Reactive Statistical Mapping: Towards the Sketching of Performative Control with Data

eNTERFACE 2013 Summer Workshop on Multimodal Interfaces

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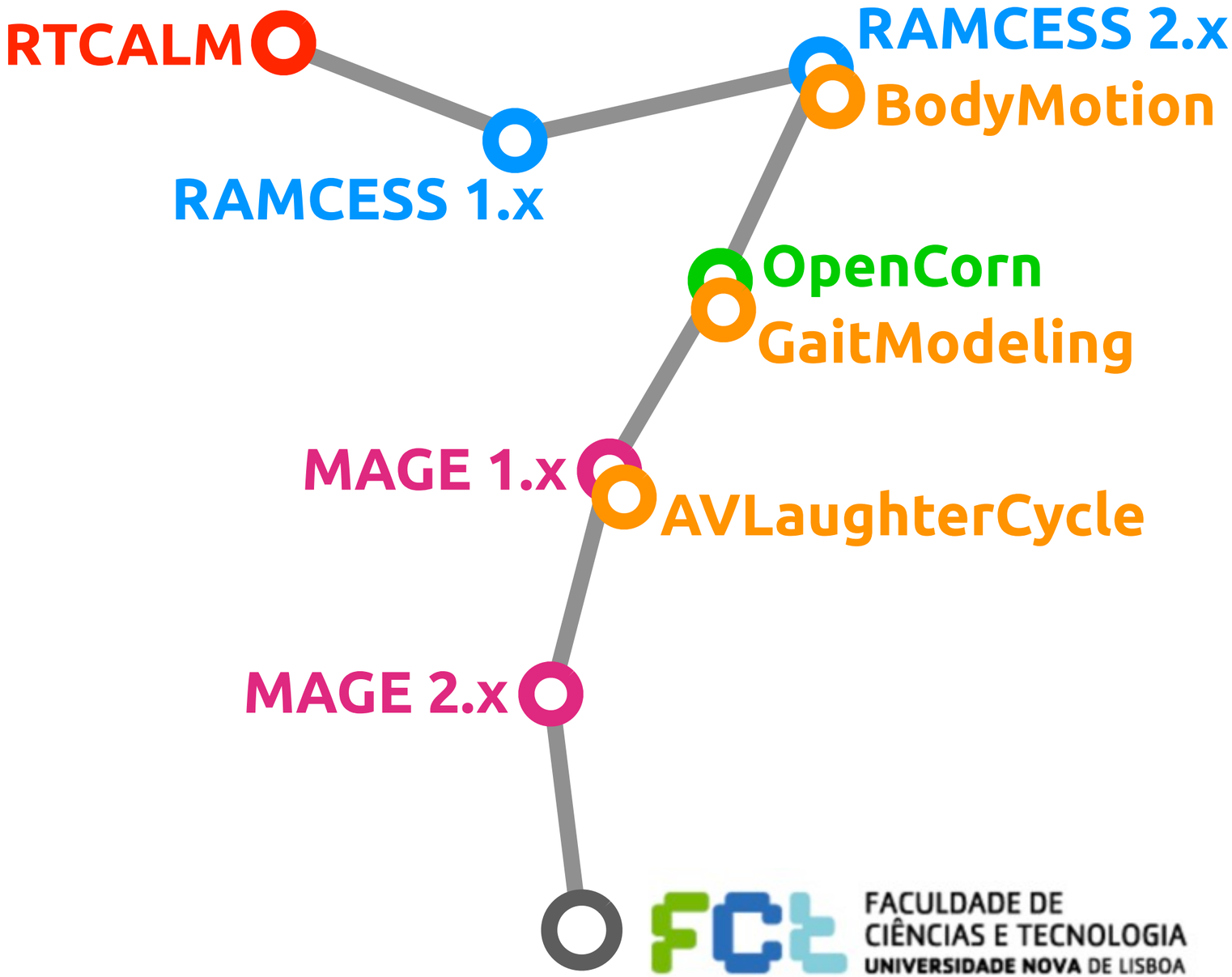

