



**COGNITIVE FUTURES
IN THE HUMANITIES 2016**

University of Helsinki 13 -15 June

Cognitive Futures in the Humanities
The Fourth International Conference

Department of Modern Languages, University of Helsinki

13-15 June 2016



Organisers: Merja Polvinen (University of Helsinki)
and Karin Kukkonen (University of Oslo)

Coordinator: Esko Suoranta

Cover: Kaisa Leino

Layout: Juho Kajava

Pre-Conference Workshop “Digitisation and Cognition:
Joint Futures for the Humanities?”
Helsinki Collegium for Advanced Studies



FEDERATION OF FINNISH LEARNED SOCIETIES
Delegation of the Finnish Academies of Science and Letters

Welcome from the organisers

Cognitive Futures in the Humanities is an international, interdisciplinary research network whose origins lie in a project funded by the Arts and Humanities Research Council (AHRC), 2012–2014 in the UK. The network brings together scholars from fields such as literature, linguistics, philosophy, and beyond, whose work relates to, informs, or is informed by aspects of the cognitive, brain and behavioural sciences.

The network has been organising international conferences annually since 2013, with the first conference organised at the University of Bangor, Wales, 2014 at the Durham University, and 2015 at the University of Oxford. This year, our programme includes more speakers than ever before, and we are proud to present four wonderful keynote speakers: Peter Garratt (Durham University), Pirjo Lyytikäinen (University of Helsinki), Anne Mangen (University of Stavanger) and Deirdre Wilson (University College London and CSMN, Oslo).

We are very happy to welcome you to the 2016 conference at the University of Helsinki, and hope that you will have an intense and rewarding three days in Finland.

With very best wishes,

Karin Kukkonen, Merja Polvinen and Esko Suoranta

Evening events:

University of Helsinki reception, Monday 13th June 18:15
University Main Building (Unioninkatu 34)
Free of charge.

Conference Dinner, Tuesday 14th June 19:00–22:00
Restaurant Meripaviljonki (Säästöpankinranta 6)
55€ for pre-registered participants.

Wifi:

The University's Central Campus is covered by Eduroam, and if you have an existing account through your home institution, it is the recommended way of getting online.

In the Central Campus you can also access the internet for free via HUPnet:
Username / käyttäjätunnus: hupnet44265
Password / salasana: jere28pyry

The city of Helsinki also hosts a free WLAN-service that does not require passwords or registration. These can be found with the SSID "Helsinki City Open WLAN" but are subject to hotspot availability and the general risks of open networks.

Monday 13th June

9.00 – 10.00

Coffee and registration at Metsätalo (Fabianinkatu 39 / Unioninkatu 40)

10.00 – 10.15

Room 1: Welcome

10.15 – 11.15

Room 1: Keynote Lecture by Peter Garratt (Durham University):

Otto Inside the Museum

11.30 – 13.00

Parallel panel sessions 1

1A: Emotion, Cognition, Text: New Approaches to the Cognitive Study of Emotion (1)

Room 6; Chair: Maria Mäkelä

Anne Päivärinta (University of Tampere)

Remembering is Possessing: The Tangibility of the Past in A. S. Byatt's Lyric Narration

Minna Jaakola & Tiina Onikki-Rantajääskö (University of Helsinki)

Focalized Emotions: A Cognitive Grammar Approach to Narration

Saija Isomaa (University of Tampere)

Dystopia as a Warning? Narrative Empathy, Collective Values and Genre Competence in Interpreting Dystopian Fiction

Riikka Rossi (University of Helsinki)

Disgust and Compassion: Ambivalent Emotion Effects in Realist Fiction

1B: Cognitive Mediation

Room 12; Chair: Dan Irving

Yanna Popova (Independent Scholar)

Presence in Literary Reading: A Typology of Reader Engagement

Stephan Besser (University of Amsterdam / OSL)

How Patterns Meet: Tracing the Isomorphic Imagination in Cultural Neuroscience and Beyond

Miranda Anderson (University of Edinburgh) (and Shaun Gallagher)

A Pattern Theory of the Mind and Self in Love and Literature

1C: Empirical Aesthetics (1)

Room 8; Chair: Cody Mejeur

Christine A. Knoop (Max Planck Institute for Empirical Aesthetics)

Cognitive Science, Literary Studies and the Poem

Ilona Roth (The Open University)

Studying Metaphor Use by Poets on the Autism Spectrum: Method and Interpretation

Alaina Schempp (University of Kent)

Film and Television Tempo Adjustment for People with Hearing Loss and Cognitive Decline

1D: Learning Processes

Room 7; Chair: Naomi Rokotnitz

Brad Bolman (Harvard University) and Rennie Pasquinelli (University of Michigan, Ann Arbor)

Narrating the Birth of Narration: The Challenges and Possibilities of Fictional Representation of Language Acquisition

Maiya Murphy (National University of Singapore)

A Necessary Temptation: How Enactivism Reveals Essentialism as Key to Creativity in Lecoq Pedagogy

Xristina Penna (University of Leeds)

'Applications of Cognitive Science in Scenographic Reception and Processes': Scenographic Contraptions

1E: Cognitive Repertoires

Room 5; Chair: Kay Young

Ancuta-Maria Mortu (EHESS Centre de Recherches sur les Arts et le Langage)

On the Cognitive Repertoire of Aesthetic Experience: Cognitive Universals in Aesthetics and Historical Contexts

Erika Fülöp (Lancaster University)

Narrative and the Limits of Reason: Paradoxes, Logic, Cognition

Alberto Godioli (University of Groningen)

A Cognitive Rhetoric of Infinity: Evoking Endlessness in Romantic and Post-Romantic Poetry

13.00 – 14.15

Lunch at Unicafé

14.15 – 15.45

Parallel panel sessions 2

2A: Emotion, Cognition, Text: New Approaches to the Cognitive Study of Emotion (2)

Room 6; Chair: Riikka Rossi

Elise Nykänen (University of Helsinki)

Testing the Limits of Narrative Empathy: The Case of Unreliable Narration in Pentti Holappa's "Boman"

Laura Visapää and Ilona Herlin (University of Helsinki)

Language and Happiness

Ilona Tragel (University of Tartu) (and Jane Klavan)

Extracting Meaning from Mind: Experimental Validation Studies for Image-Schemas of Emotion Verbs

Maria Mäkelä (University of Tampere)

Free Indirect Discourse and Typification of Original Emotions: From Literary Exemplum to Textual Folk Psychology

2B: Object Relations

Room 12; Chair: Matt Hayler

Isabelle Wentworth (University of New South Wales)

'Home Time': Exploring Anthropomorphic Temporal Synchronisation in Lisa Gorton's *The Life of Houses*

Teemu Paavolainen (University of Tampere)

Puppetry and Cognition: Metaphors of Coupled Embodiment

Caroline Shields (University of Maryland)

"The Future of Nostalgia": A Cognitive Framework for Still-Life Paintings by Paul Gauguin

2C: Empirical Aesthetics (2)

Room 8; Chair: Ilona Roth

Cody Mejeur (Michigan State University)

Getting a Grip on Neuroaesthetics: An

Interdisciplinary fMRI Study of Pleasure and Affect in Poetry

Pascal Nicklas (Johannes Gutenberg-Universität Mainz)

Attention and Attenuation: Cognition and Stress Regulation in the Rhetoric of Repetition

2D: Theatre, Dance, and Cognition: Language, Bodies, and Ecologies

Room 7; Chair: Edward C. Warburton

Amy Cook (Stony Brook University)

'Now is the winter of our discontent': Cognitive Poetics in Performance and Rethinking What It Can Mean to Mean

Edward C. Warburton (University of California, Santa Cruz)

Becoming Elsewhere: ArtsCross and the (Re)location of Performer Cognition

Rhonda Blair (Southern Methodist University, Dallas)

Leveraging the Prenoetic: An Ecological and 'Archaeological' Approach to Text and Embodiment

2E: Temporality and Consciousness

Room 5; Chair: Howard Sklar

John Lutterbie (Stony Brook University)

Toward a Theory of Time

John Rickard (Bucknell University)

Instinct as Cognition in James Joyce's Early Prose

Richard Ruppel (Chapman University)

***Nostramo* and the Hard Problem: Conrad's Explorations of Autonomy & Consciousness**

15.45 – 16.15

Coffee

16.15 – 17.45

Parallel panel sessions 3

3A: Affect, Empathy, Entrainment

Room 6; Chair: Anne Päivärinta

Julien Simon (Indiana University East)

Affect and Reader Empathy in Fernando de Rojas' *Celestina* (1499)

Nicola Shaughnessy (University of Kent)

Opening Minds: Dialogues between Performance, Psychopathologies and the 4 E's

Robert Shaughnessy (University of Kent)

Supper in the Morning: *King Lear* in Broadmoor

3B: Text, Body and Technology

Room 12; Chair: Teemu Paavolainen

Matt Hayler (University of Birmingham)

Thinking About Hacked Thinking: 4E Cognition for the Augmented Body

Ana Marques da Silva (University of Coimbra)

Algorithmic Cognition in Literary Machines: Understanding and Hacking the Apparatus

Diogo Marques (University of Coimbra)

(Im)movable Bodies or (Un)moving Texts? Haptic Reading Processes in Electronic Literature

3C: The Cognitive and Emotional Processes of Real Readers (1)

Room 8; Chair: Pascal Nicklas

Roel Willems (Donders Institute, Nijmegen)

Neuroimaging of Literary Reading: Potentials and Pitfalls

Howard Sklar (University of Helsinki)

Three Minds as One? Authors and Readers

Imagining Intellectual Disability in Daniel Keyes' *Flowers for Algernon*

Stefan Blohm (MPI, Frankfurt)

Electroencephalography and Literary Conventions

3D: Words, Sounds, Music

Room 7; Chair: Marco Caracciolo

Panu Heimonen (University of Helsinki)

Subjectivity, Context, and Musical Work

David R. Gruber (Massey University)

Suasive Speech: A Stronger Defense of Rhetoric and Futures for Cognitive Poetics

Ivan Delazari (Hong Kong Baptist University)

Reader as Listener: Experientiality of Verbal Music

3E: Self and Language: New Perspectives

Room 5; Chair: Kate Costello

Simon Kemp (Somerville College, Oxford)

"The Same Person from One Sentence to the Next":

The Self Inside, Outside and Between Languages in

Marie Darrieussecq

Kay Young (UCSB)

Vitality Affects and the Pre-Verbal Self of Daniel N. Stern

Sowon S. Park (Corpus Christi College, Oxford)

Autobiography of a Schizophrenic Girl: A

Neuropsychanalytic Reading

18.15

University of Helsinki Reception at the University Main Building (Unioninkatu 34)

Tuesday 14th June

9.00 – 10.00

Room 1: Keynote Lecture by Pirjo Lyytikäinen

(University of Helsinki):

Exploring Emotions in the Cognitive Study of Literature

10.00 – 10.30

Coffee

10.30 – 12.00

Parallel panel sessions 4

4A: Disgust

Room 12; Chair: Riikka Rossi

Scott Harshbarger (Hofstra University)

"Brave New Yuck!" The Disgust Response in and toward Utopian Narratives

Sabina Omerhodzic (Johannes Gutenberg-Universität Mainz)

Disgusted by Robert Cohn: A Moral Emotion Gone Immoral

Nathalie Schwering (Johannes Gutenberg-Universität Mainz)

Extreme Reader Reactions: How Disgust, Contempt and Anger Bias Our Moral Judgements

4B: Kinesis in Literature and Art (1)

Room 6; Chair: John Lutterbie
 Laura Seymour (Birkbeck College, University of London)

The Genre of Non-Conformist Autobiography and Defiant Gestures

Dan Irving (Stony Brook University)

Eating Fish Alone: Kinesic Description and Reading for Presence

Ellen Spolsky (Bar-Ilan University)

Getting Into the Picture? How Far?**4C: The Cognitive and Emotional Processes of Real Readers (2)**

Room 8; Chair: Pascal Nicklas
 Eugen Wassiliwizky (MPI, Frankfurt)

Emotional Power of Poetry – a Physiological Enquiry

Marion Behrens (University Medical Center Mainz)

Quantitative Research in the Humanities: The Use of Surveys

Willie van Peer (LMU Munich)

Poetry Corrects Reality. But How Do Readers Deal with This?**4D: Drawing Attention to Daydreams: An Interdisciplinary Exploration of Mind Wandering in Theory and Practice (1)**

Room 7; Chair: Hilary Powell
 Felicity Callard (Durham University)

Mind Wandering Across Twentieth-Century Disciplines

Des Fitzgerald (Cardiff University)

For an 'actually experimental literature': The Case of the Wandering Mind

Hazel Morrison (Durham University)

Histories of Introspection: The Case of Mind-Wandering**4E: Problems and Politics of Cognitivist Approaches to Text Analysis**

Room 5; Chair: Teemu Ikonen
 Teemu Ikonen (University of Tampere)

Cognitive Narratology as/and Post-Structuralism: The Return of the Paradox of the Subject?

Samuli Björninen (University of Tampere)

Analyzing Literariness: Formalist, Cognitivist, and Enactivist Approaches

Tytti Rantanen (University of Tampere)

Between Sense and Non-Sense: Interpretation as Aesthetic Surplus

12.00 – 13.15

Lunch at Unicafé

13.15 – 14.15

Room 1: Keynote Lecture by Deirdre Wilson (University College London and CSMN, Oslo): **Explaining Metonymy**

14.30 – 15.30

Room 1: **Reflective Roundtable** with Peter Garratt, Pirjo Lyytikäinen, Anne Mangen and José Filipe Silva

15.30 – 16.00

Coffee

16.00 – 17.30

Parallel panel sessions 5

5A: Emotional Entanglement with Fiction

Room 12; Chair: William Flesch
 Laura Quinney (Brandeis University)

Feelings for Phantoms: The Vestige of the Lyric "I"

William Flesch (Brandeis University)

Emotion, Fiction, and Non-Causal Bargaining

Karin Kukkonen (University of Oslo)

Bayesian Notes on the Feeling of 'Flow' in Reading

Blakey Vermeule (Stanford University)

On Rooting for the Bad Guy**5B: Kinesis in Literature and Art (2)**

Room 6; Chair: Amy Cook
 Kathryn Banks (Durham University)

Kinesic Response and Kinesic Intelligence in Rabelais's Comic Fiction

Raphael Lyne (University of Cambridge)

Kinesics on the Stage: *Knight of the Burning Pestle*

Guillemette Bolens (University of Geneva)

Inferring Kinaesthetic Sensations: Cognition and Kinesic Knowledge in Literature**5C: Social Metacognition**

Room 8; Chair: John Sutton
 Iida Pöllänen (University of Oregon)

Creating Textual Communities: The Question of Social Minds in Fiction

Kate Costello (University of Oxford)

On Continuous Bilingual Writing and World Literature: Forging a Psycholinguistic Framework for Literary Criticism

Tommi Kakko (University of Tampere)

Embodiment and Authority in Seventeenth-Century Manuscript and Print Cultures**5D: Drawing Attention to Daydreams: An Interdisciplinary Exploration of Mind Wandering in Theory and Practice (2)**

Room 7; Chair: Felicity Callard
 Marco Bernini (Durham University)

'The Mystery of the Conscious': Mind Wandering, Inner Speech and Attentional Decoupling in James Joyce's *Ulysses*

Hilary Powell (Durham University)

Demonic Daydreams: Mind Wandering in the Middle Ages**5E: Disciplinary Trajectories**

Room 5; Chair: Richard Ruppel
 Ben Morgan (Worcester College, Oxford)

Can Cognitive also Mean Critical? The Methodological Implications of Walter Benjamin's Engagement with Vygotsky

Denis Akhapiin (Saint-Petersburg State University)

Cognitive Poetics and Heritage of Russian Formalism

Gábor Simon (Eötvös Loránd University)

The Generic Patterns of Cognition in Didactic Poetry

19.00 – 22.00

Dinner at Restaurant Meripaviljonki
(Säästöpankinranta 6)

Wednesday 15th June

9.00 – 10.00

Room 1: Keynote Lecture by Anne Mangen
(University of Stavanger): **The Digitization of Reading and Writing: What May Be in It for Cognitive Humanities?**

10.00 – 10.30

Coffee

10.30 – 12.00

Parallel panel sessions 6

6A: Historicising Affect

Room 7; Chair: Julien Simon
Brook Miller (University of Minnesota Morris)
The Intersections of Cognitive Literary Studies and Affect Studies
Mark Pizzato (University of North Carolina at Charlotte)
Inner Theatre and Outer Movie Experiences: The Cognitive Neuroscience of Rasa-Catharsis
Isabel Jaén (Portland State University)
Fascism, Torture, and Affect in Post-War Spain: Memoria Histórica Narratives and Audience Empathy

6B: Gesture and Intersubjectivity

Room 12; Chair: Elise Nykänen
Renate Brosch (University of Stuttgart)
Moving Gestures: The Production of Empathy in Narrative Fictions
Naomi Rokotnitz (Tel-Aviv University)
Fairytales, Folk-Psychology, and Learning Intersubjective Competency Through Embodied Resonance
BA Harrington (Indiana University of Pennsylvania)
Knowing Hands: A Fortuitous and Prophetic Revival of Educational Sloyd

6C: Construction and Representation of Self

Room 8; Chair: Michael Wheeler
Bo Pettersson (University of Helsinki)
How Does It Feel? Cognitive Uses of Exposition in Contemporary Fiction
Csenge Eszter Aradi (University of Szeged)
The Conceptual Structure and Discursive Role of Personification in Fragmentary Genres – an Analysis of French Moralistic Maxims
Monika Jaeckel (Independent Artist Researcher)
Fragile Presence and Shifting Boundaries

6D: Fictional Spaces

Room 6; Chair: Raphael Lyne
Alexa Weik von Mossner (University of Klagenfurt)
Feeling Literary Environments: Cognitive Ecocriticism, Embodiment, and Emotion
David Rodriguez (Stony Brook University)
Cognitive Ecology and the Perception of Poetic

Environments in Charles Reznikoff's New York
Marco Caracciolo (University of Freiburg)
Ungrounding Storyworlds: An Enactivist Perspective

12.00 – 13.15

Lunch at Unicafé

13.15 – 14.45

Parallel panel sessions 7

7A: Second-Generation Readings of Fictional Humans, Objects and Environments

Room 7; Chair: Anna Ovaska
Essi Varis (University of Jyväskylä)
Crafting Possible People: Cognitive Approaches to Fictional Characters
Anna Ovaska (University of Helsinki/
Justus Liebig University)
Where Does the Mind Stop and the World Begin? An Enactivist Reading of Psychotic Fictional Minds
Laura Oulanne (University of Helsinki/
Justus Liebig University)
Feeling Words or Making Sense: Reading Gertrude Stein's *Tender Buttons*
Kaisa Kortekallio (University of Helsinki)
An Experimental Model for Ecological Reading

7C: Minds and Media

Room 8; Chair: Ben Morgan
Erwin Feyersinger (University of Tübingen)
Dynamic Visualizations, Digital Humanities and Embodied Schemata
Lyubov Bugaeva (St. Petersburg State University)
Active Perception and Narrative Media
Henry Bacon (University of Helsinki)
Being Typical and Being Individual in Film

7D: Problems and Niche Solutions

Room 6; Chair: Renate Brosch
Michael Baker (Durham University)
Guthlac in the Balance: Enacting Landscapes of Torment
John Sutton (Macquarie University)
Sharing Cognitive Futures (and Pasts): Situated Collaboration and Interaction in Small Groups
Michael Wheeler (University of Stirling)
The Cognitive Humanities and the Extended Mind: Problem Solving, Explanation and Insight

7E: Multimodal Nature of Creativity: Empirical Evidence of Triggering Originality

Room 5; Chair: Janet Blatter; discussant: BA Harrington
Nadra Assaf (Lebanese American University)
Through the Internet Choreographing and Dancing: a Creative Process in a Shared Reality
Irina Ubozhenko (National Research University Higher School of Economics, Moscow)
Translation as Creativity: Cognitive Triggers and Procedural Characteristics

15.00 – 16.00

Room 6: Conference postmortem and future planning

Presentation Abstracts

Monday 13th June

10.15 – 11.15

Room 1:

Keynote Lecture: Otto Inside the Museum

Peter Garratt
(Durham University)

In Clark and Chalmers's much discussed thought experiment, Otto and Inga each try to find their way to the Museum of Modern Art to see an exhibition. Usually overlooked is the way that aesthetic experience provides the overarching goal of the two protagonists, whose contrasting memory and navigation routines form the 'cognitive' part of the story. In effect, the thought experiment cordons off the aesthetic domain of MoMA from the cognitive episode that services it. This is not some design flaw or philosophical shortcoming, just an observable feature of how the scene is constructed. But what would happen if we could follow Otto into the museum, as it were, and consider how the extended mind story might play out there? Developing this speculative line of thought, my lecture will consider how approaches to distributed cognition might make contact with considerations of aesthetic experience, both visual and verbal, from the nineteenth and twentieth centuries.

11.30 – 13.00

Parallel panel sessions 1

1A: Emotion, Cognition, Text: New Approaches to the Cognitive Study of Emotion (1)

Room 6; Chair: Maria Mäkelä

Remembering is Possessing. The Tangibility of the Past in A. S. Byatt's Lyric Narration

Anne Päivärinta
(University of Tampere)

According to historian Pierre Nora, we live in an era characterised by the "materialization of memory" (1989, 14): due to the disappearance of the past from our everyday lives, memory must be actively reconstructed. Viewing heritage as the preservation of the aesthetics of the past and the growing tendency to commodify human experience belong to the same larger discussion (see e.g. Su 2004). This paper explores embodiment and 'material memory' in A. S. Byatt's *Possession* (1990). Byatt's novel makes for an intriguing case study because of its self-aware approach to the notion of internalising traces of the past. It deals with the fascination with collecting: collected artefacts serve as mnemonics meant to combat the sense of emptiness that haunts the central characters. However, the material past also functions as a stimulus for action: through the main characters' scholarly interest in two Victorian poets' correspondence, the tradition of Romance writing is revitalised both on the level of plot and style. The paper analyses the stylistic specifics of this resurrection of tradition in order to shed light on the relationship between the written story of yesterday and the immediacy and universality of embodied experience. In addition to the conscious manipulation

of genre conventions, attention will be given to the use of conceptual metaphors facilitating the idea of 'possessing' the past (KNOWING IS SEEING, SEEING IS TOUCHING). These poetic devices bring into focus how humans tend to conjure up mechanisms for "transforming the condition of absence into presence" (Scarry 1985, 163).

