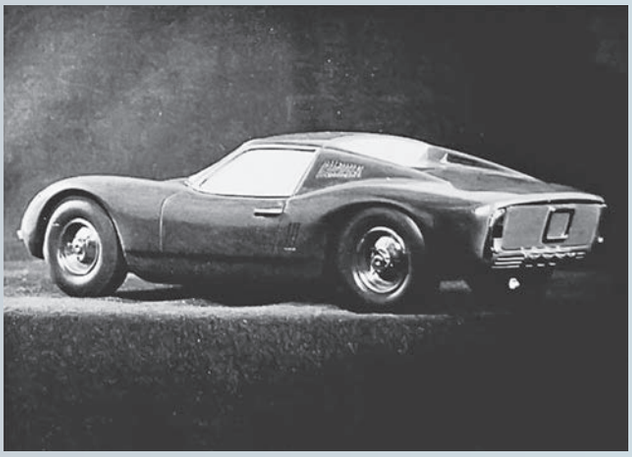
Lamborghini's chief engineer Giampaolo Dallara, may have had a germ of an idea by late 1964, but the "start of the project was by January 1965" only, says the designer of the chassis. Dallara[1] also points out: "The drawings of the chassis and powertrain were completed by June 1965, and the start of the making of the chassis by Marchesi by August 1965." And that the mid-engined chassis was ready just in time to be dramatically unveiled by Ferruccio Lamborghini on November 3, 1965 — exactly a year after Giugiaro's sketches are dated — at the Turin Motor Show.

By then Giugiaro had quit Bertone. Enzo Prearo[3] is sure of the date that he received the news

So... Who designed the Miura?







The two (plus two) proposals — in scale model form — by Carrozzeria Touring, presented to Lamborghini and his engineers in November 1965: clearly the designs were not all that convincing. ARCHIVES SERGE BELLU

of Giugiaro's departure: "It was on October 5, 1965, when I was in Paris for the Motor Show there." By the time Prearo returned, Giugiaro was gone.

As he was with Nuccio Bertone most of the time on November 3, 1965, the opening day of the Turin Motor Show, Prearo also confirms that the first time either of them had heard of or seen the Lamborghini chassis was on that day. It was also the same day that Bertone met with Ferruccio Lamborghini later in the evening and had the famous discussion, which led to Carrozzeria Bertone clothing that amazing chassis for the 1966 Geneva show.

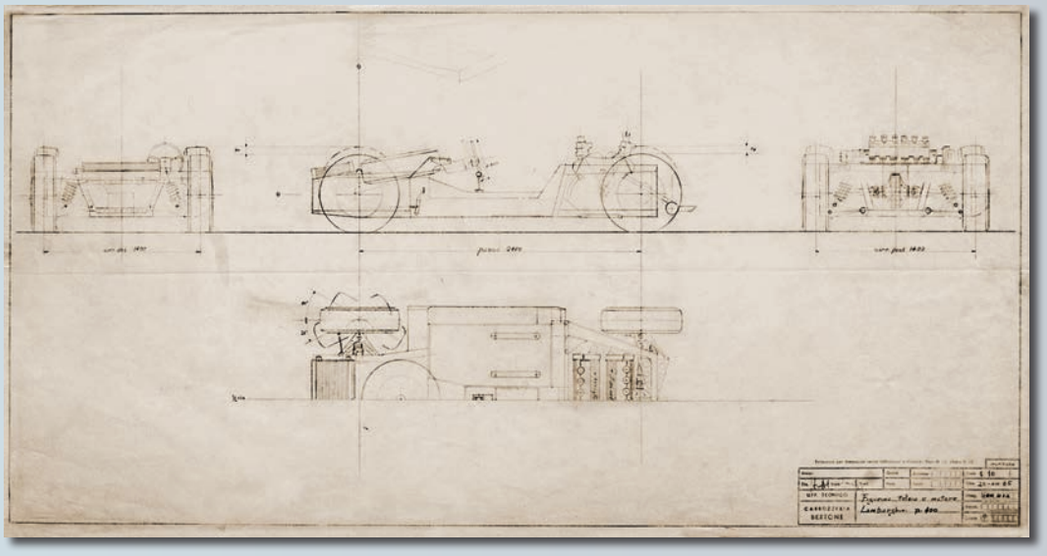
Further, it was only by late November 1965 that Carrozzeria Bertone received the first set of drawings of the chassis-mechanicals of the car that would be the Miura. By then Giugiaro was long gone, and Gandini installed in the design driving seat at Bertone. It has been confirmed by Stroppa, Stanzani and Dallara that work began on the design of the Miura only after the drawings reached Bertone and the engineers had explained their vision to the young designer. Marcello Gandini sketched his proposal for the profile of the Miura directly onto the side elevation drawings of the chassis, powerpack and hard points that Piero Stroppa had prepared.

Also, there does not seem to be any evidence that the people at Lamborghini were ever shown any sketches that looked like those from Giugiaro. Contrary to what certain journalists and magazines have said, only one proposal was made by Gandini and that was adopted, with very few changes. This is confirmed by not only Gandini, but by Dallara, Stanzani and Stroppa. The three other so-called alternative proposals were actually prepared by a young intern working at Bertone after the Lamborghini Miura was unveiled at Geneva sometime later in 1966, at the request of Enzo Prearo, essentially for 'press purposes'. These three 'alternatives' were never under consideration by either the management at Lamborghini or at Bertone, nor were they part of any evolutionary development iterations prior to deciding the final design.

Gandini is emphatic when he says that he did not see any drawings of a mid-engined car left behind by Giugiaro. Stroppa[4] also states that he was not aware of any such drawings — and he had been present when Giugiaro was around, after he left, and before Gandini joined. Stroppa also points out that he saw Gandini draw directly on the chassis-mechanical elevation drawings.

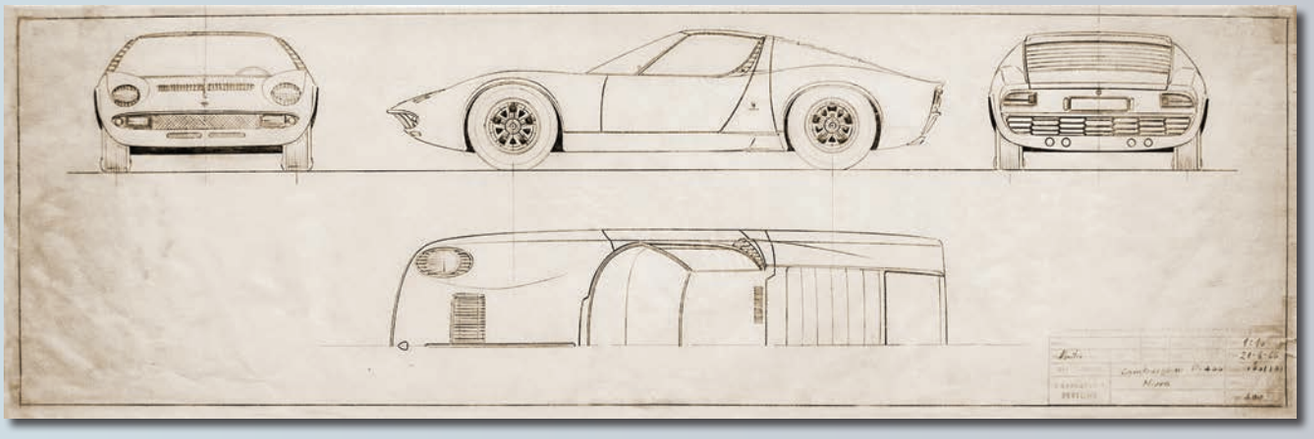
It has also been suggested in some quarters that Nuccio Bertone had significant input in the design of the Miura. Sackey, in *The Lamborghini Miura Bible* quotes a meeting between GM's head of design in Europe, Dick Ruzzin and Nuccio Bertone where the latter claimed to have "made a few minor changes" to the design of the Miura when Gandini left to go on vacation two weeks short of the completion of the prototype. In a letter to *Classic & Sports Car* in the August 2013 issue, Jonathan Root from London once again quoted Ruzzin as confirming the earlier story: "As the car progressed Bertone became dissatisfied by the way it looked. He made many suggestions but said that Gandini always ignored him. The project was within two weeks of being completed in the model shop when Gandini left to go on vacation. Bertone was very unhappy and he said that he changed the car. When Gandini returned, it was already painted and finished."

