

[SUBSCRIBE](#)[NEW CARS](#)[MOTORSPORTS](#)[CAR CULTURE](#)[VIDEOS](#)[SHOP](#)

From Road & Track for



The Internet Will Propel In-Car Entertainment FAR Into the Future

Introducing the epitome of virtual reality.

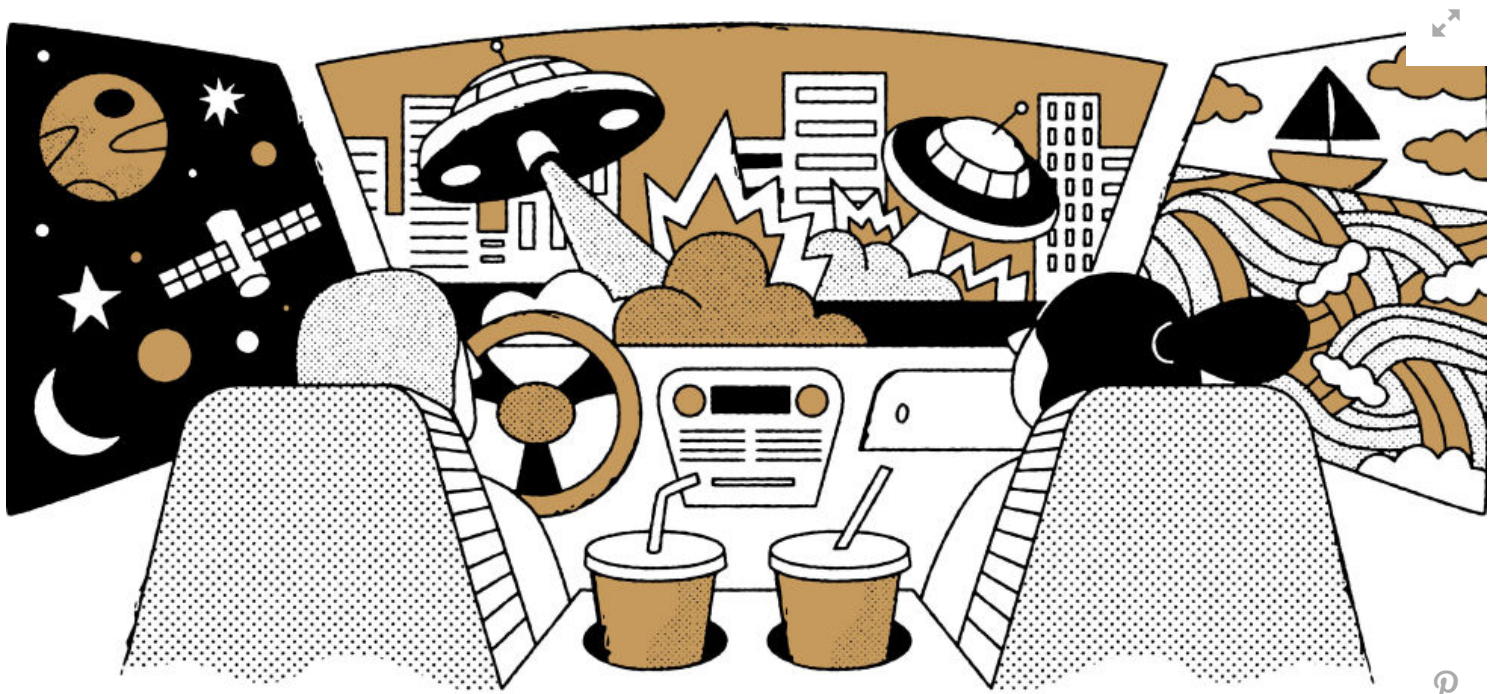


Illustration by Christopher Delorenzo

BY SAM ABUELSAMID SEP 21, 2016

100



On the right road with some challenging curves, elevation changes and no traffic, the right car can easily be all the entertainment you need. Sadly, for most of us, the bulk of our driving doesn't meet these criteria so we need to augment our trips with some other content. Fortunately, technology has dramatically increased our options in the days since the first Motorola AM car radio in 1930 and it