Focalized Emotions: A Cognitive Grammar Approach to Narration

Minna Jaakola

Tiina Onikki-Rantajääskö

(University of Helsinki)

The paper studies focalization in the first-person narration in the framework of Cognitive Grammar. We scrutinize the two versions of Finnish author Emmi Itäranta's dystopian novel, *Memory of Water* (2014, HarperCollins) and *Teemestarin kirja* (2012, Teos). Reviews of both versions emphasise the ambience created by lyrical language. Written simultaneously in English and Finnish by the author herself, the texts provide data for analysing how interpretations of point of view arise through linguistic choices. Our interest lies in the expressions of feelings and sensations, and our aim is to apply and test the Dimensions of Construal (Langacker 2008), especially the subjectivity and the figure/ground -alignment into analysis of the protagonist's point of view (c.f. Stockwell 2009, Harrison et al. 2014, Jaakola et al. 2014).

A prominent feature in the novel is the embodied expressions of the protagonist's emotions and perceptions. In addition, important for the plot are her efforts to construe her memories by reflecting afterwards these perceptions as she narrates: movements, voices, touches, postures. The embodiment of emotions is conveyed by various linguistic constructions which construe the protagonist's point of view more or less subjectively. In the paper, our focus will be on the usage of body-part metonymy and specific progressive and non-finite verb constructions. Our analysis illustrates how the protagonist's experienced and perceived emotions are interwoven into the narrative structure through embodiment, and how this embodiment effects the style of the Itäranta's novel.

Dystopia as a Warning? Narrative Empathy, Collective Values and Genre Competence in Interpreting Dystopian Fiction

Saija Isomaa

(University of Tampere)

Classical dystopia is a literary genre that imagines undesirable future societies. Scholars have emphasised the cognitive and affective functions of this kind of fiction: by envisioning oppressive totalitarian regimes, the genre attempts to warn its readers for certain societal phenomena and help them avoid their realisation in our world. However, earlier literature has not paid attention to the textual, cognitive, and cultural mechanics that produce this alleged function. How does a depiction of a fictitious world manage to warn us for processes that may take place in our world? This kind of warning arguably has to do with arousing certain kinds of emotions such as aversion, concern or fear in a reader. Given that, we need to explore the interplay between a text, its narration and genre, narrative empathy, and culturally specific values, emotions and conventions to understand the complexities of the warning function.

In my presentation, I will offer some suggestions to the question raised above by exploring a) narrative empathy and narrative techniques that have been associated with empathetic effects, b) the collective values and emotions typical of a community, and c) genre competence. I suggest that many dystopian works make use of the general narrative techniques that are taken to produce narrative empathy, i.e. sharing of feeling and perspective-taking induced by reading (Suzanne Keen's definition). By doing this, a dystopian work has the potential to affect any reader (cf. cognitive universals). However, what a reader considers undesirable

usually depends on the values she has learned in her community, and dystopian works typically rely on the values of some community in their depiction of the undesirable. Furthermore, those readers who have genre competence in literature can identify the genre conventions of dystopian narratives (versus e.g. utopian ones) and interpret the text elaborately in the tradition of dystopian fiction.

Disgust and Compassion: Ambivalent Emotion Effects in Realist Fiction

Riikka Rossi
(University of Helsinki)

Literary realism has widely been understood as an epistemological project in pursuit of knowledge and truth. Yet recent studies on emotions provide new insights that challenge this kind of approach. Linguists have shown that affect is a fundamental and all-encompassing element of human language (e.g. Besnier 1990, Wetherell 2012); the affective function of language overlaps even the referential function characteristic of realist literature. Recent cognitive studies and the philosophy of emotions have demonstrated that emotions have great intuitive power, and they often influence our views of the world, as well as our values and goals (e.g. Damasio 1994, Nussbaum 2001). Emotions thus add the plausibility of things and even enhance the effect of truth at which realism aims.

In this presentation, I will explore affective aspects of realist fiction by analysing the blending of negative and positive emotion effects in realist texts. Realist literature often represents complex characters, anti-heroes or charming, but grimly abject heroes who inspire simultaneous compassion and refusal of empathy; or the text triggers irritation, disgust or other ugly feelings, all the while thrilling and entertaining the reader. The history of realism has also witnessed a complexity of emotions: Starting from Flaubert and Zola realism has been fraught with negative emotional responses; scandals, polemics and censorships which yet seem to contribute to realism's positive ethical and moral commitment to debate societal problems. The emphasis will be on cognitive frames and textual elements, which contribute to the producing of emotion effects in realist story-worlds. By focusing on texts and questions of emotional rejection rather than emotion sharing I will provide alternative views to the general idea that exploring emotions in literature is best advanced by studying the readers' identification with fictional characters' emotions (e.g. Robinson 2005; Keen 2007). Examples from French and Finnish realism will follow.

1B: Cognitive Mediation

Room 12; Chair: Dan Irving

Presence in Literary Reading: A Typology of Reader Engagement

Yanna Popova
(Independent Scholar)

Building on my previous work on enactive narrative understanding (Popova, 2014, 2015) in this presentation I propose and develop a typology of reader engagement, based on the idea of presence. Reading a fictional narrative is a particular kind of sense-making, one with constitutive embodied and interactive dimensions and one, strictly correlated with the core aspects of narrativity. These have been defined (Popova, 2015) as causality, intentionality ascribed to a particular narrative agency, and a reader's enactive engagement with that agent's stance. It will be argued that literary narratives present the reader with distinct ways of access to their narrative worlds thereby constituting degrees of presence for the reader. These degrees of presence can in turn be correlated with textual cues, which I have termed "linguistic markers of experientiality". To mark experience through telling is also to give it a temporal profile and highlight the unique double temporality of any

narrative: as a story unfolding now for the reader, leading to yet unknown end; and as a story already completed in the past. Each event that a reader enacts, despite an awareness of its epistemological pastness, is also happening 'now' at the very moment that the reader encounters it. Phenomenal intersubjective experience (such as reading a story) happens in the present and this presentation traces its co-creation by the reader. The discussion puts in conversation older narratological work by Genette and Stanzel and some contemporary enactive views on presence from cognitive science (Noë) and literature (Kuzmičová).

How Patterns Meet: Tracing the Isomorphic Imagination in Cultural Neuroscience and Beyond

Stephan Besser
(University of Amsterdam)

This paper departs from the observation that contemporary neuroculture is characterized by a disposition to detect and construct meaningful homologies between the brain and the extra-cerebral world on the basis of principles of analogy and morphological congruency. The effects of this disposition can be seen in films such as James Cameron's *Avatar* (where the biosphere of an entire planet resembles a neural network) and works of literary fiction as well as in various forms of cultural theory and neuroaesthetic research. In this paper, I will focus on two recent examples of isomorphic and analogical thinking in the emerging field of cultural neuroscience, namely art historian Barbara M. Stafford's study *Echo Objects: The Cognitive Work of Images* (2007) and Olaf Breidbach's *Neuronale Ästhetik: Zur Morpho-Logik des Anschauens* (2003). While Stafford's work is inspired by the hypothesis that there is "a significant isomorphism between biological phenomena [in the brain] and artistic practices", Breidbach suggests a cross mapping of cultural and neuronal 'patterns' on the basis of their congruency and ultimate "complementarity". The aim of my paper is not to dismiss these traces of isomorphic thinking as dubious or even delusional form of reasoning, but to describe their cognitive and discursive conditions of possibility. I will go on to argue that they are significant for the current emergence of 'patterns' as a privileged interface between nature and culture, scientific and aesthetic knowledge in general.

A Pattern Theory of the Mind and Self in Love and Literature

Miranda Anderson
Shaun Gallagher
(University of Edinburgh)

Recent '4E' approaches, which claim that the mind is not brain-bound but extends into the body and world, are beginning to illuminate historical, as well as current notions of cognition (Anderson et al. 2014). While it has been argued that in order to avoid 'cognitive bloat' it is necessary that some 'mark of the cognitive' be found (Adams & Aizawa 2010), the first part of this paper will argue that an equally capacious approach is necessary to capture the overarching concepts of the mind and the self. The 'fission-fusion' dynamics that function both through and beyond the constraints of individual biological systems, with ever new reiterations and coalitions of factors involved, arguably mean that only a polythetic or 'pattern theory', which stretches to account for variations as well as continuities in the make-up a mind or self across time and space, can hope to act as a sufficiently rich definition of these concepts (Anderson 2015; Gallagher 2013). Focusing on Shakespeare's *Sonnets*, the second part of the paper discuss several kinds of cognitive approaches to the mind and self that emerge, not all of which are compatible, as oscillating perspectives offering fragmentary solutions are overturned or undermined by the solutions of other sonnets; this work thereby reveals how 4E approaches and a pattern theory in combination can most fully illuminate historical and literary models of the mind and self.

1C: Empirical Aesthetics (1)

Room 8; Chair: Cody Mejeur

Cognitive Science, Literary Studies and the Poem

Christine A. Knoop

(Max Planck Institute of Empirical Aesthetics)

Lyrical poetry appears like an ideal subject for experimental studies on cognitive processing and memory encoding of literature. The formal regularities underlying many poetic forms are well-documented in the tradition of literary studies, allow for research designs with sufficiently large numbers of comparable original stimuli, and yield convincing results regarding aesthetic exposure and preference, memorability of rhythmical forms, and on-line processing of semantic and formal patterns.

Reversely, however, it seems rather less evident how cognitive experimental studies on poetic form might inform more traditional perspectives on poetry in literary studies, which are mostly driven by an interest in literary texts themselves, their history, and original interpretations, rather than by a focus on the everyday experiencer's cognitive processing and memory. In other words: how can knowledge created in empirical cognitive studies on poetry reading add to knowledge created in traditional literary studies regarding poetry itself?

This paper will discuss how recent findings from empirical studies of poetry may contribute to describing and interpreting lyrical features, focussing mostly on effects of rhyme and metre and verse and stanza positions of phonological features. In addition, I suggest that investigating cognitive universals does not, in fact, conflict with the notion of potentially limitless interpretation, but rather serves to elucidate the workings of forms and features that elicit such continuous aesthetic attention. Lastly, it suggests that the study of cognitive universals may add to understanding the cultural longevity and success of particular forms of rhyme and metre.

Studying metaphor use by poets on the autism spectrum: method and interpretation

Ilona Roth

(The Open University)

The use of metaphor by poets on the autism spectrum is something of a conundrum. Difficulty with figurative language is often cited as a key characteristic of autism, linked to wider problems of the imagination and/or to theory of mind difficulties. It might therefore seem that metaphor use by autistic poets should be impaired or attenuated. A study of works by five autistic poets carried out some years ago (Roth 2007; 2008) presented an interestingly varied picture. While one poet employed very little metaphor, the others used moderate to copious amounts of metaphor, including both familiar, idiomatic metaphors and more original or creative ones. One of the five poets used metaphors which appeared especially idiosyncratic.

The method elaborated to study this metaphor use, a form of content analysis employing operationally defined categories to classify and quantify the metaphors in poetry samples, was designed, in part, to 'speak to' autism researchers within the cognitive science community. But this quasi-scientific framework posed constraints which have implications not only for autism research, but for the endeavour of cognitive linguistics, highlighting the tension between scientifically-grounded methodology and hermeneutic interpretation.

In this paper, I will return to my data on autistic poetry, considering questions for which content analysis provided insufficient or unconvincing answers, notably that of interpreting meaning in relation to context and perspective, which calls for methods to engage with, rather than stand outside of the culture of people on the autism spectrum.

Film and Television Tempo Adjustment for People with Hearing Loss and Cognitive Decline

Alaina Schempp
(University of Kent)

Empirical projects within the humanities are duty-bound to engage with and improve public health and welfare. This paper offers a straightforward solution for tackling a social welfare problem. Watching television accounts for half of all leisure time of western retirees and as people age, the number of hours spent watching television increases. For many, reaching old age can mean a decline in the physical and cognitive abilities that allow them to enjoy simple pastimes like following the story of their favourite programme. Mobility-impaired individuals use television to stay connected to the outside world, but hearing loss and cognitive decline could lead to further social isolation. One-third of people aged 65+ experience disabling hearing loss and recent studies associate hearing loss with cognitive decline. The question for cognitivists in the humanities, particularly in film and media studies, is: what can we do about improving the lives of our aging population? My paper focuses on the problems that aging adults with hearing loss and cognitive decline face while watching films and television. Subtitles and closed caption help only in cases where individuals can keep pace with spoken dialog. If the overall tempo of the audiovisual media were slowed down, then spectators would have time to read and process the dialog. Adjusting the overall tempo would allow individuals suffering from hearing loss and cognitive decline to once again enjoy this simple pastime. I further suggest that industry should foster audiovisual media that relies on editing, cinematography, and mise-en-scène with a de-emphasis on sound.

1D: Learning Processes

Room 7; Chair: Naomi Rokotnitz

Narrating the Birth of Narration: The Challenges and Possibilities of Fictional Representation of Language Acquisition

Brad Bolman
(Harvard University)
Rennie Pasquinelli
(University of Michigan)

Cognitive scientists, following Noam Chomsky's pioneering work on "universal grammar," have suggested that the pace at which children acquire language exceeds any explicit instructions they receive. They argue that this "poverty of the stimulus," the fact that children receive relatively limited sensory data to learn their first language, presupposes some innate linguistic capacity as a necessary supplement to experiential language acquisition. These "rules" or "universal grammars," which can be tested to some extent, remain partially obscure.

In a presentation at the conference "Reconfiguring the Human and Non-Human", Merja Polvinen argued that there are particularly acute narrative challenges in articulating the functioning of consciousness, particularly in distinguishing between "low-level" embodiment and "higher-level" thinking. Further, she suggests that scientific accounts of consciousness can be supplemented by the literary. In our

paper, we extend this literary analysis of the emergence of cognition by focusing, in particular, on the acquisition of language by children.

We read transversally across contemporary research about language acquisition and fictional works that depict the process of children acquiring language as well as the emergence of narration — Gunter Grass's *The Tin Drum*, Emma Donoghue's *Room*, and Yorgos Lanthimos's *Dogtooth* among others — in order to show the challenges “the poverty of the stimulus” offers to conventional narrative techniques as well as the possibilities for fiction to articulate language-learning in modes that allow for inventive understandings.

A Necessary Temptation: How Enactivism Reveals Essentialism as Key to Creativity in Lecoq Pedagogy

Maiya Murphy
(National University of Singapore)

there is no such thing as absolute and universal neutrality, it is merely a temptation
-Jacques Lecoq

Jacques Lecoq's theories and pedagogy grounded in the moving body make widespread use of essentialism in both practice and theory. This attribute often repels scholars in a postmodern age who acknowledge the problems of essentialism. As a result, not until recently has much scholarly attention been paid to his over 50-year long career that influenced generations of theatremakers. While Lecoq disavows that there is any “absolute and universal neutrality,” he uses essentialist ideas and corresponding practices repeatedly, and in another passage calls such rhetorical and practical moves “necessary” (Lecoq, *The Moving Body* 20). Lecoq is, of course, historically situated in the theatrical past of his time and location, but such an acknowledgement cannot fully account for how and why these practices are continue to be used by practitioners. Applying principles from cognitive science can illuminate how essentialism functions and why it might be “necessary” in his actor training practices. Looking at his pedagogy through the lens of the 4E's that suggest that cognition is embodied, embedded, enactive, and extended, this paper uses the concepts of basic-level categories, image schemas, and frameworks from the philosophy of science to see how these essentialist practices might help the actor to understand and shape cognitive priority in performance, particularly body-based communication that was so central to Lecoq.

'Applications of Cognitive Science in Scenographic Reception and Processes': Scenographic Contraptions

Kristina Penna
(University of Leeds)

In my Practice as Research projects 'Work Space I- a scenographic workshop on consciousness', 'Work Space II- Attempts on Margarita (multiple drafts)' and 'Work Space III- Phishing Things Together (the predictive mind)' I use cognitive theory imaginatively as a springboard for devising performance experiments / events / workshops. The aim is to bring into dialogue insights of cognitive studies related to the 4E radical framework and neuroscience research on consciousness with the 'how' of the workings of scenographic performance practice, in order to produce scenographies of process and simultaneity and to further analyse dynamic scenographic processes, operations and reception.

I will use examples from the above practice-led investigations (WS I, WS II and WS III) in order to introduce the use of 'scenographic contraptions' and 'contraption-environments' as a method tool for encouraging a conversation between the audience/participant and the work. Drawing from radical enactive cognitive frameworks which shift existing views on the notion of the Gibsonian affordance (Rietvelt and Kiverstein 2014, Bruineberg and Rietvelt 2014) the predictive mind (Clark 2015) and an enactive approach of the notion of sense and non-sense

(Cappuccio and Froese 2014) I will attempt to answer the question: How might 'scenographic contraptions' or 'contraption environments' impact on how the audience establishes a common ground with co-audiences during a performance? And in extend in what ways might we use enactive and radical embodied cognitive neuroscience to investigate the audiences' experience of dynamic/scenographic systems?

1E: Cognitive Repertoires

Room 5; Chair: Kay Young

On the Cognitive Repertoire of Aesthetic Experience:

Cognitive Universals in Aesthetics and Historical Contexts

Ancuta-Maria Mortu

(École des Hautes Études en Sciences Sociales)

Cognitive trends in aesthetics are believed to have emerged in the last decades of the twentieth century. Nevertheless, a historical enquiry into the roots of aesthetic cognition reveals the all-pervasive contribution of traditional philosophical aesthetics to contemporary cognitive approaches. My paper aims at questioning the continuing relevance of this tradition to our understanding of aesthetic cognition by means of the concept of "cognitive repertoire". As I shall prove, cognitive repertoire is an operational concept in both philosophical and scientific aesthetic research that allows us to reconstruct the cognitive architecture of aesthetic experience. According to a famous definition of Neisser (1966), cognition refers to the elaboration, transformation and construction of information through various psychological processes such as memory, imagination or attention. As for the repertoire, it generally designates a stock of knowledge or skills (Iser, 1976) that we play, so to speak, every time we engage in an action. I aim to show, through a study in diachrony of several aesthetic doctrines, that there are cognitive universals in aesthetics that stand the test of time despite the changes in conceptualization of both cognition and aesthetic experience.

Narrative and the Limits of Reason: Paradoxes, Logic, Cognition

Erika Fülöp

(Lancaster University)

The relationship between cognition and the laws of reason(ing) consecrated by logic is a thorny issue: to what extent do the latter grasp the structure and limits of how the human brain processes propositions? Does logic express the actual boundaries of reason – or does it rather set them? Might culture be limiting nature in this respect?

Before answering these questions, we need to specify what logic we are speaking about. "The laws of logic" are still generally understood to refer to the classical Aristotelian principles: the law of non-contradiction (LNC), the law of the excluded middle, and the law of identity. Twentieth-century logicians, however, have seriously questioned the first two, which no longer should be taken for granted, and which indeed may not be "by nature" present in, or indispensable for, human cognition.

Literary fiction has long been playing with the limits of the possible not only in terms of physical possibility, but also in terms of logical possibility, and not only as an element of plot, but also in narrative structure. Paradoxical self-embedding – when the book we are reading is included in the diegesis – performs a particularly strong challenge to classical logic and tests the reader's ability to think beyond the LNC. As such, it can be read as an illustration of a non-classical logic that

extends the limits of reason and perhaps better matches the actual limits of human cognition, such as dialetheism, which denies the universality of the LNC.

This paper will present some examples of such narrative structures from Don Quixote to Jacques Roubaud's 1990 *Hortense in Exile*, examine how they challenge classical logic and hint at dialetheism, and thereby serve as a guide towards a more flexible understanding of the boundaries of reason and of human cognition.

A Cognitive Rhetoric of Infinity: Evoking Endlessness in Romantic and post-Romantic poetry

Alberto Godioli
(University of Groningen)

The evocation of infinity, i.e. the attempt to defy the limits of human language and experience by hinting at something that exceeds them, clearly plays a crucial role in the Romantic aesthetics of the Sublime; the classics of early nineteenth-century European poetry, from Coleridge and Wordsworth to Leopardi, provide countless examples of this pattern. In the latter part of the century, a similar attempt – with a stronger emphasis on the fragile and deceptive nature of its ideal goal – characterises the most influential poets of the post-Romantic era, such as Baudelaire, Rimbaud, and Mallarmé.

This paper will examine a corpus of selected texts by European poets from the 19th and early 20th centuries. Special attention will be given to a series of largely unexplored similarities underlying the framing of infinity in the corpus texts, including for example: 1) Words belonging to the semantic areas of infinity, excess, and indeterminacy being positioned at the end of a line, thus creating a contrast between the visual limit of the text and the very notion of unlimitedness; 2) Binary structures involving a prolonged use of antithesis; 3) Drawing abstract qualities from concrete elements (e.g. 'the blueness of the sky'); 4) Set formulas of doubt and surmise.

Building on the theoretical framework provided by studies like Reuven Tsur's *Kubla Khan* and Alan Richardson's *The Neural Sublime*, I will analyse such similarities as instances of a shared cognitive grammar, with the aim of highlighting how specific rhetorical devices can be used as a tool to explore the very limits of perception.