There was one small problem with this story: Gandini did not go on vacation until the Miura, along with the other two cars that were needed for the 1966 Geneva Motor Show, were finished and trucked to Switzerland. In fact, "I didn't get to take any break at all until almost August 1966, as I was still new at Bertone and I couldn't take leave. Plus, there were so many projects to work on," says Gandini. Stroppa and Prearo not only confirm that they cannot re-

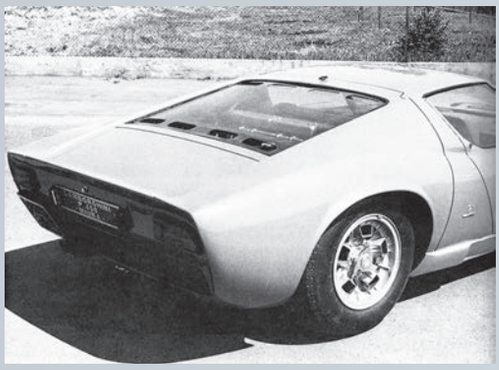


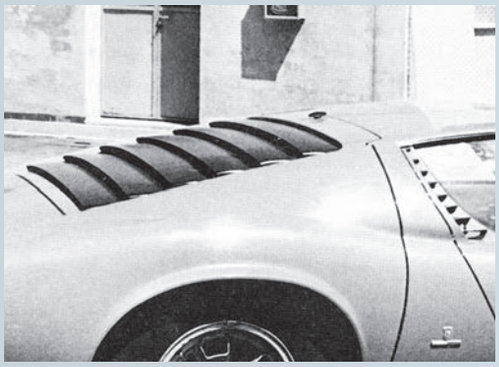
LEFT: The 1:10 scale orthogonal drawings of the chassis and the mechanical elements of the new Lamborghini, as drafted by Piero Stroppa on December 20, 1965; over these drawings, Gandini drew out the outline profile of the Miura. ARCHIVES PIERO STROPPA

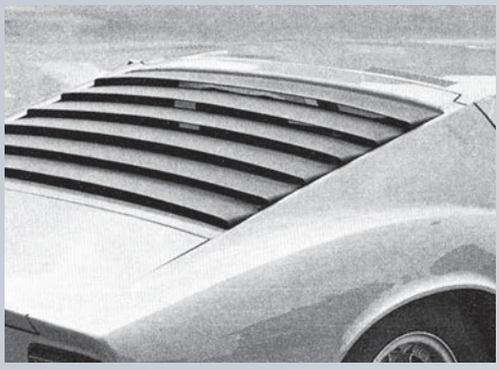
BELOW: The 1:10 scale orthogonal drawings of the production version of the Miura (with the slats) as drafted by Piero Stroppa on June 21, 1966, following the drawings provided by Gandini. ARCHIVES PIERO STROPPA

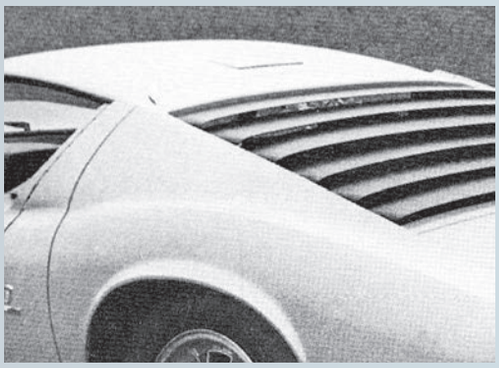


CLOCKWISE FROM TOP LEFT: The prototype Miura featured a Plexiglas rear window, two decades before the Ferrari F40; the second prototype car featured slats at the rear and a knob atop; the third proto a single flap and from the fourth twin vents, which was what was used for series production. ARCHIVES CHRISTIAN DESCOMBES

