

Bigger cars in the urban space

Cars are growing!

It is a fact: in recent decades, cars have continued to grow. In performance, but also in size and weight.

The bigger sizes are somewhat due to increased safety and so that more fittings and features and amenities can fit into the vehicles. But the main reason responsible for this phenomenon is more related to the supply-demand binomial: big vehicles are a commercial success, whether because they have more usable space, a greater feeling of safety or because they have better responses to avoiding physical obstacles, also outside of the urban setting. Off-road vehicles, mini-vans and more recent concepts like SUVs and crossovers are examples. And 'normal' vehicles have also gotten bigger. The supply of small and mid-sized vehicles is increasingly smaller.

Paradoxically, this majority growth in vehicles is not objectively justified from the viewpoint of users' needs or customs. A large majority of users does not need a bigger car today than 20 years ago, for example.

Further, vehicle occupation continues to be the same, some 1.15 people per vehicle driving. And a car is stopped some 95% of the time.

Cars and the environment

Performance features like consumption and emissions have continued to improve over the years through innovation. However, it is undeniable that if we compare two modern-day vehicles under equal conditions, the smaller vehicle will consume less and produce fewer emissions than the big one. Basically due to the effect of the lesser weight, and also a better air penetration coefficient.

Another environmental fact that must be considered globally is the amount of resources each vehicle consumes while it is being manufactured. A large vehicle is normally heavier than a small one and consequently consumes more resources and energy to produce it. These considerations are equally valid for cleaner vehicles, like the electric car: the bigger they are, the less environmentally efficient they are.

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Urban space

The densest cities with historic city centres—like many European cities—have difficulties adapting public spaces so they satisfy the many uses required.

The growth of vehicles makes lanes narrower and makes driving difficult. It is harder to find parking spaces on the street. They have a harder time on very narrow streets, making harmonious coexistence with pedestrians even more difficult.

Car parks

From the point of view of space, and also users, we discover an important problem with regard to car parks. The parking



spaces in car parks are increasingly so narrow that it is not possible to park and, if you can, you cannot open the car door enough to easily get into and out of the car. These facilities are where the effect of growing vehicles is best noticed. All cars end up being parked, so this situation is well known by all drivers. As a result, they complain that the spaces are too narrow. The fact is that our sector is the number one recipient of user dissatisfaction. But the sector is not the cause.

The regulations that regulate the minimum size of parking spaces has kept in step with the years of growing vehicle sizes, although the latter always goes first, thus leading to constant growth. A space constructed in 1985 was too narrow in 2000 for example, and a space built in 2000, even though it is wider, will be uncomfortable in 2020. The oldest car parks will have problems earlier, and the newer ones will have them in the future if we do not do anything and the trend continues.

In short, as users we complain of narrow parking spaces, but as consumers we demand bigger vehicles.

In summary, the growth in car sizes does not seem clearly motivated by a change in buyers' real needs, is not good from an environmental viewpoint, and it is not easy for

these bigger cars to get round in the urban space. And there are difficulties in car parks. Doesn't it make sense then to reverse the trend of growing car sizes? I think so.

And what can we do?

It seems quite inefficient to wait for the market to change this trend on its own, spontaneously. It is logical that the administration itself should introduce factors for change, as well as the car park operators.

The expansion in the width of parking spaces has been taking place, as mentioned, as regulations also evolve. But they do not resolve the problem of pre-existing spaces or the pressure on public spaces (driving lanes and street parking). Further, measures do not impact the growth in car sizes, they are adapted to them, which is different. It is true that car parks without columns between the spaces can be adapted more easily, but these are a minority and every re-layout of the spaces entails a not negligible expense. Besides the legal-administrative difficulties in adapting the ownership of the resulting spaces.

The driving tax is normally based on power and emissions, but not on the size of the vehicles. Along this line, administrations could increase this tax for larger vehicles, and could also increase the rates and prices

for parking them, whether on the street or public concession car parks. This movement will lead to private operators also implementing different prices.

The stable advance payment for a public parking space via long term permits or other means also lets different rates be established. Some operators today are already doing this.

These types of measures are closer today, since technology lets us—by reading the number plate—obtain the technical details on the vehicle immediately and consequently apply different prices.

For the first time we have verified that it is advisable and also possible to stimulate the change in the buyer-manufacturer ecosystem: the continued growth in vehicle sizes is not a good solution in a dense urban context, or from an environmental angle. The introduction of impediments, of measures that make this continued growth difficult, is an exercise in responsibility, and a powerful tool that the administrations should seriously consider. Further, this line of work is not contrary to the interests of the car park operators, as they can start to implement solutions now without waiting for the administration. This would thus improve the satisfaction and convenience of owners of vehicles better adapted to the city. ■

