The exhibition ‘Gestures – in the past, present, and future’

Overview

1. Multimodality in action: An exhibition on gestures
2. The research behind the exhibition
3. Interaction in the exhibition
4. Is it … impact?
5. BONUS: New master "Semiotics and Multimodal Communication"

Multimodality in action

- Multimodality research seems to be just a method of analysis
- Research needs to leave the labs, books, universities (impact)
- Multimodality research as a tool for making a difference?

➢ Creating an exhibition that does not aim just at "getting across" your research, but at changing how people think

Exhibition 'Gestures – in the past, present, and future', Chemnitz

- Special exhibition of the Saxon Museum of Industry Chemnitz
- Curation: TU Chemnitz (Department of Linguistics) in cooperation with the Ars Electronica Futurelab in Linz
- 17. Nov. 2017 to 04. March 2018
- Venue: 600 qm exhibition hall in a foundry building from 1907
- 16.607 visitors, more than 100 media reports, 82 guided tours with more than 1500 participants
- Learning about and experiencing gesture, with a focus on gesture control and its role in the workplace of the future
- http://www.gesten-im-museum.de/home/en

Exhibition 'Gestures – in the past, present, and future', Chemnitz

- Results of the MANUACT research project (funded by the Bundesministerium für Bildung und Forschung)
- Multimodal experiences such as interactive gesture-controlled exhibits were used
  - to present and explain gesture studies
  - to provoke reflection on changes caused by robotics, KI etc.
  - to show parallels with historical developments, i.e. regarding automation.

Exhibition 'Gestures – in the past, present, and future', Chemnitz

- MANUACT: Hands and Objects in Language, Culture, and Technology: Manual Actions at Workplaces between Robotics, Gesture, and Product Design
- PI: Ellen Fricke, Prof. for German Linguistics, Semiotics and Multimodal Communication, University of Technology Chemnitz
- Exhibition supported by the BMBF, Sparkassen-Stiftung, Kulturstiftung des Freistaates Sachsen
- Exhibition presented results of the MANUACT project

Video on the exhibition

- https://youtu.be/ssc4G_oLGcI

The MANUACT project

❝ MANUACT studies gestures as part of human communication, investigating both their cultural relevance and practical applications. It focuses on object-related gestures (such as the gesture for "making a telephone call"), asking how such gestures come about, how they are related to current and past technologies, and how they are used for communication. ❞

❝ A further focus lies on gesture control as an intuitive and effective means of human-machine interaction. ❞

http://www.manuact.org/en/

Di bis Fr 9 bis 17 Uhr | Sa, So, Feiertag 10 bis 17 Uhr

17. November 2017 bis 4. März 2018

GESTEN

GESTERN

HEUTE

ÜBERMORGEN

www.gesten-im-museum.de

INDUSTRIEMUSEUM CHEMNITZ

SÄCHSISCHES INDUSTRIEMUSEUM

Eine wissenschaftlich-künstlerische Kooperation der TU Chemnitz und des Ars Electronica Futurelab (Linz) mit dem Sächsischen Industriemuseum

TECHNISCHE UNIVERSITÄT CHEMNITZ

ARS ELECTRONICA FUTURELAB

Bundesministerium für Bildung und Forschung

Ostdeutsche Sparkassenstiftung gemeinsam mit der Sparkasse Chemnitz

Kulturstiftung des Freistaates Sachsen

SACHSEN

Design and interactive exhibits

Structure of the exhibition

- Area 1: Gesture research – towards a gesture 'lexicon'
- Area 2: From manual actions to gesture control
- Area 3: Use of the hand in industrial production

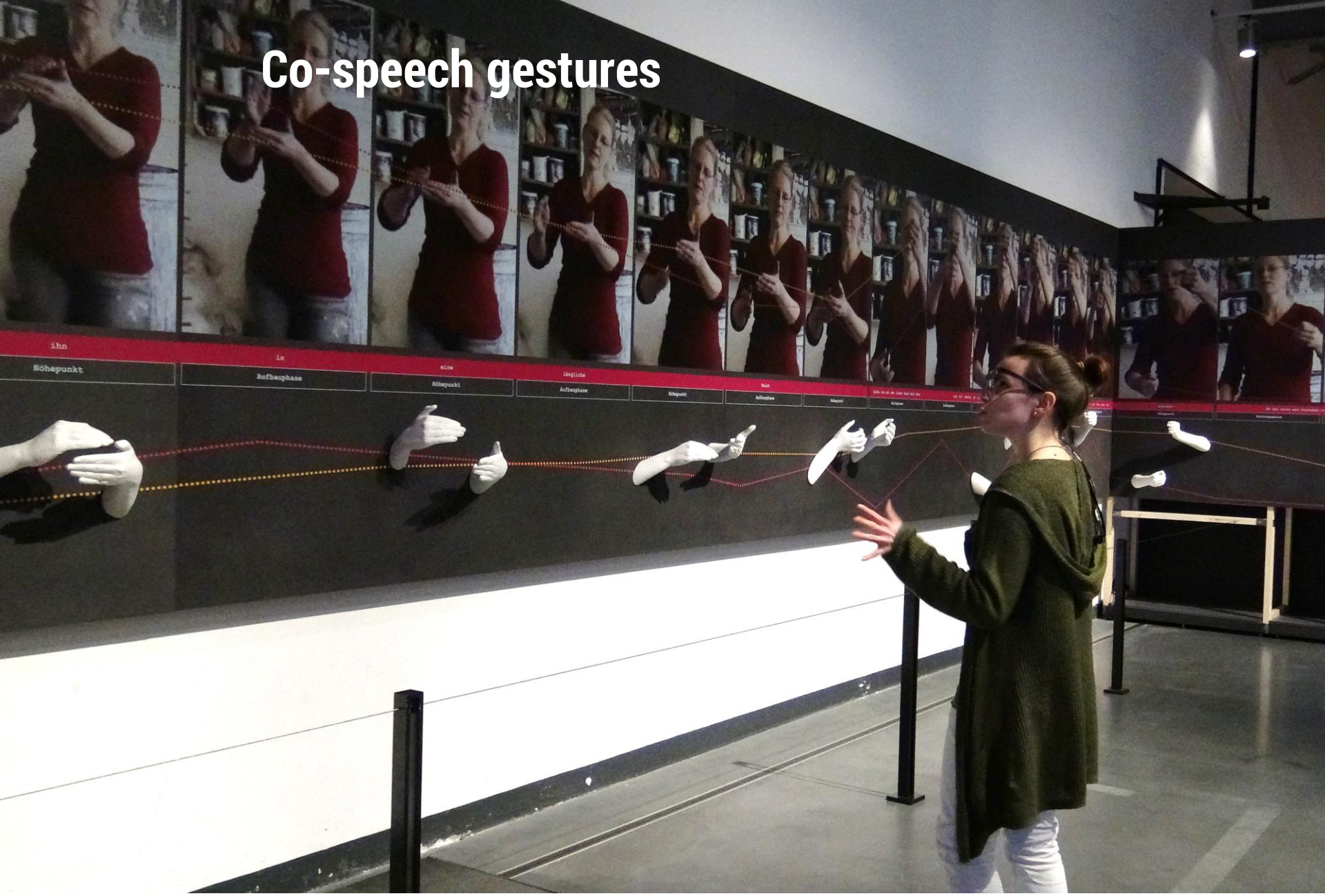
For all three areas, past, present and possible future developments are considered.