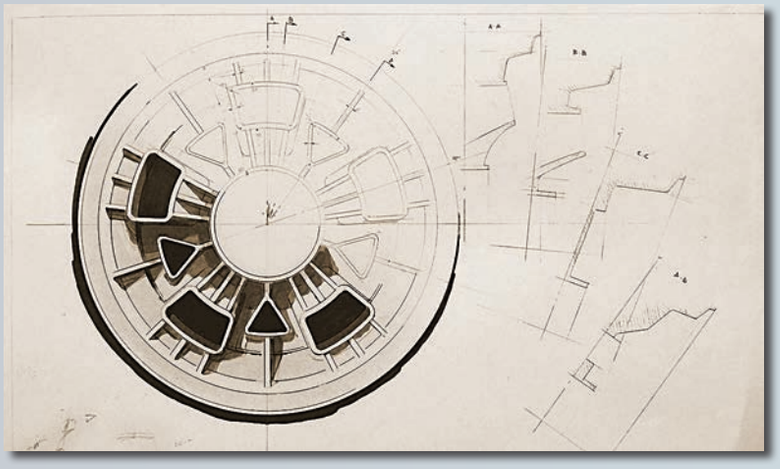






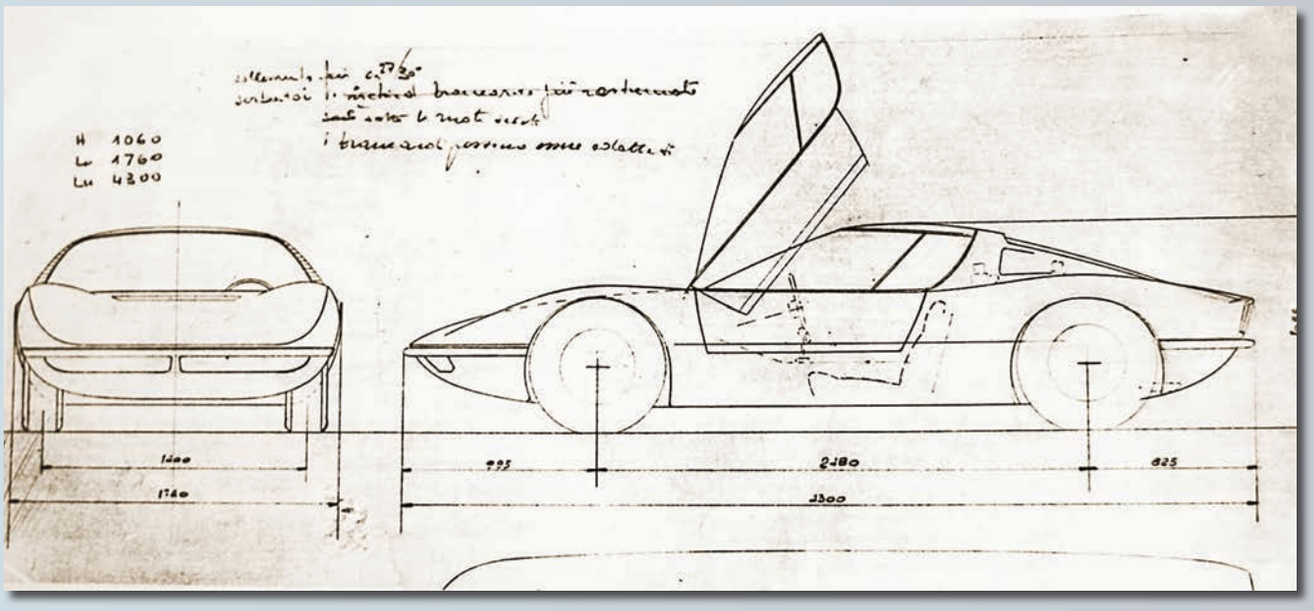


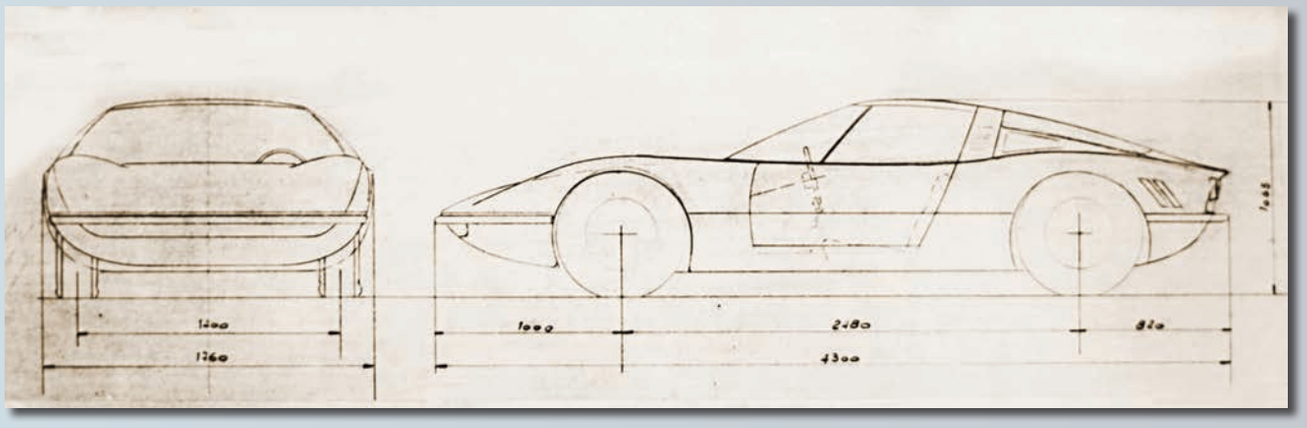
BELOW: A photocopy of Piero Stroppa's original drawings of the design for the Miura's Campagnolo wheels. ARCHIVES PIERO STROPPA

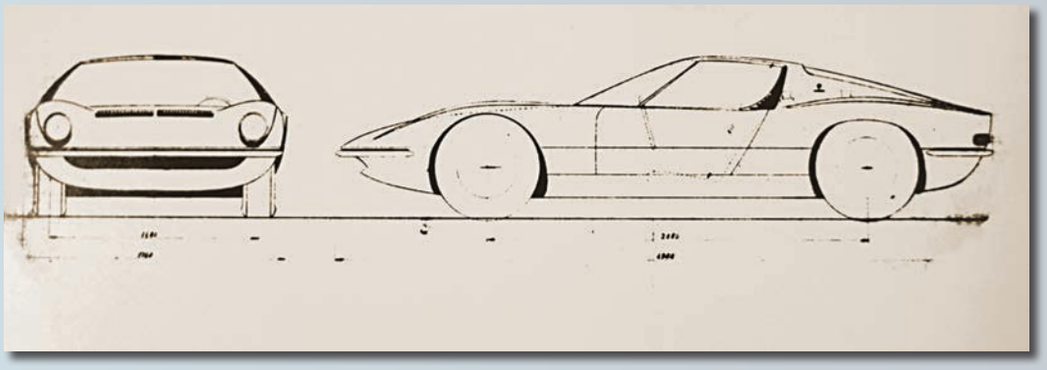


member Gandini ever taking any leave, but are also very sure that no changes were made by Nuccio Bertone. "Yes, Nuccio made several suggestions like using the headlamps and the rear lamps from the Fiat 850 Spider, and such, but he never changed anything at all," affirms Marcello Gandini.

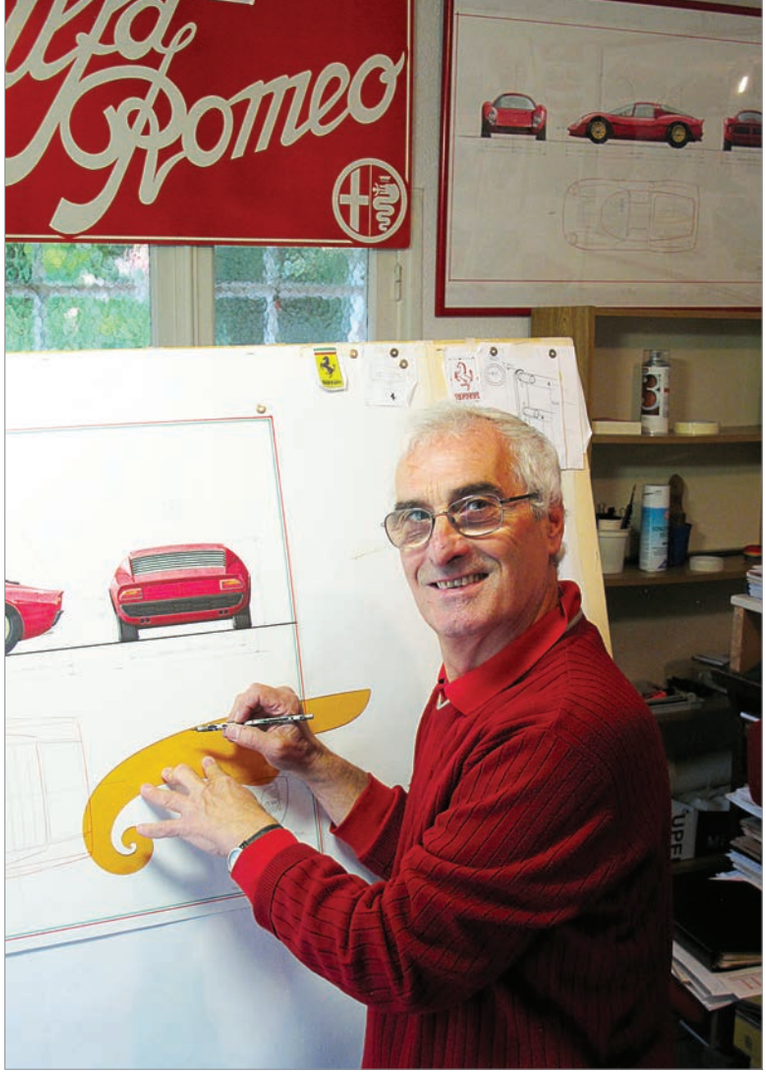
What undermines this version even more is the story (as quoted in Sackey's book) that Ruzzin was told that as part of the owner's 'exploits', Bertone "personally drove that first hand-made prototype, with an assistant in the passenger seat, from Bertone SpA's Turin studio to Geneva's Palexpo Center, to present the car for Lamborghini," as the Miura prototype was not driveable. "As we did not have enough time, we put six wooden trumpets atop the carburettors over the engine, which had been dropped into the bay — the engine was not working," remembers Stroppa[4], adding, "The details can be seen in photos as there was a transparent rear screen." This has been confirmed by Gandini and Prearo[3], both of whom also state emphatically that the three prototypes for that year's Geneva Motor Show were sent off by truck, and that amongst the three prototypes,





