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NEW DIRECTIONS IN DESIGN

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Design Changes

■ Ed Welburn looks at GM design from the top.

Edward T. Welburn is the sixth Design vice president in General Motors' 96-year history. He grew up in Philadelphia, received his training at Howard University's College of Fine Arts, joined GM upon graduation in 1972 and has led development of such notable projects as the 1987 Oldsmobile Aerotech speed record car, the 1995 Oldsmobile Antares concept car, the 1996 Oldsmobile Intrigue and (as Director of GM's Corporate Brand Center from 1998 to 2002) the 2002 AUTonomy and Hy-Wire fuel cell vehicles and the 2003 Chevrolet SSR. Modest and soft-spoken (unlike some of his more flamboyant predecessors), he replaces the retiring Wayne Cherry effective October 1, 2003.

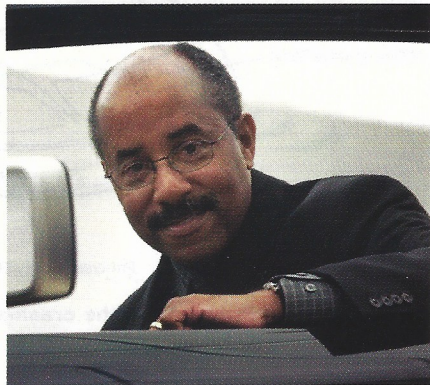
Automotive Industries recently participated in a brief Q&A with Mr. Welburn as part of a small group of reporters:

Q: What are your feelings about this challenging new assignment?

A: It's a very exciting time at GM Design, a time when we have the full commitment of the leadership of the company. There is so much going on among all our studios worldwide. As Design VP for North America, I also chair GM's Global Design Council representing facilities in Germany, Sweden, Brazil, China and Korea. We have VR [virtual reality] studios in each and can have global brainstorming and collaboration through live VR reviews, as if everyone is in the same room viewing a design and discussing it real time. We have brought these design centers closer together, and I'm determined to have more movement of designers and sculptors to enhance everyone's understanding of what is going on in all markets.

Q: Describe your design philosophy?

A: Most important is that each brand needs its own very clear identity, especially as we become more global and the market becomes more crowded. Number one is building strong, well-differentiated brands. Number two is having a clear vision of each brand's character that is common between design and engineering. We'll have great debates, but it's important to get together. If



you share a common vision, if that vision is clear up front, you can move very fast and designs come together very quickly. Developing multiple themes up front is also important so that everyone can agree on a direction and execute it.

Q: Compare today with past eras when GM was America's undisputed design leader?

A: One thing common then and now is the passion, the emotion people have with their automobiles. It was there even in the '80s and '90s, but we weren't sure how to connect with our customers.

Q: What about the negative image many people have of "Detroit" design?

A: A lot of that is based on experiences people have had in previous years with both design and quality, and [changing that image] is not an easy job. But I think it's changing. I do find that when people drive our products, they tend to feel a lot more positive about them.

Q: Three GM brands — Buick, Pontiac and Saturn — are struggling.

A: We just had a review of future products for those brands, and I am very excited about them. These are very strong designs, and I feel good about those brands in particular, as well as the others.

Q: The Cadillac design renaissance seems to be progressing well. Is Buick next?

A: There was a very clear vision for Cadillac, and everyone got on board. The one for Buick...we've got designers now that will walk

up to those [models] and say, "Man, I'm going to be buying a Buick." They get emotional about them, which is great! When you see the Buick concept design that's coming next year, pay attention...it will be a significant statement.

Q: Toyota and others make a lot of money selling "vanilla." Is there a place for boring and bland in Ed Welburn's portfolio?

A: No, we will not be doing bland, but some will be more subtle and quiet. "Gotta have" does not have to be over the top. An easy-to-love vehicle can also be a "gotta have." People can feel very passionate about a more quiet, subtle design.

Q: What is the working relationship between you and Mr. Lutz?

