

Although Henry Ford democratized car ownership with his Model T, in the decades preceding World War II there were also plenty of posh cars on the road. The rich had pioneered motoring and now the more prosperous manager and professional classes got themselves mobilized too. Expensive cars typically had wood-framed bodies with aluminium or steel panels attached, metal fittings were chromed (not so many chauffeurs around to polish brassware by that time), leather was used inside and out as an engineering material for straps, seals and gaiters, and of course for upholstery and trim. (Over at Henry Ford's place he was installing vinyl seats in the Model T as early as 1914, but that's another story). Plastic in the form of Bakelite, a phenolic resin, was used mostly under the hood for electrical parts, but you would also see the shiny, dark-coloured material used for knobs on the dash and small trim pieces, in the company of celluloid (cellulose nitrate, the plastic that is famously also an explosive) casein (milk-based) plastics for lighter colours, acrylic for transparency, and if black was your thing, ebonite — a hard form of rubber. Of course the dash and door caps and some other trim were most probably wood: beautiful hand-polished veneers along with shapely solid chunks of the stuff.

So here, in these nicely made, expensive cars of the 1920s, 30s and 40s, we have wood, metal, leather and plastics all used together, inside and out, for engineering and for visual parts. All nicely logical and consistent — using the best materials and technologies available and delivering a great experience to their users, hopefully.

Expensive cars these days are called luxury vehicles or, on a really bad day, *prestige* vehicles. I say bad, because luxury is about experience, feeling good, whereas you only get *prestige* by impressing other people with your wonderfulness. A bit shallow then, prestige.

Anyhow, today's luxury cars are all pretty technical in spirit, a fact you take for granted in a high-end Mercedes, BMW, Audi or Lexus. But a Rolls or Bentley with all its sumptuousness and bearing must also be a high-tech tour de force.

Craftsmanship has made way for engineering and these cars are symphonies in

alloys, high-grade polymers and composites — until you open a door and climb in that is, whereupon you find yourself sitting on leather and staring at a wood dash. Isn't that a bit odd? In times past, wood and leather ran through the whole vehicle's construction, but now they are applied as a kind of symbolic cuticle, probably because they're substances we all understand.

Will we ever escape the hegemony of the Tree and the Cow? We are offered alternatives: titanium, carbon fibre and engine-turned alloy — but we need stuff that's rich, warm, sensuous and engaging. Carbon fibre: isn't that a tad boyish for the luxury market, a bit F1?

Auto interior designers find it hard to be pro-active in materials. The problem I think is that materials innovation is supplier-driven, and suppliers are risk-averse and quite distant from the creativity of the designers. It's also true that the materials world is complex and divided into specialised pockets that don't talk to each other. Car interiors are unique places: the user has intimate tactile contact with all the materials he or she can see for extended periods of time, and the surfaces are close by, in sharp visual focus. There's more to Tree & Cow than symbolism: wood and leather succeed because they feel good and their visual surfaces draw the eye in rather than bounce it off. Research shows that a material can have 20-30 experiential properties, and organic materials, because they have very complex internal microstructures (unlike synthetics which generally are just so much continuous 'cheese'), tend to offer bigger, richer experiences. The thing is, technology is now smart enough to make synthetics with these kinds of properties.

Someone needs to do some R&D.

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