



**Deutsche  
Sporthochschule Köln**  
German Sport University Cologne



**Berlin Gesture Center**



**NEUROGES –  
A coding system for hand movement behavior and gesture**

# **The NEUROGES Training**

**- Final Program -**

## **NEUROGES - A coding system for the empirical analysis of hand movement behavior as a reflection of cognitive, emotional, and interactive processes**

The NEUROGES Coding System is a research tool for the empirical analysis of spontaneously displayed hand movement behavior that accompanies interaction, cognitive processes, and emotional experience. NEUROGES is designed for diagnostic purposes as well as for basic research, i.e., to further explore the anatomy of hand movement behavior and its relation to cognitive, emotional, and interactive processes. Fields of application are interaction analysis incl. psychotherapy, psychodiagnostics, and experimental and clinical neuropsychology. In a multi-stage evaluation process resulting in more and more fine-grained units, the behavior is segmented and classified according to the kinesic criteria. The objectivity, reliability, and validity of the NEUROGES categories and values have been tested in several research studies, thus far including 263 participants, healthy adults as well as patients with brain damage or mental disease. The analysis of the group differences in hand movement behavior as well as kinetographic and brain imaging studies provide evidence that the NEUROGES categories and values are associated with specific cognitive, emotional, and interactive processes.

## **The NEUROGES Training**

The training in the NEUROGES system comprises three seminars:

- Seminar 1: Theoretical and Empirical Background of the NEUROGES System, NEUROGES Module I, ELAN Basics
- Seminar 2: NEUROGES Modules II and III, ELAN Advanced, Interrater Agreement in Behavior Segmentation
- Seminar 3: NEUROGES Specifications and Interaction Coding

Each seminar can be booked separately. However, for the participation in Seminars 2 and 3, knowledge of the content of the previous seminar(s) is strongly recommended.

**Seminar 1: Theoretical and Empirical Background of the NEUROGES System,  
NEUROGES Module I, and ELAN Basics  
13.9. - 14.9.12 and 3.10.12**

**13.9.12      Background NEUROGES, ELAN Basics, Module I Activation and Structure categories**

09:00 – 10:30	Aims and Theoretical Background of the NEUROGES System
10:45 – 12:15	ELAN Basics and the NEUROGES-Template
13:30 – 15:00	Module I Activation: Introduction and Coding with NEUROGES-ELAN
15:30 – 17:00	Module I Structure: Introduction

**14.9.12      Module I Structure and Focus categories, Empirical Research, and Interactive CD**

9:00 – 10:30	Module I Structure Coding
10:45 – 12:15	Module I Focus Introduction
13:30 – 15:00	Module I Focus Coding
15:30 – 17:00	Recent Empirical Studies on Module I; Interactive CD Introduction

**15.9. - 2.10.12      Self-study Module I and ELAN**

Revision of Module I with the Interactive CD

Module I Coding of the 4 training videos on the interactive CD

**3.10.12      Supervision Module I and ELAN (Lausberg HL, Slöetjes HSI)**

9:00 – 10:30	Supervision of self-study training video codings and ELAN application
10:45 – 12:15	Supervision of self-study training video codings and ELAN application

**by appointment:** Module I exam

**Seminar fee:** 250 €, reduced 125 €;

if all 3 seminars are booked: 400 €, reduced 200 €

(included in the fee is the NEUROGES Coding Manual, the NEUROGES template, an interactive training CD, and the exam / certificate)

**Seminar 2: NEUROGES Modules II and III, ELAN Advanced,  
and Interrater Agreement  
3. - 5.10.12 and 13.12.12**

**3.10.12      Module II Contact category and ELAN Advanced**

- 13:30 – 15:00                      Module II Contact Introduction and ELAN Advanced
- 15:30 – 17:00                      Module II Contact Coding and Concatenation Procedure

**4.10.12      Module II Formal Relation category and Interrater Agreement**

- 9:00 – 10:30                      Module II Formal Relation Introduction
- 10:30 – 12:00                      Module II Formal Relation Coding;  
Recent Empirical Studies on Module II
- 13:30 – 15:00                      Interrater Agreement in NEUROGES – Categorical and  
Temporal Agreement
- 15:30 – 17:00                      Calculating Interrater Agreement

**5.10.12      Module III Function and Type categories**

- 9:00 – 10:30                      Module III Function Introduction
- 10:30 – 12:00                      Module III Function Coding
- 13:30 – 15:00                      Module III Type Introduction
- 15:30 – 17:00                      Module III Type Coding