Interspersed with works of artistic research (e.g. Wooden Mirror, Augmented Hand Series, Gesture Sculptures, Shadow Gestures, Captured Motion)

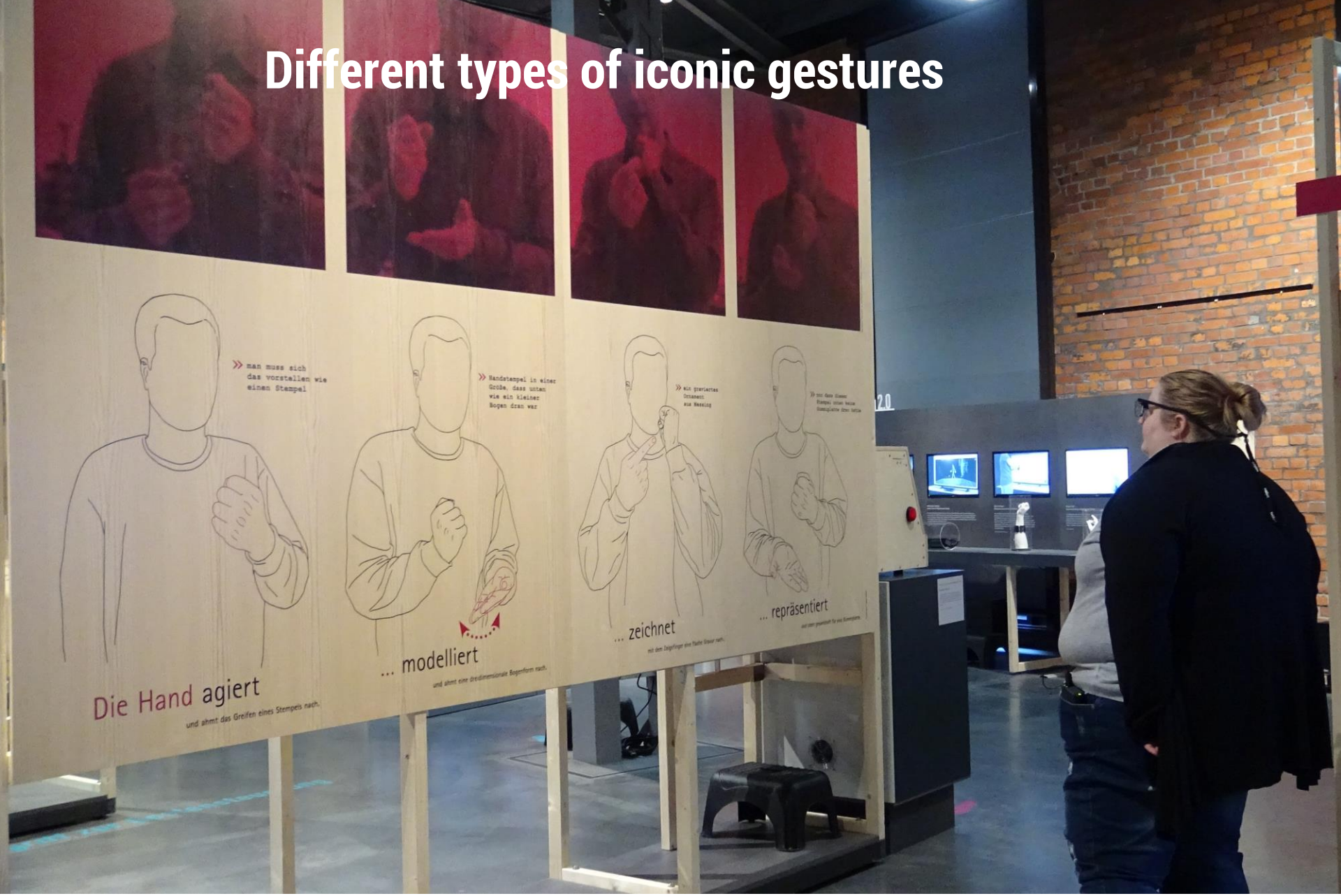
Wooden Mirror (Daniel Rozin)

