



RaAM Specialized Seminar

Ecological Cognition and Metaphor

University of Southern Denmark May 17th - 19th 2017



Book of Abstracts

Local Organizing Committee:

Thomas Wiben Jensen, SDU

Anders Hougaard, SDU

Astrid Jensen, SDU

Linda Greve, Aarhus University

MetNet Denmark



CROSSCOM

Ecological Cognition and Metaphor

The theme of the 2017 seminar is “Ecological Cognition and Metaphor”. The goal of the seminar is to relate the newest tendencies within cognitive science to the study of metaphor and other forms of figurative language. In recent years, a new way of looking at the notion of cognition is gaining ground, often labelled as 4E-cognition (embodied, enacted, embedded and extended cognition). The basic claim is that cognition cannot be reserved to individual processes in the head (and body) only; rather cognition is seen as “a doing”; it is something we do in our active and explorative sense-making with the bio-social environment. Thus, an ecological turn is on its way within cognitive science that seeks to explore thought, feeling and action as inter-related dimensions of an agent-environment system. The seminar will investigate these new approaches in relation to the study of metaphor, i.e.: If cognition is no longer to be seen as solely a property of the individual mind where does it leave a cognitive approach to metaphor? Can we investigate metaphor as evolving constraints on experience, thought and feeling within a distributed cognitive system? What is the role of metaphor in the creation of the interpersonal mind, e.g., how can metaphors be studied as affordances for joint action and thinking?

We welcome the RaAM community to Denmark!

Local organizing committee:

Astrid Jensen

Anders Hougaard

Linda Greve

Thomas Wiben Jensen

Program Overview

Wednesday 17th May 2017

Pre-conference workshop: Enacting Metaphor in Everyday Life

9.00-10.00	Registration
10.00-12.00	Session 1
12.00-13.00	<i>LUNCH</i>
13.00-15.00	Session 2
15.00-16.00	Plenum discussion
16.30-18.00	Wine reception (OPEN TO ALL)
19.30-23.00	<i>Student event: "Smørrebrød and local beer" at Grønttorvet</i>

Thursday 18th May 2017

8.30-9.30	Registration
9.30-10.30	Keynote: Ray Gibbs
10.30-11.00	<i>COFFEE</i>
11.00-13.00	Parallel sessions
13.00-14.00	<i>LUNCH</i>
14.00-15.00	Annual General Meeting RaAM
15.00-15.30	<i>COFFEE</i>
15.30-17.30	Parallel sessions
18.30-22.00	<i>Conference dinner at Restaurant PASFALL</i>

Friday 19th May 2017

9.00-10.00	Keynote: Ágnes Szokolszky
10.00-10.30	<i>COFFEE</i>
10.30-12.30	Parallel sessions
12.30-13.30	<i>LUNCH</i>
13.30-14.30	Poster session
14.30-15.30	Keynote: Jordan Zlatev
15.30-16.00	Closing ceremony

Venues

Seminar venue:

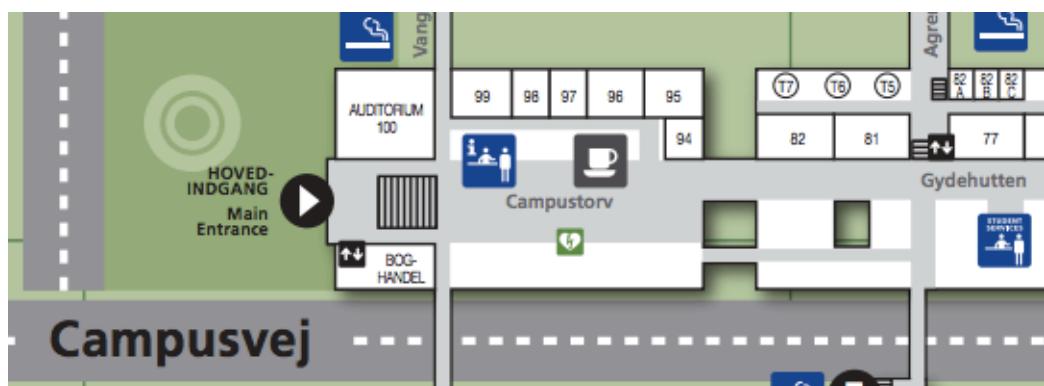
University of Southern Denmark
Campusvej 55
5230 Odense M

Take busses 41 or 42 directly to the University

Rooms

U56	Pre-conference workshop
O 100	Keynotes and AGM
O 94	Parallel sessions
O 98	Parallel sessions
O 99	Parallel sessions

Coffee breaks, lunch and wine reception will take place close to session rooms.
Follow the signs or ask at the registration desk



Social venues:

Student event (Wednesday)
Grønntorvet
Sortebrodré Torv 9
5000 Odense C

Conference dinner (Thursday)
Restaurant PASFALL
Brandts Passage 31
5000 Odense C

List of participants

Name	E-mail
Carina Rasse	carina.rasse@aau.at
Kristina S. Despot	kristina.despot@gmail.com
Allison Creed	allison.creed@usq.edu.au
Laura Hidalgo-Downing	laura.hidalgo@uam.es
Paula Perez-Sobrino	p.perez-sobrino.1@bham.ac.uk
Jeannette Littlemore	j.m.littlemore@bham.ac.uk
Fiona MacArthur	fionamac@unex.es
Marwa Ibrahim Alamin	marwaalamin@gmail.com
Bodo Winter	bodo@bodowinter.com
Blanca Kraljevic Mujic	blanca.kraljevic@gmail.com
Elena Semino	e.semino@lancaster.ac.uk
Sarah Turner	TurnerSL@adf.bham.ac.uk
Susan Nacey	susan.nacey@inn.no
Malgorzata Fabiszak	fagosia@wa.amu.edu.pl
Dr Stephen Lucek	luceks@tcd.ie
Elsbieta Górska	Elzbieta.Gorska@uw.edu.pl
BENEDIKT PERAK	benediktperak@gmail.com
David O'Reilly	david.oreilly@york.ac.uk
Yu (Elaine) Chen	ychen159@ucsc.edu
Maria Muelas Gil	mmuelasg@gmail.com
CONG MU	mu.cong@nottingham.edu.cn
Oana David	rdugger@ucmerced.edu
Andreas Musolff	a.musolff@uea.ac.uk
Christopher Karzmark	chriskarzmark@gmail.com
Ewa Olszewska	eolszewska@wa.amu.edu.pl
Dorothea Horst	horst@europa-uni.de
Dariia Orobchuk	daschaorobtschuk@gmail.com
Gudrun Reijnierse	g.reijnierse@let.ru.nl
Tina	t.krennmayr@vu.nl
Lettie Dorst	a.g.dorst@hum.leidenuniv.nl
Alice Deignan	a.h.deignan@education.leeds.ac.uk
Min Chen	mythofmuse@163.com
Patrawat Samermit	psamermit@ucsc.edu
Mark Shuttleworth	m.shuttleworth@ucl.ac.uk
Benjamin Wallsten	bwallste@ucsc.edu
Meera Burgess	m.burgess.1@bham.ac.uk
Juani Guerra	jguerra@ulpgc.es
Annamaria Notaristefano	ann.notaristefano@gmail.com

Marta Silvera	silvera_roig@hotmail.com
Prof. Dr. Cornelia Mueller	cmueller@t-online.de
JUAN JOSÉ MARTÍNEZ	
RODRIGUEZ	jjmartinez@estudiouad.com
Marlene Johansson Falck	marlene.johansson.falck@umu.se
Simon Harrison	simon.harrison@nottingham.edu.cn
Raymond Gibbs	astrid@sdu.dk
Agnes Szokolsky	astrid@sdu.dk
Jordan Zlatev	astrid@sdu.dk
Linda Greve	greve@au.dk
Astrid Jensen	astrid@sdu.dk
Thomas Wiben Jensen	twj@sdu.dk
Anders Hougaard	hougaard@sdu.dk

Wednesday 10.00-16.00

Pre-conference workshop Room U56

Enacting Metaphor in Everyday Life

Enacting metaphoricity:

A multimodal and multisensorial trajectory to David Bowie's mural in Brixton

Laura Hidalgo-Downing

Universidad Autónoma de Madrid

4E metaphoric mechanisms: Sensory-motor encounters in real estate showrooms

Simon Harrison and David H. Flemming

University of Nottingham Ningbo, China

Discourse Historical Approach to metaphor

or the socio-political and historical ecology of metaphor

Małgorzata Fabiszak

Adam Mickiewicz University in Poznań, Poland

Socio-historical micro and macro context of DHA

as ecology for the interpretation of metaphor meaning in 3D art

Ewa Olszewska

Adam Mickiewicz University in Poznań, Poland

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation is a 40-minute discussion moderated by discussants.

