Leonard M. Casillo Oral History

Interview number: 91.1.1673.94

Reminiscences and Interview Recorded: September 1985

Part of the Edsel B. Ford Design History Center Oral History Project

Audio interview transcribed: July 2022

Benson Ford Research Center
20900 Oakwood Boulevard · Dearborn, MI 48124-5029 USA
research.center@thehenryford.org · www.thehenryford.org

Note to Readers

The Automotive Design Oral History Project, Accession 91.1.1673, consists of over 120 interviews with designers and engineers conducted during the 1980s by David Crippen of The Henry Ford.

This transcript was produced from digital audio transferred from original audio tapes found in the accession. Transcription work was performed by Audio Transcription Center, Wakefield, Massachusetts.

For more information, please contact staff at the Benson Ford Research Center (research.center@thehenryford.org).

- Benson Ford Research Center staff, 2022

91-1-1673-94_Casillo-LeonardM_1985-09-17_Sides1and2

DAVE CRIPPIN: This is [Dave Crippin?], and this is September 17, 1985. We have a career design interview today with Mr. Leonard M. Casillo, C-A-S-I-double L-O. Mr. Casillo has been with General Motors all of his design career, and he is currently assistant executive designer with the Buick Automobile and Cadillac section studio. So we'll ask Mr. Casillo to begin at the beginning and to recount his design career in some detail.

LEONARD CASILLO: Well, to go way back, I would have to say that the earliest recollections I have as to [00:01:00] any idea at all where I'd be focusing my future years probably happened in my junior or sophomore year in high school. I guess I had -- even prior to that, I remember seeing books of mine from grammar school with cars cribbed in the margin and planes. And you'll hear this story, I'm sure, if you talk to any designer. The first signs of the sickness appear at a very early age, and I think we all share that common trait. Either it was an almost uncontrolled obsession with building models or sketching cars, and in my case, it was both. But at that point in time, I don't think I knew what it was. Somewhere in high school, I

realized that I had a fascination for automobiles, particularly drawing automobiles, and I thought...

DC: Where did you grow up, by the way?

LC: [00:02:00] Back in Connecticut, the East Coast. Born and raised out east. The only other place I've ever lived, I spent a few years when I was very young, during the war, in Texas, where my dad was stationed, back and forth between Texas and Washington, D.C., which was my mom's home, and Connecticut, which was my hometown. But I thought at that point in time that what I wanted to do for the rest of my life was be an illustrator, and that was only because -- and this probably due to my naivete at the time, but I guess I really didn't know that there were people that designed automobiles. I just assumed that somehow they happened and never really had focused on or thought all that much about the people that might have been responsible for that until I was about ready to graduate.

[00:03:00] We had a couple career day opportunities at my high school, and they had some representatives from the local college there. And one of them was representing this profession called industrial design, which didn't sound all that great to me, industrial design. I had this image of large machinery and smokestacks and couldn't quite imagine

how a designer would fit into that, and that was because I had very little understanding of what industrial design was. Now, that changed shortly after that, and I would have to say that that particular career day was probably one of the most -- if not the most -- significant day of my life because they had an actual practicing designer there. I wish could remember who it was. He was an instructor at the school, but he was a fellow that had a good deal of experience as a designer.

DC: What high school did you go to?

LC: University of Bridgeport, which is also in Connecticut. And he told us what he had done for a living, and I thought my god, he actually sketches [00:04:00] and creates shapes, forms, and concepts for table radios, clock lamps, whatever it was, and he gets paid for this. And I thought that’s a delicious career. I realized how significantly different that was than being an illustrator would have been and realized also, very quickly, that illustrating wasn’t what I really wanted to do. It was merely a means to an end. I loved to illustrate cars, but it was the cars that I loved, not the act of illustrating, although I enjoyed that -- still do.

So at that point, I had elected to pursue an industrial design career, which was four years at the University of Bridgeport. Now, that still was a somewhat novel beginning, and while I'm not totally unique in this building, I would say that that's a minority starting point because a good deal of the people that work in this building [00:05:00] received formal transportation training along with their industrial design. ArtCenter College in California, which was and still is one of the ranking schools in car design, teaches a broad spectrum of design, but they specialize in a variety of different segments within that broad spectrum of design. And one of them is a transportation program, which has been, through the years, one of the most vigorous and comprehensive.

Now, I had nothing like that. The closest I could get, in my industrial design training, which is really not all that different than automobile, I still maintain that a good designer can design an automobile or a piece of hi-fi equipment or a piece of furniture, if he's a really good designer. But coming out here to be a car designer, it was a slightly different starting point [00:06:00] than the majority of people who were working here at that time, who had formal automobile training.

DC: How did that come about?

LC: Well, the fascination for automobiles never quite left me, and while I was fascinated by design, I found that whenever we had the latitude to assign ourselves a project in school, I'd turn it into a transportation program. There was a certain amount of -- I won't call it negative reinforcement, but there wasn't the overwhelming support for doing that because throughout the years, there's been a bit of a split in terms of philosophy between the car design world and the world of industrial design, that whole body of professional designers.

DC: (inaudible)

LC: Well, I think that the gap has closed in recent years and for a variety of very good reasons. [00:07:00] I think that what we do today is much more professional and more profound and is the result of thinking before you leap. We don't just sit down and sketch a car today. There's a tremendous amount of information that needs to be compiled before we even start to draw. And while nobody would deny the importance of the emotional appeal of a car -- because I still think that's what it all still comes down to.

When somebody walks into the show room, if he isn't emotionally moved, there's a chance you've lost that sale.

Now, he may have a list in front of him of specs. He may want miles per gallon. He may want trunk volume. He may want certain options, but if there isn't some affinity, if he doesn't see that car and say, "Boy, there's something about that that I really like" -- and I think that's still unique to the automobile. There's still a good deal of emotion in that relationship.

[00:08:00] But if you separate that from the art of designing a car, I don't think it's all that terribly different from designing anything. But it was a little bit more difficult road to follow for me and for others like me who came out here because we were put in a training program as soon as we were hired. We were hired on as temporary. I guess they called us temporary employees. Every three months, we would have an evaluation period, and if we passed, we'd go on for another three, and it was a six or a nine months' indoctrination and training program.

DC: Did Bridgeport have a placement program? Would GM come?

LC: We were toured by GM. The fellow that representing GM and touring the design school came through our school, but it was largely because I was making all this noise out at UB to my dean, who wasn't very supportive. He would look at my quizzically sometimes [00:09:00] and say, "Are you sure

that’s really what you want to do with your life?” I said, “Yeah, I really have this passion to do cars.”

DC: That dichotomy still existed back then.

LC: To some degree. I think my dean was not on the other side of the split, so to speak. Even though he was a highly regarded member of the practicing design community, I always sensed that [Bob Redman?], by professor, had a deeper understanding of if not so much what had been done, the potential for the automobile to make a significant contribution, as far as design effort was concerned. When he knew and realized that I was really set on this, he helped by arranging to get us on the tour route, so to speak. That was another very significant day, when the fellow, who happened to be [Don Hoagg?] at the time -- he’s no longer here.

DC: H-O-A-G?

LC: H-O-A-G-G, I believe.

DC: He was then the representative...

LC: [00:10:00] He was the head of the design and orientation program that we had downstairs at the time, and he was the fellow that would tour the schools. He told me what I needed to do, and of course, the portfolio that I would have put together in my senior year as an industrial designer would not have been the kind of portfolio that I

would have needed to get in here. I remember I had to go through that a couple times because my first efforts at automobiles were probably viewed, by this building anyway, as somewhat unprofessional. When you're isolated, I think they were well-designed, but you just don't have that feeling for automobiles when you're working apart from the car industry, like I was, as an industrial designer.

I think what I had to say was probably quite good as a designer, but what I would have then done [00:11:00] after my nine-month training program, where I was exposed to all the engineering and had a better understanding of how you create a car, it would have been an entirely different answer, at that point in time. The program was necessary for someone who had no formal transportation training, which was myself and two or three other people, two of which are still with GM, John Schinella, who was runs Pontiac 1 studio...

DC: How do you spell his name?

LC: S-C-H-I-N-E-L-L-A. He was also from the East, and George Gallion is the chief designer at Opel now. He started here, and he had a number of years here at GM before he went to Opel.

DC: How do you spell his name?

LC: G-A -- it’s either one or two Ls. G-A-L-L-I-O-N. George, John, and I all started in that same program together, and we came through it together. We were a bit of a test program because I think...

DC: Is this in the late -- early ’60s?

LC: [00:12:00] ’61, yeah. That’s the one date I remember. I think that would correspond. But largely, due to Chuck, Chuck Jordan, who at the time, saw the need to get a variety of mindsets of philosophies in here, because at that point, I think ArtCenter was probably supplying the vast majority of designers to the domestic industry. And I think it was Chuck who, strongly as anybody, saw the need to get other perspectives involved. Naturally, being trained as an industrial designer for four years, I would bring something a little different into the mix.

Those of us that had that kind of a background would naturally -- even though we would come out here and go through a nine-month training program where we became familiar with the process of designing and creating packages and designing automobiles, we would be coming in from a slightly different perspective. [00:13:00] If I even pull myself out of the picture and just look at the people that have come into the organization with that

background, I think it's been healthy for the design community within GM, and I'm sure that Ford and Chrysler have opened up their sources also in the past 10 or 15 years.

DC: It's interesting. Why do you think -- Jordan was involved with ArtCenter, wasn't he?

LC: Yeah. Now, Chuck had, I believe -- you'll want to verify this, but I believe Chuck got his training through MIT.

DC: Yeah. He has an industrial background.

LC: Yeah. So it was probably not just coincidental that he felt that there are other sources out there that we ought to tap. But it was a difficult road for those who came in from the outside. When I first came here, I was put into a room with also other ArtCenter students who were marking time [00:14:00] to get assigned -- awaiting assignment in studios, and of course, I was overwhelmed, absolutely overwhelmed. They taught a level of proficiency and technical skill in terms of illustrating that was miles beyond anything that we had learned.

As an industrial designer, you used your artwork primarily as a tool to communicate, and you sold through a model or the finished product or a variety of different expressions. But because it's so hard to get to an automobile model, you

just don’t say, “Hey, that’s a nice sketch. Let’s make a model.” It’s a bit more complex than that. You could make a model of a television in a day out of wood, carboard, and some knobs, and say, “Hey, now that looks pretty good. I think there’s potential.” The car is a little bit more difficult to get at, and there’s 100 considerations that have to be factored in before you can do a full-size model.

[00:15:00] So as a result, I realize now artwork is very, very important because you have to be able to draw exceedingly well. You have to be able to sketch that car in as convincing a manner as is achievable really because what you’re trying to do is convince somebody that it’s worthwhile to invest the time and the money and the effort to make a full-size model. Your drawing has to right on. Your rendering abilities have to be very good. They have to be convincing. The way you present your two-dimensional artwork, I learned and I realized, was very, very important to automobile design. While you could logically argue that as an industrial designer, there were other ways that you could get to the finished product maybe quicker, with the car, you didn’t have that luxury.

DC: They didn’t want to deal with the chassis or a dimensional drawing.

LC: No, no, no. [00:16:00] I think that nine months was spent, among other things, as well as learning the process, really learning to become comfortable enough with drawing, so that I could draw even more accurately than I had been trained, and, of course, quickly. We would do finished renderings for our product design usually as a portfolio piece, and it was almost after the fact. You'd probably sold your design or had a pretty good indication that you were on the right track and you'd invest a large amount of time in a finished rendering. You don't always have that luxury with a car design. Now, we'll do finished renderings, but usually that first sketch is what sells the design, and you've got to be good enough, as a first sketcher, and quick enough that you can convince somebody that that's worth pursuing.

I probably devoted as much of that nine months to developing those skills, and [00:17:00] what I feared most, which was my ability to do that, turned out to be without any real foundation because once you are exposed to this environment, and you're surrounded by people who have that, it rubs off very quickly. That's where I go back to my original premise. If you're a good designer, and you've got a good foundation as to what makes an appealing form, what makes a functional form, the ability to marry those

two together, you can probably pick up those illustrating skills and the ability to picture even more accurately what a car looks like in a two-dimensional media.

DC: Two questions come to mind. First, did you have a training supervisor that acted as a buffer for you?

LC: Yeah. The individual who was on that tour group was also the fellow that [00:18:00] operated the school, in addition to an engineer and a modeler, who was the supervisor for a group of modelers that were, some, also in training to be modelers, but one or two, I believe, had enough experience that, along with the leader of that group, there were people there that knew the process for modeling, whether it be scale or full-size.

Now, the interesting thing is we did a lot of modeling in my four years as a practicing industrial designer, and I believe, to this day, they model, and the designer does a lot of his own modeling. We used to fabricate sketch models and clay models and plaster models. Your training as a designer is a pretty broad-based training. Now, here, as a designer, we work with modelers, but the modelers actually do the physical modeling. [00:19:00] Many, in fact I'd say the vast majority, of our modelers had some design training or fine arts training, and they bring to it

a very highly specialized skill. They are masters as sculpting surface.

DC: Sort of a craftsman's guild kind of thing.

LC: Yeah. So you learned to work with people like that. Now, there is nothing that precludes a designer from picking up a tool and doing a sample section or asking a modeler, "Suppose we did this. What do you think you could do? If we gave you this typical section, could you develop that in a four-inch spline surface and then highlight it? How do you think that would intersect?" It's a very unique working relationship that the designers and the sculptors and the engineers have in the studios, and probably somewhat unique because I do believe that the vast majority of product designers still do a lot of that work themselves.

DC: The other question was [00:20:00] was there any friction between -- such as yourself -- the non-art school graduates and the industrial design graduates?

LC: Well, I certainly don't recall that there was any. You would have expected to find some, but I found most of the people that I worked with to be very helpful.

DC: And supportive.

LC: I think I might have anticipated that, quite frankly, because I think the split over the years has been

perceived, at least by those of us in the auto design world, to be a bit, for lack of a better definition, elitism on the part of the industrial design community, who regards what they do as more significant, more profound, and of more lasting [00:21:00] benefit to humanity and to society. You know, we designers can get pretty lofty in our descriptions of what we contribute to the world. But if we didn't believe that, then we probably wouldn't do what we do.