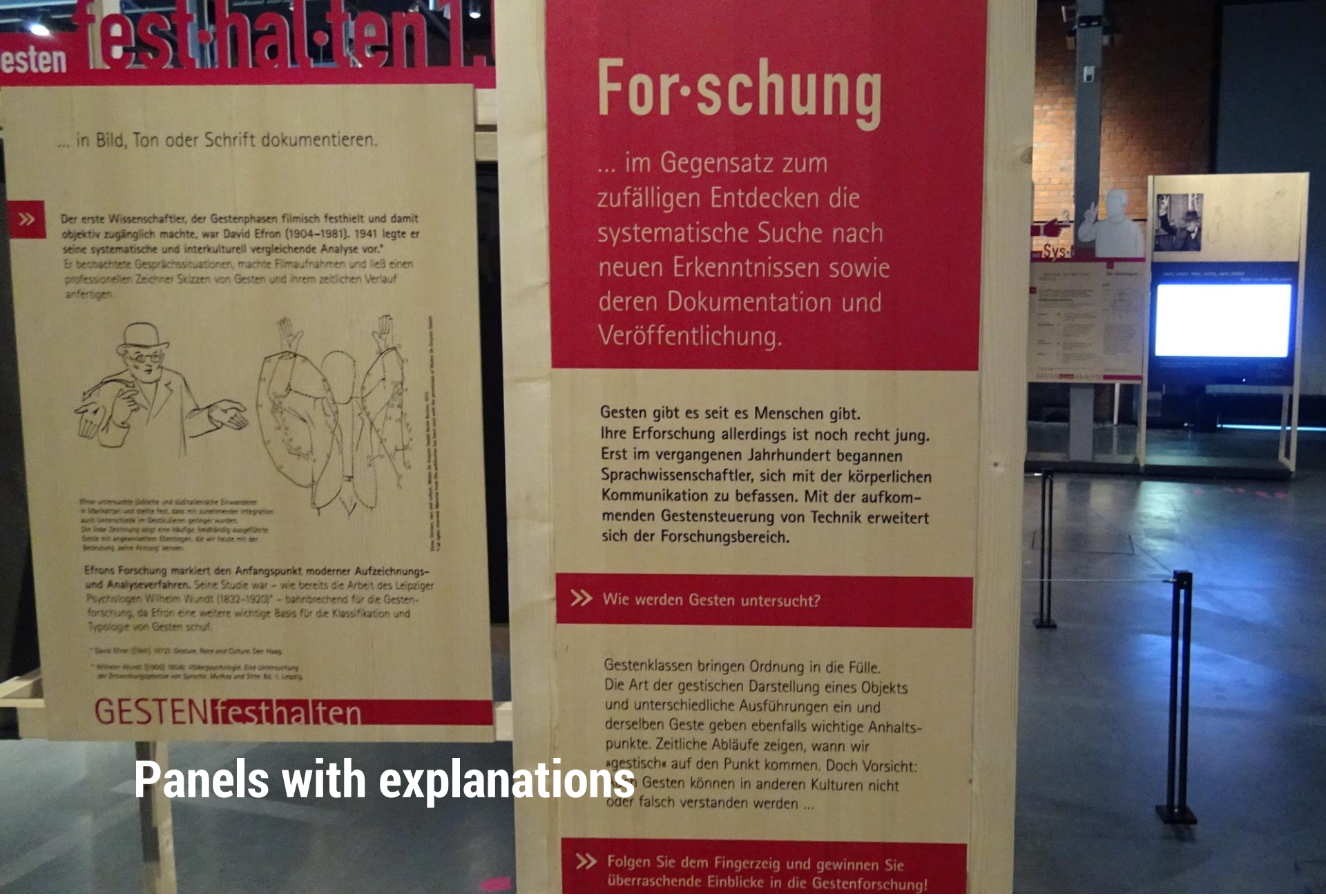
Symbolic gestures
Victory
Stinkefinger
Telefonieren
Daumen hoch
Weghalten
Hörner
Ring
Schwur
EMBLEME emblem

