

CULTURAL DIFFERENCES AMONG NATIONS OR REGIONS: RISK PERCEPTION IMPACTING ON TRANSPORT POLICY AND ROAD SAFETY.



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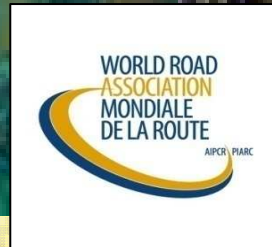
60 years of UNECE for
road safety

Joint meeting of WP.1 and SC.1



Geneva, September 29th 2010

“Man was born in labour, and birth itself means a risk of death”



PIARC TC C3



- So, if risk is embedded in our existence, the role that risk perception and risk acceptance play by moulding the individual reaction are a crucial contextual element for policy makers.



GENERAL APPROACH TO RISK

Risks are frequent in every field and situation, including the management of road infrastructures

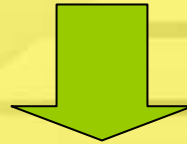
BUT

not all risks affect and interest people:
the attention focuses selectively on specific hazards, while other risks are fully neglected.

Sometimes the neglected risks rose suddenly in the limelight as a function of specific events and/or media campaigns.

WHAT IS THE ACCEPTABILITY OF A RISK?

The anthropologist *Mary Douglas* speaks about "social" acceptability



They are socially standardized conventions determining what risks are acceptable.

It is the culture that leads to define the risks considered acceptable and risks to be feared and therefore refused.

The specialists of the risk perception attempted to systematically identify what makes a risk more acceptable than others and also addressed the issue of different thresholds of tolerance.



THE FACTORS INFLUENCE THE PERCEPTION OF RISK

According to Vincent Covello the most important factor is the **TRUST**





DISPROPORTIONATE PERCEPTION OF SPECIFIC EVENTS

Covello researching in psychological sciences has identified “47 known factors that influence the perception of risk”

CATASTROPHIC POTENTIAL

FAMILIARITY

IMPACT ON CHILDREN

UNDERSTANDING

DREAD

SCIENTIFIC UNCERTAINTY

MEDIA ATTENTION

CONTROLLABILITY



DISPROPORTIONATE PERCEPTION OF SPECIFIC EVENTS



Tunnels

“CATASTROPHIC POTENTIAL” AN EXAMPLE THE CASE OF TUNNELS

The three fires of Mont Blanc, Tauern and Gotthard tunnels showed the potential for significant loss of life, bodily injury, property damage and business interruption arising from motor accidents when compared to other road accidents.

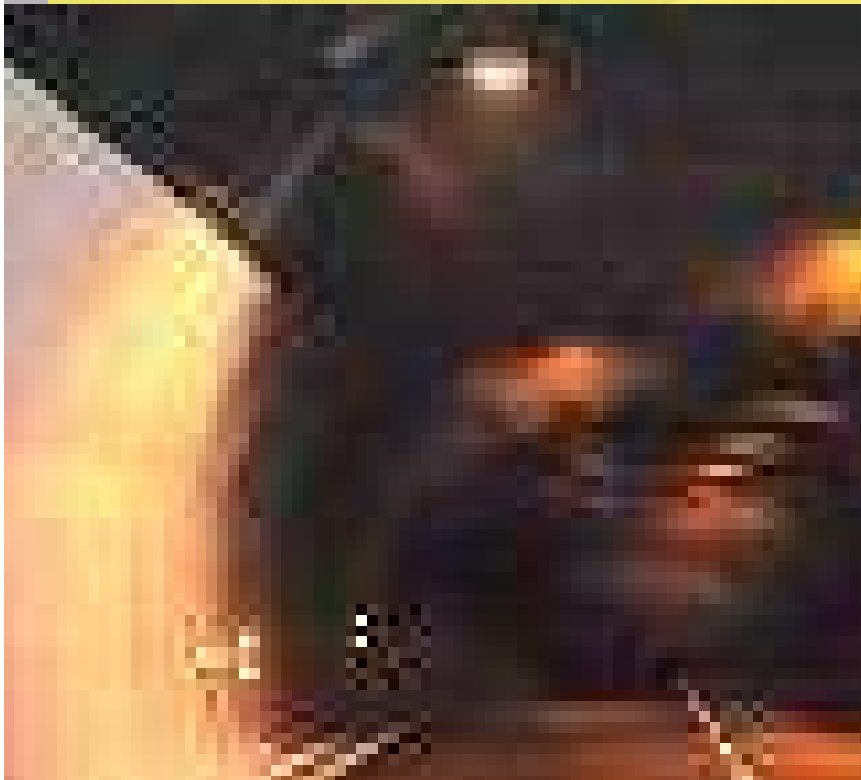


On the other hand no relevance on the perception of people has the fact that very few fire accidents in the history of worldwide transportation resulted in fatalities and only the three above listed accidents resulted in more than 10 fatalities each