DC: But your industrial design curriculum stood you in very good stead to work into areas other than just simply surface design.

LC: Yeah. I guess the point, too, that I was really leading up to is car design today is not the same as car design 20 years ago. While I see the two professional really coming much closer together, really more correctly stated, I've never sensed that they were that far apart. But in all truth, what we do today and the factors that we have to consider when design a car are probably infinite more complex than they were 20 years ago. I think when I started here, [00:22:00] it was shortly after that the Naderites struck, and that affected us in a profound way. It affected car design. It affected automobile

manufacturing as much as anything has ever impacted that industry.

It caused a lot of soul-searching and a lot of looking inward. Were we really building safe cars? Were we really building cars to last? Was our design effort really contributing something to the worth of the vehicle? I think today, it is, but I think there were excesses in the ’50s and ’60s on the part of design. We were called stylists, and this was called styling back then, and you could argue that styling more aptly described what we did 20 years ago. It was a cosmetic approach to car design, whereas today, it is [00:23:00] a total approach. We start out influencing, to a large degree, right here in this building, the very packaging of the automobile. It starts here.

We do a tremendous amount of research to determine, first of all, what we’re aiming for in the marketplace. We find an opening with the help of the divisions and marketing and all the various inputs. We say we need a car of such and such a wheelbase, of such and such interior dimensions, and overall length to sell in this price category, and it’s got to have high style, but it’s got to have a utilitarian

functional look. We'll get a fairly broad definition in our hands, and then we'll put a package together, and we'll work around that package. I will even venture to say that while no one knows what the design is until it emerges, we probably have a perception of the mood, at least, when we start out [00:24:00] that separates the way we approach it today as opposed to the much more superficial way.

Now, that's not to say that even during the superficial approach, you couldn't come up with an absolutely gorgeous, stunning shape, and some beautiful cars were done prior to the excesses of the '60s that still affect me deeply as a designer. But I think what we've, in effect, done is elevated the craft to the point where what we do today is virtually the same thing as a good, solid, upstanding industrial designer does when he sits down to do a stove. He takes factors into consideration like reach and where the heating elements are and where arms are going to be relative to heating elements, the human engineering factor, the cleanability, the durability, the usability, and it's got to look appealing. It's got to be something that a housewife would say, "That would look pretty in my kitchen. [00:25:00] I like that." All those factors come into play, but I think we do the same thing today.

DC: When you got here in ’60, Earl had just retired a couple years earlier, and his influence was still being very strongly felt, was it not, through his successor?

LC: Yeah. I think Bill largely viewed the automobile from an almost purely emotional standpoint. I think that the business of designing cars has simply changed significantly from even when Bill was here. I maintain that you can’t lose sight of the emotional appeal, but I don’t think you can put a car together that’s viable in today’s marketplace solely on the basis of emotional appeal. It’s got to have a real, firm foundation. [00:26:00] There has to be some reason for that car looking the way it does.

I guess when I look back, and I did a little thinking about this just last night, whether it was the luck of the draw or whether it would have occurred regardless of where I ended up, I guess I still kind of believe that my choice of studio -- it really wasn’t my choice. I was assigned to Oldsmobile Studio as a designer fairly early in my career. I only spent a couple of years in Chevy, and while I didn’t know that at the time, I was starting out on an adventure which would have myself and Oldsmobile wedded together for 12, 13, 14 years. We’d have to sit down and pour through that. But I spent about a year or two in Chevrolet as a

beginning designer, was transferred to Oldsmobile as [00:27:00] a practicing designer.

DC: Who was head of Chevrolet in those days? Do you know?

LC: Irv Rybicki.

DC: Oh, okay.

LC: Irv was my first boss, and Hank Haga was his assistant, and Hank is now the head of our ACC out on the West Coast.

DC: How do you spell that?

LC: Haga is H-A-G-A.

DC: ACC is?

LC: The Advanced Concept Center. And I think I...

DC: Irv was a good teacher? (crosstalk)

LC: Yes, he was. I guess the thing that first impressed me as a young designer was the way Irv listened to me. I remember the first day I went in that studio. Okay, I'd had nine months of indoctrination and training. I felt like I knew how to act and how to go about my craft now, but if I told you I wasn't intimidated when I walked into that studio, then I'd be telling you a lie. I'll never forget. I hadn't been in that studio a couple days, and we were standing around, looking at the automobile [00:28:00] and the platform. Obviously I had absolutely nothing to do with that car at that point, and I made some comment.

The comment was perhaps intended as much for myself as anybody, and I felt the need to contribute, and Irv turned to me and said, “Why do you say that?” I thought oh god, why did I say that? And I proceeded to explain, and by god, he listened to me and nodded, and I thought wow, that wasn’t bad. I walked home that night thinking well, okay. I might just make it. And I enjoyed that year and a half, two years in there. That was a good place to start out. As I say, when I got transferred to Oldsmobile shortly after that...

DC: What was the reason for the transfer? Do you know?

LC: We simply -- sad to say, I think there was probably more movement back then than there is today. [00:29:00] We’ve got so much more work per individual today that any time anyone even brings up the subject of moving some people for the sake of getting new people in new environments, we think, “But he’s got another week on this project and a couple more days on this. Maybe in another week or two, we can talk about it.” We really are handling a vastly increased load over what we were doing per man when I started. But the point I wanted to make about Oldsmobile is I guess...

DC: Excuse me. (inaudible)

LC: I probably didn’t realize this at the time, but Oldsmobile had made a few statements, the most profound being, perhaps in my eyes, [00:30:00] the ’66 Toronado, which, interestingly enough, was not a tremendous commercial success, but affected me deeply as a designer.

DC: Did that come out before you went to the studio?

LC: Yeah. Essentially, that car was done by the time I came into the studio, almost at the point that that car was... They were just lifting the brush when I got assigned. But I remember the effect that that car had on me. Without sounding melodramatic, that was probably the third most profound thing to affect me as the designer, thinking back to the day I got visited in high school and my experiences in school. Then on seeing that car, I guess I felt like you might almost want to just put your pencils away and pack up your gear and go home. I couldn’t imagine anything [00:31:00] being any more perfectly stated than that car, the proportions, the balance of the line, the graphic front, just everything about it, I literally fell in love with that automobile.

DC: Who was responsible for that? Do you remember?

LC: I think Stan. Stan Wilen was running the studio when that car was designed, and I remember hearing about a fabled red rendering. You’ll have to ask someone about the, quote,

red rendering, unquote. That rendering, supposedly done by one of the designers at that time, was literally the car. It was one of those happy occurrences where a designer lays something out, and it is just so well-stated and captures so much of the feeling that it literally becomes the car. And don't let me forget to make a point [00:32:00] about a similar Toronado at the wrap because something else quite similar to that happens. I was the chief in there, and I can talk about that.

DC: For the transcript, how do you spell Stan's last name?

LC: W-I-L-E-N. But that, in addition to affecting me very profoundly, told me something about Oldsmobile. Now, the Buick Riviera was an exceedingly gorgeous car also and the Cadillac Eldorado. All three of the E cars of that era I thought were beautiful cars. But the Toronado had a mechanical quality, and the Riviera had a graceful quality, and the Eldorado had an elegant quality. Those are my adjectives, but that's the way I saw those cars. And while I'm certainly moved by elegance and while I'm certainly moved by those other attributes, I have always had a fascination for the mechanical aspect of design.

[00:33:00] How do you make something that is mechanical -- and an automobile is obviously mechanics personified -- how

do you make something like that still graceful and still an emotion product and still something that has emotional appeal? Obviously you take a slightly different approach with that philosophy than you would the Buick Riviera, which for me was a beautiful, organic, fluid, fluid design. It wasn't so much mechanical as it was just sensuous and organic. But I clearly had a fascination for the mechanical aspect, and I think that followed me throughout my years with Oldsmobile. As a designer, it seemed to let me think about the automobile in such a way that it gave Oldsmobile a very, very unique character, which I think survives to this day.

I used to think about Oldsmobiles [00:34:00] as they had been designed from the late '60s, through the '70s, and into the '80s, and for me, there was always as quality about those cars that I liked. For lack of a better definition, it was a very mechanical, functional, deliberate look. As a designer, it enticed me and lured me on, and as a studio chief, which I became as an assistant in Olds for three or four years, and then ultimately became studio chief.

DC: Was this in the '60s?

LC: I think I went into Oldsmobile as the chief in the early ’70s.

DC: But you’d been with them for about...

LC: But I’d been an assistant in there for about four years prior to that, and I left for, I think, two years in between that point in time to work as an assistant in Cadillac for a year and run my first studio, and that was my other year in the advanced studio, where I ran an advanced Chevrolet studio for a year, then back to Oldsmobile as a chief. At that point, I felt that -- I won’t use the word mandate, [00:35:00] but I really felt strongly that as a chief, if I could do anything in there, I wanted to continue and build upon what I had always found to be the most fascinating and appealing aspect of Oldsmobiles. And I felt we had done that. As an assistant, I felt that I had contributed towards that, and as a chief, I really felt that that was where I wanted to take that automotive division.

DC: It was the first production transaxle, as I recall, in the industry, wasn’t it?

LC: Yes. I believe you’re right.

DC: The Oldsmobile is unique, I think, in design history. I think it occupies a special niche, with a certain elan that no other product has.

LC: If you look at Oldsmobiles down through the years, say from the middle ’60s on, the thing that endears it to me over and above this almost subliminal quality is that there has been [00:36:00] a recognizable clue -- we call it road graphics -- but it’s a recognizable clue that has always been in those designs. I said that I wanted to continue that, to not lose that aspect. Oldsmobile had split grills in the middle ’60s, and we found ways to work with that as a signature. Even though fronts got lower and even though light configurations changed and went from single rounds to dual rounds to rectangular and now composites, and even though we would change the faces of those cars drastically, we always managed to find a way to put that signature in the front of the Oldsmobile.

It didn’t have to be the same. Sometimes it was a chrome centerpiece, car-color piece, or just a bar, but we always managed to find a way to sign the drawing, so to speak, and say Oldsmobile out front. And in the rear, the Oldsmobile [00:37:00] graphics, to me, have always been typified by a no-nonsense, fairly large, bold, graphic approach to a taillight. Some car divisions chose louvers. Some would have very thin, elegant lights, three rounds per side for Chevrolet. But Oldsmobiles, the overall configuration

changed, but it was always a large, block graphic. It was very functional, no nonsense. A square, it lit up, and it said stop light, turn light.

And we managed to keep that, and yet obviously part of our business is to initiate change and to continue moving ahead and doing designs that have added appeal and stay contemporary and stay fresh. But the thing that I found so unique about Oldsmobile is we were able to do that. We were able to move ahead with our design philosophy, as it were, and continue to do increasingly [00:38:00] contemporary cars, more functional designs. We were able to do all the things that you needed to do, and yet we always had, I think, that real strong advantage of being able to sign the drawing and put that Oldsmobile signature.

I sensed we had it during the years when some of the other divisions were floundering. Pontiac had a very strong image in the early ’60s, and then they lost it for a while. I think they lost it when they abandoned some of the clues, some of the very subtle little elements in the design that we were able to work with in Oldsmobile. Even to today, there still exists, under those considerably lower aerodynamic fronts that slope back, that are very smooth

and very fluid and have none of the qualities, form-wise, of their predecessors, and yet you can still go back in [00:39:00] and make that statement with a grill texture or a center bar. I think that afforded us the opportunity to keep a very strong identity for Oldsmobile throughout the past 20 years.

DC: (inaudible) in recent years, the Rocket symbol, too, was, I think, (crosstalk)

LC: Yeah. We've never really abandoned the Rocket. We've contemporized it. We felt that it's V2 heritage was starting to look a little dated and tired around the middle '70s or so, and middle to late '70s, early '80s, we offered some contemporized versions. At one point, we really dipped back into the archives, and we pulled out the original old Oldsmobile emblem from the Curved Dash era, [00:40:00] which we still use on some cars today as a model identity. The '98 has sported that emblem, I would say, for the past five or six years, in addition to the Rocket. The Rocket is, of course, the divisional identity, and in this case, the old emblem was a device we used to get model differentiation.

DC: What was that emblem?

LC: It was a shield with three acorns and a spur. I had a copy of it somewhere. In fact, there's a reason for all of

that. The reasons have faded into oblivion. I can't remember quite what they were, but we liked the idea of going back and pulling that emblem out and putting it in a fairly contemporary environment.

DC: A lot of companies have done that. Ford did it.

LC: Ford's done it with their oval and the Ford lettering, yeah, and that emblem is on the 98s. The current front-drive C car still has that emblem.

DC: (inaudible)

LC: I believe that does. [00:41:00] There were two or three design iterations of that emblem, and a true historian could probably tell you no, there was four acorns, not three, or the spur was upside down, or the wings were different, but essentially, we took a historical emblem that did exist at some point in time, and it may have already gone through a couple of changes when we elected the one that we liked.

DC: Olds really took up a large portion of your life at the very beginning.

LC: Yeah. As I say, I'd have to sit down and count the years, but I can only recall really one, two, three, four, five -- I think maybe five years, six years out of my entire stay here at GM where I wasn't involved with Oldsmobile in one

capacity, first as a designer, then as assistant, and then as the studio head.

DC: [00:42:00] Obviously you had a great deal to do with the shaping of the current... But can you tell us about how the interplay between yourself, your superiors, the product planners, the body engineers were able to shape this? How were you able to impact on the evolution of design?

LC: Well, I guess I need to have you repeat the question. I'm not sure really what you're driving at.

DC: I'm not really sure either. What I'm looking for is sort of a description of what went on in the planning, in the studio. Take the Oldsmobile as a case history, the mid-'60s and on. The Toronado is '66, wasn't it?

LC: Yes.

DC: It's established as really a front-runner. It's not the bread-and-butter car that [00:43:00] Chevy is, but you've got something, and it's recognized as a really good thing.

LC: It established a design benchmark. It didn't necessarily establish a commercial benchmark.

DC: Obviously, you're not going to tamper with it too much, but you're going to improve it.

