Learning to live together: cars, human and kerbs in solidarity
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Certificate of original authorship

I, Guillermo Fernández-Abascal declare that this thesis, is submitted in fulfilment of the requirements for the award of Master of Research in the School of Architecture / Faculty of Design, Architecture and Building at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

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Abstract

Recent developments in driverless technologies are bringing discussions about the urban environment to the forefront. Automotive and technological industries are envisioning the future of our cities while developing the vehicles themselves without establishing a conversation with the architectural discipline. Yet, proposed driverless scenarios appear to emphasize consensual solutions where idealized images of the street seamlessly integrate their technologies. Ignoring the immediate future, these visions focus on a more distant time where technology dominates: driverless cars populate the road, human behaviour and city infrastructure remain unchanged, and society has learned to live with autonomous vehicles.

This thesis explores the conflicts unleashed by new technology, how it triggers meaningful transformations in the city, and how these changes might happen in the near future. The fast and disruptive implementation of driverless technology does not foresee an urban solution. However, it does ask us to imagine how the cohabitation of humans and cars might be articulated in the urban environment since this is where the short-term negotiation between them will take place. The differences in the way that cars and humans sense and sense the city will define the terms of the discussion and the design of these spaces.

To explore these discussions and transformations, we first dissect the sensing devices that allow driverless technologies to navigate the urban environment whilst unpacking the interlinked socio-technical controversies inherited in their deployment. Secondly, we identify the hybrid forum as the only available space with the capacity to address the convolutions of the immediate driverless future. We finish by concentrating on a thing; a kerb is presented as the object of deliberation in this hybrid forum. It allows multiple agents to have discussions about safety, control, surveillance, security, empathy, trust, urban policy and automation; it sets the rules for cohabitation.
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