



MGM Quali-quantia

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Iterative process...

- Evaluation✓
- “Classification”✓
- Towards custom-tailored questionnaires/surveys✓
 - optimisation through comments, group discussions, manual and statistical evaluation✓
- Towards custom-tailored concepts, categories or continua?
 - critical evaluation of literature and own concepts?
 - feasibility in gesture analysis by human or machine✓

Iterative process...

- mixed form=final form?✓
 - scale, rank and comment✓
 - “which element is typical of...?”✓
 - percentual estimations?
- context of use✓
 - on/offline✓
 - live (rating)✓
 - target “population”✓
- applicability/interaction other research tracks?
 - useful per se?✓
 - beyond descriptive?

experiment

- 26 participants
 - 13 musicians
 - students and zhdk staff
- design
 - 5 pre-selected excerpts from precision video capture
 - continuous effort rating in either audio or video condition (quantitative)
 - survey on selected segments (qualitative)

survey tool

<http://ww2.unipark.de/uc/mgmpression/>

survey data

- overall categorization, overall rating
- contrast
 - musicians vs. non-musicians
- statements
- link to quantitative ratings

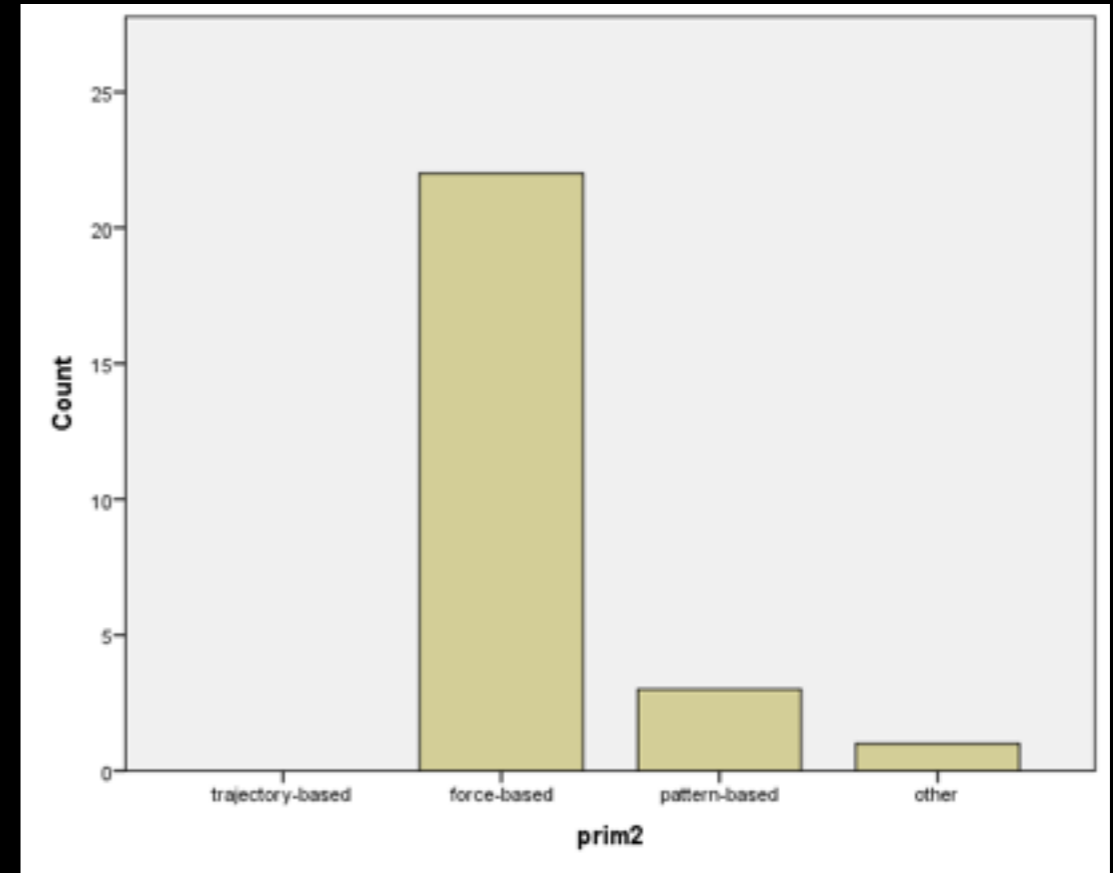
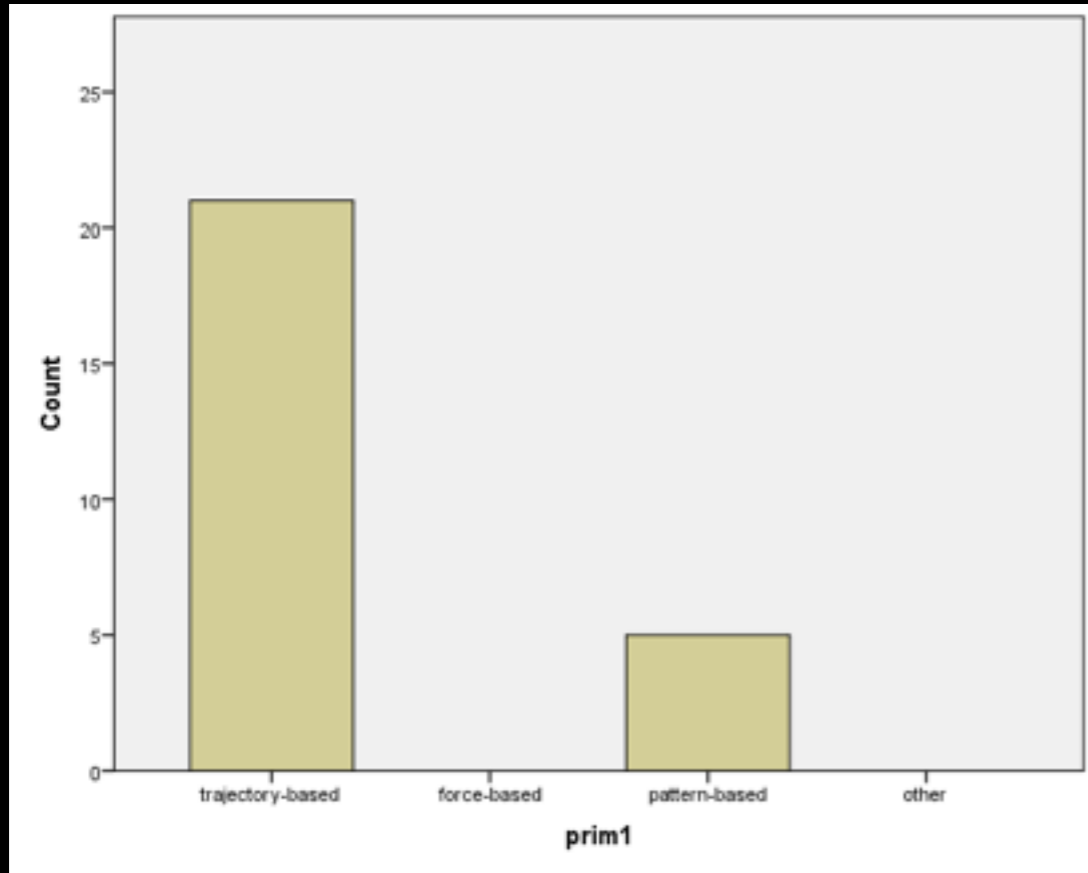
segment 1 - long