LC: But as designers, I think we all recognized that that was a pretty profound statement. I would guess, if I had to point to the reason that we were able to do what we did in

Oldsmobile, you'd have to turn it right back around to our success in the marketplace. Really, the car that started it all was probably the Cutlass Supreme. When that car first started in the early '70s, I believe, it was [00:44:00] really the brainchild of John Beltz, who was the general manager of Oldsmobile at the time. Beltz passed away maybe 10 years ago.

DC: How do you spell his name?

LC: B-E-L-T-Z. But John was a true visionary, and I was in Oldsmobile, obviously, when he was at the helm. He wanted a car that would compete in this new, emerging market of personal luxury cars. The Monte Carlo and the Grand Prix, which were totally individualistic, specific automobiles, were enjoying a very early success in the marketplace. I think we had identified a new market, really, which was personal luxury, and it was personal luxury at an affordable level, where Toronado and Riviera represented personal luxury that was at the extreme end of the spectrum in terms of price.

Here was an intermediate car that suited truly the [00:45:00] heart of the American buying public, and those cars, the Monte Carlo and the Grand Prix, were initially very, very successful cars. But they were also very

expensive from a manufacturing standpoint in that those were specific, unique automobiles. What Beltz did was take the A intermediate car at the time and with a special upper, which was a very formal, stiff notchback upper. The studio was able to show him a car that captured a lot of the feeling of these special luxury cars, only they weren't special luxury cars in that they were built off of a basic, intermediate vehicle that already existed in Oldsmobile's line. But it captured some of that spirit, with a formal, vertical roof line [00:46:00] and the fairly elegant, stately rear-quarter profile that really became a trademark on Cutlass for a number of years.

That car started it off, and he was able to go out in the marketplace with that car. We gave him the design, and I think the studio did a great job of doing a car that didn't have the specifics that the Grand Prix and the Monte Carlo had. It didn't share their extended wheel base and some of the more radical features that made those cars so significant. But it had enough, and he was able to go out there and market that car at such a reduced price that the buyer would go out in the market and see Grand Prix and Monte Carlo, and then he'd go to the Olds dealership, and

he’d see a car that had a lot of those same attributes for a lot less money.

Well, that started the ball rolling, and while that design was not what I considered to be the most significant design, [00:47:00] it led the way and built the momentum up that allowed us to do the car that I really think tipped the ball over the edge, and that was the ’76 Cutlass Supreme. That was the car with the first waterfall grill texture that went up and over the hood. I still think it’s a good-looking car today. Many people came to identify that car with Oldsmobile. The car was successful beyond anyone’s original anticipation. While the first car was successful, this took that momentum, and it really capitalized on it.

It was a very unique look at the time. It had many qualities that hadn’t been done before like the waterfall grill, a very elegant, very formal and sophisticated design, and yet very functional, very clean. It had all those attributes that we said we wanted to keep in our Oldsmobiles. The graphics on the road were distinctive. The wheel openings were clean, round wheel openings, very smooth body side, very functional, deliberate, direct.

[00:48:00] All of those adjectives applied. That fueled that fire and allowed us to continue. But at that point, that car became one of the wonder boys of the corporation in terms of being a successful car.

DC: Do you remember any of the discussions about the studio before you came up with that watershed design?

LC: I think we recognized, at that time, that what we were dealing with here was a bit of a phenomenon because we'd gone out in the marketplace and proven that for a lot less money and content, we could take a basic vehicle and put enough of the attributes in the high style of these special G cars, as they were referred to at that time. We knew the market existed, and you didn't need all of those very expensive attributes that those cars had. [00:49:00] But it also told us now that we really had a hold of something, and we wanted to make sure that we didn't lose it, and that was a real labor of love, working on that '76 Cutlass Supreme.

DC: You've given some hint of the general manager of the division wanting something special.

LC: That was a different general manager at that point, too. That was actually [Howard Carol's?] division, and Howard Carol is our vice chairman now. But Howard was the general manager of the division at that time. I remember one

aspect of the design of that car that rather fascinates me because the first Cutlass was somewhat of an experiment and an effort to do something that we ultimately proved could be done, but now we clearly knew we could do it, and we wanted to really do this thing right from stem to stern. When that car was completed, we all loved the car, and Howard Carol and the division loved the car. [00:50:00] We clinic'd the car. It was one of the first clinics. That was just emerging as a tool, and we had not had much experience with the idea of taking designs out into the real world and saying, "How do you like this car?"

DC: You hadn't done that much before?

LC: Not too much, no. Today, there are still a lot of us who feel that you're almost doomed to failure when you do that. That's asking a guy, "How would you like to get rid of the car that you probably have all paid for and that you're very comfortable with and buy this smart, new-looking car here?" The average guy is going to convince himself he doesn't like it because he really doesn't want to -- in a sense, it means he's going to have to shell out more money. So I think there's a series of built-in negatives when you clinic a car. People tend to be resistant to change. It takes a few folks that are avant-garde enough and leading edge to go out and say, "I want that new, different car."

Then the rest of the world sees that [00:51:00] and wants to identify with this new daring individual. While they don't quite have the courage to take the step first, when they see a few people on their block doing it, then the rest follow. But we clinic'd that car, and I remember to this day, we did disastrously in the clinic. If the clinic was any indication of what we were going to find in the marketplace, we were doomed to dismal failure. They didn't like the car. And of course, we loved it. We said, "Oh, it must be the color or the mix of the people that looked at it, or any number of things." But it's not the design because it's a beautiful car. I remember the meetings that we had at that point, the drives up to Lansing in swirling snowstorms to decide what we could do.

DC: The division was in Lansing all this time?

LC: [00:52:00] The division was in Lansing, yeah. Of course, they were obviously concerned, and nobody knew what could be done in that short period of time. The car was designed, engineered, released, and here we clinic it, and we get these disastrous results. We -- and Bill Mitchell was still here at the time -- said you've got to have conviction. That's a good-looking, gorgeous automobile.

It’ll do well. But division was very nervous because of the clinic.

Fortunately, it was too late to do anything to the car. It was too late to do anything with the car. We just didn’t have time, so the car went into production, hit the marketplace, and was almost immediately an overwhelming success. We may have had a few weeks where people had to get used to the look of the car because it was a fairly radical departure. The front-end graphics were rather novel at that point in time. I think it was if not the first time we took a grill up and over, [00:53:00] it was the first time we had exaggerated it to that degree and really made such a strong statement out of it. I remember watching the sales charts for a few weeks nervously, and then this car started to climb, and ultimately went on to be one of the all-time most successful cars certainly for Oldsmobile and for the corporation.

Really, the momentum that built up from that approach to the car is, I feel, what’s given us the license to continue to pursue that kind of an image for Oldsmobile. Even today, the Cutlass Supreme remains a very high-volume car in the intermediate segment of the market. And if you look

at the car today or look at the steps in between, it had that quality that we said we wanted to keep, that very functional, clean, [00:54:00] very bold approach. We stumbled a little bit in the late ’70s when downsizing became a part of the mix, and we had to suddenly deal with making cars now that were smaller look as elegant as cars we had learned how to do on longer overall lengths and wheelbases. I think some of the interim steps were not as successful as where we are back to day with our approach to that vehicle.

The point I wanted to make about the original red rendering on the Toronado, the last car that I worked on in Oldsmobile as the chief is the Toronado that’s coming out this fall. The interesting thing about that car -- and I think that that’s going to be another fairly significant benchmark design for Oldsmobile. I’m pretty confident about that car, even though there are a number of concerned people who are looking at it from a downsizing standpoint. [00:55:00] We didn’t have that to deal with in ’66. Now, we’re doing two things. It’s a radical new design, and it’s smaller again, and you’ve got to separate one from the other. There are some folks out there that are resistant

to the downsizing. I still think the car is going to do well.

But the interesting thing about that car was one of the designers that was working for me at the time did an original sketch. It still hangs in my office, which isn’t my office anymore, but it’s still in there. Like that red rendering, it captures the very spirit and the essence of that Toronado. He did that sketch, and it was a rough, early sketch, and we saw it, and through all the iterative stages of that design, we never lost that. You can go all the way back to that original sketch. And just like its predecessor that started it all out, the ’66 Toro, which I think is rather significant, the same thing has happened. It's almost come about full circle. It’s an entirely different design.

[00:56:00] The most gratifying thing was an article on the new Toro in one of the car magazines, where they chose to position the new Toro on the front cover, and they’ve got a ’66 Toronado in the background. I don’t know who told them to do that. I’d like to think that they see it the same way we do. If you’ve seen the car -- and if you haven’t, I’d like you to see it -- it has, subliminally, some of the

same qualities as that ’66 car in an entirely different vehicle package. But it’s got a very fine horizontal grill texture, and it’s got a very thin horizontal taillight, fairly bold, round, easy to understand wheel openings. And there’s just a quality in the flow and the boldness of the car that, as a designer anyway, I see its roots, and yet they’re two totally different statements. [00:57:00] I think about that, and that fascinates me. I think that’s a very interesting keynote, especially in the history of the Toronado.

DC: Let’s stop there... Mr. Casillo, may I ask you at this point if you could tell us the story behind the naming of the Toronado? It’s certainly an interesting name and probably a coinage centering around the name Tornado?

LC: We’ve got to go back a ways now because Toronado was named back in the early ’60s when I was working in Chevrolet. We were doing a car that was based around an early ’62 or ’63 Chevrolet Impala show car. I remember one of the co-designers that was working with me on the [00:58:00] project at the time had come up with the name Toronado, as opposed to Tornado, which maybe sounded a little bit too aggressive. We stuck that name on this Impala show car. If I remember correctly, it was a convertible with a special tonneau cover and some customizing done to the

exterior of the vehicle. That was where the name first showed up. I just heard Irv Rybicki telling this story a few days ago. That's why some of it's fresh in my mind. But he had apparently been in a meeting with [Mr. Knudsen?], who was the -- what was Knudsen's connection then?

DC: Chevrolet?

LC: Yeah, he was still with Chevrolet, but somehow, the question came up about what to name this new '66 Oldsmobile, which had no name at that point. Irv had remembered the name that we had stuck on [00:59:00] this show car some two years earlier, which obviously did not achieve a high level of notoriety. He says, "I've got a good name for you." I thought he directed the statement to Mr. Knudsen.

END OF AUDIO FILE

91-1-1673-94_Casillo-LeonardM_1985-09-30_Sides3and4

LC: He pulled that name out (snaps) and said, "I've got a great name for you." It was Toronado. Irv was the chief in Buick at the time that that show car had been designed. I was a designer there working for him. That was just one of

those small projects. It was probably done for a local auto show. The name was stuck on the side of the car and then since forgotten until Irv brought it up again some years later, and it stuck. He mentioned the word, and whoever it was that was listening at that time said that's great, and that became the name of the car. I'd like to paint you a more exciting, dramatic story, but in that instance, I happened to be there, so I recall how that name... But there wasn't a large amount of research and study.

DC: You don't remember who it was who actually came up with it?

LC: Yeah, I do. It was a fellow by the name of [Ira?] Guilford, G-U-I-L-F-O-R-D.

DC: Is he still with the company?

LC: [00:01:00] No. Ira left 10 or 15 years ago, but he and I were designers together. We were probably hired on about the same point in time. The show car, as I say, I'm a little vague, but it was somewhere between, say, '62 and '64.

DC: Chevy show car?

LC: Chevy show car, based on a large Impala. And Ira, who had been doing the car, the show car, came up with the name.

DC: As you mentioned earlier, the Toronado was an instant success, if somewhat of a limited audience, but because of

its price. But it really showcased the automobile product for many years, did it not?

LC: I think it's a little early yet to regard a '66 vehicle as a true classic, but there are those people that feel that it will be a collector's piece at some point down the road. Yeah, it's a unique car in that it was [00:02:00] clearly ahead of its time, but it was, I think, a very success design ahead of its time, as opposed to, say, a design like the Chrysler Airflow, which was also ahead of its time, but was not nearly as attractive to our eyes in that timeframe. I think most designers reacted very positively to the Toronado. The public was just not aware or ready for a deck that dropped off that quick and with a rear overhang that was that short.

It was a very masculine, very, very masculine statement. I think since we've learned that that luxury segment of the market, personal luxury cars, includes a lot of women, and I think women were largely responsible for the success of the Riviera, which was a more organic, and if you can use these words, I think probably a more feminine approach. Toronado was intimidating to many people, in that it was very, very bold.

DC: [00:03:00] I may have asked you this, but why the front-wheel drive? How did that come about?

LC: I guess I can’t really enlighten you much as to the reasons for the front-wheel drive. I do remember, at the time, the early ad campaigns and the TV spots on the car, however, and the shot that I remember to this day was a picture of the Toronado clawing its way up the side of a snow-clad mountain. You know, a lot of us thought, even back then, well, why don’t we just do all of our cars that way? It sounds like obviously that makes a much better vehicle. Now, here we are, almost on the verge of converting just about all the cars we make over to front-wheel drive.

DC: What happened?

LC: As to why it took so long to come about? I think one of today’s recognized advantages in front drive is the packaging. It allows you, as you make the car smaller, [00:04:00] you can eliminate the drive train and the hump in the floor, and you can get a more efficient seating package. I just don’t think that those kinds of criteria were tools that we had to use at that point in time. The gas crunch was something that nobody had even imagined yet, and the idea of down-sizing really hadn’t dawned on us until a number of years later.

At that point in time, front-wheel drive had to survive strictly on the virtues of what it meant mechanically. Although a lot of people talked about the flat floor in the front seat of the Toro and the Rivieras being very, very nice and very unique, it was strictly a feature that you could talk about. The cars were so big back then that it hardly made that much difference.

DC: Riviera had it, too?

LC: No. The first Riviera did not. I'm not sure when the Riviera came onstream with front-wheel drive. The original Riv didn't.

DC: To shift to a [00:05:00] (inaudible) would have been inordinately expensive.

LC: Yeah, yeah. I'm not sure. You probably know, and I can't tell you exactly when the Riv switched over to front-wheel drive. But initially, no, the Toronado was the car that blazed the way, and it was truly an amazing car in ice and snow.

DC: Oh yes, incredible. Not only was it mechanically interesting, but as you've noted, the styling was quite visionary. It sort of gave the Oldsmobile line a cache that they might not have had, don't you think?