14.15 – 15.45

Parallel panel sessions 2

2A: Emotion, Cognition, Text: New Approaches to the Cognitive Study of Emotion (2)

Room 6; Chair: Riikka Rossi

Testing the Limits of Narrative Empathy: The Case of Unreliable Narration in Pentti Holappa's "Boman"

Elise Nykänen
(University of Helsinki)

This presentation takes part in the recent debate in the field of cognitive narrative theory on narrative empathy, emotional effects, and reader response. In my talk, I will discuss the already contested idea of the empathy-altruism hypothesis, implicating the purely positive effects of narrative empathy in transforming readers into more enlightened citizens (e.g. Keen 2007). My presentation focuses on the ways in which literary texts utilize narrative's potential to manipulate

audience's capacity to feel with fictional others for different aesthetic purposes. The existing research on narrative empathy still lacks more elaborate study on the actual practices, reading strategies, and devices used by literary texts. Rather than providing any specific tools for textual and rhetorical analysis, the existing studies have focused on listing formal techniques that might lead to an empathy-generating effect (including character-identification). In order to demonstrate the problems!

of such an approach I will analyze a modernist text, in which the process of character-identification is challenged by the presence of the fantastic in a first-person narrator's tale: Pentti Holappa's "Boman" (1959). Discussing the methods this short story uses for provoking allegorical reading I will show how the (unreliable) first-person narration can be employed both for generating bonding and estranging emotional effects (Phelan 2007). The rhetorical communication in this story is aimed at evoking empathy, but also confusion and estrangement in the readers as they follow the interactions between the character narrator and his animal companion: an intelligent, speaking dog.

Language and Happiness

Laura Visapää
Ilona Herlin
(University of Helsinki)

The topic of this presentation is happiness and its relation to linguistic practices. The presentation introduces research, which combines linguistic research with insights from an array of sciences, including neuroscience, philosophy and anthropology. It wishes to participate in the exploration of the scientifically interesting intersection of habitual behavior, individual agency and cultural norms and instruments. The aim is to contribute to the building of conceptual, empirical, and practical interfaces between the humanities and other sciences. As has been extensively shown in recent years, there is a two-way interplay between, e.g., cultural and biological aspects of human behavior. Cultural behaviors shape neurology and physiology in ways that we have only recently begun to understand.

While incorporating insights from different fields, this presentation focuses on language. It is claimed, that daily linguistic and interactional practices have not been given sufficient attention in projects related to human well-being. Language mediates our relations with others – and our relations with ourselves. The majority of our daily activities happen through language: we tell stories, we form groups and relationships with others, using language as a means of including some and excluding others. Although language and interaction lie at the heart of human sociality, they have been practically ignored in most existing research on happiness and wellbeing.

Examining linguistic data, the presentation shows how "happiness" and "well-being" grow out of interactional and linguistic practices. Recent findings in neuroscience suggest the vast power of experience-dependent neuroplasticity. The brain is continuously restructured according to the experiences one has. That is, we can use our mind to change our brain to change our mind. Linguistic and interactional habits are one important layer of experience. Since they are relatively controllable, they can be used as a means of shaping experience and self-directing neuroplasticity. Changing one's linguistic and interactional habits, by becoming more aware of them and actively guiding them into new directions, can therefore potentially change the felt quality of life not only socially but psychologically.

Extracting Meaning from Mind: Experimental Validation Studies for Image-Schemas of Emotion Verbs

Ilona Tragel
Jane Klavan
(University of Tartu)

The aim of cognitive linguistic studies is to pin down the regularities of the general conceptual structure as reflected in language. One of the central questions in this line of research is a very basic one – how to do it. In this paper we discuss some of the ways how linguists are able to extract meaning from the language user's mind by focusing on the image-schemas of emotion verbs. We do not yet have a full understanding of the exact nature of the data obtained using different methods and it is not clear what is the best way to study an object (e.g. semantics) that is not readily accessible to the linguist. The aim of this study is to bring us a step closer to this understanding.

Much of previous work on the image-schematic representation of verbs has focused on English (e.g. Spivey et al. 2005, Meteyard & Vigliocco 2009); our work is based on Estonian. We report the findings of an experiment – a free form drawing task. In our experiment we asked subjects to create and explain their own representation of verbs. In a pilot study, six native speakers of Estonian provided schematic representations of 10 abstract verbs. The subjects were asked whether they think verbs have a direction and instructed to draw it. The results of our previous experiments (Authors 2014, 2015) confirm the general prediction that verbs with abstract meaning have an image-schematic direction, but the specifics of the direction vary according to the type of experiment, type of verb and the viewpoint selected.

For the present paper five emotion verbs were chosen for detailed analysis: armuma 'to fall in love', meeldima 'to like', igatsema 'to miss', kartma 'to fear' and imestama 'to wonder'. We present the qualitative analysis of the results of the free form drawing task, and compare these results to the results of our previous experiments. In general, orientational metaphors were systematically used: verbs with a positive meaning (armuma 'to fall in love', meeldima 'to like') correlate with the right and upward direction (GOOD/HAPPY IS UP). An important finding of our study pertains to viewpoint – the schematic representation of verbs depends on the viewpoint selected by the subjects. This result may explain some of the divergence in the results of previous studies.

Our paper contributes to an understanding of the embodied meaning of emotion verbs. By comparing the results of three different experiments, our study promotes methodological pluralism and discusses the seminal question of cognitive linguistics – how to extract meaning from mind.

Free Indirect Discourse and Typification of Original Emotions: From Literary Exemplum to Textual Folk Psychology

Maria Mäkelä
(University of Tampere)

Cognitive narratology, in its urge to see the cognitive universals at work in reading fiction, has overlooked literature's distinctively textual means of thematizing the attribution of emotions to others. I will demonstrate how the linguistic and narrative mechanisms of typification and schematization in the construction of ostensibly unique and extraordinary emotions are negotiated in the sentimental tradition of occidental literature and in relation to the cultural code of the exemplum. I draw my theoretical framework from Fludernik's (1993) cognitive-narratologically pioneering theory of schematic speech and thought representation, maintaining that reproduced speech or thought is never faithful to the original utterance but instead, is a prototypically modeled approximation, drafted according to situational

and narrative frames. In the context of sentimental literature, we may ask who is representing whose emotions if the expressive discourse has no psychological origin but is rather based on imitation and approximation.

The 17th and 18th century novel, with its overemotional heroines and gossipy, all-knowing societies, shapes the now conventional narrative modes for the representation of inner lives of fictional characters. Yet the oscillation between the socially shared and the imaginatively constructed is still tangibly inscribed in the narrative discourse of these novels, as the undeveloped novelistic modes such as early free indirect discourse verge on the non-literary forms of social cognition. However, I will go on to claim that instead of eliminating this ambiguity between folk psychology and imaginary construction, the evolution of novelistic techniques has maintained this tension, grinding it into new compositions of social and fictional mind attribution. As recent examples, I will look at the best-selling biographer Andrew Morton's constructions of the extraordinary yet exemplary emotions in *Diana: Her True Story* (1992) and *Monica's Story* (1999).

2B: Object Relations

Room 12; Chair: Matt Hayler

'Home Time': Exploring anthropomorphic temporal synchronisation in Lisa Gorton's *The Life of Houses*

Isabelle Wentworth
(University of New South Wales)

Recent work in the neuroscience of time perception has revealed an astonishing phenomenon: an unconscious capacity to 'catch', or synchronise with, other people's subjective experience of time. This process has, I argue, been profoundly intuited by authors in their literary explorations of the human patterns of time and subjectivity. In fact, I believe literary discourse offers a privileged site for exploration of temporal synchronisation, as authors are able to frame, refract and nuance the relationships they depict, so broadening our understanding of the role of subjective temporality within them. However such an investigation is in danger of becoming unidirectional, importing insights from cognitive science to literary criticism rather than generating a dialogue in which literature offers reciprocal cognitive insights. My paper attempts such a reciprocation: I contend that Lisa Gorton's *The Life of Houses* evidences an aspect of temporal synchronisation that is yet to be explored by neuroscience. I refer to this as anthropomorphic temporal synchronisation, in which individuals may empathetically align with an object's perceived temporal mode. The plausibility of this theory lies in neuroscientific research into motor resonance systems, embodied cognition, and proprioception's influence on our 'internal clock'. However, I believe a cognitive-historicist and linguistic analysis of literature is best positioned to explore the individual, cultural and philosophical implications of an anthropomorphic synchronisation of time. In concert with cognitive critics such as Blakey Vermeule and Mary Crane, my research attempts to move beyond dichotomies of body-brain, biology-culture and art-science, hopefully contributing interpretive possibilities for literary criticism and a new direction for cognitive science's understanding of time perception.

Puppetry and Cognition: Metaphors of Coupled Embodiment

Teemu Paavolainen
(University of Tampere)

Taking off from my previously "ecological" approach to theatrical objects (2012), the paper is a first probe toward a cognitive study of puppetry, on a generally 4E ground spanning from cognitive linguistics to ecological psychology. The topics are threefold: after (1) a brief introduction to the perception of animacy

and agency – drawing on developmental psychology and on cognitive studies of religion – the paper focuses on the varieties of schematic cognition that different culturally specific forms of puppet theatre seem to afford, as well as on their various metaphorical entailments. While section (2) argues that standard Western theories and histories of puppetry often reflect what the authors take to be prototypical of the “coupled embodiment” that arguably defines the genre, section (3) extends the discussion from such prototypes –involving schemas of part-whole, centre-periphery, and verticality – to their attendant metaphors of power and politics, often indeed troubled by their potential connotations of theatre in general and puppetry specifically. As for research material, the paper’s focus is mostly on previous scholarship on puppet theatre, along the often semiotic lines of Proschan, Jurkowski, Bell, Tillis, Kaplin, Shershow, and Veltruský. Of the possible topics listed in the call – apart from theorizing a curious range of coupled embodiment specific to puppetry and object animation – the paper explicitly addresses the question of how cognitive universals are related to sociohistorical particulars.

“The Future of Nostalgia”: A Cognitive Framework for Still-Life Paintings by Paul Gauguin

Caroline Shields
(University of Maryland)

This paper employs the structure of nostalgia as understood through scientific and humanistic perspectives to examine two still-life paintings by the nineteenth-century French artist Paul Gauguin. These paintings of oranges and oleanders, which Gauguin composed shortly after his arrival in Tahiti, evoke Vincent van Gogh and the highly productive period both artists enjoyed while living together in Arles, France, in a yellow house they called the “Studio of the South.” Gauguin left for Tahiti a year after van Gogh’s death, looking to fashion a new kind of studio in the tropics. Created at a time when Gauguin left his social and professional support groups in France to embark upon an entirely new life overseas, these still-life paintings embody the duality of longing and hopefulness that defines nostalgia. Recent studies in psychology as well as cultural theory have found that nostalgia is a positive emotion that arises in response to perceived social threats, boosting an individual’s self-esteem in the present and promoting optimism for the future. My paper employs a framework and vocabulary derived from several disciplines within cognitive science to create a scaffolding—a new point of entry through which to examine and interpret the artist’s paintings and corresponding writings. This interpretive lens reveals the still lifes as a site of negotiation: by looking backward to Arles from Tahiti, Gauguin could re-imagine the Studio of the South and determine what his past would mean for him in the present, and what his artistic practice would become in the future.

2C: Empirical Aesthetics (2)

Room 8; Chair: Ilona Roth

Getting a Grip on Neuroaesthetics: An Interdisciplinary fMRI Study of Pleasure and Affect in Poetry

Cody Mejeur
(Michigan State University)

Some of the greatest difficulties in overcoming the nature/culture opposition and bridging the divide between discourses in the humanities and the sciences arise in matters of differing tools and methodologies. How does one deploy scientific methods in the humanist study of aesthetics, where concepts resist steady definition and observation, without being reductive? Conversely, what role does humanistic inquiry play in advancing scientific experimentation? Or are such questions built on the problematic assumptions that divide the two to

begin with? This talk will suggest we can approach these questions anew through interdisciplinary experiment design, discussing the development and preliminary findings of a new fMRI study on poetry reading and aesthetic pleasure at Michigan State (Phillips), part of a global collaboration through New York University on the neuroscience of art, music, and poetry.

The MSU poetry study focuses on attention and aesthetic pleasure in poetry, particularly sonnets, investigating the cognitive processes involved when we like (or dislike) a sonnet while reading. The interdisciplinary team faced daunting difficulties in experiment design at first, especially in how to define—much less capture—what aesthetic pleasure is in order to study it. To account for the dynamic nature of aesthetic pleasure (and displeasure), we developed a way for participants to highlight their particularly positive or negative responses to the sonnets, allowing for the adaptive measure of participants' feelings while reading. However this presented an additional difficulty in translating the highlighting mechanic to a MRI-compatible device, a challenge the study plans to overcome by using a MRI-compatible joystick. By exploring this iterative process in the study, this paper presentation will provide new insights for navigating the tension between humanistic and scientific inquiry, using practical knowledge gained from interdisciplinary experiment design to suggest next steps for future cognitive studies.

Attention and Attenuation: Cognition and Stress Regulation in the Rhetoric of Repetition

Pascal Nicklas

(Johannes Gutenberg-Universität Mainz)

There are a number of ways to characterize poetic texts: by the cultural coding of the reading situation, by the para-textual qualities of the text, in formalist terms by the self-referentiality of the rhetorical features. Usually at least, real readers know that they are reading a poetic text when they do. One of the most salient features of poetic texts is the repetition of the same word, the same syllable or phrase. Rhyme, e.g., is a rhetorical means of repetition which quickly helps identifying a piece of text as poetry. In the context of our research into an aesthetics of adaptation, we are keenly interested in repetitive structures and their cognitive processing. In cognition, repetition can have two completely different effects in the recipient: it can either (as traditional rhetoric teaches) increase attention, or (as neurobiology teaches) lead to an attenuation of attention. The repetition of the same stimulus in a healthy subject leads to a decrease of attention to the point that further repetitions will make the subject suppress the perception of the stimulus. We are interested in specifying the conditions and mechanisms triggering either the one or the other reaction. What are the factors making rhetorical repetition comforting and/or stimulating? When does the subject feel bored and/or annoyed? Insights into these mechanisms may enhance our understanding of the connection between aesthetic pleasure and cognitive learning protocols.

2D: Theatre, Dance, and Cognition: Language, Bodies, and Ecologies

Room 7; Chair: Edward C. Warburton

“Now is the winter of our discontent’: Cognitive Poetics in Performance and Rethinking What It Can Mean to Mean”

Amy Cook

(Stony Brook University)

When I first began using cognitive linguistics to explain the impact of how

Shakespeare makes his meaning—as opposed to what he means, a more traditional avenue of research—I turned to Conceptual Integration Theory. This allowed me to perceive how, in Shakespeare, language scaffolds future conceptualizations. A commitment to 4e cognition, however, challenges me to rethink what I meant by meaning. The humanities have historically been interested in hermeneutics: what does this poem, this play, this historical event, this painting, mean. We discover this meaning through a reading. The metaphor of reading presumes a linearity of information intake and meaning output: decoding. This metaphor of reading as meaning-making does not fit with theories of 4e cognition. This paper will take up Shaun Gallagher’s warning about the “body snatchers,” attempting to disembodify embodied cognition, and Mark Turner’s call for methodological diversity. I will argue that a cognitive approach to language and poetry must foreground the embodied and embedded nature of communication. I will use a brief example of mine on Richard III as well as Barbara Dancygier’s theory of dramatic anchors and Vera Tobin’s contribution to dramatic irony to posit a cognitive poetics that is always in performance. Those of us interested in the cognitive futures of the humanities must stop looking backward at old theories of the brain as processor and must continue to reimagine what it can mean to mean.

Becoming Elsewhere: ArtsCross and the (Re)location of Performer Cognition

Edward C. Warburton
(University of California, Santa Cruz)

This talk describes how dancers far from home can reach a necessary state of “situatedness” for performance. I consider evidence from ArtsCross, a multiyear, three-way artistic collaboration between Beijing, London, and Taipei. Drawing on 4E-based approaches to performer cognition, I argue that learning choreography, as opposed to memorizing movements, requires more than remembering a dance as task-relevant inputs and outputs. Dancers have thus developed—and choreographers have learned to exploit—an off-line, context independent, movement reduction, “marking” strategy to simulate desirable aspects of the dance. Dance “marking” is a memory device that performers employ to mark particular moments—compressing their movements in space and chunking sequences in time—to commit to memory long passages of choreography. I show how the use of marking as cognitive mechanism in ArtsCross rehearsals acted as a kind of physical re-languaging tool that re-located dancers—crossing language and cultural barriers—to create a shared physicality and a joint, felt experience of the work in progress. In this way, dance marking can be theorized as a kind of translingual (nonverbal) practice for bridging the incommensurability of language so as to establish a hypothetical equivalence between movements and their meanings. I suggest that research in 4E cognition can thus account for the workings of both online and offline cognitive processes simultaneously, opening a new window into the processes by which performers build up an adequate representation of a performance sequence that is complex both “horizontally” (extended over time) and “vertically” (multilayered at any given moment).

Leveraging the Prenoetic: An Ecological and ‘Archaeological’ Approach to Text and Embodiment

Rhonda Blair
(Southern Methodist University)

This talk will focus on 4E-based approaches to text analysis for MFA and BFA actors, directors, and designers, considering not only “practical” tools, but also the social-cultural frameworks in which they are applied, i.e., looking at text ecologically and dynamically. I will draw on Gallagher’s discussion of the “prenoetic” (signifying “certain bodily processes that we are not aware of, but that shape the way we perceive and move around the world,” Gallagher 2016) to unpack the complexities of moving from text to the many possible theatre-performance embodiments that any good text affords, and that are demanded by the dynamic and varied systems

in which a text might be embodied. I will describe approaches to working with young artists that engage and ground them in material ways that link the affective and the critical/ intellectual. This work shifts, sometimes radically, the relationships of the students' bodies and imaginations to the text by requiring them to work with a specificity of seeing and in well-articulated contexts that they haven't typically encountered before. The research in 4E cognition provides tools and perspectives not just for thinking more deeply and more clearly about the relationships among language, thought, and feeling, but also for excavating as fully as possible the potentials for expressive embodiments. While text analysis for embodiment is the main "case study" here, I will also consider other approaches to cognitive ecologies in relationship to performance, such as those described by Evelyn Tribble, Matt Hayler, and others.

2E: Temporality and Consciousness

Room 5; Chair: Howard Sklar

Toward a Theory of Time

John Lutterbie
(Stony Brook University)

Time is a thorny issue and one that is often overlooked in theories of aesthetics. I raised this issue last year in discussing G. Gabrielle Starr's *Feeling Beauty*. This year I wish to develop the theme of time by exploring different theories and arguing for an embodied, phenomenological position. The focus of the argument will be that time should not be considered a noun with relations to past, present and future, but as a process of events without incremental subdivisions. The writing of this proposal is such an event. I am not aware of the time it is taking to write it but focus on the act of writing, a durational process with dynamic dimensions that appear to speed up and slow down as the experience unfolds fluidly or encounters obstacles. This theory insists that temporal experience requires an acknowledgement of the embedded body as central to direct perception and therefore the experience of time. This theory will then be related to case studies as time permits. The two events I intend to discuss are a theatre piece by Romeo Castelluci, *The Concept of the Face: Regarding the Son of God*, and Robert Smithson's "Mirrors and Shelley Sand."

Instinct as Cognition in James Joyce's Early Prose

John Rickard
(Bucknell University)

The concept of "instinct" in James Joyce's early prose evolves, from *Dubliners* to *A Portrait of the Artist as a Young Man*, beginning as a paralyzing force that ties *Dubliners* to a "mere" animal identify but becoming a potentially liberating agent in *A Portrait*. This development is crucial for tracing Joyce's understanding of the body as a way of knowing or a source of unconscious cognition. The paper historicizes this evolution of instinct by examining possible sources for Joyce's general understanding of instinct and "unconscious cognition." Then, in a very brief survey of *Dubliners*, I will demonstrate that Joyce represents instinct for the most part as an impersonal "force" emanating from the body or the preconscious mind. Instinct in *Dubliners* is paradoxically a "force" that contributes to the stasis characteristic of this text. In *A Portrait of the Artist as a Young Man* we find a transition from this view of instinct to a new embrace of the human body as an animal body with its own particular and valuable forms of apprehension and "embodied cognition." This body-based or instinctual "knowing" ironically provides Joyce's hyper-rational protagonist with new and more powerful sources of motivation. This process continues to develop throughout *A Portrait*, as instinct becomes the key force in freeing Stephen to move away from church and country, to "listen" to his body and its growing, instinctive rejection of the status quo in

Ireland.

Nostromo and the Hard Problem: Conrad's Explorations of Autonomy & Consciousness

Richard Ruppel
(Chapman University)

Conrad was, perhaps, the darkest of the great modernist authors. His protagonists are subject to forces, both internal and external, beyond their control. The more conscious his character, the more plagued by self-doubt, the more crippled by a sense that all action is futile. Only his villains and fools have self-confidence; only they can pursue their goals with ruthless or blind determination. Conrad's self-conscious heroes are always touched and tainted by irony; they often treat even their own situations and desires ironically.

In this paper I will examine Conrad's representations of autonomy and consciousness in *Nostromo*, linking that discussion with contemporary work on the hard problem, on the great, ongoing problems of autonomy and consciousness, drawing especially on Jeffrey Gray's *Consciousness: Creeping up on the Hard Problem* (Oxford, 2004). I will take up as many of the following features as I have the time to pursue: ego construction (both male and female), consciousness and narrative form, post-traumatic memory, and other matters related to consciousness and autonomy, in both contemporary neuroscience and in *Nostromo*.

My goal for this and for my larger project is to contribute to the creation of a mutual space for neuroscientists and the study of literature.

16.15 – 17.45

Parallel panel sessions 3

3A: Affect, Empathy, Entrainment

Room 6; Chair: Anne Päivärinta

Affect and Reader Empathy in Fernando de Rojas' *Celestina* (1499)

Julien Simon
(Indiana University East)

Fernando de Rojas' *Comedia de Calisto y Melibea* (1499) is one of the first books of prose fiction written in Castilian and it became an instant bestseller. In fact, in Spain it is considered to be, by some accounts, the most printed book of fiction in the sixteenth century. The love story of Calisto and Melibea—respectively a low nobleman and a beautiful lady who's the only daughter of a noble and particularly affluent family—has its roots in the sentimental novel, but it is the go-between of the story, *Celestina*, who captures the interest of contemporaneous readers. Her name appears for the time in the title of one of the Spanish editions in 1520. Many of the translations in Italian, French, German, Dutch, Latin, English, Latin, and Catalan bear her name. And the many sixteenth-century imitations and continuations of the story will also center on the go-between, rather than on the two lovers. How did *Celestina*, and its eponymous character, move its readership and move so many writers to pen these imitations and continuations? This essay explores the roots of the affective response toward *Celestina* (the

character), pointing at the human-like way she interacts with (and manipulate) her counterparts as the possible basis of the empathy that readers and writers felt towards this character and which, I argue, was central to and responsible for the text's wide success.