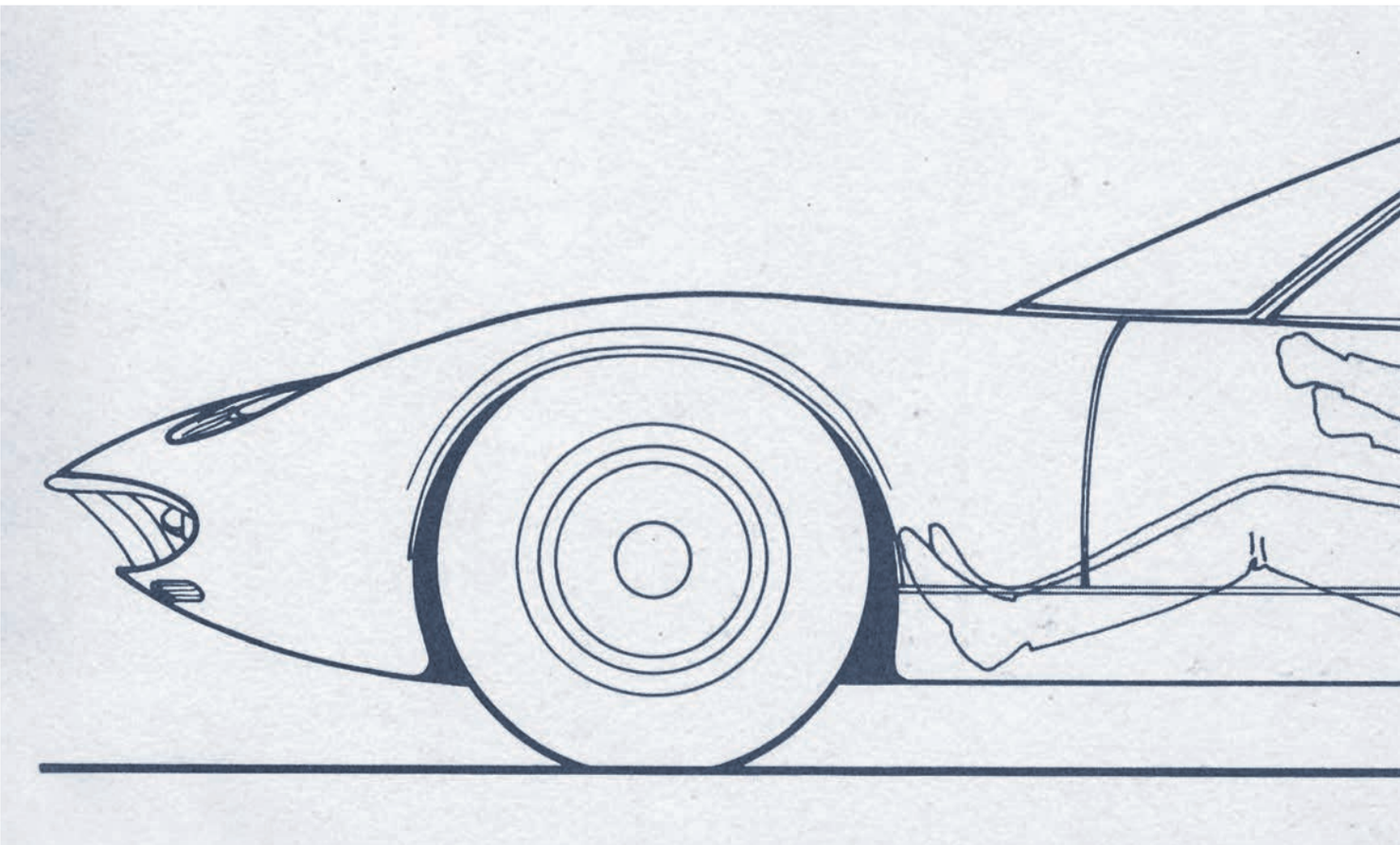


These three so-called preliminary drawings that supposedly 'explored' the shape of the Miura were all readied after the Miura was unveiled, essentially for press purposes, on the initiative of Bertone's communication chief then, Enzo Prearo, and confirmed by him to the author.
ARCHIVES CHRISTIAN DESCOMBES



the Miura was surely not in working condition as the engine was not complete. Stroppa[4] remembers that, "It was after the show that the Miura came back to Bertone for some detail finishing, and then the prototype was sent to Lamborghini where they must have re-installed the completed engine to make the first Miura a runner, quite a few days after the Geneva Show."

Prearo[3] adds: "Nuccio Bertone was good at making up stories for the journalists, a great raconteur indeed."