FAMILIARITY

People is more concerned about unfamiliar risks: people is not familiar to fires in tunnels while almost every week, driving in a major town, we can experience to see a car accident or a hurt motorcyclist laying on the ground



VOLUNTARINESS OF EXPOSURE

People are more concerned about risks that are imposed rather than voluntarily accepted; we can consider that over-speeding related accidents are extent the consequence of a voluntary exposition, while it is not the case of being hurted by dangerous hot smoke travelling in a tunnel in the event of a fire





SCIENTIFIC UNCERTAINTY

People are more concerned about poorly understood activities (exposure to radiation) than those that may be understood (slipping on ice)





CONTROLLABILITY

People are more concerned about risks not under personal control. When a major fire ignites in a tunnel, the physics of the phenomena could be out of human control



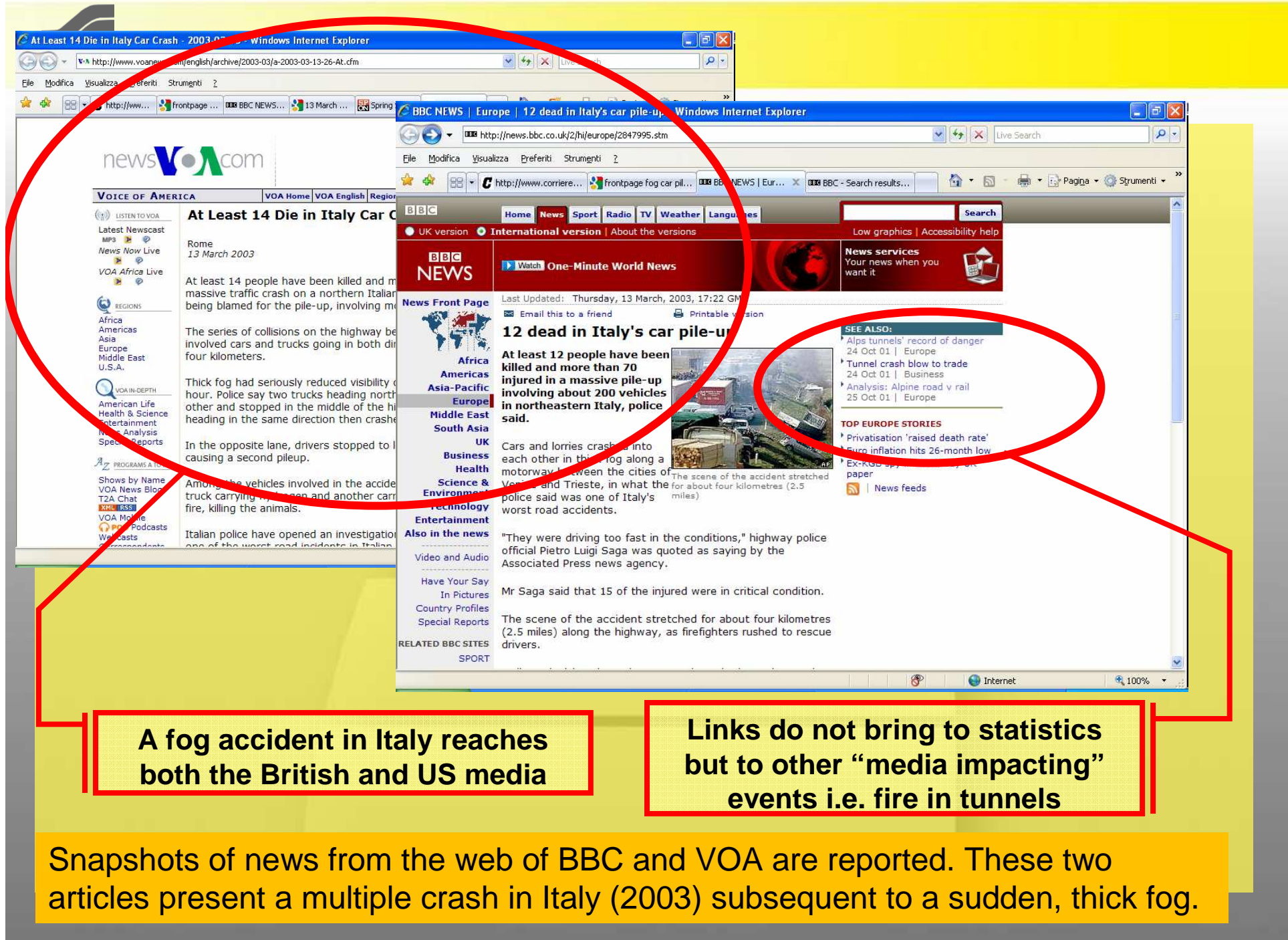
MEDIA ATTENTION

The attention of media is a key element for the
modulation and amplification
of the risk perception on the public opinion;
even a minor event related to fire trigger the attention of media worldwide and quickly go front-page.

