



# International Workshop on Modal and Amodal Cognition

Date: 15.05.2024 - 17.05.2024

Location: Universität Tübingen, Alte Aula, Münzgasse 30, 72070 Tübingen

This workshop will bring together international experts from psychology and related disciplines, to explore and discuss issues related to the format of mental representations, with a particular focus on the role of modal and amodal representations in various fields of human cognition (including perception, learning, thinking, motor processing, emotion, etc.).

We are convinced that this workshop will provide a great chance to network with fellow international researchers and establish collaborations within the field while enjoying the charms of Tübingen, which is known for its picturesque old town, historic university, and scenic setting along the Neckar River.

### **Organizers**

Karin Bausenhart Barbara Kaup Rolf Ulrich

### **Conference homepage**



Scan to access extended programme including abstracts or visit https://uni-tuebingen.de/de/264402

#### **Acknowledgements**

We are deeply indebted to all student, graduate, PostDoc level and technical staff helpers who supported this workshop in various and indispensable ways.

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The German Research Foundation is a major research funding organization in Germany, responsible for promoting and supporting academic research and scientific cooperation across various disciplines. Its primary goal is to fund and facilitate high-quality research projects, promote the training of young researchers, and foster international collaboration in science and academia. It plays a crucial role in shaping the research landscape in Germany and promoting scientific excellence both nationally and internationally.

Further information about the German Research Foundation can be found here: <a href="https://www.dfg.de/en">https://www.dfg.de/en</a>

#### WIFI

Participants and speakers can use their eduroam login to access the wifi provided by the University of Tübingen. Participants and speakers who do not have their own eduroam login can use the following login:

SSID: Guest
User name: siakbg01
Password: jn5jn1

#### Conference venue

#### All talks and the poster session will take place in the Alte Aula:

Universität Tübingen, Alte Aula, Münzgasse 30, 72070 Tübingen, (A) in following map.

Public transport: The Alte Aula is centrally located in the city of Tübingen and can best be reached by with a short walk from Hauptbahnhof (8 minutes) or either bus stops "Neckarbrücke" (4 minutes) or "Am Stadtgraben" (7 Minutes)

#### **Networking events**

Please note that registration for these events is closed due to capacity limitations. If places become available at short notice, interested guests can register at the conference help desk.

#### Warming up (invited speakers, May 14th, 2024):

Restaurant "Mauganeschtle" Burgsteige 18, 72070 Tübingen, see (B) in following map.

#### Get-together at the Guest House of University of Tübingen (May 15th, 2024):

University of Tübingen, Guest House, Lessingweg 3, 72076 Tübingen

#### Punting boat trip (May 16th, 2024)

Landing dock at Hölderlinturm, Bursagasse 6, 72070 Tübingen, (C) in following map.

#### Accomodation

#### Hotel am Schloss, Burgsteige 18, 72072 Tübingen

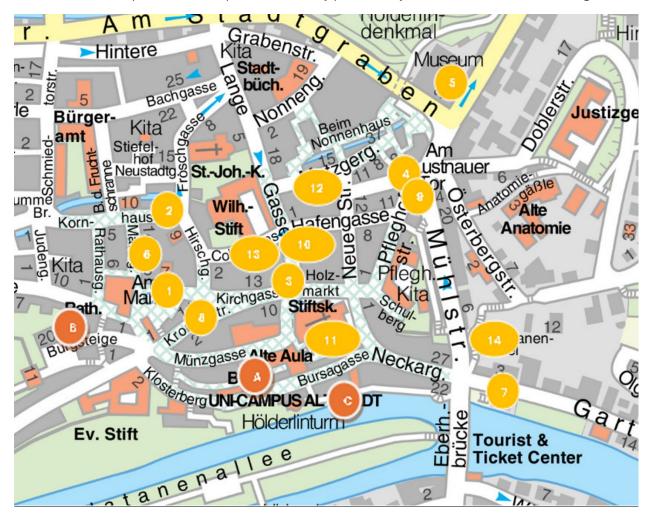
Public transport: The Hotel am Schloss is centrally located in the city of Tübingen and can best be reached by with a short walk from Hauptbahnhof (12 minutes) or either bus stops "Neckarbrücke" (8 minutes) or "Am Stadtgraben" (8 Minutes)

#### University of Tübingen, Guest House, Lessingweg 3, 72076 Tübingen

*Public transport:* The guest house can easily be reached by bus lines 3 or 4, nearest bus stop "Im Rotbad". By foot, it is a walk about 20 -25 minutes from the conference venue.