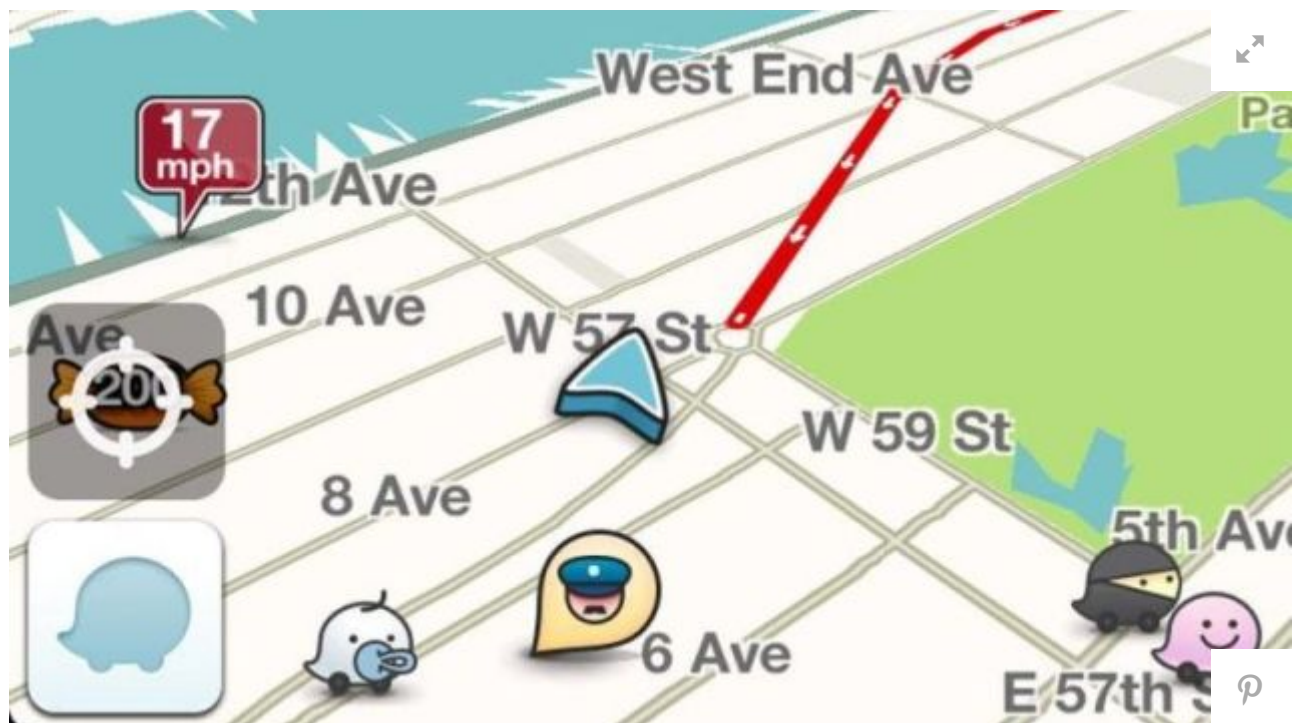
sign of slowing down.



The advent of 8-track tape in the 1960s, followed by cassettes, compact discs and even hard drives brought the era of locally stored media to the car. But even as each new medium replaced the previous generation, radio frequency transmission has remained a constant and is likely to for many decades to come. Through the 20th and now into the 21st century, AM has been augmented by FM and more recently satellite radio.

The common thread among all those radio technologies was that they only went in one direction, from a tower or satellite, to your car. Now, thanks to wireless broadband technologies our mobility platforms can send as well as receive radio signals. Outside of the car, we increasingly get audio and video content streamed through our smartphones wherever we happen to be. We can use those mobile devices to select our content, set up playlists or just consume content curated by someone else.