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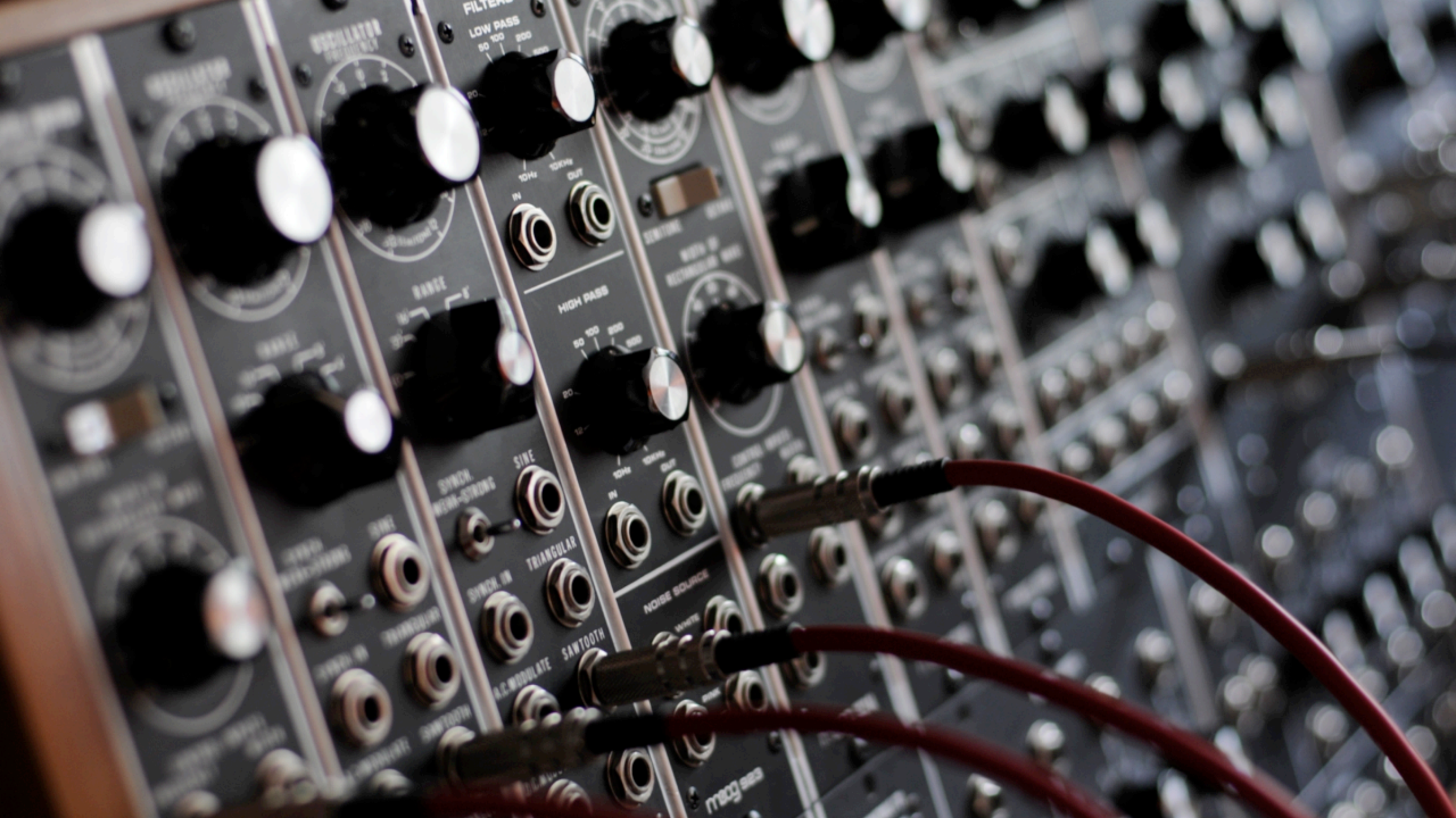
what do we want to do?

