

Recognition of Non-Prototypical Emotion from Speech – The Final Frontier?

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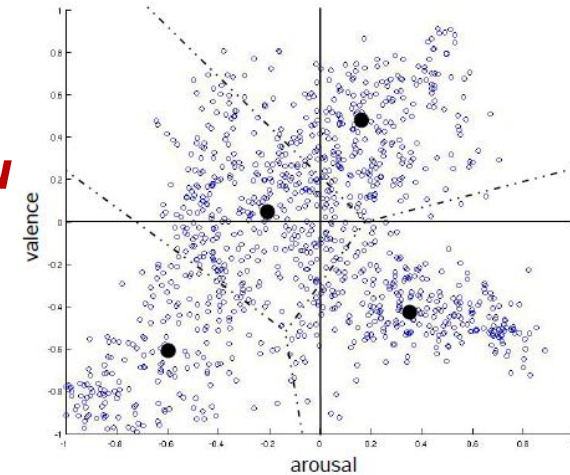
Special Session @ ACII 2009, Saturday, 12th September 2009, 3:25-3:30 PM

Most Promising Approach

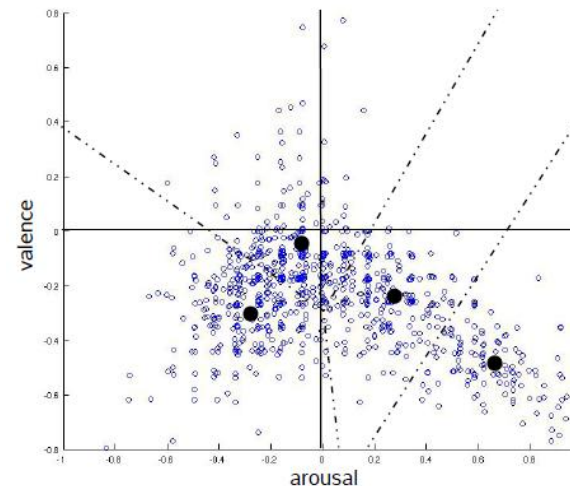
“What is the most promising approach that you can imagine so far towards dealing with non-prototypical emotion?”

- **Data-Driven Dimensional Modelling with Independent Confidences**

Contradiction?



SAL / VAM



Most Challenging Problems

“What are the most challenging problems we all have to face in this respect?”

- **Robust Garbage Modelling (“Universal Background Model”)**
Model must also contain other non-target emotions
Leading to other evaluation measures (e.g. Area Under ROC)
- **Automatic Segmentation**
Potentially multimodal at different time levels
... Leading to other evaluation measures (e.g. “Emotion Error Rate”)
- **Coping with Noises and Other Speakers**

Most Challenging Problems

“What are the most challenging problems we all have to face in this respect?”

- **Measuring Uncertainty**

Calculation of confidence-levels based on independent analyses

- **Labelling with Uncertainty**

Deriving the “rest-class” not only from low inter-labeller-agreement

- **Using Uncertainty**

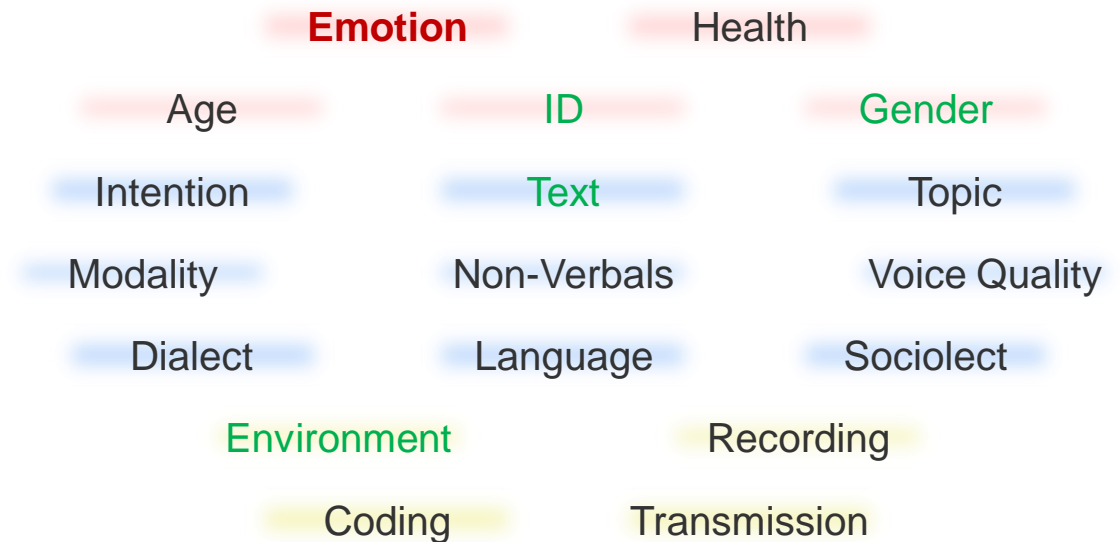
Finding reasonable system-reactions that differentiate “neutral” and “rest”

Adapting, classifying and fusing with uncertainty

Most Challenging Problems

“What are the most challenging problems we all have to face in this respect?”

- **“It’s not just Emotion...”**





Thank You.

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