

# **Thesis Supervisors: Linguistics**

## **(Cognitive Science and Cognitive Semiotics below)**

**Note: You are free to choose supervisors across the three disciplines. If you desire a supervisor across disciplines please contact the desired supervisor in advance.**

**All supervisors external to LICS must be approved by the Head of Department,  
Joshua Charles Skewes**

**NB: Faculty members on this list are available for thesis supervision, and most are also available for internal supervision of Project Placement projects.**



**Alexandra Kratschmer**

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Research areas/Areas of supervision	Examples of theses
<ul style="list-style-type: none"><li>• Linguistic behavior on social media</li><li>• Translation theory and practice (also as product thesis)</li><li>• Translation critique</li><li>• Text linguistics, discourse analysis, ethnographic linguistics</li><li>• Foreign language acquisition</li><li>• Language and evolution</li><li>• Psycholinguistics</li><li>• Romance and Germanic languages (also in a comparative perspective)</li><li>• Grammar studies (e.g. standard vs. non-standard varieties; historical change)</li></ul>	<ul style="list-style-type: none"><li>• Vaccination discourse on Israeli Facebook</li><li>• Vaccination discourse on Israeli Facebook</li><li>• The discourse of depression on Greek Redit</li><li>• Hadetale i danske online-medier</li><li>• Anti-vaccinationsdiskursen på danske Twitter</li><li>• Høflighed på dansk - spørgeskemaundersøgelse</li><li>• Creative writing in second language learning (product thesis: textbook and teacher's manual)</li><li>• Mnemonic-scaffolding and circular syllabus design and their effect in second language vocabulary learning (Cognitive Semiotics)</li><li>• Citatkonditionalis i moderne italiensk talesprog</li><li>• Oversættelse og kultur – en analyse af kulturbundne elementers gengivelser i en dansk oversættelse af “Il giorno della civetta” af Leonardo Sciascia</li><li>• Leksikaliseringmønstre i oversættelsen teori og praksis. Komparativ undersøgelse af leksikaliseringmønstre i danske og italienske bevægelsesverber og substantiver</li><li>• Oversættelse i teori og praksis med udgangspunkt i egen oversættelse af Enrico Deaglios bog “La banalità bene” (produktspeciale)</li><li>• Dialektiske interferenser i skriftligt italiensk hos padovanske børn. En empirisk undersøgelse</li></ul>



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## Research areas/Areas of supervision

- Phonetics and Phonology
- Bilingualism
- Second-language acquisition
- First-language acquisition
- Language and pre-literacy intervention
- Language and pre-literacy assessment
- Language acquisition in hearing-impaired

## Examples of theses

- Perception ved indlæring af nye ord hos danske hørehæmmede førskolebørn: Diskrimination af initiale konsonanter
- Forebyggelse af læsevanskeligheder i børnehavealderen - Evidensbaseret prædiktation og intervention
- En undersøgelse af om Reciprocal Teaching kan forbedre sprogforståelsen i læsning hos tosprågede elever i de yngre klasser i folkeskolen
- Otitis media og sprogudvikling – En kvantitativ undersøgelse af sprogudviklingen hos danske børn i treårsalderen med historik for otitis media
- The Phonological Development in Danish-speaking Children
- Voksne hørehæmmedes identifikation af danske konsonanter i stilhed og støj
- Er piger bare dygtigere? En undersøgelse af kønsforskelle i sproglige kompetencer hos treårige baseret på national sprogvurdering



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## Research areas/Areas of supervision

### Language processing:

- Phonetics/phonology
- Foreign language learning
- Arabic phonology/morphosyntax
- Danish phonology/morphosyntax

### Parkinson's disease:

- Deep brain stimulation (DBS)
- Basal ganglia
- Response inhibition
- Verbal fluency

### MEG/EEG:

- Auditory processing
- M/EEG methods generally speaking
- Experimental design for neuroimaging

### *More tangentially related topics:*

- Musical processing in cochlear implantees
- Musical feature processing in the brain
- Multimodal (e.g. audio-visual) sensory processing