#### **Food**

Tübingen's city centre offers many places to eat: cafés, restaurants, snack bars and takeaways. Here is a short list (not exhaustive) of some nearby places for your lunch breaks and evenings:



https://www.tuebingen.de/stadtplan/

#### **Bistro & Bar**

- (1) Ranitzky: coffee & bistro, Am Markt, 72070 Tübingen
- (2) Vegi: vegan and vegetarian, oriental, Kornhausstraße 1, 72070 Tübingen

#### **Bakery**

- (3) Hofpfisterei: Am Holzmarkt 2, 72070 Tübingen
- (4) Bäckerei Gehr: Am Lustnauer Tor 5, 72074 Tübingen

#### Restaurants

- (5) 1821 Tübingen: regional & international dishes, Wilhelmstraße 3, 72074 Tübingen
- (6) Alte Kunst: italian dishes, Marktgasse 8, 72070 Tübingen
- (7) Neckarmüller: regional dishes, Gartenstraße 4, 72074 Tübingen
- (8) Forelle: regional & international dishes, Kronenstraße 8, 72070 Tübingen
- (9) Wurstküche: regional dishes, Am Lustnauer Tor 8, 72074 Tübingen
- (10) Stern: italian & international dishes, Lange Gasse 4, 72070 Tübingen
- (11) Al Dente: italian dishes, Bursagasse, 72070 Tübingen

#### Take away

- (12) Kichererbse: oriental food, Metzgergasse 2, 72070 Tübingen
- (13) Hao's Box: asian food, Lange Gasse 1, 72070 Tübingen
- (14) Brothers Orientfood: oriental food, Gartenstraße 1, 72074 Tübingen

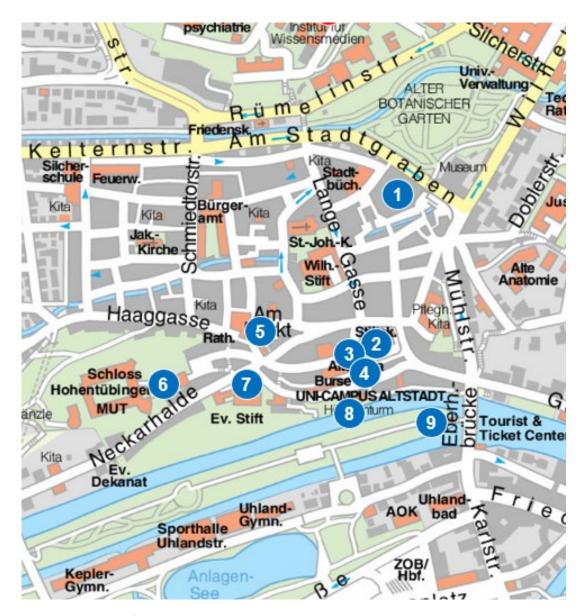
#### **About Tübingen**

Small steps, narrow alleys, and pointed gables shape the silhouette of old Tübingen on the way up to its castle. The Swabian university town, with 28,000 of its 90,000 inhabitants being students, combines the flair of a lovingly restored medieval town center with the colorful bustle and typical atmosphere of a young and cosmopolitan students' town. Tübingen has witnessed almost a millennium of history. The area was likely first settled in the 12th millennium BC; Tübingen itself dates to the 6th or 7th century AD. It was first mentioned in writing in 1078 and achieved town status and civil liberty under the Palatine Counts of Tübingen in the middle of the 13th century.

Many well-known personalities have resided in Tübingen over the past few centuries. They came to teach, to study, or to find space for their artistic, scientific, or political goals. The University became the cornerstone for numerous great careers and has itself been molded and enriched by the subsequent activities and events.