"The digital revolution and content will change the car more in the next couple of years than ever before." said Gorden Wagener, head of design at Daimler AG.



W270





Any of a run-down screening room or concert hall, ubiquitous connectivity means that over-the-road entertainment now runs the gamut from news and music to movies and video games. Back seat passengers can even watch almost any movie, TV show or even Swedish video game players. At best, that first 1930 Motorola might have been able to pick a handful of crackly AM stations from around the area. Now, we virtually the entire recorded history of human culture.

Today, many of us connect our phones to the car to enable that connectivity, but a large number of cars already have their own dedicated data connections. These built-in connections will increasingly become standard on most vehicles in the coming years to support technologies such as autonomous driving and over-the-air updates.

Whether it's through a smartphone, tablet or in-vehicle data connection, every person can have their own unique entertainment experience. An increasingly useful aspect of the audio head unit is providing the interface to run phone apps like Pandora or Spotify for music, Stitcher for podcasts or iHeartRadio to stream any of hundreds of live radio stations.

**IN THE FUTURE PEOPLE EXPECT A SEAMLESSLY INTEGRATED IN-CAR
INFOTAINMENT WHEN THEY ENTER A CAR**

Advertisement - Continue Reading Below

Renault **DUSTER**
Bem-vindo ao verdadeiro mundo SUV.

> Novo Motor 1.6 SCe
> Versões 4x2 e 4x4

CLIQUE E CONHEÇA >

RENAULT
Passion for life

Who would have thought a decade ago that you can search for a table at your favorite restaurant and make a reservation directly from a screen in the dashboard. Running late? Just use Glympse or Waze to send your current location to the friend or client you're supposed to meet so they can track your location in real-time.





by the Internet of Things."

"At the same time we always want to be surprised. The content within the vehicle becomes a digital core of the car and its design is very relevant."

Until recently, automakers have generally done a pretty weak job of designing user interfaces to use all of these features while driving. New user experiences designed by manufacturers like Mercedes-Benz as smartphone projection systems like Apple's Carplay and Google's Android Auto are optimized for use while driving.



Opel

The Power of the Cloud Will Make the Car Smarter

The ability to use the power of the cloud to provide much more capable voice recognition that is closer to natural language significantly improves usability. This can be used to play the media you want without ever taking hands off the wheel or eyes off the road, although in the coming years that too will be less of an issue as the car begins to drive itself.

Controlling media streaming apps on the phone means you can have access to an almost infinite universe of content, including streams of radio stations from all of the world. Native connections in the car will soon make even that obsolete for drivers as apps run can right on the car platform. This constant data-





As we eventually make the transition to autonomous vehicles that are shared, cars will have ability to play anything you want directly without having to connect a phone although that will remain an option. When someone summons an autonomous car to take them somewhere, their preferences can be sent to the car before it even picks them up and their preferred streaming service will be ready to go when they get in.

USB ports throughout the vehicle to keep devices charged are now as important as cupholders were just a few years ago. As the world transitions to cars driven by computer algorithms, larger screens will probably replace much of what we now think of as the dashboard. These screens will be able to project content from mobile devices or pull down content directly via the data connection.



Mercedes-Benz

The Rolling Theater

Without the need for a human driver to see out of the windows, they could become displays themselves for either entertainment or a simulated view of the outside world. While commuting through urban traffic, we could be watching an ocean view or driving through the Swiss Alps.





will be a room on its own," adds Wagener.

Another intriguing possibility shown by concept vehicles like 2015 Mercedes-Benz F 015 is that we may actually use less individual in-car entertainment. That concept transforms into a salon with seats that swivel to enable everyone to face each other and talk. We probably won't see anything quite like that until well into the 2030s as current crash safety requirements would have to be completely reworked.