segment 1 - short



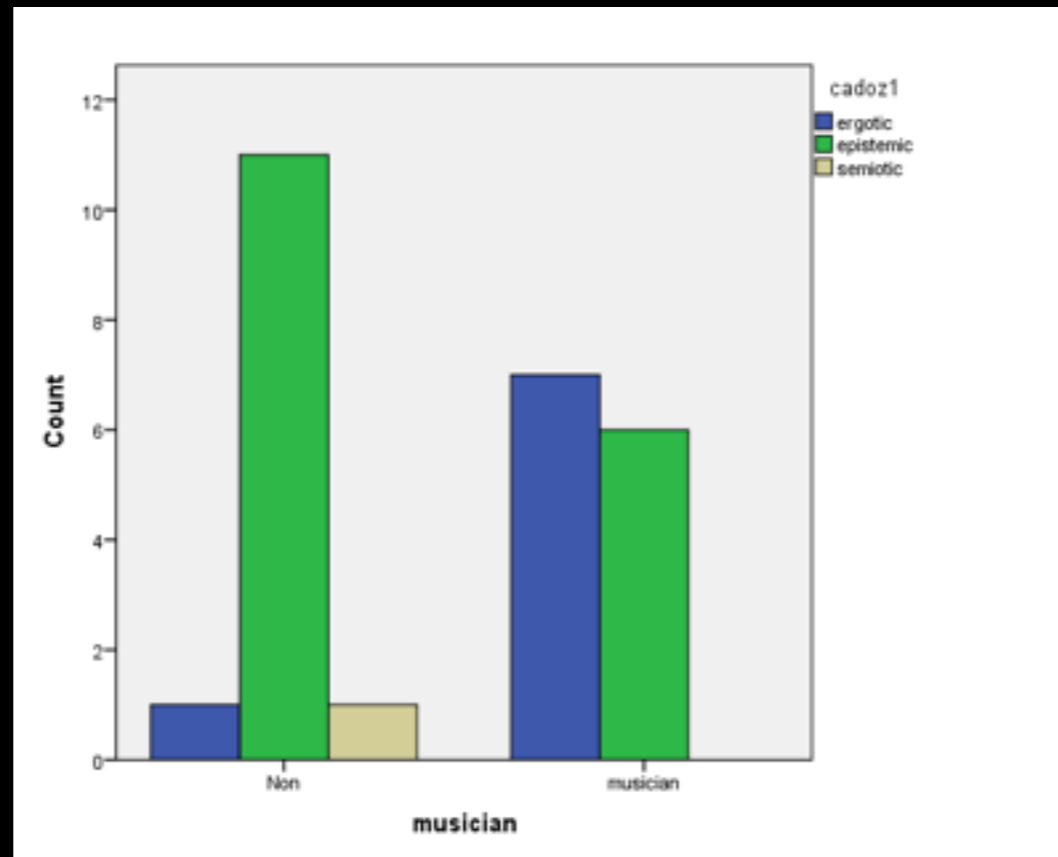
between segments



“categorization”

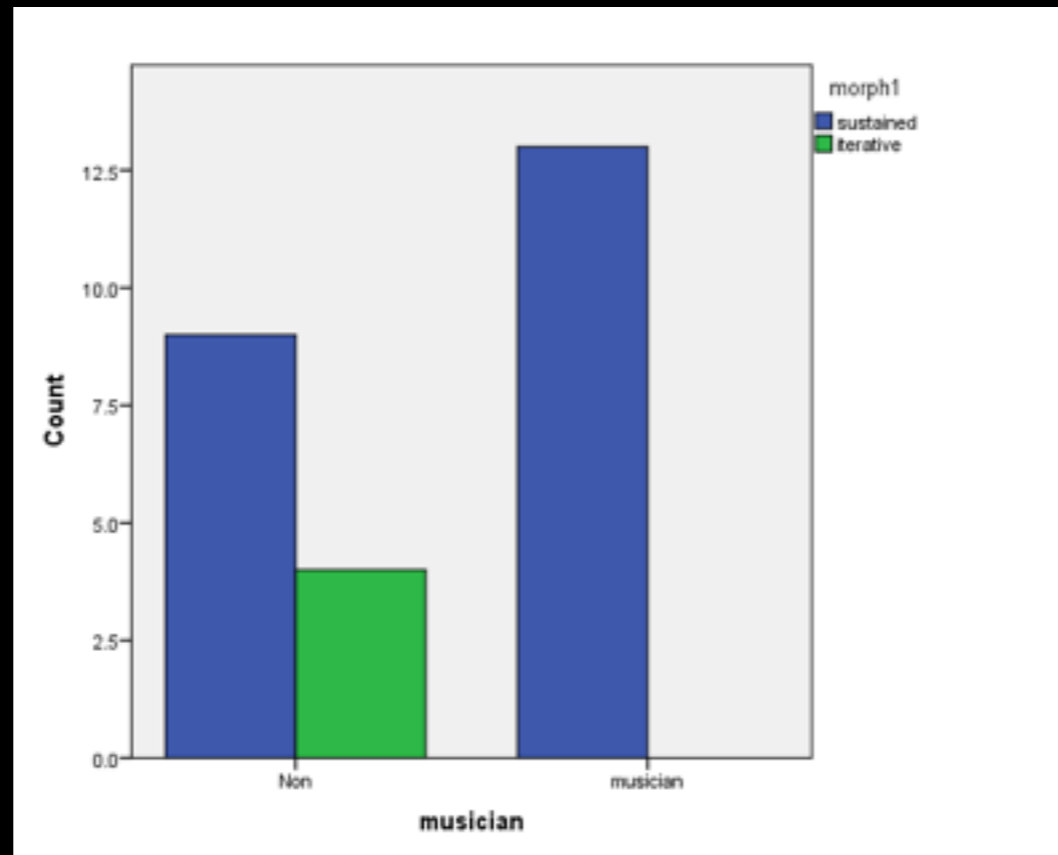
	segment 1	segment 2	segment 3	segment 4	segment 5
cadoz	epistemic	ergotic	ergotic	ergotic	ergotic
helping	timbre	level	rhythm	rhyhtm	timbre
morph	sustained	impulsive	impulsive	iterative	sustained
nature	producing	producing	producing	producing	producing
prim	trajectory	force	force	pattern	trajectory