Opening Minds: Dialogues between Performance, Psychopathologies and the 4 E's

Nicola Shaughnessy
(University of Kent)

'How do you show the inner workings of a person's psyche to an audience sitting 25 feet away in the dark? For theatre director David Woods, the solution is simple: get in a cardboard box' (Neil Frizzell).

The solution may appear to be simple, but engaging with psychosis through performance involves complexities of theory and practice that are central to the concerns addressed in the cognitive humanities, particularly in terms of affect and audience empathy as well as the fraught relationship between madness and creativity. The show referred to in the review above (*Give me your Love*) is a staging of post traumatic stress disorder and is the second piece in a theatre and madness triptych by the UK company, *Ridiculusmus*. Emerging from my current research on developmental psychopathologies, imaginative cognition and performance (*Performing Psychologies*), this paper takes *Ridiculusmus* as a case study to consider how theatre can transform understanding of complex mental states. The paper takes its cue from the first play in the current series, *The Eradication of Schizophrenia in Western Lapland*. Described as 'the play that wants to change the way we view mental health', the production is informed by the Finnish "open dialogue" approach to therapeutic intervention for psychosis. Whilst the split staging and structure contribute to the audience's insight into the experience of psychic distress, the dialogic therapy that has transformed approaches to acute psychosis in Finland (a network-based language approach to psychiatric care) is endemic to the play's conceptualization. Form and content coalesce as the dramatization of Bakhtin's concepts of polyphony and dialogism facilitate understanding of psychosis as temporal, dynamic and embedded. The systems theory informing this radical therapy and understanding of the relations between brain, body and environment are endemic to the principles and practices of cognitive approaches to performance. In this body of work, I suggest, we see a convergence of analytic and synthetic sciences of mind and drama as the four branches of radical cognitive science—embodied, embedded, enactive and ecological engage in dialogue with performance.

Supper in the Morning: King Lear in Broadmoor

Robert Shaughnessy
(University of Kent)

In recent years, the term 'social jet lag' has acquired an increasing currency in the social and cognitive sciences, as a label for phenomena ranging from the long-term damage inflicted by the irregularities of shiftwork to generational and gendered variations in body-clock settings (Roennenberg). Beyond 'social' jet lag, the term has been applied to more profound forms of cognitive impairment, including autism and schizophrenia (Glickman; Wulff and Joyce). In both instances, the cognitive 'jet lag' manifests itself in profoundly disordered sleep patterns which in turn exacerbate other symptoms of the condition. One implication of this is that addressing the dysfunctional entrainment of individuals with these conditions may help to alleviate at least some of those symptoms. In this paper, which builds upon my work on the relations between performance temporalities, actor-audience dynamics and Shakespeare in the framework of entrainment, (Shaughnessy), I focus on a remarkable historic intervention in a context of severe cognitive impairment, the National Theatre's performance of *King Lear* in Broadmoor Hospital in 1991. Examining the testimony of performers, staff and patients, I will argue that the

intense rapport that it generated, as well as its capacity to stimulate empathy, mutuality and recognition, was a matter of shared textual and theatrical rhythms.

3B: Text, Body and Technology

Room 12; Chair: Teemu Paavolainen

Thinking About Hacked Thinking: 4E

Cognition for the Augmented Body

Matt Hayler

(University of Birmingham)

Understanding cognition as abiding by (at least) four Es requires that the study of the ways in which we think must become intertwined with studies of embodiment. Work by, for example, Shaun Gallagher (Phenomenology), Andy Clark (Supersizing the Mind), and Don Ihde (Technology and the Lifeworld) illustrates how classical phenomenology and postphenomenology can provoke and respond to new findings within the cognitive sciences. Clark and Ihde, in particular, also demonstrate how we think alongside, with, and through our tools, how our cognition becomes entangled with our artefacts as well as with our bodies and the milieu in which we find ourselves (something I write about with regard to expertise in my Challenging the Phenomena of Technology). But what happens when those tools really become a part of us?

This paper will explore some of the implications for a 4E model of cognition in a time of increasing experimentation with wearable devices, pharmaceutical enhancements, and the implanting of technologies inside the human body. Positioning this transhuman research, or "biohacking," at a nexus of the Cognitive, Medical, and Digital Humanities, I will look at the (for now) special case of blurring the boundaries of the body, an activity which seems to perform the extension and embodiment of the enactive and embedded individual even as it offers whole new potentials for being and new ways in which cognition might become distributed (Edwin Hutchins Cognition in the Wild). In short, what might a 4E model of cognition have to deal with to negotiate 21st Century embodiment?

Algorithmic Cognition in Literary Machines:

Understanding and Hacking the Apparatus

Ana Marques da Silva

(University of Coimbra)

Fluid and unbound, a generative text is a continuous reconfiguration of possibilities that emerge from a system composed of different elements -author(s), algorithm(s) and reader(s)-, with different materialities and signifying strategies. Distributed through and emerging from human and algorithmic actors, a generative text is thus constituted by the intermediations between information and meaning, non-conscious and conscious cognizers, digital and analogue processes, and mathematical and linguistic modes of representation. But how do algorithms cognize? And how is meaning constructed in a system where the authorial intentions and the readers' experiences and interpretations are mediated by an algorithmic autonomous agent? Through the analysis of *How It Is In Common Tongues* (2012), a work by John Cayley and Daniel C. Howe, which subverts Google's search algorithms to produce a proprietary text, Samuel Beckett's *How It Is*, "regenerated from the commons of language" (Cayley,!

2012), I intend to highlight the tensions that arise from the encounter between algorithmic and human cognition, and between the regimes of information and expression. I will focus on how algorithmic cognitive processes embody the dynamics that characterize contemporary cognitive and cyber capitalism,

and reflect on the strategies of resistance enabled by aesthetic approaches to computation, such as the ones explored in the proposed case study.

(Im)movable Bodies or (Un)moving Texts? Haptic Reading Processes in Electronic Literature

Diogo Marques
(University of Coimbra)

The intensification of academic and industrial research around media devices that summon tactile/haptic functions, along with efforts to increase tangibility in the Human-Machine Interface (HMI), often come attached to instrumentalizations of both touch and gesture. Either by representing them as a superficial contact, or by making promises of presence, transparency and intimacy, such literalizations paradoxically reveal the antinomy between the human and the machine. By contrast, and consistent with the enactive cognition paradigm, the concept of cybrid bodies (cyber + hybrid) (Domingues & Venturelli, 2007) avoids such antinomies, particularly by placing the emphasis on the potential of the digital to combine the virtual and the actual (mixed reality/mixed virtuality).

Literature, in its technological condition, does not obliterate the escalation of artistic and industrial research around intersensory perception. Nonetheless, literary fields such as electronic literature often put into question phenomena intrinsic to digitality and digitization, namely, in order to rethink what means to read and write through digital multimodal environments.

One of these works is *Still Standing* (2005), an interactive installation by Jason Edward Lewis and Bruno Nadeau that demands an unmovable body in order to enable its textual database, a print-like poem previously written by the authors. In disrupting the idea of movement as a sine qua non condition for digitality, this piece asks for a “non-functionality” of its digital mechanisms in order to be fully experienced. By emphasizing a series of haptic reading processes, *Still Standing* takes the relationship between body and language to present a reverse idea of playability, as well as to draw attention to specific reading and writing processes that are not restricted to an ocularcentrist perspective.

3C: The Cognitive and Emotional Processes of Real Readers (1)

Room 8; Chair: Pascal Nicklas

Neuroimaging of Literary Reading: Potentials and Pitfalls

Roel Willems
(Radboud University, Nijmegen)

Our understanding of the brain basis of language is still largely based on findings from studies in which language is presented to participants in a rather impoverished form. Typically participants read single words, or short sentence, devoid of context and without a meaningful task for the participant. This is in sharp contrast to the much richer and contextualized way in which language has been studied in literary sciences.

Recent developments have made it possible to measure neural signals while participants engage with (literary) narratives. In my contribution to this symposium I will give example of studies using fMRI to study brain signals while participants listened to short literary narratives. These will serve as an illustration for the potentials of this approach, as well as its pitfalls. Potentials include that the approach can give a direct (not mediated by task) indication of specific subprocesses during literary reading (e.g. mental simulation). Pitfalls are the technical constraints set by the use of fMRI, and the reliance on so-called ‘reversed

inference', which is possible but should be done with caution.

Overall I aim to show that the study of literary reading with neuroimaging holds great potential for understanding real language processing in real readers, but that progress will crucially rely on tight interdisciplinary collaboration. Finally, I will argue against too strong reliance on one particular measurement technique: Advancement in this field of science will come from converging insights from a variety of methods.

Three Minds as One? Authors and Readers Imagining Intellectual Disability in Daniel Keyes' Flowers for Algernon

Howard Sklar
(University of Helsinki)

Daniel Keyes's 1966 novel *Flowers for Algernon* is comprised of short journal entries, or "progress reports," that the intellectually disabled narrator, Charlie Gordon, has been asked to write by scientific researchers. The purpose of these reports is to record the results of an experimental neurological operation that, if successful, will make him highly intelligent – but for us, as readers, they also serve as a window into his way of thinking. Indeed, in an important sense, the narrative represents a convergence of three (or more) minds: that of the intellectually disabled Charlie; of the author, Keyes, who imagined his character's unconventional, distinctly other, mind; and of each actual reader, who, based on the cognitive speculations of the author, as well as his/her own experiences with intellectual disability, conceptualizes Charlie in a particular way.

In an attempt to investigate readers' contribution to this cognitive convergence, several years ago I conducted tests with roughly 250 adolescents in four Finnish secondary schools. In those tests, participants read an excerpt from *Flowers for Algernon* and then answered a series of questions in order to determine their perceptions of, and feelings towards, the protagonist. In this presentation, I will look particularly at specific cognitive characteristics identified by readers in describing Charlie, as well as the possible connections between those features and their attitudes or feelings towards the character. I aim to show how testing of this kind can contribute to our understanding of the interaction of the "three minds" involved in the realization of a narrative.

Electroencephalography and Literary Conventions

Stefan Blohm
(MPI Frankfurt)

The human electroencephalogram (EEG) provides a non-invasive measure of ongoing brain activity that is used in a wide variety of clinical and research contexts. The technique has been applied to humans for roughly 90 years and, by now, has become a well-understood and routinely applied standard method in the cognitive sciences.

Within the language sciences, EEG research is used extensively in psycholinguistics and related fields as the multidimensional data patterns obtained via EEG allow formulating functionally and temporally explicit models of language comprehension. Its application to the study of verbal art, however, is relatively rare and its contribution to literary theorizing is marginal. As with other experimental methods, the kinds of inferences we can draw from EEG data very much depend on the way we formulate our questions. A few experimental findings are presented that illustrate how EEG can address questions of literary conventions and notions discussed in literary theory, but, in doing so, shortcomings and limitations of the method will inevitably become obvious as well.

3D: Words, Sounds, Music

Room 7; Chair: Marco Caracciolo

Subjectivity, Context, and Musical Work

Panu Heimonen
(University of Helsinki)

This paper presents a theoretical model that reconciles the experience of a performer with the surrounding sphere of cultural knowledge, which can be understood as distributed cognition. Hardly anyone denies the highly subjective nature of musical experience. Yet, analytical approaches seek for verifiable features. What do, then, these qualities depend on? When a pair of themes interact in a Sibelius symphony, for example, they need to draw on relevant transcendences in order to signify the relevant cultural context. In order to explain how this can be accomplished from the point of view of a performer a level of context is established.

Presuming that cultural knowledge resides in transcendence the question arises how is it transformed into a subjective experience? It is suggested that performance creates a contextual sphere that is able to utilize both cultural traits and a work's syntactic qualities. Dialogue in a Mozart concerto negotiates the form's syntactic constraints while simultaneously it draws from intertexts of ancient tragedies. Presuming that context is what a performer creates it is conjectured that in the context there are properties of both subjective nature and objectified universal features. This is the place where according to existential semiotics individual (Moi) and social (Soi) properties encounter. Context is what enables one to understand the nature of the dialogue in question. A work as a syntactic entity is enlarged to embrace the context. Leaning toward idealism the cultural and cognitive are on their way to seeking their common denominator.

Suasive Speech: A Stronger Defense of Rhetoric and Futures for Cognitive Poetics

David R. Gruber
(Massey University)

In his "Strong Defense of Rhetoric," Richard Lanham (1993) proclaims that all symbolic formations are rhetorical insofar as they include and exclude, structure and situate. He unravels the so-called "Weak Defense" championed by philosophers like Jean-Jacques Rousseau who assert that rhetoric is value-neutral while specific deployments are 'good' or 'bad,' appropriate or manipulative.

Despite Rousseau's views being largely rebuffed today, his particular concern over the enchantment of vocal performance proves relevant for the field of rhetoric in light of new cognitive poetics research into the affecting sounds of speech. Involuntary affective responses to rhetorical features (Jacobs et al., 2015; Menninghaus et al., 2015; Zhang et al., 2014; Ponz et al., 2014) expose the need for a Stronger Defense of Rhetoric. The body's attunement to the sounds of speech and its resonances with the external environment suggest that some ways of speaking may, indeed, be inherently more repulsive or seductive than others. If this is the case, then merely saying that all discourse is value-laden does not go very far toward addressing the concern embedded in the Weak Defense, i.e. that particular rhetorical deployments manipulate and tempt and need to be evaluated against some measuring stick.

I argue that Lanham's Strong Defense elides the vast differences in rhetorical effects and ignores the asignifying forces of the body. Involuntary, affective

bodily reactions expose the forceful impacts of some rhetorics and proposes the possibility that some speech consistently affects a broad range of affectable bodies, which have physiological similarities. This paper presentation teases out the implications per Rousseau's concerns and ultimately offers a Stronger Defense of Rhetoric that charts interlocking futures for rhetoric and cognitive poetics.

Reader as Listener: Experientiality of Verbal Music

Ivan Delazari

(Hong Kong Baptist University)

In Scher's (1968/1970) initial coinage, "verbal music" is "any literary presentation [...] of existing or fictitious musical compositions." In the light of Damasio's (1994) views on perceptual and recalled mental imagery as "concocted" by the brain and sharing the same neural topography, Scher's (1970) insight that "verbal music" in fiction is "to suggest the experience or effects of music" to the reader is worth a less skeptical consideration than it received in Wolf (1999). Literature's immersive capacities are known to not only create effects of presence, but also map body states, such as hunger in response to a "mouth-watering" narrative episode of a meal. In my paper, I suggest grading readerly impacts of verbal music from sporadic "auditory reverberations" (Kuzmičová 2013) of diegetic musical sound to more speculative contemplations of tones moving through metaphorical, yet profoundly experiential, "acousmatic" space (Scruton 1997). The intermediary function of words in transposing music to fiction is illusory, since existing music scores become effectively fictionalized within diegetic reality, where "there are no gradations of fictivity" (Schmid 2010). Thus the juxtaposition of "real [and] fictitious" sources of verbal music in Scher's definition corresponds to Damasio's indiscrimination between recalled past/ possible future images, which the "embodied reader" (Kukkonen 2014) of verbal music is invited to generate. The dynamic qualities of discourse, not its referential properties, contribute to the vividness of the reader's mental performance intensified by the subject's competences with words rather than music. Musico-literary examples are drawn from the fiction of William Gass, Richard Powers, and William Vollmann.

3E: Self and Language: New Perspectives

Room 5; Chair: Kate Costello

"The Same Person from One Sentence to the Next": The Self Inside, Outside and Between Languages in Marie Darrieussecq

Simon Kemp

(University of Oxford)

The phenomenon of the "neuro-novel" is less in evidence in contemporary French fiction than in some other literatures, perhaps due to the continuing dominance of psychoanalytic models of the mind in French culture. One notable exception is Marie Darrieussecq, who has followed her late-1990s succès-de-scandale *Truismes* (Pig Tales: A Novel of Lust and Transformation) by becoming French literature's foremost psychological novelist, drawing widely on scientific research in her representation of consciousness. This paper proposes to examine the relationship between self and language in Darrieussecq. The writer's preoccupation with the topic is clear in the recurrent theme of bilingualism in her texts, as well as in the representation of non-linguistic thought, and the interest in the pre-linguistic and language acquisition in children (to the extent of appropriating the research of P. D. Eimas and others on mother-tongue recognition in infants for the psychologist protagonist of *A Brief Stay with the Living*). I argue that Darrieussecq's novels present an implicit attack on neo-Whorfian theories that would claim a determining role for language in self-creation, and instead emphasize a consistency of self before language, between languages, and in the absence of language.

Vitality Affects and the Pre-Verbal Self of Daniel N. Stern

Kay Young
(UCSB)

How do we experience the categorical affects (sadness, joy, anger, fear, disgust, wonder) in time, amount of intensity, and degree of pleasure or pain, and how do we perceive such states of affective shift in others? What makes possible the representation of the temporal-intensity-degree shifts in categorical affects in language? The infant research and writings of developmental psychologist Daniel N. Stern dynamizes affect and helps us better understand how we experience the felt quality of affective states and how the arts come to “translate” them into symbolic representation through what he calls “vitality affects.” If we cannot perceive changes in temporal and intensity contours, we can experience such changes as performances of behavior or “style.” “Bursting,” “fading away,” “forceful” are words we use to describe forms of dynamic, kinetic feeling states—they are verbal representations of vitality affects. Focusing on Stern’s narrative of the pre-verbal infant, *Diary of a Baby*, where vitality shifts inform the infant’s moment-to-moment state of being, framed by his field-changing *The Interpersonal World of the Infant*, and *Forms of Vitality on dynamic experience*, my paper will address the non-verbal felt-quality of experience that changes in motivation, appetites, and tensions induce to whose attunement our pre- and non-verbal selves seek analogues—and eventually language.

Autobiography of a Schizophrenic Girl: a Neuropsychanalytic Reading

Sowon S. Park
(Corpus Christi College,
University of Oxford)

Few narratives can surpass *Autobiography of a Schizophrenic Girl* for its immediacy and potency in rendering schizoid cognition. Made up of two parts, patient Renee’s first-person account and therapist Sechehaye’s psychoanalytic interpretation of Renee’s case history, *Schizophrenic Girl* is a testament to the power of language to create a unified sense of self. Yet language is clearly only a fraction of the whole that is the experience of Renee’s recovery. This paper will discuss representations of shared physical actions that rely on non-verbal communication to illuminate the relevant interactions between linguistic and non-linguistic processes that form the experience of self. Neuropsychanalytical research by Carhart-Harris and Friston (2010) and recent studies on creative cognition by Beaty and Schacter (2016) will be drawn on with the aim of expanding the discussion on language and selfhood.

Parallel panel sessions 1

Monday 13th**11A: Emotion, Cognition, Text**

(1)

c: Maria Mäkelä
Anne Päivärinta
Minna Jaakola (+ Tiina
Onikki-Rantajääskö)

1B: Cognitive Meditation
c: Dan Irving
Yanna Popova
Stephan Besser
Miranda Anderson

1C: Empirical Aesthetics
(1)
c: Cody Mejeur
Christine A. Knoop
Ilona Roth
Alaina Schempp

1D: Learning Processes
c: Naomi Rokotnitz
Brad Bolman + Rennie
Pasquinnelli
Maiya Murphy
Kristina Penna

1E: Cognitive Repertoires
c: Kay Young
Ancuta-Maria Mortu
Erika Fülöp
Alberto Godioli

11.30 – 13.00

room 6

13.00 – 14.15

Lunch at Unicafé

Parallel panel sessions 2

2A: Emotion, Cognition, Text
(2)

c: Riikka Rossi
Elise Nykänen
Laura Visapää + Ilona Herlin
Ilona Tragel + Jane Klavan
Maria Mäkelä

2B: Object Relations
c: Matt Hayler
Isabelle Wentworth
Teemu Paavolainen
Caroline Shields

2C: Empirical Aesthetics
(2)
c: Ilona Roth
Cody Mejeur
Pascal Nicklas

2D: Theatre, Dance, and Cognition
c: Edward C. Warburton
Amy Cook
Edward C. Warburton
Rhonda Blair

2E: Temporality and Consciousness
c: Howard Sklar
John Lutterbie
John Rickard
Richard Ruppel

14.15 – 15.45

room 6

15.45 – 16.15

Coffee

Parallel panel sessions 3

3A: Affect, Empathy, Entrainment
c: Anne Päivärinta
Julien Simon
Nicola Shaughnessy
Robert Shaughnessy

3B: Text, Body and Technology
c: Teemu Paavolainen
Matt Hayler
Ana Marques da Silva
Diogo Marques

3C: The Cognitive and Emotional Processes of Real Readers (1)
c: Pascal Nicklas
Roel Willems
Howard Sklar
Stefan Blohm

3D: Words, Sounds, Music
c: Marco Caracciolo
Panu Heimonen
David R. Gruber
Ivan Delazari

3E: Self and Language
c: Kate Costello
Simon Kemp
Kay Young
Sowon S. Park

16.15 – 17.45

room 6

18.15

University of Helsinki Reception (University Main Building, Unioninkatu 34)

Wednesday 15th

9.00 – 10.00	Anne Mangen (University of Stavanger): The Digitization of Reading and Writing: What May Be in It for Cognitive Humanities? room 1				
10.00 – 10.30	Coffee				
10.30 – 12.00	Parallel panel sessions 6				
	6A: Historicising Affect c: Julien Simon Brook Miller Mark Pizzato Isabel Jaén room 7	6B: Gesture and Intersubjectivity c: Elise Nykänen Renate Brosch Naomi Rokotnitz BA Harrington room 12	6C: Construction and Representation of Self c: Michael Wheeler Bo Pettersson Csenge Eszter Aradi Monika Jaeckel room 8	6D: Fictional Spaces c: Raphael Lyne Alexa Weik von Mossner David Rodriguez Marco Caracciolo room 6	
12.00 – 13.15	Lunch				
13.15 – 14.45	Parallel panel sessions 7				
	7A: Second-Generation Readings of Fictional Humans, Objects and Environments c: Anna Ovaska Essi Varis Anna Ovaska Laura Oulanne Kaisa Kortekallio room 7	7C: Minds and Media c: Ben Morgan Erwin Feyersinger Lyubov Bugaeva Henry Bacon room 8	7D: Problems and Niche Solutions c: Renate Brosch Michael Baker John Sutton Michael Wheeler room 6	7E: Multimodal Nature of Creativity c: Janet Blatter Nadra Assaf Irina Ubozhenko BA Harrington (discussant) room 5	
15.00-16.00	Conference postmortem and future planning room 6				