A grayscale photograph of a winter scene. A person is walking away from the camera on a path that is partially covered in snow. The path is flanked by trees, some of which are bare and some with dark leaves. The entire scene is shrouded in a thick, white fog, which obscures the background and creates a sense of depth and mystery. The lighting is soft and diffused, typical of a foggy day.

Fog





A fog accident in Italy reaches both the British and US media

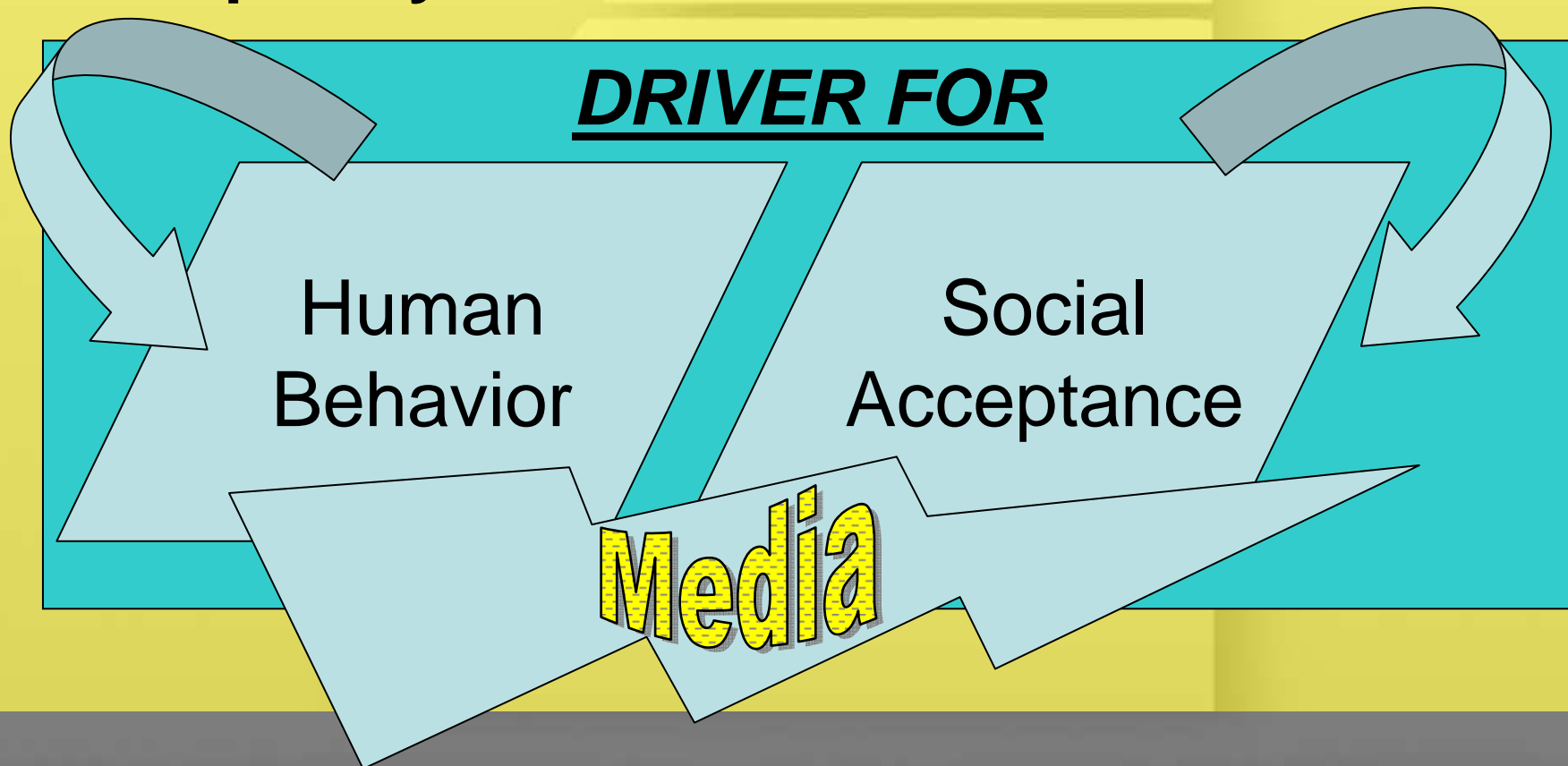
Links do not bring to statistics but to other "media impacting" events i.e. fire in tunnels

Snapshots of news from the web of BBC and VOA are reported. These two articles present a multiple crash in Italy (2003) subsequent to a sudden, thick fog.

