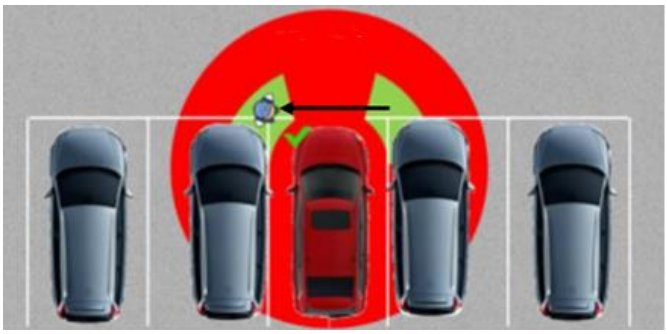
OUT FOR A WALK WITH MAN'S BEST FRIEND – THE CAR

PONTUS STRÖMBERG,
LUND UNIVERSITY

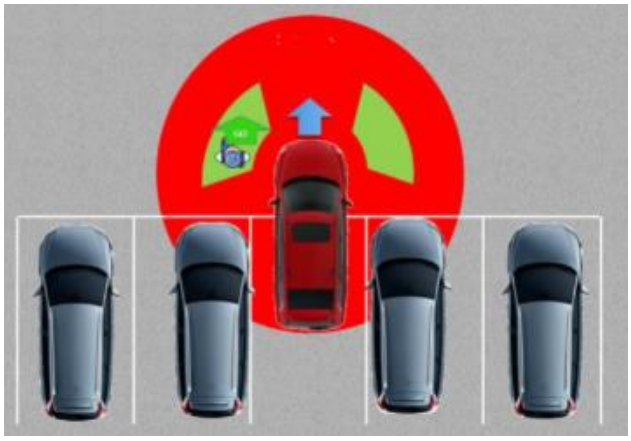
There is a special relationship between humans and their cars. No other invention has been customized and re-innovated so many times to match the personality of its owner in such a big way as the car. No matter if you want to go dangerously fast in a racer, sideways in a drifter, show of your status in your luxurious wagon, or just go from A to B, you will have endless options to choose from. All in different shapes, colors, and brands just to suit your lifestyle and personality. So why not take your best friend out for a walk? With Volvos new Virtual Leash, you can.

The Virtual Leash is an Autonomic Parking function where the driver is able to operate the car from outside the vehicle, without controlling it from a remote device. The car simply detects the driver through ultrasonic sensors, and follows his/her movement.

Imagine coming out from the grocery store and two other cars have parked very close to yours on both sides. There is no room for you to open the doors to get in. After activating the Virtual Leash with your phone, all you have to do is walk past the front of the car, to let the cars ultrasonic system detect you, and the walk the car out of the parking spot. The car will follow your movement until it is out of the parking spot and you have plenty of room the open the doors and get in.



Walk from one side of the car to the other to let the car recognize you.



Walk from one side of the car to the other to let the car recognize you.

The Virtual Leash function works in the same easy way for park in scenarios as well. Imagine if there is a big puddle of water next to your parking space and you don't want to get wet by stepping out of the car and into it. No worries, just activate the Virtual Leash on your dashboard, step out of the car and walk from one side of the car to the other, just as you would for the park out scenario. The car will recognize you, and let you lead it into the parking spot.

The way the car is able to follow the drivers movement is through ultrasonic sensors. The Ultrasonic sensors transmits a sound wave with very high frequency that bounces off objects and is returned to the sensor. When the wave is returned the distance from the object to the car can be calculated. By using this technique the sensors can follow the driver's movement with very high accuracy.

The Virtual Leash presents a new way of controlling your car. To be able to remotely operate your car without any device is a first step into a new and more comfortable experience when parking your best friend. In the past you could only tell your car to stay. We have thought it to follow.