LC: Well, Oldsmobile, in my eyes anyway, has always been an engineering-driven organization, at least we'd like to

think that. I think as I said earlier, that kind of engineering undertone, we tried to play that up in the design of all the cars we did for Oldsmobile, [00:06:00] which was a very functional, clean approach to cars that we were able to keep consistent through a number of years. In that regard, the Toronado maybe epitomized the start of what I call engineering focus, really. That car also had a profound influence on a number of other cars that were to follow. It really set the stage. I would say that kind of set Oldsmobile on its course for the next decade at least. To these times now, the influence of that car, I think, are still lurking underneath the surface.

DC: I think it will definitely become a classic 10 years from now. Well, it was quite a triumph for the division and al involved. What next engaged your (inaudible)... [00:07:00] You're now an assistant chief designer at Olds at this point, and you will be for a number of years. What distinguished your tenure there at Olds from '68 to '71, late '70s?

LC: Well, the car that I remember, perhaps, more than any other vehicle that we worked on was the '76 Cutlass Supreme. We were probably working on that design in the '72, '73 timeframe. But as I had mentioned earlier, the Cutlass Supreme had established itself as [00:08:00] a somewhat

less contented competitor to our own G cars, the Grand Prix and the Monte Carlo, but on a basic Cutlass underbody, without the additional wheelbase that the G cars had and without a lot of the specifics. And it had gone out there and established itself as a pretty good value and a strong competitor for the more expensive G cars, and that really launched the name Cutlass Supreme.

I guess a lot of us felt that the ’76 was the first time we took that car and really had a go at it, stem to stern, as far as the design. We knew the car. We knew the market we were in, and we knew what we were competing with. That car was probably the car that lent as much additional momentum to the Cutlass [00:09:00] story as any car we did, with the exception of the very original vehicle.

DC: When did the first Cutlass come out?

LC: Boy. The first Cutlass. I know it was in the early ’70s, but I’m not exactly sure. I get a little foggy on my history there, and I don’t believe I was in the studio at the time that the first Cutlass came out.

DC: It sort of chugged along as a fairly good car, but it wasn’t until the Supreme came out that it really took off.

LC: Yeah. I think that’s fair. Of course, the styling on that car, while maybe not quite as radical as the Toronado, was

considered very unique for its day. It was one of the first cars to take a grill and wrap it up and over the front-end panel and onto the hood surface. The roof line was very, very distinctive with a somewhat [00:10:00] [V'd?] backlight and the isolated quarter windows and the formal rear quarter. The car had an image that was very convincing, and it was immediately recognized. I guess I would have to say that that one design was as responsible for the success of the Cutlass in the following years as any car that we've ever done.

In many ways, I think the design is more enduring than some of its follow-up designs, which we had to do when we got involved with downsizing that car. There are people around here that still seek that car out and restore it and drive it around. It is a very good-looking automobile. It was not excessive. Unlike a lot of cars that were done in years gone by that designers have a fond remembrance of, when you come face-to-face with those designs 10 or 15 years later, they almost always embarrass you because [00:11:00] they're not nearly as well-done as you remembered them. The proportions. You're thinking in terms of what you're today and the proportions of the cars that you're working on today, and you tend to be very nice

in your memory to what you did. That's one car that, when I see it, I don't feel any of that embarrassment. I could see that car coexisting with some of the cars we're today very well.

DC: It was clean and crisp and had a tidiness that other divisions had not really accomplished.

LC: And again, as I had mentioned, we had those ever-present clues that made it an Oldsmobile. It made it so easy for us, designing during those years, because while some divisions were looking at sweep lines through the side of the car or painting the scheme on the side of the car -- and that is really what we used to do. We would draw the theme on the side of the car, whether it was a wheel-oriented theme or a sweep line through the car. [00:12:00] The Toronado got its theme by virtue of being the only car that didn't have to do that. We ran a clean surface through the side of the car with just a little indication of a rear quarter, a formal rear quarter fender, and very simple wheel openings, and it had the split grill up-front and the fairly bold, block, vertical graphics in the rear, which we had identified as Oldsmobile clues.

The nice thing about it is that they were clues that we could address without it looking like we had done the same

car over and over and over. The fact that you could still do a split grill, but wrap it up and over the hood surface in a way that you'd never seen before made it extremely fresh. People would see the grill for the first time, and it would catch their attention. And yet, down the road, the road graphics would still be Oldsmobile split grill. We had our cake, and we ate it, too, for a number of years.

DC: Speaking of the Cutlass Supreme now.

LC: [00:13:00] Yeah. And we took the tail lamps, which were very typically Oldsmobile lights, but we added that little additional wrinkle of wrapping that up over The top of the quarter surface, consistent with the grill wrapping up over the front. So there was this very tidy approach of tying all the loose ends together, and yet in the rear, it was clearly Oldsmobile graphics again. I remember in the middle '70s, too, it seemed to be a time when we were searching for divisional identity with all of our divisions. Some were more fortunate and some were less fortunate than others in having marked out a territory that was theirs.

But having cleanliness and a non-fussy approach as your trademark made it very, very easy to take a purist approach to the design. We could concentrate on things like front

and rear graphics and silhouette, and we didn't have to worry about the character of the wheel. [00:14:00] In a division where the wheel opening is part of the theme, you could spend months and months doing variations on an egg-shaped wheel opening until you got the one that suited your theme. Well, we didn't have that problem. With Oldsmobile, you didn't have to try to win an award for uniqueness. Everyone anticipated that the Oldsmobile wheel opening would be a very simple -- in many cases, it was concentric, just a simple round wheel opening that matched the shape of the wheel.

The Cutlass, it was a slightly clipped off, square wheel opening, but it was, again, a very easy-to-understand shape. There was very little that you had to study to understand it. I think that was the thing that made it so easy for Oldsmobile. By lack of having this other quality to deal with, we always had Olds' identity in whatever we did, as long as we didn't steer from that course. I think that's largely true today. But what's happened today that makes it a little tougher is everybody is [00:15:00] moving in that direction. What was once a direction for one division has really become the direction for all automobiles. We do much less in the way of superficial

styling, and I think the idea of clean, uncluttered surfaces and fairly functional form is becoming the trademark of General Motors cars or domestic cars, for that matter.

DC: I think the Oldsmobile division led the way.

LC: I would like to think that Oldsmobile did, in some way, contribute towards that. I think it was inevitable. It was really inevitable that we would come to where we are at this point in time, and I think European design maybe pointed the way well ahead of a lot of domestic automobile manufacturers. They sold a different car for a different reason anyway, [00:16:00] and styling was a much smaller commodity in the view of the Europeans. Engineering and performance were absolutely as, if not more, important, and design as simply what you did to package in an appealing shape. But they did not let styling become the force behind the automobile, whereas in many cases in the ’60s, the styling of the car became the car, and then we applied the engineering and the packaging to the design after the fact.

DC: You’re right. The Euro look was rather stodgy until just very recently.

LC: It was stodgy, but had a more purist approach for the most part, in that it was a cleaner, more functional approach.

Yes, I agree with you. It was also stodgy in their interpretation. But I think it was inevitable that car design eventually evolved into what it is today, [00:17:00] which is very functional, very clean. It's not nearly as superficial as it was in the early years. Yeah, I guess I kind of think that Oldsmobile, as a division, landed there. If you include all the cars in the Oldsmobile stable throughout the '70s and into the '80s, I think you can say that as a division, they were walking in that direction.

Obviously, there were moments of brilliance throughout the domestic auto industry, as well as within our corporation. We have our other examples with F cars, Firebirds and Camaros. I certainly can't say that while a Toronado was very functional in engineering, in its approach, that I didn't find the Riviera to be also a very beautiful form. [00:18:00] I think we may have gotten there with the vast bulk of cars that we did for Oldsmobile ahead of the rest, but it was clear that we were all heading there. Of course, now that we're all there, it makes the problem of what you do do now much more important. The differences become more subtle.

Things like graphics, which that's what you see on the road, the face and the rear of the automobile, are now very important. That's where you get your divisional identity. And really, and I'm sure you've heard this before, but as cars get smaller, you physically have less area to deal with. Particularly when you get down into our smaller vehicles, there isn't room on a 98-inch wheel base car, for example, to draw a scheme on the side of it. You just don't have the room to do some of the Baroque or Rococo themes that we might have been able to do [00:19:00] when you had a huge vehicle to embellish. As our cars downsized, I think that probably played a role in bringing us to where we are today, which is a more functional approach to design.

DC: It's been a long time coming, but I think General Motors has finally reached, I think, the plateau where their styling is crisp and clean and functional and, as you say, less...

LC: And of course, it makes the job, as I said, of the designer more difficult now because your parameters have closed in on you somewhat from what you used to have in terms of almost anything goes. You could use a jet plane as the inspiration for a design or a speed boat. [00:20:00] Although in many cases, I think it was the other way

around. I think speedboats were very heavily influenced by car design in the late ’60s. But today, we look for a little bit more of a reason for what we do than simply pointing to a shape. There was a lot of plagiarism, I think, in the early days, where a B-52 engine could be the real reason for the design of a bumper pod or grill texture.

As designers, we were taken up with the things that were appealing and that were exciting and that we thought were the things that you liked to look at, so it was obvious that you’d take those things and apply them to the automobile. But the ground rules have changed some. And of course, you still want a car to be exciting. You still want a car to be beautiful. [00:21:00] You still want a car to elicit that quality that makes you want to get in it and drive it and makes you want to be seen in it. None of that’s gone away. The love affair is still there, at least we feel it is. But the rules have just changed a little bit.

DC: (inaudible)

LC: Yeah. If you simply look at it from the standpoint of the controls that impact the designer today and compare to that the kind of constraints that he was faced with 10 or 15

years ago, you've got federal bumper specifications, front and rear, that dictate ranges and offsets. You've got all kinds of lighting, height to ground, and offsets to bumper requirements, front and rear, in addition to side-marker lights. You've got safety considerations as far as what constitutes a safe shape versus a hazardous shape. Now, some of that gets subjective, but nonetheless, [00:22:00] we think that generally speaking, flush and round is safer to a pedestrian than hard and sharp with large, deep offsets and sharp edges.

The Toronado would be a good example of a car that, by today' standards, if you were to judge it strictly on the basis of pedestrian safety, would probably be considered fairly dangerous, formidable. Those two front fender shapes were much like hatchets coming down the road. Today, we would never attempt to put shapes like that out in front of the car. We know a lot more than we knew. There's been a large body of information available to us, considerably amount of testing. My point being when you take all those factors into consideration, before the designer even touches a pencil to paper, [00:23:00] so much is known about that car as to what dots have to be connected. That would separate what the designer does

today from what he had to do 15 years ago, when we had an overall length and a wheelbase to deal with.

DC: Package first and design was second.

LC: We probably influenced the package through the designing, whereas today, it's a hand-in-hand process, where we know the niche in the marketplace. We know the size of the vehicle and the weight class that it's going to take to fill that niche. Going in, we've got an idea of dimensionally what that car will be. Starting with those knowns are so much different than what we used to start with.

DC: Back in the early '70s, the decision for the Cutlass Supreme [00:24:00], can you sort of sketch how that came about? Was it a divisional decision? Was it dictated from higher up? Once you had made the merchandising decision, how did the design decision follow that?

LC: Well, now, I'm going to try and reconstruct this as best I can, and I'm probably not the most definitive source because I was not there during all of that. But the way I understand it, the G specials, which were the Monte Carlo and Grand Prix, had been allocated to Chevrolet and Pontiac. That car was not a car that was going to be given to Oldsmobile and Buick. I think the theory being that they had Rivieras and Toronados, which were expensive,

personal luxury cars, and Pontiac and Chevrolet needed something priced below that, but also in the form of a personal luxury car.

[00:25:00] The corporation viewed Monte Carlo, Grand Prix, and Riviera, and Toronado, and Eldorado as much the same type of vehicle, separated only by the cost of the car. Obviously the E cars, as we call them, Toros and Rivs, were more expensive, ultimate vehicles, and the Monte Carlo and Grand Prix were affordable vehicles, but of that same personal luxury type car. They both were image cars, or they all were image cars. Olds was not going to be given a G body. The corporation, I think, viewed those as strictly Chevrolet and Pontiac. What Oldsmobile did was take their A body, which was a slightly shorter car, had a few inches less overall length or dash to axel.

They took that A body, which was the Cutlass, and with the addition of a formal [00:26:00] roof and a specific quarter, they were able to more or less ape the look of these more expensive Chevrolet and Pontiac personal luxury cars. It was okay with the corporation that they do it that way because they were still A cars, and the Monte Carlo and Grand Prix were G bodies. When they actually got

out there in the marketplace and looked so much, to the buyer, like the same kind of car, he didn't see the things that we saw as being so profound separating those cars, like size, a couple inches in wheel base. He saw it merely as a way to get an Oldsmobile, which meant it was an up-level car, at a price that was not as up-level, in many cases, as the Monte Carlo and Grand Prix.

They went out there with a car that had the image, and they were able to sell that car at a significant advantage over the [00:27:00] G bodies. That really launched the Cutlass Supreme. That was when that car first took on the name Cutlass Supreme. I can't tell you the exact year. I know it was in the early to middle '70s that the first Cutlass Supreme debuted. That car was as much the brainchild of John Beltz, the general manager of Oldsmobile at that time, as anyone else. I'm sure he was the force behind finding a way to do a car that the corporation would let Oldsmobile do and get out there and compete in that marketplace.

DC: And you did successfully.

LC: But John Beltz was a visionary. I remember working as an assistant at Oldsmobile for a few years when he was still the general manager. [00:28:00] Even back then, he was talking about doing a vehicle for young people that would

be very, very basic. This was a very small, two-passenger vehicle. The thing that sticks in my mind to this day -- and you've got to recognize that this was back in the early '70s -- he was telling the interior people that he wanted a design that was very basic and very functional. He said, "When it gets dirty, I want to be able to take a hose and just clean it out."