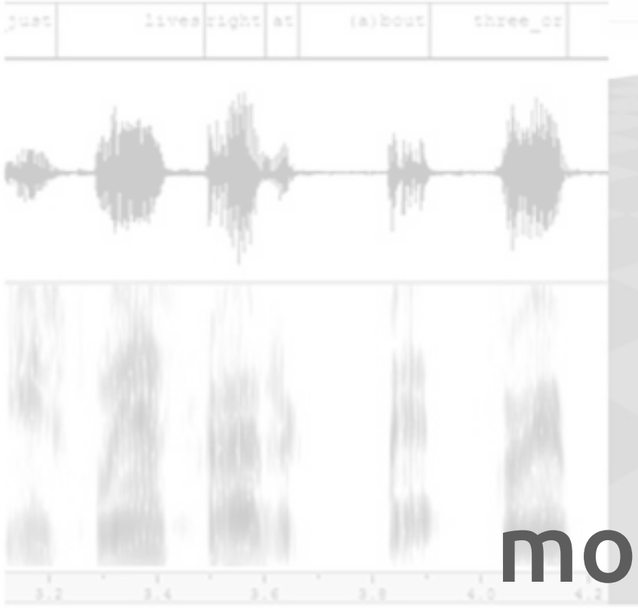
explore HMM-based techniques used in speech synthesis as a statistical mapping layer in multimodal performative systems


LOW PASS
HIGH PASS
SINE
TRIANGULAR
SAWTOOTH
NOISE SOURCE
WHITE
SYNCH. IN
A.C. MODULATE
RANGE
IN
OUT
10Hz
10KHz

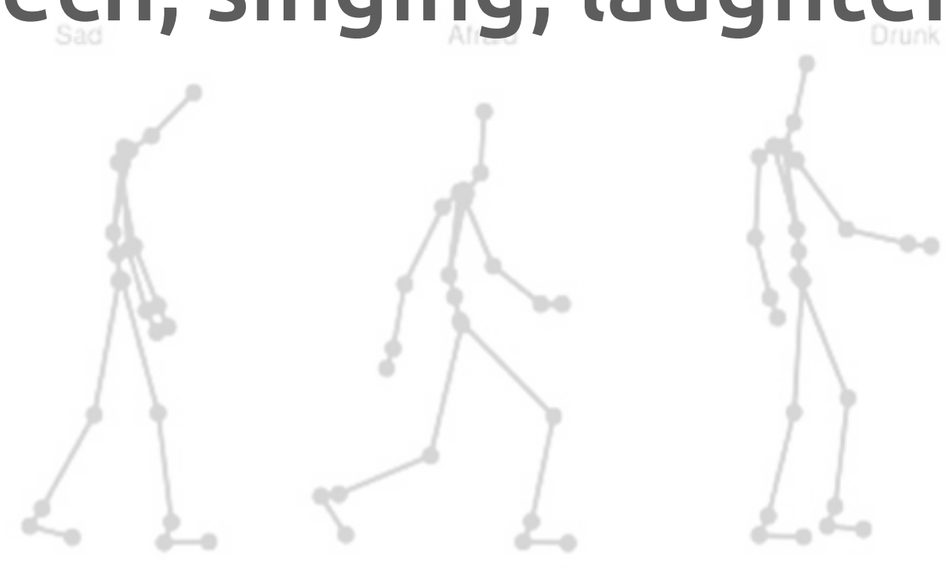
interface
mapping
realtime
reactive
meaningful

