

Understand People's Representations of Automated Vehicle: a way to conceive our future road safety

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Introduction

Various levels of automation will soon coexist on the roads resulting in **mixed traffic** environments, in which inexperience in Automated Vehicles (AVs) is the primary **cause of accident** with AVs [3].

The **Social Representations** (SRs) of AVs and its evolution with these technologies is a relevant question, given that the literature on the domain remains "a vast undeveloped field" [4].

Methods

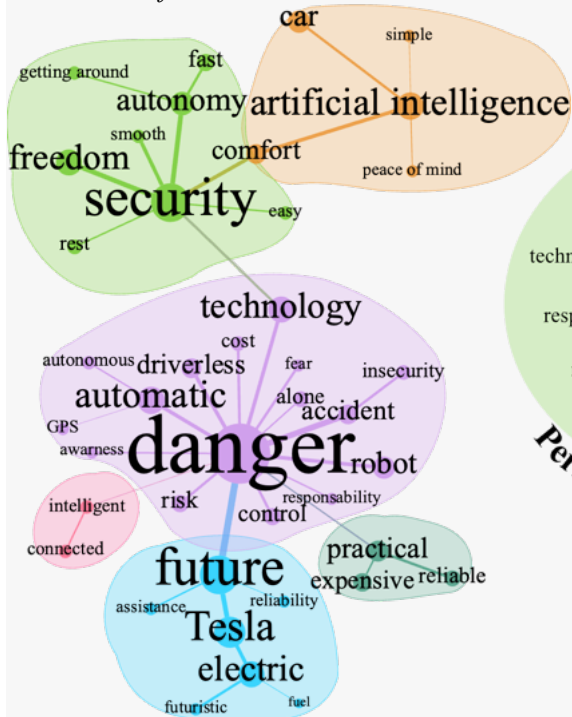
Free associations [1]:

We conduct an **online questionnaire** to address the **content** and the **structure** (central core, periphery) of the representations. Data collection: frequency and importance of words.

- List **5 words** you consider representative of AVs or Conventional Vehicles (CVs).
 - Rank the words in order of **importance**.
- 2 groups: AVs (n=183) and CVs (n=190).

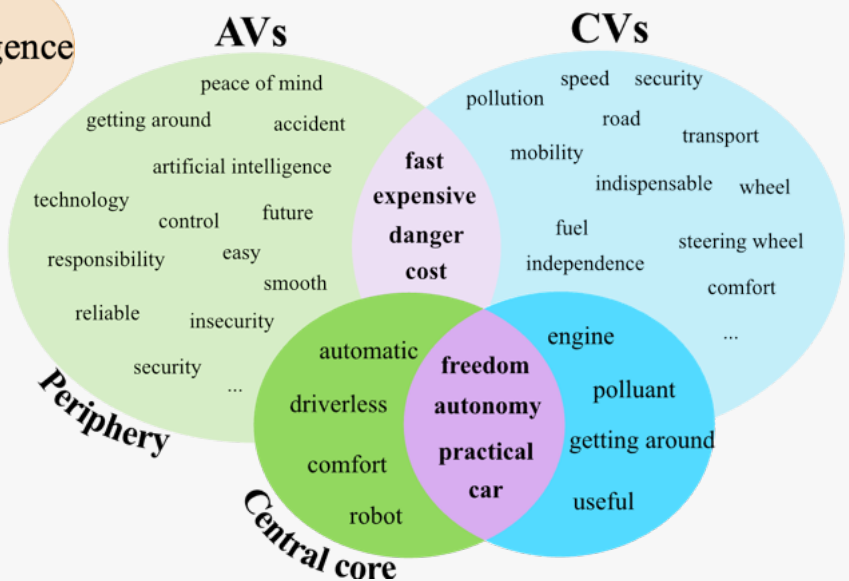
Preliminary results

AVs' free associations content



Several themes stand out: **general features** (future, Tesla, electric); **disadvantages and consequences** (danger, accident, responsibility); **profits** (security, freedom, peace of mind).

AVs and CVs' free associations structure



AVs' SR **shares elements** with CVs' SR particularly in the **central core** (stable and resistant part of the SR). It is then challenging to define a distinct representation of AVs.

AVs' SR is part of a **broadier context**, making it essential to define a **distinct** representation for AVs.

Perspectives

Understanding the **context** is crucial for interpreting how individuals perceive and reconcile the **potential risks and benefits associated with AV technology**.

Add a **method to discriminate** the representations of AVs and CVs to obtain the **most specific representation possible**.

Use these results to **design appropriate road safety measures** [2].

References

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