Pre-conference workshop

Enacting metaphoricity: A multimodal and multisensorial trajectory to David Bowie's mural in Brixton

Laura Hidalgo-Downing

Universidad Autónoma de Madrid

The present paper presents an urban trajectory as a physical and metaphorical journey carried out in the London underground to the mural dedicated to David Bowie in Brixton, his place of residence during his youth, together with a preliminary analysis of some of the metaphors in the graffiti surrounding the mural. The trajectory and the metaphors in the graffiti are approached as metaphorical processes of enactment and embodied memory. The study draws from research on embodied multimodal metaphor, enactment and metaphoricity (Forceville and Urios-Aparisi 2009, Gibbs 2003, 2006, Jensen and Cuffari 2014). The mural has become a protected shrine visited by thousands of fans. As such, it is an urban site for the expression of collective memory (Harju 2015). Metaphoricity is approached as a multimodal, multisensorial, performative, dynamic phenomenon. The study focuses, first, on the network of metaphors which emerge as the trajectory is performed, including two sound recordings in the underground and at the site of the mural, and the evoked metaphors in memory. Second, some of the main types of creative metaphorical recontextualizations expressed in the graffiti are analyzed. Here, metaphorical enactment takes place in the fans' writings on the wall, who enter the imaginary universes of David Bowie's songs and address the artist to pay him tribute.

References:

- Forceville, Charles, and Eduardo Urios-Aparisi (2009) *Multimodal Metaphor*. Berlin: Mouton de Gruyter.
Gibbs, Raymond W. Jr. (2003) Embodied experience and linguistic meaning. *Brain and Language*, 84: 1-15.
Gibbs, Raymond W. Jr. (2006) *Embodiment and Cognitive Science*. Cambridge: Cambridge University Press.
Harju, Anu (2015) Socially shared mourning: construction and consumption of collective memory. *New Review of Hypermedia and Multimedia*, 21(1-2): 123-145.
Jensen, Thomas W. and Elena Cuffari (2014) Doubleness in experience: Toward a distributed, enacted approach to metaphoricity. *Metaphor and Symbol*, 29(4): 278-297.

4E metaphoric mechanisms: Sensory-motor encounters in real estate showrooms

*Simon Harrison and Darbid H. Flemming
University of Nottingham Ningbo, China*

This paper explores metaphoricity in advertising discourse produced in the context of real estate showrooms in urban China. The research used video, photography, and participant observation to document the elaborate scenes and strategies in the showrooms, or the ‘multi-dimensional more-than-human set-ups, qua distributed (in time and space) enworlded urban agential-assemblages’ that developers have deployed to attract, entangle, and manipulate prospective customers into purchasing an expensive yet-to-be-built apartment (Fleming & Harrison, *in review*). While these set-ups immediately suggest a multimodal (Forceville and Urios-Aparisi, 2009) and dynamic (Müller, 2008) view of abstract conceptualization processes (including metonymy and metaphor), they also indicate that broader metaphor scenarios (Musolff, 2009) could be at play to evoke various frames, blends, image schemas, and other conceptual mappings that guide the logic of cognizers’ reasoning and behavior in those settings. In line with the theme of the RAAM seminar, our current paper embraces a 4E cognitive approach to these showrooms, outlining what we might call the ‘multi-modal agential confederations of objects’ that we have found in our various data sources surrounding these real estate showrooms. In particular, we set out to explore the use of tactile metaphoric mechanisms or ‘devices’ (Mladenov 2006: 8) that inculcate sensory-motor encounters that prompt the body and mind to leap frog, or ‘pole vault’ from one domain to another, and to ‘think’ of (if not to experience) an embodied encounter in ‘terms of something else’ (cf. Lakoff and Johnson, 1980). Affective objects in this setting are approached for their potential for latent transformations (see for example Brian Massumi, Elena del Rio), that is, as potentially transformative objects whose agential qualities (e.g. tactility, heft, olfactory particles) are deployed to help trigger metaphoric sensory-motor encounters. Accordingly, this paper examines how a range of cross-modal affective objects (e.g. to be touched, heard, tasted, smelled, etc.) and practices (e.g. waiting, following, uncovering, etc.) are deployed as ‘metaphorical devices’ that operate at a level ‘below’, albeit impacting, conscious thought and associations.

Pre-conference workshop

Discourse Historical Approach to metaphor or the socio-political and historical ecology of metaphor

*Małgorzata Fabiszak
Adam Mickiewicz University in Poznań, Poland*

Discourse Historical Approach (Reisigl and Wodak 2001) stresses the importance of socio-political and historical context for meaning making. Similarly, Bernardez (2007) advocates synergic cognition as a combination of embodied, situated, distributed cognition in a socio-cultural historical context. This is similar to the 4-E model of cognition (cf. Jensen – Pedersen 2016). In the present paper I build on these two proposals to address the issue of the ecology of metaphor.

The original version of CMT (Lakoff and Johnson 1980, 1999) focuses on the individual cognitive dimension of meaning making, but investigating the function of metaphors in discourse has always emphasized the importance of the socio-historical context which influences their interpretation. Zinken et al. (2008) stress that the embodied and the generic levels of metaphor are of little use to discourse analysts, because the power of metaphor in discourse or discourse metaphor is realized at a more specific level of meaning making. Similarly, Cameron et al. (2009) propose a metaphor-led-discourse-analysis, which focuses on how linguistic metaphors emerge from the discourse dynamics and show how recontextualizing them in the speakers' turns changes the implications that they produce. Such recontextualizations may also influence our perception of the degree of metaphoricity of meaning making processes (Mueller 2008, Jensen 2016).

Jensen (2016) sees written language bias as responsible for the reification of the concept of metaphor. In the study of dynamic embodied interaction the processual approach dominates in which metaphoricity is activated and deactivated to various degrees in the negotiation and re-negotiation of meaning making. I would like to argue that even in the written discourse, which is devoid of the natural affordances of spontaneous interaction, the mental simulation of the various potentialities of meaning is necessary for the critical evaluation of discursive implications as conducted within Critical Discourse Studies.

References:

- Bernárdez, Enrique. 2007. "Synergy in the construction of meaning", in: Fabiszak, Małgorzata (ed.) *Language and meaning. Cognitive and Functional perspectives*. Frankfurt(Main): Peter Lang. 15-37.
Cameron, L., Maslen, R., Todd, Z., Maule, J., Stratton, & N. Stanley. (2009) The discourse dynamics approach to metaphor and metaphor-led discourse analysis. *Metaphor & Symbol*, 24, 1-27.
Jensen, T. W. & Pedersen, S. B. 2016. "Affect and affordances: The role of action and emotion in social interaction", *Cognitive Semiotics* 9, 1: 79-103.

**Socio-historical micro and macro context of DHA
as ecology for the interpretation of metaphor meaning in 3D art**

*Ewa Olszewska
Adam Mickiewicz University in Poznań, Poland*

The paper focuses on the interrelations between language, thought, and bodily experience and in doing so follows three main concepts. One is that “language programs the mind and it does so through the manipulation of embodied (...) representations” (Lupyan and Bergen 2016). The second postulates that language “cannot be investigated in isolation from human embodiment” (Evans and Green 2006: 44), while the third assumes that cognitive processes involved in the making of meanings in language and art are generally the same (Libura 2007, O’Toole 2011, Kwiatkowska 2013).

The presentation has two aims. The first aim is to propose a methodological framework for the analysis of the language of 3D art forms, while the second aim is to show how the ecology of discourse may frame the understanding of art. The data is a set of nine three-dimensional artworks of four African-American artists, derived from the exhibition catalogue *History Refused to Die: The Enduring Legacy of African American Art in Alabama* (2015).

In order to analyze the artworks, I propose a methodological frame that draws on three strands of linguistics — Cognitive Linguistics (Lakoff and Johnson 1980, Forceville 2015, Dancygier 2016, Kwiatkowska 2013), Social Semiotics of art (O’Toole 2011), and Discourse Historical Approach (Wodak and Reisigl 2009) which I employ to examine the context of discourse. Context is also analyzed in the light of the ecological paradigm which portrays our discursive behavior as “materially embodied, culturally and ecologically embedded, naturally grounded, affect-based, dialogically coordinated and socially enacted” (Jensen 2016: 84, after Thibault 2011: 211).

By examining 3D artworks’ metaphoricity through the 3E (embodied, extended and ecological) cognition, the presentation pinpoints strengths and weaknesses of the proposed methodology and presents ways to overcome its limitations. In this way, the paper shows that it is possible to apply methods developed within Cognitive Linguistics, Social Semiotics and DHA to other research fields such as the meaning-making processes of 3D artworks.

Plenary speakers

Metaphor and Human Experience

Raymond W. Gibbs, Jr.

University of California, Santa Cruz

Perceiving metaphors

An ecological realist developmental approach to metaphors

Ágnes Szokolszky

Szeged University

The Sedimentation and Motivation Model in an Ecological Theory of Metaphor

Jordan Zlatev

Lund University

Presentation format:

All plenary speakers are given 45 minutes to present their paper.

Following the presentation will be 15 minutes for questions and discussion.