That was unheard of back then. That kind of thinking is what you'd expect today, but to be thinking in terms of a car that basic and obviously aimed at the youth market was something that you didn't see a tremendous amount of back then. The car was still rolling along at a pretty good clip as a living room on wheels for most people. [00:29:00] That's essentially what everyone aspired to. Bigger was better, and there was no concern for mileage or lack of mileage really or weight or size. We had entered into that area with both feet. But John was the kind of guy that I think saw that coming. The car never got done, but there was a model. It was a car that Oldsmobile was very serious about trying to bring to the marketplace.

DC: Did it have a code name?

LC: Yeah, I think it did, and I can't remember the code name. It was probably internal to this building only. It might

have been something like an F-85, which is a name that you could draw out of the Olds archives. In fact, the F-85 was the predecessor to the Cutlass, and then ultimately the Cutlass Supreme.

DC: [00:30:00] The general manager, a man like Beltz, who has vision and a creative flair, was it his duty or his job to pull together, to steer the division in the way that he wanted and the company wanted it to go, but also to pull together the ideas of the product planners, the body engineers, the designers, and the merchandisers? Was that pretty much his...

LC: Yeah, that’s a fair statement. The general manager is our client, and he is the person that we are selling our designs to. We see the general manager as often a couple times a week to sometimes, nowadays, maybe once or twice a month, depending on where they’re located. Logistics has a bearing on that. [00:31:00] If you’re working at Chevrolet, you used to be right across the tracks, and it’s easy to get over here. If you’re in Lansing or Flint, it’s not quite as frequent. But we would certainly bring our thoughts to the conversation when it came down to issues like size of vehicles and where we should go next with this car and what markets we were in or weren’t in or ought to be in or would like to be in.

But the general manager was responsible, in fact is responsible, for that division's participation in the markets that they wish to participate in. At least they petitioned the corporation to go after what segments of the market they would go after. But he can play a fairly large [00:32:00] role in the look of the car because if he's a progressive, forward-thinking general manager, then we're tested. We're tested. Then the question is "I wish you could give me something newer," or "Could you go back and try something that's got a little bit more excitement?," or "Scare me a little bit more" would be a quote that a designer would love to hear from a general manager. On the other hand, you can have a general manager who's very conservative, and we've had them.

DC: Plays a more or less passive role in terms of design.

LC: Well, passive as far as design, but in some cases, not even passive as much as just not wanting to move ahead quite that quickly. As somebody once put it, working in Oldsmobile, the general managers and some of their key executives are largely the type of people [00:33:00] that we sell these cars to. They represent upper-middle class, and 98s and Toronados are the kinds of cars they drive. If you attack their conservatism, which a designer would,

wanting to move ahead, you get the very logical answer. “Well, I may be conservative, but I’m the kind of guy who drives the car that I’m selling, and I say I don’t want to move ahead quite that quickly.”

So the designer has to push as hard as he can against that boundary and get the car as new as he can, under those constraints. It’s very clear for designers. I don’t think we know how to pull a punch. It’s just not in our makeup. If somebody tells me to design a car, [00:34:00] I do the newest, most exciting vehicle I can around the criteria that I’m given. I don’t think I’d know how to do that if somebody said, “Do it half as new as that. I don’t want to make the leap from here to there in one big step. I want to take a couple of smaller steps.” It’s very difficult for a designer to do that. We’ve been forced to do it, but it’s a very painful process, where you eventually get beaten down to a position where you just simply don’t feel that you’ve got a car that’s as new as you would like to have it.

But you can’t walk into that kind of a relationship completely willingly and with a lot of enthusiasm. Your tendency is to do the best and the newest that you possibly

can. I've worked for the gamut in terms of Oldsmobile general management. We've had fellows like John Beltz that were very progressive, and you couldn't be new enough for John. If you did something, and [00:35:00] he sensed it tasted too much like what he had the year before, well, he'd simply tell you, "I think you guys got to try a little harder." You don't have to think long and hard about that to recognize that a designer would thrive in that environment.

The challenge is do not intimidate us. It's what causes us to rise to even greater heights. It's when you feel that you're not allowed to express yourself fully that it's very difficult to become inspired. The general manager can play a fairly significant role in the design of the car. Now, he does not design the car. He has a strong veto vote if he sees something he doesn't like. We're given our day in court, and we can argue, but if he absolutely says, "I don't like that car, no way will I do it," then we really are compelled to go back and give him another alternative or another choice. [00:36:00] We don't always do that willingly, but the general manager has to be nodding up and down in order for the process to work. We'll do our best to convince him of what we think is right, and sometimes

we’re more successful than others. But if he is a conservative individual and feels that he’s right in his conservatism and that I need a car that only moves this far ahead, then that’s going to influence what comes out of our building.

DC: Which general manager, besides Beltz, was responsible for the moving of -- maybe it was he -- moving of Oldsmobile out of the luxury division and moving into the Cutlass Supreme era?

LC: Well, you’d have to give Beltz credit for moving into the Cutlass Supreme. I think that was largely his brainchild. Other than that, I guess I really don’t know that Oldsmobile has moved out of the luxury car [00:37:00] end of the business.

DC: Was Delta 88 a step...

LC: Delta 88 was considered to be an up-level family car, but certainly not a luxury car. I think what Oldsmobile has been able to do, at least in the preceding years, is appeal to a very, very broad spectrum of the marketplace. I think they start out just below Cadillac or maybe just below Buick. If I remember correctly, Buick is perceived as just a notch above Oldsmobile. If you take the three largest cars, the Olds 98 Park Avenue and Cadillac Sedan DeVille, you’d rate them Cadillac, Buick, and Oldsmobile. But I

think we're only talking about a few hundred dollars separating those cars.

Oldsmobile has done very, very well in the 98 segment of the market over the years. I remember seeing some sales figures from some years that they were just almost [00:38:00] dominating that segment, with the exception of Cadillac. Olds has been very successful in keeping their foot planted firmly in that upper luxury end of the market and reaching way down and picking up younger, youthful buyers in not nearly the same income bracket as, say, the 98 and Toronado. Probably the Cutlass Supreme was the vehicle that enabled them to do that. I don't believe that any of the sister divisions ever shared the success that Oldsmobile did in the early years of the Cutlass Supreme. That was, I think, the car that everybody was shooting at, really. There were some years that I know it was the highest single model that Oldsmobile was responsible for, [00:39:00] and there were times when it was also the pride of the corporation. It was one of the top-selling cars in the company.

DC: Oldsmobile always managed to have a sporty, dashing look that really Buick and Cadillac must have envied in terms of design.

LC: Well, I don’t know that they envied, but I think that the sportiness maybe was just another way of saying the cars had their roots in that engineering focus that I mentioned earlier, which I could see as being interpreted as sporty. I think they had such a clearly marked area as where they were that we obviously didn’t want to let another division fall right on top of that. What that may have meant was that some of the other divisions [00:40:00] had to search around a little harder for exactly the image and the niche that they really wanted to occupy.

But I think it was fairly clear that during that period, Buicks were themes that were sweeping lines that went from the front to the rear of the car. We tried to apply that to all the Buicks, and the Cadillac was a fairly stately outgrowth of the fin. It was a truncated rear quarter, but it left you with a very tall, thin taillight. The characteristics of the Cadillac, if I could think of any, were the coffin-shaped hood and the slightly lower fenders.

DC: It also had sort of a dowager look, as if it were the preferred of wealthy...

LC: Yeah. I think that was intentional [00:41:00] in the case of Cadillac. I think we clearly wanted a stately automobile, and you didn’t play lightly with that aspect of

Cadillac. It was very important that those cars maintain a very elegant, very stately, very haughty look. It may have been a little less clear for some of the other divisions where they wanted to be at that point in time. It was clear for Cadillac, though. I don't think there was any mystery or any envy at that point in time, as far as where Cadillac was. I think they were very clearly where they wanted to be, and I think Oldsmobile was very clearly where they wanted to be.

And Buick was just starting to, I think, recognize the need to start addressing the youth market and to broaden their approach. But it was probably a little bit more difficult for Buick to do that because [00:42:00] they had been viewed as, as I said before, just a step down from Cadillac. The big Buicks were very stately vehicles in their day also.

DC: At this point, you have a short stint at Cadillac. What occasioned that transfer? What happened there?

LC: I was the assistant chief designer in Cadillac for about a year, a year and a half.

DC: Early '70s.

LC: Yeah. And I had been the assistant at Oldsmobile for a number of years before that. I think probably, for no

other reason than the fact that I'd been an assistant at Oldsmobile for so long, that when you looked at the record books, it probably looked like a move would just be a good thing. I'd spent so much of my career with Oldsmobile prior to that, that I think it was thought... And if I recall, there was a general [00:43:00] movement in the building around that point in time, where a few of the studios changed hands. That was my first experience in Cadillac and my first chance to do something other than Oldsmobiles for five or six years.

DC: When you first came into the studio, did you encounter a sort of mystic about Cadillac design? Was it sort of untouchable?

LC: Yeah. I think that's very true and probably still is today. I'm in the position now, and have been for a little over a year, of having Buick, Oldsmobile, and Cadillac as studios, to view the designs in a somewhat different way. Prior to this assignment, I had always been responsible for one division. I can see that, in the part of Cadillac management, and I think it's right. But yeah, you move more cautiously with a car that represents the ultimate in your line of cars, [00:44:00] and Cadillac clearly represents the flagship of this corporation. Whatever steps you take, I think you have to be very calculating and

very, very much concerned, in your rush for something new, that you don't throw out the heritage.

That applies more to Cadillac, I think, than any other division. I think Oldsmobile could poke its head into something entirely new and make it work and convince the public that that's okay for Oldsmobile to be there. But I think Cadillac has to be more cautious. While, as a designer, I would like Cadillacs to be new and exciting -- and that brings me to another point, too. I guess back in the '50s, when I was still in high school -- I'm digressing now -- [00:45:00] one of the things that I remember vividly was when the new cars came out -- it's already assumed that I was a car nut at that point -- when the new cars came out, and GM's cars were at the dealerships, the car that I wanted to see first of all was the Cadillac.

In the '50s, for me, the Cadillac was the newest of all of GM's cars. It was the most exciting. As a kid, that would be the thing to aspire to. Boy, a Cadillac. Look at that, tail fins, lights in the fins, and all the things that Cadillac did. I guess I learned a lesson back then, and I preach that today, and that's that I think you can be all the things that you need to be to Cadillac buyers, all the

tradition and all the heritage and all the things that cause you to move in very, very deliberate steps, and still be very new. [00:46:00] It's just that that corridor of newness is a bit more restrictive.

I don't think Cadillac could turn around tomorrow and put a split grill on the front of their car or start to emulate any of the other graphic images that have been available throughout the years. But I think they can still be new and exciting because I remember a time when Cadillacs were very, very new, in fact were among the most innovative cars that GM put out. Then eventually, those things would trickle down into the rest of the organization. A lot of times, they'd bypass Olds, Buick, Pontiac, go right to Chevrolet, which made sense. Obviously the two were never going to compete with each other. They were at opposite ends of the spectrum. What better way to sell a Chevrolet to somebody than to convince them it had a little Cadillac in it?

DC: Along that line, did you participate in the early [00:47:00] discussions on the Seville modification?

LC: No.

DC: The rear end?

LC: That was after I had left the studio.

DC: That must have been quite a revolution.

LC: You're talking about the bustleback?

DC: Yes.

LC: All it was, there was a lot of trepidation on the part of the division when that car was about to come out, and of course, they'd been so successful with the original Seville that you had to ask the question why was it necessary to take that car and do such a radical change to a car that had really established the vertical back light look that's become almost a GM trademark? That was the car that really started the whole thing. I still think it's a handsome vehicle.

DC: [00:48:00] I do, too. It's interesting that today in '85, they decided to drop it.

LC: And we're going to go back to the traditional. Now, again, in the interim, the bustleback car has managed to pick up its following. I could see where that car would have a following, for the guy who wants to be distinctive to a fault, where you really feel the need to stand out in the crowd. The original Seville didn't do that for you. It was a very quiet, elegant statement.

Somebody that would be satisfied driving a Mercedes or a BMW would be satisfied driving that car, and those are not

people who need to shout out that I'm here and look at me. Whereas I think the current Seville is very definitely that kind of approach to an automobile, a very egocentric type of a person that would find that to be an appealing vehicle. I have to say that I never cared for the look of that Seville, [00:49:00] and to this day, I think that car is a mistake. I find it very ugly and offensive. I'm talking about the bustleback car.

DC: Can you explain the term bustleback in terms of design?

LC: No. The terminology -- I guess that little trunk looks like a bustle, and it just became the terminology that was used around here to describe that vehicle. I personally was sick when that car came out. I thought the original Seville was so intelligent-looking and such an understandable, understated, elegant statement, and then we came along and did its predecessor, and it just... It established so many threads that we could have picked up and used in a new car, and we completely abandoned [00:50:00] it and took a 90 degree turn and went off into another direction.

Now, I think the car that comes out this fall, that's debuting right now, has a lot of the quality of the original car. Of course, it's been downsized now. It's a

lot smaller, and it's more fuel-efficient. There'll be some resistance to the car because of the downsizing. We've had that problem for a number of years, since the '77 B cars. There's always been a segment of the buying public that's been very resistant to the downsizing. It's oftentimes very difficult to separate whether it's the size they don't like or the design that they don't like. More often than not, we just get caught up into all of it, and if the car is not being received well, then the fingers get pointed at design staff also.

But I think it's hard to be objective about design when we're making such drastic changes to the overall anatomy of the car, [00:51:00] and I think in the case of the new E and K cars, if there's a perception that the cars are way too small, and I've heard people reacting to that --

DC: E and K are the...

LC: Eldorado, Seville, Riviera, Toronado. Well, then it's going to be hard to separate that from a resistance to the styling, if in fact there is any. But I'm delighted that the Seville has returned to what I consider to be a logical extension of the first design.

DC: I've always found that interesting, that General Motors, in spite of your efforts with the Oldsmobile, has been fairly

resistant to radical change in design. And I thought the Riviera represented -- the redone Riviera with that odd name, bustleback -- bustleback seems to me...

LC: Oh, you're talking now about the boat tail Riviera?

DC: [00:52:00] Yes. The boat tail Riviera, I'm sorry, yeah. That's what I had in mind.