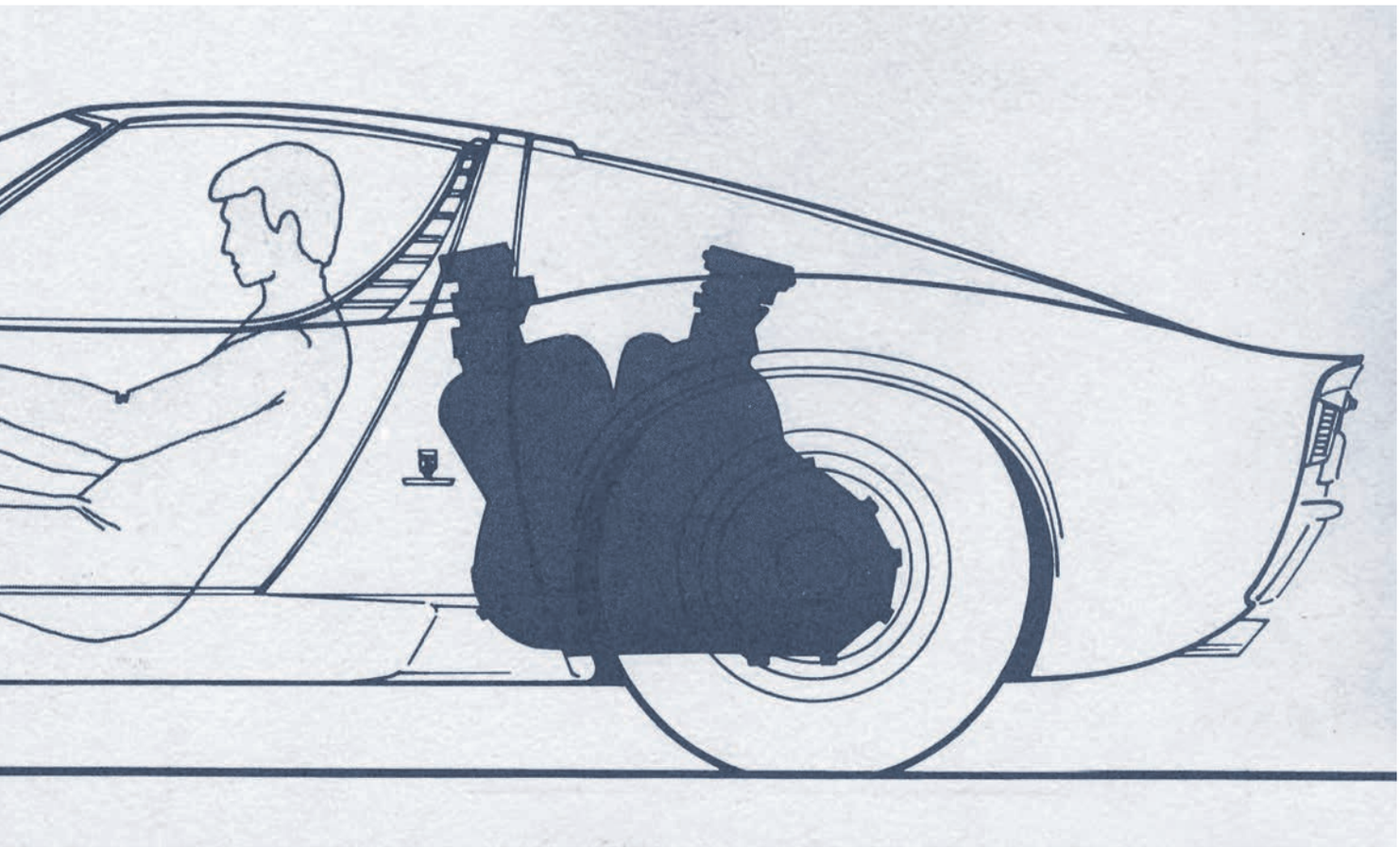


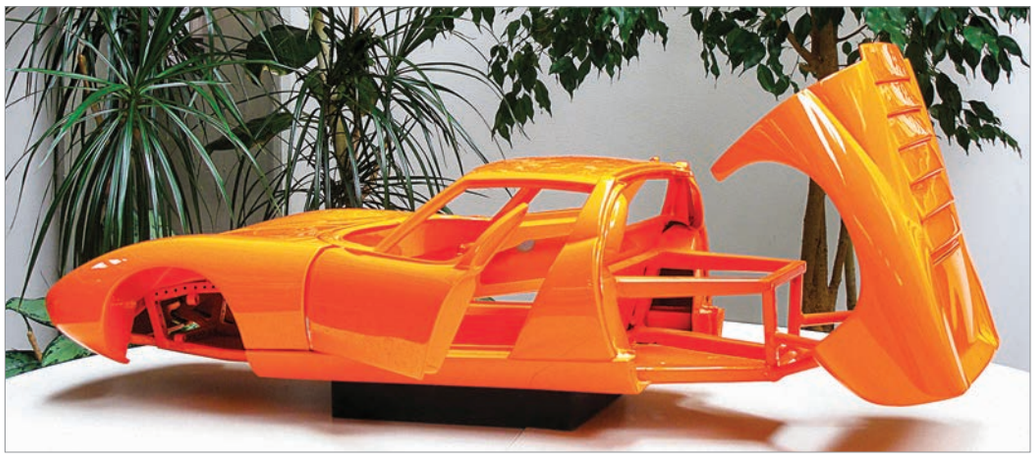
LEFT: A young Marcello Gandini (left), with an even younger Piero Stroppa when the two were colleagues. ARCHIVES PIERO STROPPA

BELOW: Packaging drawing of the Miura shows the compact powertrain just a few inches behind the passenger area. ARCHIVIO STILE BERTONE

OPPOSITE FAR LEFT: Piero Stroppa today. GAUTAM SEN

OPPOSITE RIGHT: Piero Stroppa posing with a Miura. ARCHIVES PIERO STROPPA





ABOVE: A scale representation of the Miura's body and chassis as supplied by Carrozzeria Bertone, at the Bertone 'museum'. GAUTAM SEN

BELOW: Color rendering executed for press purposes by an in-house trainee designer (and not by Gandini) after the Miura had been unveiled. ARCHIVIO STILE BERTONE

It may be interesting to note that Sackey, who had previously credited Giugiaro with the "preliminary drawings for the Miura," later wrote: "Enter the 27-year old Marcello Gandini. He was officially assigned the Miura project, credited with the design and, as both Bertone and Gandini concur, he started from scratch. The chassis was sent up to Bertone SpA and it was young Gandini who suggested to the engineers that the radiator be moved forward and down so he could indulge in an ultra-low swoopy front hood. So Gandini was totally involved and completed the project from start-to-finish using the actual car's chassis. Remember, Giugiaro never even saw the chassis. The resultant Miura design was in fact all Gandini."

Joe Sackey also adds: "Remember too, technically, Giugiaro was never officially credited with the design of the Lamborghini P400 in any way, so to say that he was the car's designer is simply incorrect. He started on 'a project' and he designed 'something' which not only never amounted to a real car, but also, it wasn't the Miura."

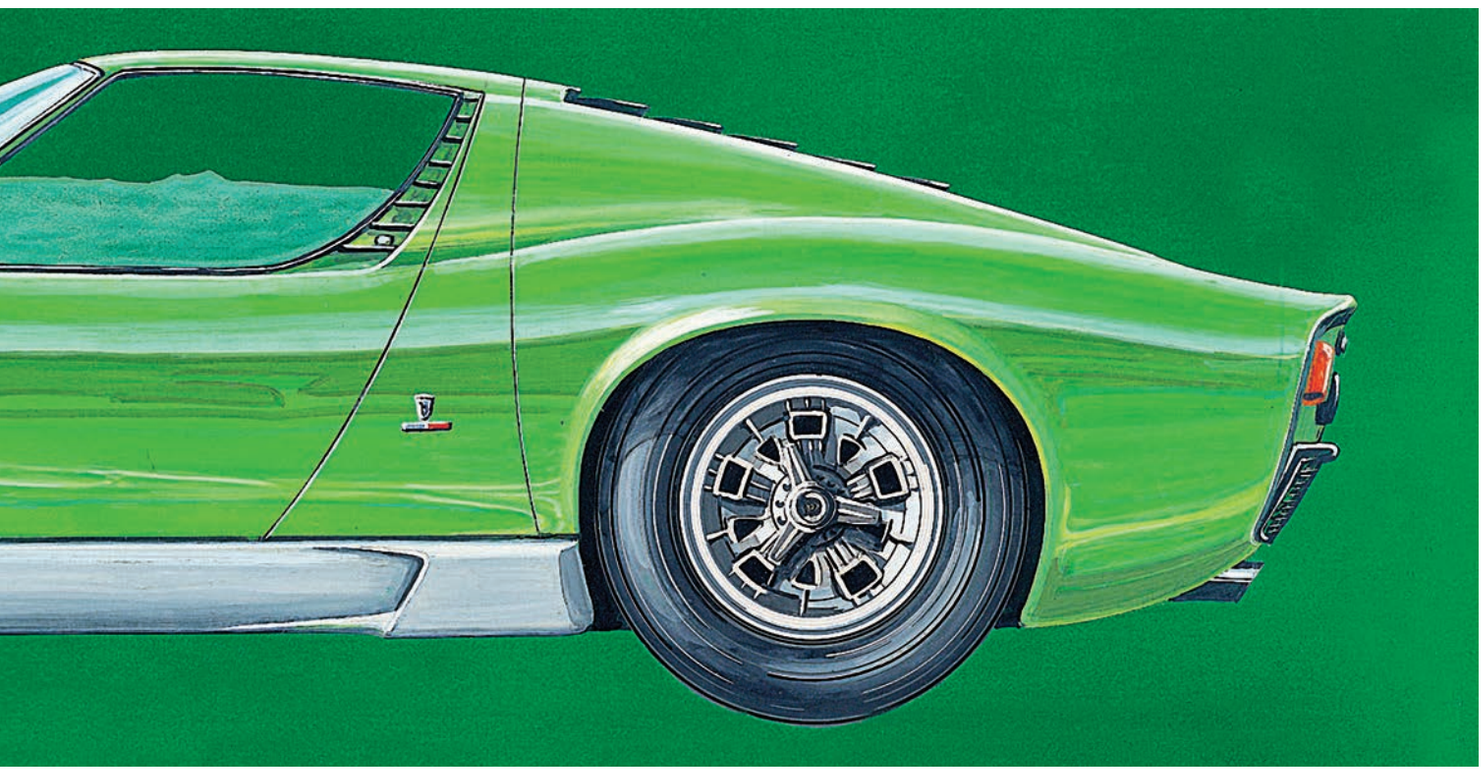
Experts' Opinion

To ascertain whether the Miura 'may have been influenced' by Giugiaro's drawings, photographs of the mock-up that Fabrizio gave his father were shown to a few eminent designers and experts. Gerard Godfroy[8], one of France's better known independent designers, whose work includes most of the Venturis, the Hobbycar Passport and the iconic Peugeot 205 amongst others, said: "The mock-up looks a lot like the Bizzarrini 5300GT and the Alfa Romeo 33 Stradale. The Miura is very different. If at all, the Miura has the proportions of the more 'rustic' Ford GT 40 which looks like the work of an engineer, whereas the Miura is so much more refined, sophisticated and beautifully detailed."