9.00 – 10.00

Coffee and registration

10.00 –10.15

Welcome room 1

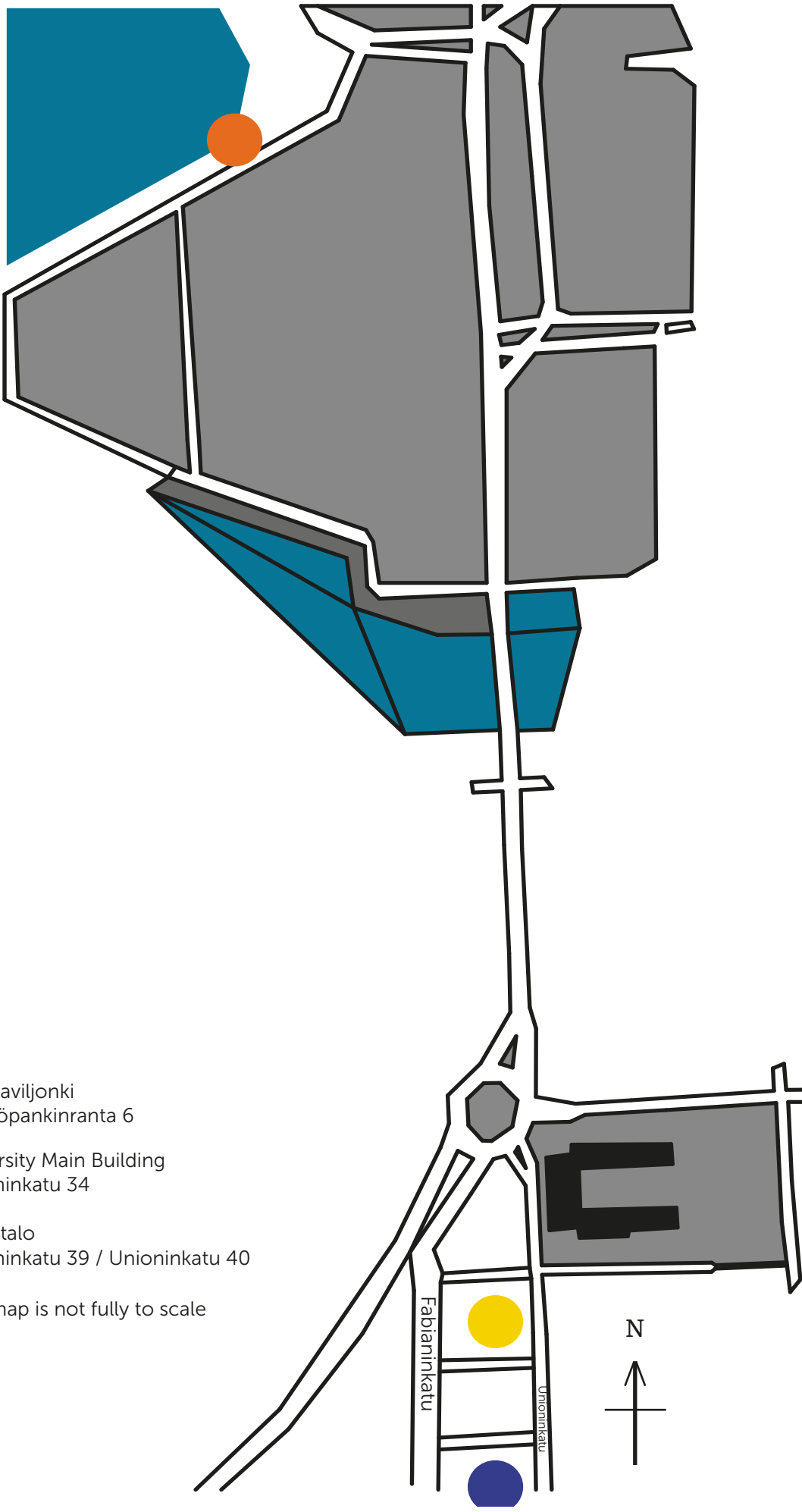
10.15 – 11.15

Peter Garratt (Durham University): Otto Inside the Museum
room 1



Tuesday 14th

9.00 – 10.00	Pirjo Lyytikäinen (University of Helsinki): Exploring Emotions in the Cognitive Study of Literature room 1				
10.00 – 10.30	Coffee				
10.30 – 12.00	Parallel panel sessions 4				
	4A: Disgust c: Riikka Rossi Scott Harshbarger Sabina Omerhodzic Nathalie Schwering room 12	4B: Kinesis in Literature and Art (1) c: John Lutterbie Laura Seymour Daniel Irving Ellen Spolsky room 6	4C: The Cognitive and Emotional Processes of Real Readers (2) c: Pascal Nicklas Eugen Wassiliwizky Marion Behrens Willie van Peer room 8	4D: Mind Wandering in Theory and Practice (1) c: Hilary Powell Felicity Callard Des Fitzgerald Hazel Morrison room 7	4E: Problems and Politics of Cognitive Approaches to Text Analysis c: Teemu Ikonen Teemu Ikonen Samuli Björninen Tytti Rantanen room 5
12.00 – 13.15	Lunch at Unicafé				
13.15 – 14.15	Deirdre Wilson (University College London and CSMN, Oslo): Explaining Metonymy room 1				
14.30 – 15.30	Reflective roundtable with Peter Garratt, Pirjo Lyytikäinen, Anne Mangan and José Filipe Silva room 1				
15.30 – 16.00	Coffee				
16.00 – 17.30	Parallel panel sessions 5				
	5A: Emotional Entanglement with Fiction c: William Flesch Laura Quinney William Flesch Karin Kukkonen Blakey Vermeule room 12	5B: Kinesis in Literature and Art (2) c: Amy Cook Kathryn Banks Raphael Lyne Guillemette Bolens room 6	5C: Social Metacognition c: John Sutton Iida Pöllänen Kate Costello Tommi Kakko room 8	5D: Mind Wandering in Theory and Practice (2) c: Felicity Callard Marco Bernini Hilary Powell room 7	5E: Disciplinary Trajectories c: Richard Ruppel Ben Morgan Denis Akhapiin Gábor Simon room 5
19.00 – 22.00	Dinner at Restaurant Meripaviljonki (Säästöpankinranta 6)				



Meripaviljonki
Säästöpankinranta 6



University Main Building
Fabianinkatu 34



Metsätalo
Fabianinkatu 39 / Unioninkatu 40

This map is not fully to scale

Fabianinkatu

Unioninkatu



Tuesday 14th June

9.00 – 10.00

Room 1:

Keynote Lecture: Exploring Emotions in the Cognitive Study of Literature

Pirjo Lyytikäinen
(University of Helsinki)

While the ability of fictional stories not only to describe and evoke emotions but also to shape emotion systems is an acknowledged fact, the multiple ways by which literature has an emotional impact on its audience are still largely unexplored. In my paper I will try to delineate how the cognitive study of literature could provide a suitable and helpful theoretical and methodological frame for this study and what kind of areas the textually oriented study of literary emotions needs to cover. This approach presupposes that the concept of cognition is understood in its inclusive meaning; it is necessary to see emotions and affects as integral to human cognition. There are good grounds for this presupposition. I follow the usage of the current research on emotions identifying itself as cognitive studies where the term cognition generally refers to all mental processes and frequently regards all cognition as 'affective' (e.g., Colombetti 2014). This permits us to think of cognitive poetics encompassing the poetics of emotion, too. I use mainly Edgar Allan Poe's "The Fall of the House of Usher" to illustrate the ways in which literary texts produce emotion effects in the authorial audience.

10.30 – 12.00

Parallel panel sessions 4

4A: Disgust

Room 12; Chair: Riikka Rossi

"Brave New Yuck!" The Disgust Response in and toward Utopian Narratives

Scott Harshbarger
(Hofstra University)

This paper explores the relationship between cognition and emotion in narrative by examining three examples of utopian thought and reflection in light of recent cognitive neuroscientific research and theory regarding disgust. Hawthorne's "The Birth-Mark" (1843), Huxley's *Brave New World* (1932), and Transhumanism's prognostications (Bostrom 2005, Tirosch-Samuelson 2011) probe the boundaries of what is acceptably human, both depicting and inviting an emotional response which has become the focus of a great deal of recent scholarly attention (Strohming 2014).

Having evolved "from a rejection response that protects the body from 'bad' foods, to a rejection system that protects the soul" (Rozin et al. 2008), disgust varies greatly from individual to individual, culture to culture. Researchers have studied correlations between disgust and mental disorders (Husted et al. 2006), humor (McGraw & Warren 2010), political orientation (Inbar et al. 2009), and moral judgment (Schnall et al. 2008). A largely learned response with significant biological dimensions, disgust has proven to be a "prototypical example of the interaction of affect and cognition" (Rozin 1987).

Disgust reactions are particularly relevant to narrative, in that “bodily reactions to real events (e.g., nausea, arousal) come to be so well learned that whenever people merely think about a similar situation, they get an ‘as-if’ reaction in the parts of their brains that control or sense those reactions” (Schlasser et al. 2008; Damasio 1994). Utopian thought and literature present a variety of such “as-if” scenarios, eliciting responses in which the visceral and cognitive are inextricably intertwined. Focusing on disgust felt by characters (real or imagined) to the humanity they wish to transcend, as well as disgust felt by readers to the violations of humanity presented in these scenarios, this paper throws light on the embodied processes by which readers respond to narrative.

Disgusted by Robert Cohn: A Moral Emotion Gone Immoral

Sabina Omerhodzic

(Johannes Gutenberg-Universität Mainz)

Mucus, feces, and maggots belong to a large group of biological disgust elicitors triggering a set of automatic reactions which have been protecting our and our ancestors’ bodies. Disgust is thus a universal emotion. What has made it unique, however, is its expansion into a cognitive emotion: After millennia of developing alongside human civilization, its automatic reactions are now also elicited when we assess socio-morally disgusting behavior. This interaction of primal and cognitive disgust is greatly responsible for what we are least proud of as human beings: in-group/out-group behavior culminating in racism and genocide.

When engaging in fictional stories, our brain runs the same programs it has been developing since evolutionary times, reacting to the same triggers, albeit textual and metaphorical, that elicit disgust. Consequently, socio-moral disgust makes us highly selective and judgmental towards fictional characters, dividing them into in-group and out-group members. But how are our involuntary reader reactions challenged if disgust reactions towards a type of character have become sociohistorically proscribed?

This question is addressed by the Jewish character Robert Cohn in Hemingway’s *The Sun Also Rises*. The description of Cohn’s behavior copiously exploits the vocabulary of disgust, inevitably triggering this emotion. Although his behavior is not related to his Jewishness, Western society has become hyper-sensitive to moral transgressions and possible offenses, recently resulting in trigger warnings on book covers and linguistic censorship. Are we ‘allowed’ to scoff and shudder at Cohn nowadays? I argue that we are, and that our reading pleasure is heightened due to this internal emotional discussion of the permissiveness of disgust, a discussion facilitated by the sociohistorically determined reconfiguration of a universal emotion.

Extreme Reader Reactions: How Disgust, Contempt and Anger Bias Our Moral Judgements

Nathalie Schwering

(Johannes Gutenberg-Universität Mainz)

When we engage with a literary text, instant feelings of approval or disapproval can bias us in favour of or against fictional characters, their actions, or even their representations. Morally challenging texts, especially those dealing in unreliability, require an unusual amount of reader activity where deception detection and moral judgement are concerned. Making moral judgements is a constant human activity requiring both moral intuitions and moral reasoning to varying degrees. Our other-condemning moral emotions of disgust, contempt and anger can override preferred responses even if we understand a text’s manipulative narrative techniques on the cognitive level. Interestingly, these readerly emotions are not always directed only at the text, sometimes they extend to the author as well. If readers feel tricked, deceived or cheated by a complicated metanarrative text, their anger might be aimed at the author for abusing the reader’s trust. But is there a

contract between author and reader, and can it really be broken? Why do we feel betrayed by literary characters, or authors, for that matter? Are authors obliged to cater to naive readerly expectations of poetic justice? Using select works of Ian McEwan, I will show that narrative devices geared towards emotional priming can act as biasing devices tapping into our evolved moral systems, thereby influencing readerly judgement. I argue that while disentangling our cognitive and affective biases as well as distinguishing to what (or whom) precisely we are reacting might present a challenge, the activity of doing so can be rewarding and lead to deeper insights into the mechanisms of our reading experience.

4B: Kinesis in Literature and Art (1)

Room 6; Chair: John Lutterbie

The Genre of Non-Conformist Autobiography and Defiant Gestures

Laura Seymour
(Birkbeck College, University of London)

An enactive reading of socially non-conforming gestures in the early modern era and present day.

Early modern people were fascinated by the idea that you could tell from a person's gestures (even down to tiny details like the ways their eyes moved during official ceremonies) whether or not they were a religious or social non-conformist. More recently, early modern obsessions with the dangers of both hypocrisy and non-conformity, and the blurred boundaries between theatrical and ceremonial gestures, have been uncannily echoed in responses on social media to occasions like Jeremy Corbyn's bow during London's 2015 Remembrance Day service. Early modern communities' responses to non-normative gestures were often shockingly violent, from the burning of religious heretics to the violence meted out against early Quakers like Thomas Ellwood who refused to bow or take off their hats to authority figures.

This paper will examine how early modern texts used what we now can think of as a Foucauldian notion of 'docile bodies'. As Foucault relates in *Discipline and Punish*, subjects' bodies are ideally malleable: just pliable enough for the state to manipulate them, and then ideally fixed forever in the form dictated by the state. The neuro-philosopher Catherine Malabou argues that if we seize back control of the malleability of our bodies and brains for ourselves, we can shape our thoughts and gestures in a way that breaks the accepted political mould.

My paper uses Malabou's idea of 'destructive plasticity' to examine various connected early modern and present day examples of people who defy gestural norms in official ceremonies. What does it mean cognitively when subjects take control of their own neural plasticity in this way? In what different ways can Malabou's idea of neural plasticity be applied to gesturers in different historical periods? And what (enactively) do socially-defiant gestures mean for the communities within which they are embedded?

Eating Fish Alone: Kinesic Description and Reading for Presence

Dan Irving
(Stony Brook University)

This paper is about the experience of reading weak-narrativity texts, or the sort of strangely-told stories which Brian McHale (2011) describes as "episodic, disjointed, weakly plotted, picaresque in structure rather than strongly end-oriented." I suggest here that kinesic description might serve as an access point for experiencing first-person presence in a literary narrative. In the introduction to her important study,

Guillemette Bolens points to the description of a smile in Proust's *Swann's Way* to suggest the interpretive value of kinesic intelligence. In most cases of well-told, strongly-narrativized, end-oriented texts, I am inclined to agree with such a claim. But kinesic description - like language itself - can do far more than just communicate information (such as in the interpretation of a smile), and when faced with curiously-told weak narratives, such interpretive modes of reading oftentimes fail to satisfy.

Building on recent claims (Kuzmicova 2014; Caracciolo 2014; Popova 2015) that readers experience narrative from an enactive first-person rather than representational third-person perspective, I suggest that kinesic description can serve as an access point for the becoming-present of an experimental storyworld. An interpretation-focused mode of reading cannot due justice to weak-narrativity texts, but I argue that presence-based reading can help us make something of these strange stories. To contextualize my argument for a presence-based view of reading, I will be looking at two brief stories by Lydia Davis. I will also turn to Kenneth Goldsmith's *Fidget*, a narration of one man's bodily movements made across a single day, to discuss readers' approaches to a kinesic informational overload.

Getting Into the Picture? How Far?

Ellen Spolsky
(Bar-Ilan University)

Is there a border between pleasure, excitement and disgust or fear? Pushing the envelope? Or is it not a border - not a gradual switch, but rather a perspective switch, or the genre - the third personhood that allows us stare, to prolong the bodily experience, to feel it more deeply? To pretend it's 1st personhood?

I would like to try out distinguishing 4 spectra of kinesic information: 1) proprioception, 1st person - what my own body tells me about my reaction to external or internal phenomena. (my eyes are tearing, my stomach is growling, 2) mirror/ relational, as 2nd person - in the presence of another (life, play, film?) feeling a sexual reaction in my body, searching for immediately needed information in face of a threat, or a poker game, (children, animals watching for the border between play and threat) 3) abstraction, 3rd person perspective, as when looking at a painting in a museum 4) social ethical when what we suddenly know means I have not only feel something in relation to another but also act- move my body or parts of it? Swing a bat at a ball, push someone out of danger, run away? (Or are these 2nd person knowing with the expansion of a culturally learned, rule-guided, and/ or ethical reaction?

4C: The Cognitive and Emotional Processes of Real Readers (2)

Room 8; Chair: Pascal Nicklas

Emotional Power of Poetry - a Physiological Enquiry

Eugen Wassiliwizky
(MPI Frankfurt)

Poetry co-existed over millennia alongside of other forms of human aesthetic expression due to its unique aesthetic merits. Up to date, however, no empirical research has been conducted on the emotional effects and the aesthetic pleasure derived from poems. Using psychophysiological measures and neuroimaging, we demonstrate that recited poetry is a very potent emotional stimulus, able to elicit peak emotional experiences. These strong aesthetic responses are governed by mesolimbic brain circuits engaged in primary rewards. Moreover, the occurrence of

peak emotional experiences provides insight into structural patterns of poetry.

Quantitative Research in the Humanities: The Use of Surveys

Marion Behrens

(University Medical Center Mainz)

Surveys are well established and frequently used methods for conducting research in social sciences, recently spreading their implementation to studies targeting culture and the arts. Basically, a survey is a method to collect and analyze data representing an opinion or a rating given by an individual person. But, by including more than one participant in a survey, it is possible to gather information over a whole group or specific subgroup as well. Thus, even general conclusions about the behavior of an underlying population can be inferred by applying principles of statistics on data from a representative cohort.

The advantages of performing surveys in experimental research are the high representativeness by including a great number of participants, the low costs compared to imaging methods, e.g., the usually safe and easy handling of data acquisition, the independence of the observed behavior from direct influences through the researcher and the attractiveness of results based on statistics.

In my talk, I will present the basic principles of surveys with a focus on questionnaires and interviews, introduce some established methods like 'The Desire for Aesthetics Scale' by Lundy et al. (2010) or the 'Art Experience Questionnaire' by Chatterjee et al. (2010) and give examples of results generated with surveys in empirical aesthetics and literature studies.

Poetry Corrects Reality. But How Do Readers Deal with This?

Willie van Peer

(LMU Munich)

This paper presents a concrete illustration of the methods that Marion Behrens highlighted in her talk. It will concentrate on the way in which very simple manipulations of literary texts can provide enlightening insights into the nature of literary perception and evaluation.

The issue at hand is the current security situation, and the behavior it produces in people. A short poem by Emily Dickinson (quite unexpectedly) highlights the fact that this behavior is in fact in stark contrast to the real structure of fear. Reading the poem may produce reactions of surprise or even disbelief. To find out how real readers react to such clashes between poetic and everyday reality, we made two manipulated versions of the poem and distributed them randomly, together with the original, among readers, who then responded to 30 aesthetic statements with respect to the poem they had read. At the end of the questionnaire we also asked them to evaluatively compare the three versions.

The paper shows how simple it really is to move from a theoretical position to empirical tests that are easy to administer, and that will provide a test for the theory, while simultaneously enriching and deepening our understanding of the effects and functions of literature.

4D: Drawing Attention to Daydreams: An Interdisciplinary Exploration of Mind Wandering in Theory and Practice (1)

Room 7; Chair: Hilary Powell

Mind Wandering Across Twentieth-Century Disciplines

Felicity Callard
(Durham University)

Across the twentieth century, experimental work in the 'psy disciplines' (psychoanalysis, psychology, psychiatry et al.) on mind-wandering, daydreaming and related states was heavily engaged with problematics, paradigms, and frameworks that might be thought to be central preoccupations of the humanities. Whether one turns to the dense body of work on fantasy or the imagination, to the ways in which literary works were invoked by scientists to provide exemplars of protagonists engaged in, or to various engagements with phenomenology in the service of enriching natural scientific studies, there are dense research seams in which experimentalism and the humanities have been close bedfellows. More recently, however, as cognitive psychological research on mind wandering and daydreaming has become less marginal to the discipline of psychology, such intimacy between so-called humanistic and scientific problematics and paradigms regarding these phenomena has arguably been less apparent.

In our presentation, we return to certain moments from the twentieth century in which conceptualizations and empirical investigations of mind wandering demonstrated the entwining of the literary, the philosophical, and the psychoanalytic within the so-called 'scientific'. In re-opening these historical archives, we aim to offer additional resources for current experimental investigations of mind wandering – not least as our research team works up a new interdisciplinary protocol experimentally to investigate this complex mental and bodily state.

For an 'actually experimental literature': The Case of the Wandering Mind

Des Fitzgerald
(Cardiff University)

It is a truism today that, if cognitive phenomena were once important agents/producers/fellow-travellers of literary production, literary studies has since been remiss in failing to keep pace with conceptual and methodological developments in the cognitive (and/or neuroscientific) sciences. This is probably true enough. But have those sciences, in their turn, kept up with developments in literary work? Put otherwise: if we know that literary (and more broadly humanities) scholarship has been slow to open itself to the energies in cognitive and neuroscientific work – should we not also recognize a deficiency on the part of the cognitive and brain sciences themselves, viz. their failure to harness the potential of literary studies to torque the experimental apparatuses through which those sciences are propelled?

