

# With comfortable couches and no steering wheel: An Israeli designer envisions the driving experience in an autonomous car.

The autonomous vehicle that will drive us around is no longer science fiction. But did you ever think how the technological revolution will affect the vehicle's interior design? A young Israeli designer gives us a sneak-peak on the vehicle's interior, and it's nothing like you have seen so far.

<http://www.geektime.co.il/autonomous-car-inside/>

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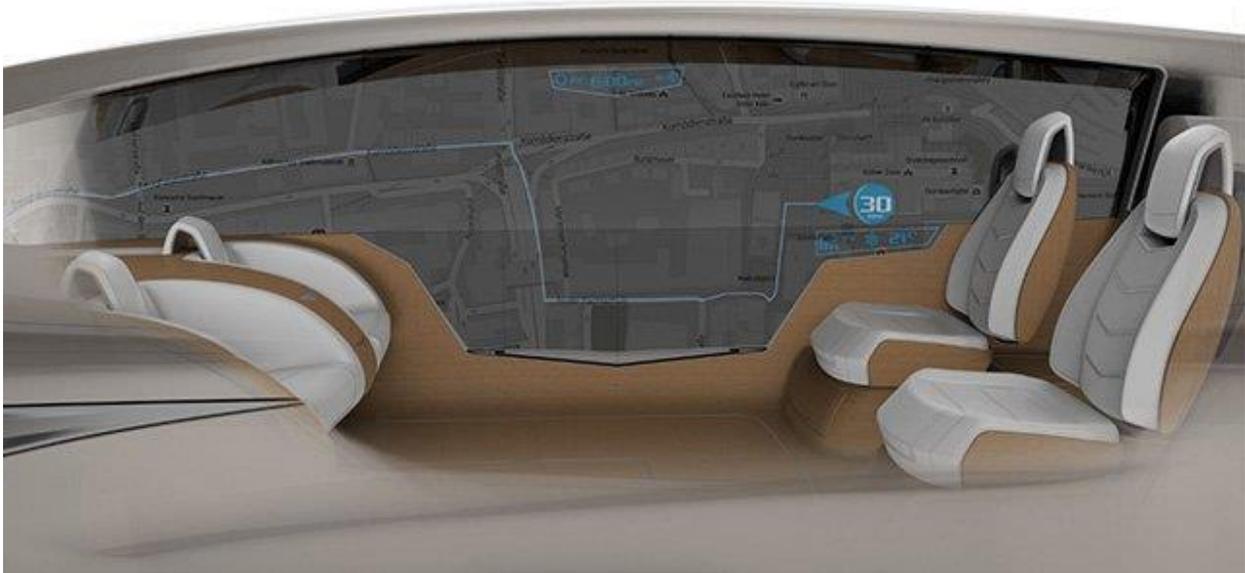
Autonomous vehicles are no longer considered as futuristic concepts or sci-fi movies' technology. In recent years we have witnessed an impressive jump in both development and applications of these different technologies. However, it seems like most of the discussion so far has been focused on the technology itself, on the large amounts of money invested in it, and on the regulations around it. Not much had been spoken about the design and the passengers' user experience. Or Shachar, an industrial designer and freshly-graduated from Bezalel Academy of Arts and Design, chose to deal with this exact issue in his final degree project, showing us the design revolution of the autonomous vehicle – when it eventually becomes a reality. Speaking to Geektime, Shachar talked about how such vehicle might look like in the not-so-far future.