Discover the treasures of the historic old town: The Protestant seminary, in which Hölderlin, Schelling, and Hegel once shared a study; or the town hall in the marketplace, which is more than 500 years old. The Hölderlin Tower by the Neckar River invites you to linger with a line of "Stocherkähne," punting boats unique to Tübingen ready for a ride. Numerous sidewalk cafes, wine taverns, restaurants, and boutiques invite visitors to stroll around and to pause here and there.

#### **Sightseeing walk through Tübingen** (Numbers refer to the map below)



https://www.tuebingen.de/stadtplan/

#### House of the Nuns (Nonnenhaus) (1)

The House of the Nuns dates back to the second half of the 15th century and owes its name to the Beguine or hermit women who lived here in a fellowship similar to nuns and who devoted their lives to charity. The stairs on the exterior of the building lead to the second floor, and to the left you will see to the so-called Speaking House, a medieval toilet directly over the Ammer Canal. Leonhard Fuchs, professor of medicine in Tübingen and known as the Father of Botany, moved into the house in 1535 and planted an herb garden next to the building, which he used for his

experiments on the medicinal use of plants. In the 18th century, a newly discovered plant family, Fuchsia, was named after him. The stone book in front of the House of the Nuns commemorates his work.

#### Collegiate Church (Stiftskirche) (2)

In the context of the foundation of the University in 1477, the former parish church, which was mentioned for the first time in 1191, was transformed into a Gothic Collegiate Church. It was one of the first churches to convert to Martin Luther's protestant church after the Reformation in 1534. The top of the tower was added only at the end of the 16th century. As one of the most important churches in Württemberg – and thanks to the support of Duke Eberhard im Bart (the Bearded) of Württemberg – the Collegiate Church received an excellent décor.

#### Goethe (3)

Across from the Stiftskirche (Collegiate Church), number 15 in the Münzgasse lane, you will find the Cotta-Haus (House of Cotta), the former address of the famous publishing house that released the works of Schiller and Goethe. A plaque on the Cotta-Haus commemorates Goethe's stay of a few weeks while visiting his publisher (Hier wohnte Goethe). This is parodied on the building next door – once a dormitory, which features a plain sign with the words Hier kotzte Goethe ("Goethe puked here").

#### Burse (4)

The Burse was built from 1478 to 1482 as a students' home and study shortly after the founding of the University. From 1803 to 1805, the building was transformed into the first medical clinic in Tübingen. One of the first patients was the poet Friedrich Hölderlin, who was released as incurable after 231 days of therapy in 1807. With the advancing medical development, the clinical center became too small. In 1972 – after a thorough reconstruction of the building – students and professors of philosophy and art history returned to this place of the "free arts".

#### Marketplace (Marktplatz) and City Hall (Rathaus) (5)

The Market Square with the City Hall and Neptune's Fountain, along with the Neckar waterfront, is one of Tübingen's favorite photography locations. The visually dominating City Hall – the oldest house at the marketplace – was built with three stories in 1435, in 1508 heightened by a fourth level, and in 1511 decorated with an artfully made astronomical clock by Johannes Stöffler. The clock, which is still functioning, shows the course of the stars, the phases of the moon, and even such celestial events as eclipses of the sun and the moon. The Renaissance Neptune's fountain gives a certain touch to the marketplace and dates back to the beginning of the 17th century. It is the work of the master builder Georg Müller based on the design by Heinrich Schickard, who was inspired by a Bolognese archetype.

#### Hohentübingen Castle (Schloss Hohentübingen) (6)

In 1078, the castle of the Counts of Tübingen was mentioned for the first time. The current castle, which hosts numerous institutes and collections of the University, derives mainly from the 16th century. The Hohentübingen Castle is a mighty renaissance construction with four wings and a round tower. Its most beautiful decoration is the Renaissance portal built around 1606 in the style of a Roman triumphal arch, whose center shows the emblem of the Duchy of Württemberg. Beginning in the mid-18th century, the University acquired its first rooms in the castle, and in 1816, the King of Württemberg, Wilhelm I, transferred ownership of the castle to the University. The University library of nearly 60,000 volumes was temporarily housed in the hall of knights, an astronomical observatory was housed in the northeast tower, and a chemistry laboratory was set up in the kitchen. There, in 1869, Miescher was the first researcher to isolate various phosphaterich chemicals (nucleic acid) in a laboratory, paving the way for the identification of DNA as the carrier of inheritance. After the complex restoration of the castle from 1979 to 1994, some of the University's cultural and academic institutions were relocated there, the collections of which are open to the public. Parts of the highlights are numerous archeological findings and replicas, such as a complete ancient Egyptian burial chamber. From the castle, the visitor has views to the city, as well as to the Neckar and Ammer valleys and the extended region up to the horizon of the Swabian Alb in the south.