Plenary speakers

Metaphor and Human Experience

*Raymond W. Gibbs, Jr.
University of California, Santa Cruz*

The amazing revolution in metaphor studies over the last several decades has led to a tremendous appreciation of the role that metaphor plays in human thought, especially in regard to the structuring of abstract concepts. These studies, seen across many fields (e.g., linguistics, psychology, philosophy, cognitive neuroscience) have suggested to some that metaphors are entrenched patterns in the human conceptual system and play a critical role in diverse linguistic and nonlinguistic actions. Furthermore, metaphors in thought are now widely recognized as being grounded in recurring embodied experience, such that we experience LIFE IS A JOURNEY in a bodily manner given our past and current physical experiences of journeys. Still, metaphor theory typically assumes that inner, conceptual metaphors drive metaphorical language use and action, as if these conceptual metaphors are there waiting to be activated given the right input. My argument is that metaphor must also be studied and understood in terms of its embodied, ecological contexts. Metaphor, in this view, is always a matter of “performance,” or what people do, rather than just the activation of some prior knowledge. I will describe several ways of thinking about metaphor in human experience as a “performance,” as a type of “enaction,” which critically emerges from human self-organizing tendencies. Metaphorical experience unfolds dynamically over time in sensuous bodily ways from a complex interaction of forces that operate along different time-scales. Studying these interactions is critical to our understanding of how metaphors are always enactive in exquisitely context-sensitive and adaptive ways.

**Perceiving metaphors.
An ecological realist developmental approach to metaphors**

*Ágnes Szokolszky
Szeged University*

The metatheory in current “4-E” (embodied, embedded, enacted and extended) approaches to cognition is ecological, which implies a relational, mutualist ontology and epistemology of the organism – environment system: the organism can only be conceived in terms of its ecological environment, and the environment in relation to the organism whose environment (world) it is. There is a basic compatibility and meaningfulness involved: the world offers opportunities to know and the organism is equipped to exploit these opportunities. In order to build an ecological understanding of what metaphor is we need to clarify how this metaphysical ground plays out in acts of knowing that involve metaphor. Embodied approaches typically focus on conceptual metaphors in adult language use. However, it is equally important to understand the ontogenesis of novel insightful metaphors, and the role of perception and perceptual learning. In my talk I will present an ecological realist approach to the emergence and development of metaphor, based on the theory of direct ecological perception. This approach assumes that infants are naturally geared towards perceivable meta-modal invariants that specify persistence of qualities (e.g. perceiving rigidness when sucking on a rigid substance and seeing a rigid object moving), and early metaphors (e.g., when a 3-year-old says that a mother dog feeding her puppies “is a feeding bottle”) are consequences of this unfolding process in which invariants over naturally occurring kinds are perceived. Thus, metaphor production is an act of situated and experience dependent perceiving and acting, in the ecological world of socially shared meanings. Analysis of naturally occurring early metaphors, and an analysis of a dialogical situation, in which adult – child, and child-child dyads are looking at and conversing about visual metaphors will serve to illustrate and support the theoretical framework.

Plenary speakers

The Sedimentation and Motivation Model in an Ecological Theory of Metaphor

*Jordan Zlatev
Lund University*

From a broad ecological perspective, we could raise four desiderata for a theory of metaphor. In fact, these could be mapped to the different aspects of “4E cognition”: (1) it should be “embodied”, in the sense of grounded in the phenomenology of perception and action, (2) it should be “embedded” in sociocultural practices and discourse, (3) it should be “enactive”, in accounting not only for established expressions and constructions but also for emerging novel metaphors, and (4) it should be “extended” beyond the mind of individuals, and beyond a single semiotic mode such as language.

All current theories of metaphor lack in one or more of these aspects. For example, Conceptual Metaphor Theory (Lakoff & Johnson 1980, 1999; Kövecses 2000) claims to fulfill (1) and (4), but does much less well with the other criteria. Discourse Metaphor theory (Cameron & Diegman 2006; Zinken 2007) conversely focuses on (2) and (3), and to some extent even on (4), but is largely limited to language, and neglects (1). Gibbs & Johansson-Falck (2012) attempt a synthesis, but in using the unconstrained notion of “embodied simulation” fail to tease apart “different types of motivations (e.g. embodied, cognitive, linguistic, pragmatic)” for why various words are ultimately used in specific metaphorical ways” (*ibid*: 268–269).

To remedy this, I introduce the Sedimentation and Motivation model (Zlatev & Blomberg 2016, in press), which (a) distinguishes between three levels of meaning-making: Situated, Conventional and Universal, with (b) sedimentation processes operating top-down, and (c) motivating factors constraining from the bottom. It is at the highest Situated level where metaphors emerge and are at their most creative. Some of these become repeated and may eventually enter the Conventional level (e.g. expressions like *fall into a depression*). The Universal level, consisting of pan-human features related to embodiment, constrains which of the expressions become recruited, and which get established. However, such motivations are not metaphors per se, as both novel and conventional metaphors require publically accessible signs in language or some other semiotic resource.

With examples of “motion-emotion metaphors” in language and gesture from different languages/cultures I illustrate how the model fulfills the four desiderata for an ecological theory of metaphor.

Thursday 11.00-13.00

Parallel session Room O 94

Metaphors and disease

Chair: Jeannette Littlemore

Victims of our own metaphors: Is cancer a war in every language?

David Oana

University of California, Merced

A dynamic systems approach to metaphor and humour in online interactions about cancer

Elena Semino

Lancaster University

Zsófia Demjén

University College London

Metaphor and the Aesthetics of Headache

Anders Hønggaard

University of Southern Denmark

Metaphor Production by Patients with Schizophrenia – a Metaphor-Led Discourse Analysis

Kristina S. Despot

Institute of Croatian Language and Linguistics

Martina Sekulić Sović

University of Zagreb, Croatia

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphors and disease

Victims of our own metaphors: Is cancer a war in every language?

David Oana

University of California, Merced

Studies of English cancer-related discourse show that various stakeholders – patients, doctors, loved ones – tend to largely employ two metaphors: CANCER IS A JOURNEY and CANCER IS WAR. The latter is particularly dominant (Demmen et al. 2015, Semino et al. 2015), and has been shown to have detrimental effects for morale by creating a sense that the cancer is too strong to be beaten (Byrne et al. 2002, Hauser & Schwarz 2014). These findings lead to a series of important questions. Are bellicose metaphors ubiquitous cross-linguistically? If cancer is not a war to the same extent and with the same semantic spread in other languages as it is in English, what does this say about how cancer patients speaking other languages experience their condition?

In the current work, we debut a cross-linguistic corpus study of bellicose metaphors in the discussion of cancer as evident in grammatical constructions involving the word ‘cancer’ as the metaphoric target domain evoker. We find salient constructional patterns across the multi-billion word TenTen Web corpora for English, Spanish, and Japanese (Jakubíček et al. 2013). Cancer metaphors are shown to arise linguistically a) in different grammatical constructions across languages and b) with different frequencies and different degrees of lexical association across similar grammatical constructions. In addition to comparing frequencies, we also compare the log dice measure of lexical association. For instance, verb-object constructions, such as ‘fight cancer’ are frequent in English, but not as frequent in Japanese (e.g. ‘gan wo tataku’). Importantly, ‘fight cancer’ and similar expressions have a stronger lexical association in English than ‘gan wo tataku’-like expressions have in Japanese, signaling more entrenched status in English. We also show that in English as compared to Spanish and Japanese there are more war-specific metaphors (e.g., ‘form an army to fight cancer’), rather than more general physical combat metaphors. This is perhaps due to the preponderance of the ‘war on x’ construction that was popularized in the United States the 20th century to galvanize social action in addressing multiple social problems, including cancer. These differences may signal that cancer metaphors are enacted in different ways cross-culturally, in large part shaped by political discourse trends on a broader societal scale over time.

A dynamic systems approach to metaphor and humour in online interactions about cancer

*Elena Semino
Lancaster University
Zsófia Demjén
University College London*

This talk presents and discusses the findings of the analysis of one particular metaphor – the ‘cancer card’ – in a 500,000-word sample from a thread dedicated to humour on an online forum for people with cancer. One of several in-jokes shared by contributors to the thread is the idea that having cancer provides them with a metaphorical ‘card’ that they can use to their advantage in a variety of situations: e.g. ‘thinking the cancer card might get me off in court’. An analysis of all 106 instances of the expression ‘(cancer) card(s)’ in the data shows that, though related to English expressions like ‘play the [...] card’ and to conventional conceptual metaphors like LIFE IS A GAME, the use of this metaphor by forum contributors cannot be adequately explained as a Card Game metaphor involving stable source-target mappings. Rather, the metaphor is collaboratively and creatively developed (i.e. used, re-used, adapted) in ways that are emergent in context and specific to the particular online discourse community, while also reflecting a broader tendency on the forum thread to employ humour as a strategy for coping with adversity (Kuiper et al. 1993). We suggest that the collaborative and humorous development of this metaphor in the data can only be adequately explained in terms of the interaction of multiple factors, from conventional conceptual metaphors that may be shared by all speakers of English to the local interpersonal goals of individual contributors interacting on the particular thread on a particular day about a particular topic. We therefore propose that this interaction of factors in metaphor use is best accounted for within a dynamic systems approach to metaphor (Gibbs and Cameron 2008), and particularly by Cameron and Deignan’s (2006) notion of ‘metaphoremes’ that may be shared by the members of particular discourse communities (Deignan et al. 2013).