The event of 2003 was extremely severe resulting in several fatalities. However, “extremely severe consequences to human life” are not the only triggers for media attention. For instance, a pile-up collision resulting in a single fatality in Austria garnered broad media attention (e.g. on Spiegel). A similar interest from media wouldn’t have occurred for a single fatality related to “ordinary” road accidents.

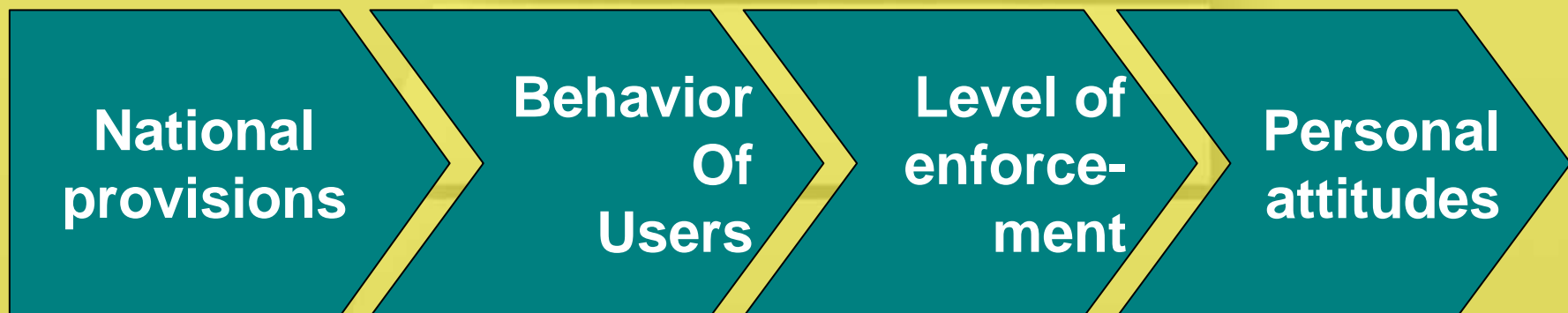
CONCLUSIONS

- **Culture leads the perception of risks and influences the social definition of risks considered “acceptable” and those “feared” and consequently refused. Culture become the**



CONCLUSIONS

- Risk perception is a phenomena strictly depending on culture
- Different cultures could lead to different personal and social approaches to key risk influencing factors such as:



CONCLUSIONS

The perception of risk has two major consequences identified as fields of interest for the operation of roads:

A yellow 3D rectangular box with a black outline, positioned on the left side of the diagram.