#### Protestant Collegiate (Evangelisches Stift) (7)

The Evangelisches Stift was a former monastery of the Augustinians. In 1534, after the implementation of the reformation in Württemberg, it was reconstructed and enlarged in order to serve as a ducal stipend, a scholarship for students of Protestant Theology. A great amount of European intellectual history has been written within its walls. Among the scholars who studied there were Johannes Kepler, Gustav Schwab, Eduard Mörike, and Hermann Kurz as well as Georg Wilhelm Friedrich Hegel, Friedrich Hölderlin, and Friedrich Schelling, who occasionally lived and studied together in the collegiate at the end of the 18th century. Today it serves as an accommodation and study space for about 140 students. Women have been admitted since 1969.

#### Hölderlin Tower (Hölderlinturm) (8)

In the late 18th century, the Hölderlinturm was built on the pedestal of the inner ring wall. The wall dates back to the 13th century. The poet Friedrich Hölderlin (born in 1770) lived here from 1807 until his death in 1843. The family of a carpenter, Zimmer, accommodated him in this building for the last 36 years of his life as he struggled with mental instability. Today, the Hölderlinturm is a literary memorial place and museum.

# Eberhards Bridge (Eberhardsbrücke), Neckar Island (Neckarinsel), Plane Tree Avenue (Platanenallee) (9)

In central Tübingen, the Neckar River divides briefly into two streams, forming the elongated Neckarinsel, famous for its Platanenallee with high plane trees, some of which are more than 200 years old. During the summer, the Neckarinsel is occasionally the venue for concerts, plays, and literary readings. The row of historical houses across one side of the Neckarinsel is called the Neckarfront. Houses were built even upon the city wall above the Neckar River during the Middle Ages, which created this distinctive waterfront, including the Hölderlinturm. The Eberhardsbrücke, which was formerly the only bridge in the city center and is therefore also called Neckarbrücke, is dominated by pedestrians. The railings and lanterns are decorated with brightly blossoming flower baskets during the summer months.

To learn more about what Tübingen has to offer, please visit www.tuebingen.de/en.

#### **University of Tübingen**

"Tübingen does not have a university, it is a university," is a common expression and for good reason: With its palm tree symbol and Duke Eberhard's motto "Attempto!" ("Dare!"), the university and its 28,000 students certainly shape the city image. Its over 500 professors and nearly 5,000 academics make it the second largest university in Baden-Württemberg, following Heidelberg. Its seven institutes are spread throughout the city. In the old town, there is hardly a single building or location not associated with a famous scholar – Hegel, Hölderlin and Schelling, Mörike and Uhland, Kepler and Schickard among them. Furthermore, nine Nobel laureates are associated with the University of Tübingen.

The University of Tübingen is one of Europe's oldest universities. Several hundred years of history in the sciences and humanities have been written here. The University's history began back in 1477, when Count Eberhard "the Bearded" of Württemberg founded the University. The latest chapter of the University's history is marked by its success in the Excellence Initiative of the German federal and state governments. One Graduate School, one Excellence Cluster, and the University's Institutional Strategy were successful in the major funding program – also making Tübingen one of Germany's eleven universities in the top "Excellent" class. The University has partnerships with more than 150 educational institutions in 45 countries, particularly in North America, Asia, and Latin America as well as with all countries in Europe. Moreover, together with 6 partner institutions, the University of Tübingen promotes excellence in research-led education within the Matariki Network of Universities (MNU). Some 13 percent of students in Tübingen come from abroad, and many of the University's German students pursue part of their studies in other countries.