## Examples of theses

- Structural priming from arithmetic to language
- Investigating the application of 3D CNNs to whole-brain fNIRS data and transfer learning
- Inconsistencies detected in the processing of human emotional and non-emotional auditory and visual stimuli; an fNIRS study
- Exploring fNIRS and verbal reporting as complementary methods for neuroanthropology research
- Selective action verb impairment in Parkinson's disease patients when reading naturalistic stories
- Impaired action language processing in Parkinson's disease when reading naturalistic texts
- Developing Eye-Cue: Implementing augmented reality cues to relieve freezing of gait in Parkinson's disease - A case study



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Research areas/Areas of supervision	Examples of theses
<ul style="list-style-type: none"><li>• Early language development Early childhood interventions</li><li>• Quality of the learning environment (daycare/home)</li><li>• Early assessment (language, pre-literacy, math, socioemotional skills)</li><li>• Professional development (teachers)</li></ul>	<ul style="list-style-type: none"><li>• Kvaliteten af børns ordforråd som indikator for senere skoleudvikling</li><li>• Fra afprøvning til test. En undersøgelse af otteårige med og uden SLI's færdigheder i præteritumbøjning omsat til praksis</li><li>• Børns tilegnelse af tidlig gestik</li><li>• Ensartetheden i den danske logopædiske testning med Reynell og Sproglig test 1</li></ul>



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## Research areas/Areas of supervision

### Clinical Linguistics:

- Dyslexia
- Reading Comprehension
- Autism Spectrum Disorder
- Working Memory and Language Disorders

### Child language development:

- Phonological development
- Child-directed speech
- Language development in school-age children

### Speech Acoustics:

- Voice quality
- Speech processing
- Modelling prosody in clinical groups

### Methods:

- Quantitative Analysis
- Online Experiments
- Acoustic Analysis
- Meta-Analysis
- Network Analysis
- Experimental Methods

## Examples of theses

- Kan skærmlesning optimeres? En undersøgelse af læseoptimerende tiltag og bevidsthedsskabende læsestrategier
- Arbejdshukommelsen og skriftsprogs vanskeligheder - Et foreløbigt studie af arbejdshukommelsen hos personer med dyslexi og dyskalkuli
- "Jeg snakker hele tiden, far - jeg holder slet ikke pause". En interventionsundersøgelse af et video-SMS-forløb til forældre med børn i vuggestuealderen.
- Vanskeligheder med lokal kohæsion hos studerende med skriftsprogs vanskeligheder
- RAIIO: Redskab til automatisk individuel opsætning af et ordforslagsprogram
- Los, las... ¿y les? Assessing the cognitive effort of gender-neutral language in Spanish role names
- Investigating the role of mouthing in Greek Sign Language, and its relationship with lexical access for congenitally deaf and bimodal adults: An online priming study
- Syntaktisk kompleksitet, arbejdshukommelse og dyslexi i videregående uddannelse
- Authorship Analysis: Document Clustering for Digital Text Forensics
- Does musical training affect the speech perception abilities of cochlear implant users?
- Udvikling Af Stavekompetencer - en pilotundersøgelse af dysleksimaterialers effekt i den almene undervisning
- Udvælgende opmærksomhed og kognitiv kontrol hos dyslektiske folkeskolebørn - et kvantitativt studie af ordblindes opgaveløsning, selvregulering og arbejdshukommelsesstrategier
- Læseforståelse og dyslexi på lange videregående uddannelser: En undersøgelse af clozetest-formatet og dets gyldighed som læseforståelsestest på en kontrolgruppe af universitetsstuderende.
- Dyslexia - using spelling errors to qualify self-reports



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## Research areas/Areas of supervision

- Interaction
- Conversation analysis
- The grammar of talk-in-interaction
- Linguistic ethnography
- Ethnographically based studies of language use and interaction more generally
- Video-observation
- Danish grammar
- Danish phonetics and phonology
- Interactional linguistics, emergent grammar, construction grammar, dialogic grammar
- Second language acquisition
- Children's interaction
- Discourse analysis, text analysis
- Bilingual, multilingual, plurilingual interaction
- Qualitative sociolinguistics
- Post-structuralist linguistics