Co-speech gestures



Different types of iconic gestures

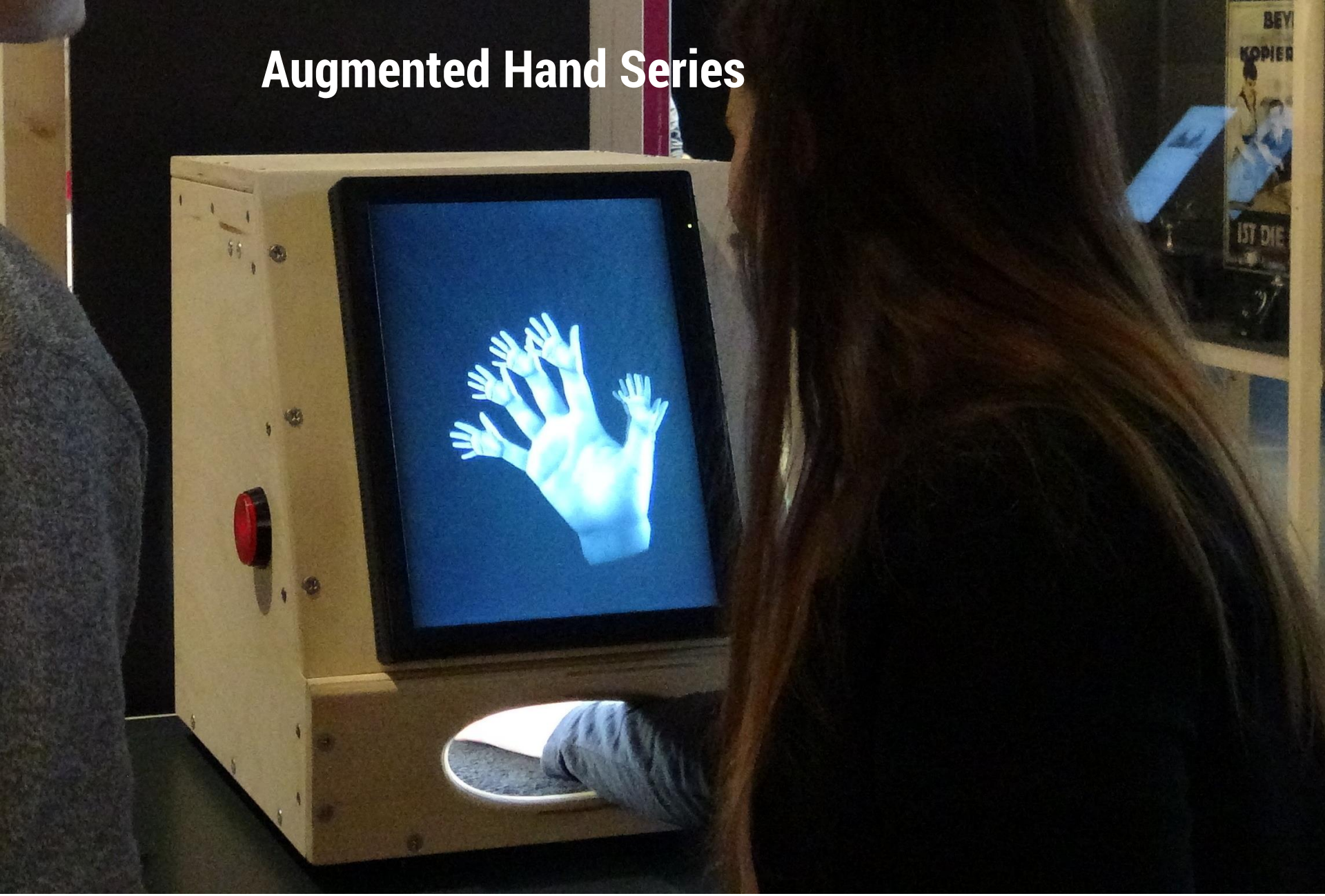




Panels with explanations

Augmented Hand Series (G. Levin)

Augmented Hand Series



Gesture imitation

Gesture lexicon (prototype)

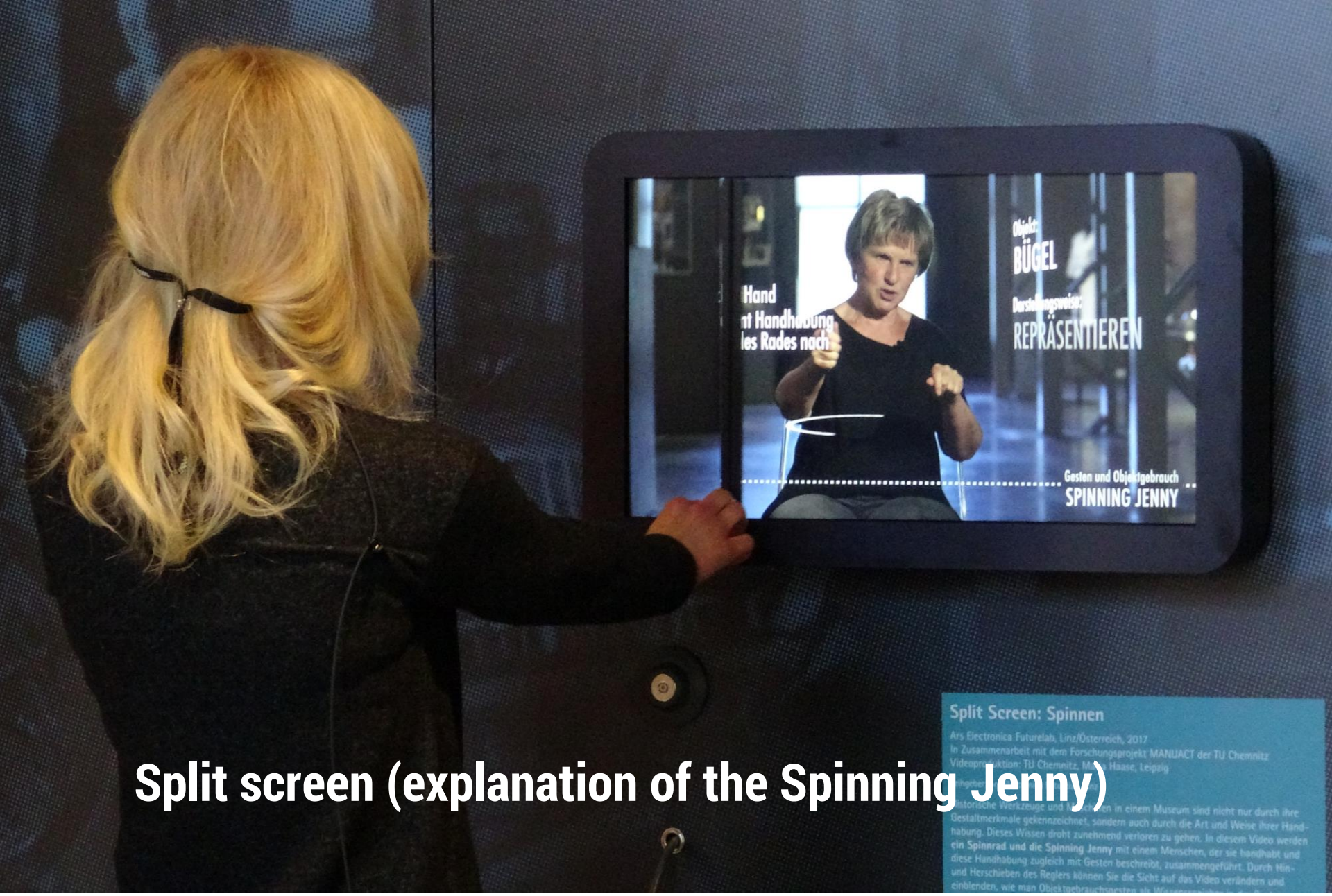
Gesture jigsaw puzzle

Gesture Jewelry (Jennifer Crupi)