To learn more about the University of Tübingen, please visit the University's Website: www.unituebingen.de/en.

### **Programme overview**

### Tuesday, May 14<sup>th</sup>, 2024

6:30 pm	Warming up, Restaurant	
	<u>"Mauganeschtle"</u>	
	Burgsteige 18, 72070 Tübingen	

### Wednesday, May 15th, 2024

09:15 am – 10:30 am	Talk Session 1	
9:15 am – 9:30 am	Welcome	
9:30 am – 10:30 am	Modal and amodal cognition: An overarching principle	Barbara Kaup, Rolf Ulrich, Robert Johansson, Karin Bausenhart, & Mandy Hütter
10:30 am – 11:00 am	Coffee and Exchange	
11:00 am - 12:30 pm	Talk Session 2: Perception	Chair: Jürgen Heller
11:00 am- 11:30 am	Perception is modal iconic, non- propositional and non-conceptual whereas cognition is amodal, discursive and conceptual	Ned Block, New York University
11:30 am - 12:00 pm	The role of object structure in representational updating	Cathleen Moore & Elisabeth Hein, University of Iowa
12:00 pm – 12:30 pm	Head-shape invariant representation of dynamic facial expressions	Martin A. Giese, University Clinic Tübingen
12:30 pm – 2:00 pm	Lunch break	

2:00 pm – 3:30 pm	Poster Session and Coffee	
3:30 pm – 5:00 pm	Talk Session 3: Memory & Knowledge	Chair: Kriti Bhatia
3:30 pm – 4:00 pm	Systems memory consolidation - from modal to amodal?	Monika Schönauer, University of Freiburg
4:00 pm – 4:30 pm	Does multisensory integration benefit memory?	Diane Pecher, Brandon Keytel, & René Zeelenberg, Erasmus University Rotterdam
4:30 pm – 5:00 pm	Investigating the representational format of knowledge: Evidences and insights	Elisa Scerrati, Catholic University of the Sacred Heart Milan
6:30 pm – 10:00 pm	Get-together at the Guest House of University of Tübingen Lessingweg 3, 72076 Tübingen	

### Thursday, May 16th, 2024

09:00 am - 10:30 am	Talk Session 4: Language	Chair: Markus
		Janczyk
9:00 am – 9:30 am	The myth of the modal manifestation	<u>Ulrich Ansorge<sup>1</sup> &amp;</u>
		Soonja Choi <sup>2</sup>
		<sup>1</sup> University of Vienna
		<sup>2</sup> San Diego State
		University
9:30 am – 10:00 am	Modal and amodal meaning components in	Rasha Abdel
	language production	<u>Rahman</u> ,
		HU Berlin
10:00 am – 10:30 am	Mental simulation in non-native speakers	René Zeelenberg &
	during language comprehension	Diane Pecher
		Erasmus University
		Rotterdam
<u>10:30 am – 11:00 am</u>	Coffee and Exchange	

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11:00 am - 12:30 pm	Talk Session 5: Adaptation & Control	Chair: David Dignath
11:00 am – 11:30 am	Modality effects in cognitive control:	Iring Koch,
11.00 10.00	Evidence from task switching  First the bones then the flesh: Toward a	RWTH Aachen
11:30 am – 12:00 am	goal-directed explanation of maladaptive	Agnes Moors, KU Leuven
	behavior	KO Leuveii
12:00 am – 12:30 am	Episodic representations can be both modal	Jan De Houwer,
	and amodal and support flexible relational responding	Ghent University
12:30 pm – 2:00 pm	Lunch Break	
2:00 pm – 3:30 pm	Talk Session 6: Perception & Action	Chair: Volker Franz
2:00 pm – 2:30 pm	Predictions and perception in the human	Andreas Bartels,
	brain - in Gestalt, colour, and magic	University of
		Tübingen
2:30 pm – 3:00 pm	Thoughts about actions and outcomes (and	Ruud Custers,
	what they lead to)	Utrecht University
3:00 pm – 3:30 pm	On the relationship between features of an	Daniel Bub,
	action plan in working memory and the	University of Victoria
	speeded naming of tools/utensils: New	
	empirical evidence and a theoretical framework	
	namework	
3:30 pm – 4:00 pm	Coffee and Exchange	
4:00 pm – 5:00 pm	Panel Discussion	
	Panelists: Monika Schönauer, Diane Pecher,	Host: HC Nuerk
	Martin Fischer, Hanspeter Mallot	
<u>5:30</u>	Networking on the Neckar:	
	Punting Boat Trip	