The one thing we may not see in the car anytime in the foreseeable future is virtual reality. While the technology has improved dramatically, it may not be possible to overcome the motion sickness that might ensue when your brain gets confused between the views in the goggles and the motions of the car.

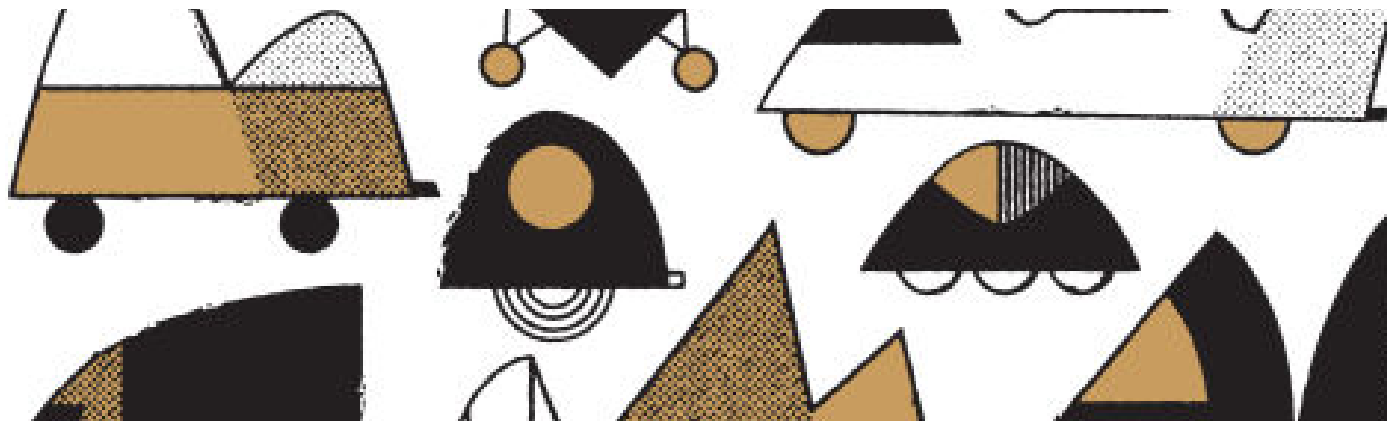
The one thing we know for sure as we approach the centennial of the car radio is that things will keep changing.

More from Road & Track:



With Self-Driving Cars, It's the Interior That Will Matter

Created by Road & Track for Mercedes-Benz E Class



Goodbye Hot Rods, Hello Mobility Pods

Created by Road & Track for Mercedes-Benz E Class

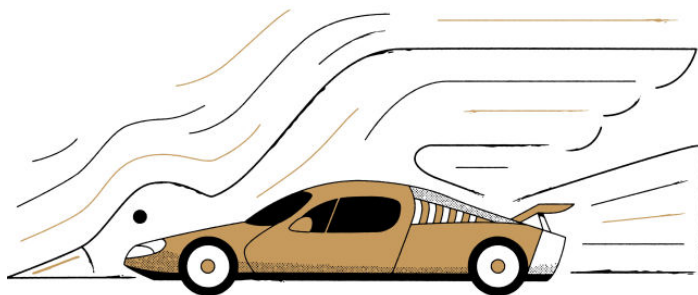
MORE FROM

Special Report: A Look At The Future Of Driving



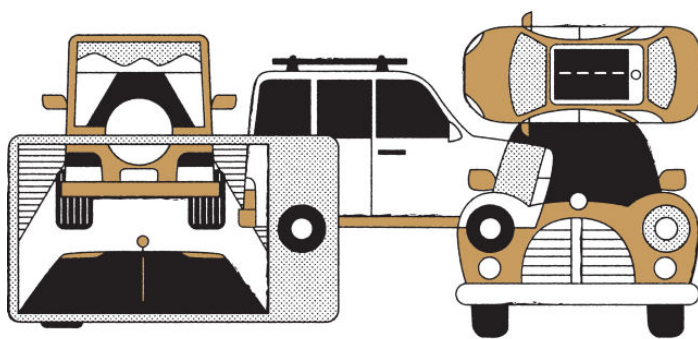
With Self-Driving Cars, It's the Interior That Will Matter