between persons

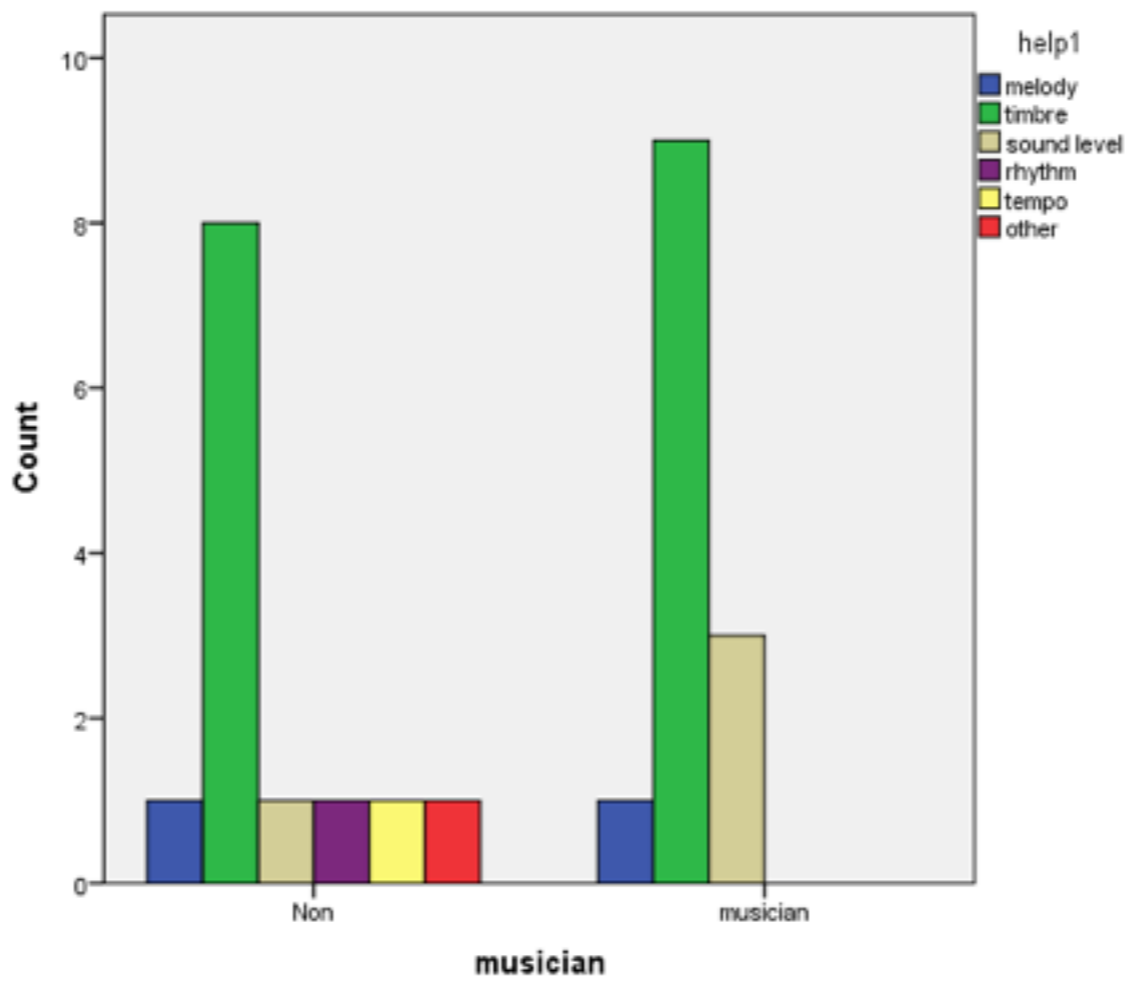