Tom Tjaarda[6] believes that "the Miura was inspired more by the GT40; taking it a step further in refining the design." Tjaarda also points out that Giugiaro's design had some of the (Giugiaro-designed) Alfa Romeo Canguro "mixed with a Bizzarrini front end and a Ferrari Dino rear window treatment. It has absolutely nothing to do with the Miura and is definitely a modified Canguro."

Tjaarda whilst pointing out the design of the B-pillar/rear quarter panel states: "Whose idea was this? I do not think that Giugiaro left a design of such a detail. I do not understand what Fabrizio was trying to prove with the yellow Bizzarrini car. It is indeed strange that Giugiaro took more than 40 years to claim any sort of credit for the Miura."

When Robert Cumberford[2] was shown the photographs of the Competizione Bizzarrini mock-up his reaction was: "To me, this is clearly a Giorgetto Giugiaro design, related to the Bizzarrini derived from the Iso Grifo and — in profile — to the Bertone Alfa Romeo Canguro. I see nothing that remotely resembles the Lamborghini Miura, which has none of the fat forms of the Bizzarrini."



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Porsche 911 Roadster

At the same time that the Lamborghini Miura was being designed and prototyped at Carrozzeria Bertone two other new cars were also in preparation – a Porsche and a Jaguar. The work on both these cars had begun before the start of the Miura's design, and while Marcello Gandini was still working on a part-time basis, sharing his commitments between Marazzi and Bertone.

The Porsche project had been commissioned by Porsche's Californian distributor, Johnny von Neumann, who believed that there could be a market for a pure two-seater convertible roadster in US, specifically in sunny California, separate from the market that would be served by the forthcoming Porsche 911 Targa model, unveiled in 1965 and slated for launch in 1966 as a 1967 model. With the tacit understanding of the Porsche factory, a single 911 chassis was shipped to Bertone's facilities in Italy by September 1965. At the same time Porsche chose to distance itself from the project, so that if the design came in for criticism it would be seen as an independent project, and not connected with the factory.

The Porsche would be one of Gandini's first projects with Bertone. He decided to pen an evolution of the Fiat 850 Spider design that his predecessor had created, but in a more billowy idiom with curvaceous fenders at the front defining a swage line that followed through to the rear deck beltline, running parallel just 'below' the engine canopy. Large clamshell lids hid a pair of twin headlamps, the lids dropping down and tucking under the lamps for night driving, yet it was possible in daylight to flash oncoming traffic through an innovative 'grille' with the outer pair of lamps. The main design element at the front, as well as the discrete lamp grille, was the neat chrome bumper incorporating polycarbonate driving lamps and indicators shaped in exactly the same profile as the bumper itself. A similar wraparound chrome bumper at the rear incorporated the inset rear lamps and indica-

ABOVE: Something of the Fiat 850 Spider in the profile, yet quite a bit more curvaceous and billowy. ARCHIVIO STILE BERTONE

LEFT: Very clean, almost featureless rear, the stop lamps and indicators were incorporated into the bumper. ARCHIVIO STILE BERTONE

FAR LEFT: Interesting treatment of the clamshell headlamp flap that drop down, with slits allowing for flashing oncoming traffic. ARCHIVIO STILE BERTONE

tors, below which was located the grille for the rear engine's heat extraction. With a rather short wheelbase and pronounced overhangs, necessitated by the rear overhung flat-six engine of the Porsche 911, the Bertone roadster's overall proportions were not necessarily the best around, yet it managed to look more modern than the Alfa Romeo Spider (later Duetto) that was also launched at the 1966 edition of the Geneva Motor Show. With a rather high price tag, and overshadowed by the Miura perhaps, no one came forward to order another example. Also structural rigidity was a concern so the prototype remained a one-off.

At the time of writing Bertone's Porsche 911 Roadster is in the US with a private collector.

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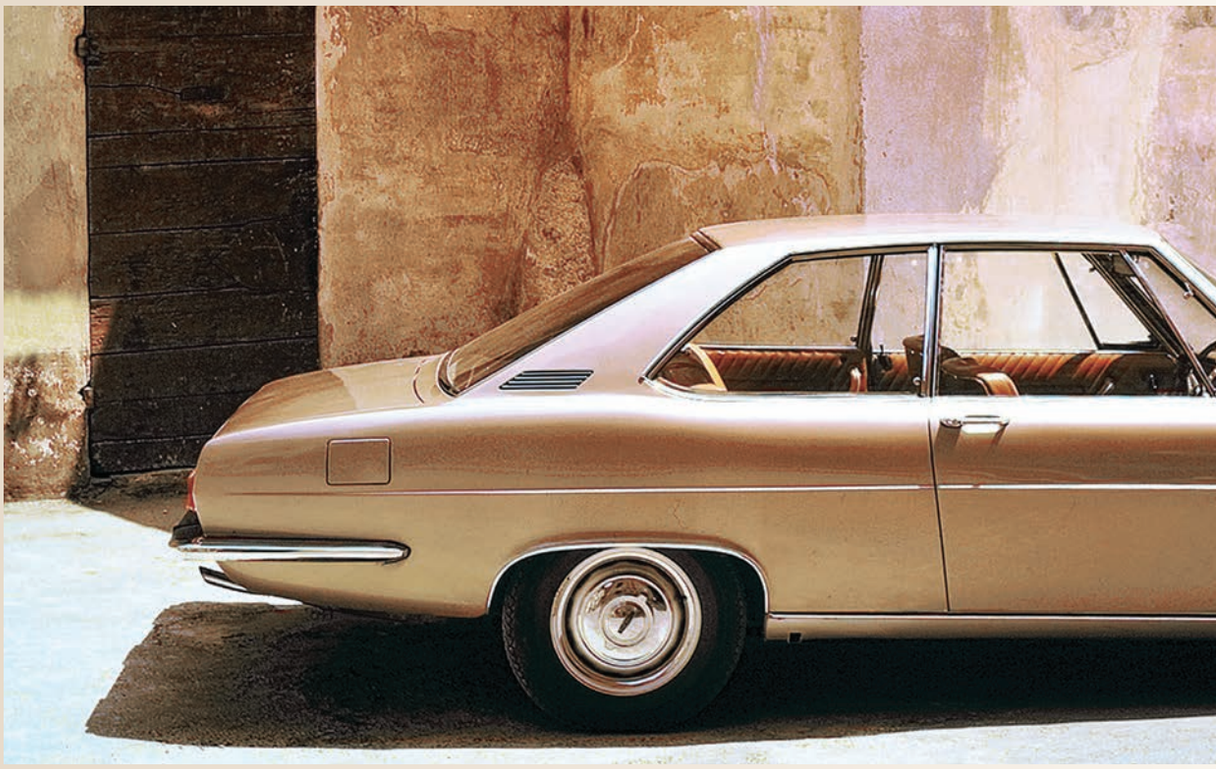
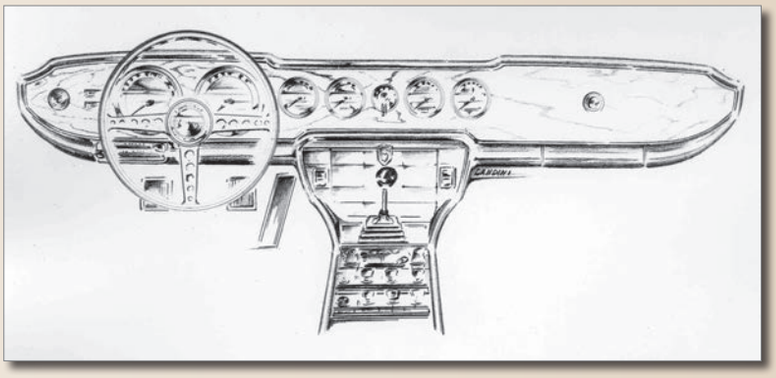
Jaguar FT 3.8