References:

- Cameron, L., and Deignan, A. (2006) The Emergence of Metaphor in Discourse. *Applied Linguistics*, 27(4), 671-690.
- Chapple, A., & Ziebland, S. (2004) The role of humor for men with testicular cancer. *Qual Health Res*, 14(8), 1123-1139.
- Deignan, A., Littlemore, J. and Semino, E. (2013) *Figurative Language, Genre and Register*. Cambridge: Cambridge University Press.
- Gibbs, R. W. Jr. and Cameron, L. (2008) The social-cognitive dynamics of metaphor performance. *Cognitive Systems Research*, 9: 64-75.
- Kuiper, N. A., Martin, R. A., & Olinger, L. J. (1993) Coping humour, stress, and cognitive appraisals. *Canadian Journal of Behavioural Science*, 25, 81-96.

Metaphors and disease

Metaphor and the Aesthetics of Headache

Anders Hougaard

University of Southern Denmark

Using text and images from the headache medication industry as data along with artistic and patient renditions of headache, this talk will describe a central role for metaphor in the construction of a shared phenomenal world. Traditionally (Lakoff and Johnson 1980, 1999) metaphor has been seen to serve the fundamental cognitive purpose of providing “embodied” inferential structure for conceptually “impoverished” (Lakoff and Johnson 1999: 58) events, experiences, sensations, etc. In the present account metaphor is instead seen as a central resource for establishing intersubjectivity given situations that require attention to matters the significant quality of which is otherwise unsupported and indeterminable as a public phenomenon. In the case of headaches the significant matter at hand is the distinctly “private”, specific quality (or “type” in medical terms) of a headache. In order to select appropriate treatment a doctor may need to know the exact quality of a headache. Following recent phenomenological accounts of “direct perception” (e.g. Gallagher 2008) a doctor in relying on facial expressions, gestures, body postures, etc. will typically be able to share some aspects of a patient’s condition and to determine that some unspecified headache is the problem. But such direct perception may be seen to be potentially extended by the use of metaphor, which in such cases provides a ground for supporting and determining a public ontology for private experience. The headache becomes “visibly-rational-and-reportable-for-all-practical-purposes”, we may say, using Harold Garfinkel’s (1967) jargon. This approach has many implications for the understanding and analysis of metaphor. In many ways it follows the lead of and contributes to recent trends in metaphor research (e.g. Cameron (2007), Gibbs and Cameron (2008), Müller (2008), Jensen and Cuffari (2014)), for instance by offering a perspective on metaphor as a “practical correlative” (an elaboration of Washington Allston’s (1878) and T.S. Eliot’s (1919) notion of an “objective correlative”) Moreover it introduces a “social inescapability” of metaphor in addition to Lakoff and Johnson’s (1999) embodied, ontogenetic inescapability.

Metaphor Production by Patients with Schizophrenia – a Metaphor-Led Discourse Analysis

Kristina S. Despot

Institute of Croatian Language and Linguistics

Martina Sekulic Sovic

University of Zagreb, Croatia

Schizophrenic language concretism (the inability of patients with schizophrenia to understand figurative meaning) has long been the subject of clinical and experimental interest. It has been shown that schizophrenic patients have impaired pragmatic or context dependent language understanding (Bazin et al 2000, Linscott 2004). They demonstrate two impairments of figurative language comprehension: insensitivity to irony and poor recognition of metaphor (Langdon and Coltheart 2004). Interpretational errors include literality, concretism, idiosyncratic and bizarre responses etc. (Iakimova et al. 2006). Neural basis of schizophrenic language has also been studied (Kircher et al.).

All the previous research of schizophrenic language was focused on figurative language comprehension (resulting in a long and fixed tradition of proverb tests). The aim of our study is to investigate metaphor production by patients with schizophrenia to reveal cognitive processes that underlie it and to detect possible errors.

We formed a target group of five patients with schizophrenia, and a control group of five healthy individuals. Target group was balanced by the type and degree of illness. Control and target group were balanced by age, gender and education level.

In order to collect a corpus of spontaneous speech, we have compiled an interview, based on Clinical Language Disorder Rating Scale (Chen et al. 1996), and prepared pictorial material designed as a story. Interviews were recorded and transcribed. On these transcriptions, we have performed a qualitative analysis using method of metaphor-led discourse analysis to detect differences in patterns of metaphor use (Cameron et al. 2009) between the target and the control group. Material has also been annotated for the type of conceptual metaphor (primary, complex, entailed) using MetaNet (<https://metanet.icsi.berkeley.edu/metanet/>) and MetaNet.HR (<http://ihjj.hr/metafore/metanet-hr/>) annotating schema. Target and control group parameters were then analyzed and compared. The results of the analysis could improve proverb tests as well as schizophrenia diagnostics and therapy.

References:

- Bazin, N., Perruchet, P., Hardy-Bayle, M.C. and Feline, A. (2000) 'Contextdependent information processing in patients with schizophrenia'. *Schizophrenia Research* 45: 93–101.
- Cameron, L., Maslen, R., Todd, Z., Maule, J., Stratton, P. and Stanley, N. (2009) The Discourse Dynamics Approach to Metaphor and Metaphor-Led Discourse Analysis. *Metaphor And Symbol* 24/2: 63–89.
- Chen, E. Y. H., Lam, L. C. W., Kan, C. S., et al (1996) Language disorganisation in schizophrenia: validation and assessment with a new clinical rating instrument. *Hong Kong Journal of Psychiatry* 6: 4–13.

Thursday 11.00-13.00

Parallel session Room O 98

Metaphor and narratives

Chair: Aletta Dorst

Metaphoremes: the situated co-construction of metaphorical narratives

Alice Deignan

University of Leeds, UK

Why don't we just go after 'the low hanging fruits'?

Metaphor and narratives in Corporate Strategizing

Astrid Jensen Schleiter

University of Southern Denmark

Metaphor in gesture

The emergence of mathematical concepts through metaphor and gesture

Maciej Rosinski

University of Warsaw, Poland

Speech-gesture patterns and the conceptualisation of musical pitch:

Bimodal metaphor usage by speakers of Swedish and Turkish

Peer Christensen & Marianne Gullberg

Lund University, Sweden

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphor and narratives

Metaphoremes: the situated co-construction of metaphorical narratives

*Alice Deignan
University of Leeds, UK*

Metaphor is increasingly understood as an emergent and dynamic phenomenon, shaped during text and talk production, through the interaction of what Gibbs & Cameron (2008: 65) term ‘enduring metaphorical concepts’ (p. 65), socio-cultural norms, the relationships between participants, and other language in the discourse up to that point. This interaction can result in the creation of a ‘metaphoreme’ (Cameron & Deignan 2006), that is, a metaphorically-used word or phrase that has specific lexico-grammatical patterning, pragmatic and affective characteristics as well as the conceptual content that has more traditionally been the focus of metaphor scholarship. Musolff’s ‘scenarios’ (e.g. 2006) capture a similar notion, with a stronger focus on narrative. Metaphoremes are sometimes developed during the course of an interaction and are unique to that interaction, other metaphoremes are shared more widely by groups or cultures. None can be fully understood without reference to their co-text and context. Analysis therefore needs to take account of discourse and cultural context, which is at odds with a quantitatively focussed version of corpus linguistics. Nonetheless, corpus methods are invaluable to the detailed study of metaphoremes, in at least two ways. Firstly, corpus analysis can show regular occurrences of the lexico-grammatical patterns that characterise metaphoremes. Secondly, a very large corpus can help the analyst to identify the usual evaluative stance and connotations of a metaphoreme, reducing reliance on introspection.

In this paper, I discuss the metaphoremes identified in the analysis of a small number of ministerial speeches about education policy. I describe the emergence of a set of metaphoremes that characterise teaching as a war, in various ways. I show how the analyst can pinpoint the covert evaluation in these expressions by using a large reference corpus.

References:

- Cameron, L. & Deignan, A. 2006. The emergence of metaphor in discourse. *Applied Linguistics* 27/4, 671-690.
Gibbs, R. & Cameron, L. 2008. The socio-cognitive dynamics of metaphor performance. *Cognitive Systems Research* 9/ 1-2, 64-75.
Musolff, A. 2006. Metaphor scenarios in public discourse. *Metaphor and Symbol* 21/1, 23-38.

**Why don't we just go after 'the low hanging fruits'?
Metaphor and narratives in Corporate Strategizing**

*Astrid Jensen Schleiter
University of Southern Denmark*

The aim of this project is to explore the integrated relationship between metaphor, narratives and corporate strategizing. Corporate strategizing is viewed from the perspective of dynamic metaphor theory (Gibbs & Cameron 2008), corporate storytelling (Boje 2008, Svane et al. 2017) and strategy-as-practice (SAP) (Jarzabkowski, Balogun, & Seidl, 2007). Strategizing can be seen as embodied practices heavily relying on both metaphor and storytelling, as both metaphor and storytelling function as cognitive instruments for strategizing. However, we find very limited research on the combined perspective of metaphor and narratives (see however, Michael Hanne, 2014) let alone, empirically explored in corporate strategizing.

