SCSC

7th ANNUAL MEETING OF THE SOCIETY FOR THE COGNITIVE SCIENCE OF CULTURE

April, 28 & 29, 2025

Zurich, Switzerland

Welcome to Zurich

We are happy to welcome you in Zurich for the 7th annual meeting of the Society for the Cognitive Science of Culture. This meeting offers a rich scientific and cultural program. You will get the chance to attend the Sechseläuten, "a centuries-old tradition to herald the beginning of spring in Zurich. Besides guild members attired in historical costumes, the festival is characterized by music ensembles, horses, flowers, flags, and the Böögg. Nowadays, the Böögg is even the main protagonist: the pyre with the snowman figure on top is set alight when the clock of the St. Peter church strikes 6 pm. The faster his head – which is filled with fireworks – explodes, the finer the summer will be. At least that's what the people of Zurich say." (2025 Zürich Tourismus)

I am very grateful for the support of co-organiser Professor Volker Dellwo, and the assistance of Natalia Bekemeier, Alejandra M. Hüsser, and Sarah Krause from the University of Zurich in organizing the meeting, as well as Celia Lazzarotto from the NCCR Evolving Language; Thomas Lachmann, Kirstin Bergström, and Cosima Jergens from the University of Kaiserslautern-Landau for their contributions to the production of advertisement material, and Huw Swanborough from the University of Zurich for his help with abstract review. I would also like to thank the University of Zurich for hosting this year's meeting and the NCCR Evolving Language and the UZH Alumni for their generous support of the event.

We hope you have a wonderful and inspiring time in Zurich and look forward to reconnecting with former colleagues and meeting new ones.

Best wishes,

Alexis and the organization committee

General Information

Venue
Universität Zürich
Rämistrasse 59
8001 Zürich
E-Mail: scscult@gmail.com

Main entrance

Lichthof (RAA)

Kleine Aula (RAA-G-01)

Organization & programme committee

Alexis Hervais-Adelman

Volker Dellwo

Natalia Bekemeier

Alejandra M. Hüsser

Internet
WiFi name: UZH_guest OR eduroam

Coffee break and Lunch
During coffee and lunch breaks catering is served in the entrance hall (Lichthof, RAA) of the conference venue.

Social events
On Monday April 28, you will have the opportunity to attend the Sechsiläuten, a traditional festivity of Zurich. The burning of the Bögg (starts at 18:00 at the Sechseläutenplatz close to Bellevue). We recommend you get there at least 30 minutes in advance as it gets very crowded. It is in walking distance from the conference venue. Trams will not be running.

At 19:30, we will have dinner at Moudi's Leckergarten (Winterthurerstrasse 86, 8006 Zürich).

On Tuesday April 29, at the end of the conference we will have a social gathering at the Cabaret Voltaire (Spiegelgasse 1, 8001 Zürich), which is in walking distance from the conference venue.

Programme of the 7th annual meeting of the Society for the Cognitive Science of Culture

Monday, 28th April 2025

08h15 - 08h45	**Registration, coffee**
	Lichthof, RAA
08h45 - 09h00	**Opening remark: Prof. ALEXIS HERVAIS-ADELMAN**
	(Universität Zürich, Switzerland)
	Aula, RAA-G-01
09h00 - 10h00	**Keynote lecture: Prof. AMBER GAYLE THALMAYER**
	(Universität Zürich, Switzerland)
	The language of psychology: What lexical studies of personality trait structure teach us about human universals and cultural differences
	Aula, RAA-G-01
10h00 - 10h30	Coffee break
	Lichthof, RAA
10h30 - 12h00	**Oral session A: Literacy, Perception and Cognition**
	A.1: Iliana Karipidis "Short dynamic localizer uncovers development of category-selective visual brain activation in children"
	A.2: Susana Araújo "Orthography influences spoken word production: Evidence from serial object naming across literacy levels"
	A.3: Manuel Perea "Beyond Words: The Cultural and Neural Dynamics of Visual Modifications in Logotypes"
	Aula, RAA-G-01
12h00 - 13h00	Lunch break
	Lichthof, RAA

13h00 - 14h00	**Poster session I**
	Lichthof, RAA
14h00 - 15h00	**Keynote lecture : Prof. SARAH EBLING**
	(Universität Zürich, Switzerland)
	Automatic Sign Language Processing
	Aula, RAA-G-01
15h00 - 16h30	**Oral session B: Acquiring Reading and Writing**
	B.1: Ramesh Kumar Mishra: "Biliteracy Training Induces Sustained Cross-Linguistic Orthography Activation in Adult Illiterates"
	B.2: Sendy Caffarra "Validation of an Italian screener for reading: the case of ROAR-word"
	B.3: Svetlana Pinet "On the Acquisition of Typing Skills Without Formal Training by School-Aged Children"
	Aula, RAA-G-01
16h30 - 19h00	Sechseläuten
19h30	Dinner: Moudi's Leckergarten

Tuesday, 29th April 2025

08h30 - 09h00	Coffee
	Lichthof, RAA
09h00 - 10h00	**Keynote lecture : Prof. PASCAL GYGAX**
	Université de Fribourg, Switzerland)
	Inclusive language: A storm in a tea cup or an answer to a real problem?
	Aula, RAA-G-01
10h00 - 10h30	Coffee break
	Lichthof, RAA
10h30 - 11h30	**Oral session C: Risks and Challenges of Technology**
	C.1: Falk Huettig "Can large language models counter the recent decline in literacy levels? An important role for cognitive science"
	C.2: Maria Fernández-López "The Cognitive Traps of Fake News: Sensationalism, Anchoring, and Cultural Biases"
	Aula, RAA-G-01
11h30 - 13h00	Lunch break
	Lichthof, RAA

13h00 - 14h00	**Keynote lecture: Prof. ANIRUDDH PATEL**
	(Tufts University, USA)
	Human music as a biologically powerful cultural inven-
	tion: a comparison to literacy
	Aula, RAA-G-01
14h00 - 15h00	**Oral session D: Attention**
	D.1: Inka Romero-Ortells "Hearing Once, Reading Twice:
	The Role of Dual Subtitles in Eye Movements in Bilin-
	guals"
	D.2: Ann-Kathrin Beck "Investigating Cultural Influences
	on Automatic Processing of Task-Irrelevant Global and
	Local Visual Information"
	Aula, RAA-G-01
15h15 - 15h45	**Closing remark: Prof. ALEXIS HERVAIS-ADELMAN**
	(Universität Zürich, Switzerland)
	Lichthof, RAA
16h45	Social gathering

Abstracts

Amber Gayle Thalmayer
Universität Zürich,
Switzerland

Amber Gayle Thalmayer (PhD Psychology, University of Oregon, 2013) is an Assistant Professor for Personality, Mental Health and Culture at the Department of Psychology, University of Zurich, a Research Fellow at University of the Free State, South Africa, and a Swiss National Science Foundation Excellenza Fellow. Since 2022 she leads the ambitious longitudinal Africa Long Life Study, a collaborative six-university partnership to study personality and mental health development in Namibia, Kenya, and South Africa. Previously as a junior lecturer at the University of Lausanne, she was principal Investigator of a mixed-methods study of personality and mental health in Namibia.