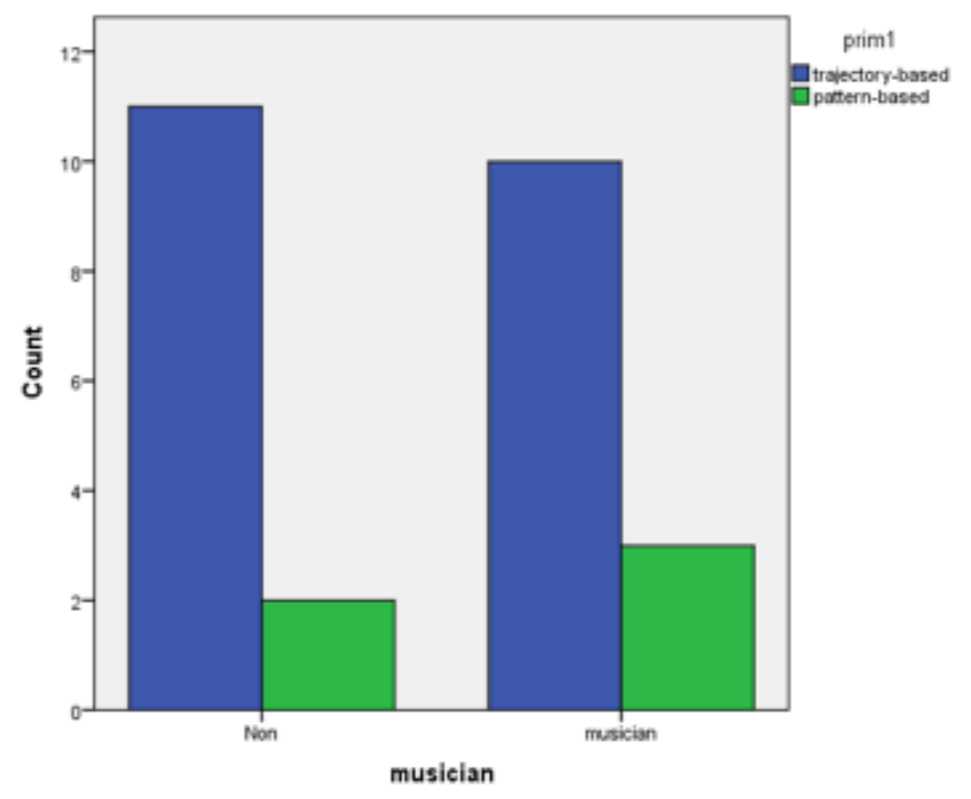
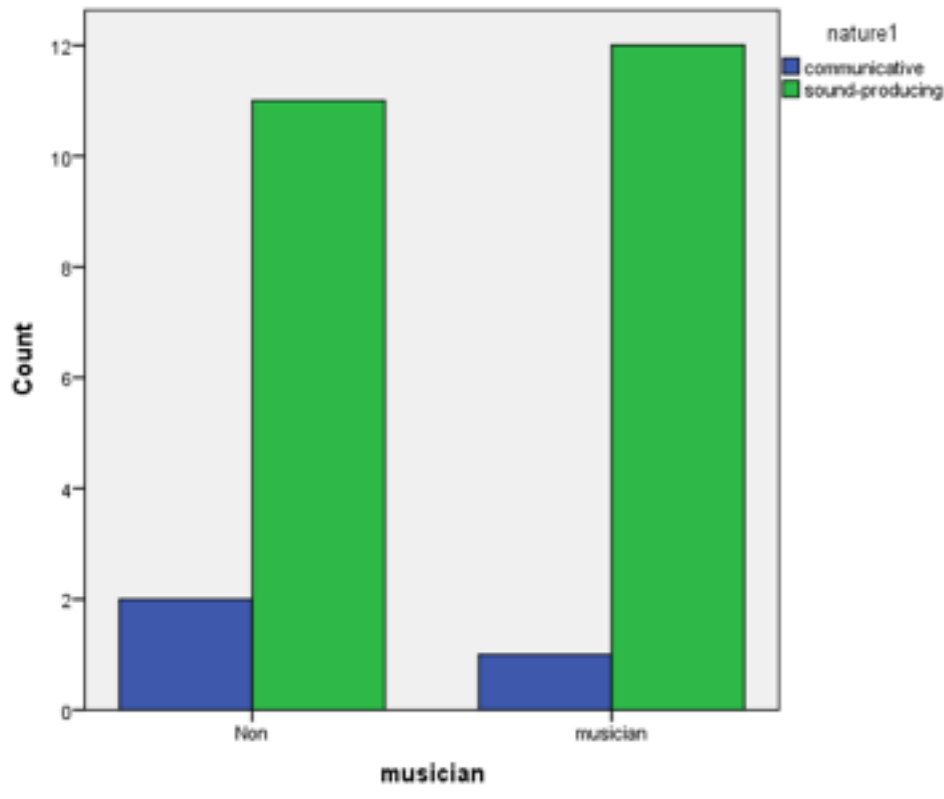


