

How Cars Went From Boxy to Curvy





If you look at cars from the 1970s and cars from the 1990s, there's really one big difference in their designs. The ones from the 70s are boxy, and the ones from the 90s are curvy. For some car models, you can even tell the exact year when that change happened. Just look at this commercial for the Buick LeSabre, showing the 1991 model — and then the 1992 model. See the curves? Let's watch that again. '91 is boxy, sharp edges. '92? Smooth and round. Since then, cars have become curvier and curvier. So how did this happen? When manufacturers started making curvy cars in the 90s, it wasn't a totally new concept. Back in the 1930s, streamliners like this Chrysler Airflow used this sleek design to reduce wind resistance. But as the 50s and 60s rolled around, American streamliners stopped selling well — they were outsold by bigger, boxier cars. Gas prices were on fairly steady decline at this point, so streamlining for fuel efficiency was less of a concern.





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Well into the 1970s, just about every car made in America had sharp edges and very few curves. They were basically designed as a series of three boxes — the hood, the cabin, and the trunk. That model worked really well in the US market. But in Europe, fuel was always more expensive. In the 60s, a gallon of gas in France cost a whopping 73.1 cents while it was just 31 cents in the US. So European designers started experimenting with more aerodynamic designs to help cars move more easily so they'd waste less gas. Automakers like Porsche, BMW, Audi, Mercedes-Benz — they all started rolling out car models that had curved exteriors. Eventually American automakers started to copy the European aerodynamic look to try to attract upscale consumers. The mass market was a different picture. In Europe, a designer named Uwe Bahnsen was the first person to push for a curved design for the average driver, and he did that with the 1982 Ford Sierra. It was curvier than any car in its class at the time. But critics just laughed at it. And it didn't sell very well at first. It was nicknamed the "jelly mould" because of how much it looked like the kind of circular shape you'd make JELL-O with. But one of the designers from that European Ford design team — this guy, Jack Telnack — took over the US design team in 1980.

American gas prices at this point were skyrocketing due to conflict in the middle east. So Telnack brought wind tunnel testing into the design process. He first did that with the 1983 Ford Thunderbird. But the real breakthrough came a few years later: "The result was the groundbreaking 1986 Ford Taurus." It might not look that groundbreaking now, but this style was revolutionary at the time. It was a mass market car with curvy edges — and people liked it. "Taurus! Now a North American car with a shape and a feel we've never seen before... Taurus for us!" They used it in RoboCop as the car of the future. The sales basically saved Ford, which had really been struggling at the time, and it inspired a whole wave of copycat curvy cars. And streamlining became even more popular because manufacturers were facing new fuel economy regulations in the US. Starting in 1978, the average







fuel efficiency of each manufacturer's passenger cars had to meet higher and higher levels. According to one Ford designer, aerodynamic design was a much more affordable way to boost efficiency than doing engineering work under the hood. The rise of computer modelling in the 80s also made it easier for car makers to design and manufacture curved lines.

All these years later, the influence on today's cars is pretty clear. Even the models that we criticize for being ridiculously boxy these days — like the Scion xB — are actually really round. And if our modern day sci-fi movies have anything to say about it, that won't be changing anytime soon.