Drawing on audio and video recordings from several strategy-development meetings, I will show how the combined use of metaphor and narratives can contribute to an understanding of corporate strategizing. I report on the preliminary findings from a strategy implementation process, where the official corporate strategy can be seen as the current dominant narrative. The analysis covers strategy meetings, where members discuss the implementation of the strategy. During a meeting, one narrative may be dominating; but the use of a metaphor may offer a moment of clarity, a perspective on the situation that evokes an implied counter-narrative, without making it too explicit. Ex. the use of the metaphor, 'why don't we use the low hanging fruits', could be seen as carrying with it a number of hidden 'small stories', as well offering the potential to transform the strategy process through a new narrative.

People use 'metaphorical reasoning' to make sense of complex situations, and narratives to structure events into meaningful plots. By combining a dynamic approach to metaphor theory (Gibbs & Cameron, 2008) with Svane et al's (2017) triad storytelling model, I expect to be able to offer a more comprehensive approach to the use of metaphor and narratives in strategizing.

My research question is therefore: How does a combined perspective on metaphor and narratives shape strategizing in corporate strategy meetings?

Metaphor and narratives

The emergence of mathematical concepts through metaphor and gesture

Maciej Rosinski

University of Warsaw, Poland

The work of George Lakoff and Rafel E. Núñez (2000) examines mathematics from the perspective of Conceptual Metaphor Theory, showing the experiential and bodily roots of many basic mathematical notions. Despite their anti-platonic stance, however, the authors present mathematics and its concepts as ideals, or final products of the historical evolution of science. Lakoff and Núñez rarely rely on linguistic data or discourse analysis, therefore, their perspective towards metaphors is necessarily static. Their work may be contrasted with materialist approaches to discourse and mathematics education presented by Wolff-Michel Roth (2011), Elizabeth de Freitas and Nathalie Sinclair (2014). Although these researchers are not interested in the metaphorical nature of mathematics, they present the re-creation of mathematical concepts in classroom discourse, where ideas emerge as assemblages of students, teachers and mathematical instruments.

The present study looks for a middle ground between the positions described above. Looking at mathematics discourse from the perspective of Cornelia Müller's (2008) dynamic approach to metaphor, it is possible to trace the emergence of mathematical concepts along with their metaphorical roots. Mathematics is saturated with metaphors, but they are not mere conventions or entrenched techniques of problem solving. Sleeping mathematical metaphors may become waking in discourse, whenever they become extended in multiple modalities or are elaborated in speech. Importantly, Müller's approach allows to treat mathematical concepts as dynamic phenomena, whose meanings are established and formed not only in words, but also modalities such as gesture and drawing. In my presentation, I will give examples of the emergence of three geometrical concepts: area, symmetry and angle. The examples are taken from video interviews conducted with participants of different proficiency in mathematics. The interviews were semi-structured and involved questions and geometrical tasks related to the three notions. My analysis will include the modalities of speech, gesture and drawing.

References:

- Müller, C. (2008). *Metaphors dead and alive, sleeping and waking: a dynamic view*. Chicago: University of Chicago Press.
- De Freitas, E., & Sinclair, N. (2014). *Mathematics and the body: material entanglements in the classroom*. New York NY: Cambridge University Press.
- Lakoff, G., & Núñez, R. E. (2000). *Where mathematics comes from: How the embodied mind brings mathematics into being*. New York: Basic books.
- Roth, W.-M. (2011). *Geometry as Objective Science in Elementary School Classrooms: Mathematics in the Flesh*. New York: Routledge, Taylor & Francis Group.

**Speech-gesture patterns and the conceptualisation of musical pitch:
Bimodal metaphor usage by speakers of Swedish and Turkish**

Peer Christensen & Marianne Gullberg

Lund University, Sweden

How are metaphors for musical pitch manifested in speech and gesture? Proponents of Conceptual Metaphor Theory (e.g. Lakoff & Johnson, 1980) have argued that metaphors are vital for how we “think” about abstract concepts. Languages offer different ways of expressing pitch by means of metaphor, i.e. in terms of “height” (e.g. Swedish) or “thickness” (Turkish, e.g. Dolscheid, Shayan, Majid & Casasanto, 2013). What is shared is a cross-domain mapping of spatial attributes to sound. Gesture studies have demonstrated that such mappings also appear to be reflected in speakers’ co-speech gestures (see e.g. Cienki & Müller, 2008).

To better understand the conceptualisation of pitch and the production of the “height” and “thickness” metaphors from an embodied perspective, we investigated how these metaphors are used in both speech and gesture by speakers of Swedish and Turkish. We hypothesised that a) Swedish and Turkish participants would describe pitch using “height” and “thickness”, respectively; b) representational co-speech gestures would co-vary with the axes invoked by spoken metaphors (i.e. vertical vs. lateral). We investigated these issues in a speech production task, where participants were asked to listen to stimuli consisting of sung notes differing only in pitch. Participants then described each item to a confederate performing a stimulus-matching task.

Results show that Swedish participants frequently used “height”, but also “brightness” to describe pitch, whereas Turkish participants mainly used “thickness”. However, in gesture, the two groups revealed both congruent and incongruent usage patterns. The “height” metaphor was frequently accompanied by gestures indicating physical height. Conversely, the “thickness” metaphor was not accompanied by lateral, but occasionally by gestures indicating tightness of grip. Moreover, Swedish participants using “brightness”, and Turkish participants using “thickness” often produced vertical gestures congruent with the “height” metaphor. The observed cross-linguistic and cross-modal patterns in metaphor usage point to the need for a more complex view of how spatial metaphors are used by speakers to communicate information by means of mappings across perceptual domains.

References:

- Cienki, A. & Müller, C (eds.) (2008). *Metaphor and Gesture*. Amsterdam: Benjamins.
Dolscheid, S., Shayan, S., Majid, A., and Casasanto, D. (2013). The thickness of musical pitch: psychophysical evidence for linguistic relativity. *Psychological Science*, 24, 613–621.
Lakoff, G., and Johnson, M. (1980). *Metaphors we live by*, Vol. 111. Chicago: The University of Chicago Press.

Thursday 11.00-13.00

Parallel session Room O 99

Metaphors in situated and embedded cognition

Chair: Bodo Winter

The ecology of anchoring and metaphoricity in social interaction

Thomas Wiben Jensen

University of Southern Denmark

Linda Greve

Aarhus University, Denmark

Humor Close to Home: Dynamic Metaphorical Gestures, Humor, and Embodiment

Patrawat Samermit, Benjamin Wallsten & Raymond W. Gibbs

University of California, Santa Cruz

Sharing the feeling of metaphors:

Intersubjectivity of body movement, talk and gestures in dance classes

Cornelia Müller

European University Viadrina, Frankfurt (Oder), Germany

Understanding through experience:

Verbo-gestural metaphor as intersubjective and interaffective meaning making

Dorothea Horst

European University Viadrina, Frankfurt (Oder), Germany

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphors in situated and embedded cognition

The ecology of anchoring and metaphoricity in social interaction

Thomas Wiben Jensen

University of Southern Denmark

Linda Greve

Aarhus University, Denmark

In this talk we will argue 1) that in order to adequately capture the complexity of how metaphors arise and work in our daily social interactions a gradable notion like metaphoricity is called for. Metaphoricity is here regarded as a scalar value; a metaphorical potential which is more or less activated (Müller 2008, Jensen and Cuffari 2014); 2) that the notion of metaphoricity in turn can enable us to investigate on a finer grained level how metaphor use is deeply embedded in our interactively negotiated reasoning. One level of this type of reasoning concerns the way in which our perception of interactively relevant phenomena is constrained by the first piece of information offered; a so called cognitive bias referred to as anchoring in psychological literature (Tversky and Kahneman 1974). When introduced into a conversation a metaphor, or an expression with a metonymic/metaphorical potential, can constrain how a topic is understood and how it is dealt with in the ongoing interactive negotiation: In this sense, we will argue, the metaphoricity anchors the perception and conceptualization since new information – or new actions – are understood in light of the properties of the anchor, i.e. metaphorical/metonymic expression. This dynamic perspective on metaphor (Gibbs and Cameron 2008) will be illustrated by analyses of two empirical examples. The first example comes from an audio recording of a staff meeting in a municipality in which a discussion turns into an argument highly constrained by a repeated use of a particular metonymic expression guiding and constraining the final decision (Jensen in press). The second example is based on video recordings of a start-up company in which a particular conception of the idea of knowledge is reused later in the conversation in and through specific gestures that points to the initial conceptualization is anchored in the group's co-created metaphor (Greve 2016, in press). This example also illustrates how metaphorical anchoring is embedded in physical structures and embodied practices (Hutchins 2004). The analyses points to metaphoricity as an ecological phenomenon embedded in our daily actions in accordance with affective behaviors, environmental artifacts, cognitive embodied dynamics and situational affordances of social interaction.

Humor Close to Home: Dynamic Metaphorical Gestures, Humor, and Embodiment

*Patrawat Samermit, Benjamin Wallsten & Raymond W. Gibbs
University of California, Santa Cruz*

Classical theories indicate that humor is a singular incongruity resolution that happens solely within an individual's mind. Incongruity resolution implies a serial two-step process: Recognize an abstract incongruity and resolve it. We challenge this notion and propose that humor is a dynamic interpretative process that is highly embodied (Samermit & Gibbs, 2016). To examine how people conceptualize humor, we analyzed 30 participants' co-speech metaphorical gestures in an interview about humorous content. We hypothesize that humor is metaphorically understood as a continuous process of negotiating two concepts, which are primarily understood in terms of the embodied self.