**6.10. - 12.12.12      Self-study Modules II and III, ELAN Advanced,  
and Interrater Agreement**

Revision of Modules II and III with the interactive CD

Module I Coding of the 4 training videos on the interactive CD

Team work: Exchanging the coded files and calculating interrater agreement

**13.12.12      Supervision Modules II and III, ELAN Advanced, and Interrater Agreement**

- 9:00 – 10:30                      Supervision of self-study training video codings, ELAN  
Advanced, and Interrater Agreement
- 10:45 – 12:15                      Supervision of self-study training video codings and ELAN  
Advanced

**by appointment:** Module II examen, Module III examen

**Seminar fee:** 250 €, reduced 125 €;  
if all 3 seminars are booked: 400 €, reduced 200 €  
(included in the fee is the NEUROGES Coding Manual, the NEUROGES template, an interactive training CD, and the exams / certificates)

**Seminar 3: Module III Specifications and Interaction Coding**  
**13. - 14.12.12**

**13.12.12      Module III Specifications** (Lausberg HL):

13:30 – 15:00                      Module III Specifications Introduction

15:30 – 17:00                      Module III Specifications Coding

**14.12.12      Interaction Coding** (Dvoretzka DD, Lausberg HL, Kryger MK):

9:00 – 10:30                              Nonverbal Interaction Analysis

10:30 – 12:00                              NEUROGES Interaction Analysis Introduction

13:30 – 15:00                              NEUROGES Interaction Coding

15:30 – 17:00                              Recent empirical studies on Specifications and Interaction

**Seminar fee:** 100 €, reduced 50 €

## **Referees:**

### **Janka Bryjovà**

Graduated in clinical psychology at the Humboldt University, Berlin. She has been working as a student assistant at the Department of Psychosomatic Medicine in Dresden and Jena. Lectured on Neuropsychological Gesture Coding System. Since 2008, involved in the development of the NEUROGES interactive learning CD. Since 2011, Assistant to the Chair of Clinical Psychology at the Department of Psychology, University Fribourg, Switzerland.

### **Daniela Dvoretzka**

Graduated in psychology at Humboldt University, Berlin. Since 2010, PhD student and research assistant at the Department for Neurology, Psychosomatic Medicine, and Psychiatry at German Sport University Cologne. Her research interests are: nonverbal behavior, interpersonal coordination, social interaction, and hand gestures.

### **Ingo Helmich**

Since 2009 PhD student at the department of Neurology, Psychosomatic Medicine and Psychiatry at German Sport University Cologne (Supervisor: H. Lausberg). Graduated in Exercise Science at Humboldt University, Berlin, focusing on the benefits of exercise on mental health. His research interests are the neuropsychology of movement behavior, the relation between movement behavior and mental disease and the influence of movement training on mental health and behavior.

### **Hedda Lausberg**

Full Professor of Neurology, Psychosomatic Medicine, and Psychiatry at the German Sport University Cologne. Co-founder of the Berlin Gesture Center. Her main research interest is the neuropsychology of movement behavior, i.e., the relation between movement behavior and cognitive, emotional, and interactive processes. Furthermore, she focuses on method development in movement analysis. She has developed the NEUROGES-system and the BAST-system.

### **Robert Rein**

Since 2009 research assistant at the Department for Neurology, Psychosomatic medicine, and Psychiatry at German Sport University Cologne. Research interests are: tool-use from an evolutionary, motor control, and neuroscience perspective, dynamical system approach to motor control, and interpersonal coordination.

## Harald Skomroch

Since 2009, student assistant at the Department for Neurology, Psychosomatic medicine, and Psychiatry at the German Sport University Cologne where he graduated in 2011. He has been holding workshops on NEUROGES and internal rater trainings since 2011. He is graduate assistant at the same department working on different projects investigating hand movement behavior as well as interpersonal coordination.

## Han Slöetjes

Software developer at the Max Planck Institute for Psycholinguistics in Nijmegen (The Netherlands). He is a Sun certified Java programmer who joined the Technical Group at the MPI in 2003. There, he is mainly occupied with the further development of the multimedia annotation tool ELAN (<http://www.lat-mpi.eu/tools/elan>) and is currently the main responsible person for maintaining, extending and teaching this tool.

<b>Information and Registration</b> Corinna Klabunde E-Mail: <a href="mailto:C.Klabunde@dshs-koeln.de">C.Klabunde@dshs-koeln.de</a> Phone: ++49(0)221-4982 4710	<b>Deadlines for registration</b> Seminar 1 (13. - 14.9.12 and 3.10.12) until 09.09.12  Seminar 2 (3. - 5.10.12 and 13.12.12) until 30.9.12  Seminar 3 (13. - 14.12.12) until 30.11.12 maximum capacity: 12 participants  <b>reduced fee for students and unemployed people</b>
<b>Location</b> German Sport University Cologne Am Sportpark Müngersdorf 6 50933 Köln Institutsgebäude I, room 212, 2 <sup>nd</sup> floor	<b>Public transportation by</b> Tram 1, direction Weiden West, stop Junkersdorf