The language of psychology: What lexical studies of personality trait structure teach us about human universals and cultural differences

Lexical studies of personality trait structure, proposed over 100 years ago, can provide an objective taxonomy of key individual differences. For a lexical study, all person-descriptive terms are extracted from a dictionary; the most familiar and psychologically-relevant are administered as a survey to describe oneself or a well-known other; then dimension reduction is used to identify key clusters/traits. Such studies became tractable with computing power in the 1990s, and efforts in English, German, and Dutch converged on a similar five-factor model. This Big Five model was heralded as a human universal and came to dominate the field, with inventories used in thousands of studies around the globe. Our replication of the psycholexical approach in three African languages, representing the three main language groups of sub-Saharan Africa and diverse socio-ecological conditions, disrupted the Big Five hegemony. Instead, I show a two-factor model of Social Self-Regulation and Dynamism to provide a more universal structure for traits, and a higher-order taxonomy under which more culture-specific models can be organized. I also show how we created a culturally-decentred inventory to allow for appropriate, culture-fair comparison, and how lexical studies teach us about both psychology and culture.

Sarah Ebling
Universität Zürich,
Switzerland

Sarah Ebling is a Full Professor of Language, Technology and Accessibility at the University of Zurich. Based in the fields of natural language processing and computer vision, her research focuses on language-based assistive technologies in the context of persons with disabilities, specifically, persons with hearing and visual impairments, cognitive impairments, and language disorders. Her research deals with sign language technologies, automatic text simplification, technologies for the audio description process and computer-aided language sample analysis.

Automatic Sign Language Processing

In this talk, I will discuss automatic sign language processing—composed of the tasks of sign language translation, recognition, and synthesis—from the point of view of natural language processing (NLP) and computer vision (CV). Specific attention will be given to the topics of computational representation of sign language and data (signer types, domains, availability and augmentation of data). The impact of generative AI on the field of automatic sign language processing will be discussed and exemplary contributions of our group presented, focusing specifically on the development of deep learning models and their evaluation. The talk will also give an overview of ethical aspects of sign language processing research, ranging from bias to participation of end users.

Pascla Gygax
Université de Fribourg,
Switzerland

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Pascal Gygax leads the Psycholinguistics and Applied Social Psychology team at the University of Fribourg in Switzerland. His research delves into how our brains process male grammatical markers and the influence of language on gender perception. Alongside colleagues Sandrine Zufferey and Ute Gabriel, he recently published a public-understanding-of-science book with Éditions Le Robert, titled Le cerveau pense-t-il au masculin? Cerveau, langage et représentations sexistes (Does the Brain Think in the Masculine? Brain, Language, and Sexist Representations). In recognition of his contributions to the understanding of language and thought, Pascal Gygax received the prestigious Marcel Benoist Prize in 2024, often referred to as the Swiss Nobel Prize.

Inclusive language: A storm in a tea cup or an answer to a real problem?

When referring to a person's personal, social, or professional role—such as a scientist, a traveler, or a professor—knowing the person's gender is not always crucial for understanding the discourse. In fact, it rarely is. However, research suggests that when we read or listen to sentences where gender is not specified, such as "The professors were really interested" or "Les professeurs étaient vraiment intéressés," we still form a mental representation of these people that includes gender. In my presentation, I will present data from different languages (e.g., French and German) to demonstrate that we tend to attribute gender in ways that unnecessarily narrow our perceptions of the world. I will argue that language inevitably compels us to focus on certain properties of the world that are not always relevant. I will further explore specific properties of grammatical languages, such as using the masculine form as the default, and discuss whether these properties bias the way we attribute gender. Additionally, I will briefly address some practical aspects of the issues at stake, often referred to as "inclusive language.

Aniruddh D. Patel
Department of Psychology,
Tufts University, USA

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Anniruddh (Ani) Patel is a Professor of Psychology at Tufts University, where he studies the cognitive, neural, and evolutionary foundations of musicality. Areas of emphasis include music-language relations, rhythmic processing, and cross-species studies. He is the author of Music, Language, and the Brain (2008, Oxford Univ. Press). Patel has served as President of the Society for Music Perception and Cognition and is a member of the Brain, Mind, and Consciousness program in the Canadian Institute for Advanced Research (CIFAR). His public engagement includes an 18-lecture lectures titled Music and The Brain, produced by The Great Courses for a general audience.

Human music as a biologically powerful cultural invention: a comparison to literacy

Music is ancient and universal in human cultures. Cognitive neuroscience reveals that music is also biologically powerful, meaning that regular engagement with music can shape the brain within individual lifetimes in ways that impact non-musical aspects of cognition, including speech processing and mental mechanisms relevant to literacy. I will review evidence for this view of music as a "transformative technology of the mind", and then turn to evolutionary issues. I will argue that musical behavior (like literacy) originated as a cultural invention, which (unlike literacy) triggered processes of gene-culture coevolution leading to evolutionary changes in human brain structure and function. I will end by discussing how recent cross-cultural research on music processing bears on this theoretical perspective. Such work reveals that certain aspects of music processing or behavior long thought to be universal are in fact dependent on specific cultural circumstances for their maintenance and inter-generational transmission. Music may thus be an ideal domain for studying how culture and biology interacted over evolutionary time to shape the human mind.

ORAL SESSION A

Literacy

Perception

and Cognition

A.1

Short dynamic localizer uncovers development of category-selective visual brain activation in children

Iliana Karipidis[1], Leonie Hämmerli[1], Sarah Valerie Di Pietro[1], Carmen Providoli[1], Nina Raduner[1], Silvia Brem[1]

[1] University of Zurich, Zurich, Switzerland

During development the ventral occipitotemporal cortex (vOTC) adapts to process culturally relevant visual categories (1,2). We studied how the brain develops to process dynamic stimuli of gestures, text, and faces, visual categories that are crucial for language development. German-speaking kindergarteners (n=33; prereaders) and school children (n=36; beginning/intermediate readers) completed a short dynamic fMRI localizer task (5min), including visual clips of sentences (SE), falsefonts (FF), checkerboards (CH), gestures (GE), hand movements without meaning (HM), talking faces (FA), and scrambled pictures (SP). Textselective brain responses (SE vs CH; SE vs FF) were significantly stronger for school children compared to kindergarteners in the left-lateralized reading network (p<0.001), demonstrating plastic changes that emerge through learning (3,4). Increased text-selective responses in the left vOTC were associated with higher skills in rapid automatized naming (F(2,66)=6.36, p=0.003). Gesture and face-selective regions were successfully localized in both groups. Kindergarteners showed stronger gesture-selective (GE vs SM; GE vs HM) responses in the right vOTC, and stronger face-selective (FA vs SM) responses in the left vOTC than school children (p<0.001), suggesting an increasing lateralization for faces in the right and for gestures in the left hemisphere with development (5). This work illustrates that a short naturalistic fMRI task can robustly localize category-selective visual responses in children to uncover the maturation of the brain's reading network.