Our primary finding suggests participants gesturally juggle concepts on each hand to metaphorically "balance" their expectations of both of them in order to find something humorous. Additionally, people gesture towards their body when they find things funny and away when they are not, indicating that humor arises when they relate the joke to their own experiences. This motion towards and away from their body supports the idea that humorous concepts need to be concretely interpreted through our embodied experiences for something to be found funny. This is opposed to humor as simply resolved abstract (disembodied) domains. We also found that participants' co-speech gestures indicated jokes and laughter were objects that comedians (more distal) passed along to them (proximal to their own bodies). Additionally, when participants were explaining why the joke was funny to the interviewer, they would do a similar gesture from their own bodies towards that of the interviewer's. This may indicate that humor is socially shared across bodies, where funniness is an object within a container that is passed along a source – path – goal. These findings indicate that humor is a more situated, dynamic process of reinterpretation than classical humor theories suggest, indicating a need for more embodied studies of humor.

References:

- Samermit, P., & Gibbs, R. W. (2016). Humor, the body, and cognitive linguistics. *Cognitive Linguistic Studies*, 3(1), 32-49.

Metaphors in situated and embedded cognition

Sharing the feeling of metaphors: Intersubjectivity of body movement, talk and gestures in dance classes

Cornelia Müller

European University Viadrina, Frankfurt (Oder), Germany

This paper targets the intersubjectivity of embodied experiences for the emergence of metaphoric meaning. In particular, it addresses one question raised in the call for papers, namely: “how can metaphors be studied as affordances for joint action and thinking?”. I am going to explore this issue by taking a closer look at the dynamics of interactive embodied meaning making in a ballet class. This is an interesting context to study joint action and thinking, since the talk and the gestures the trainers and students are employing in the class are embedded in bodily actions. In the context of bodily exercises, metaphors are invented to develop a shared feeling, a shared understanding of specific bodily experiences. Metaphoricity emerges in an interactive process between the co-participants and is a product of working out a shared feeling for metaphoric meaning. What we learn about metaphor, when studying them in a ‘real’ life context of dance instructions, is that there is an ongoing negotiation about the dynamic grounding of metaphoric meaning in changing bodily experiences. This is what the phenomenologist Sheets-Johnstone (1999) has described as “languaging of movement” (cf., Kolter et al. 2012), or what we have termed the affective grounding of metaphors in felt sensations (cf., Kappelhoff & Müller 2011). The paper will conclude on the point that rather than being instantiated metaphoric meaning is temporally orchestrated and grounded in embodied intersubjective experiences.

References:

- Kappelhoff, H., & C. Müller (2011). Embodied meaning construction. Multimodal metaphor and expressive movement in speech, gesture, and in feature film. In *Metaphor in the Social World*, 121-153.
- Kolter, A., S.H. Ladewig, M. Summa, C. Müller, S. Koch, & T. Fuchs (2012). Body memory and emergence of metaphor in movement and speech. An interdisciplinary case study. In: Koch, Sabine, Thomas Fuchs & Cornelia Müller (Eds.) *Body Memory, Metaphor, and Movement*. Amsterdam & Philadelphia: John Benjamins. 201-226.
- Sheets-Johnstone, M. (1999). *The primacy of movement*. New York: John Benjamins.

**Understanding through experience:
Verbo-gestural metaphor as intersubjective and interaffective meaning making**

*Dorothea Horst
European University Viadrina, Frankfurt (Oder), Germany*

With its essence of “experiencing and understanding one kind of thing in terms of another” (Lakoff and Johnson 1980: 5), metaphor is a paramount example of embodied meaning making. However, its embodied aspect has been primarily regarded and discussed in terms of neural connections between a source and a target domain by cognitive metaphor theories, such as Conceptual Metaphor Theory (Lakoff and Johnson 1999). In doing so, the experiential ground of metaphoric meaning making turns into a purely mental and thus rather dis-embodied processing activity.

Combining instead a phenomenological take on embodiment (e.g., Gibbs 2006; Johnson 2007) with a dynamic view of metaphor (Müller 2008), clearly suggests that metaphoric meaning making in face-to-face communication emerges from the flow of situated and intersubjectively shared affective experience. We will illustrate this by means of a sequence from a three-party conversation about the notion of self-realization. Discussing, the interactants are negotiating their ideas through metaphoric conceptualizations that are expressed and elaborated in speech and gesture. It will be argued that the gestural embodiment of experiential source domains as “expressive movement” (Kappelhoff and Müller 2011) comes up with felt experiences – in a phenomenological sense – on the part of the interlocutors (Johnson 2007; Sheets-Johnstone 1999). In this manner, gestures are considered to provide an intersubjective and interaffective connection between interactants that grounds and shapes metaphoric meaning making and enables mutual understanding.

Against this background, verbo-gestural metaphor can be regarded as a case of literal sense making: through interlocutors “entering a process of embodied interaction and generating common meaning through it” (Fuchs and de Jaegher 2009: 465).

Thursday 15.30-17.30

Parallel session Room O 99

Metaphors in specific contexts

Chair: Elena Semino

Is ‘getting stuck between a rock and a hard place’ really easier than ‘falling head over heels’?

The curious case of extended-bodily-idioms for learners of English

David O'Reilly

University of York, UK

Metaphor in Judicial Decisions:

The Nature of Metaphor in Dutch and English Supreme Court Rulings

Aletta Dorst, Tony Foster & Femke Duyff

Leiden University, Nederlands

Career and working life:

An investigation of metaphor usage in online promotional videos

of Australian and Norwegian universities

Allison Creed

University of Southern Queensland

Susan Nacey

Inland Norway University of Applied Sciences

Experience as a Mediator of Metaphorical Priming in Video Games

Christopher Karzmark & Raymond W. Gibbs

University of California, Santa Cruz

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphors in specific contexts

Is ‘getting stuck between a rock and a hard place’ really easier than ‘falling head over heels’? The curious case of extended-bodily-idioms for learners of English

*David O'Reilly
University of York*

Engaging in language play can aid L2 communicative language development (Cook, 2000; Littlemore & Low, 2006). One intriguing (but scarcely researched) avenue of language play involves re-literalising idioms for comic effect, for example “I’ve been sitting on the fence so long my bottom is beginning to hurt” to denote extreme indecision (Littlemore & Low, 2006, p. 130). Idioms involving bodily action (e.g. ‘beat around the bush’) seem particularly extendable and also applicable to embodied cognition research (e.g. would Kacinik’s (2014) participants have judged even more ambivalently as the effects of straddling the sawhorse were felt?). Understandably, learners find extended idioms difficult, however, little is known about how they approach and negotiate them.

The present study investigates three research questions: 1) What is the relationship between learners’ ability to extend idioms and L2 proficiency? 2) What kinds of extensions do learners produce? 3) Which idioms are most easily extended?

Participants, 31 English NSs and 112 NNSs (L1 Chinese) of mixed proficiency (A2-C2) completed a specially designed test of ability to recognise and produce acceptable extensions of idioms ($k=12$). Participants either identified the ‘best’ multiple choice response or produced their own response to sentences in the form: ‘he got such a taste of his own medicine that _____’. Productive responses were scored 0, 1 or 2 by three raters and instrument, interrater and intrarater reliability estimates and item difficulty indexes were calculated.

The results revealed 1) that it was generally (but not always) the case that proficiency level and extended idiom test score increased together, 2) semantic and grammatical patterns in the productive responses, 3) comparatively easy (or difficult) idioms to extend and possible reasons why.

References:

- Cook, G. (2000). *Language Play, Language Learning*. Oxford: Oxford University Press.
Kacinik, N. (2014). Sticking your neck out and burying the hatchet: What idioms reveal about embodied simulation. *Frontiers in Human Neuroscience* 8, Article 689, 1-14
Littlemore, J., and Low, G. (2006). *Figurative thinking and foreign language learning*. Basingstoke: Palgrave Macmillan.

**Metaphor in Judicial Decisions:
The Nature of Metaphor in Dutch and English Supreme Court Rulings**

*Aletta Dorst, Tony Foster & Femke Duyff
Leiden University*

Metaphor has been studied in a wide range of communicative settings, including education, politics, science, journalism, literature, business, advertising and healthcare. One area that remains largely unstudied, however, is legal discourse (cf. Urbonaité, 2015; Imamović, 2013). This is unfortunate, given the potential of metaphor to “determine which arguments are valid in legal reasoning” (Ebbesson, 2008: 260). The level of abstraction in legal writing is so high that metaphor can help judges make abstract concepts and argumentation accessible. As a result, metaphors may affect the outcome of legal proceedings.

In this paper we present a first study that investigated the nature of metaphor in judicial decisions. It compared the use of metaphor in four Dutch and four UK Supreme Court rulings to test the following expectations:

1. UK Supreme Court rulings contain more metaphors than Dutch Hoge Raad rulings since the English and Dutch legal systems interpret the principle of legality differently.
2. Substantive law rulings contain more metaphors than procedural law rulings since procedural law is less abstract and less likely in need of clarification.
3. Civil law rulings contain more metaphors than criminal law rulings since the principle of legality plays a more important role in public (criminal) law than private law and judicial decision-makers in public law case are thus more concerned about figurative language leading to ambiguity and vagueness.