A: We connect quite well. He may be more outgoing, but we both have a real passion for vehicles of all kinds, new and old. Bob and I, in many ways, are quite different, but some of our likes and dislikes in design are very similar. We can look across a Board table and have a great conversation just through eye contact.

Q: What have been some your most satisfying projects?

A: I've worked on a variety of projects...on one end off the studio, working on the SSR, on the other end working on AUTonomy and Hy-Wire. The Olds Aerotech is one that moved very quickly. Nothing made me happier than the day when A.J. Foyt first drove that vehicle. We had lots of wing and spoiler options to try [if the basic shape didn't work], but he did a 256-mph lap and close to 300 mph on the straight, right "out of the box" with no aero add-ons. During development of that vehicle, A.J. teased me about my "Detroit shoes." After setting the record, he went to his transporter and came back with a pair of Tony Lama ostrich skin boots. He said, "Here, I don't want to see you ever wearing those Detroit shoes again." I still have those boots, and I love them.

Q: Given the awesome importance of your responsibilities to the corporation's health and future, do you sleep well at night?

A: I sleep well. Not as many hours as before, but well. — Gary Witzenburg



New Directions in Design

OEM designers discuss the risks and rewards of changing brand image.

by Gary Witzenburg

Apppearance is a powerful thing, especially in show business and the equally volatile and brutally competitive automobile business. Quality, content, features, price, value and image are all extremely important, no question. But what was the last truly awful-looking car or truck that succeeded?

Designers of everything from cars to kitchen appliances will tell you that — all other factors being roughly equal — people will purchase the best-looking product. Or the one that looks best to them.

And therein lies the challenge designers face every day of their working lives: style is highly subjective and subject to change. People can tell you what appeals to them today, but there's no predicting what they'll like two, three or more years into the future.

Trendy fashions tend to age fairly quickly, while more conservative looks often have more "legs." Some designs start slow but grow on people over time. Others do the opposite. At any point in time, passionate disagreements abound. What looks great to one may be offensive to another. What turns your visual senses on may well rattle mine.

Betting the Ranch

Last month, we put you in the shoes of industry CEOs charged with righting a rapidly sinking ship. Now let's look inside the minds of design leaders whose responsibility is creating new automotive looks on which those CEOs will be willing to bet their ranches.

When and why does an automaker set off in a bold new design direction for a product line (Chrysler 300C and Dodge Magnum), a critically important brand (Cadillac) or an entire portfolio (BMW and Nissan/Infiniti)? How do they get it done, and how do they deal with the huge risk involved in doing so?

History abounds with examples of dramatic new designs that helped save a marque or even an entire company. And plenty that didn't. And many more makers who couldn't or wouldn't take the risk and rode stale-looking products into extinction.

Envious of GM's multi-marque stable, Ford in 1958 tried inserting Edsel into the slender space between its Ford and Mercury brands —

and failed miserably. There were many problems with this idea and its execution, but it didn't help that the '58 Edsel was (to most peoples' tastes) remarkably ugly, the '59 even worse, and the short-lived '60 model just a mildly offensive facelift of the '60 Ford.

Nearly three decades later, a struggling Ford bet the ranch on a series of radically different sedans and wagons, the '86 Ford Taurus and Mercury Sable. They brought media under the tent early and began leaking photos a year in advance to let everyone get used to them well ahead of launch. Both were hugely successful, and Taurus was America's best-selling car until displaced by Honda's Accord following an unsuccessful redesign for 1996.

In the 1990s, Chrysler created an innovative "cab forward" proportion for front-drive cars that moved the company to a position of design lead-

ership and helped generate the sales and profitability that made it an attractive take-over target for Mercedes-Benz.

Following a decade of financial struggles and conservative styling, GM showcased a quintet of concepts in 1999, including one — Cadillac's Evoq two-seat roadster — exciting enough to foreshadow that once-proud marque's future design direction, and another — Pontiac's Aztek — ugly enough to make Ford's ill-considered Edsel look appealing. GM showed great gumption by moving both to market (Evoq as XLR), though in Aztek's case it probably wished it hadn't.