Golarai, G., Ghahremani, D., Whitfield-Gabrieli, S. Reiss, A., Eberhardt, J.L., Gabrieli J. D. E., Grill-Spector, K. Differential development of high-level visual cortex correlates with category-specific recognition memory. Nat Neurosci 10, 512–522 (2007). https://doi.org/10.1038/nn1865 Dehaene-Lambertz, G., Monzalvo, K. & Dehaene, S. The emergence of the visual word form: longitudinal evolution of category-specific ventral visual areas during reading acquisition. PLoS Biol. 16, 1–34 (2018). https://doi.org/10.1371/journal.pbio.2004103 Dehaene, S., Cohen, L., Morais, J. & Kolinsky, R. Illiterate to literate: behavioural and cerebral changes induced by reading acquisition. Nat Rev Neurosci 16, 234–244 (2015). https://doi.org/10.1038/nrn3924 Karipidis, I. I., Pleisch, G., Di Pietro, S. V., Fraga-González, G., & Brem, S. Developmental trajectories of letter and speech sound integration during reading acquisition. Front psychol. 12, 750491 (2021). https://doi.org/10.3389/fpsyg.2021.750491 Behrmann, M. & Plaut, D. C. A vision of graded hemispheric specialization. Ann N Y Acad Sci 1359, 30–46 (2015). https://doi.org/10.1111/nyas.12833

A.2 Orthography influences spoken word production: Evidence from serial object naming across literacy levels

Susana Araújo[1], Falk Huettig[1,2,3,] Tânia Fernandes[1]

[1]Faculty of Psychology, Universidade de Lisboa, Lisbon, Portugal, [2]Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, [3]University of Kaiserslautern-Landau, Kaiserslautern, Germany

The question of whether orthography is automatically activated during spoken word production is still debated. Findings on orthographic effects have been inconsistent, with previous studies either overlooking this influence or disagreeing on its nature. To address this issue, we adopted a 2 x 2 design in a serial object naming task, orthogonally manipulating orthographic consistency (i.e., one vs. many phonology-orthography mappings: consistent vs. inconsistent) and phonological neighborhood of the object names (i.e., sparse vs. dense). Experiment 1 examined highly literate college students (N=46), while Experiment 2 examined neurotypical adults varying in literacy and schooling (unschooled illiterate, unschooled exilliterate, and schooled literate; N= 69). In readers, orthographic consistency facilitated rapid word retrieval, especially for words in dense neighborhoods, where lexical competition during word production is presumably higher. This finding supports the influence of orthography in spoken-word production, even when it is not task-relevant. The orthographic consistency effect was absent in illiterates. Unlike readers, illiterate participants exhibited a phonological neighborhood effect, with slower naming latencies for words from sparse rather than dense neighborhoods. We argue that these results suggest two functionally distinct influences of orthography in word production: via top-down online mechanisms (i.e., bidirectional interaction between orthography and phonology) that assist in lexical selection and through the restructuring of phonological representations during reading acquisition.

A.3 Beyond Words: The Cultural and Neural Dynamics of Visual Modifications in Logotypes

Melanie Labusch[1], Stéphanie Massol[2], Teresa Civera[1], Marta Vergara-Martínez[1], Manuel Perea[1,3]

[1]Universitat de València, Valencia, Spain, [2]Université Lumière Lyon 2, Lyon, France, [3]Universidad Nebrija, Madrid, Spain

For millennia, human civilizations have used symbols and inscriptions—now often categorized as logotypes—to signify the quality and origin of goods and businesses (e.g., in ancient Greek pottery). A defining characteristic of these brand-related words is their consistent visual presentation. Unlike common words, brand names have been shown to be particularly sensitive to modifications in surface features (e.g., typeface, letter-case; Labusch et al., 2024). In contrast, leading models of word recognition propose that, beyond the earliest stages, lexical access in common words remains largely unaffected by changes in surface elements (e.g., font, letter-case, color, size) (Dehaene et al., 2005).
To further investigate this issue, we examined the neural dynamics underlying the identification of brand names embedded in logotypes during a semantic categorization task. Electrophysiological responses (event-related potentials; ERPs) were recorded to address two key questions: (1) To what extent do small deviations in a logotype's format—through modified typeface or letter-case—impact lexical-semantic retrieval compared to intact With generous support from logotypes? (2) Does the time course of this effect differ between modifications in typeface and those in letter-case?
Results showed that modified logotypes elicited changes in early (P200), intermediate (P300), and late (N400) ERP components. Furthermore, while logotypes with modified typeface and those with modified letter-case showed similar effects overall, they diverged in the early (P200) processing stages. Thus, the perceptual characteristics of logotypes exert a lasting influence on their cognitive processing, challenging abstractionist models of lexical access and favoring more episodic models of lexical processing (Jamieson et al., 2022).

Dehaene, S., Cohen, L., Sigman, M., & Vinckier, F. (2005). The neural code for written words: a proposal. Trends in Cognitive Sciences, 9(7), 335–341. https://doi.org/10.1016/j.tics.2005.05.004 Jamieson, R. K., Johns, B. T., Vokey, J. R., & Jones, M. N. (2022). Instance theory as a domaingeneral framework for cognitive psychology. Nature Reviews Psychology, 1(3), 174–183. https://doi.org/10.1038/s44159-022-00025-3 Labusch, M., Duñabeitia, J. A., & Perea, M. (2024). Visual word identification beyond common words: The role of font and letter case in brand names. Memory and Cognition, 52, 1673–1686. https://doi.org/10.3758/s13421-024-01570-3

ORAL SESSION B

Acquiring

Reading

and Writing

B.1 — Biliteracy Training Induces Sustained Cross-Linguistic Orthography Activation in Adult Illiterates

Ramesh Kumar Mishra[1], Keerthana Kapiley[1], Thippeswamy Nijalingappa[1]

[1]University of Hyderabad, Hyderabad, India

We aimed to understand how biliteracy training modifies the lexical organization in long-term illiterate adults. Group 1 – Kannada (L1) - Telugu (L2) and Group 2 - Telugu (L1) – Kannada (L2) underwent biliteracy training. The participants performed a cross-modal visual-word recognition task. The visual world consisted (orthography) of the cross-linguistic phonological cohort of the spoken word and 3 distractors. The visual world was presented after a delay of 3000 ms of spoken-word. This was done to examine if the effect of crosslinguistic activation persisted even after a significant cross modal delay. We hypothesized that training in biliteracy improves visual-word recognition in the two Dravidian languages. We also predicted that due to immersion in L2 use, Group 1 would exhibit more robust cross-linguistic activation. Timecourse analysis was performed with a repeated measures ANOVA - proportion of fixations with object type (CLP cohort, distractors), spoken word (Kannada, Telugu), time-window (200ms–1200ms) and group (Group 1, Group 2) as factors. There was a significant four-way interaction, $F_1(1, 21) = 8.04$, $p < 0.001$, $\eta^2 = 0.28$; $F_2(1, 89) = 3.142$, $p = 0.01$, $\eta^2 = 0.009$. Both the groups of biliguals activated cross-linguistic phono-orthographical information. Our results provide further evidence that the environmental context and the propensity to use a language in their everyday life influenced automatization of L1 sound to L2 script. This strengthens the idea that the language profile and the environment cannot be ignored when theorizing about the psycholinguistic or cognitive impact of bilingualism or biliteracy (Titone & Tiv, 2023).

Titone, D. A., & Tiv, M. (2023). Rethinking multilingual experience through a Systems Framework of Bilingualism. Bilingualism: language and cognition, 26(1), 1–16.