## Examples of theses

- Selv-initieret selv-reparatur i dansk samtaleprog
- Samtaleri: Et dialogbaseret læringsmateriale til undervisning i dansk som andetsprog
- "Camilla brødet er a'så blevet lidt brændt", "super" En undersøgelse af fritstående 'super' i danske samtaler
- At springe ud af skabet – en lingvistisk-etnografisk, queerteoretisk undersøgelse af homo- og heteroseksuel identitetsarbejde
- "Man bør stave rigtigt på forsiden" – En undersøgelse af ubevidste holdninger til stavefejl på virksomheders hjemmesider
- Samarbejdende børn – En lingvistisk etnografisk konservationsanalytisk undersøgelse af sprog og bevægelser i børnehavebørns sociale interaktioner
- Samtalegrammatik i skriftlig online interaktion – en digital-samtaleanalytisk undersøgelse af udvalgte samtalegrammatiske fænomener på facebook
- Æv bæv – Et samtaleanalytisk indblik i vurderinger i danske, naturlige samtaler
- Investigating interlanguage and cross-linguistic influence in the foreign language classroom
- The function of the foundation field in Danish talk-in-interaction. On the intersection of information structure, interactional organization and syntactic coordination



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## Research areas/Areas of supervision

- Early written language analysis
- Languages of religious minorities

## Examples of theses

- An Analysis of Low German administrative texts on the Danish Island of Amager

*Note: Basic knowledge of German would be an advantage for any student looking to write in these areas.*





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## Research areas/Areas of supervision

- Sociolinguistics
- Anthropological linguistics
- Historical linguistics
- Contact linguistics
- Pidgins and creoles
- Amerindian languages
- Genderlects
- Twins' languages
- Language planning and policy
- Multilingualism
- Deaf studies
- Canada
- Nuristani languages
- Typology
- Language description

## Examples of theses

- Fonologisk kompleksitet i dansk – en diskussion af det danske lydsystems synkrone og diakrone kompleksitet fra et typologisk perspektiv.
- Sproglig socialisering – En lingvistisk etnografisk tilgang til en caseundersøgelse fra en dansk institution med tosprogede børn.
- "Må jeg låne your pencil, please?". The whys and whens of codeswitching in schoolchildren's conversations.
- Rosa Mexicano. The meaning of the Mexicano Spanish color terms of Oaxaca.
- The spread of English in present Europe: Comparing the popularity of English in different parts of Europe. A survey among volunteers in an international organization.
- African structural continuity in Atlantic creoles: phylogenetic network analysis applied to structural-typological data.
- The performance of femininity in rap lyrics.
- Did the Neanderthals speak? – A review of the evidence.
- Kltringelatin. Kryptolekter blandt omrejsende underklassegrupper på landet i Skandinavien mellem år 1700 og 1945.
- Linguistic Fieldwork: Experience and tense and aspect system description of a Neo-Aramaic dialect of Diana, Iraq.



**Rebekah Baglini**

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## Research areas/Areas of supervision

- Semantics and pragmatics
- Language typology and variation
- Natural Language Processing and Machine Learning
- Computational Linguistics
- Social media analysis
- Causality/causal inference modeling
- Sound symbolism
- Social meaning/sociopragmatics

## Examples of theses

**See student paper titles resulting from courses/seminars I've taught at AU:**

- 2019 Research Workshop Computational Linguistics  
papers: [https://aunlp.github.io/LaC20/#!2019\\_Papers.md](https://aunlp.github.io/LaC20/#!2019_Papers.md)
- 2019 Natural Language Processing  
papers: [https://aunlp.github.io/LaC20/NLP\\_posters\\_flier.pdf](https://aunlp.github.io/LaC20/NLP_posters_flier.pdf)

**Some recent theses:**

- Improving coreference resolution accuracy on scientific texts using pronoun masking and document segmentation
- Offensive Language Detection in Danish
- Creating NLP tools for analysis of Danish News Data
- Topic Modeling Danish Covid-19 Tweets
- Towards explainable Embeddings: XAI using topic modeling
- EMOda: An Interactive Tool for Emotion Classification in Danish
- How Individual Perceptions & Societal Constructions Affect Compliance During COVID-19: A two-fold Methodological Mixed Effects Approach
- Empathy and Political Polarization in Coverage of the Black Lives Matter Movement: An NLP Approach



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## Research areas/Areas of supervision

- Everyday interaction and interview interaction
- Conversation Analysis
- Video-observation
- Danish grammar, phonetics and phonology
- Interactional Linguistics
- Grammar of talk-in-interaction
- Phonetics & phonology
- Interjections and response tokens
- Question and response types, assessing actions
- Prosody and intonation

## Examples of theses



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## Research areas/Areas of supervision