### Friday, May 17<sup>th</sup>, 2024

09:00 am - 10:30 am	Talk Session 7: Numeric Cognition	Chair: Martin Butz
9:00 am – 9:30 am	Developmental dynamics between innate and acquired representation: The case of numerical cognition	<u>Daniel Ansari,</u> Western University Ontario
9:30 am – 10:00 am	Representation and process in embodied cognition: The case of number concepts	Martin H. Fischer, University of Potsdam
10:00 am – 10:30 am	Coffee and Exchange	
10:30 am – 12:00 pm	Talk Session 8: Language & Thinking	Chair: Claudia Friedrich
10:30 am – 11:00 am	In and out of sight: Processing concepts in situated and displaced contexts	Viktor Kewenig, Jeremy Skipper, & Gabriella Vigliocco, University College London
11:00 am – 11:30 am	Grounding of concrete and abstract concepts in modal experiential brain systems related to perception, action, and introspection	Markus Kiefer, University of Ulm
11:30 am – 12:00 am	The format of representations of the abstract relations same and different in prelinguistic thought	Susan Carey, Harvard University
<u>12:30 pm</u>	<u>Farewell</u>	Rolf Ulrich

### **Invited talks**

(authors in alphabetical order)



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#### Modal and amodal meaning components in language production

Rasha Abdel Rahman & Marisha Herb

Humboldt University Berlin, Berlin, Germany

Keywords: Speaking, semantic interference, sensorimotor similarity, sensorimotor strength

# Developmental dynamics between innate and acquired representation: The case of numerical cognition

Daniel Ansari

Western University Ontario, London, Canada

**Keywords**: Numerical cognition, developmental dynamics, symbolic representations, non-symbolic representations, symbol-grounding

#### The myth of the modal manifestation

Ulrich Ansorge<sup>1,2,3</sup> & Soonja Choi<sup>4</sup>

- <sup>1</sup> Department of Cognition, Emotion, and Methods in Psychology, University of Vienna, Austria
- <sup>2</sup> Vienna Cognitive Science Hub, University of Vienna, Austria
- <sup>3</sup> Research Platform Mediatised Lifeworlds, University of Vienna, Austria
- <sup>4</sup> Department of Linguistics and Asian/Middle-Eastern Languages, San Diego State University, USA

**Keywords:** adaptation, selectivity, procedural memory, spatial language and representation

#### Predictions and perception in the human brain - in Gestalt, colour, and magic

**Andreas Bartels** 

University of Tübingen, Germany

**Keywords:** fMRI / functional imaging, predictive coding, colour vision, motion vision, Gestalt, expectation violation

Perception is modal iconic, non-propositional and non-conceptual whereas cognition is amodal, discursive and conceptual - An empirical argument that perception is non-conceptual

**Ned Block** 

**New York University** 

Keywords: perception, iconic, non-conceptual, non-propositional

On the relationship between features of an action plan in working memory and the speeded naming of tools/utensils: New empirical evidence and a theoretical framework

Daniel Bub

University of Victoria, British Columbia, Canada

Keywords: Pragmatic representations, semantic representations, feature binding

The format of representations of the abstract relations same and different in prelinguistic thought

Susan Carey

Harvard University, Cambridge, Massachusetts, USA

Thoughts about actions and outcomes (and what they lead to)

**Ruud Custers** 

Utrecht University, Netherlands

Keywords: goals, ideomotor, regulation, motivation, instrumental learning

# Episodic representations can be both modal and amodal and support flexible relational responding

Jan De Houwer

Ghent University, Belgium

**Keywords:** episodic representations, propositional models, feature specific attention allocation, relational responding, relational frame theory