B.2

Validation of an Italian screener for reading: the case of ROAR-word

Elisa Bassoli[1], Giuditta Smith[1], Emily Arteaga Garcia[2], Wainjing Anya Ma[2], Nicole Mastrangelo[3], Yagmur Ozturk[3], ROAR Developer Consortium[2], Jason Yeatman[2], Marilina Mastrogiuseppe[3], Sendy Caffarra[1]

[1]University of Modena and Reggio Emilia, Modena, Italy, [2]Stanford University, Stanford, USA, [3]Consiglio Nazionale delle Ricetche, Trieste, Italy

The Rapid Online Assessment of Reading (ROAR) is an online open-source platform for the screening of English reading abilities in children and adults (Yeatman et al., 2021). This work is aimed at validating the Italian adaptation of the single word reading task of the ROAR (ROARword). The Italian ROAR-word includes 184 words and 184 pseudowords matched for length, bigram frequency, orthographic neighbors and orthographic depth (Keuleers & Brysbaert, 2010). It requires a lexical decision with a two-alternative forced choice task. So far, 1,097 children from the elementary school (age range: 6-11, average: 8.87, SD: 1.14) participated in the study and the data collection is still ongoing. All participants were administered with the ROAR-word. A subset of children (n = 499) also completed a series of standardized paper-and-pencil tests targeting reading, vocabulary and non-verbal intelligence skills. Preliminary analyses showed that the Italian version of the ROAR-word has high levels of reliability (both split-half reliability and Cronbach alpha higher than 0.90). Mixed linear models with by-subject random intercepts showed that the ROAR-word reading times were strongly related to standardized measures of single word reading, and this effect held after correcting for age, vocabulary size and non-verbal intelligence (B = 1.39, SE = 0.37, t = 3.73, p<0.001). These results provide supporting evidence that the Italian version of ROAR-word is a highly reliable and valid tool for the screening of reading abilities in Italian.

Yeatman, J.D., Tang, K.A., Donnelly, P.M. et al. (2021). Rapid online assessment of reading ability. Sci Rep 11. Keuleers, E., & Brysbaert, M. (2010). Wuggy: A multilingual pseudoword generator. Behavior research methods.

B.3

On the Acquisition of Typing Skills Without Formal Training by School-Aged Children

Svetlana Pinet[1,2], Christelle Zielinski[3], F.-Xavier Alario[4], Marieke Longcamp[4]

[1]Basque Center on Cognition, Brain and Language, Donostia San Sebastián, Spain, [2]Ikerbasque, Basque Foundation for Science, Bilbao, Spain, [3]Aix Marseille Univ, CNRS, LPL, Marseille, France, [4]Aix Marseille Univ, CNRS, CRPN, Marseille, France

Typing is not formally taught at school in most European countries, despite digital activities being increasingly prevalent in children's curricular requirements. Typing skills presumably emerge from informal practice, modulated by the availability and use of tools at school or at home. The cognitive processes leading to typing skill acquisition in children have not been described in any detail. To characterize the acquisition of typing skills across school years, we collected data from children schooled in grades 4 to 9 using a questionnaire on typing practice and various chronometric tasks. In our cross-sectional sample of 131 children, the time spent typing or handwriting was stable over grades, but the self-reported number of fingers used for typing increased with grade. The chronometric tasks required typing single letters (alphabet), single words (word copying and picture naming), and sentences (copying and With generous support from composition). Across tasks, typing speed increased and keypress duration variability decreased with grade. Typing performance for single keystrokes and for words was modulated by a combination of psycholinguistic factors and physical constraints, whose influence decreased with grade, pointing to the ongoing –yet incomplete– organization of the typing process. Text composition performance was highly correlated with performance in text copying. These findings are interpreted with reference to previous results in adults and models of typing expertise. Quantifying the evolution of typing performance opens avenues to fully understand the cognitive processes underlying the acquisition of typing skills and the generation of typing behavior.

ORAL SESSION C

Risks and

Challenges of

Technology

C.1

Can large language models counter the recent decline in literacy levels? An important role for cognitive science

Falk Huettig[1], Morten H. Christiansen[2]

[1]MPI for Psycholinguistics, Nijmegen, Netherlands, [2]Cornell University, Ithaca, USA

Literacy is in decline in many parts of the world, accompanied by drops in associated cognitive skills (including IQ) and an increasing susceptibility to fake news. It is possible that the recent explosive growth and widespread deployment of Large Language Models (LLMs) might exacerbate this trend, but there is also a chance that LLMs can help turn things around. We argue that cognitive science is ideally suited to help steer future literacy development in the right direction by challenging and informing current educational practices and policy. Cognitive scientists have the right interdisciplinary skills to study, analyze, evaluate, and change LLMs to facilitate their critical use, to encourage turn-taking that promotes rather than hinders literacy, to support literacy acquisition in diverse and equitable ways, and to scaffold potential future changes in what it means to be literate. We urge cognitive scientists to take up this mantle—the future impact of LLMs on human literacy skills is too important to be left to the large, predominately US-based tech companies.

Huettig, F., & Christiansen, M. H. (2024). Can large language models counter the recent decline in literacy levels? An important role for cognitive science. Cognitive Science, 48(8): e13487.

C.2 The Cognitive Traps of Fake News: Sensationalism, Anchoring, and Cultural Biases

Maria Fernández-López[1,2], Melanie Labusch[2], José Antonio Hinojosa[3], Manuel Perea[2,4]

[1]Department of Basic Psychology (University of València), València, Spain, [2]ERI-Lectura (University of València), València, Spain, [3]Instituto Pluridisciplinar (Complutense University of Madrid), Madrid, Spain, [4]Department of Methodology of Behavioral Sciences (University of Valencia), Valencia, Spain

Misinformation spreads rapidly in the digital era, influencing public opinion and reinforcing ideological biases (Waldrop, 2017). This study examines the role of sensationalism, anchoring, and cultural stereotypes in shaping the perceived credibility of fake news and its likelihood of being shared.

Through two experiments, we tested how emotional content (e.g., pandemics and gender violence) interacts with these biases. Overall, we found that emotionally charged content was With generous support from perceived as more credible and was more likely to be shared (Fernández-López & Perea, 2020; Pennycook & Rand, 2019). In Experiment 1, sensationalism was manipulated by exaggerating numerical values in fake news headlines. Results showed that credibility and sharing propensity increased with emotion: highly sensationalized news that evoked stronger emotions was rated as more credible and shareable. In Experiment 2, we examined anchoring and in-group/out-group effects using fake news about gender-based violence. Lower numerical anchors increased credibility and sharing propensity, demonstrating that initial numerical cues influence trust in misinformation. Additionally, participants rated out-group news as more credible than in-group news. This effect appears to be driven by cultural stereotypes, as participants likely associated gender violence with regions perceived as less egalitarian, even in the absence of supporting information (Lewandowsky et al., 2012). These findings highlight the interaction between cognitive biases, emotional engagement, and cultural narratives in processing fake news. Misinformation is designed to exploit cognitive shortcuts and emotional responses to enhance its credibility and spread. In sum, this study emphasizes the need for culturally informed media literacy programs and interventions.