- musician (ergotic):
 - “the gesture is associated to the music and I guess is written in the music sheet.”
- musician (epistemic):
 - “es dient nicht der Kommunikation... es wirkt auf mich experimentell, um herauszufinden, was für ein Klang bei dieser Geste entsteht. Allerdings ist deutlich, dass es keine intuitive Entdeckung ist, sondern so angeleitet wurde -> insbesondere der Wechsel"
- non-musician (epistemic):
 - “it seemed like she was connecting to her instrument...”

between persons



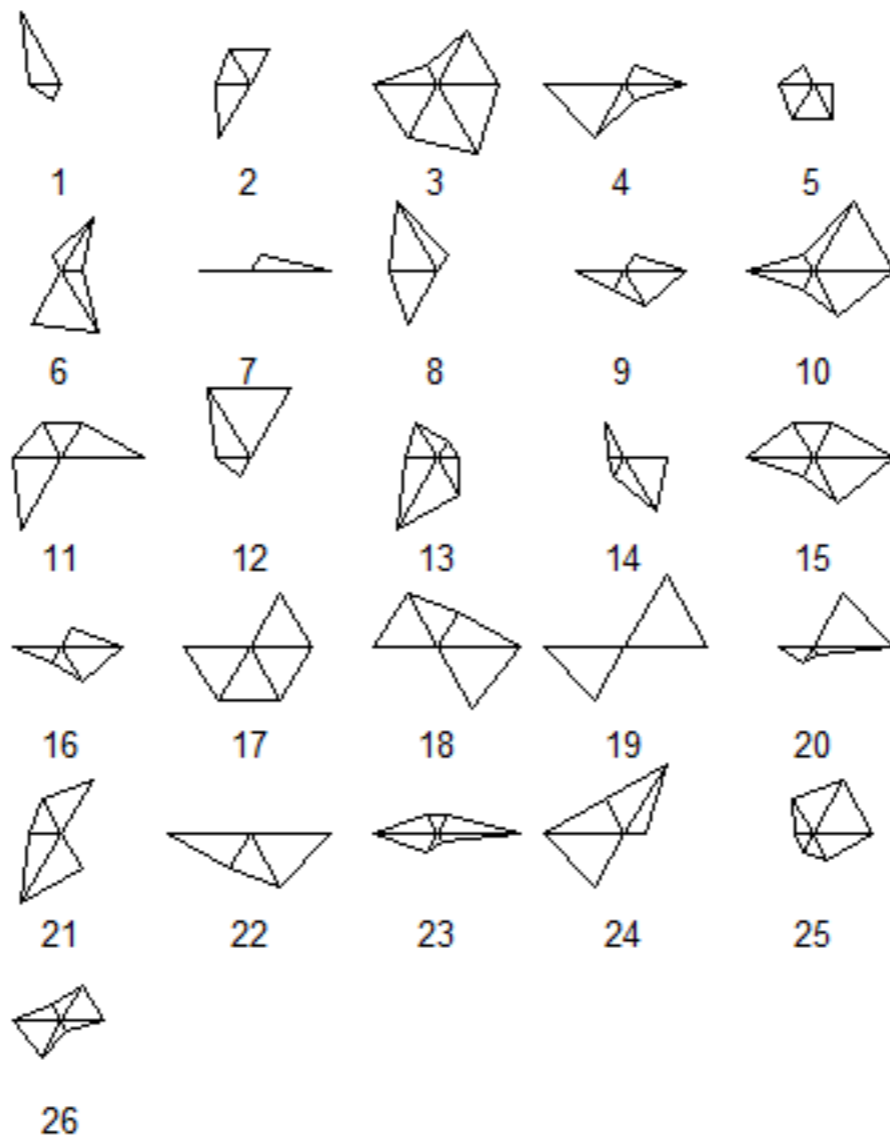
- musicians (sustained):
 - “the sliding down the string gesture moved seamlessly into the sliding along the bow gesture. “
 - “continuous movement with some precise amount of pressure “
 - “... is a natural movement. “
- non-musicians (iterative):
 - “somehow she looks like looking for the next sentence. “
 - “It is a mirrored gesture. Thus creating a small pattern. “



categorization

- “human classifier”
 - differences between groups?
 - individual foci and conceptual understanding
- match with own categorization
 - selection bias?

ratings



ratings - overall

- segment 3
 - most surprising, gestural, interesting
 - vs. segment 5 (lowest scores)
- segment 4 is rated as most pleasant