#### Representation and process in embodied cognition: The case of number concepts

Martin H. Fischer

University of Potsdam, Germany

Keywords: numerical cognition, sensory and motor biases, processing depth

#### Head-shape invariant representation of dynamic facial expressions

Martin A. Giese<sup>1</sup>

Collaborators: Michael Stettler<sup>1</sup>, Nick Taubert<sup>1</sup>, Ramona Siebert<sup>2</sup>, Silvia Spadacenta<sup>2</sup>, Peter Dicke<sup>2</sup>, Peter Thier<sup>2</sup>

**Keywords:** perception, facial expressions, dynamic faces, norm-referenced encoding, invariance, neural models

<sup>&</sup>lt;sup>1</sup> Section Computational Sensomotorics, Research Unit N3, CIN & HIH, University Clinic Tübingen

<sup>&</sup>lt;sup>2</sup> International Max Planck Research School for Intelligent Systems, Tübingen

<sup>&</sup>lt;sup>3</sup> Dept. of Cognitive Neurology, CIN & HIH, University Clinic Tübingen

# Grounding of concrete and abstract concepts in modal experiential brain systems related to perception, action, and introspection

Markus Kiefer

University of Ulm, Germany

Keywords: conceptual knowledge, grounded cognition, embodied cognition, neuroimaging.

#### Modality effects in cognitive control: Evidence from task switching

Iring Koch

RWTH Aachen, Germany

**Keywords:** cognitive control, task switching, modality compatibility

#### The role of object structure in representational updating

Cathleen M. Moore<sup>1</sup> & Elisabeth Hein<sup>2</sup>

First the bones then the flesh: Toward a goal-directed explanation of maladaptive behavior

Agnes Moors

KU Leuven, Belgium

<sup>&</sup>lt;sup>1</sup> University of Iowa, USA

<sup>&</sup>lt;sup>2</sup> University of Tübingen, Germany

#### Does multisensory integration benefit memory?

Diane Pecher, Brandon Keytel, & René Zeelenberg,

Erasmus University Rotterdam, Netherlands

**Keywords:** multisensory memory, multisensory integration, encoding specificity, continuous recognition

#### Investigating the representational format of knowledge: Evidences and insights

Elisa Scerrati

Catholic University of the Sacred Heart Milan, Italy

**Keywords:** semantic processing, action knowledge representation, priming paradigm, property verification, lexical decision

#### Systems memory consolidation - from modal to amodal?

Monika Schönauer

University of Freiburg, Germany

**Keywords**: systems memory consolidation, neural plasticity, reactivation, sleep, naturalistic paradigms, human neuroimaging

#### In and out of sight: Processing concepts in situated and displaced contexts

Viktor Kewenig, Jeremy Skipper, & Gabriella Vigliocco

University College London, UK

**Keywords**: language processing during movie watching, visual context, concrete and abstract concepts, context-dependent brain responses

#### Mental simulation in non-native speakers during language comprehension

René Zeelenberg & Diane Pecher

Erasmus University Rotterdam, Netherlands

**Keywords:** mental simulation, sentence-picture verification task, language comprehension, bilingualism

### **Poster contributions**

(authors in alphabetical order)



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#### Grain size in modal and amodal event representations

Tolgahan Aydin<sup>1</sup>, Simge Hamaloğlu<sup>2</sup>, Sarah Nolasco<sup>2</sup>, Nadia Said<sup>2</sup>, Daniel T. Levin<sup>3</sup>, & Markus Huff<sup>1,2</sup>

- <sup>1</sup> Leibniz-Institut für Wissensmedien, Tübingen, Germany
- <sup>2</sup> University of Tübingen, Tübingen, Germany
- <sup>3</sup> Vanderbilt University, Nashville, USA

Keywords: event cognition, grain size, abstraction

#### #2

#### Memory specificity in evaluative conditioning: A multinomial processing tree approach

Karoline Bading, Barbara Kaup, Michael Ramscar, & Mandy Hütter

University of Tübingen, Tübingen, Germany

#### #3

# Dessert in Philadelphia, pudding in Tübingen? Investigating the relation of abstraction level and distance in a sentence completion task