Fernández-López, M., & Perea, M. (2020). Language does not modulate fake news credibility, but emotion does. Psicológica, 41, 84-102. doi: 10.2478/psicolj-2020-0005 Lewandowsky, S., Ecker, U. K., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. Psychological science in the public interest, 13, 106-131. doi: 10.1177/1529100612451018 Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. Cognition, 188, 39- 50. doi: 10.1016/j.cognition.2018.06.011 Waldrop, M. M. (2017). The genuine problem of fake news. Proceedings of the National Academy of Sciences, 114, 12631-12634. doi: 10.1073/pnas.1719005114

ORAL SESSION D

Attention

D.1

Hearing Once, Reading Twice: The Role of Dual Subtitles in Eye Movements in Bilinguals

Inka Romero-Ortells[1], Manuel Perea[2], Jon Andoni Duñabeitia[1]

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In today's interconnected world, videos serve as effective educational tools for language learning (Mayer, 2024). Subtitles can enhance comprehension, particularly for second language (L2) learners (Pannatier & Bétrancourt, 2024). While research has explored subtitle impact, little is known about how bilingual subtitles (L1 and L2) influence gaze behavior and understanding based on audio language (Liao et al., 2020; Wang & Pellicer-Sánchez, 2023). This study examines how intermediate-to-advanced L2 speakers process dual subtitles versus no subtitles, with a focus on visual attention and comprehension.

Using eye-tracking, Spanish-speaking participants with intermediate-to-advanced English proficiency viewed videos with L2 (English) and L1 (Spanish) audio in a within-participants design. Each participant watched six videos under varying conditions: no subtitles, bilingual (L1 on top, L2 on bottom), or reversed. Gaze behavior was tracked based on dwell time on the speaker's eyes, mouth, and subtitles, while comprehension was assessed through true/false statements.

Results indicated high comprehension in all conditions. Participants focused more on the speaker's eyes during L1 audio but allocated more attention to subtitles during L2 audio, With generous support from especially the upper line. In L1 audio, when L2 subtitles appeared first, participants glanced at the speaker's eyes before reading the L1 subtitles, and the reverse occurred for L1 subtitles first.

These findings emphasize the cognitive demands of processing multiple languages and the critical role of subtitle positioning in visual attention. This study provides valuable insights for improving subtitle utilization in language education and audiovisual design.

Liao, S., Kruger, J. L., & Doherty, S. (2020). The impact of monolingual and bilingual subtitles on visual attention, cognitive load, and comprehension. Journal of Specialised Translation, 33, 70-98. https://www.jostrans.org/issue33/art_liao.pdf Mayer, R. E. (2024). The Past, Present, and Future of the Cognitive Theory of Multimedia Learning. Educational Psychology Review, 36. https://doi.org/10.1007/s10648-023-09842-1 Pannatier, M., & Bétrancourt, M. (2024). Learning from academic video with subtitles: When foreign language proficiency matters. Learning and Instruction, 90, 101863. https://doi.org/10.1016/j.learninstruc.2023.101863 Wang, A., & Pellicer-Sánchez, A. (2023). Examining the effectiveness of bilingual subtitles for comprehension: An eye-tracking study. Studies in Second Language Acquisition, 45, 882–905. https://doi.org/10.1017/S0272263122000493

D.2

Investigating Cultural Influences on Automatic Processing of Task-Irrelevant Global and Local Visual Information

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Cultural background shapes cognitive processing, influencing how individuals prioritize global (holistic) versus local (detailed) visual information. Research suggests that individuals from collectivistic cultures, such as East Asian societies, tend to process information more globally, while those from individualistic cultures, such as Western societies, exhibit a stronger focus on local details. However, most studies rely on explicit tasks requiring directed attention, leaving open the question of how these cultural biases manifest in automatic, task-irrelevant visual processing.

In this study, we investigated whether cultural differences influence the automatic detection of global and local visual changes. Participants from different cultural backgrounds (i.e. Japan and Germany) viewed compounded geometrical figures while engaged in a separate task, ensuring that changes in global or local features were task-irrelevant. Using an oddball paradigm combined with equiprobable sequences, we recorded the visual mismatch negativity (vMMN) to assess automatic processing.

Our results indicate that both global and local changes elicited vMMN responses, with cultural background not modulating the mean amplitude, peak amplitude, or peak onset of these effects. These findings suggest that global/local change detection is independent of cultural differences.

Navon, D. (1977). Forest before trees: The precedence of global features in visual perception. Cognitive psychology, 9(3), 353-383 Kimura, M. (2012). Visual mismatch negativity and unintentional temporal-context-based prediction in vision. International Journal of Psychophysiology, 83(2), 144-155. McKone, E., Davies, A. A., Fernando, D., Aalders, R., Leung, H., Wickramariyaratne, T., & Platow, M. J. (2010). Asia has the global advantage: Race and visual attention. Vision research, 50(16), 1540-1549

POSTER SESSION

I.1

Uncertainty Resolution in Cultural Objects: The Case of Letter Transposition

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Recognizing words efficiently is central to reading and literacy in all writing systems (Grainger, 2024), yet this process depends on how the brain encodes letter (or character) position over time (Gomez et al., 2008). A key phenomenon illustrating this is the transposed-letter effect, where pseudowords created from letter transpositions (e.g., CHOLOCATE for CHOCOLATE) are more difficult to classify as pseudowords than those created by replacing two letters (e.g., CHOTONATE) (e.g., Romero-Ortells et al., 2024). Two main theoretical accounts explain this (see Snell, 2024, for review): positional uncertainty models, which suggest that letter position encoding sharpens with time, and open bigram models, which propose that intermediate letter-pair representations persist despite decay. We conducted two delayed lexical decision experiments to examine how time influences this effect. In Experiment 1, a robust transposed-letter effect (9.6%) appeared at 750 ms but diminished to 2.9% at 1,500 ms. Experiment 2 replicated this pattern with contrast manipulations on critical letters, showing a slightly smaller residual effect (1.9%) at 1,500 ms. These findings suggest that the brain refines letter order information over time but retains traces of orthographic overlap. Crucially, this highlights the need for sufficient processing time; this should be considered especially when reading in unfamiliar orthographies or second languages, where letter position flexibility may play an even greater role.

Our results support hybrid models that integrate bottom-up refinements in letter order encoding with top-down influences from stored orthographic knowledge, reinforcing the time-dependent nature of language comprehension.

Gomez, P., Ratcliff, R., & Perea, M. (2008). The overlap model: A model of letter position coding. Psychological Review, 115, 577–600. https://doi.org/10.1037/a0012667 Grainger, J. (2024). Letters, words, sentences, and reading. Journal of Cognition, 7, 66. http://dx.doi.org/10.5334/joc.396 Romero-Ortells, I., Baciero, A., Marcet, A., Perea, M., & Gómez, P. (2024). A stringent test of visuospatial position uncertainty accounts for letter position coding. Language, Cognition and Neuroscience, 39, 1278–1290. https://doi.org/10.1080/23273798.2024.23840453 Snell, J. (2024). PONG: A computational model of visual word recognition through bihemispheric activation. Psychological Review. https://doi.org/10.1037/rev0000461

I.2

Limitations on primate vocal sequencing

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Novel calls are exceptional in primate vocal production behavior (Fischer & Hammerschmidt, 2020), and seemingly highly limited to enculturated individuals (Tennie & Motes-Rodrigo, 2021). However, even the enculturated apes that have been reported to produce sequences of novel sounds do not pass these on to other individuals. This prompts the research question, "why don't they?". Here, we provide a synthesis of available data bearing on this issue. Namely, there is now widespread comparative evidence that most, if not all non-human animals, including great apes, do not readily represent – and neither do they routinely copy – arbitrary sequential stimuli. Without such a capacity, any shared system of communication composed of sequential "units" (e.g., phonemes, signs) would effectively be rendered impossible (Jon-And et al., 2023). We discuss our findings in the context of recent claims of apparently combinatorial call behavior in primates (e.g., Badihi et al., 2023).