statistical mapping

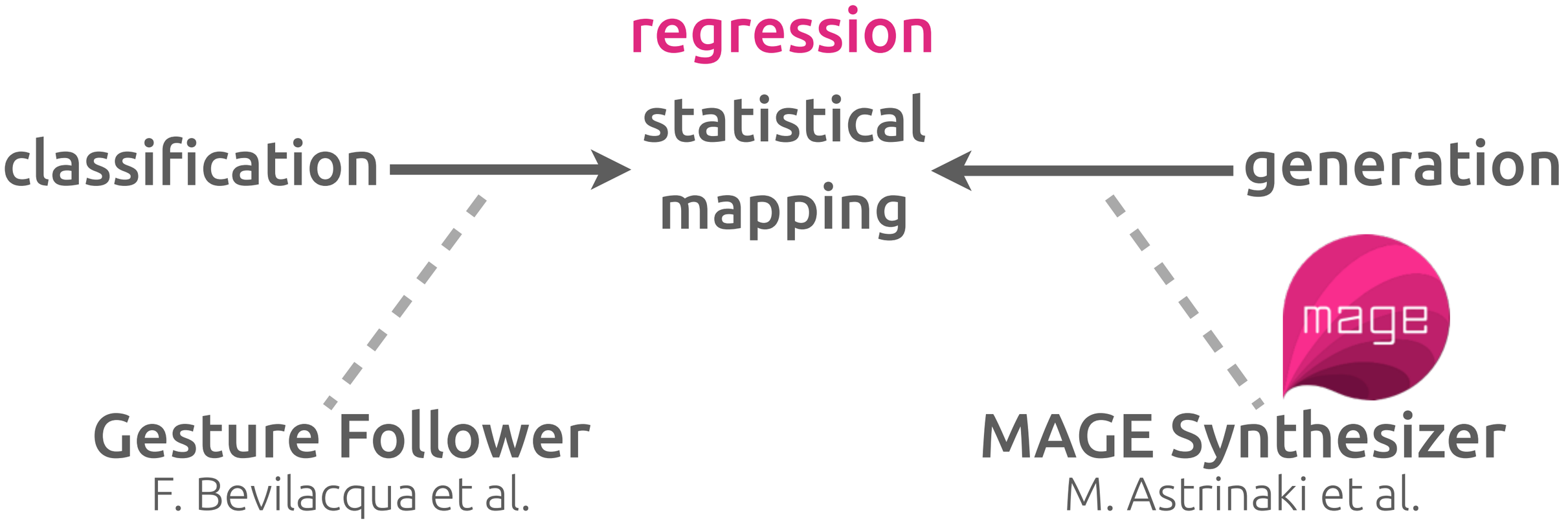
“rules suck, data rocks!”



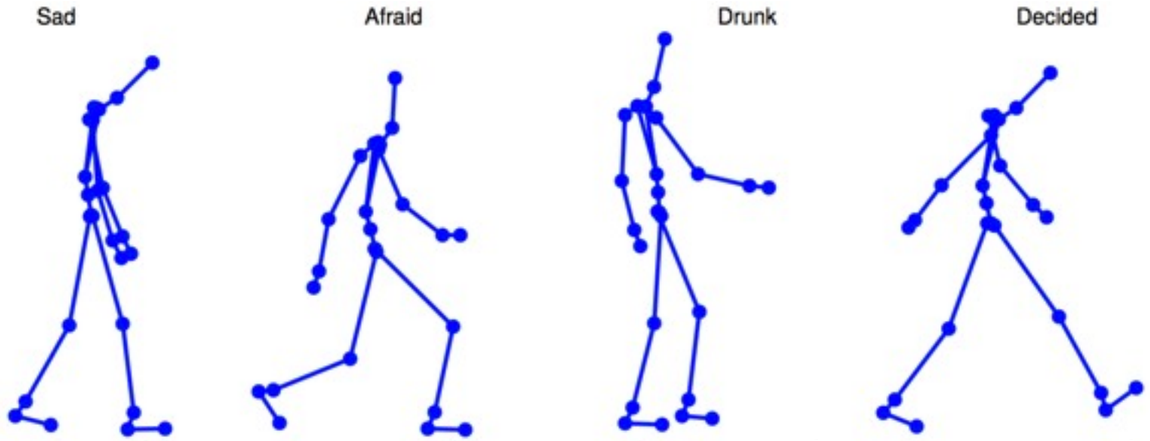
mocaped facial and body motion
voice (speech, singing, laughter)



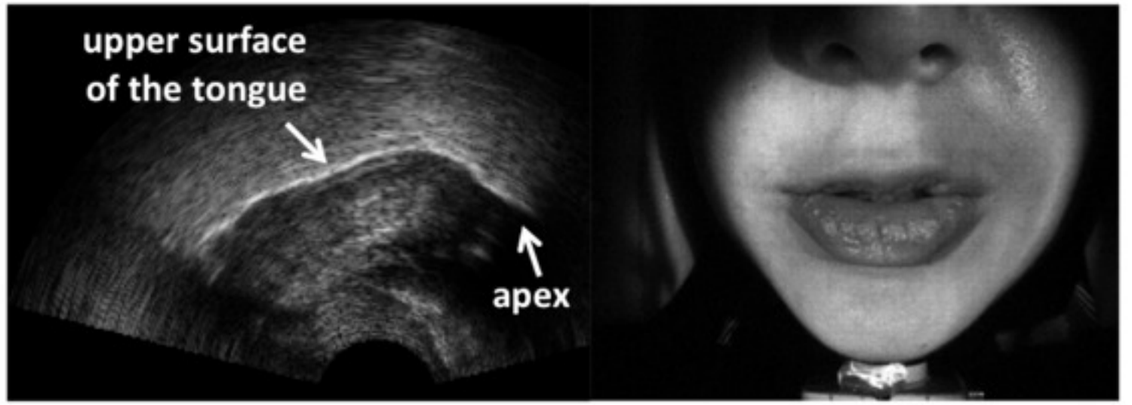
Hidden Markov Models in Performative Systems