LC: Well, that's another car I never cared all that much for. The ironic is that my stint in one of the advanced studios -- I spent about a year -- we worked on a car that became the seeds for that boat tail Riviera. But the car that we were working on was based on something like an F body package, Firebird or Camaro. And it was really a rather well done, flamboyant design, and somehow, on that size vehicle and on that type of vehicle, it pleased all of us. It wasn't until the Riviera became the size car that it became the attempt was made to stretch that package over what was really a B body [00:53:00] vehicle, a full-size like a Buick Electra. The underbody of that car was no longer a personal luxury car. It was a fairly large car.

That scheme translated fairly well on a personal, small-size car like a Firebird or Camaro. But I think it was disastrous when we tried to put that car on a large, family-sized vehicle, which was when we chose to do that,

on the Riviera. That was not a terribly successful car for Buick, and it was not until the current Riviera, the one that is now being phased out, that they really enjoyed the successes that they have been up until the introduction of the new car. They had been very successful with the old design.

DC: Distinguish if you will, for my confusion, [00:54:00] the difference between a bustleback and a boat tail. I'm thinking about the Seville.

LC: Okay. The Seville is definitely a bustleback. You've got a fast-back roof profile that's one continuous line that sweeps from the top of the backlight back to the top of the bumper. Then there's a secondary shape that fits on that that's the trunk shape. It comes out below the back light horizontally for about a foot or so, and then it drops down and meets the other line at the base. That little vestigial trunk, if you will, for lack of a better definitely, is a bustle. That's the only way I can really... If I were to choose the adjectives to describe that car, I probably wouldn't have used the word bustleback, but somewhere along the line, it was deemed that that's what that car reminded somebody of, so the term bustleback came into use.

[00:55:00] It may very well be that the name bustleback has its roots in some classic cars. If it does, then that would explain it. I'm not sure, but clearly that trunk shape has its roots in some earlier classic cars. It was a clear case of taking the small, little add-on trunk of some of the earlier -- the Rolls Royce was the car that did it most recently -- and grafting it on a contemporary vehicle, which was clearly what we did. The boat tail Riviera was very clearly a boat. One looked at the rear of that car, and there was a vertical prow that extended from the top of the tapered back light to the bottom of the rear bumper, and the whole body of the car had a boat prow kind of a feeling. Then the fenders simply grew out of that.

I see much more reason for the adjective, in the case of the Riviera, being a boat tail than I do [00:56:00] with the bustleback. That's why I suspect bustleback may have its roots in some actual classic cars of an earlier period. That's what we called it. It didn't make me like it any better.

DC: It has an archaic ring to it.

LC: Yeah. The car was a very odd vehicle in that it was so obviously one thing up front and so obviously something else in the rear.

DC: To buyers, you mean?

LC: No, to me, to my eyes. The car had much of the quality of the old Seville still in the front half of the vehicle, but then we came along and wantonly sliced off the rear and then grafted on this shape. If I could ever like that shape on the back of the car, if I could, I certainly would have to have the latitude to apply it to a car that was designed [00:57:00] from the ground up to accept it. I'm bothered by it as a design, period, but I'm bothered by the inconsistency front to rear of the vehicle.

DC: You used the phrase wanton. It makes you think of a butchery, sort of a hack.

LC: Well, see, the car always elicited that response in me. I felt literally the designer's knife coming down and slicing the car off and then adding that on, yeah.

DC: Well, you make sort of a quantum leap back into a different era or a different type of car. You moved over to the Chevrolet division at this point, right? In the mid-'70s or the early '70s?

LC: There was a sting in advance Chevy when I had my first studio as the chief designer, and that was after the year in Cadillac. That was a promotion for me [00:58:00] in my first studio.

DC: At that time, did Chevrolet have an adjunct?

LC: At that time, we named all of our studios for a division. We had advance Chevy and advance Pontiac. The tie-in to the production studio was fairly loose, the theory being that we were working on advanced vehicles, whatever, and then eventually, some of those cars might gravitate up to the production studios, where they would serve as a religion car or a theme car or some downwind work on the next generation of new cars. At least that was the intended purpose of the advance studios at that point in time.

The truth of the matter was that what we worked on for that year or so that I had that studio probably bore little relationship to any of the real projects in Chevrolet, other than that we were putting [00:59:00] Chevrolet names on what we did. I think that was largely true of most of the advance rooms. Of course, our advance rooms now are no longer labeled Chevrolet, Pontiac, but one, two, three, and four, which I think is right. That doesn’t mean that they won’t literally be doing exactly that, working on the next generation Chevrolet, but by tying them into a division kind of locks them into what they’ll be working on. I think this way, our resources are much more flexible. We

can devote our advance studios to any efforts that we feel are significant.

But it may very well be that they’re right now working on a Chevy, Pontiac, Olds, and Buick. In fact, in the case of one new program that they are working on, that’s literally what’s happening. You go down there, and you can see the divisional marks on the car. But back then, it was an attempt to, I think, tie in the advanced efforts [01:00:00] with the production room, but we really didn’t... We were working on advanced cars, and they would just have easily been for Pontiac as for Chevrolet.

DC: Did you find this, as a designer, an exciting diversion?

LC: I did, and yet there’s a part of me -- and we’re all different, and I suppose that’s why we have people that like advance work and we have people that like production work. I liked automobiles, and designing cars is what I really love doing. But I could make a strong case for working on production programs. Having had a taste of advance work and having had a large taste of production work, if I were given the option, I clearly enjoy the iterative process of designing a production car, where you have to sell to the client.

END OF AUDIO FILE

91-1-1673-94_Casillo-LeonardM_1985-09-30_Sides5and6

LC: -- where you not only have to sell to the client, but you have to engineer and ultimately manufacture that design. I'd be lying to you if I told you that for me, one of the biggest rushes that I get is seeing thousands and thousands of thousands of reproductions of my efforts passing me on the street and parking lots and neighbors' driveways and my dad's garage. For me, there's a tremendous kick out of designing a car and then actually seeing it being built and then seeing those cars on the road for years and years and years. I suppose most creative people are driven by the desire to see what they have done somewhere. [00:01:00] Architects have buildings to point to. Famous artists have paintings hanging in museums.

I don't envy any of those. If I had designed the Empire State Building, I'd still have to go to New York whenever I wanted to see it. And I don't have to go beyond my front door, and I'll see products of my efforts whizzing by on any given day. I simply get a huge kick out of that and would miss that in an advance studio. The satisfactions

that I derive from an advance studio would be entirely different. The ability to, say, influence a direction years from now would be a very exciting and challenging thought. That would be, for me, the main drive in advance work, that you're going to have an influence now on maybe not only the thinking of a division, but if you should latch onto [00:02:00] a direction that is particularly sound, you could have a profound effect on the corporation.

That always stands in the cards in advance studio work. You might just hit on something that everybody looks at and says, "Boy, that's so good. We may have to make that a part of our corporate religion as well as divisional religions." But production work, I love the job of doing it. I like the tremendously complex and difficult job of working with the engineering community to make something work. Making something work means sometimes having to go back and change what you dearly love because somebody's found a way to make it cheaper or somebody just simply can't make it the way you originally designed it or can't make it at a realistic price.

With this car in mind, your design, you go forth now, and [00:03:00] you work with the engineering and manufacturing

community to try and capture hopefully all or as much of that design as possible. Then seeing that emerge out of the other end of the tunnel in steel and rubber and paint and there it is, and nobody can change it now, they're just going to build thousands of them, is for me, very, very exciting and very stimulating.

DAVE CRIPPIN: And what point in the process is the design fixed, without alteration?

LC: Well, I guess you almost would have to answer that by saying if you've got a severe problem, it's amazing how much can be changed even after die steel has been cut. Technically, when data leaves our buildings, and in years prior to today, it used to leave in the form of drawings, those drawings went to the engineering and manufacturing community, [00:04:00] where dies would be drawn up and ultimately made and trial models made from those dies, hopefully when that information left here, barring major problems, that was what everyone expected the design would look like.

Now, we've gone to die model tryouts, where we've looked at wood models or hard models of what the car has ultimately evolved into, after it's been drawn and then the information given to the engineers and redrawn to outside

metal and all the steps plugged in, and here we are, and now this is what we're going to actually stamp. You may see a crease reading a little longer or harder or sharper than you originally anticipated. When you realize all the steps and everybody who gets that and handles it in the process, from the engineering community to the manufacturing community to the die makers, and they've got their formulas to apply, [00:05:00] it's not inconceivable that a hard edge could get rounded off or a round edge gets rounder or a highlight doesn't go through.

You see those, and if it's a major problem, and if it's something that you really consider to be wrong, we can even make changes at that stage. Now, that's not an easy thing to do. It's a fairly expensive process now because a considerable amount of time and effort has already been expended. But we follow the design right up until that point. If anywhere along the line something drops out or doesn't look quite right, we may have to bring that to the attention of the division or the general manager and say, "We really see a problem." Sometimes, you have to bring in somebody at that level to resolve it.

Sometimes, if it's early enough in a program, we can reach an agreement without going beyond our own little group to resolve a problem. Many times, the die engineers themselves say, "We needed to massage this to make it work, and we think we've got a problem with this webbed area in here. [00:06:00] You better get some designers and come over here, and we'll work right on the model with you and resolve it. But if it were a perfect world, and if things didn't occasionally go wrong, we would like to think that the engineering information that leaves this building is the design that we're going to ultimately build, and largely, that's true.

DC: What form does it take today in 1985?

LC: Well, now it's all computer-generated data. Everything leaves electronically.

DC: In a printout?

LC: It used to be. Prints, somebody physically picked up a blueprint and walked from here to there, and many times the prints were redrawn. We drew it as a representation of surface, and the engineering community would redraw that with an eye towards ultimately making die models. That information got handled many times, and there were lots of opportunities to reinterpret. Now we have what we call [00:07:00] a master database with our electronic

information. The numbers don't lie, and that information stays untouched, or we all agree that we have to make a change, but much less surprises today than there were years ago.

DC: One last question about advance styling that occurred to me earlier, when was advance styling moved out of the individual studios and put under its own umbrella? Do you remember offhand? Did that represent a significant shift in the design thinking?

LC: As far as I know, it was always that way, if I understand your question correctly. The advance studios always...

DC: But now you have a head of advance.

LC: Yeah, but we always have. There was always... Well, I guess if you go back far enough, there was a time when [00:08:00] we may not have had quite the management structure that we have today. But even then, the advance studios did not report up through any one of the divisions. Even when they were called Chevrolet, Pontiac, Olds, and Buick, they still reported to someone separate. In other words, the advance room and the production studio efforts were never one in the same. They were never right next door. Even when we shared the name, they were separated by a floor.

And the reporting structure always had the advance studios. They may have reported directly to a [Glowacki?] or a Mitchell in the early days or to a Harley Earl, but I think what we've done now is brought down the level of management tier, so that we have a head of advance and a head of production and really truck and bus. Those three group heads [00:09:00] report to Chuck, who is the director of design, who then reports to the vice president. The director's position was always there, but if you go back to the Mitchell era, the group executives were not onstream at that point in time.

DC: Well, Len Casillo had a couple of stretching and broadening efforts in the early '70s, and he's obviously recognized as a (inaudible) by his superiors. You've been moved back to Oldsmobile.

LC: A little over a year with an advance studio, which was my first experience at a production studio, that's your first taste, really, of all the other things that come with the job. Up to that point, I'd been an assistant, and that's a good job. You get to assist in the running of the studio, and you focus primarily on design and coordinating the efforts of the creative people in the studio. But now, as a chief, everything comes to your door. Personnel problems, if a [00:10:00] modeler and an engineer aren't

getting along, evaluations, somebody wants a raise, somebody doesn't like working in your studio anymore. All the things that go with managing a group of people are now suddenly your responsibility.

The year or so that I spent in advance Chevy was a good year for me in that without the pressures of a production program and a release schedule, I had a chance to develop some cars, but also develop my skills at working with this group of people. I think it would have been a challenging experience indeed to have gone right upstairs to a production studio from an assistant. As familiar as I was with Oldsmobile, being the assistant for a number of years, I was glad to have had that time to learn a little bit about working with that large group. Now, there's nobody to turn around and ask the advice of within the studio. [00:11:00] I always used to, I had a problem, go to my boss, who was the chief designer, and say, "Boy, I've got a real problem here. This fellow will not do what he's supposed to do." The chief would resolve that.

Now, there was nobody behind me to do that. You had to work those problems out yourself. That took some thinking and some doing to feel comfortable in managing and

motivating a group of people like that. When I came back upstairs to Olds, I had only been gone for maybe two, two and a half years, a year in Cadillac and a little over a year in advance studio, and then back to the studio that I had spent so much time in.

DC: Had it changed?

LC: It hadn't changed that much. Most of the players were all the same in the studio, and at the division, I knew more faces than not. I had such a thorough [00:12:00] understanding, at that point in time, of Oldsmobile's product line that it was really a delightful experience. I just thoroughly enjoyed myself, whereas I think one would anticipate some growing pains in a situation like that. I could get right down to the business of what I had wanted to do with Oldsmobile design and the direction I'd like to take us in and organizing the kind of studio that I would like to have. It was an enjoyable experience from day one.

DC: But you did have some problems, obviously, looming on the horizon, the oil embargo, and then you probably had to change a lot of your designs.

LC: Well, the '77 full-size program was the first program where we had to take a car that had been virtually unchanged -- in fact, if anything, it had grown [00:13:00] throughout the years to become a bigger and bigger car. Yeah, you're

absolutely right. That was a problem for the industry and for all of us in general, but to take a car that was going to shrink by a couple of feet and get somewhat narrower, to throw out all the rules that had worked so well for you in the past, and now strike out, it was really a totally new concept, to our eyes, for a family car.

Where lower and longer and wider and bigger had always been legitimate goals to aspire to in a car, now the opposite was true. Shorter and higher was better. The passenger compartment suddenly dominated the shape of the car, whereas if you go back to prior to the middle ’70s, the automobile was a fairly large vehicle [00:14:00] with a smallish upper relative to the lower, the form relationship. Now, as the car got smaller, you obviously couldn’t take the passenger compartment and continue to shrink it consistent with the exterior dimensions of the car, or you’d be doing (inaudible) for guys that wanted Delta 88s and Buick LeSabres.