In this paper, I report from the early stages of an interdisciplinary project on mind-wandering. This ongoing experiment brings together neuropsychological, humanities and social science work in a series of shared empirical gestures (from psychological experiments to work in literary and social theory), not to better let the one represent the other, but to show how each is already interior to the other – and then to lean on those interiorities, in order to make more interesting

experiments. Focusing on a mind-wandering neuroimaging experiment front-loaded with insights from the humanities and social sciences, the paper makes a case for an 'actually experimental literature' –literary work and scholarship for which experimentalism has as much an affinity with laboratory and statistical techniques as it does with devices of narrative and genre.

Histories of Introspection: The Case of Mind-Wandering

Hazel Morrison
(Durham University)

The everyday commonality of mind wandering, by which one's mind drifts towards inner thoughts, fantasies and feelings, is self-evident if one refers to one's own introspective observations (Smallwood, 2006). '[I]n day-dreaming' writes Jerome L. Singer 'all of us are in a sense authorities because of the very private nature of our experiences' (Singer, 1966, 6). Yet when looking to the history of literary, philosophical, psychological and neuro-scientific research that foregrounds contemporary understanding of mind wandering, we, that is, the generic you and I who every day experience our minds to wander, are notably absent. This isn't to say that the voices, experiences and narratives of 'everyday people' are entirely obscured. Rather the authenticity of their subjective viewpoint is repeatedly, historically denigrated.

This paper looks back to nineteenth century literary, philosophical and psychoanalytic engagement with mind wandering, highlighting their intrinsic engagement with fin de siècle notions of self. In doing so, I consider how such a history may account for the denigration of the everyday subjective viewpoint in twentieth century studies of mind wandering.

4E: Problems and Politics of Cognitivist Approaches to Text Analysis

Room 5; Chair: Teemu Ikonen

Cognitive Narratology as/and Post-structuralism: The Return of the Paradox of the Subject?

Teemu Ikonen
(University of Tampere)

The paper begins by giving support to two propositions concerning the location of cognitive narratology vis-à-vis major trends in late 20th century literary studies. Then a problematic of the subject of narrative is developed in a way that questions the validity of both propositions.

Proposition 1: Cognitive narratologies have surpassed the limitations of structural linguistics. As Herman argued in 2002, linguistics is no longer a pilot-science for narrative theory, and thus structuralism cannot be more than a prologue to cognitive narratology.

Proposition 2: The rapprochement between cognitive narratology and post-structuralism is unprobable. Ryan's (2015) argument is representative: post-structuralism has valued textual mediation too high to really engage in dialogue with cognitivist theories of immersion or embodiment in narratives.

The picture changes if we look into the conceptual history of the subject of narrative. Crucial here is Benveniste's definition of the subject of discourse. It was confusingly adopted as a postulate to narratology by Todorov and Genette. At the same time, its philosophical presuppositions were critically examined by Lacan and

Derrida. They offered different solutions to the Benvenistean-structuralist paradox in which the subject is both a product and a presupposition of narrative discourse. The paradox returns in Žižek's criticism of the interconnectedness of subjectivity and narrative in cognitivist theories. According to Žižek (2006), Damasio's conception of the emergence of the subject in narrative does not resolve the structuralist paradox but, instead, only reformulates it in a new guise. Two questions are in order: To what extent is the paradox present in current cognitivist theories? If it is effectively resolved, does this promise a future for a debate between cognitive narratology and the post-Benvenistean deconstructions of the subject?

Analyzing Literariness: Formalist, Cognitivist, and Enactivist Approaches

Samuli Björninen
(University of Tampere)

In formalist thought "literariness" became the specific quality assigned to artistic texts. It defined the proper object of study for literary poetics – instead of literature, its literariness; instead of language, its functions which conduce to literariness. Cognitive literary studies, too, has taken "literariness" as the benchmark for its capability to deal with the specific demands of literature.

Literariness has therefore been linked to debates about cognition. Which properties make parts of text especially "striking" and how to talk about them? This has led to a juxtaposition of cognitivist and enactivist views on the subject. The former posits that the effect is due to the capability of literary language to subvert scripts and schemata of everyday sense-making. The latter emphasizes the embodied and pre-conceptual nature of aesthetic experience, while also challenging the cognitivist notion of the mind as insufficient, even false. But does this show on the level of textual analysis?

I will look at Thomas Pynchon's novel *Gravity's Rainbow*, notorious for its complex language and structure, and demonstrate how the three views on literariness – formalist, cognitivist, and enactivist – contribute to premises and possibilities of textual analysis. Texts like *Gravity's Rainbow* are overloaded with unconventional and imaginative language and challenge the idea that literary language use stands out against an ordinary and nonsignificant background. My paper argues that cognitive literary studies are yet to offer an alternative to the deviation-based notion of literariness, and suggests why this may be the case.

Between Sense and Non-Sense: Interpretation as Aesthetic Surplus

Tytti Rantanen
(University of Tampere)

Lately, there has been some discussion about the cognitive value of literature and literary studies (cf. e.g. Caracciolo 2016, Mikkonen 2015): What can be achieved by reading narrative fiction through the cognitivist point of view? Should we move beyond interpretation towards some more "scientific" system of observing the cognitive action and affects related to reading? This concern is said to be a two-way movement, but I would like to turn the question on its head: What is the value of the cognitivist approach for narrative fiction and literary studies?

My paper aims at questioning and criticizing the positivist undercurrent of cognitive studies. As Jean-Marie Schaeffer (2015) states, aesthetic pleasure is a vital cognitive function of literary and other art. I want to stress that interpretation is not just an old-fashioned method to get rid of – it is attached to the aesthetics and thematics of several works of art to the extent that it has become a trope in itself.

Cognitive mapping and sense-making are natural mental activities we engage in when reading narratives. Nevertheless, in the spirit of Roland Barthes and other

post-structuralists, I want to point out that the aesthetic pleasure may lie in the tension between sense and non-sense. My study cases come from Alain Robbe-Grillet, but his works are only one example of narratives that both resist and mock any simple efforts of sense-making all the while puzzling and provoking us to interpret them. The interpretive struggle is the aesthetic surplus that we may lose in cognitive text analysis.

13.15 – 14.15

Room 1

Keynote Lecture: Explaining Metonymy

Deirde Wilson

(University College London and CSMN, Oslo)

The last twenty or thirty years have seen a move away from code-based theories of communication to inferential theories on which the speaker's aim is not to encode her message in an utterance but to provide clues to her intended meaning. Figurative utterances (e.g. metaphor, irony, metonymy) present a challenge to inferential accounts of communication. Throughout their history, figurative utterances have been standardly analysed using code-like 'transfer of meaning' rules (e.g. 'In irony, the literal meaning is replaced by its opposite', 'In metaphor, the literal meaning is replaced by a related simile or comparison', 'In metonymy, the literal meaning is replaced by an associated attribute or adjunct'). While there are now several plausible inferential accounts of metaphor and irony (see e.g. Wilson & Carston 2006, 2007; Sperber & Wilson 2008 on metaphor, and Wilson & Sperber 2012, Wilson 2013 on irony), metonymy has continued to present a serious challenge. How can the speaker of (1)-(3) be seen as providing evidence of her intention to refer to a patient, a customer and a group of people rather than a disease, a dish or a building, respectively?

- (1) The appendicitis in bed 3 is threatening to write to the newspapers
- (2) Can you take the pepperoni pizza his glass of wine?
- (3) Buckingham Palace is refusing to comment.

After arguing briefly that standard 'transfer of meaning' accounts of metonymy (e.g. Nunberg, Recanati) are neither inferential enough nor generalizable enough to provide an adequate solution, I will outline a new approach to metonymy (developed jointly with Ingrid Lossius Falkum) which may help to meet this challenge. On this approach, metonymy is a type of neologism, or word coinage, and is understood in exactly the same way as other types of word coinage, needing no special interpretive rules or mechanisms.

14.30 – 15.30

Room 1

Reflective Roundtable with Peter Garratt, Anne Mangen, Pirjo Lyytikäinen and José Filipe Silva

A new feature in this year's programme, the roundtable on "Cognitive Futures" will offer space for reflection and big-picture thinking on our field of research. Invited speakers are our keynotes Peter Garratt, Pirjo Lyytikäinen and Anne Mangen, as well as José Filipe Silva, who runs the ERC project "Rationality in Perception: Transformation of Mind and Cognition, 1250-1550" at the University of Helsinki.

At this round table, we will explore further some key issues of our field that were already addressed in the interviews in the newsletters: What is the role of history in the cognitive humanities? How are they situated in Europe and the world? And how do they relate to the challenges of the digital age? The round-table will take a discursive, open-ended format. We look forward to a lively discussion and hope you can join us.

16.00 – 17.30

Parallel panel sessions 5

5A: Emotional Entanglement with Fiction

Room 12; Chair: William Flesch

Feelings for Phantoms: The Vestige of the Lyric “I”

Laura Quinney
(Brandeis University)

Why are we moved by the utterances of the lyric “I,” an inherently fictional being? Why - and how - is the reader of lyric engaged by its impersonation of subjectivity? The critic may fall back on terms like “identification,” “expression” and “contextualization” to account for the cogency of the traditional lyric “I,” but it is more difficult to explain the personal pathos of experimental poetry in which the “I” has become vestigial. We are still moved, for example, by the poems of John Ashbery, although he does not use the word “I” with any consistency, nor tell its story, nor create an empirical context for its description. In fact, Ashbery’s “I” is often a dummy “I,” part of a formula or cliché or pastiche not meant to be taken literally. Yet in the poem’s overall effect, we still feel that we encounter a subject in all the inherent distress of its subjectivity. The fictional “I” that was already a phantom has been rendered doubly phantasmal - a mere allusion to subjectivity - but the force of personal pathos remains. This paper will reflect on the lyric mimesis of subjectivity by considering extreme examples in which the traditional modes of summoning the “I” have all but disappeared.

Emotion, Fiction, and Non-Causal Bargaining

William Flesch
(Brandeis University)

“On devine en lisant, on crée... une bonne partie de ce que nous croyons ... avec un entêtement et une bonne foi égales.” --Proust

In Newcomb’s problem, an uncannily accurately oracle predicts what choice I will make and arranges a reward or punishment for me according to her prediction of what my choice will be. If she predicts I will prefer a sure but small gain to trusting her to give me a large gain, she will have irrevocably arranged to punish me; if she predicts I will trust her, she will have irrevocably arranged to reward me: she will make these arrangements before I make my choice, so that my choice cannot affect them after the fact. I know this, and know that her predictions to date about thousands of other people’s choices have always been accurate. Should I trust her? Or should I take the sure gain, knowing it won’t make a difference (she’s already made her irrevocable decision), even while hoping to get the large gain as well (since she’s already made her decision irrevocably)? This fascinating conundrum is for me a model of how we read fiction, hoping that our emotional investments mean that the fictionists will have predicted and rewarded the readers who make the emotional investments we do. (Aristotle: “the poet is guided in what he writes by the wishes of his audience.”)

I this attitude towards the oracle or the fictionist noncausal bargaining, and I think noncausal bargaining is an essential achievement of human evolution, in particular the evolution of cooperation. Writ large, it is through noncausal bargaining that we come to cooperate with each other in general. Noncausal bargaining looks like, and functions like, mutual trust; but it feels like magical thinking. The schema of such magical thinking is this: if my emotions are intense enough, are committed enough, they will induce you (via your own emotions) to act in ways consonant with the honesty of emotion I have expressed. Because of their role as bargaining

chips in noncausal bargaining, emotions normally involve or include a sense of their own contagiousness or efficacy: the fact that I really and feelingly believe you'll cooperate (or arrange the large reward) manifests itself as a real and feeling intention on my part to cooperate. Because I want you to cooperate, I really feel that intention, feel it emotionally, and (as the honest signals they have evolved to be) my emotions express the reality of that feeling. (This is Proust's combination of "entêtement et une bonne foi.")

Our emotional response to fiction provides a royal road to insight into the evolution of cooperation through noncausal bargaining. Emotional investment in fiction sheds light on how and why emotions evolved to undergird human cooperation in general, and the subtleties of literary response and responsiveness will contribute to the general cognitive theory of the mechanisms of human cooperation.

Bayesian Notes on the Feeling of 'Flow' in Reading

Karin Kukkonen
(University of Oslo)

If readers feel they waltz with Anna Karenina and Vronsky across the ballrooms of St Petersburg, embodied approaches to cognition can explain such a feeling through the motor resonances or embodied simulations in response to the motion verbs, directions and emotional states of the characters (see Bolens 2012; Caracciolo 2014). But readers arguably experience more than just an imitation of the characters' motions and emotions. Their feeling of "flow" in the literary text also carries a metacognitive dimension of consciousness and control.

With particular attention to the embodied aspects of emotions, the present paper will propose that the feeling of "flow" in reading, which has been remarked on in very general terms by Csikszentmihalyi (1997) already and which seems to relate to the experience of immersion (see Schaeffer 2015), connects to a predictive, probabilistic moment of embodiment (see Kukkonen 2014; Clark 2016). According to the psychological literature, the ease of matching expectations of movement with actual movements seems to increase a sense of agency and control that can be cued externally (see Moore, Wegner, Haggard 2009) and that can even be ascribed to the movement of others (see Wegner, Sparrow and Winerman 2004). The present paper takes a Bayesian approach to the sense of conscious control in reading through the guidance of the "probability design" of the text (see Kukkonen 2014) and aims to provide new perspective on the feeling of 'flow' in reading.

On Rooting for the Bad Guy

Blakey Vermeule
(Stanford University)

The premise of this paper is that mafia fiction is especially good at separating our emotional moral intuitions from the ones we are able to speak, announce, and own.

The next time you find yourself locked in an phone loop with a customer service associate from a giant multinational connectivity conglomerate who clicks onto the line only for your mutual befuddlement while you claw at your own vocal cords to keep from screaming, you might find that fantasizing helps. You might for example let your mind wander over the yacht-mansion- Caribbean island retreat that your hour of frustration buys for the company's top executives.

But when the stakes get higher—when say, an elderly relative of yours is sick and anxious and his doctor won't return his calls, your fantasies might become more abrasive. Fortunately for all of us, a genre exists to handle these feelings and to run nifty little vengeance scenarios on our behalf. I mean Mob movies. When red tape has you feeling like Laocoon, The Godfather will come to your rescue.

Of course the Godfather will exact his price. Someday, and that day may never come, you may be asked to render him a service in return. As difficult as that price may be to accept, submitting to the Godfather's rule is generally much better than taking your chances with the corrupt, feeble, and hypocritical institutions of the modern world where sanctioning is slow, indirect, uncertain and comically inefficient. When you arrive in the new world, you are on your own. The police won't protect you. The courts won't do you justice. Only your family will show up when you are down and work out your troubles for you.

David Chase, Sopranos creator and mafia movie connoisseur, knows how to play this fantasy for great comic effect. The moral code, the rule of the tribe, is the fantasy of revenge delivered swiftly. Just sit back and enjoy the spectacle as Tony and his muscleman Furio come flying across the greensward in a golf cart looking like bulked up cartoon characters to tell Uncle Junior's oncologist to return Uncle Junior's phone calls. They push the oncologist further and further into the water hole until the mud curls around his golf shoes. This is Robin Hood for the bureaucratically oppressed, justice for the person who craves a tiny bit of clarity and control in a multi-polar world, a helping hand for the person drowning in lying privacy notices, sinister end-user license agreements, endless peremptory demands to update your nagware, and cascades of fine print that you hope don't mean anything until it turns out they really, really do.

5B: Kinesis in Literature and Art

Room 6; Chair: Amy Cook

Kinesic Response and Kinesic Intelligence in Rabelais's Comic Fiction

Kathryn Banks
(Durham University)

Reading literature, like viewing paintings, engages our 'kinesic intelligence', as Ellen Spolsky provocatively suggested. Literary texts are more likely than other kinds to employ the language of movement in ways which heighten kinesic response. Indeed, as Guillemette Bolens has convincingly argued, the literary intensification of kinesic response may even render it the object of explicit reflection. My goal is to identify and explore particular ways in which kinesic response is thus intensified and brought into focus. My case study is the comic fiction of the canonical French renaissance author François Rabelais, whose texts are especially useful for highlighting aspects of kinesic intelligence, and themselves appear in a new light when viewed through a kinesic lens. The paper will explore how particular aspects of style can prompt kinesic intelligence of various kinds, showing how Rabelais draws attention both to the ease with which we respond kinesically and also to the special creative things which literary writers might do with this kinesic predisposition.

Kinesics on the Stage: Knight of the Burning Pestle

Raphael Lyne
(University of Cambridge)

A theatre audience has many opportunities to exercise its kinesic intelligence. As well as interacting with the physical experience of fictional characters, it also engages with the movements and sensations of actors, who work together and practise skills that are palpable to varying degrees at different moments. By exploring the links between the works of cognitive theorists and theatre scholars (including Guillemette Bolens, Amy Cook, Bruce McConachie, Ellen Spolsky, John Sutton, Evelyn Tribble, and Bart Van Es) I will argue that the Shakespearean theatre

has been shown to be a dynamically kinesis place, and that there is much more to be said, about the exercise of skills by the actors, about interactions within companies, and about how the texts allow such things to be manifest. In particular, I will discuss a play by one of Shakespeare's contemporaries, Francis Beaumont's *The Knight of the Burning Pestle* (1607), which brings these different interactions into view as its multiple plots clash together. This play was successfully revived at the new Wanamaker Playhouse at the Globe Theatre in 2014, and I will draw on the insights generated by that production, and a conversation I had with its director, Adele Thomas.

Inferring Kinaesthetic Sensations: Cognition and Kinesic Knowledge in Literature

Guillemette Bolens
(University of Geneva)

Following directly on Ellen Spolsky's foundational article 'Elaborated Knowledge: Reading Kinesis in Pictures', *Poetics Today* 17/2 (1996), my general goal is to find ways of accounting for cognitive processes linked to kinesis, which are activated in literary reception. I wish to argue that the lower-order pre-reflective cognitive acts that are elicited by linguistic utterances referring to sensorimotor aspects in a text can become the focus of higher-order reflective acts, thus allowing for kinesic critical analysis. In kinesic analysis, a deliberate attention to the sensorimotor simulations triggered by literary texts may help acknowledge the extent to which modality-specific simulations play central roles in the way language is processed. In this paper, I will focus on kinaesthesia, i.e., the sensory side of kinesis. To understand a perceived gesture is one thing. It is another to infer specific dynamic sensations produced by the act of performing such a gesture when the latter is expressed verbally. How do literary artists succeed in using language to make their readers infer the kinaesthetic dimension of a gesture, a movement or a gait? The fact that readers may gain cognitive access to such doubly mediated sensations will be my focus of attention.

5C: Social Metacognition

Room 8; Chair: John Sutton

Creating Textual Communities: The Question of Social Minds in Fiction

Iida Pöllänen
(University of Oregon)

Cognitive science's theories on embodied cognition (Lakoff & Johnson 1999) and 'wisdom of crowds' (e.g. Kao & Couzin 2014) phenomena have pushed forth an understanding of minds as embodied, shared, and external. Meanwhile, the idea of 'social mind' has risen in narrative studies (Palmer 2010, *Style* 45.2, *Narrative* 23.2) to give focus to instances of such collective thinking in literature. However, the concept raises interpretative questions that need further analysis: whose voice do we hear when fiction represents a social mind - who gains narrative authority through it - and what do these collective moments tell about fiction's ability to portray communities and intersubjective thinking?

Through a textual analysis of American modernist short stories, I study how the social mind can be equipped for the interpretation of collective experience in fiction. The small towns represented in my primary texts form unities that (at least seem to) collectively think, feel, evaluate and respond to different events and people. In this paper I will analyze whether the social mind can function as an egalitarian voice for the characters portrayed, or if it should be understood more metaphorically as a narrative trick that deconstructs any sense of real community.

Furthermore, a cognitive narratological study of social minds can show how social norms and hegemonic discourses work. Producing the illusion of a collective through a social mind is influential to how characters are interpreted by each other and the reader, because the act of feeling (pride, embarrassment, resentment, etc.) is understood as something that comes intuitively and instinctively, thus having associations of being natural instead of socially or artistically constructed.

In addition, I argue that my case-studies thematize questions of finding a past for a modern America, as well as the ethical value of artistry as a way to construct a collective history, and the application of the concept of social minds can offer new insights into our understanding of such tendencies within the modernist movement.

On Continuous Bilingual Writing and World Literature: Forging a Psycholinguistic Framework for Literary Criticism

Kate Costello
(University of Oxford)

Given that half of the world's population is bilingual, it is surprising that the topic of bilingualism is so seldom broached in the field of literary studies. Within the canon of world literature, the phenomenon of writers with multiple language competencies is the norm, though this is rarely acknowledged to be the case. In searching for a framework for critical analysis that recognizes the complexity and nuance of the bilingual experience, the burgeoning field of psycholinguistics has much to offer. In my paper, I draw upon François Grosjean's pioneering work in language processing and the monolingual-bilingual mode continuum. For reading the texts of bilingual authors that showcase dynamic interplay between two or more linguistic and cultural systems, I propose the term continuous bilingual writing. This kind of writing is frequently engaged in comparisons, both implicit and explicit, which prompt the reader to consider the cultural systems at play beyond the linguistic structure of the text. As a literary technique, continuous bilingual writing calls into question the issues of belonging, inclusion and exclusion through the juxtaposition of vocabulary, grammar, and syntax. Insofar as it calls into question the shortcomings and logic or irrationality behind linguistic systems, it also functions as a way of manipulating the distance/ closeness of the reader to the character through identification and alienation. This paper explores the role of bilingual competencies in the second-language fiction of British Chinese author Guo Xiaolu, foregrounding the potential of a psycholinguistic approach to world literature as an alternative to the discourse of Global English.