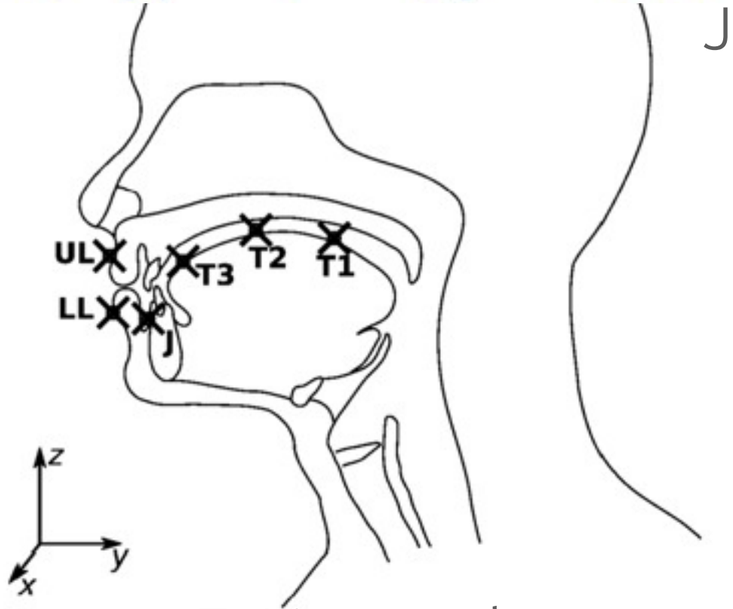
Hidden Markov Models in Media Synthesis



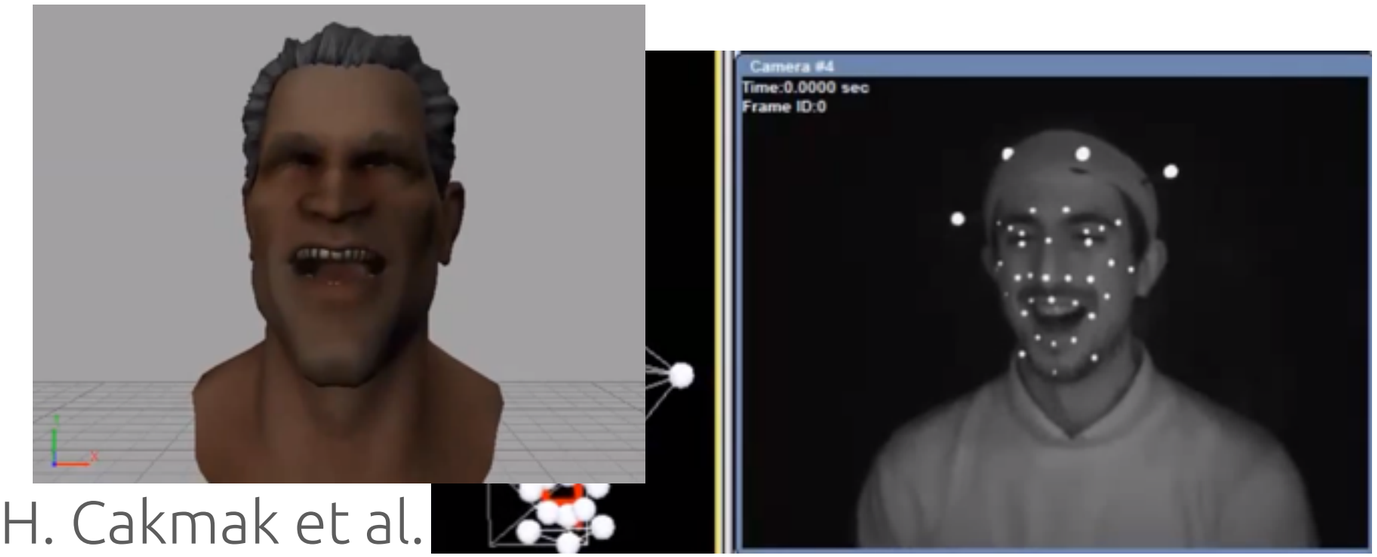
J. Tilmanne et al.