- Language description and documentation
- Historical & comparative linguistics
- Grammaticalisation
- Linguistic typology
- Cognitive-functional-semiotic grammar
- Sign languages - deaf & alternate
- Australian Aboriginal languages
- Khoe languages
- History of linguistics
- Possession
- Interpersonal grammar and joint attention
- Nominal and verbal classification
- Kinship
- Semantics and pragmatics
- Narrative
- Spatial language and cognition

## Examples of theses

- Reta phonology, morphology and syntax. A grammar sketch of a Papuan language of Nusa Tenggara Timur, Eastern Indonesia
- Blumps and twipitts: how native speakers of English perceive sound and symbolic elements in nonsense words
- An initial description of the phonetics and phonology of Kurdish Sign Language
- The phonology of Zaachila Zapotec. A segmental and suprasegmental analysis
- ORSUMM recognizes speakers using motor movements
- Typological variation of syntactic roles
- Relationen mellem læsning og hurtig automatisk benævnelse

# Thesis Supervisors: Cognitive Science and Cognitive Semiotics

Note: You are free to choose supervisors across the three disciplines. If you desire a supervisor across disciplines please contact the desired supervisor in advance.

**All supervisors external to LICs must be approved by the Head of Department,  
Joshua Charles Skewes**

NB: Faculty members on this list are available for thesis supervision, and most are also available for **internal supervision of Project Placement projects.**



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Research areas/Areas of supervision	Examples of theses
<b>Language processing:</b> <ul style="list-style-type: none"><li>• Phonetics/phonology</li><li>• Foreign language learning</li></ul> <b>Parkinson's disease:</b> <ul style="list-style-type: none"><li>• Deep brain stimulation (DBS)</li><li>• Basal ganglia</li><li>• Response inhibition</li><li>• Verbal fluency</li></ul> <b>MEG/EEG:</b> <ul style="list-style-type: none"><li>• Auditory processing</li><li>• M/EEG methods generally speaking</li><li>• Experimental design for neuroimaging</li></ul> <b>More tangentially related topics:</b> <ul style="list-style-type: none"><li>• Musical processing in cochlear implantees</li><li>• Musical feature processing in the brain</li><li>• Multimodal (e.g. audio-visual) sensory processing</li></ul>	<ul style="list-style-type: none"><li>• Structural priming from arithmetic to language</li><li>• Investigating the application of 3D CNNs to whole-brain fNIRS data and transfer learning</li><li>• Inconsistencies detected in the processing of human emotional and non-emotional auditory and visual stimuli; an fNIRS study</li><li>• Exploring fNIRS and verbal reporting as complementary methods for neuroanthropology research</li><li>• Selective action verb impairment in Parkinson's disease patients when reading naturalistic stories</li><li>• Impaired action language processing in Parkinson's disease when reading naturalistic texts</li><li>• Developing Eye-Cue: Implementing augmented reality cues to relieve freezing of gait in Parkinson's disease - A case study</li></ul>



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<https://annapzamm.github.io/>

## Research areas/Areas of supervision

I am interested in the below research topics at the levels of brain & behaviour:

### 1) Interpersonal synchrony:

How do humans synchronize rhythmic actions such as music with one another?

### 2) Perception & production of auditory rhythms:

How do humans perceive and produce auditory rhythms?

### 3) Turn-taking in human communication:

How do humans take turns across different forms of communication (e.g., musical interaction, conversation)?

### Methods used:

- Neural: Electroencephalography (EEG)
- Behavioural: MIDI, capacitive sensors, Bela (<https://bela.io/>)
- Coding: MATLAB/C-shell/C++ (basic)

## Examples of theses

- Neural and behavioural correlates of musicians' natural frequencies in music (McGill University)
- Endogenous rhythms influence interpersonal synchrony (McGill University)
- Match me if you can: Continuous dynamics of learning to coordinate auditory-motor rhythms with a partner (Central European University)
- Neural entrainment as a mechanism of rhythm processing in music and language (Aarhus University)



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## Research areas/Areas of supervision

- Computational neuroscience
- Predictive coding
- Data science
- Disorders of the mind

## Examples of theses

- The diagnostic predictiveness of interindividual differences in susceptibility to illusory control
- Inside the triad - a computational exploration
- The role of dopamine in a volatile social decision-making task with active inference and a hierarchical Gaussian filter