For current perspective on the risky business of creating game-changing new vehicle designs, we checked in with (soon to retire) GM Design vice president Wayne Cherry, Chrysler Group Design senior vice president Trevor Creed, Nissan Design America (NDA) president Tom Semple and BMW AG design chief Chris Bangle.

When and Why?

When and why does a car company gamble its reputation, financial strength and perhaps even its very future on dramatic new design?

In some cases (Cadillac and Nissan/Infiniti), when they desperately need to. Their current product — due to years of neglect, risk-aversion and/or financial conservatism, is simply uncompetitive. Tastes have changed, competitors have innovated, and the market has left them behind. The alternative is a continued sales slide to oblivion.

In others, even when their current models' styling remains reasonably (Chrysler) or even strongly (BMW) competitive, when a product's life cycle timing calls for an update, senior management understands the potentially higher risk of low-risk evolutionary change, and they seek to lead the market, not follow it.

"Different companies have different circumstances, different rationales and reasons," says GM's Cherry. "We wanted to re-establish and re-energize Cadillac as a global luxury product."

Adds Chrysler's Creed: "The reason for a change may come about — as in the case of the LX (300C and Magnum) as a result of a change in direction such as from front-wheel drive to rear-wheel drive. The package is different, so you want to signal that change of direction in terms of the mechanicals and the intentions of the company."

When Renault sent Carlos Ghosn across to save newly acquired, nearly-bankrupt Nissan and it (*see "How To Turn Around a Car Company," AI, Nov. 2003*), he elevated design — long subservient to engineering — to equal importance, then hired Shiro Nakamura away from Isuzu to lead the charge. "We needed to come up with exciting, provocative, audacious cars that were our own statement," says NDA's Semple. "We can't afford to make bland cars. We had no money, we were in debt and we had to come up with a global product line that was exciting."

But why would BMW risk its future on bold appearance changes when evolutionary updates to its handsomely sporting shapes have served it well for so long? "If you look outside the range of automobiles," Bangle says, "there are good examples where a company doesn't rest on its laurels but keeps setting the bar even higher. In the case of BMW, there was the issue of growth within the brand and the question of a global presence and whether or not the previous design strategy could fulfill that in the future."

Only when questioned does Bangle (who has taken a lot of flack from



DCX's Trevor Creed (right) says that the rear-drive 300C was already on the drawing board before the merger. Mercedes rear-drive portfolio helped speed things along.

media critics and owners less than thrilled with BMW's new direction) point out that the controversial shapes of its new sedans have also been driven by the size and shape of its class-leading Valvetronic V-8 engine, additional crash structure and a roomier interior package. The taller engine, for example (see "It's All About Flow," *AI May*, 2003) requires a higher hood, which flows into a higher beltline and the oft-criticized "bustled" rear end.

The Process

When John Smith was installed to head GM's struggling Cadillac luxury division in 1997, his mission was no less than to turn it around and elevate it to effectively compete with the likes of Lexus, BMW and Mercedes-Benz. He soon teamed with Cherry to work on the styling transformation. "I got a call from the Strategy Board," Cherry relates. "They wanted to see my thoughts on a Cadillac vision and where Cadillac was going in the future. I had some thoughts that I'd put together months before, and one of the things we talked about for a global premium product was rear-wheel drive. We had studied the possibility of a new rear-drive platform, but that was a lot of money, huge money, and the Strategy Board had not seen a vision of how this platform would be used across a product portfolio."

Led by Cherry and Smith, a small team began working intensely on



Tom Semple of Nissan Design North America says that a struggling Nissan needed products that were exciting, provocative and audacious and Murano fits all three.



most profound vision we've ever seen for Cadillac," Cherry recalls, and they bought into the vision, approved and authorized funding for the new rear-drive platform and stuck with it despite misgivings by some that it might turn out to be a colossal Edsel-like mistake.