Around the same time that Johnny von Neumann had approached Carrozzeria Bertone about the Porsche 911 Roadster prototype, the Italian importer for Jaguar Cars, Ferruccio Tarchini commissioned Bertone to design and develop a larger four-five seater sports coupé based on Jaguar's 3.8-litre six-cylindered S-Type sedan. The original plan was to sell a limited edition coupé version of the S-Type as a more spacious and luxuriously appointed grand



touring alternative to Jaguar's E-Type coupé. The first of seven chassis was sent across to Bertone in 1965. Marcello Gandini made a couple of simple sketches that captured the essence of the design. The brief was to retain Jaguar's classical grille as seen on the Mk X, but with a smaller, squatter look, yet evolve the overall design to a more modern European coupé form. Side lamps and indicators from the Mk X were used and a four headlamp look for the front was retained, but all the lamps and the 'radiator grille' was set in a wide grin-like grille that dominated the face of the car. The C-pillar had a pronounced rake that reflected the car's sporty intentions, with the beltline kicking up slightly at the base of the pillar, providing for a certain touch of the sinews, typical of Jaguar's feline feel.

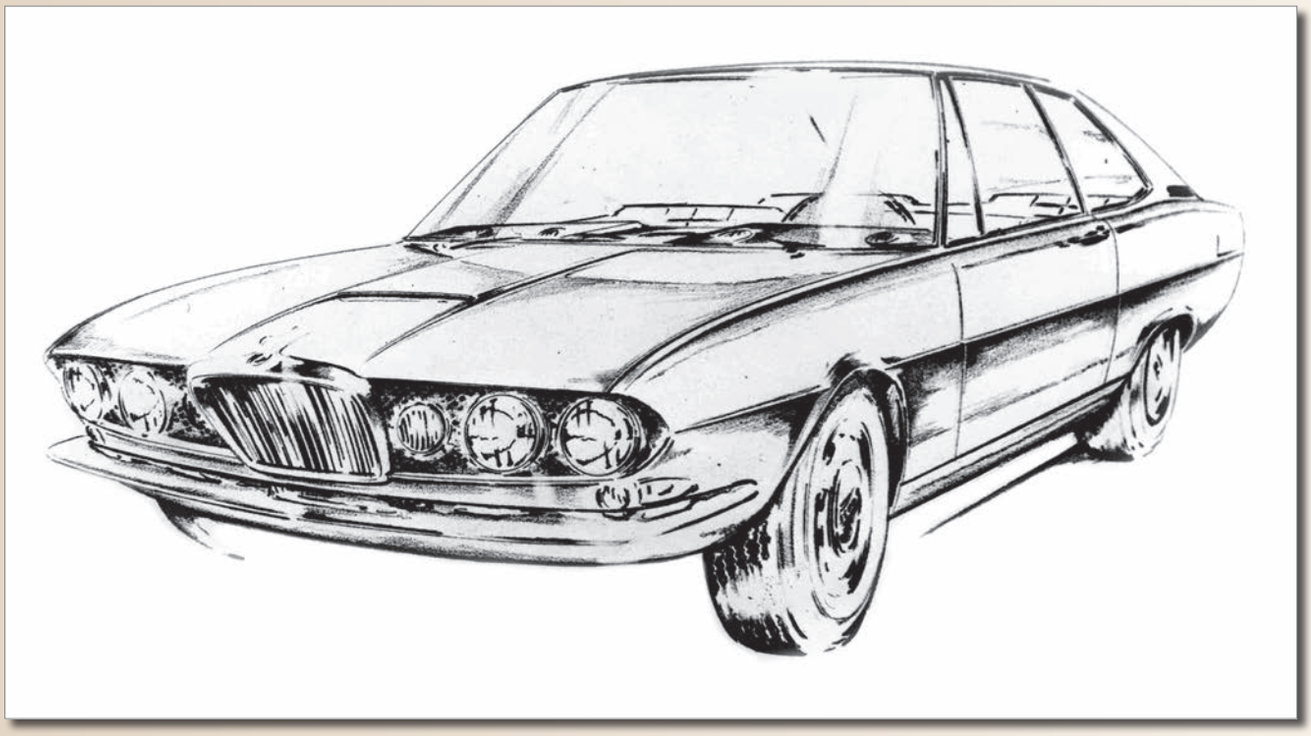
Inside, Gandini retained the Englishness of the car, yet updated it to a certain level of Italianate luxury. The wooden-rimmed steel-spoked steering wheel was typically Italian and the wooden fascia had a certain classical Italian symmetry, with the speedometer and

TOP: Quick renderings by Gandini of the fascia. ARCHIVIO STILE BERTONE

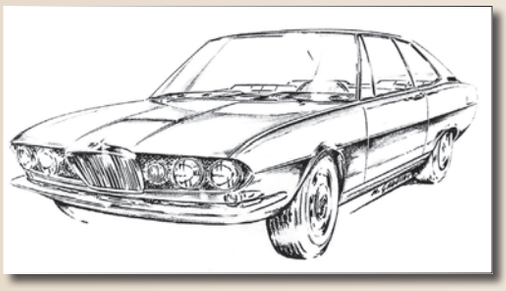
ABOVE: The interior is very Jaguar-like with much use of wood and leather. ARCHIVIO STILE BERTONE

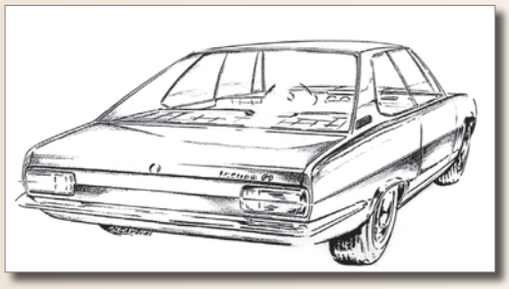
ABOVE LEFT: May not quite look like a Jaguar, but indicative of the future BMW look. ARCHIVIO STILE BERTONE