Wooden labyrinth

Gesture sculptures

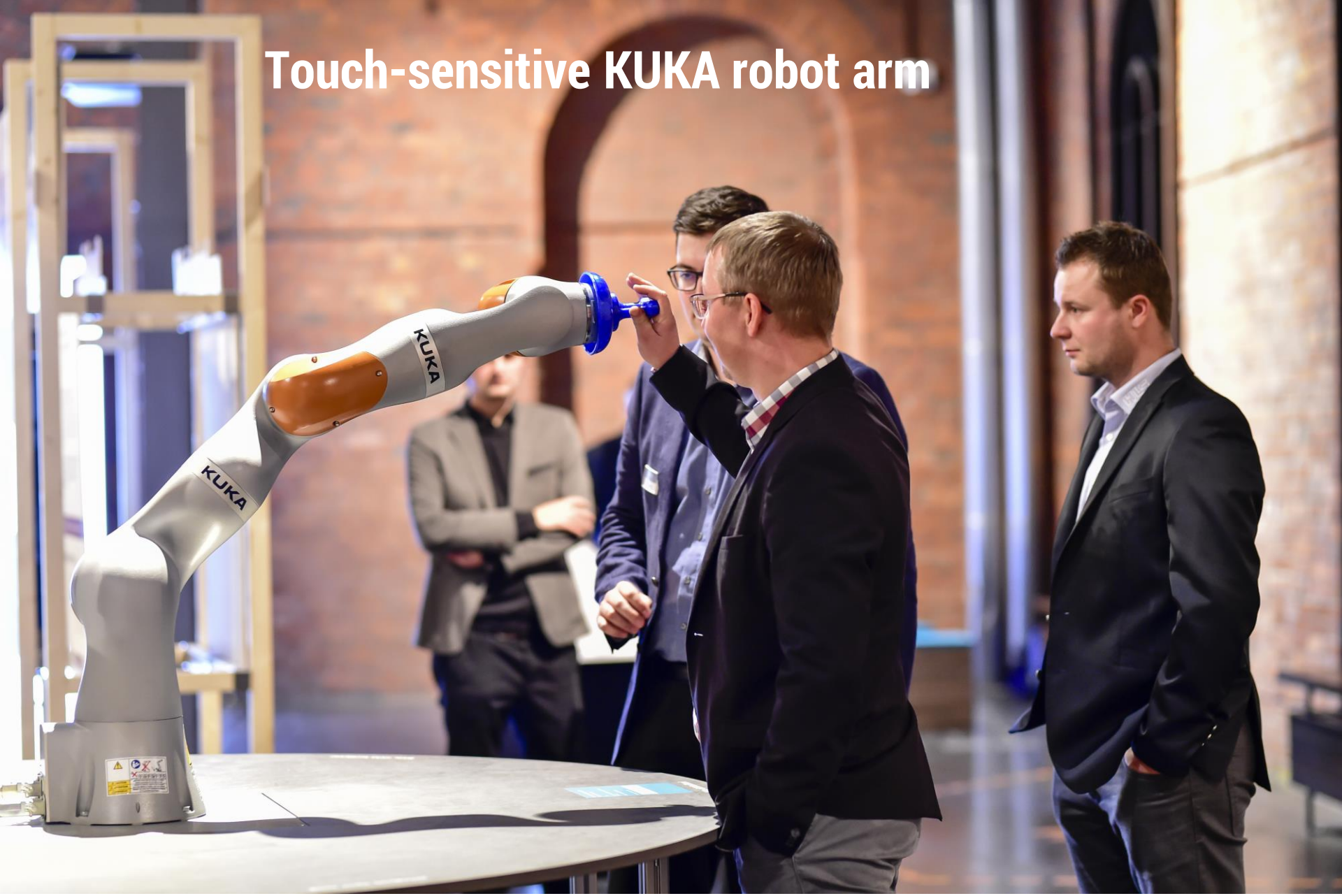
Virtual Globe



Split screen (explanation of the Spinning Jenny)