From each of the eight rulings, 1,000 words were taken randomly from the total number of words and analysed for linguistic metaphor using MIPVU (Steen et al., 2010). The identified metaphors were then further analysed in terms of their conventionality and the source and target domains involved.

The results confirmed our three main expectations, and revealed that most metaphors can be related to three dominant mappings: LEGAL ARGUMENT IS WAR; THE LAW IS A PERSON; and THE LAW IS A BUILDING. Only 91 MRWs were identified (1.14%). Legal metaphor may therefore not be frequent, but further research is needed to determine how it affects our understanding of the law and “its power to convince and convert” (Fuller, 1930-31: 380).

Metaphors in specific contexts

Career and working life: An investigation of metaphor usage in online promotional videos of Australian and Norwegian universities

Allison Creed

University of Southern Queensland

Susan Nacey

Inland Norway University of Applied Sciences

Analysis of metaphoric language offers a means to explore self and identity as well as a framework for theorising career and working life; such analysis is currently emerging within the field of vocational psychology for the study of career, work, and organisational dynamics. Indeed, metaphoric themes are recognised as fundamental to understanding the notion career (Inkson, 2004; Mignot, 2000; Super, 1957, 1980), meaningfulness in the workforce (Lengelle, Meijiers, & Hughes, 2016; Savickas, 2011), and organisational behaviour more broadly (Cornelissen, Oswick, Christensen, & Phillips, 2008; El-Sawad, 2005; Morgan, 2006). For instance, the classical developmental theory of career by Super conceptualised career as a vehicle or lifelong path. More recently, Inkson proposed nine metaphors for career, including a cycle, a resource, and a story. In communication with others, metaphors form fuzzy categorical clusters of expectations and associations accessed in culturally and socially situated contexts of discourse. Our investigation analyses online videos of Australian and Norwegian university students talking about education, career, and working life, created to promote career-related benefits of higher education. We apply the Metaphor Identification Procedure Vrie Universitat (MIPVU) (Steen et al., 2010) to the English transcriptions and an adapted Scandinavian version of MIPVU to the Norwegian transcriptions to gain reliable, quantifiable and comparable results concerning the metaphor used by these students to discuss their careers as students and as college graduates. The aims are twofold: first, to compare the metaphors identified in these videos with those previously established by scholars of vocational psychology; and second, to perform a cross-cultural comparison between the promotional uses of metaphor in these different university contexts and languages. Furthermore, we argue that metaphors offer an interpretive repertoire to facilitate the coherent transfer of interrelated physiological, emotional, and cognitive dimensions. This work represents an innovative methodological advance for research into career and working life.

Experience as a Mediator of Metaphorical Priming in Video Games

Christopher Karzmark & Raymond Gibbs

University of California, Santa Cruz

Do our past experiences shape our current embodied metaphorical understanding of our situation? Current embodied theories of metaphor assume that yes, our experiences do shape our metaphorical understanding, but the question has received relatively little empirical attention. This paper investigates this question through a priming study of motion-time metaphors using a video game as the motion prime. Participants were primed with motion by playing four levels of a Super Mario game. Priming was measured using the classic ambiguous time question “Next Wednesday’s meeting has been moved forward two days. What day is the meeting now that it has been rescheduled?” with the response “Monday” corresponding with the Time-Moving metaphor and the response “Friday” corresponding with the Ego-Moving metaphor. Participants who considered themselves experienced gamers gave the Ego-Moving “Friday” response more often than those who did not consider themselves gamers. While this difference is purely observational, it suggests that participants who are more familiar with the type of motion used in a traditional video game may be more open to metaphorical priming from this type of motion. If this extends to other domains with further testing, we may be able to show that individuals’ sensitivity to priming varies by their experience in the priming domain. These findings are discussed in terms of embodied metaphor theory and the proteus effect. Potential experimental tests of the current finding and extensions to other priming domains are also discussed.

Thursday 15.30-17.30

Parallel session Room O 98

Multimodal metaphors

Chair: Anders Hougaard

Embodied perception – Metaphor and figurative thinking in audiovisual media

Sarah Greifenstein

European University Viadrina, Frankfurt (Oder), Germany

The victim or the problem?

A multimodal critical discourse analysis of cartoons depicting PSOE's internal political crisis

Maria Muelas Gil

Universidad de Castilla-La Mancha / Universidad Autónoma de Madrid

Metaphorical creativity and response to controversial ads: A pilot study

Blanca Kraljevic-Mujic

Universidad Rey Juan Carlos

Identity commodification: Multimodal metaphors in L'Oréal cosmetic TV commercials

Min Chen & Weiwei Sun

University of Shanghai for Science and Technology

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Multimodal metaphors

Embodied perception – Metaphor and figurative thinking in audiovisual media

Sarah Greifenstein

European University Viadrina, Frankfurt (Oder), Germany

Since the beginning of film, metaphor has been at the core of theoretical reflection: already in the 1920s, Sergej Eisenstein described the way in which metaphor in film is based on visual dynamics in order to edit associations within spectators (Eisenstein 2005/1929). Philosopher Gilles Deleuze historicized the phenomenon, stating that only a certain phase of film history (the classical phase) had been rich in figurative thought, and that in modern cinema, in the new waves metaphors were mainly excluded (Deleuze 1989). Nevertheless, theories on metaphors in film have been continuously gaining weight: Already in the 1980s and 1990s, different film theoretical perspectives ranging from semiotic over aesthetic to narrative film theory (Metz 1977; Gerstenkorn 1995; Whittock 1990) described the phenomenon profoundly. More recent approaches are to name, such as: the ‘theory of figuration’, a code-oriented communication model from audiovisual rhetorics (Joost 2008); the definition of visual metaphor from cognitive philosophy (Carroll 2001); and the concepts of multimodal metaphor (Forceville 2009; Coegnarts and Kravanja 2015) and audiovisual metaphor (Fahlenbrach 2010) from cognitive media studies. The approaches that are presented as an overview range from aesthetic to narrative theory on film images, from the view of subtle, implicit ways of figuration to explicit, obvious forms of metaphoricity. I will argue that figurative phenomena defined by film and media theory might be useful to reinforce the newest tendencies of research on the dynamics and embodied dimensions of metaphor more generally. I will especially deepen the argument of one recent approach, that of the interdisciplinary take on multimodal, cinematic metaphor and expressive movement from film and media studies and from cognitive linguistics (Kappelhoff and Müller 2011; Schmitt et al. 2014; Müller and Schmitt 2015; Kappelhoff and Greifenstein 2015). As film images unfold in time, the figuration processes and the way spectators make meaning of what they see and hear are highly fluid. They are part of an embodied system, in a sense that spectators communicate with the screen mainly by exchanging perceptive and expressive acts, by taking up a certain seeing and hearing exposed and presented by the film itself (Sobchack 2004). In such a mediatic context, metaphor is not understood as an underlying and already existent conceptual ground, but as an ad-hoc arising from fluid and temporally orchestrated (and very specific) embodied experiences that spectators go through while watching the film.

The victim or the problem?

A multimodal critical discourse analysis of cartoons depicting PSOE's internal political crisis.

Maria Muelas Gil

Universidad de Castilla-La Mancha / Universidad Autónoma de Madrid

This study analyses the communicative yet manipulative power of multimodal metaphors in political cartoons. It draws upon the groundings of conceptual metaphor theory and its explanatory value (Lakoff and Johnson 1980, Lakoff 1993, Kövecses 2010, etc.) combined with different theories approaching visual and multimodal metaphor (Forceville 1996, 2008, 2009; Koller 2009) and the principles of Multimodal Critical Discourse Analysis (Kress and van Leeuwen 1996, Machin 2007).

Considering ideology as a product of the combination of cognition, discourse and action and social interests and positions (Van Dijk 1995), we observe how different ideologies represent the same target very differently, supporting the claim that metaphor is a powerful tool in (re)constructing reality and a great bearer of ideology (Charteris-Black 2004; Musolff, 2003). The data consist in cartoons published by Spanish cartoonists in four different newspapers: *El País*, *Público*, *El Mundo* and *La Razón*. The reason for choosing these newspapers is their claimed political stance (*El País* and *El Público*: left-wing liberal publications; *El Mundo* and *La Razón*: right-wing, more conservative) and their degree of radicalism. All the selected cartoons depict the political internal crisis of the Spanish Socialist Worker's Party (PSOE) during the last election period (2015-2016).

The purpose of the study is to observe how different ideologies represent the same reality using and manipulating metaphors, pursuing a different effect in the readership. It also aims at observing whether the level of "radicalism" tends to convey the choice of different sources as well. Preliminary results reveal that, as hypothesized, the situation of the Socialist Party and the role of its components are represented differently by all different cartoonists. While the target and the focus are similar, the targets are polarized. This pilot study therefore supports previous claims on the ideological load of metaphors and their influential power on the viewer/reader.