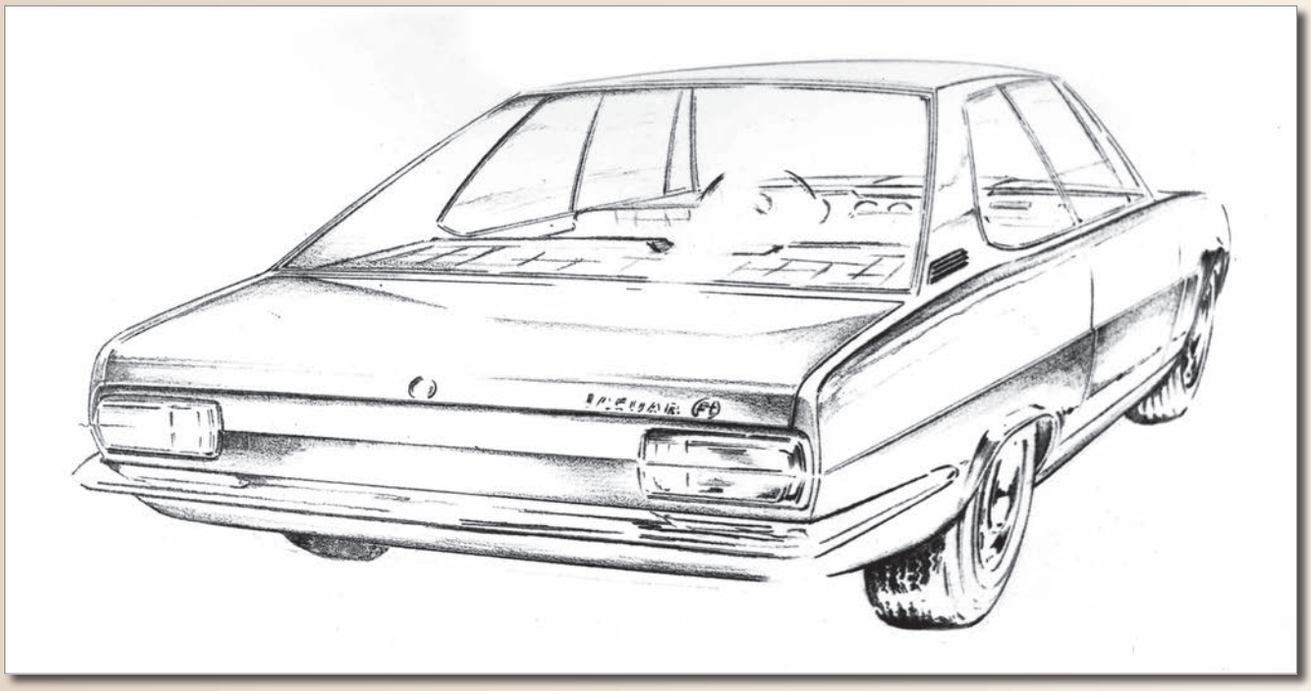
OPPOSITE BOTTOM: At the front a Jaguar-esque grille gives the car a 'family look'. ARCHIVIO STILE BERTONE

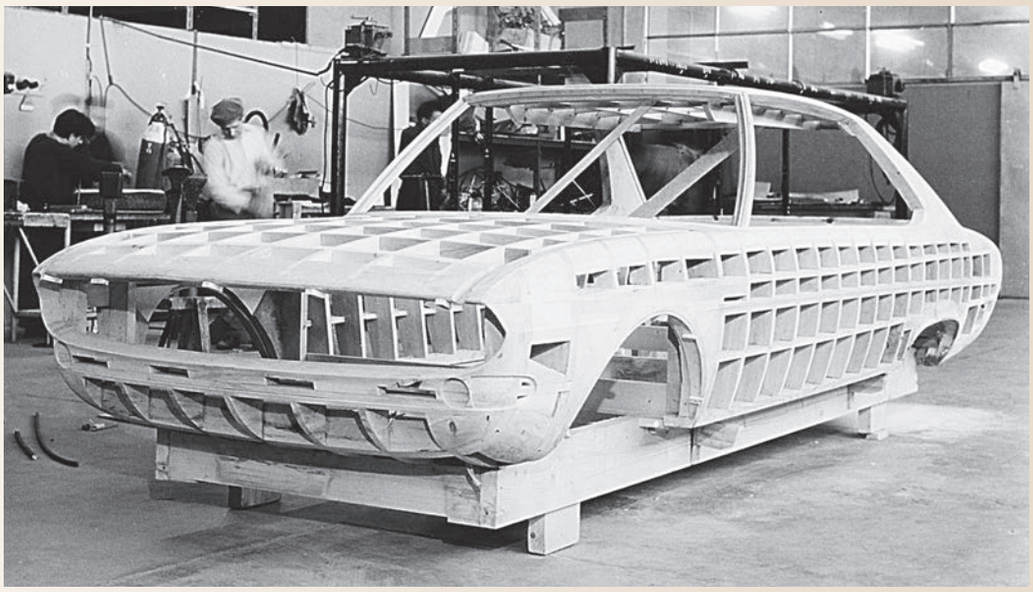


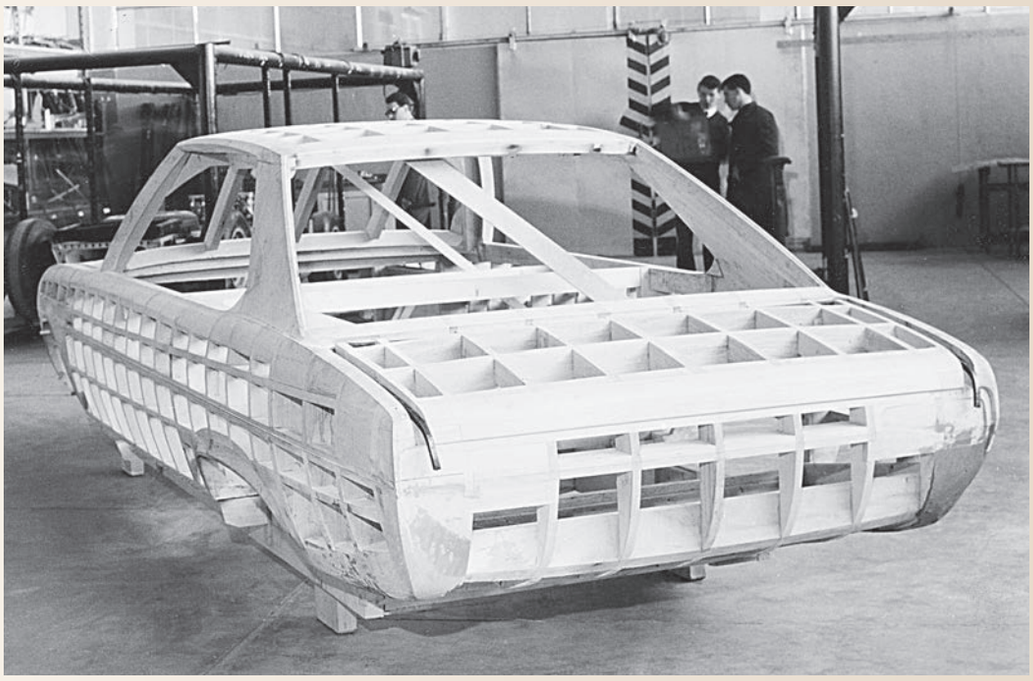
Renderings of front and rear three-quarters by Gandini; smaller images (at right) of the same renderings with Gandini's signature, but erased subsequently by…? ARCHIVIO STILE BERTONE/ AUTHOR'S ARCHIVE











The wooden armature buck, which formed the base for shaping the steel panels of the prototype.
ARCHIVIO STILE BERTONE

tachometer set directly in front of the driver, and the four less important instruments across the center. The sumptuous seats and door trims featured classical beige leather, nicely matching the metallic champagne gold color scheme of the prototype.

The Jaguar FT (named after Ferruccio Tarchini) was also unveiled at the 1966 edition of the Geneva Motor Show, but on Tarchini's own stand. Though handsome and distinctive looking, the FT did not excite Jaguar enthusiasts, and only one more car was ordered by a wealthy enthusiast in Madrid. This car was completed in 1967, based on a Jaguar 420 chassis (which was similar to that of the S-Type's) and the light green colored car was shipped out to Spain, where it remained off the circuit before coming up for sale in 2011. Though many may argue that the FT hardly looks like a Jaguar, it does give a good indication of the direction that Gandini was taking for other cars such as the very influential BMW soon after.