Chrysler, too — even before the "merger" with Mercedes-Benz — was pondering a return to rear-drive for its large and prestige cars. "We had been toying with a series of rear-drive concepts," Creed relates. "If you look at the prestige brands — Lexus, BMW, Mercedes — they have an entirely different look [compared to front-drive cars], with a long wheelbase, shorter overhangs and a more efficient package.

"We did a series of internal models using rear-drive architecture, then a concept called Chronos. It was an entirely new look, a very upmarket-looking car, and we said, 'Boy, if we could do a rear-drive car, that's the direction we would go.' Then when the merger happened, and we began to share the vision that we would like to do rear-drive prestige vehicles, everything fell into place. All of a sudden, we had access to the Mercedes-Benz toolbox and could learn from all their experience in doing modern rear-wheel drive.

"Then we said, 'Wouldn't it be great if we could do a hemi engine and get back to the classic nature of the original 300-Series cars, when they

this new product vision. "We looked at where Cadillac was at its height of popularity, what the competition was then, how values and influences have changed over the years and how people perceive luxury vehicles today," Cherry explains. "We looked at the design language, and we settled on this 'Art and Science' term as an internal way to focus on the things we wanted to do. 'Art' means design, because Cadillacs at their height were always bold designs. 'Science' means applied technology, since they were also technology flagships."

Inspired by stealth aircraft and Bang & Olafsen components, a "form vocabulary" of edgy shapes and surfaces was developed, and a complete product portfolio — including what became the (Catera replacement) CTS sedan, the XLR two-seater, the SRX crossover, the soon-to-come (larger) STS sedan and even the truck-based Escalades — was presented it to GM's Strategy Board in February, 1998. "They said, 'This is the



BMW's Chris Bangle took a lot of heat for the design of the new 7 Series. He admits that a lot of the controversial shapes were driven by the size and shape of the new V-8 engine, crash structure and roomier interior package.

were real American muscle cars and had this great image,' and along with that goes rear-wheel drive. And we needed to do something for Dodge, because Dodge is very clear on the truck and SUV side, but a bit muddled on the car side. We needed to create a unique and fresh look for Dodge that would make people say, 'Wow, that's really something! What is it? It's a Dodge,' and that would begin to establish an identity for the brand. And we began to do a series of models that culminated in the 300C and Magnum."

Creed points out that his senior management is included in the process "from the initial sketching right up until the vehicle is completely finished and approved and ready to go to production, because it's really important to get their buy-in and for them to understand why we're doing what we're doing."

Semple points out that Nissan's design centers in Japan, the U.S. and Europe compete and collaborate on new designs. And while product-savvy CEO Ghosn is open to input from all involved, he makes the final call himself. "We've had competitions where we'll do a car and they'll do a proposal...not like before, where we were working totally separately. We know exactly what they're working on; they know exactly what we're working on, and we try to give Mr. Ghosn two good choices."

"The last design decision meeting here at NDA was one of the longest we've had because he took a long time to make up his mind. He heard from different factions and finally decided to go a certain way. But he said it was a good job, because [both candidates were so good that they] made the decision difficult, and that's what we want to do. If it's a global car for multiple markets, we'll usually have three alternatives — contributions from Europe, America and Japan — in the bake-off."

BMW's Bangle, who held design leadership positions at GM's Adam Opel AG and Fiat's Centro Stile before joining BMW AG in 1992, explains that "The BMW way is different from what I experienced at other compa-

nies. Their way is, 'Let's first put together a strategy of where we want to go, so we all understand the kind of car we want and the targets it's got to fulfill.' Then we take that and say, 'All right, fulfilling those targets allows us this spectrum of alternatives, sort of a bandwidth that we can play in.'"