Karin M. Bausenhart, Dina Blunck, Alicia Klötzel, Rolf Ulrich, & Barbara Kaup

University of Tübingen, Tübingen, Germany

**Keywords**: Construal Level Theory, spatial distance, linguistic processing, cognitive representation

#### Reviewing evidence for different representations in perception and action

Kriti Bhatia<sup>1</sup>, Angela Osenberg<sup>1</sup>, Markus Janczyk<sup>2</sup>, & Volker H. Franz<sup>1</sup>

- <sup>1</sup> Experimental Cognitive Science, Department of Computer Science, University of Tübingen, Tübingen, Germany
- <sup>2</sup> Psychological Research Methods and Cognitive Psychology, Department of Psychology, University of Bremen, Germany

**Keywords**: perception & action, grasping, size estimation

#### #5

#### Disentangling population stereotypes from individual differences in ACEs

Francesca Capuano<sup>1</sup>, Daniel Bub<sup>2</sup>, Berry Claus<sup>3</sup>, & Barbara Kaup<sup>1</sup>

- <sup>1</sup> University of Tübingen, Tübingen, Germany
- <sup>2</sup> University of Victoria, British Columbia, Canada
- <sup>3</sup> University of Hannover, Hannover, Germany

**Keywords**: embodiment; ACE; individual differences; population stereotypes; reading-by-rotating

#### #6

### Visual tactics: Exploring modal and amodal cognition with if-then plans in identifying food stimuli

Rabia Dilawar & Caterina Gawrilow

<sup>1</sup> University of Tübingen, Tübingen, Germany

Keywords: self-regulation strategies, visual identification, If-then plans (ITPs), stimulus modality

### Unraveling the relationship between accuracy and confidence: A meta-cognitive perspective within event perception

Simge Hamaloğlu<sup>1</sup>, Markus Huff<sup>1, 2</sup>, Stephen Fleming<sup>3</sup>, Frank Papenmeier<sup>1</sup>, & Nadia Said<sup>1</sup>

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Keywords: event completion, metacognitive efficiency, confidence, Signal-Detection Theory

#### #8

#### Stimulus intensity: From neural representation to behavior

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Keywords: intensity processing, psychophysical modeling, multisensory perception

#### #9

#### Spatial regionalization depends on perceived landmark categorization

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Keywords: spatial language, cognitive map, regions, route choice, virtual environments

#### Cross-modal matching of brightness and loudness and internal references

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Keywords: cross-modal matching, psychophysics, cognitive modeling, Bayesian estimation

#### #11

# When can we and when do we adapt? Evidence that conflict adaptation can transcend contexts early in childhood

Theodora Hera Potamianou<sup>1</sup> & Donna Bryce<sup>2</sup>

**Keywords**: cognitive control, conflict adaptation, Congruency Sequence Effect, mouse-tracking, children, development

#### #12

# Chocolate craving and attitude change: Do amodal stimuli differentially influence attitude change towards chocolate in cravers and non-cravers?

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Keywords: Attitude change, craving, amodal representations, food consumption

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# Human language comprehenders appear to integrate rapidly gestural and verbal expressions of "yes" and "no": Evidence from a two-choice response time task

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Keywords: multimodal language, gesture-speech integration, affirmation, rejection

#### #14

# Exploring the efficacy of multimodal techniques in L1 German-speakers' acquisition of Persian vocabulary

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**Keywords:** language acquisition, vocabulary learning, sensorimotor techniques, multimodal instruction

#### #15

### Decomposing the Delta plot: Exploring the congruency effect using inhibition and facilitation curves

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**Keywords:** cognitive control, delta functions, neutral condition

# Distance effects on mental representations in egocentrically and allocentrically presented hand images

Theresa Sorg, Karin M. Bausenhart, Rolf Ulrich, & Barbara Kaup

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Keywords: construal level, psychological distance, abstraction, mental representation

#### #17

#### Nouns link to typical space in 18- to 24-month-olds

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Keywords: eye-tracking, language-space associations, word learning

#### #18

#### Restrained eaters' attentional blink to amodal and modal food cues

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Keywords: dietary restraint, attentional blink, electroencephalography

#### #19

#### Language-space compatibility effects: The influence of task demand

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**Keywords:** language comprehension, Stroop, compatibility effects, language-space associations, response-selection stage

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