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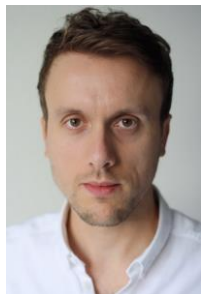
[http://pure.au.dk/portal/en/persons/id\(3eca8b0b-e266-444d-a2bd-8754dfd34a85\).html](http://pure.au.dk/portal/en/persons/id(3eca8b0b-e266-444d-a2bd-8754dfd34a85).html)

## Research areas/Areas of supervision

- Experimental semiotics
- Social cognition
- Embodied communication
- Joint action
- Action planning and control
- Joint music performance
- Shared representations
- Behavioral synchrony
- Social learning

## Examples of theses

- Dissociating Movement Variability and Speed in Intentional Joint Action Coordination
- Motor Coordination and Task Representations in Joint Action
- Learning Time Coordination in Joint Action and the Effects of Theory of Mind Ability
- Do You Want to Play Piano with Me? A Study on Shared Learning in Music Performance
- Transfer of Learning in Joint Action



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Research areas/Areas of supervision	Examples of theses
<b>Child language development:</b> <ul style="list-style-type: none"><li>• Phonological and lexical development</li><li>• Statistical learning of language</li><li>• Online sentence processing (<i>intermodal preferential looking</i>)</li><li>• SES-related predictors of language development</li><li>• Parent-child interactions, child-directed speech</li></ul>	<ul style="list-style-type: none"><li>• Look at me, I'm talking to you: Using eye tracking to investigate meaning extraction in communication</li><li>• When fish sell clerks: Linguistic processing in clear and noisy conditions</li><li>• The eyes hold important cues to human mate choice</li><li>• What makes an art expert? Investigating the effect of briefing on the perception and evaluation of modern art</li><li>• Aesthetic perception and evaluation</li><li>• Effects of commercials on consumer behavior: An eye-tracking study</li><li>•</li></ul>
<b>Language processing:</b> <ul style="list-style-type: none"><li>• Artificial language learning paradigms</li><li>• Role of phonetics on language processing</li><li>• Phonetic reduction in Danish and psycholinguistic implications</li></ul>	
<b>Eye tracking:</b> <ul style="list-style-type: none"><li>• Application of eye tracking to topics in cognitive science/linguistics at large</li></ul>	



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## Research areas/Areas of supervision

### **Cumulative cultural evolution, e.g.**

- Social learning
- Cultural transmission chains

### **Social cognition, e.g.**

- Social influence
- Metacognition
- Mentalising
- Advice-taking

### **Group decision-making, e.g.**

- Perceptual decision-making
- Collective intelligence
- Group behaviour
- Wisdom of crowds

### **Individual differences, e.g.**

- Structural neuroimaging
- Behaviour/Domain-generalizability

### **Experimental Semiotics, e.g.**

- Emerging sign-systems
- Conventionality

### **Art-Science collaboration projects**

- I work in the EER project <https://eer.info/>

### **Abstraction in human cognition**

- I work in the Traincrease project <https://traincrease.uw.edu.pl/en/main/>

## Examples of theses

- The effect of deliberation on metacognitive skills in climate change knowledge: rethinking the wisdom of crowds
- Drawn from memory: Compression in cultural transmission
- Beyond the dyad: Social cognitive mechanisms in larger groups
- Does the Voice Gender Matter for our Decisions?
- Social influence, cognitive processes and how these mechanisms manifest themselves as influencer marketing in the digital world
- Group composition and diversity in collective decision-making: recommendations for applications at the workplace
- The impact of colours on the human mind
- Investigating individual differences between social advice-taking and brain structure using diffusion magnetic resonance imaging
- What makes you smart? Examining the role of gray matter density, iron and myelin on intelligence



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[https://pure.au.dk/portal/da/persons/kristian-tylen\(9950d8bc-e1cd-400a-a547-359cd0b07157\).html](https://pure.au.dk/portal/da/persons/kristian-tylen(9950d8bc-e1cd-400a-a547-359cd0b07157).html)

