

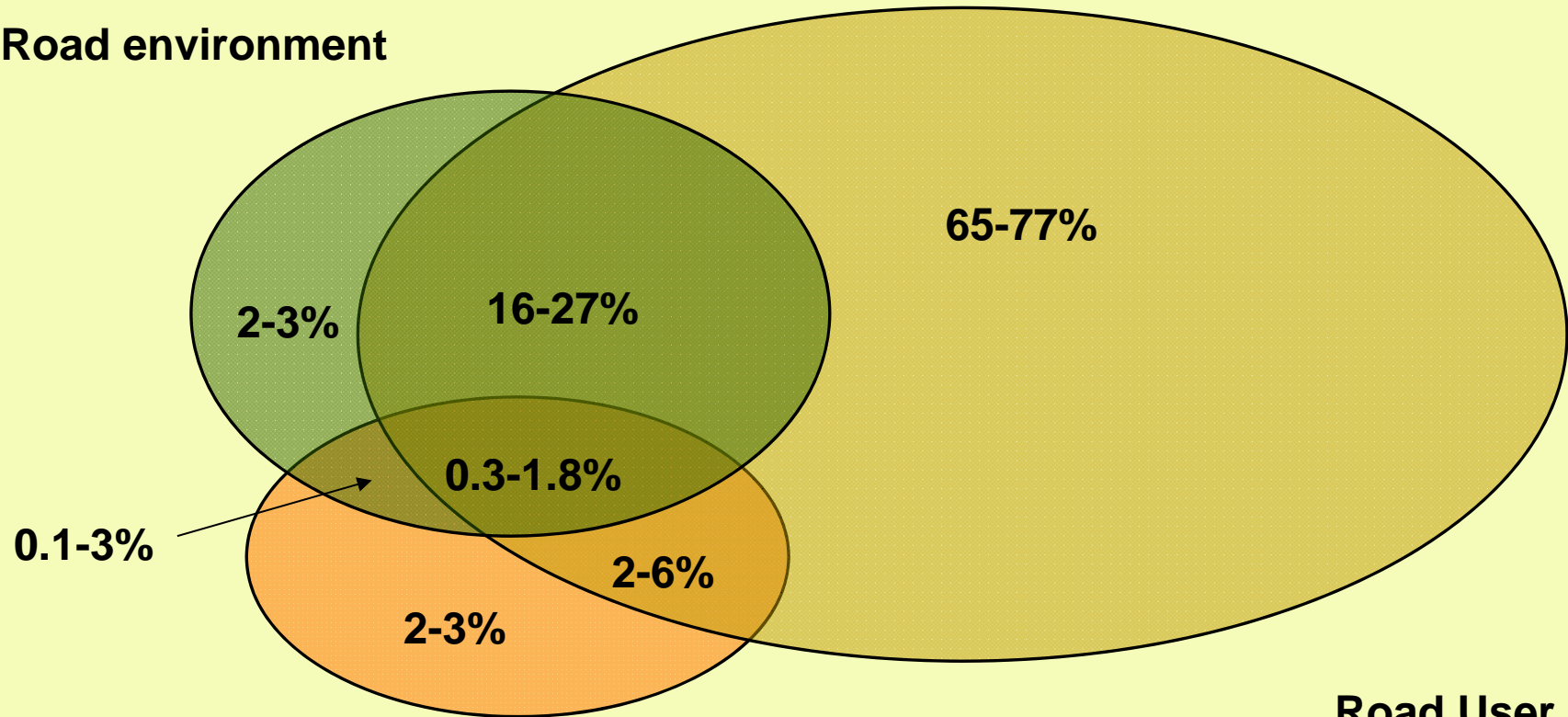


The Human Element

Highway Design and Safety

A Luck BSc (Hons), MSc, MCIHT, MEWI

Road environment

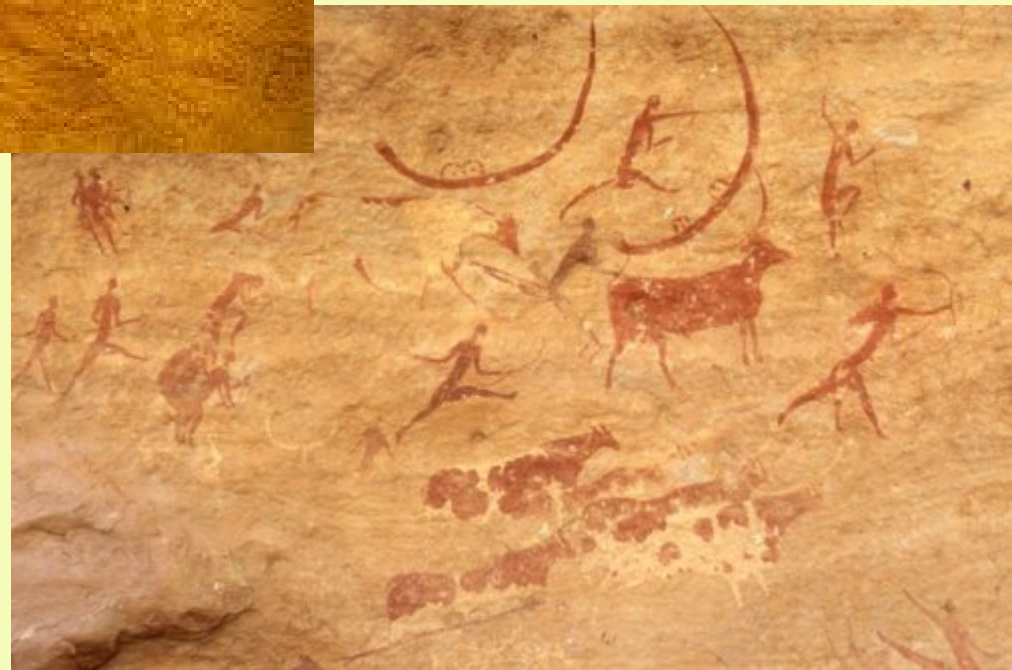


Vehicle

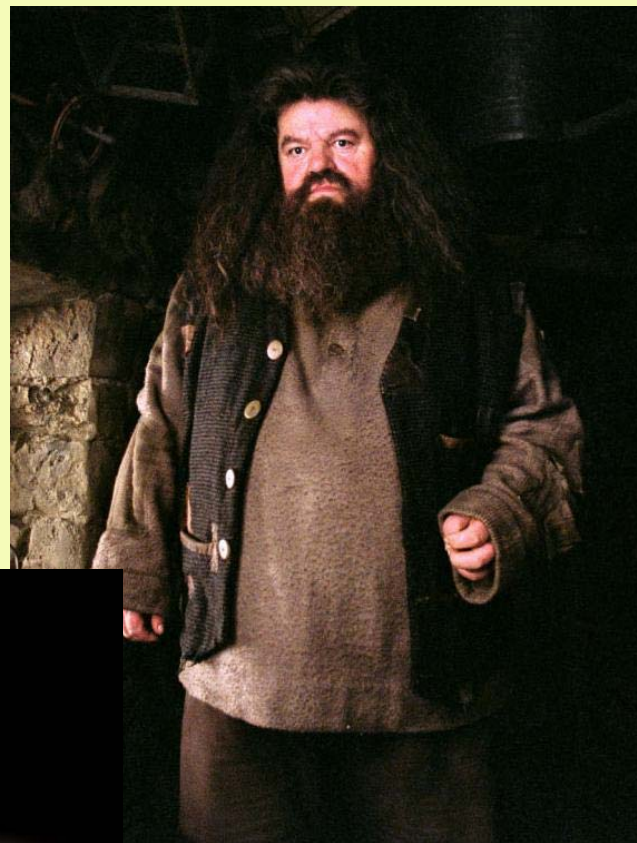
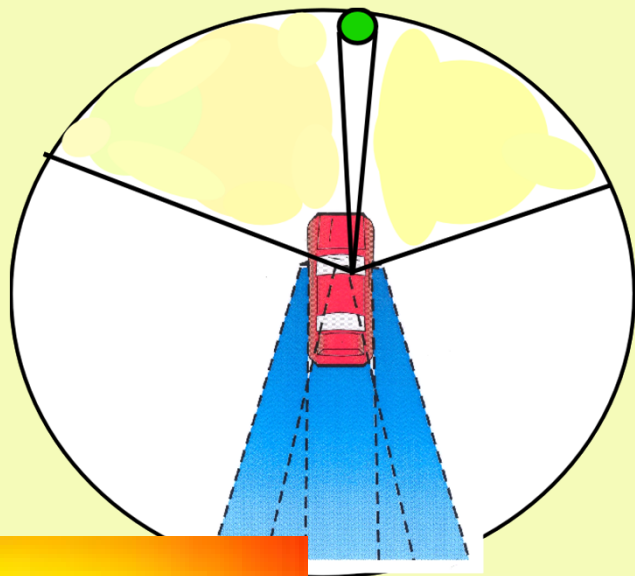
Road User

Source: Sabey and Taylor (1980)

Carston et al (1989)















Self-explaining
environment

Evokes right
expectations

- Road geometry
- Own behaviour
- Other's behaviour









Self-explaining
environment

```
graph TD; A[Self-explaining environment] --> B[Evokes right expectations]; A --> C[Permanently supports user expectations]; B --> D["• Road geometry<br/>• Own behaviour<br/>• Other's behaviour"]; C --> E["• Limited speed adaption required"]
```

The diagram is a flowchart on a light yellow background. At the top is a green rounded rectangle labeled 'Self-explaining environment'. Two arrows point down from this box to two separate green rounded rectangles. The left one is labeled 'Evokes right expectations' and the right one is labeled 'Permanently supports user expectations'. Below the left green box is a larger orange rounded rectangle containing a bulleted list: 'Road geometry', 'Own behaviour', and 'Other's behaviour'. Below the right green box is a larger orange rounded rectangle containing a single bullet point: 'Limited speed adaption required'.

Evokes right
expectations

- Road geometry
- Own behaviour
- Other's behaviour

Permanently
supports user
expectations

- Limited speed
adaption required



Self-explaining
environment

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graph TD; A[Self-explaining environment] --> B[Evokes right expectations]; A --> C[Permanently supports user expectations]; B --> D["• Road geometry<br/>• Own behaviour<br/>• Other's behaviour"]; C --> E["• Limited speed adaption required<br/>• Minimal speed differentials"]
```

The diagram is a hierarchical flowchart. At the top is a green rounded rectangle labeled 'Self-explaining environment'. Two arrows point down from this box to two separate green rounded rectangles. The left one is labeled 'Evokes right expectations' and the right one is labeled 'Permanently supports user expectations'. Below each of these green boxes is a yellow rounded rectangle containing a bulleted list. The left yellow box lists 'Road geometry', 'Own behaviour', and 'Other's behaviour'. The right yellow box lists 'Limited speed adaption required' and 'Minimal speed differentials'.

Evokes right
expectations

- Road geometry
- Own behaviour
- Other's behaviour

Permanently
supports user
expectations

- Limited speed adaption required
- Minimal speed differentials



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