We were faced with this new proportion, which was to say that the passenger compartment now became the dominant shape. The upper was no longer a small shape that sat on the lower. The upper was almost two-thirds of the car.

That meant reassessing and reevaluating all the things that we thought were good about a car. You could not apply the same rules anymore. You could not look at that car the way you would a car that was long and low because it simply wasn't long and low. It might have been -- in retrospect, it might have been a little [00:15:00] easier for Oldsmobile to achieve that because of this somewhat engineering focus and this functional approach that we had been building on for so many years. We were able to envision a clean body side again and simple wheel openings.

Now, imagine a design that had involved some very organic, fluid lines through the side of the car and a fairly complex form relationship. Having to make that same gigantic step, it was very difficult. I think we had a difficult time with some of our cars, but probably less of a problem conceiving an Oldsmobile within those parameters than it might have been for Buick and Pontiac, Cadillac.

DC: At this point, when you're faced with a major decision like that, who makes [00:16:00] the decision at the divisional level? Is it body engineering that comes up with the package and then tells styling you've got to cover this, or is it a team effort?

LC: It’s a team effort. We largely knew what we needed to get at in terms of fuel economy, and we knew here what you could and couldn’t do to the passenger compartment and still be able to sell to that size segment of the market. A good deal of the groundwork was laid right in this building. Miles per gallon can be equated to weight of vehicle and size of vehicle. Interior passenger compartment, we took what we could out of it in the way of fat, narrowed the vehicle where we could, thinned up the doors. But generally speaking, the car got taller as people got a little closer together.

To keep the same torso figures or the same interior figures, where people may have been in a more [00:17:00] recumbent position, your legs come in a little bit, and you sit a little higher, and the roof goes up a little higher, you can achieve essentially the same space and about the same comfort index, but you do so now at the expense of the silhouette of the car, which is no longer long and low, but is now taller. But I think we knew largely what we were up against going in. The size of the vehicle was pretty well determined, the silhouette of the vehicle.

That’s not to say that it wasn’t shocking to us when we started laying out our first drawings and our first models also. It took some very definite getting used to. This was the first time we had taken cars that were that big and that represented a very lucrative segment of the market and largely a very successful entry on the part of (inaudible). You had all those things [00:18:00] to consider, and there was a lot of concern right up until the very last minute when those cars came out and a lot of concern after they came out. Ultimately, it ended up being one of the more successful downsizings, amid the voices of concern that were coming at us from all corners.

I remember taking one of those cars home when they had just hit the dealerships. A couple of my neighbors came over and laughed. That’s the new 98? Boy, oh boy, you guys got to be kidding. You can’t be serious about that. That doesn’t look like a 98. I, of course, would extol the virtues of the packaging. Sit inside the car. See how little room has actually been taken away from you. Take it for a ride. See how tight and quiet, and the car was more responsive. It didn’t wallow [00:19:00] like its predecessors did. It was just simply a more manageable,

more alert, more responsive vehicle. It had shed all kinds of weight, and you could tell that when you got in the car.

And yet the ride did not feel like it sacrificed a tremendous amount. I certainly didn't see that. The buy word became you've got to get them in it to drive it before they'll buy it. That became the battle cry at the dealerships. They were giving us cars to drive and saying, "Get people in your neighborhood to drive them. Give them the keys. Let them take the car. If you know somebody, let them take the car for the weekend. Do whatever you can." For the first time, our salesmen at the dealerships had to sell. We really never had to sell all that hard in years gone by. People came in pretty well with their minds made up, knew what they wanted. By the time they got to the dealership, all the dealer really had to do was [00:20:00] get you to sign on the dotted line and straighten out the options.

But now he had a very, very skeptical guy coming in who was perhaps attracted by all the hoopla, but was not at all sure that this was the kind of car that he wanted. It became necessary for the dealers to really learn their trade. They had to know the vehicles like they never had

to know vehicles before. All the specs had to be something that they were very comfortable with, comparative specs between the leg room of last year's car and the new car, shoulder room figures, acceleration figures. Ultimately, it appears as though everyone did an excellent job because the cars did go on to become very successful, but not after a fairly slow and anxious start out, [00:21:00] when those cars first came out.

DC: Interesting that you were able to trim the fat out of the interior, but you didn't reduce leg room and hip room and head room.

LC: Significantly, yeah. The package, I think, got most of its torso figures by virtue of being somewhat taller, rather than somewhat stretched out. Shoulder room was cut down some on the car, even with the thinner doors.

DC: Was ergometrics or ergonomics becoming more pronounced at this point?

LC: Oh, sure.

DC: At the luxury end, of course, you're always giving everybody plenty of room.

LC: Well, see, that's it. Ergonomics in our large cars was largely just a matter of knowing where you were and knowing that knobs and controls were somewhat excessive. We never had to use the skill the maximize packaging efficiency.

Now, we had to [00:22:00] get the blood out of the stone, so to speak, whereas it was a relatively easy process in the past. If you wanted to make the door thicker, fine, make the car wider. But we were confined now by exterior dimensions. I think our people did a fine job.

I remember taking one of those cars on the first long trip, and I would not have wanted to go back to the old way of doing things. If anything, I found them to be more comfortable to drive and less fatiguing. Some of our cars were so cushy and the seats were so soft and there was so much room that you literally had to force yourself to stay awake. Now, of course, that's the German philosophy taken even a notch further. The seats on a Mercedes are actually quite hard and firm, and the ride is not as soft as even our new generation C cars [00:23:00] and the German philosophy. But that to them, their luxury comes from the engineering and the quality that's in the car. But they also say that if you drive a car like that for 10 or 15 hours, you'll be less fatigued because the car requires you to stay alert to drive it, and it does not lull you to sleep.

DC: This must have been rather a tonic for all the designers at that level. They had to really contrive -- within the

reduced parameters, they had to really come up with feature comfort and feature convenience as well.

LC: I wouldn't say tonic, though, because I think we're happy with where we came out. But at the time, I think it was probably a more difficult process than I remember. Getting used to the new proportions at that time had very little to do [00:24:00] with what many of us thought made a good-looking car. In other words, simply having less length and less proportion to deal with was a difficult adjustment to make. While we were tuned into this functional approach in Oldsmobile, I can't tell you that because we were, it made doing this new generation of car a piece of cake.

It really was a very, very difficult -- one of the most difficult programs I think I've ever worked on because none of the old rules would apply. While it was nice to know that I didn't have a Baroque scheme to try and put on the side of this car that was now considerably smaller, that didn't make the job of designing that car all that much easier, really. It was very difficult. We had to look at a vehicle in an entirely different way.

DC: I guess I was thinking in terms of a challenge.

LC: Oh yeah. [00:25:00] From that standpoint, sure, it was very definitely a challenge. The days went by very quickly, and there was very little time to second-guess.

DC: Lots of overtime.

LC: Yeah, I think so.

DC: But no second-guessing allowed. It was a luxury that you had lost.

LC: Well, I say no second-guessing because it was a major program for all four divisions, coupes and sedans, and there were a lot of cars that had to be done. We couldn't make a big mistake. With so much to change and to get used to, there was no slop. There was certainly not the feeling that we had the luxury of time in developing that program. We worked it right down to the wire.

DC: The down-sizing decision was certainly a break with tradition from General Motors' past. But I think it signified a new [00:26:00] decisiveness, the fact that they did it company-wide.

LC: I think we all felt good about that. We all felt good. That had to be the thing that probably had us motivated and stimulated all along, and that's the fact that our giant corporation was taking some rather bold steps to satisfy what it saw as the future of automobiles and certainly the effect on car design. But I remember feeling pretty good

about the company at that point in time because we were doing that. While the design problem was a most difficult design problem, you're absolutely right. In that regard, we all felt good.

I think designers have always harbored a desire to [00:27:00] do cars that are somewhat tighter and more functional. It's the nature of a designer to want to do a car that is less flamboyant and excessive, and the cars that we were replacing were certainly excessive. While we had done that kind of car for so many years, and we had gotten to learn the kinds of things that worked, now not having those proportions to work with made it difficult, but it wasn't with reluctance that we went ahead to do those cars. It just required a whole new rule book. But I think largely it was regarded as a very positive move by all the creative people. Because people would be saying things. "Well, when we're through with these cars, we may have the first C body [00:28:00] I'll be willing to drive."

Designers have to do that. We have to design cars that we don't necessarily drive ourselves. Some people may be Corvette drivers. Others may like big cars. But this one, I guess if you were a young designer and were caught up in

the excitement and the fun of this kind of work, the last car you would probably picture yourself driving would be a 98 or a Park Avenue or a big Cadillac. You'd go after a Corvair or a Firebird or a Camaro or a Corvette. That's just the nature of designers, I think. They see the machinery lurking much closer to the surface in cars like that than in a big luxury car. But I remember that being one of the programs that elicited that response. People were coming out of the woodwork, saying, "You do that right, that may be the first C car I'd consider buying."

DC: [00:29:00] By C, you mean?

LC: C car, 98, Buick Electra. In that regard, we were doing cars that, as designers, even though we were going to have a difficult time doing them, we all recognized that this was closer to the kinds of cars that we really wanted to be doing.

DC: If General Motors had made the wrong decision -- they borrowed a couple billion dollars to do it. Ford declined to do it and banked on the fact that the embargo would be short-lived, and they could still sit there with their larger cars and still make a killing. For a time, it seemed like they were going to get away with it. But what happened then?

LC: I guess the ultimate rightness of those cars just eventually started to dawn on most people, really. You didn't need to haul all that excess weight around and all that [00:30:00] extra baggage to arrive somewhere in relative comfort and be able to carry four or five people in relative comfort. The situation today is not all that different, in that in some of our car lines, Ford is still waiting on the sidelines and making a tremendous -- and rather successful at it, too. In the case of -- well, in the case of our new downsized E and K cars...

Maybe an even better example than the E and K, which are really not out yet, would be the front-wheel drive C car, in particular the Cadillac front-wheel drive C car. There has been some buyer resistance to that car on the part of the Cadillac owner. This is yet another step. I know that Lincoln's full-sized sedan has been doing quite well in the marketplace [00:31:00] because it now represents just about the only alternative. Chrysler does not make a large car anymore. The New Yorker is a pretty small car now, really. It's almost below intermediate size.

DC: It's really disappeared.

LC: Yeah. So Lincoln has the only big car on the block. Based on the fact that we're seeing some resistance in Cadillac

owners to make the second jump that they've been asked to downsize, they're going to Ford, and people have been saying, "Well, I'll keep the one I have until it rusts out from under me." I sense much more resistance to this last phase of downsizing than we did to the first. I think the public was preoccupied with fuel economy, and we'd had a taste of standing in line at gas stations, and we didn't like that, as a country, at all. It wasn't so much the cost of operating a vehicle as it was the availability of gas [00:32:00] and the time it took to get gas.

If somebody had a car that got 40 miles a gallon and had a 40 gallon tank, he could have probably sold all he could make because what that meant was that you just didn't have to stop at every gas station to fill up your car. But for some reason -- and I'm not really sure I understand why because the financial aspect of it never was a tremendous problem, I don't think, and gas hasn't gone up all that much anyway. But for some reason, the public has forgotten the other aspect of what it was like when the fuel embargo hit us. That's the waiting in line and the availability of gas.

I think we have short memories in this country, and we've heard so much now in recent years about the overabundance of fuel reserves that can take us -- depending on which scenario you choose to listen to, [00:33:00] I've heard some that say we can probably go to the end of this century before we really start scrapping again. If people hear that, then that tells them well, it's going to be available. No more long lines. I don't have to worry about how many miles I get per gallon because it's not the money that concerns me. If it costs me 30 dollars to fill up my tank, that's not a major concern. It is if I've got to wait for an hour and a half in line to get to that 30 dollar fill-up, or if once I get there, they only give me five dollars' worth.

But I really -- I guess I don't know if it's really -- the scenario that we see today is true or whether the one that we were living under a few years ago was true. But it was clear to all of us, when those '77 cars came out, that we were just about to run out of fuel. That was not a naïve point of view. The world opinion was that we were running short on reserves. [00:34:00] Now, I think if you go out and poll the vast majority of people, they would tell you that it looks like we've got unlimited reserves. About the

only thing I might have to fear would be the cost of gasoline. If you look at what most things have risen to in the past five or six years through inflation and look at gasoline, it's still a bargain. It could double tomorrow and still not be out of line with some of the other things you and I pay willingly.

I don't see fuel economy as being quite the issue in the public's mind that it was, unless we're getting an entirely erroneous perception of what we really have out there in the world with the fuel supply situation. If that picture does not alter significantly, then I don't see fuel economy being a driving issue to the average car buyer. Now, it's a driving issue to us because the federal government is still telling us that we have to meet certain CAFE averages [00:35:00] and that as total number of cars produced, we have to achieve a certain number of miles per gallon with all of our vehicles. That isn't going away. While we're arguing for a lessening of those figures in the years ahead, the government is still --

DC: And getting them, too.

LC: Yeah, but the government is still setting the tone to the extent that even if you could -- and you wouldn't, but even if you could go back to building cars like you used to, you

wouldn’t be able to sell them. Even Ford’s advantage will be fairly short-lived because it’s obvious that they fall under the same kind of corporate averages that we do, and I’m sure, in another year or two, the largest cars that they make will also disappear from the scene. Of course, once that happens and everybody’s got essentially the same wares out there in the marketplace, the picture becomes now one of [00:36:00] traditional competition the way it’s always been. It’s a little difficult to compete with a car that’s obviously smaller and lighter and more economical when people don’t particularly care if it’s smaller and lighter and more economical.

DC: You had an intermediate decision to make, too, as I recall, in 1980 when you had to make your second downsizing.

LC: That was the Cutlass Supreme. As a designer, I don’t feel that that first step was quite as successful as the steps that were to follow. I don’t feel that the first downsizing of the B cars and C cars, the ’77, was quite as successful as the phase that followed it. Again, in both cases, I think the designers simply understood the language a little better now. We’d had one car under our belt, one line of cars under our belt, when we did [00:37:00] the A cars in the early ’80s. Then when we came back in ’81 or ’82 and redid the B cars, we did a little better job then.