Created for Mercedes-Benz E Class



The Next Big Breakthrough in Car Aerodynamics: Shape-Shifting

Created for Mercedes-Benz E Class



The Imminent Future of Car-to-Car Connectivity

Created for Mercedes-Benz E Class



Goodbye Hot Rods, Hello Mobility Pods

Created for Mercedes-Benz E Class

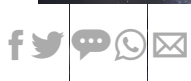


What Makes This Mercedes-Benz The Most Intelligent Car on the Road

Created for Mercedes-Benz E Class



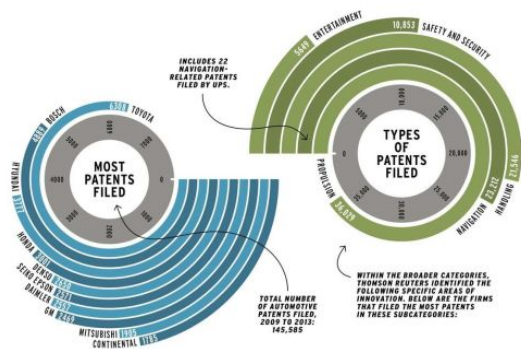
RoboRacing: Automated Slot Cars For the Big Boys





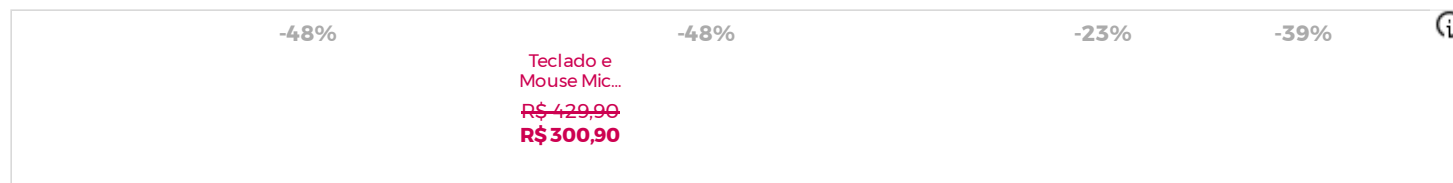
Future Tires?

Apple Store



Out of the Darkness: Automotive Headlights of the Future

Look to Patents to See Where the Auto Industry Is Going [Infographic]



NEW CARS

FUTURE CARS & SPY SHOTS

AUTOMATICA: THE FUTURE OF IN-CAR AUDIO?

IN-CAR THEATER: WILL POWER INDYCAR QUALIFYING ST PETE 2013 VIDEO

CABBING INTO THE FUTURE

A PEEK INTO THE FUTURE OF COMMUTING

U.S. MEDIA COMPANY BUYS STAKE IN F1, WILL EVOLVE INTO FULL PURCHASE

CITROËN WILL JUMP INTO WTCC WITH SEBASTIEN LOEB



MORE FROM SPECIAL REPORT: A LOOK AT THE FUTURE OF DRIVING



Digital Edition

About Us



[Customer Service](#)

[BestProducts](#)

[Being Green](#)

[Subscribe](#)

[Give a Gift](#)

[Why Did I Get This Ad?](#)

[Other Hearst Subscriptions](#)

[Giveaways](#)

[Shop R&T](#)

HEARST *men's group*

A PART OF HEARST DIGITAL MEDIA

©2017 Hearst Communications, Inc. All Rights Reserved.

[Privacy Policy](#) [Your California Privacy Rights](#) [Terms of Use](#) [Site Map](#)