Previous to today's new look, the only criticism leveled at BMW's designs was that its sedans were essentially alike except for size...the same "sausage" cut to different lengths. "We had such a clear knowledge of what the famous BMW 'sausage' was," Bangle says, "that all we had to do was work around that. Now, not only do we have to solve some problems with each car, we have to solve the problem of how it fits into the whole new world of cars. By the time we go to the Board, we have reduced this down to a reasonable selection of models that should fulfill both of those criteria."

He describes BMW's Board as a "seriously sharp" group of people who are not easy to sell on new ideas. "They're all engineers, they know the cars inside and out and drive them all the time [and] have a long-range commitment to the company, the product and the customer. They

"If you look outside the range of automobiles, there are good examples where a company doesn't rest on its laurels but keeps setting the bar even higher."

— Chris Bangle, BMW AG design chief

may say, 'OK, we understand that these [models] are closer to fulfilling the criteria than something else, but they've got these problems from our point of view.'

"Then we'll go through another loop, an elimination process that's competitive, like in any design studio, and go down from six models to four, to three, to two, to one. When it comes to making management

decisions, there's an enormous amount of direct hardware interrelationship that is part and parcel of the process."

The Risk

Knowing what's at stake — the success or failure of a critically important product, perhaps the very future of their companies — can these creative leaders sleep well at night? Yes, because they enjoy a high level of confidence in their own judgment and in the capabilities of the people around them, from the designers and sculptors in their studios to the decision-makers who will make the final calls.

"You've got to believe that what you're doing is the right thing to do," GM's Cherry asserts. "[In the case of Cadillac's bold new direction], I think we did, and we had the support of management. A number of people were very concerned, a number were not on board with this, as you can imagine in any large company with a move like this, but John and I had support from some of the key top people in the company that they were committed to make this happen."

"Our corporate mission," Chrysler's Creed says, "is to provide the company with products that are distinctively designed. That's what Wolfgang and Dieter expect of me, and it's written into my goals and objectives each year. They don't tell me how to do it, but they give me carte blanche to do distinctive design. There are lots of examples of people in this industry who have taken risk and people who have taken no risk. Chrysler has

"Chrysler has taken big risk in the past, and we'll continue to. Others have taken no risk and have gotten basically nowhere. So I prefer to take the risk."

— Trevor Creed, Chrysler Group Design Senior VP

taken big risk in the past, and we'll continue to, because that's the nature of our company. Others have taken no risk and have gotten basically nowhere. So I prefer to take the risk.

"You may start out thinking, 'Wow, this really is a risk.' And as time evolves, there are enough checks and balances in the system for us to hear people say things like, 'You know, when I first saw that, I wasn't sure whether I liked it. But now I really like it.' Sometimes things that start out to be risks are less risky than you think."

"The risks are always there," adds BMW's Bangle, "but at the same time, our company believes very strongly that it has to do the right thing.



GM design chief Wayne Cherry (above) led the 'Art and Science' design movement that brought the world the Cadillac XLR (left) and Cadillac 16 concept (above).

The right thing is setting yourself up for the curve, getting your product palette in place as the world economy changes and shifts, as markets open up, as technologies make themselves available, and as customer needs refocus on some issues as opposed to others...and then, wow, you've got all the parts in place. These are very important things to remember as you're doing risk assessment, and this is what we're trying to do when we propose new design concepts.

"We're not doing this to freak anybody out. We're doing it because we believe these are the best solutions to fulfill these upcoming challenges. And we do our homework to make sure we can say, 'Did we do the best job we could, did we leave no stone unturned, and are we really convinced through the whole process that we're doing the right thing?' And if you've got that

backing from the Board behind you, then it also makes taking the critical reviews a little easier, because you can take a long-view perspective of it."

Bangle believes that when the process leads to a major success, credit goes to the team that did the work. And when there is criticism, "it should be targeted at me...that's part of my job. I assumed this responsibility. I'm the one who told the team, 'This is the interpretation we're getting from the Board,' and I'm the one who's making the needed decisions along the process. A design director has to do his job, and in the end, when anyone has an issue, it's natural that there should be a place where the buck stops." ★