Badihi, G., Graham, K. E., Fallon, B., Safryghin, A., Soldati, A., Zuberbühler, K., & Hobaiter, C. (2023). Dialects in leaf-clipping and other leaf-modifying gestures between neighbouring communities of East African chimpanzees. Scientific Reports, 13(1), 147 **Fischer, J., & Hammerschmidt, K. (2020).** Towards a new taxonomy of primate vocal production learning. Philosophical Transactions of the Royal Society B, 375(1789), 20190045 **Jon-And, A., Jonsson, M., Lind, J., Ghirlanda, S., & Enquist, M. (2023).** Sequence representation as an early step in the evolution of language. PLOS Computational Biology, 19(12), e1011702. **Motes-Rodrigo, A., & Tennie, C. (2021).** The method of local restriction: In search of potential great ape culture-dependent forms. Biological Reviews, 96(4), 1441-1461.

I.3

Focus or Distraction? The Role of Preferred and Non-Preferred Music in a Virtual Basketball Decision Task

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Music has been shown to influence cognitive and motor performance across various domains, including sports and decision-making tasks. However, these effects are often contradictory and depend on task-specific demands. This study investigates how preferred and nonpreferred music affect performance in a speeded choice task in basketball involving head fakes. A head fake is a deceptive maneuver in which a player looks in one direction while passing the ball in another, typically leading to slower and less accurate responses compared to normal passes. Participants completed the task under three counterbalanced music conditions: referred, non-preferred, and no music. To control for linguistic and familiarity effects, playlists were created from five self-ranked music genres (Pop, Rap/Hip Hop, Classical, Indie, Country, and Rock & Roll) and included tracks from diverse cultural backgrounds. Each session comprised seven experimental blocks of 40 trials, with 67% of trials featuring head fakes (33% congruent, 67% incongruent). The no-music condition served as the baseline. We hypothesize that preferred music enhances performance by reducing cognitive strain, boosting motivation, and improving coordination relative to the baseline. In contrast, nonpreferred music may impair performance due to its distracting effects. This research contributes to a deeper understanding of how music influences cognitive-motor integration and decision-making in dynamic sports environments, offering insights into optimizing performance through personalized auditory interventions.

Cassidy, G., & MacDonald, R. A. R. (2007). The effect of background music and background noise on the task performance of introverts and extraverts. Psychology of Music, 35(3), 517–537. https://doi.org/10.1177/0305735607076444 **Karageorghis, C. I., & Priest, D. L. (2012).** Music in the exercise domain: A review and synthesis (Part II). International Review of Sport and Exercise Psychology, 5(1), 67–84. https://doi.org/10.1080/1750984X.2011.631027 **Lesiuk, T. (2005).** The effect of music preference on cognitive task performance. Journal of Music Therapy, 42(2), 105–118. https://doi.org/10.1093/jmt/42.2.105 **Mann, D. T. Y., Williams, A. M., Ward, P., & Janelle, C. M. (2007).** Perceptual-cognitive expertise in sport: A meta-analysis. Journal of Sport and Exercise Psychology, 29(4), 457–478. https://doi.org/10.1123/jsep.29.4.457

I.4 The cognitive profile of adults with low literacy skills in alphabetic orthographies: A systematic review

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Even in modern societies, not everyone acquires sufficient literacy skills during school education. This systematic review synthesizes research on adults with low literacy skills (ALLS) With generous support from in alphabetic writing systems, integrating findings from behavioral and neurobiological studies. These findings were compared with those on developmental dyslexia, as this developmental disorder is a possible explanation for low literacy skills in adulthood.

A comprehensive search identified 8,922 records, of which 27 studies on the cognitive profile of ALLS fulfilled the predefined criteria for reading level, age, and education. Results showed that ALLS performed worse than literate adults in various tasks at the skill and information processing levels, and exhibited structural and functional differences at the neurobiological level. At the skill level, ALLS' literacy skills relied less on phonological and more on orthographic strategies compared to children. At the information processing level, ALLS showed worse performance compared to literate adults in almost all cognitive functions, i.e. phonological awareness, RAN, phonological working memory and phoneme perception, but not in orthographic knowledge. A narrative comparison of the results with meta-analyses on developmental dyslexia revealed a large but incomplete overlap in their cognitive profiles. However, this does not imply shared causes for the low literacy skills in both groups. Difficulties at the information processing level and differences at the neurobiological level in both groups may be causes for low literacy skills, their consequence, or both, combining and/or influencing each other reciprocally in different degrees across the two groups.

Vagvölgyi, R., Bergström, K., Bulajić, A., Rüsseler, J., Fernandes, T., Grosche, M., Klatte, M., Huettig, F., & Lachmann, T. (2024). The cognitive profile of adults with low literacy skills in alphabetic orthographies: A systematic review and comparison with developmental dyslexia. Educational Research Review, 100659. doi.org/10.1016/j.edurev.2024.100659

I.5 Accounting for language background in early literacy assessments

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This study examined whether standardized pre-literacy assessments should account for language background differences, particularly for children learning German as a second language (L2) compared to native speakers (L1). Early language and phonological skills are crucial for literacy development, yet standardized tests may disadvantage L2 learners due to linguistic biases1,2.

722 kindergarten children were assessed using five tasks, two of which used pseudowords instead of German words, minimizing the impact of individual differences in language background: a phoneme identification task (phonemic awareness) and a syllable span task (phonological working memory). The German-based tests included a rhyming task (phonological awareness), an adapted version of the PPVT3 assessing their vocabulary, and a rapid automatized naming (RAN) task (information processing).

L2 children scored significantly lower than L1 children on the German-based tasks – rhyming task (W = 39705, p = .001), PPVT (W = 57182, p < .001), and RAN (W = 47263, p = .001) – but showed no significant differences on the pseudoword tasks – phoneme identification (W = 29397, p = .6) and syllable span (W = 36031, p = .995). Comparison of universal and L2-specific With generous support from norm tables indicated significantly higher L2 scores on the rhyming (V = 0, p < .001) and phoneme identification (V = 152, p < .001) tasks, but not for syllable span (V = 15084, p = 1).

These findings suggest that separate norms for language-based tasks may be more representative for L2 children. Furthermore, language-neutral tasks could provide a fairer assessment of literacy precursor skills for both L1 and L2 learners.

