

# **Individual movement characteristics**

## **Looking outside speech**

Three examples

# 1. Face movement

# Why are moving faces easier to recognize?

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**Full paper here :**

Previous work has suggested that seeing a famous face move aids the recognition of identity, especially when viewing conditions are degraded (Knight & Johnston, 1997; Lander, Christie, & Bruce, 1999). Experiment 1 investigated whether the beneficial effects of motion are related to a particular type of facial motion (expressing, talking, or rigid motion). Results showed a significant beneficial effect of both expressive and talking movements, but no advantage for rigid motion, compared with a single static image. Experiment 2 investigated whether the advantage for motion is uniform across identity. Participants rated moving famous faces for distinctiveness of motion. The famous faces (moving and static freeze frame) were then used as stimuli in a recognition task. The advantage for face motion was significant only when the motion displayed was distinctive. Results suggest that reason why moving faces are easier to recognize is because some familiar faces have characteristic motion patterns, which act as an additional cue to identity.

## 2. Are perception and action linked?

Predicting the effects of actions: Interactions of perception and action.

Knoblich, G. & Flach, R. (2001)

Psychological Science, 12 (6), 467-472

[Full paper here:](#)

Common coding theory of perception and action

W. Prinz

cf. motor theory of speech perception

mirror neurons

This page intentionally left blank to remind me of the demo

Matlab demo of pointlight display of human gait available from me  
on request

Johansson, G. (1973).

Visual perception of biological motion and a model for its analysis.  
Perception and Psychophysics, 14, 201-211

related to previous topic:

Beardsworth, T. & Buckner, T. (1981)

The ability to recognize oneself from a video recording of one's  
movements without seeing one's body.

Bulletin of the Psychonomic Society, 18, 19-22

Knoblich, G. & Prinz, W. (2001)

Recognition of self-generated actions from kinematic displays of  
drawing

J. Experimental Psychology: Human Perception and Performance,  
26, 456-465

## Aktuelles Beispiel

Westhoff, C. & Troje, N.

Personenidentifikation anhand von biologischer Bewegung -  
strukturelle und kinematische Parameter

[Full paper here:](#)

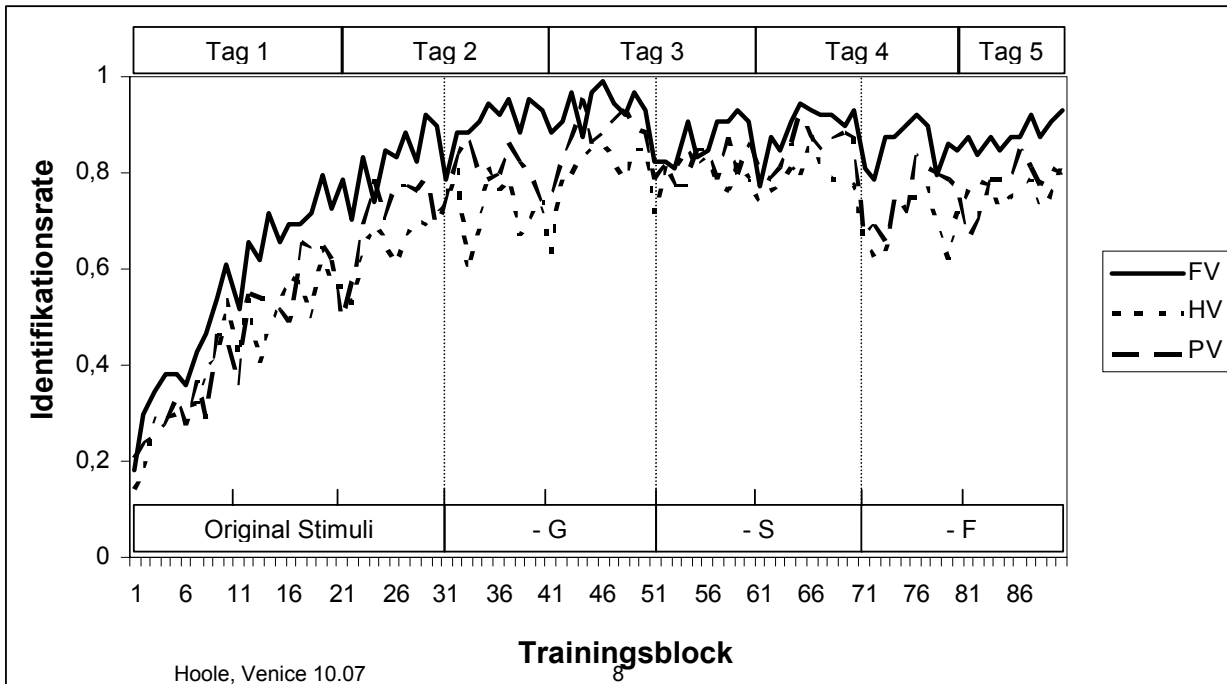


Abb. 1: Lernkurven in Studie 1. – G: Größe norm.; - S: Größe u. Struktur norm.; - F: Größe Struktur u. Frequenz norm.; FV: Frontalansicht; HV: Halb-Profil Ansicht; PV: Profilansicht.