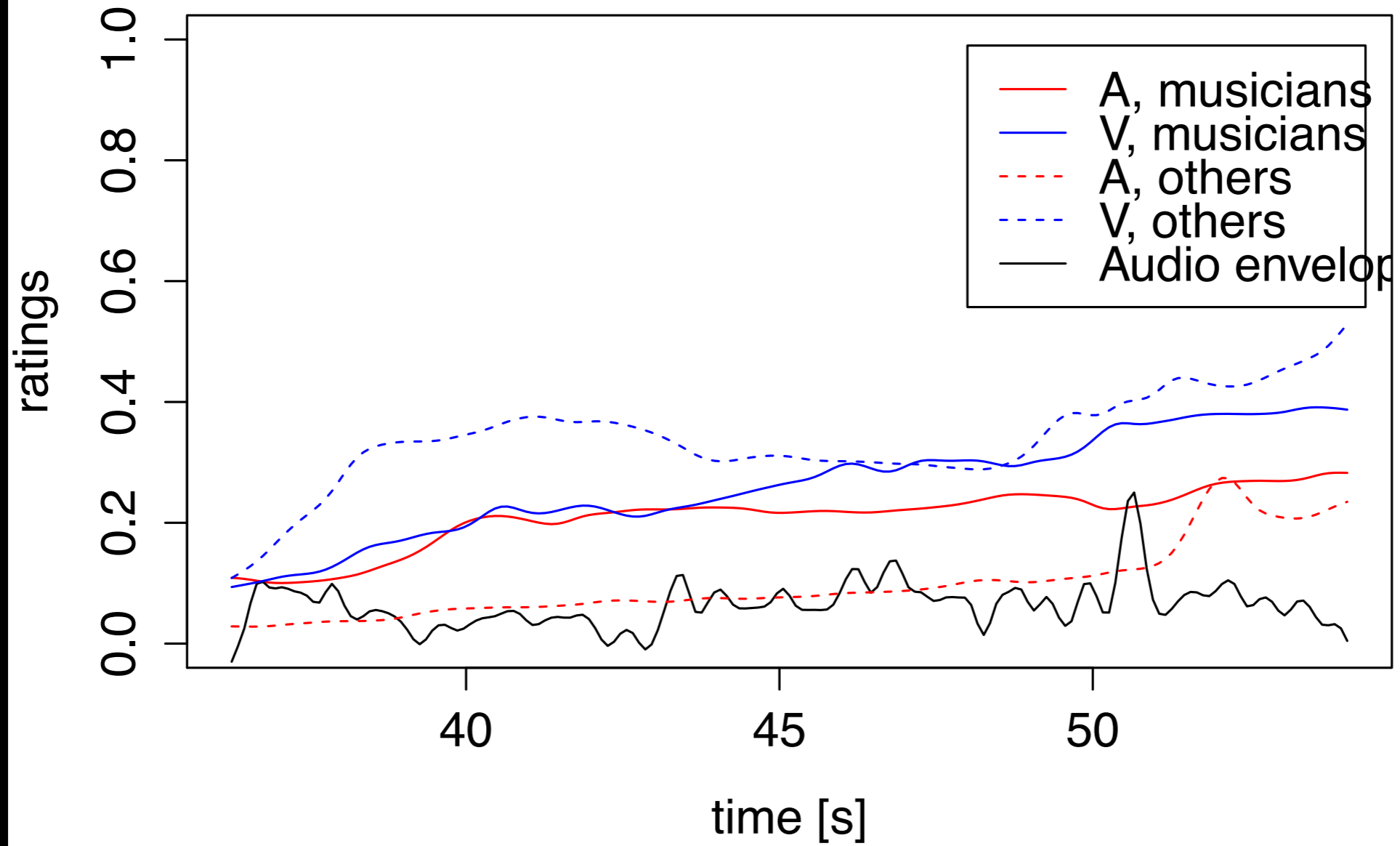
ratings - differences?

- musician contrast:
 - segment 1 less surprising
 - segment 2 more gestural and pleasant
 - segment 4 more familiar