Embodiment and Authority in Seventeenth- Century Manuscript and Print Cultures

Tommi Kakko
(University of Tampere)

In Stuart England, the king's word was the law and his warrant was required before action could be taken. These documents were written, not printed, and validated by signatures and seals to maintain a chain of legitimation. In many cases, the documents had to be read out loud to have legal force. Printing, it seems, had less authority in the institutional exercise of power. Harold Love (1993) described the intricate networks of narratives and tropes that formed the "fundamental legitimizing fictions" of the pre-Civil War government. After the Restoration, Love notes, fictions of regal authority were reestablished, but they made little attempt to disguise their fictive nature. The king's person was the locus of social fictions of power, but things had changed. A practical nominalist view of power was nothing new in the Hobbesian court of Charles II, but the transparent simulacrum of political authority is nevertheless an example of a strikingly modern idea. In it one can see what Lisa Zunshine (2008, 2010) has called "fictions of embodied transparency". A transparently fictive legitimation of political power also supports Jonathan Kramnick's (2010) criticism of the way later eighteenth-century conceptions of mind have often been

reduced to “a language of inwardness or subjectivity”. My paper will explore this break in seventeenth-century manuscript and print cultures with an eye towards Zunshine’s and Kramnick’s studies of the eighteenth-century mind.

5D: Drawing Attention to Daydreams: An Interdisciplinary Exploration of Mind Wandering in Theory and Practice (2)

Room 7; Chair: Felicity Callard

‘The Mystery of the Conscious’: Mind Wandering, Inner Speech and Attentional Decoupling in James Joyce’s Ulysses

Marco Bernini
(Durham University)

Cognitive approaches to the presentation of consciousness in the novel have been stressing the importance of considering a character’s mentality as distributed into observable actions and behaviors (Palmer 2004; Zunshine 2012; Herman 2013). Building on contemporary scientific definitions of consciousness and intentionality as acted phenomena, cognitive narratology favoured a reweighting of the outer visibility of conscious states. This enlarged conception of consciousness, either in real or fictional cognisers, leaves to an important extent several problems related to inner experience untouched. William James already pointed at the webbed nature of conscious processes as well as at the difficulty of disentangling core elements in what he significantly generalised as ‘mind stuff’ (1890). As James Joyce pointed out, even without addressing the secretive life of a Freudian unconscious, enigmas remain about what he defined as the ‘mystery of the conscious’ (Ellman 1984: 433). Which are the core processes of our conscious life? In the past two decades, cognitive science has been refocusing on the intricate, dynamic and parallel nature of conscious inner life suggesting that mind wandering (Smallwood and Schooler 2015) and inner speech (Alderson-Day and Fernyhough 2015) appear to be two processes that are ubiquitous in, and foundational to, our conscious inner experience. This paper addresses the literary presentation of these two interlaced processes in James Joyce’s Ulysses. On the one hand, I will argue that contemporary cognitive models of mind wandering and inner speech can provide hermeneutic tools for the understanding of Joyce’s treatment of inner experience. On the other hand, I will suggest that narrative theory should put these two processes at the centre of future theoretical models for the analysis of consciousness in the novel.

Demonic Daydreams: Mind Wandering in the Middle Ages

Hilary Powell
(Durham University)

‘Mind wandering’ may be the latest buzz word to hit cognitive neuroscience but the phrase and its signification as a facet of conscious experience is centuries old. Concerns over a ‘wandering of mind’ (*evagatio mentis*) were aired by both St Augustine and John Cassian in the early 5th century. Read in concert with today’s scientific literature, their treatment of the subject seems startlingly prescient, particularly with regard to certain phenomenological aspects such as poor meta-awareness and perceptual decoupling. The aim of this paper, however, extends beyond a discussion of those points of convergence. Instead it will explore a series of literary narratives depicting encounters between early medieval saints and demonic figures. This paper will make the case that these narratives were written as allegorical renditions of the early monastic perspective on mind wandering before illustrating how engagement with contemporary cognitive models can shed light

on the utility of such narratives within the context of monastic meditative practice. These narratological devices not only represented the dynamics of mind wandering but actively recruited listeners to indulge in the experience, offering up tantalising mental images in which the listener could luxuriate. The formulaic resolution of these narratives, however, wherein the wandering mind is brought back to task, points to a more preceptive role; having induced the mind to stray, they then effectively stage an intervention. In this capacity, these texts may offer today's cognitive scientists some interesting medieval analogies for coping with and even attenuating the experience of mind wandering and attentional drift.

5E: Disciplinary Trajectories

Room 5; Chair: Richard Ruppel

Can Cognitive also Mean Critical? The Methodological Implications of Walter Benjamin's Engagement with Vygotsky

Ben Morgan
(University of Oxford)

This paper takes as its starting point an essay by the Russian developmental psychologist Lev Vygotsky, published in German in 1929, which condenses the arguments of his major work, *Thought and Language* (1934). After *Thought and Language* was translated into English in 1962, Vygotsky became an important point of reference for Anglophone developmental psychologists. Figures interested in the constitutive role that socially situated interaction plays in the growth of identity, such as Jerome Bruner, Michael Tomasello, Bruce Wexler, Vasudevi Reddy, all show a debt to his insights. It is not so well known that Walter Benjamin also read him in preparation for the report on "Problems in the Sociology of Language" he wrote for the journal of the Frankfurt School *Zeitschrift für Sozialforschung* in 1934/35. My paper will analyze Benjamin's encounter with Vygotsky as an example of the interdisciplinary project that members of the Frankfurt School embarked upon in 1931. At that time, this project combined social critique with a full engagement with empirical research in psychology. This approach was largely abandoned when better-known writings of the group, such as *Dialectic of Enlightenment*, were written. Interestingly, however, the insights of post-Vygotskian psychology invite a return to the earlier approach, and provide empirical grounding to key concepts, such as that of a mimetic faculty, which in the original texts remain obscure. More importantly, the comparison allows us to interrogate the normative assumptions of a cognitively inflected philosophy and to explore its ethical potential from a newly integrated perspective.

Cognitive poetics and heritage of Russian formalism

Denis Akhapiin
(Saint-Petersburg
State University)

Maybe the most challenging change in the multidisciplinary area between linguistics and literary criticism is rising of emerging field called cognitive poetics. It has been growing fast since Reuven Tsur had invented this brand in early nineties. Last years we see expansion of the new discipline — from the monographs devoted to this conception (Stockwell 2002, Gavins and Steen 2003, Brone and Vandaele 2009, Gronas 2011, Kwiatkowska 2012) to the numerous articles in scientific journals. But is this really a new discipline or just rebranding of some well known practices of linguistic and literary analysis? One can see that cognitive poetics covers some basic and well known issues such as metaphor, deixis and reference in literature, text worlds etc. Is cognitive poetics opens a cognitive future for literary scholars?

I tend to answer this question positively, especially because using ideas and methods from cognitive psychology, cognitive linguistics and neuroscience of reading gives us a possibility to rethink some old conceptions in our area and find new answers to several old questions – what makes a text remarkable for a reader, why some books become canonical while others are forgotten, how to teach analytical reading of poetry and fiction at schools.

In my presentation I will focus on ideas of Russian formalists that are getting a new life in numerous works of scholars in the area of cognitive poetics. I will show that despite of the fact that some of them are well known to western scholars in cognitive literary studies (like Shklovsky's estrangement), others wait to be discovered – such as Jury Tynjanov's ideas of automatization, tightness or his conception of genre as a gene. Cognitive science can shed a new light on these conceptions and enrich our understanding of the processes behind writing and reading texts.

The Generic Patterns of Cognition in Didactic Poetry

Gábor Simon
(Eötvös Loránd University)

The theoretical reception of didactic poetry has two tendencies in the last decades: (i) the emphasis is on what is taught in the works of art instead of how the teaching process is structured, therefore the rhetorical (Marković 2008) and the philological (Dalzell 1996: 27–31) approaches dominate in theory and interpretation; (ii) the status of didactic poetry as a poetic genre is instable in our days too despite of the revision of the ancient Aristotelian critique of non mimetic (thus non poetical) nature (Volk 2002: 40–41). The aim of my presentation is to renew both aspects of the reception from a cognitive point of view.

I examine what kind of cognitive patterns organize the teaching process in three works of art: in the *De rerum natura* of Lucretius, in the *A méltóság keserve* (The grief of dignity) of the Hungarian poet György Bessenyei, and in *Die Metamorphose der Pflanzen* of Goethe. To demonstrate how the teacher-pupil interaction serves as the basis of the complex didactic plot (Fowler 2000), I apply the evolutionary model for teaching behaviour elaborated by Kline (2015).

The main results of the investigation are (i) drawing the attention to the indirect adaptations of teaching behaviour (e.g. social tolerance, local enhancement, evaluative feedback) represented in didactic poetry; (ii) demonstrating the importance of poetic imagery in didactic poetry, emphasizing the close relation between poetic and didactic consciousness; (iii) rethinking the notion of genre as the pattern of cognitive universals mediating between particular sociocultural contexts (see Busse 2014: 103).

Wednesday 15th June

9.00 – 10.00

Room 1:

Keynote Lecture: The Digitization of Reading and Writing: What May Be in It for Cognitive Humanities?

Anne Mangen
(University of Stavanger)

The current digitization of reading and writing reveals dimensions of these processes and skills that have hitherto been less acknowledged, in particular the role of ergonomics (i.e., haptic and tactile feedback). I'll use the ongoing transition from paper- to screen-reading, and from handwriting to keyboard writing, as an occasion to "unpack", theoretically and conceptually, what is entailed in reading

and writing as embodied, multisensory human-technology interactions involving interfaces and devices with particular material affordances. Through a presentation of some theoretical and empirical work on the digitization of reading and writing from an embodied perspective, I'll argue that the replacement of paper by screens, and of pens by keyboards, can – indeed, should – be a catalyst for increased interdisciplinarity and, as such, a promising avenue for cognitive humanities research.

10.30 – 12.00

Parallel panel sessions 6

6A: Historicising Affect

Room 7; Chair: Julien Simon

The Intersections of Cognitive Literary Studies and Affect Studies

Brook Miller

(University of Minnesota, Morris)

In this presentation I plan to offer an overview of a chapter I'm currently writing for a proposed Handbook of Affect Studies, edited by Donald Wehrs and under consideration at Palgrave Macmillan. The chapter, "Affect Studies and Cognitive Approaches to Literature," offers a brief survey of cognitive literary studies. It traces its emergence from psychological and phenomenological approaches to literary studies, and it describes a variety of influential approaches, including linguistic, historicist, reader-oriented, culturalist, and phenomenological, briefly highlighting examples from a diverse range of scholarship. Also, it describes recent attempts to articulate how the cognitive sciences and philosophy of mind might inform approaches to narrative, and vice versa. Taken together, these theories offer a wide-ranging investigation of the forms and status of knowing in relation to narrative. Turning to affect studies, the chapter explores affect studies' contrasting emphasis on how personal and social experience is shaped by forces not reducible to conscious knowledge. The chapter describes affined political and aesthetic projects between well-known statements about affect studies and the approaches and positions adopted by cognitive literary scholars. I emphasize how conceptions of the social, material, and virtual inform the projects of cognitive literary studies. The chapter considers how recent scientific accounts of affect that emphasize the role of emotion in shaping thought and memory, and recent philosophical interest in embodiment and enactivism, all promote linkages between the two fields of inquiry. My hope is to solicit substantial feedback on the chapter to sharpen, fill in gaps, and consider implications not yet considered. I believe this would provide a useful forum for scholars interested in the intersections of cognitive literary studies and affect studies.

Inner Theatre and Outer Movie Experiences: The Cognitive Neuroscience of Rasa-Catharsis

Mark Pizzato

(University of North Carolina at Charlotte)

What can cognitive and affective neuroscience tell us about emotional experiences within our brain and our shared experiences of movies? How might conflicts onscreen affect us, with ironic twists in expected stereotypes, evoking a cognitive reappraisal of emotional impulses? Drawing on research from his forthcoming book, *Beast-People Onscreen and in Your Brain: The Evolution of Animal-Humans from Prehistoric Cave Art to Modern Movies* (Praeger, 2016), Mark Pizzato will present an "inner theatre" model of cogno-affective networks in the brain,

regarding our animal ancestry. Then he will consider recent experiments on the cognitive reappraisal of sad, erotic, and aversive film clips, along with ancient Indian and Greek theatre theories about *rasas* (aesthetic flavors of various emotions) and *catharsis* (purifying emotions), to offer potential steps in the *rasa-catharsis* of empathetic feelings while watching movies. He will also point to exemplary moments from vampire and ape-planet movies. How might such films not only reflect but also affect spectators' animal drives, primal emotions, and social prejudices—with tragicomic twists in their melodramatic threats of and violence against animal-human monsters?

Fascism, Torture, and Affect in Post-War Spain: Memoria Histórica Narratives and Audience Empathy

Isabel Jaén
(Portland State University)

Unlike the rest of Europe, where fascism was defeated after WWII, Spain had to endure a long and repressive dictatorship (1939-1975). Justice was never served and, to this day, almost eighty years after the end of the Spanish Civil War, the *memoria histórica* movement, to acknowledge Franco's genocide and compensate the families of his victims (many remain buried in unopened mass graves scattered around the country), faces the permanent obstruction of Franco's sympathizers. The trauma and agony of the impotent families of these victims resurfaces through what are called the narratives of the *memoria histórica* (multimodal narratives commonly expressed via genres such as the novels, plays, films, and soap operas, but also through administrative and popular media discourses, in legal and human rights settings). The present study will focus on the 2002 *memoria histórica* novel *La voz dormida* [The Sleeping Voice], by Dulce Chacón and its 2011 film adaptation by Benito Zambrano, tracing how this particular narrative is constructed across two different media by focusing on the dynamics between torture and affect while aiming to elicit a strong empathetic response and raise social awareness against the ideological background of contemporary Spain.

6B: Gesture and Intersubjectivity

Room 12; Chair: Elise Nykänen

Moving Gestures: The Production of Empathy in Narrative Fictions

Renate Brosch
(Stuttgart University)

According to neuropsychological research, the saliency of gestures is positively related to the level of empathy a person is capable of (Chu et al.) Recent experimental studies show that gestures not only facilitate the recall of spatial information and mental images, but also activate images in working memory (Hostetter and Alibali 508). Evidently, because they are natural manifestations of the simulated action that underlies thinking, gestures make embodied and enactive cognition visible. In this paper I want to address the effect of this form of non-verbal communication in narrative fictions. In narrative fictions gestures do not arise spontaneously from communicative action but are selected by authors to elicit a certain response. It is well-known that readers are adept at understanding a character's state of mind from merely external signs. Indeed, literary scholar Suzanne Keen notes that empathetic experiences of intense identification and emotion-sharing with bodily effects can be produced by reading (Keen 51). This vicarious sharing of affect may in fact be greater when reading fictions than in real life, suggesting that particularly pertinent and persuasive gestures enter the descriptions of fictional characters. Using examples from very recent fictions, which rely less on psychological commentary and more on the description of

body language, I assemble a range of narrative strategies that stimulate empathetic emotion. My main argument, which my title tries to capture, is that an essential feature of affective body language in fiction is expressive movement. Through movement narrative combines the appellative dimension of deixis (orientation in the fictional world) with a recall of simulated sensorimotor perceptions (ability to attribute states of mind to others). This thesis comports nicely with experimental findings that listeners benefited more from representational gestures when these gestures were used to depict motor actions than when they were used to depict abstract topics. Gestural movements derive partly from embodied universals and partly from historically dependent fictional conventions.

Fairytales, Folk-Psychology, and Learning Intersubjective Competency Through Embodied Resonance

Naomi Rokotnitz
(Tel Aviv University)

Following the “cognitive Turn” in the sciences and the humanities, and the emerging “4E’s” model of cognition, it is no longer disputed by scientists, psychologists, and philosophers that human processes of perception and response are necessarily a matter of coalition between neural activity and an intricate network of peripheral nervous system pathways that stretch all over our bodies. Body and brain are inextricably linked: mind is the product of both.

Close analysis reveals that the tellers folktales already knew this. Having evolved from an essentially pagan, oral form of tribal entertainment and moralizing, tales of this kind have often been coopted, adapted, embellished or corrupted over the centuries. But my analysis suggests that, throughout their various evolutions, the tales persistently call attention to bodily phenomena as a means of exploring emotions, mental states and moral preferences. Bodily experience has, in fact, been interwoven into the very structures of most folktales, at least of the European varieties.

This paper focuses on the fairytale tradition. Drawing upon current theories of “folk-psychology”, complementary developmental studies of “intersubjective competence”, and literary criticism, I examine how fairytales may teach by accessing sensory-motor mechanisms that mobilize readers/listeners’ “affective consciousness” (Vandekerckhove/Panksepp 2011: 2017). Focusing specifically upon a number of renditions of Snow White, this paper unpacks some of the strategies by abstract ideas are conveyed through concrete images that appeal directly to readers/listeners’ bodies, thus both exemplifying the force of the genre and instantiating the centrality of bodily sensations to human understanding.

Knowing Hands: A Fortuitous and Prophetic Revival of Educational Sloyd

BA Harrington
(Indiana University of Pennsylvania)

In his pivotal book from 1998, *The Hand: How its Use Shapes the Brain, Language, and Human Culture*, the renowned neurologist Frank R. Wilson credits neuroscience with finally bringing us to a place where we “sense” the great extent to which the hand has played a role in our neurological and linguistic evolution. He then suggests that a closer examination of the human hand in contemporary contexts could lead to further evolution wherein we might develop the ability to put the hand “to our own personal and expressive use—to make it speak and ourselves more articulate.” I draw a parallel to the sense of agency Wilson suggests and the agency, or ownership for action Shaun Gallagher discusses in relation to the sensory-motor body in *How the Body Shapes the Mind*. The presentation will link the idea of the agency of knowing hands with design processes and the manual manipulation of materials in object-making by considering a recent revival of the Educational Sloyd System with inner city Boston 6th-8th grade students. The Sloyd

System, developed in Finland in 1865 and still compulsory in Swedish education today, uses handicraft-based education, predominantly woodworking, to develop skills in practical problem solving, self-evaluation, and in the expression of cultural and aesthetic values. The presentation will position this revival not only as fortuitous but as prophetic of the continued evolution of the embodied cognition being discussed by Wilson, Gallagher, and others participating in the current dialogue on cognition and the hand.

6C: Construction and Representation of Self

Room 8; Chair: Michael Wheeler

How Does It Feel? Cognitive Uses of Exposition in Contemporary Fiction

Bo Pettersson
(University of Helsinki)

Going against the trend of applying cognitive science to literature, Patrick Colm Hogan (2015: 273) has recently noted that “valuable insights may be derived by moving in the opposite direction, from literature to cognitive science”. In this paper I study how narrative form is employed when portraying emotions from the inside by extended exposition focalised by first-person female narrators. These narrators provide an inside view of how it feels to be their kinds of character before disclosing central facts about them and/or other characters, which shows that their viewpoints have in fact in some sense been unreliable.

The five novels analysed show that this affective use of exposition occurs in all kinds of contemporary fiction, from realist novels (Monique Truong, *Bitter in the Mouth*, on adoption, and Karen Joy Fowler, *We Are All Completely Beside Ourselves*, on siblings of different species) to psychological thrillers (Clare Mackintosh, *I Let You Go*, on abuse in a relationship, and Gillian Flynn, *Gone Girl*, on psychopathic behavior in a relationship) to science fiction (Michel Faber, *Under the Skin*, on humans as farm animals for aliens). In all of them, the prolonged exposition leads to a surprise, which is at the service of character description. Most importantly, however, the expositional affect (readers feeling for the character) is elemental in that it heightens the impact of the shock that not only makes readers reassess the protagonists but also their own preconceptions. Thus, narrative form can give rise to affect that stimulates learning about identity.

The Conceptual Structure and Discursive Role of Personification in Fragmentary Genres – an Analysis of French Moralistic Maxims

Csenge Eszter Aradi
(University of Szeged)

In Conceptual Metaphor Theory (Lakoff & Johnson, 1980), personification is a most fundamental conceptual category that facilitates our comprehension of the world (Lakoff & Turner, 1989). The result of metaphorical composition and blending, personification, when subject to poetic creativity, is susceptible of great conceptual complexity which can contribute to the persuasive power of the given text. The present proposal sets out as primary research aim to analyze the conceptual structure and the discursive role of personifications related to self-love, sin and grace in the fragmentary works of 17th century French moralists, including Pascal, La Rochefoucauld and La Bruyère. The selected corpus classifies into the form of maxims, a type of fragmentary genre wide-spread in a period characterized by the mounting tension between Jansenists and Jesuits (from 1642 on). Moral writings therefore frequently carried, either explicitly or implicitly, a religious and

political statement. For this reason, the rhetorical power of the text is of substantial importance. The works constituting the corpus all represent Jansenist, or at least, Augustinian (Saint Augustine, 354-430) principles, as opposed to Jesuit, mainstream Catholic and mundane morals. Instances of personification are extracted, analyzed and interpreted in a triple angle, namely, conceptual, cultural and pragmatic. At the first level, the metaphorical bases and processes (e.g. composition, extension, elaboration, blending) are identified and described, taking any cultural foundations into consideration. At the second level, these conclusions will be projected upon the discourse in order to explore how the conceptual structure contributes to the persuasive power and the intertextual coherence of the corpus. Apart from its specific scope, the research may also provide an insight into metaphor-text-discourse relations in general.

Fragile Presence and Shifting Boundaries

Monika Jaeckel

(Independent Artist Researcher)

With this proposal I want to continue my research of the memacism project through a diffractive reading of A.Noë's sensorimotor based enactivism as applied in his recent text 'Concept Pluralism, Direct Perception and the Fragility of Presence' and the subsequent commentary, developed on an social-enactivism account, by M. Kyselo with feminist readings of K.Barad's Agential Realism as introduced by R.Coleman and P.Hinton among others.

The latter feminist new-materialist perspective regards subjectivity as dispersed and interwoven defining bodies as objects of knowledge, which are intra-actively involved in the bringing forth of meaning, though not because 'we do the choosing [...] but because we are an agential part of the material becoming'. Defining body/matter as having an 'active role in the generation of perceptual meaning' and not merely as containers of mediation challenges definitions of a representational rational that is performed by a solitarily existing conscious mind.

A.Noë, equally argues that access to the world emerges in a constant process of fragile presence, though indicates conceptual representation as that what enables us to see with. Such concepts, while marked as fragile, define a critical point, which I would like to approach under the aspects of performativity in exploring R.Coleman's argument that 'culture and materiality have reciprocal agentic effects upon one another'.

With reference to K.Barad's concept of exteriority-within-phenomena I assume established boundaries as the one between nature/culture not as fixed, but rather as shifting from within – an iterative intra-active process that also affects the concepts of a conscious mind.