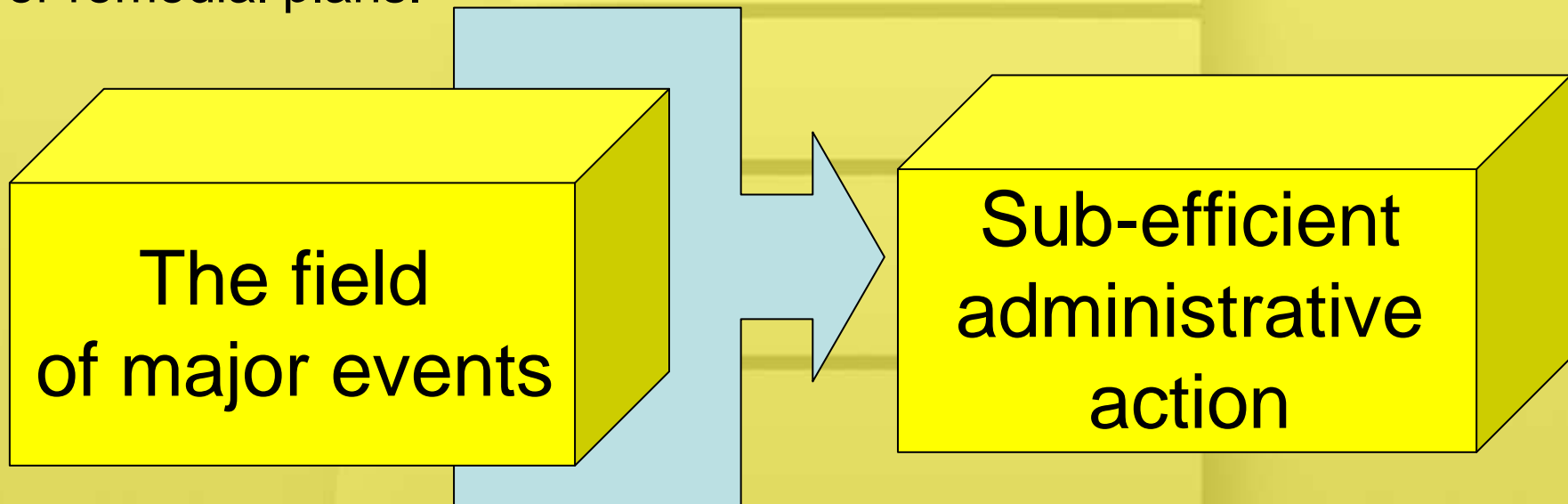
**The field
of major events**

A blue 3D rectangular box with a black outline, positioned on the right side of the diagram.

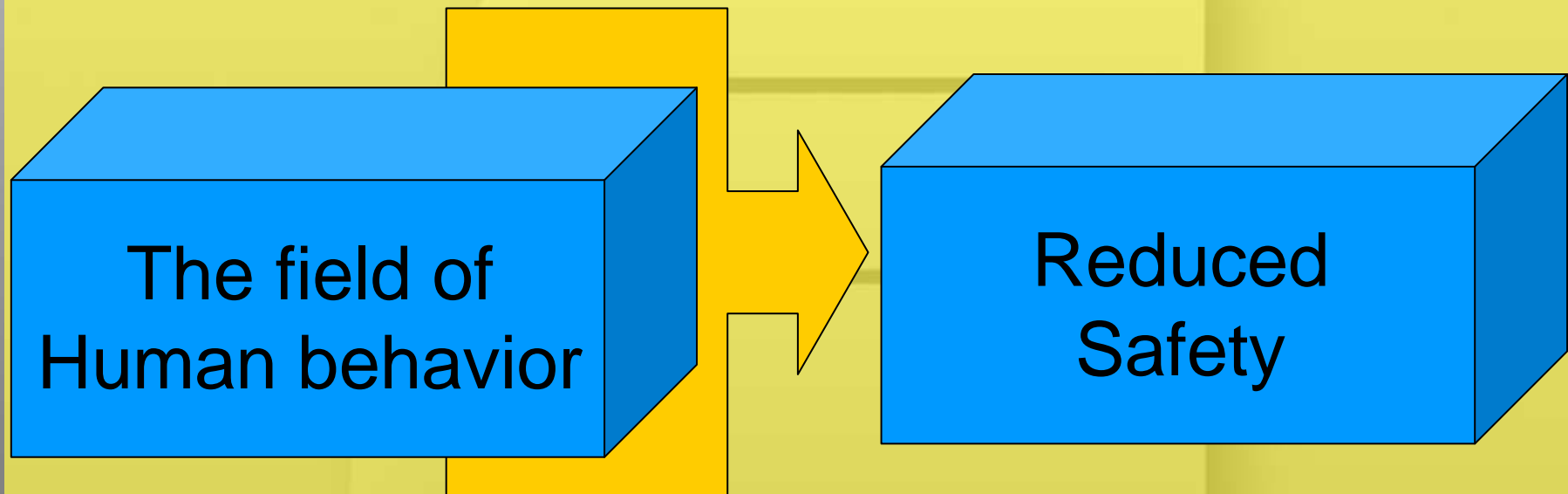
**The field of
Human behavior**

CONCLUSIONS

a. **The field of major events:** Road Authorities and Operators need to make choices and investments discriminating among hazards with a reasonably high probability and other risks. The perception of risk and the social amplification of major events can have an impact on the assessment process, bringing the overall action to unpredictable results in terms of assessment, provisions or remedial plans.



b. The field of human behavior: Understanding the phenomena and appropriate perception of user's risks in order to underpin the proper overall function and bring a coherent approach. The misperception or underestimation of risks could be considered a key factor impacting a good approach to driving.



CONCLUSIONS

risk perception is a culture-led issue. It has a sensible impact on road related policies.

Impact on people can be influenced, improved through education, communication etc.

Authorities and operators need to know the effects and make use cost/benefit, and impact assessment

Thank you for your attention



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