Chilla, S. (2020). Mehrsprachige Entwicklung. In S. Sachse, A.-K. Bockmann, & A. Buschmann (Eds.), Sprachentwicklung: Entwicklung – Diagnostik – Förderung im Kleinkind- und Vorschulalter (pp. 109–130). Springer. https://doi.org/10.1007/978-3-662-60498-4_5 Schulz, P., Grimm, A., Schwarze, R., & Wojtecka, M. (2017). Spracherwerb bei Kindern mit Deutsch als Zweitsprache: Chancen und Herausforderungen. Entwicklungsverläufe Verstehen, 190–207. Dunn, L. M., Dunn, D. M., Lenhard, A., Lenhard, W., Segerer, R., & Suggate, S. (2015). PPVT 4: Peabody picture vocabulary test—4. Ausgabe. Pearson Assessment & Information GmbH.

I.6

AI-Based Online Mandarin Tone Perception Training: Examining Training Effects and AI Voice Gender

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Non-native speakers of tonal language often struggling with perceiving and understanding tone patterns (Wang et al., 1999; Antoniou and Chin, 2018). With the growing role of artificial intelligence (AI) in language learning (Rukiati et al., 2023), this study investigates the effectiveness of three-week online training using AI-generated Mandarin tone stimuli to enhance tone perception in non-native adult learners. Nineteen German native speakers (14 females, 5 males) with no prior Mandarin experience participated. Pre- and post-training assessments measured their tone perception accuracy to evaluate the effectiveness and generalization of AI-generated stimuli, created using NaturalReader (www.natural-readers.com). Training and tone discrimination tasks followed an "odd-one-out" paradigm (Frearson and Eysenck, 1986; Schwab and Dellwo, 2016; Wang et al., 2021) and incorporated speakers, syllable, syllable count, and odd-tone position variability. Ten participants completed nine training sessions with AI-generated male and female voices, accompanied by visualized tone pattern feedback, to examine potential learning differences based on voice gender (Nomura, 2017; Zellou et al., 2021). The online training sections lasted approximately 40 minutes each. Linear Mixed Models in R (R Core Team, 2023) revealed a significant post-test improvement in learners' Mandarin tone discrimination performance after the three-week training, suggesting that AI-generated stimuli can effectively improve tone perception. Moreover, participants demonstrated significantly higher accuracy with female voices, highlighting the need for further investigation into the acoustic properties of AI-generated speech. These findings underscore the potential of AI-generated speech in auditory training and its implications for second language learning and clinical applications.

Nomura, T. (2017). Robots and gender. Gender and the Genome, 1(1), 18-26. Rukiati, E., Wicaksono, J. A., Taufan, G. T., & Suharsono, D. D. (2023). AI on learning English: Application, benefit, and threat. Journal of Language, Communication, and Tourism, 1(2), 32-40. Schwab, S., & Dellwo, V. (2016, June). The use of the Odd-One-Out task in the study of the perception of lexical stress in Spanish by German-speaking listeners?. ISCA. Wang, Y., Spence, M. M., Jongman, A., & Sereno, J. A. (1999). Training American listeners to perceive Mandarin tones. The Journal of the Acoustical Society of America, 106 (6), 3649-3658. Zellou, G., Cohn, M., & Ferenc Segedin, B. (2021). Age-and gender-related differences in speech alignment toward humans and voice-AI. Frontiers in Communication, 5, 600361.

I.7

Metonymy and conceptual blending in "Not-my-president's day" protest signs

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In February 2017 and 2025, people across the USA protested what they considered to be an unfair election. The historical moment differed (e.g. popular vote results and contemporaneous wars), but the initiator of the protests, Trump's presidency, remained the same. I consider how protest signs at each event evoke salient issues of their shared and distinct cultural contexts through frame metonymy and conceptual blending (Dancygier & Sweetser 2014). I give special focus to multimodal representations, considering how images and written language compose to create a single effective message (Dancygier 2023). For example, American freedom is evoked metonymically through images of the Statue of Liberty in both protests. However, the accompanying words and depicted interaction differ; a 2017 sign depicts Trump molesting the statue beside the words "WE DESERVE BETTER", whereas a 2025 sign depicts Trump beating the statue beneath the words "WAKE UP AMERICA". Both signs represent the potential repercussions of the presidency on American democracy, but also unique aspects of each cultural moment (alleged sexual misconduct versus an attack on democracy by the ultra-wealthy).

All data comes from photographs in online news articles reporting specifically on "Not-my-president's day" protests. This data set can be considered a case of triple-curation, with the historical moment represented by protestors, then filtered by the press, and again by the researcher for analysis. I discuss the ways in which each step contributes to "collective memory" (Ahaotu & Oshamo 2023) and cultural meaning-making, as particular images become more salient metonymic representations than others.

Ahaotu, J. O., & Oshamo, O. A. (2023). A multimodal discourse analysis of selected social media posts on the #BlackLivesMatter protest. Journal of Pragmatics and Discourse Analysis, 2(1), 25-35. Dancygier, B. (2023). Multimodal media: Framing climate change. Discourse Studies, 25(2), 220-236. Dancygier, B., & Sweetser, E. (2014). Figurative language. Cambridge University Press.

Information

Zurich Center for Linguistics and the Neurolinguistics group

The Linguistics Center Zurich (LiZZ) and the Neurolinguistics lab welcome the Society for the Cognitive Science of Culture.

The LiZZ supports the development of the linguistically oriented institutes and initiatives of the University of Zurich (UZH). Our central goal is to strengthen linguistics in Zurich and to generally foster the public perception of the impact and value of language science.
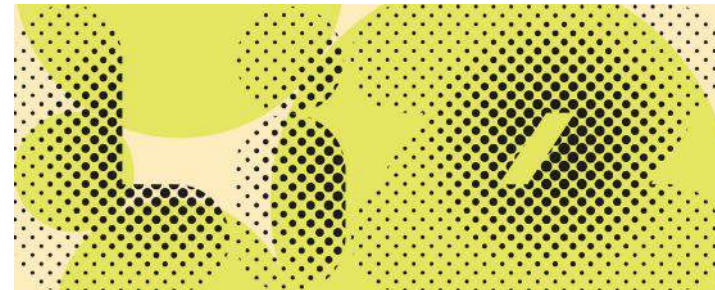
To achieve this goal LiZZ members

> promote scientific exchange and joint research projects;
> pool knowledge and technical resources;
> strive to build common training programs;
> and they inform the general public about linguistics.

The Neurolinguistics group at the University of Zurich, and the Dynamics of Brain and Language Lab at the University of Geneva, are headed by Prof. Alexis Hervais-Adelman. The primary research focus is on the neural basis of language using a variety of methodological approaches to address the broad question of "how is language implemented in the brain?". As a part of the NCCR Evolving Language, an evolutionary perspective informs the way we consider the human language system as an exceptional configuration of cognitive abilities that intersect with those of extant non-human species and our common ancestors. We employ MRI, M/EEG, non-invasive electrical brain stimulation, and neurofeedback to look at how the brain processes speech and text. We examine the mechanisms that allow us to comprehend speech in noise or other acoustically challenging speech. One of the key questions we are interested in is the role of the motor system in speech perception and how we might be able to leverage this system to improve speech comprehension for individuals with hearing impairments. We explore pre-natal language development and how our experiences in the womb affect our speech system, a vital piece of the puzzle in how humans evolved spoken language.