Research areas/Areas of supervision	Examples of theses
<ul style="list-style-type: none"><li>• Experimental semiotics/pragmatics</li><li>• Problem solving</li><li>• Dialogue</li><li>• Gesture</li><li>• Extended mind</li><li>• Language evolution</li><li>• Natural Language processing</li><li>• Sound symbolism</li><li>• Creativity</li></ul>	<ul style="list-style-type: none"><li>• What gesture reveals about event conceptualization: An experimental approach to the communication of transitive event structure</li><li>• Mapping the lexicon for sound in Danish, Norwegian and English</li><li>• Informational Synergies in the HCRC map task corpus</li><li>• Environmental Constraints on Cultural Conversations: A Case Study of Linguistic</li><li>• Coordination in Joint Problem Solving. A multidisciplinary Approach to Reconstructing Communicative Abilities in Our Genus</li><li>• The Linguistic Relativity of Synesthetic Pitch Metaphors</li><li>• </li></ul>



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Research areas/Areas of supervision	Examples of theses
<b>Consciousness, awareness and attention:</b> <ul style="list-style-type: none"><li>• How to measure subjective experience</li><li>• Neural correlates of consciousness</li></ul>	<ul style="list-style-type: none"><li>• Hjernens signalstoffer og aktivitet hos personer med muskelkraftnedsættelse, betydning for diagnostik og udvikling af hjælpemidler</li><li>• Breathing in the Brain: A computational approach</li></ul>
<b>Electro- and magnetoencephalography:</b> <ul style="list-style-type: none"><li>• Somatosensation</li><li>• Visual perception</li><li>• Sensory expectation</li><li>• The cerebellum</li><li>• Parkinson's Disease</li><li>• On-scalp magnetoencephalography</li><li>• Source reconstruction</li></ul>	<ul style="list-style-type: none"><li>• Random Matrix theory based denoising of redundant neuroimaging data</li><li>• Expectation-related activity in the cerebellum during somatosensory perception</li><li>• Selective Auditory Attention and the Influence of Expertise</li><li>• Perceptuel bevidsthed i henhold til detektions- samt diskriminationsopgaver</li><li>• Cortical alpha waves as a neural correlate of attention</li></ul>
<b>Programming pipelines:</b> <ul style="list-style-type: none"><li>• MATLAB</li><li>• Python</li></ul>	
<b>Tangentially related topics:</b> <ul style="list-style-type: none"><li>• Primate cognition</li><li>• Mixed models fitting and machine learning</li><li>• Philosophy of Mind</li></ul>	



**Mads Jensen**

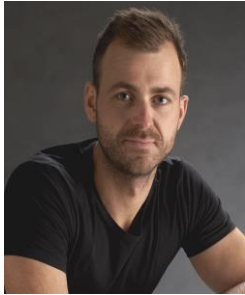
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## Research areas/Areas of supervision

- Electrophysiology (EEG/MEG)
- Sense of agency
- Volition/free will
- Consciousness
- Machine learning
- Social robots

## Examples of theses



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Research areas/Areas of supervision	Examples of theses
<b>Cognitive Development:</b> <ul style="list-style-type: none"><li>• Play &amp; Playfulness</li><li>• Play across development</li><li>• Cognitive models of play</li><li>• Play fighting</li><li>• Risky play / adventurous play</li><li>• Exploratory play</li><li>• Enjoyment</li><li>• Animal play</li><li>• Playing with fear / recreational fear / horror media</li></ul> <b>Cognitive Science of Religion:</b> <ul style="list-style-type: none"><li>• Religious experiences</li><li>• Divination</li><li>• Agency Detection</li></ul> <b>Methods:</b> <ul style="list-style-type: none"><li>• Mobile Eye Tracking</li><li>• Heart rate (light, unobstrusive setup, Firstbeat. Bodyguard 2)</li><li>• Virtual Reality</li></ul>	



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## Research areas/Areas of supervision

Quantitative approaches to areas in the vicinity of

### Brain and body:

- Cognitive neuroscience
- Basic physiology and cognition (heart rate, respiration, hormones, sleep, etc.)