Virtual pottery

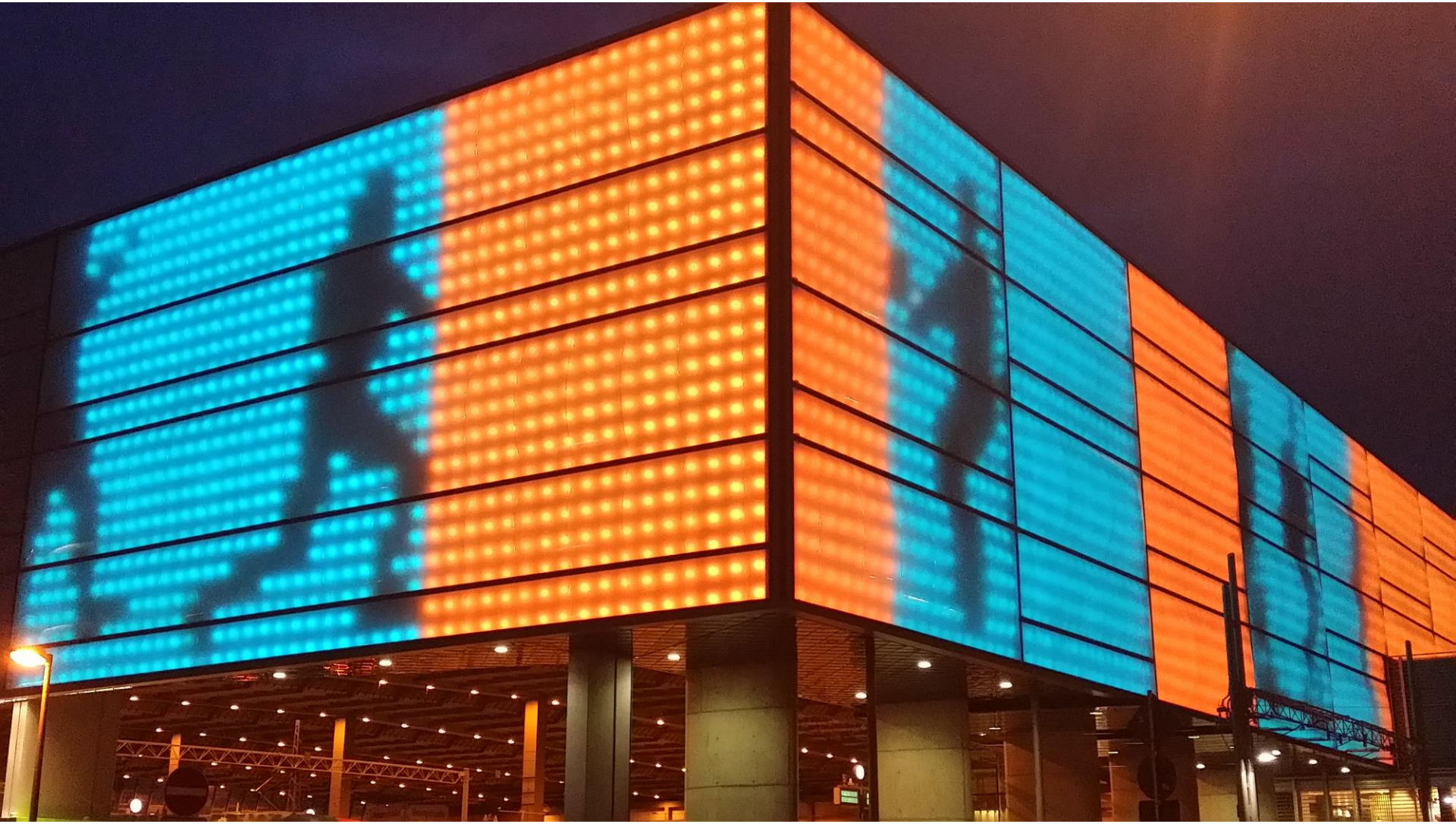
Touch-sensitive KUKA robot arm



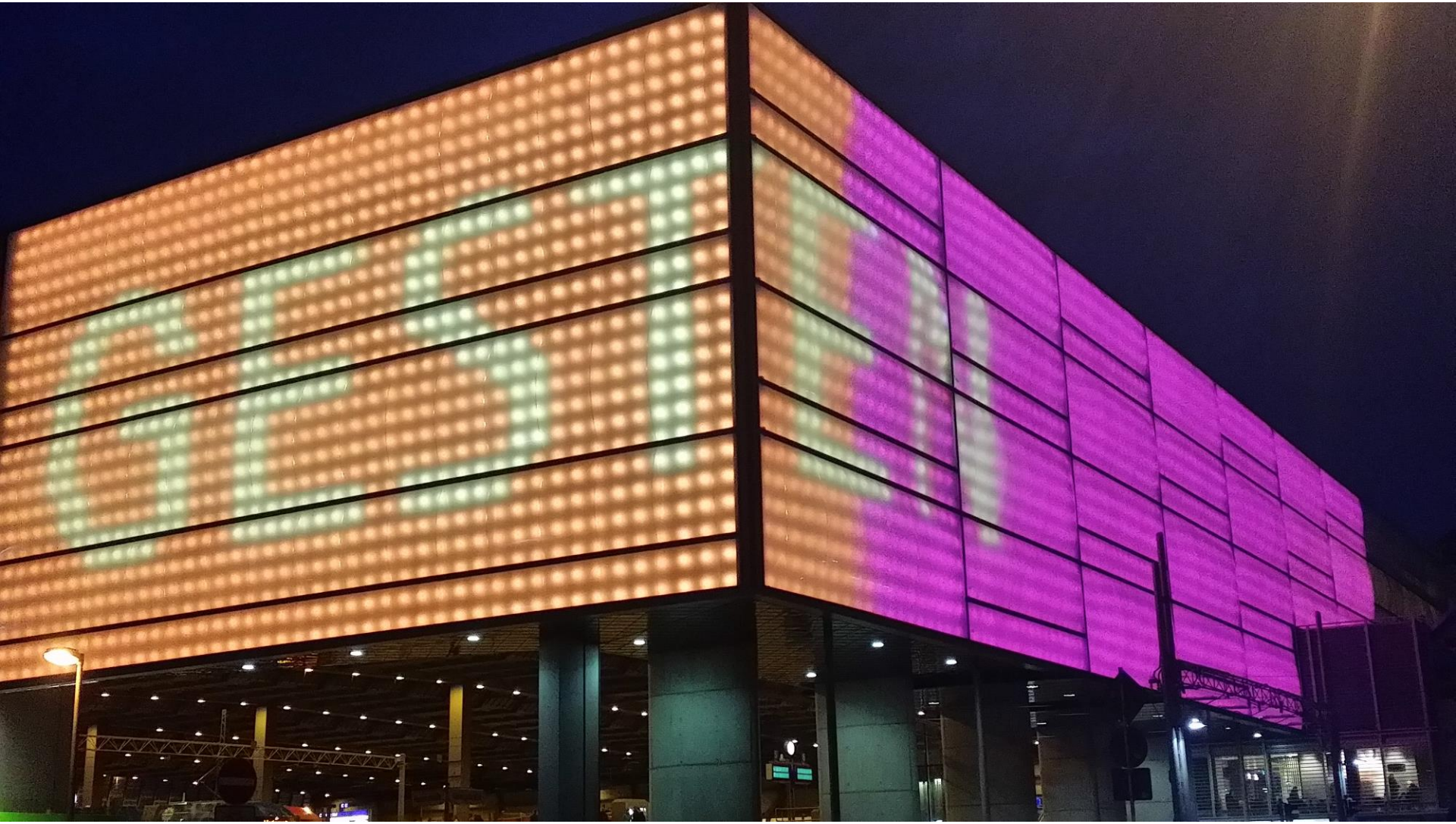
BOSCH Ultrahaptics prototype

Shadow Gestures

Shadow Gestures – Chemnitz central station



Shadow Gestures – Chemnitz central station



Impact of the exhibition

Selected articles about the exhibition

In total, more than a hundred articles and media reports on the exhibition have appeared, in both regional and national media in Germany.

http://www.gesten-im-museum.de/home/en/#Media

A website was developed that provides information on the background and selected exhibits.

http://www.gesten-im-museum.de/home/en/

Can we measure the impact of the exhibition?