Universität Zürich

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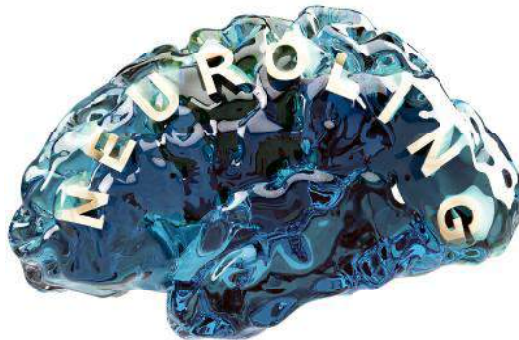
With more than 27,000 students, the University of Zurich is Switzerland's largest university. Founded in the year 1833, UZH was Europe's first university to be established by a democratic political system. Made up of seven faculties covering some 100 different subject areas, the University offers a wide variety of Bachelor's, Master's and PhD programs.

As a member of the "League of European Research Universities" (LERU), the "Universitas 21" (U21) network and "una europa", the University of Zurich belongs to Europe's most prestigious research institutions. Being Switzerland's largest, most diverse university, UZH attracts the world's best researchers and most promising students. Numerous distinctions highlight the University's international renown in the fields of medicine, immunology, genetics, neuroscience and structural biology as well as in economics. To date, the Nobel Prize has been conferred on twelve UZH scholars.

The academic excellence of the University of Zurich brings benefits to both the public and the private sectors not only in the Canton of Zurich, but throughout Switzerland. Knowledge is shared in a variety of ways: in addition to granting the general public access to its museums, collections and many of its libraries, the University makes findings from cutting-edge research available to the public in accessible and engaging lecture series and panel discussions. Moreover, the high quality of the University's medical institutions translates into first-rate health care for the population of Switzerland.

https://www.uzh.ch/en/explore/portrait/profile.html

A brief history of Zurich

Already 5000 years ago the first settlers made the shores of Lake Zurich, where the waters exit, their place of home. Traces of these settlements can be detected from Baus-chänzli to Wollishofen. 57/58 BC the Romans came to Zurich and founded the Turicum customs station, where travelers and goods were dispatched before crossing into the province of Raetia.

According to legend, in the 8th century, Charlemagne re-discovered the tombs of the patron saints of Zurich, Felix and Regula. While out hunting, he was pursuing a stag from Aachen to Zurich when his horse suddenly fell to its knees to pay homage to the saints' tombs. Charlemagne subsequently had the bones exhumed and he founded the church and the provostry of the Grossmünster in their honor. In 853 AD, Charlemagne's grandson, Louis the German, built a "Pfalz", or palace, on the Lindenhof and gave an existing women's convent with its own jurisdic-tion as a gift to his eldest daughter, Hildegard. Thus, the Fraumünster abbey was founded.

Zurich prospered in the 11th and 12th centuries thanks to the Fraumünster, which as a convent for aristocratic wom-en attracted princesses from all over Europe. Under the Frankish kings, Zurich also grew to become the most important market town, with trade connections reaching from northern Italy to Hol-land. Thanks to the relics of Zurich's patron saints, Felix and Regula, the city was also an important pilgrimage site. In 1218, Zurich gained its freedom from the Empire after the extinction of the main line of the Zähringer fam-ily, the imperial bailiffs responsible for Zurich. Zurich was placed under the direct control of the emperor, but was allowed to govern itself. In 1336, Rudolf Brun and the tradesmen of the city stormed the Town Hall. From this time on, the council no longer consisted only of aristocrats; half of it was made up of tradesmen, who or-ganized themselves into guilds.

In 1351, 60 years after the founding of the Helvetic Confederation, Zürich was the sixth canton to join. In the 16th century, as moral decline reached its peak and the council could not bring the population to its senses, Ulrich Zwingli became the priest of Grossmünster Church. He started the Reformation, which spread from Zürich to all of German-speaking Switzerland. In the time following the Reformation, many religious refugees came to Zürich. Thanks to them, Zürich developed into a center of the textile industry. In 1648, the Peace Treaty of Westphalia granted the Confederation independence from the Holy Roman Empire of the German Nation.

During the age of industrialization in the late 18th and 19th centuries, Zürich changed from a city of trades-men to a capital of machine-driven industry. After World War II, 70% of the workforce was already active in the service sector. Restaurants, bars, galleries and shops took up residence in former factory halls. Now, at the beginning of the 21st century, the for-mer industrial districts have become the trendy districts in Zürich. In past years, Zürich has repeatedly been chosen as the city with the highest quality of life in the world.
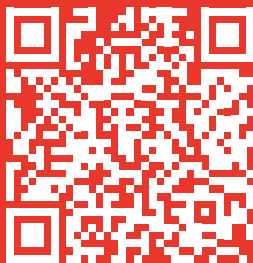
The Society for the Cognitive Science of Culture (SCSC)

(modified text from the website)

Traditional cognitive science has largely ignored cultural influences on cognition and has also predominantly concentrated on a group of people who are not particularly representative of the world's population as a whole. Yet, today, we have an increasing amount of empirical and theoretical work that emphasizes cultural and social influences on mind and brain, including through bodily modulations. An increasing number of researchers believe that cognitive science cannot ignore culture as a crucial factor impacting mental processes and brain functioning. A focus on individuals and their experiences in cultural environments has become more and more important. This approach has emerged in all fields that have been associated with cognitive science, from neuroscience to philosophy of mind.

It is indispensable to look at different cultures and diverse participant populations to understand what kind of findings from the mostly Western research body generalize (or not) to diverse populations and across cultures. Important questions are, for example, how cultural inventions like written words, numbers, music, and belief systems shape the mind and brain from the beginning of our lives and how exposure to cultural objects can shape the mind and brain during the lifespan. We welcome contributions from all these fields of research. The society aims to encourage discussion of the latest developments in the cognitive science of culture, to provide a platform for exchanging ideas, and a network to foster collaborations among interested researchers. We particularly encourage research involving non-WEIRD participant populations. We want to understand the human mind (and not just the minds of Western undergraduates) and how cultural objects (e.g., literacy; religion), including those within culture at the macro-level, can shape the human brain and mind. We especially encourage participation by researchers from all parts of the world. Another important aim of the society is public outreach, for instance, to promote the application of research findings for the greater good of humanity.

Visit our website to join the society.

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The journal covers major topics related to cognition, culture, and the brain as well as the interface of those broad subjects, publishing articles that probe cognitive processes such as attention, perception, language, memory, and decision making as well as current trends in anthropology, education, and artificial intelligence. Emphasis is placed on the cognitive prerequisites and consequences of bi-, tri- and multilingualism in different cultures; literacy; poverty; socioeconomic status; and culture on cognition. The coverage encompasses all major research areas of cognitive science, including Psychology, Cognitive neuroscience, Linguistics, Computational modeling, Anthropology, Education, Evolutionary/genetic approaches, Philosophy of mind, Artificial intelligence and more. International in scope, the journal presents research articles that seek rigorous answers to its core themes and thought-provoking theoretical articles that challenge prevailing views and explore new directions.
The journal is associated with the Society for the Cognitive Science of Culture.

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