### Language and mind:

- Lateralization in language, brain and behavior
- Language and attention/space
- Language as a window to personality
- The inner voice and self-talk in relation to cognition, mood and personality

### Sound and fury:

- Emotion & mood
- Music and sound processing

### Sex and gender:

- Sex and gender differences in language, brain and behavior

## Examples of theses

- Revisiting the Bayesian Model for Novel Word Learning
- Objects as Signs – an experimental study.
- Does it sound alive? - auditorily perceived cues of animacy
- Dilated Pupils As an Attractor of Visual Attention: an Eye Tracking Study
- Music and meaning- making. The effects of music in cross- modal domains
- Beskrivelse og praktisk afprøvning af forventningsopbygning i musik og hjerne med fokus på ""Mismatch Negativity"" MMN
- When Depression Speaks - A Computational Analysis of Quantitative Differences in Word Frequencies Between Danish Individuals with First-Episode Major Depressive Disorder and Healthy Controls
- What does the inner voice do? Self-regulation in sport and cognitive psychology





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Research areas/Areas of supervision	Examples of theses
<ul style="list-style-type: none"><li>• Meaning-making in Art and Perception</li><li>• Meaning-making in Art and Language Theories of Text Types and Genres</li><li>• Topics in Cognitive Linguistics/Semiotics at large</li><li>• Philosophy of Mind and Theories of Consciousness</li><li>• Communicational strategies at large (adds, brands, framing, and discourse)</li></ul>	<ul style="list-style-type: none"><li>• Political Communication - Framing and Conceptual Metaphor (thesis is in danish)</li><li>• Synthesizing Ritualized Behavior and Religious Cognition</li><li>• Din Hjerne på Reklamer - Hvorfor nogle reklamebilleder er mere fængende end andre?</li><li>• Morality as Purity - Studying Moral Cognition from the Perspective of Conceptual Metaphor Theory and Moral Psychology</li><li>• Meaning-making in literary art: A cognitive semiotic study on simultaneous narration</li><li>• Perception and Representation of Motion, Time, Sound, and Symbols in Comics</li><li>• Poesiens styrmand - Om Klaus Høecks poetik og kybernetik</li><li>• En kognitiv tilgang til visuel kunst</li><li>• Framing, narratives, and conceptual metaphors as propaganda techniques for psychological and informational warfare</li></ul>



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## Research areas/Areas of supervision

### **Social interactions (free and task-oriented):**

- Quantitative corpus analysis
- Experimental investigations
- Agent based models

### **Language, Voice, Gesture and Movement in:**

- Autism Spectrum Disorders
- Schizophrenia
- Affective disorders (Depression, Bipolar)

### **Language acquisition**

- Corpus analysis (e.g. Childes)
- Lexical networks
- Child Directed Speech
- Turn-taking

### **Computational cognitive modeling**

- e.g. Models of information integration in social contexts
- e.g. Implementation and validation of cognitive models in a probabilistic framework (Stan)

**Natural Language Processing** (e.g. large corpora of transcripts, or social media)

- Speech processing
- Interactive alignment

## Examples of theses

- Børnertilrettet tale på dansk - En undersøgelse af de akustiske parametre
- Automated diagnostic tools for depression: natural language processing of life histories in people with depression and controls.
- Linguistic alignment: a meta-analytic approach

List of currently available project ideas:

<https://docs.google.com/spreadsheets/d/1tIIHV0->

[W9NBF5ba1gUplGQ50lmFQfX8x8l0434xxnAA/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1tIIHV0-W9NBF5ba1gUplGQ50lmFQfX8x8l0434xxnAA/edit?usp=sharing)



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Research areas/Areas of supervision	Examples of theses
<p><b>Cognitive, corpus-based and computational approaches to:</b></p> <ul style="list-style-type: none"><li>• Style, register, and genre</li><li>• Rhetoric</li><li>• Meaning construction</li><li>• Narrative comprehension</li><li>• Discourse processing</li></ul> <p><b>Natural language processing</b>, particularly in the following areas:</p> <ul style="list-style-type: none"><li>• Low-resource languages</li><li>• Historical language data</li><li>• Literary texts</li><li>• Lexical semantics</li></ul> <p><b>Computer vision and image processing applied to cultural data:</b></p> <ul style="list-style-type: none"><li>• Digital art history</li><li>• Visual culture (memes, advertising, etc)</li><li>• OCR (extracting text from images)</li></ul> <p><b>General topics in digital humanities and social science using:</b></p> <ul style="list-style-type: none"><li>• Network analysis</li><li>• Applied deep learning methods</li><li>• Mixed-method approaches combining text and image data</li></ul>	<p>Investigating the performance of contemporary Danish NLP models on 19th century Danish language text</p>