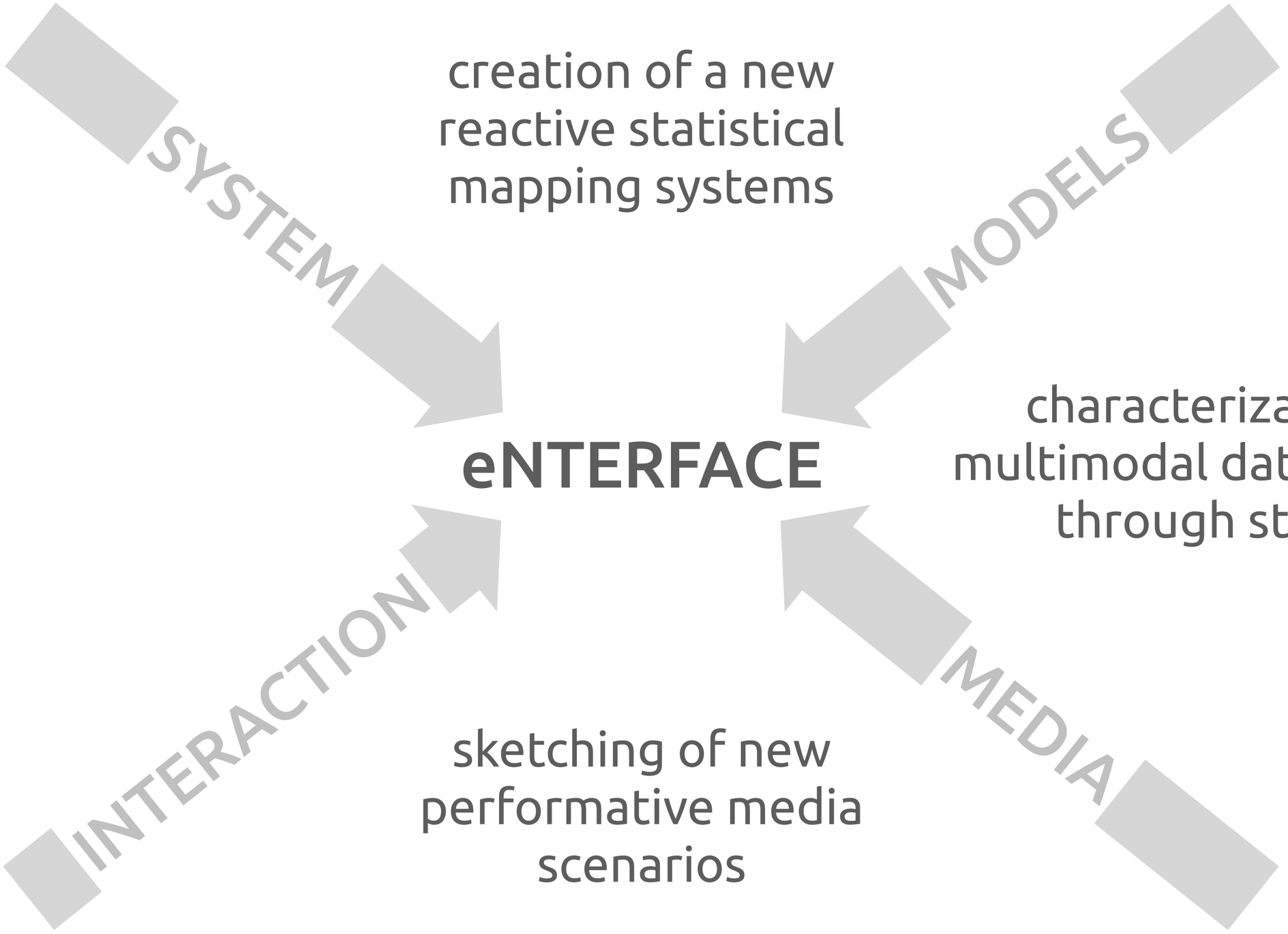
T. Hueber et al.