... vs. effort rating

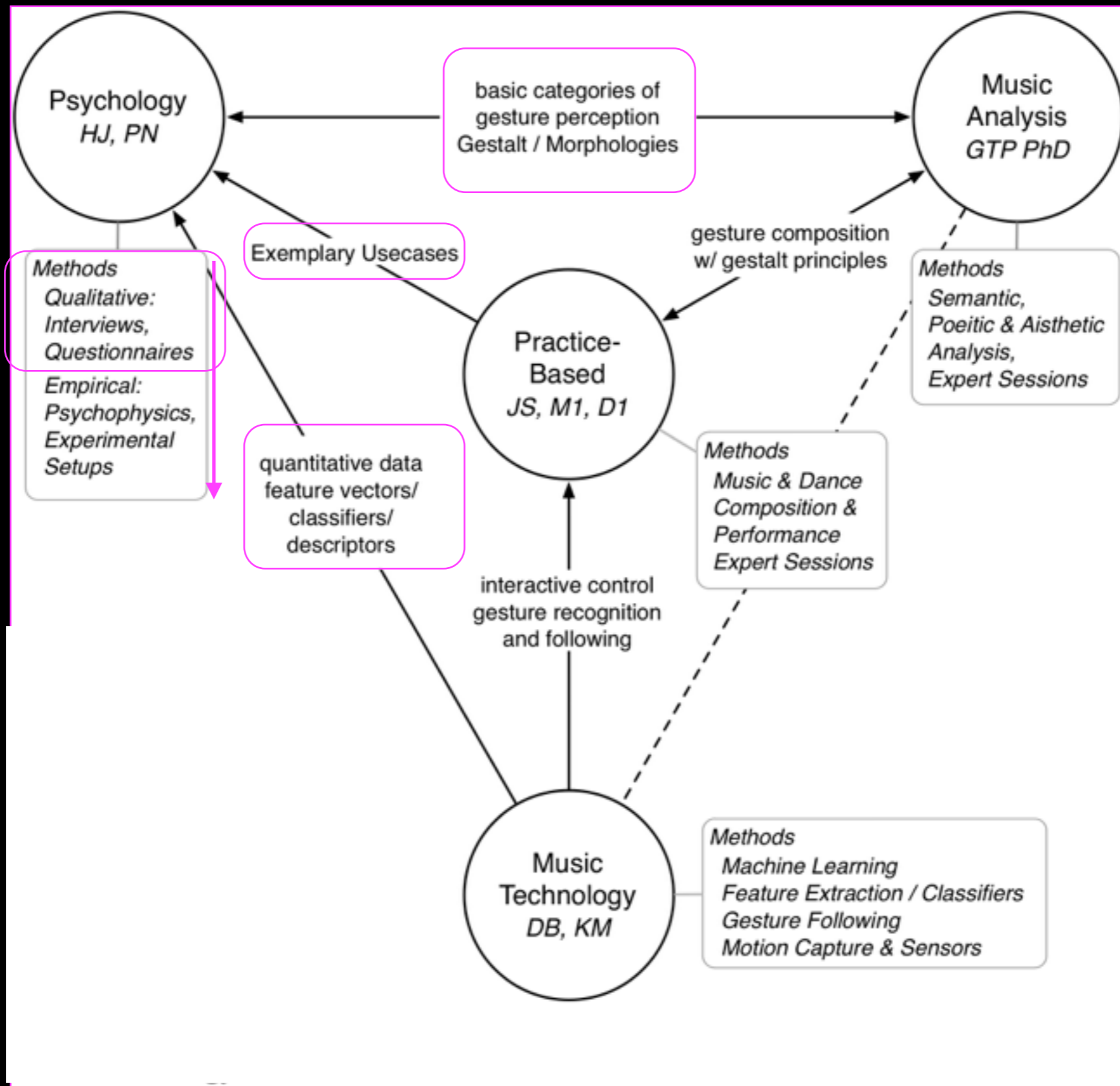
- segment 1
 - *difference in continuous effort rating reflected by surprise?*
- segment 2
 - no differences
- segment 4
 - no differences

Segment 1



reaching out

- integration in master visualisation tool
- link to music analysis
 - e.g. correlations to notation
- link to music technology
 - “human classifier”



...and iterate

- larger samples
- live ratings
- different cohorts
 - e.g. laypeople
- specific contrasts and hypotheses
- (neuro)physiological measures?

Participative Interview

- Grounded Theory/Participative Research
 - transparency, inclusion, immersion
- open interview
- casual, with topic/question catalogue, 60 minutes
- with both musician and dancer
 - following the developing piece, done after first “presentation”

Participative Interview

- Focus on body in different function/contexts
 - Evaluation of concepts and research in a “field” setting
 - “For whom are you doing that?”
 - (personality, biography, motivation, “meta”)

Skill Development and Stabilisation of Expertise for Electronic Music Performance

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Abstract. Skill development, the stabilisation of expertise through practise, and processes of bodily as well as neural sharing in the context of gesture-based electronic music performance are the topic of this article. The key questions centre around the affective, embodied but also neurological aspects of these processes. The types of awareness on a corporeal level and the neural processes that occur within the musician and the listener-viewer are investigated, since in music performance the perceptions of musician and audience depend on shared embodiment and cognitive processes. The aim is to show that ‘enactive’, embodied