The cars didn’t get any bigger, and we didn’t compromise any of the interior room, but they looked just a little bit more graceful and a little more fleeter than their predecessors did. That’s just the designers firing up their engines, and having had the opportunity to do this once, they just simply were a little bit more confident. Going in the second time around when we reskinned those cars, I think we just demonstrated that we were becoming more comfortable with the medium. When the A cars came along, there was some shock with the smaller, slightly narrower, taller look. But when we redid those cars again, the second time around, [00:38:00] all of that went away, too.

I think the designers are very, very comfortable now working with cars of reduced size. If we don’t sell cars or if we don’t enjoy initial success with our downsizing now, I don’t feel it will be nearly as much as a result of the looks of the vehicles as the sheer resistance to the size. I think the new front-wheel drive C cars, for example, are the best-looking C cars we’ve ever done, bar none, bar any size or any form of large-size luxury car. And yet, we’re having more resistance -- initial resistance

-- with those cars in the marketplace than we had with the first downsizing.

I think it’s coming down to strictly a size, comfort issue now. I shouldn’t even say comfort because that’s [00:39:00] remained reasonably intact. It’s the size. People have perhaps some of the wrong reasons for equating size with comfort and luxury because if I were to blindfold you and put you inside one of the new cars and take you for a ride, I really doubt that you could tell me it was any less comfortable than the biggest, heaviest cars we’ve ever built. But very definitely we’ve come smack up against a perception on the part of the public that they look at a new Cadillac and they say, “Well, that’s not a Cadillac. That’s just not my idea of a full-size car.” I honestly think they’re very good-looking vehicles. I really do.

DC: General Motors has been in the unenviable spot of having to drag their former customers into the 21st century, kicking and screaming.

LC: Yeah. That’s part of it. [00:40:00] That’s part of it. Largely, that’s a segment of the market that we’ve virtually dominated throughout the years. Who better than us to do it? But it has not been -- and is not going to be

-- that easy. The E cars that come out this fall, I think, will be an even greater test.

DC: Can you describe them largely in the past -- by the time this is heard, can you describe the E and the K car program?

LC: Well, as I said, they're significantly downsized. I'd have to get my dimension sheets out, if you're looking for precise dimensions, but the cars have shed another couple hundred pounds, probably a foot shorter. Again, interior dimensions have remained virtually or in essence very close to...

DC: How do you achieve that?

LC: [00:41:00] The uppers generally get a little taller. The doors get a little thinner. You're sitting a little less recumbent and a little bit more upright. That's a gross oversimplification, but in essence, it's how you manage to achieve equivalent comfort. The truth of the matter is the interior compartment hasn't changed all that much in size. You lop a foot off the car by chopping it off the front-end sheet metal and the rear-end sheet metal. You've obviously got less trunk room. There's only so much you can do and so much magic you can deal out, and somewhere along the line, you pay a price.

Now, we used to have a tremendous amount of wasted area up-front on a lot of our cars, so it wasn't hard to find a place to lop off some additional sheet metal. What was hard was the loss of proportion that resulting chop gave you. If you took a foot off the car in the front [00:42:00] and didn't change anything else, you'd have a vehicle that would not be pleasing, at least to our eyes, aesthetically. That's really the difficult part of designing around the new proportions, where the upper -- as I said earlier in conjunction with the E cars, the upper becomes the dominant element of the vehicle. It's clearly passenger-oriented.

The front and rear overhands are minimal to package whatever we're packaging. You put your passenger compartment. You do what you can to tighten it as much as you can without compromising it. You put your drive train and your engine on, and you set a trunk volume, and you package the car as close and as tight as you can. Of course, one of the ways we can achieve even moderately good trunk volume figures is as you shorten the rear, you raise the rear. [00:43:00] That's why a lot of our cars have a very high, short rear deck. The reason is two-fold. Number one, as I said, that's how you manage to maintain

some cubes in your drunk. As you shorten the car to take weight out of the vehicle, you raise the deck. Fortunately, that also happens to be what the wind tunnel likes.

DC: In terms of CAFE?

LC: In terms of good aerodynamic drag figures. You lower your frontal area or minimize your frontal area and the wind tunnel because we know that achieves better aerodynamic numbers, and you raise your deck in the rear, and that achieves better overall fuel numbers. When you step back from what you've done and look at it, you see the origins of the wedge profile that everybody seems to be working around in one form or another. The reason for the wedge look is very obvious [00:44:00] when you look at it from that perspective. It's derived out of a need, a real, true, functional need, based on packaging and aerodynamics, and is not merely a frivolous styling trend that's going to be with us here today and replaced by something else tomorrow.

I think we're learning how to do short, tall, chopped-off decks, so they don't look at short and tall and chopped off. We're learning how to imply a graceful silhouette. But the architecture of all of those moves is going to be

with us for a good while now. And it's not just GM. If you look at any of the cars that have been through a downsizing program, you'll probably see that underlying formula apply. Frontal area is decreasing on [00:45:00] all the cars. Remember when the fronts of the cars used to be as tall as the car was at the base of the windshield, and the hood simply drove out horizontal to that point, and the front stopped. We were very taken with fronts that were powerful and aggressive and looked like they meant that there was a serious car coming down the road.

Well, now the drive is to decrease frontal mass, frontal area. We've even gotten into headlamp systems that have allowed us to do even more of that. The rectangular headlamp was in a desire to start to bring down the frontal area of the car. You've got to have bumper criteria solved, and that occupies the bottom half of the vehicle. You've got to have legal headlights on top. By the time you're through, there's really not much left. If you look at a car today and look at the front end graphics, [00:46:00] the entire height of that vehicle in front view is legislative. The bumper has criteria that it has to satisfy and the head lamp. There's not much in between. There is not much in between.

We've got some new lamps coming onstream in the near future. We refer to them as composite lamps. In essence, it's a replacement of the old sealed beam unit, where the bulbs are separate from the lamp, and the lamp takes on the surface of the front of the vehicle, which is even better from an aerodynamics standpoint and maybe affords us to squeak another few fractions of an inch in height out of the frontal appearance of the car. But if you look across the industry, there's been a move to do that, and we've just about brought that part of the car down as low and as tight as you can possibly get.

DC: You also recently got an innovation that allows the air intake [00:47:00] to go under the bumper.

LC: Well, we're finding that that happens in a wind tunnel, that if you open up a mouth in the bumper, or even in some cases duck below the bumper, air comes in even easier than it used to come in through the grill.

DC: This allows you to go to the wedge shape.

LC: Yeah. I think you're going to see cars where the grill probably plays a less significant part in the image of the front of the car. IT may be there strictly as a way to get some divisional identity, and it'll probably be a much smaller element on the front of the car than there used to

be. Lurking around the corner are innovations in even the placement and the design of radiators. While its application is not being felt in the production rooms yet, there are some experiments being conducted that look at other placements for the radiator. It may be more advantageous than [00:48:00] where it's currently being place. We know there's a low-pressure area at the base of the windshield and the intersection of the hood. That may be a place where you can get air relatively easily.

DC: Certainly they're being compressed into sort of a horizontal shape rather than a traditional vertical shape.

LC: Mm-hmm. We tried a car where we had a radiator placed underneath the car ahead of the rear wheels. It was a mid-engine car, and so there was reason to see how well that worked, and it worked rather well. The problems were physical rather than mechanical. There was mud-loading and things like that, that would have to be dealt with, but from a principle standpoint, it worked quite well.

DC: Well, amidst all this, you move into a new responsibility in '83, do you not, to the OBC studio?

LC: [00:49:00] God, was it '83? That's been a couple years almost. I guess it will be a couple years. Yeah. That was perhaps the most profound change in terms of what I've done all my life here and what I'm now doing because I find

myself involved in the planning and the marketing strategies as it applies to three divisions, rather than being almost at the other end of the chain in the studio. Now, we would participate, to some degree, in the planning, but our job was largely one of executing and doing the cars.

What I find so fascinating about this job now is that I'm involved in some work well in advance of it even being in the studios [00:50:00] on the floor. That's looking at future programs and determining, with the divisional marketing people, where we want to go with the different divisions and what we see as areas in the market that we aren't in and ought to be and maybe are and shouldn't. From that standpoint, it represents a fairly significant change in what I do during my eight hours a day here now as compared to what I used to.

DC: This is a jump from assistant executive designer to the executive designer in that group, right?

LC: No. I'm assistant executive now, but I was chief designer prior to this assignment, chief designer at Oldsmobile, right up until this last role.

DC: But you broadened your horizons with a new group.

LC: [00:51:00] Yeah. It's fascinating to see how three divisions operate simultaneously. So much of my life, when I was at Oldsmobile, I had blinders on. My only concern was the way Oldsmobiles looked, and I was only concerned about Buicks and Cadillacs if somebody thought they looked better than Oldsmobiles. But for the most part, the studios do not have a lot of communication with the other studios. I think that's one of the strengths of our organization. We communicate when we have to. If we're doing a shared panel program, for example, and Buick is sharing a door with Oldsmobile, then obviously there's got to be some very direct communication.

When we have shows outside, we invite perhaps all the BOC studios out to bring their cars outside, and we'll have comparative shows. But the strategies and what we're going to do and how we're going to do it are largely [00:52:00] kept confined to the individual production studios. But now I have a chance to see that in five separate studios. It's a fascinating experience, and it's very rewarding, although again, I'd be lying if I told you that I didn't miss being in there with a pencil and paper. You try and find areas that you can make a contribution in, and I view myself as a roving pair of eyes. I'm constantly walking in

and out of those studios, and I'll see things that may or may not look right or may look exceedingly good. I'll make comments to that effect as I go through.

But it's one of the -- I won't call it a drawback of a managerial position, [00:53:00] but it's particularly difficult for creative people because we all want to get ahead, I think, and we all want to do well. But one of the little added aspects of a creative guy moving ahead is you get somewhat further away from the job of drawing and sketching and more now in a job of overseeing and helping to direct the efforts of these five studios, making sure we're working on the right program, making sure we're not overlapping and generally acting as kind of a cheerleader for the creative groups.

But I can still draw. I can still sit down to a pad of paper and with a pencil render an automobile. Many is the time at night that for me to relax now is to sit at the kitchen table and sketch a car. But I don't bring that stuff in with me anymore. [00:54:00] I don't pin it on the wall in the studio and say, "Hey, guys, try this." It's not my job. But I do miss it. I do miss it.

DC: In terms of administrative control, then, you are the assistant exec of which studios again?

LC: Oldsmobile, Buick, and Cadillac. There's two Oldsmobile studios. There's two Buick studios, and one Cadillac studio.

DC: Why are there two of those?

LC: Because of the number of cars.

DC: The lines expanded.

LC: Yeah. Cadillac has a smaller line of cars. Cadillac is the only studio in the building that still is just one studio. We have the C cars. We have the E, K cars and the Cimarron, the J body, and that's essentially Cadillac's lineup of cars. Then we have the new (inaudible) personal luxury car. Oldsmobile or Buick has -- or had -- an X car. The X has now dropped. We have the J, the N.

DC: What do those translate in terms of recognizable names?

LC: [00:55:00] Firenza. N is Calais. Ciera, which is the A car, Cutlass Supreme, Olds Toronado, Olds Delta 88, Olds 98. There's a considerably broader spectrum of cars for both Oldsmobile and Buick. The studios are divided more or less along size. Olds One handles the 98, the 88, the E car, and the A car. Olds Two handles the A car coupe and everything in size down from that A car, the J and the N,

as well as Cutlass Supreme. The line has been kind of -- and it's flexible.

We may move a Riviera into the number two studio or move an A car into the number one studio. But generally speaking, Olds One, Olds Two, Buick One, Buick Two are divided [00:56:00] along large cars and small cars. That's true of Pontiac, Pontiac One and Pontiac Two. Chevy has three studios because of the number of cars that they do. One is devoted solely to Corvettes and Camaros, cars of that nature.

DC: I meant to ask you about the creating of those three car lines you mentioned in Olds, the Firenza, the Ciera, and the Calais. Did you have any part in their creation.

LC: No. Those cars were all done in Olds Two, and I was chief designer of Olds One. The cars that I was involved with throughout my time at Oldsmobile, at different times really, was the A line of cars and then the Es. The A was Cutlass Supreme. That later became a responsibility of Olds Two. But we had the Toronado, the 98, and the 88. [00:57:00] When the rear-wheel drive A car was still being manufactured, coupe and sedan, we did the sedan, and Olds Two did the coupe. That was in the first downsizing of the original Cutlass Supreme.

DC: I guess at this point, Mr. Casillo, may I ask you, if you just sort of lean back in the next five minutes or so, give us your personal design credo, if that is possible, as it has evolved.

LC: Well, I could start that out by staying that what we were able to accomplish in Oldsmobile probably most typifies what I like to think of as the kind of designs that please me. I have always been -- and it's probably because of my [00:58:00] engineering, industrial design background -- I have always been most fond of designs that are explainable. While that's sometimes difficult to do and maybe even difficult to define, it's that part of me that says a design is more than just simply sitting down and adding pencil in front and sketching whatever comes to mind.

I have always felt that what I've done over the years as a designer was defensible. If someone were to ask me, "Why did you do that?" I'd have a reason. I'd have a hard time doing design that I couldn't give you a reason, a good reason. It's got to be more than just saying, "Well, because it look good." [00:59:00] I just have a very strong feeling that a designer ought to be able to defend based on good, sound reasons why he did what he did. Of course, we've got so many allies in our business today, and

when I say allies, I mean things like the wind tunnel, that I can use to put teeth into my designs and teeth into the reasons why. I'm doing this body side clean because it pleases me, and visually it's good, but it's good in the wind tunnel, and it's easier to clean. Maybe the panels are stronger.

I would want criteria like that to support what I do. I think it's important that a design [01:00:00] be a good-looking representation. I think an automobile is an emotion product. As so, it should look like something that moves through the air. Even though it's going to move at speeds of 60 or 70 miles an hour, in its usable lifetime, it should generate that kind of purpose when you look at a car. It should look like something that is not designed to stay in one place. And I think it should be exciting, and it should be good-looking. But I think it also should have some reasons for being what it is and not just arbitrary styling, but a good foundation of reasons behind why that car ultimately ended up looking the way it did.

END OF AUDIO FILE