6D: Fictional Spaces

Room 6; Chair: Raphael Lyne

Feeling Literary Environments: Cognitive Ecocriticism, Embodiment, and Emotion

Alexa Weik von Mossner
(University of Klagenfurt)

To date, only very little cognitive scholarship has made inroads into ecocriticism (Easterlin 2010; James 2015) or the environ-mental humanities more generally. My paper will suggest that an ecocritical approach that takes on board the insights of second-generation cognitive science can give us a better understanding of the role played by affect and emotion in readers' virtual experience of literary environments.

It will take a closer look at how exactly literary texts evoke environments in the minds of readers and how both the environments themselves and characters' relationships to them are imbued with affective meaning.

Drawing on the neuroscientific concept of liberated embodied simulation (Gallese & Wojciehowski 2011), the paper will argue that simulation processes are of central importance not only to readers' engagement with characters, but also when it comes to their experience of literary environments. A comparative look at John Muir's *The Mountains of California* (1894) and Bonnie Nadzam's novel *Lamb* (2011) will allow for a consideration of the central role of literary perspective in the creation of "instruction manuals" (Caracciolo 2014) that invite embodied simulation. The paper will consider both the empathetic emotions that are evoked as prota-gonists move through storyworlds and the direct emotions that readers experience in response to the storyworld itself. It will also engage with claims, made by scholars such as Richard Gerrig (1998) and Patrick Colm Hogan (2011), that there is no qualitative difference between fiction and nonfiction when it comes to readers' affective engagement with the storyworld of a text.

Cognitive Ecology and the Perception of Poetic Environments in Charles Reznikoff's New York

David Rodriguez
(Stony Brook University)

In order to emphasize the ecology of Edwin Hutchins's formulation of cognitive ecology, this presentation examines how early- and mid-20th century American poetics establishes a distinctly spatial engagement with imagination. In the face of more well-known examples—William Carlos Williams's variable foot, Charles Olson's experiments with concrete form, Louis Zukofsky's geometrical prosody—we can turn to Charles Reznikoff's haiku-like descriptions of his long walks around New York City for imaginative engagement, simultaneously, with daily and extra-daily environments.

This is the wayfaring line drawn as he wanders through the streets, parks, and subways as well as the short, clipped lines he draws in the active sketches of what he sees. The reader, then, experiences (I propose) an aesthetic dimension to what Hutchins calls "imagined-trajector- based practices." This is the power of trajectors to order and enable action in the environment: We queue appropriately without noticing that we've organized the perception of a mass of bodies in front of a bank window into a "line;" we name Ursa Major before realizing we've drawn lines between stars billions of miles apart. Our practical interactions with the environment are, in this way, both culturally and perceptually concrete. This concretization comes through our individual actions, and is significant because it sets our perceptual habitus literally into our shared environments.

But a poem is an impractical engagement with the environment. Can it set anything into a shared environment? As a cultural act also set into lines, trajectors, Reznikoff's poems become an entryway into an aesthetics of the distributed cognition Hutchins describes in the context of boat or aircraft navigation. For Reznikoff similarly orders the reader's perceptions into the immediacy of his poetic navigation through an ecological awareness of both his environmental surround and the texture of the poem, but challenges the concept of distributed cognition's "functionality" through the comparative "uselessness" of the poem as compared to other trajectors.

Ungrounding Storyworlds: An Enactivist Perspective

Marco Caracciolo
(University of Freiburg)

Notions such as "storyworld" or "fictional world" carry a sense of ontological completeness and self-sufficiency: hence, comparing a story to a world often

serves to emphasize its distinctive atmosphere and immersive qualities. The intuitive appeal of the world metaphor explains its popularity in both everyday language and academic discourse, where scholars such as Umberto Eco, Ruth Ronen, and Marie-Laure Ryan have developed accounts of mimesis influenced by the notion of “possible worlds” in modal logic. On the other hand, the world metaphor has attracted important criticisms: for Richard Walsh, the ontological separation it implies is misleading, because reading fiction is mainly an act of relevance-building in which the story is integral part of our everyday reality.

In cognitive approaches to narrative, the world metaphor has typically been embraced—for instance, by Richard Gerrig in *Experiencing Narrative Worlds* or David Herman in *Story Logic*—without scrutinizing its implications. This paper considers to what extent, and in what ways, this metaphor is really compatible with a mind-oriented approach. I will argue that the world metaphor should be de-ontologized—i.e., freed from any connotation of stability and persistence through time. As philosophers Varela, Thompson, and Rosch posited in their seminal *The Embodied Mind*, the world does not pre-exist the mind; on the contrary, worlds are enacted by sentient organisms on the basis of a background of bioevolutionary (and, in humans, biocultural) propensities. This enactment is a form of meaning-making, and accommodates both Walsh’s emphasis on relevance and experiential phenomena such as atmosphere or immersion.

13.15 – 14.45

Parallel panel sessions 7

7A: Second-Generation Readings of Fictional Humans, Objects and Environments

Room 9; Chair: Anna Ovaska

Crafting Possible People: Cognitive Approaches to Fictional Characters

Essi Varis

(University of Jyväskylä)

No narrative element has received as scant academic attention as characters. The most oft-quoted reason for this is that they are simply too obvious to be interesting: everyone constructs possible humans and other fictional creatures out of newspaper articles, diaries, advertisements, logos and – of course – stories told across media every day. The fact that cognitive creation of life is so common does not, however, make it any less miraculous. Quite the contrary: analyzing the cognitive processes involved in reading characters is a central prerequisite for understanding, for example, transmediality, narrative empathy, identification with fictional heroes and numerous character-centered fan practices.

My presentation will explore how cognitive approaches have already influenced character theory and how it could benefit the interdisciplinary study of transmedial fictional characters required in the future. While few character theories identified as cognitive before the 21st century, some bear clear traces of cognitive reasoning: Baruch Hochman’s theory of *homo fictus* (1985) and Aleid Fokkema’s semiotic theory (1991) already recognized the character’s double nature as a textually and mentally generated construct, an amalgamation of signs and a textual effect. This double vision offers a far richer explanation for phenomena like interfigural or identification than the traditional trait theories do. Yet, the newer, explicitly cognitive theories are still very narrowly focused on literature and narrated minds. I maintain that cognitive approaches, especially second generation cognitive approaches, would enable a more holistic analysis of characters as fundamentally

transmedial, more or less human-like creatures with imagined minds, bodies and lives – as well as an impact on real people.

Where Does the Mind Stop and the World Begin? An Enactivist Reading of Psychotic Fictional Minds

Anna Ovaska

(University of Helsinki / Justus Liebig University)

Fictional narratives that evoke experiences of mental disorders often employ and challenge the ways we understand the borders between the self and the world. Looking from an enactivist point of view, the fictional representations of non-normative mental experiences such as psychotic delusions reveal the basic structures of our cognition and our being-in-the-world. The enactivist approach emphasizes that the human mind and experiences are always enacted, embodied and embedded in a specific environment. Accordingly, mental disorders are no longer understood as “inner” or “psychic” phenomena but rather as disruptions in the subject’s being-in-the-world that encompass both cognition and affectivity, and the self and the world (e.g. Fuchs 2009; Colombetti 2013).

In my presentation, I will discuss how the enactivist view on minds and pathology could be applied to the reading and interpretation of fictional minds in psychosis. I will show how first-person narrated stories of psychotic experiences (e.g. by Franz Kafka and Sarah Kane) tap into readers’ cognitive and emotional experiences of being-in-the-world: how they, for example, portray the mind as dispersed into the world and its objects, or, conversely, as turning inwards. Literary representations of psychosis go against the dualism between cognition and affectivity, and depict the embodied mind in its environment. They are thus breaking the divisions between inner and outer, subject and object, and self and world. As such, narratives can also open new perspectives to the ways mental illnesses are understood in culture and in society, as well as challenge our cultural and folk-psychological assumptions about the human mind.

Feeling Words or Making Sense: Reading Gertrude Stein’s Tender Buttons

Laura Oulanne

(University of Helsinki / Justus Liebig University)

Gertrude Stein’s prose poems in *Tender Buttons* (1914) continue to puzzle readers and researchers. Some attempt to decode them, others celebrate their non-referentiality, which mocks all pursuit of meaning. Lately, attention has been paid to the sensual and affective qualities of the poems, which bring an element of experientiality and a different kind of sense beside their nonsensical experimentality. The poems approach their titular Objects, Food and Rooms in highly affective terms and in a language that highlights its own materiality. This applies not only to expressions of visual, aural and tactile experience, but also to concrete object-nouns, abstract formulations and linguistic conventions. Yet, readings tend to overlook this consistency and especially the sense-tingling affectivity of the abstract, while seeing meaning where there might be none.

I suggest a reading that acknowledges both the “literariness” and the affectivity of *Tender Buttons*, without forcing an interpretive frame on its word-objects. Drawing on a second-generation cognitive approach, I base my reading on the idea of the embodiedness and cultural embeddedness of experience and consciousness, with a special focus on affect as embodied (Colombetti 2014). In the study of literature, such approach complements affect theory by encompassing embodied responses to not only representations of sensing, movement and emotion, but also the material world, conventions of language and culturally loaded concepts (Kukkonen & Caracciolo 2014). My reading addresses the affective appeal of the work, balancing between sensuality, making sense and nonsense.

An Experimental Model for Ecological Reading

Kaisa Kortekallio
(University of Helsinki)

Second-generation cognitive science provides a framework for thinking cultural practices as embodied interactions with other bodies and processes, and therefore it also enables ecological methods for reading fiction. Marco Caracciolo (2014) has recently drawn up a working model, "the embodiment spectrum", that considers literary interpretation in the system of constraints and affordances provided by the biological makeup of human bodies. In my presentation, I connect Caracciolo's embodiment spectrum to ecological theory: in the resulting experimental model, reading bodies are considered as organisms-in-systems and engagement with fiction as niche construction. The concept of niche construction, applied to human cultures by Laland and Brown (2006), describes a process in which an organism modifies its immediate location in ways that affect the living conditions of future inhabitants of that location. I ask how this idea could be useful in studying a specific cultural practice of humans: literature.

To map out the potential of the experimental model, I present a reading of Jeff VanderMeer's novel *Annihilation* (2014). The novel uses affective and estranging strategies to evoke reconfigurations of subjectivity and environment. Following Alva Noë and Timothy Morton, I posit my reading body as a phenomenological instrument that, in engagement with literature, produces knowledge of the biocultural mesh it is embedded in. This method reconsiders the importance of personal involvement and aesthetic experience in understanding both literature and environmental phenomena.

7C: Minds and Media

Room 8; Chair: Ben Morgan

Dynamic Visualizations, Digital Humanities and Embodied Schemata

Erwin Feyersinger
(University of Tübingen)

Dynamic, i.e. animated visualizations are a highly pervasive form of moving images, increasingly used also in the Digital Humanities. While many visualizations foster meaning-making of complex phenomena, others achieve quite the opposite by being unintentionally misleading or even intentionally deceptive. This paper will argue that embodied image schemata strongly influence both the understanding and misunderstanding of visualizations.

Conceptual Metaphor Theory seems to be an especially promising approach for analyzing how human beings process dynamic visualizations. This theory, originally proposed by George Lakoff and Mark Johnson for researching linguistic metaphors, is successfully employed by contemporary cognitive film scholars (amongst others Fahlenbrach 2010, Forceville and Jeulink 2011, Coegnarts and Kravanja 2012, and Quendler 2014). It claims that meaning-making and reasoning, even of abstract concepts, are deeply rooted in the sensorimotor experience of human bodies. Embodied schemata are an integral part of Conceptual Metaphor Theory. They are thought of as basic spatiotemporal mental patterns that can be mapped onto more abstract domains.

Conceptual metaphors motivated by embodied schemata seem to be omnipresent in animated visualizations. In its core, animation itself consists of basic spatiotemporal patterns: shapes in motion. These moving shapes are, however, representational mappings of a certain image schema, not the schema itself, even if they seem to be very similar. By discussing a few well-known examples, this

paper tries to disentangle visual images from mental images and identifies this dual structure as a source for misleading representations of abstract data.

Active Perception and Narrative Media

Lyubov Bugaeva
(Saint-Petersburg
State University)

Couple years ago "The Nation" published an article "Adventures in Neurohumanities" that discusses the expansion of neuroscience into the area of literary studies and asks a question whether it is a good way to read a novel (The Nation. May 27, 2013). The answer to the question is twofold and can be sought theoretically and practically. Enactivists developed the idea of an active perception that challenges traditional conceptions of perception and interpretation. Writers and artists in their turn try to employ brain-computer interface (BCI) in their works in order to turn a reader (or a viewer) into a 'second-order' author. Thus, Finnish writer and mathematician Hannu Rajaniemi developed a project 'Neurofiction' based on BCI that aspires to provide a new kind of literary experience. However, experiments in creating a model for active perception are not limited to BCI narratives but embrace a wider range of approaches that challenge linear narrative structure and passive perception, e.g. ergodic literature and cybertext in particular, interactive narratives, including hypertext fiction and Choose Your Own Adventure books, perceptive media (for example, BBC research and development experiment – the audio drama "Breaking Out", 2012), and even 'emotional script' that goes back to the 1930s.

The paper examines the interactive narrative dynamics through the concepts of experientiality and 'embodied mind' and seeks to identify the 'basic elements' (David Herman) of narrative models aimed at active perception.

Being Typical and Being Individual in Film

Henry Bacon
(University of Helsinki)

Types in film stand for something more general than an individual in order to ensure narrative clarity, to make a point about human behaviour and social relations or for expressive purposes. There may be a tension between typificatory and individuating tendencies in characterization but for the most part these work out in a dialectical fashion, individuation taking place through a process of increasing refinement of categorization. The key issues are in what ways the characters are representative in terms of traits assigned to them, how these appeal to both acquired cognitive schemata and learned social codes, and to what mode of classification the typification appeals to. The structures of real life encounters have their analogies in filmic narration which provides its own frames and contexts triggering the schemata which govern not only categorization itself but also the affective and evaluative way the spectator conceives the characters. The crucial point is the analysis of character typicality/ individuality in terms of the givenness, accumulation and development of recognizable traits over the course of the narrative. Are traits chosen to elicit a sympathetic or an antipathetic reaction and is the spectator cued to accepting or questioning the assigning of such traits and the way they are presented? In what ways are traits assigned to a class or people made to appear representative? The ways this is worked out will be analyzed in terms of cognitive theory of classification.

7D: Problems and Niche Solutions

Room 6; Chair: Renate Brosch

Guthlac in the Balance: Enacting Landscapes of Torment

Michael Baker
(Durham University)

As scholars such as Monika Fludernik, Antonina Harbus, and Leslie Lockett have demonstrated, medieval narratives offer fertile fields for cognitive study; they challenge ideas about the scope and limits of narrative, and how it both shapes and is shaped by mental processes—such as perception, cognition, and emotion—and by evolving, emergent understandings of these processes. The instrumental bias in Anglo-Saxon thinking suggests the relevance of enactivist approaches for diachronic study of the mind-narrative nexus, and vice versa, so this paper investigates how the landscapes of the Old English *Life of St Guthlac* and the two short Guthlac poems (all circa-tenth-century texts) stage medieval minds' enactment of complex theological, social, and material worlds.

Anglo-Saxon texts like these offer a phenomenological model of purposive self-and-environment interactions that begs to be placed in conversation with enactivist theory. Where the enactivist agent gains access to experiences through skilled sensorimotor coordination, the hermit Guthlac seeks contact with God through trained contest with his perceptions. In search of a hellish site, Guthlac journeys to the fens (rather than a patristic desert), but from that watery bog he is lifted by accursed spirits to behold a fiery Christian hell. Affirmed and confirmed by testing in the fens, it is the strength of his perceptual standpoint, rather than traditional heroic agency, that verifies his later, incredible spectacle of fiery torment for an audience that valued the exploratory use of the senses, and a diversity of experiential perspectives.

Sharing Cognitive Futures (and Pasts): situated collaboration and interaction in small groups

John Sutton
(Macquarie University)

Small group research is one key domain for the cognitive humanities, where concepts and methods from the humanities and social sciences can actively contribute to and reorient the cognitive sciences. The rich mutual interanimation of minds and cultures in small group decision-making, remembering, and action requires novel mixed methods for tapping the microprocesses of interaction between heterogeneous but tightly entangled individuals over time. We engage in many significant cognitive and affective practices in ongoing interaction with specific others, in couples, families, groups of like-minded friends, colleagues or work teams. Such small groups are dense networks of relations which are psychological, emotional, behavioural, and ethical all at once. In these stronger cases, participants recognize that they have interests in common, a shared past, and a commitment to shaping a prospective future. We know that we have and will continue to have shared experiences, to renegotiate their meaning, and to draw on this specific embedded history to direct collective planning and joint action. If minds are not located in the skull, if they are both embodied and distributed across diverse cognitive ecologies, they can be studied in action and interaction in such small groups, arenas of coordinated problem-solving and joint feeling where shared customs, expectations, norms, and intentions emerge and are contested. Drawing on our studies of collaborative recall in couples and small groups, I discuss the use of cognitive ethnography and culturally or historically specific case studies for building thicker understanding of situated collaboration and interaction in temporally extended group processes.

The Cognitive Humanities and the Extended Mind: Problem Solving, Explanation and Insight

Michael Wheeler
(University of Stirling)

According to the extended mind hypothesis (EMH) of cognitive science, psychological phenomena are sometimes realized by distributed systems of organic and technological machinery. James Williams has argued recently ('Do No Harm: the Extended Mind Model and the Problem of Delayed Damage') that EMH conceives of thought as essentially a matter of problem solving aimed at smooth and transparent coping with the environment. However, argues Williams, "smoothness and transparency conceal underlying conflict in the situations they seek to describe and explain", a concealment which "leads to harm, defined as a diminishing of our capacities to flourish in a given environment". Williams' critique chimes with a humanities-driven approach to thought. How much of what we learn about the human mind from, say, literature counts as a better appreciation of smooth coping by generic human problem solving capacities, as opposed to an exploration of contours of underlying conflict in human lives? Indeed, one might think that other aspects of the mind as revealed by literature, such as the playful wandering of human consciousness, are either invisible or distorted, when viewed as problem-solving-aimed-at-smooth-coping. The worry, then, is that the extended mind of cognitive science is not the mind of the humanities. I shall argue that Williams' critique may be absorbed by EMH. Along the way, I shall address a critical issue for the cognitive humanities, namely the distinction between explaining psychological phenomena (depicted as the goal of cognitive science) and providing insight into such phenomena (depicted as an achievement of literature and its study).

7E: Multimodal Nature of Creativity: Empirical Evidence of Triggering Originality

Room 5; Chair: Janet Blatter; discussant: BA
Harrington

Through the Internet Choreographing and Dancing: a Creative Process in a Shared Reality

Nadra Majeed Assaf
(Lebanese American University)

Cultural connections allow for differences that exist based on personal experiences and different ways of knowing (phenomenological understanding- Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty, Jean-Paul Sartre, et al.). Examples of such things are: corporeal expression, technology, and vocabulary. Audience reactions are directly linked to embodied knowledge. Where the code is not known, however, the information (no matter how elaborate) is simply noise. The feelings an audience member develops while watching movement is referred to as kinesthetic empathy. Kinesthetic empathy is actually the knowledge one has of the movement she/he sees and what that makes her/him feel. Michael Polanyi's assertion: "we know more than we can tell", puts this in the context of "tacit knowledge" (2009). This knowledge amasses in our bodies over time, and is often referred to as body or muscle memory and is a motivating principle in somatics. Thus through reference to our past embodied experiences, we infer what others mean verbally as well as physically. According to Foster "... these patterns represent a way of knowing in a given cultural context, a form of embodied knowledge" (2011). This also illustrates dance as a different mode of communication (Gardner, 1988). Mangione (1993) considers the historical connection between the birth

of modern dance and the development of somatic theories and practices. She explains the similarities between the two with their "body-based forms that value the whole human being" (Mangione, 1993). Modern Dance just like modern art, is open to interpretation. The project developed by Assaf and Ross is a modern dance and is saturated in intercultural exchange. It was both embodied in the movement and in the actual process of developing the work. In this paper I will cover the context of the work from inception to presentation. I will also be looking at the diasporic elements of individuals who participate in the International Dance Day Festival in Lebanon (IDDFL) and how dance communicates identities and how this issue can both hinder and help creative development. Ultimately, the paper looks at how IDDFL has inspired the work of both Assaf and Ross, and how hosting a festival that highlights the identity of dancers in Lebanon brings forth its own cultural exchange, political identity and creative processes.

Translation as Creativity: Cognitive Triggers and Procedural Characteristics

Irina V. Ubozhenko
(National Research University
Higher School of Economics)

Translator's intuition and creativity have remained the most complicated issues of human thinking modeling linked to possible ways of teaching translator's ingenuity.

In my proposal the phenomenon of "translation occasionalism" serves as the fundamental concept in understanding creativity. Translation occasionalism being a novel invention that emerged in the course of translator's mental activity may be "read off" and interpreted only by the representatives of a definite cultural community who percept the reality around as shared cognitive environment.

I see the abilities of a person to produce linguistic occasionalisms as a cognitive trigger of a person's creative linguistic decisions that influences their overall intellectual - both verbal and non-verbal - potential, marks the creative identity and individuality of a writer, hence, should be developed comprehensively.

While language intuition is considered as implicit knowledge, creative skills initiating should rely on explicit knowledge-based procedures typical of any creative process. In case of stereotype universals dominating in the structure of translation knowledge the variant of translation chosen will be pattern-like, while the original structure of intuitive knowledge presupposes the emergence of an original decision: the result of a mental state, when a trivial cognitive vision does not prevail in a person's mind and does not prevent him/her from blending different concepts.

The task of a professional teacher of translation is to help "building up" and developing an original cognitive mind structure by stimulating the student's ability to involve in the process of thinking non-standard associative links, thus provoking the creative translation decision.

15:00 – 16:00

Room 6:

Conference post-mortem and future planning

At the conference post-mortem, we look back on three full days of "Cognitive Futures in the Humanities". This is an open session for any interested participant to exchange views on the conference and to make plans for the future. Future conference venues will be announced here, as well!

