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Keeping the Driver in the Loop While Driving With Conditional Automation

Dillmann, Jeremy

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Propositions (Stellingen behorend bij het proefschrift)

Keeping the Driver in the Loop While Driving With Conditional Automation Jeremy Dillmann

- The perception-action perspective provides a more parsimonious approach to the out of the loop problem than the situation-awareness perspective. (Chapter 1)
- 2. Two key processes underlying driving behavior while "in the loop" are perceptual attunement and perceptual-motor calibration. (*Chapter 1*)
- 3. Placing non-driving-related-tasks in a head-up display during automated driving can increase safety. *(Chapter 2)*
- 4. Driving performance in an automated vehicle can be increased if drivers frequently take back control from automation. (*Chapter 2 / Chapter 3*)
- 5. Limitations of the automated system can help keep drivers in the loop if they lead to recurring driver-initiated take-overs. (*Chapter* 3)
- 6. While driving an automated vehicle on the road, participants are capable of safely performing self-paced and urgent take-overs. *(Chapter 4)*
- 7. Automated driving on the road can be learned: take-over behavior becomes faster as we become accustomed to the system. *(Chapter 4)*
- 8. Transferring the fundamental perception-action theory to the applied human factors field of automated driving is challenging yet rewarding. (*Chapter 5*)
- 9. You can recognize a German engineer as study participant by their frequent stereotypical "jawohl!". (*Chapter 2 / Chapter 3*)
- 10. "Be not afraid of going slowly, be afraid only of standing still." Chinese Proverb