- 16.607 visitors (one of the most successful special exhibitions of the Museum of Industry)
- 68 guided private tours (booked in advance) with 1136 participants
- 14 public tours: 398 participants
- 29 workshops for children with 472 participants
- 6 public workshops with 137 participants
- 2 public matinée events with 28 participants
- The Museum für Kommunikation Berlin will take over the exhibition in 2019
- Other museums have declared interest in the exhibition

Wait – is this impact?

> there are no simple metric-based ways to measure [Human and Social Sciences] impact
> (Benneworth, https://www.ideas-idees.ca/blog/we-need-better-understanding-good-research-impacts)

- Impact can be about reaching lots of people, or about changing one regulation or procedure
- How do you measure "changing your mind"?
- Maybe not about changing your mind, but subtler effects?
  - Quality of reflection and discourse
  - Experiencing the future
  - Using your body to gain control

What we wanted

Communication with robots should be taken seriously as a linguistic and social problem (not technical)

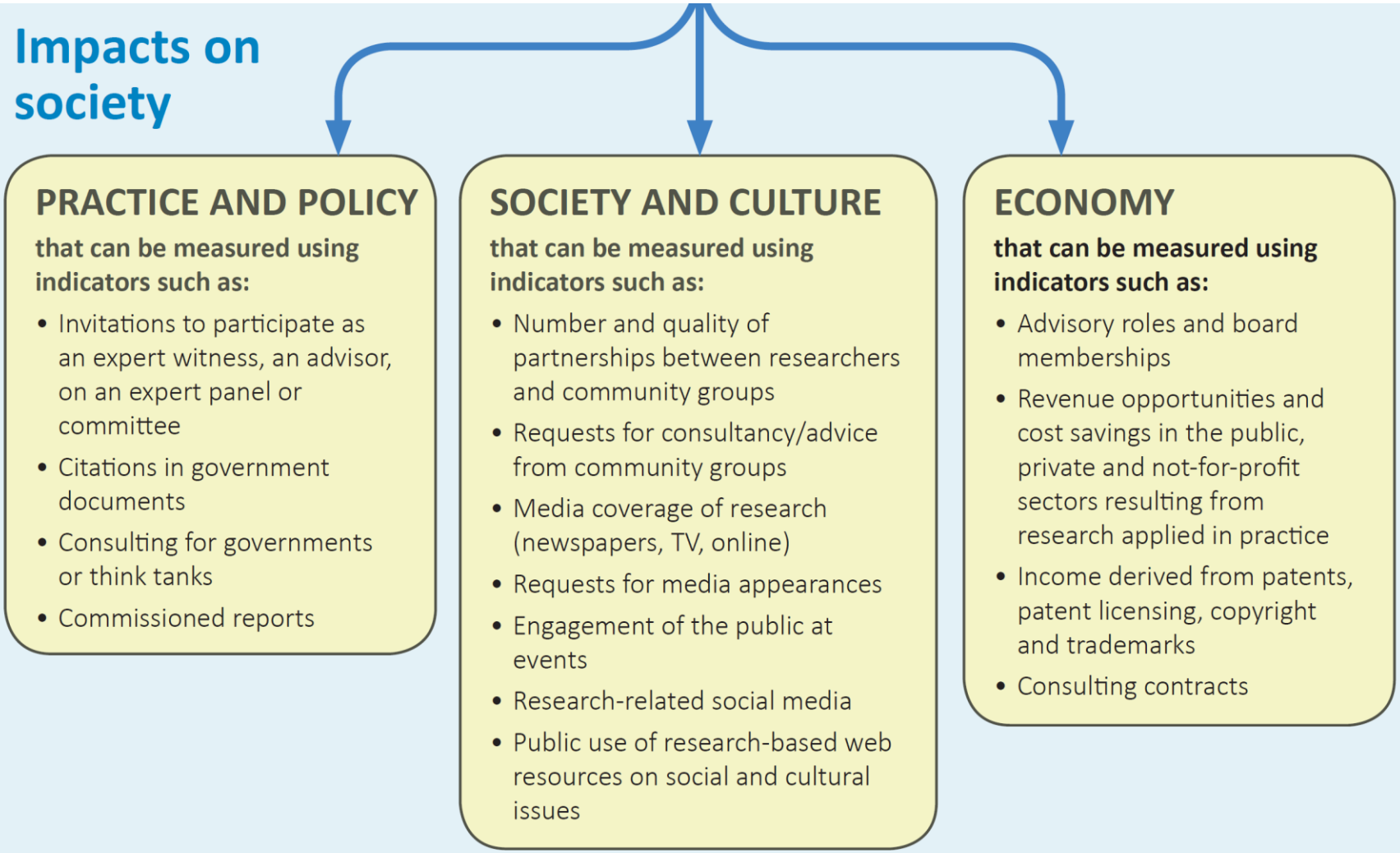
Reflection on the changes due to automation and KI in production and at home. Mediation between positions of scepticism, naive optimism, and fatalism

Connecting engineers, linguists, historians, and the general public with the goal of informed reflection and decision making

Provoking interdisciplinary perspectives and projects with the aim of further decision making

Let's try again … impact?

- 12 guided tours by members of the MANUACT project team (some with sign language translations), + workshops for children
- Many visitors mentioned surprise and learning effects regarding gesture research, multimodality, and humanities research in general
- Chemnitz (pop. 246.000) is an industrial and technological, not an intellectual center. Some visitors commented that they now understood what the humanities are and what they can do
- Context offers challenges and possibilities (industrial history, knowledge about and interest in earlier production methods, etc.)
- In one smaller project, video recordings were made of volunteers with exhibits in the permanent exhibition (e.g. weaving looms)



Approaches to Assessing Impacts in the Humanities and Social Sciences. Report of the Federation for the Humanities and Social Sciences, May 2017. p. 5.

Demonstration of a weaving loom

Evaluating the impact

- Media reports were often based on press releases, sometimes also citing visitor opinions. Critical reflection was the exception.
- Hundreds of school classes visited the exhibition, which was highly popular due to the interactive exhibits. "Reflexion points" (tables with questions written on them, and paper for answers) were much used by the students.