## Entering a living room

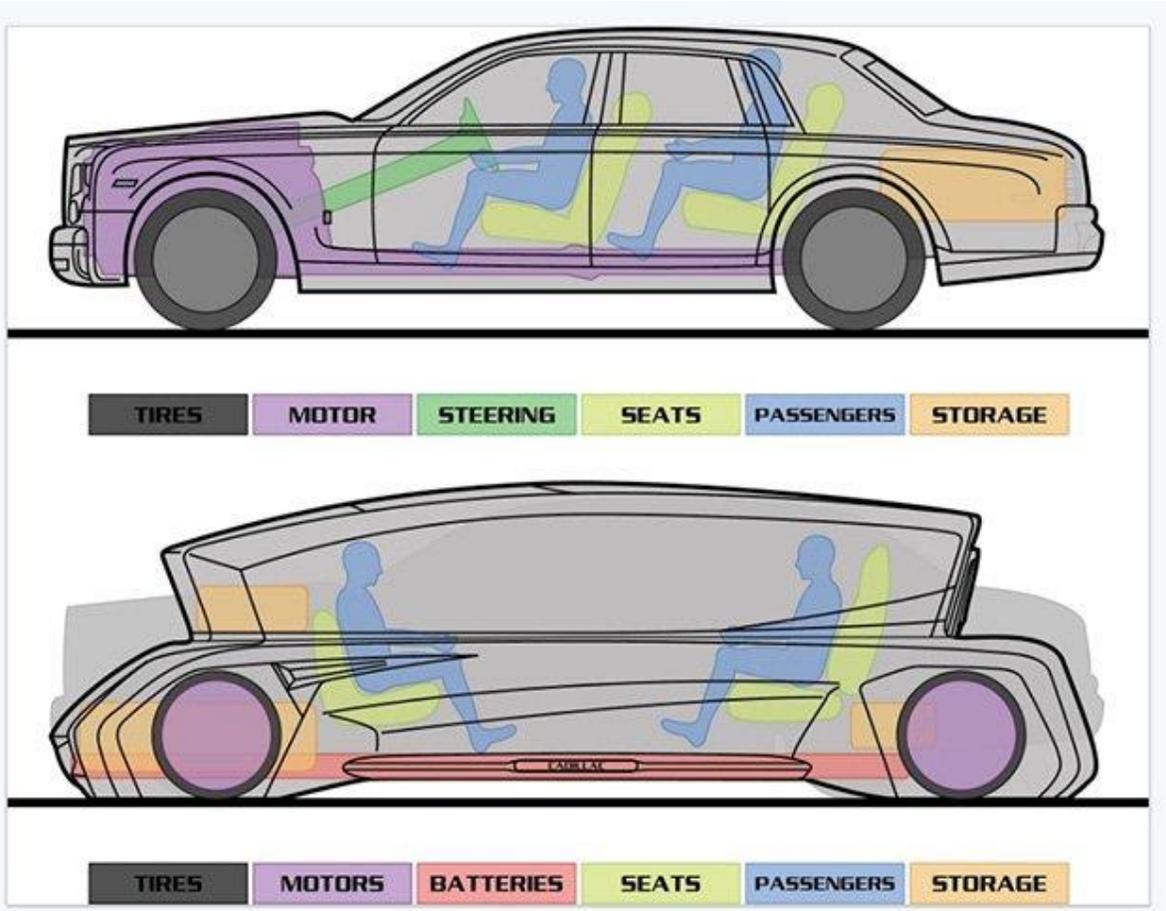


Before facing the design-phase, Shachar conducted a thorough research, supervised by Dr. Yona Weitz, and found out that most semi or fully autonomous vehicles still offer the traditional two-row seating arrangement that face the driving direction, with the steering and dashboard elements sitting exactly where they were for the last 100 years. Shachar wanted to stretch the limits and imagine how an autonomous vehicle's interior will look like with the highest level of freedom. Choosing to focus on a luxury vehicle

allowed him to do just that, by totally ditching the standard steering mechanism, choosing high quality materials and using sophisticated technical elements.



However, the vehicle's interior is not the only aspect to get a reboot. Shachar also learned that by dividing the main electrical engine into 4 smaller ones and placing the battery packs in the vehicle's floor, a bigger, valuable space is cleared. After completely cleaning up the vehicle's insides, Shachar turned to deal with the elements arrangements. The entrance to the vehicle for example, is located at the back of the car, thus "achieving the feeling of stepping inside a comfortable home-like living room, without having to bow down and struggle to get inside via a side-door.



The interior features stand-alone chairs and two “sofas”, embedded in a wooden panel. The sofas are meant for children or for having business meetings inside the car while traveling. The two separate seats can open up to a sleeping position, allowing the passengers to sleep comfortably in the vehicle during long distance travels. According to Shachar, this will allow the autonomous vehicle to use as an attractive option for travelling instead of plane flights or train rides within Europe or the United States – without taking the passengers through endless stations, check-ins and luggage delivery.

By cancelling the usual 4 side-doors the autonomous vehicle can also include huge screens which are integrated in the windows, and provide endless customization and real-time information on the outside view, such as information about different buildings, restaurants’ opening hours, tourist attractions and more.

## No meaning to back or front part of the vehicle



The exterior design of the vehicle, who doesn't get a lot of emphasis today, went through a rethinking process. Shachar aimed to create a different design language than what we know today, basing on the fact there is no significant meaning to back or front in the computer systems' eyes. This allows the use of negative-angle windows, which are not ideal for manual driving, but are considered better in terms of blocking UV rays. The windows themselves can change their transparency according to the passengers' will, from 100% transparency to 100% opacity from all directions.

Shachar designed the wheel covers in a way that gives the vehicle the feeling of floating or levitating on the road, reflecting an ambiguous driving direction. The front lights are consisted of only daylight LED's, responsible for the vehicle's "face", but don't have any long-distance night time lights. As said before, the entrance to the vehicle is from the back, using a big gullwing door, allowing a comfortable and luxurious entry to the vehicle.

“Today, people are afraid to drive autonomous vehicles, in the future they will be afraid to drive a manual vehicle”



During the project Shachar also considered the psychological and practical aspects of driving an autonomous vehicle

What do you think we will do with the free time we gain by driving an autonomous vehicle?

Shachar: “most of the people would prefer to just sleep... but working during the travel is also optional. My fear is that working from the car will become a standard that is expected from everyone. That being said, the main potential I saw in autonomous vehicles is the opportunity to look out a bit more and seeing what’s going on – both scenery in and outside the city, and the interaction with other vehicles on the road or the other passengers. The time spent inside the vehicle can become quality time for playing and interacting with the family, having business meetings, or taking time to obtain various hobbies.

What about the psychological fear of people to go inside an autonomous vehicle?

Shachar: during the research I have conducted I found an interesting phrase, saying that if today people are afraid to drive on the same road with autonomous vehicles – in 20 years the situation will be the exact opposite, and people will be afraid when seeing a manually-driven car on the road. In the past, elevators were only operated by humans, today it's very hard to find a manually-operated one. I believe we have more stages on the way to 100% autonomous vehicles, that will make it easier to the users to accept the final technology.



Or Shachar's final project, supervised by Dori Regev, was shown during the Bezalel Degree Show 2016.