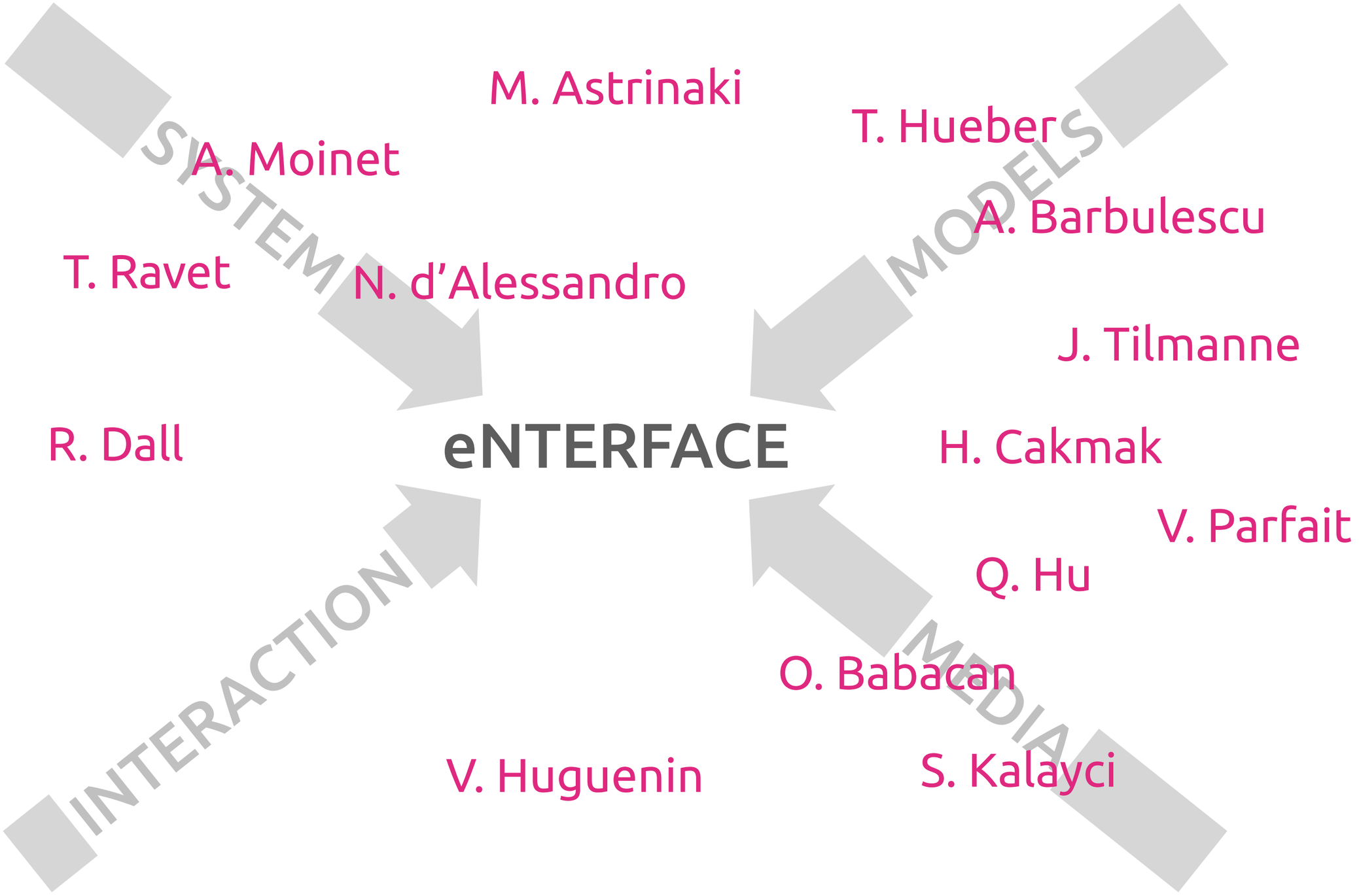


Z. Ling et al.



H. Cakmak et al.


creation of a new
reactive statistical
mapping systems
SYSTEM
MODELS
characterization of
multimodal databases
through statistics
eNTERFACE
INTERACTION
MEDIA
sketching of new
performative media
scenarios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Obrigado!

Questions?