➢ Impact was made – but in which regard?

➢ We cannot really evaluate the actual influence of the exhibition on social discurses

➢ New chance in Berlin in 2019 > Come and impact us!

And now to a bit of shameless outreach* …

The new MA course programme Semiotik und Multimodale Kommunikation starts in Chemnitz in the fall term 2018!

First year: 34 applications for 30 places (deadline was only three months after public announcement)

https://www.tu-chemnitz.de/phil/ifgk/germanistik/studium.php#ma3

https://studieren.de/semiotik-und-multimodale-kommunikation-technische-universitaet-chemnitz.studienprofil.t-0.a-407.c-42843.html

* Basically advertising, propaganda

New MA programme Semiotics and Multimodal Communication at TU Chemnitz

MA Semiotik und Multimodale Kommunikation, TU Chemnitz

- New MA programme **Semiotik und Multimodale Kommunikation**
- Collaboration of the **Institut für Germanistik und Kommunikation** and the **Institut für Medienforschung**
- New **Virtual Environments Learning Lab** experience virtual reality, eyetracking, etc.
- taught in **German**
- First admission: fall term 2018
- 30 places per year
- Next deadline: probably **July 2019**

MA Semiotics and Multimodal Communication (starts fall term 2018)

1. Semester	2. Semester	3. Semester	4. Semester
Basismodul A.1 Grundlagen der Semiotik	**Multimodalität II: Rede und Geste** *Seminar*	**Datenanalyse und Visualisierung** *Übung*	**Modul F Masterarbeit**
Grundlagen der Semiotik *Vorlesung*	**Transkription, Annotation und Analyse** *Übung*	**Vertiefungsmodul D.1 Kultursemiotik**	**Kolloquium zur Masterarbeit** *Kolloquium*
Klassiker der Semiotik *Seminar*	**Digitale Editionen und Repositorien** *Seminar* ODER **Qualitative und Quantitative Digital Research Methods** *Seminar*	**Vertiefungsmodul D.2 Kognitive Semiotik**	
Basismodul A.2 Grundlagen der Multimodalität	**Vertiefungsmodul D.1 Kultursemiotik**	**Ergänzungsmodul E.1** Germanistik: Interkulturelle Perspektiven auf Literatur, Sprache und Kommunikation	
Multimodalität I: Text und Bild *Seminar*	**Vertiefungsmodul D.2 Kognitive Semiotik**	**Ergänzungsmodul E.2** Digitale Medien und Medienpsychologie	
Basismodul B Methoden		**Ergänzungsmodul E.3** E-Learning	
Grundlagen des empirischen Arbeitens *Übung*		**Ergänzungsmodul E.4** Rezeptionskulturen der Vormoderne	
Tutorium zur Übung		**Ergänzungsmodul E.5** Anglistik: Interkulturelle Perspektiven auf Literatur, Sprache und Kommunikation	
Basismodul C Digital Humanities			
Einführung in die Digital Humanities *Vorlesung*			

Semiotik und Multimodale Kommunikation (M.A.)

Technische Universität Chemnitz

TECHNISCHE UNIVERSITÄT CHEMNITZ

Studienprofil Infos

Fachstudienberatung
Technische Universität Chemnitz
Dr. Martin Siefkes
E-Mail: martin.siefkes@phil.tu-chemnitz.de

Der Studiengang beginnt ab dem Wintersemester 2018/2019. Bewerbungsfrist: 15. Juli

Warum sagt uns manches Bild mehr als 1000 Worte – und warum braucht man manchmal eben doch eine sprachliche Erklärung? Wieso benutzen wir Gesten, während wir sprechen? Wie werden wir in Zukunft mit Robotern kommunizieren und sie vielleicht mit Gesten steuern? Und wie konstruieren eigentlich Filme oder Computerspiele eine fiktive Welt aus Bildern, Geräuschen, Sprache und Musik?

Was zeichnet den Masterstudiengang Semiotik und Multimodale Kommunikation aus?

Heute wird medienübergreifend erzählt, berichtet und geworben. Kommunikation ist so komplex geworden, dass traditionelle linguistische Ansätze zu kurz greifen. Der deutschlandweit einmalige Masterstudiengang Semiotik und Multimodale Kommunikation bringt die Untersuchung natürlicher, alter und neuer Medien zusammen. Er verbindet **Forschung und Praxis** und bietet vielfältige Wahl und Vertiefungsmöglichkeiten.

Der Studiengang kombiniert Ansätze der Linguistik, Medien- und Literaturwissenschaft und führt genauso in das geisteswissenschaftliche Denken wie auch in empirische Forschungsmethoden ein. Er vermittelt, wie man das Zusammenwirken von **Rede und Geste** und **Texten und Bildern** theoretisch erfasst, aber auch, mit welchen Techniken Kommunikation aus multimodaler Perspektive erforscht werden kann. Darüber hinaus ist der Studiengang mit weiteren Angeboten und Studiengängen der Philosophischen Fakultät verbunden, etwa dem VELL Lab, der Interkulturellen Kommunikation und der Anglistik.

Unter **multimodaler Kommunikation** werden alle Situationen verstanden, in denen mehrere Zeichenarten zusammenwirken: Texte, Bilder und Videos auf Webseiten, Rede und Geste in der mündlichen Kommunikation, Bilder, Sprache und Musik in Filmen, Sprache und interaktive Raumdarstellung in Computerspielen. Der Studiengang vermittelt ein Verständnis für diese vielfältigen Zusammenhänge und die Fähigkeit, sie zu analysieren.

Innovative Forschungsmethoden

Komplexe Kommunikationsprozesse stellen besondere Herausforderungen dar und bedürfen innovativer Forschungsmethoden. Das dreisemestrige Basismodul Digital Humanities führt nicht nur in aktuelle Themen wie Digitale Editionen und Visualisierungstechniken ein, sondern bietet in Verbindung mit dem

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Thanks for being

impacted!

Making the hand sculptures …