Multimodal metaphors

Metaphorical creativity and response to controversial ads: A pilot study

Blanca Kraljevic-Mujic
Universidad Rey Juan Carlos

The present paper examines metaphorical creativity and recontextualisation in two controversial printed advertisements. The study focuses, first, on the analysis of multimodal metaphors in two ads, Antonio Federici's (2010) 'Immaculately conceived' ice-cream ad, which was banned by the UK Advertising Standards Authority (ASA), and the UK Government's (2015) anti-smoking ad; in this case ASA rejected the complaints. The study draws from research on multimodal metaphor (e.g., Forceville and Urios-Aparisi 2009).

The second objective of this paper is to present the preliminary results of a questionnaire completed by 20 informants after seeing the ads, in order to explore the way viewers react to and interpret metaphors in the two controversial ads. Scholars have explored the audience's reaction to metaphors in advertising from a more experimental perspective (e.g., McQuarrie & Phillips 2005; van Mulken, le Pair & Forceville 2010; Caballero 2014) or have alternatively focused on the analysis of multimodal metaphors and creativity (e.g., Hidalgo & Kraljevic 2013; Forceville 2012, Burgers et al. 2015; Pérez-Sobrino, in press). However, little attention has been paid so far to the potential of metaphorical creativity and recontextualisation in controversial ads (Hidalgo & Kraljevic, in press) and the study of audience's response to creativity in controversial ads. In a pilot study, our results have shown that most informants responded positively to the question whether the ads struck them as controversial and to the fact that they perceived a relation between the controversial content and creativity.

References

- Burgers, C., Konijn, E., Steen, G. & Iepsma, M. 2015. Making ads less complex, yet more creative and persuasive: the effects of conventional metaphors and irony in print advertising, *International Journal of Advertising*, 34: 515-532.
- Caballero, R. 2014. Exploring the Combination of Language, Images and Sound in the Metaphors of TV Commercials, *Atlantis*, 36(2): 31-51.
- Forceville, C., & E. Urios-Aparisi, 2009. *Multimodal Metaphor*. Berlin: Mouton de Gruyter.
- Forceville, C. 2012. Creativity in pictorial and multimodal advertising metaphors In: R. Jones (Ed.), *Discourse and creativity*. Harlow, UK: Pearson Education: 113-132.
- Hidalgo Downing, L. & Kraljevic Mujic, B. (Eds.) (2013) *Metaphor in the Social World: Special Issue on Metaphorical Creativity Across Modes*, 3(2).
- Hidalgo-Downing, L. & Kraljevic-Mujic, B. (in press) Metaphor and persuasion in commercial advertising. In: E.Semino & Z. Demjen (Eds.). *The Routledge Handbook of Metaphor and Thought*. London & New York: Routledge.
- McQuarrie, E., Phillips, B. 2005. *Indirect Persuasion in Advertising: How Consumers Process Metaphors Presented in Pictures and Words*.

Identity commodification: Multimodal metaphors in L'Oréal cosmetic TV commercials

*Min Chen & Weiwei Sun
University of Shanghai for Science and Technology*

The paper examines socio-cognitive functions of multimodal metaphor by exploring the use of multimodal metaphors in L'Oréal cosmetic TV commercials. Based on evidence extracted from the self-built corpora by 20 L'Oréal cosmetic TV commercials during the period of 2011-2015, the study intends to investigate the social cognition underlying the differentiation in metaphor scenarios constructed jointly by more than one mode in the TV commercials for two product consumer groups, women consumers and men consumers. Following MMIP, it identifies and concludes the four metaphor scenarios that are selectively used to conceptualize L'Oréal cosmetic TV commercials: they are NOURISHMENT Scenario in the commercials for women consumers, and REPLENISHMENT Scenario, CONFRONTATION Scenario and COLD-DEFENSE Scenario in the commercials for men. The findings reveal that underlying the differentiation in multimodal metaphorical instantiations is the different gender identities being commodified by the company. Thus multimodal metaphors become the carrier and reinforcer of the social identity and gender stereotype of a consumer group on the one hand, and a positioning implement for shaping its brand personality by a company on the other. As the mouthpiece of the hidden commercial ideologies, they are drawn on by the discourse community to implicitly exercise the manipulative check on the behavior of the audience as consumers.

Thursday 15.30-17.30

Parallel session Room O 99

Metaphor in corpora

Chair: Alice Deignan

Corpus-based or Corpus-driven Experiments:

Using corpora to test and generate containment and support metaphor variation data

Stephen Lueck

Trinity College, Dublin

Using taste and smell words to perform evaluation across domains

Bodo Winter

University of Birmingham

Referential conceptual metaphor and collocation

Marlene Johansson Falck

Umeå University

**What happens when people from different language backgrounds
use metaphor when communicating with each other?**

Jeannette Littlemore

Birmingham University

Fiona Macarthur

Universidad de Extremadura

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

**Corpus-based or Corpus-driven Experiments:
Using corpora to test and generate containment and support metaphor variation data**

*Stephen Lucek
Trinity College, Dublin*

Research into metaphor variation in English has focused on corpus data collected in specific locations (e.g. Wolf & Polzenhagen 2009). More recently, the GloWbE corpus has allowed cross-cultural and within-language variation research on a massive scale (e.g. Davies & Fuchs 2015). Contrastively, empirical studies have not been conducted to the same degree. As metaphor variation presents an opportunity to blend conceptual methods with those more commonly associated with sociolinguistics (Callies 2011), the question becomes: should we rely on large, unfocussed datasets to provide the sole basis of metaphor variation research or does a face-to-face interview help to further this area of research? Should researchers compile a standardised corpus of real world language and use it to push metaphor variation into a new area of cognitive sociolinguistics?

Towards these long-term goals, the current paper presents two approaches to corpus research to examine the place that both corpus-driven and corpus-based experiments can play in the future of cognitive sociolinguistic research. Using historical data of containment and support in Irish English research (Traynor 1953, Henry 1957, Moylan 1996), findings of within-language variation are tested using the ICE-Ireland corpus to see if a corpus-based approach can show the validity of creating a set of metaphor variation. Next, a corpus-driven approach of searching the GloWbE corpus for instances of variation in containment and support metaphors shows what can be learned from this type of research. Finally, these collected metaphors are compared to the results of an empirical study of Irish English where containment and support are shown to exhibit expected and unexpected results.

In analysing these approaches to metaphor variation, the following questions are asked: what do we with our data? How can we read corpora for contextual meaning? And can we generate theories of within-language variation from corpus or experimental methods alone? I conclude by suggesting possible future research and methodologies for metaphor variation studies.

Using taste and smell words to perform evaluation across domains

*Bodo Winter
University of Birmingham*

One of the primary things humans do with language is to express evaluation, i.e., stating verbally whether something is good or bad. Compared to neutral visual words such as yellow, taste and smell words such as delicious and pungent are more likely to have a strong evaluative component (Levinson & Majid, 2014; Winter, 2016). In this talk, I argue that we liken many different conceptual domains to food, for example, the following statement was used on the movie review site [rottentomatoes.com](#) to describe a film:

Watching Trouble Every Day (...) is like biting into what looks like a juicy, delicious plum on a hot summer day and coming away with your mouth full of rotten pulp and living worms

To quantitatively assess the evaluative dimension of taste and smell language in multiple domains, I use multiple sources of valence norms for words (e.g., Warriner, Kuperman & Brysbaert, 2013) and corpora for different topics. First I use Pott's curves (Potts, 2011) to analyze sensory adjectives in Yelp restaurant reviews, which shows that smell words tend to occur more frequently in highly negative reviews; taste words are relatively more frequent in positive reviews.

I then show that this evaluative function extends beyond restaurant contexts to movies, where an analysis of Pang and Lee (2004)'s corpus of [rottentomatoes.com](#) movie reviews reveals that taste and smell words occur more frequently in the evaluative parts of those reviews—even in contexts that literally do not refer to tastes and smells. I discuss implications of these analyses for generalizations of "synesthetic" metaphors such as sweet melody, which may involve a mapping of evaluative function rather than a transfer of perceptual content.

Metaphor in corpora

Referential conceptual metaphor and collocation

Marlene Johansson Falck

Umeå University

The English term bridge may be used both metaphorically (as in e.g. bridge between the classroom and students' homes) and non-metaphorically (as in the truck beneath the bridge). But when and why is bridge used metaphorically, and when and why is bridge used non-metaphorically?

This paper deals with a corpus linguistic analysis of the usage patterns of bridge collocations (i.e. words that occur together more frequently than expected (Sinclair, 1991)) from the Corpus of American English (COCA). My main aim is to better understand the relationship between metaphorical and non-metaphorical language and body world knowledge.

The analysis shows that there are systematic differences between metaphorical and non-metaphorical bridge collocations that can neither be explained in terms of schematic conceptual metaphors at the levels of primary or complex conceptual metaphors nor in terms of linguistic metaphor. Metaphorical bridge collocations (e.g. bridge gap) are intimately connected with central aspects of our experiences of real world bridges, and in particular with their function (cf. (Gibson, 2014), and strictly non-metaphorical bridge collocations (e.g. bridge river) with either more specific, or more complex aspects of bridge experiences. The latter involve specific bridges, specific types of bridges, specific parts of bridges, or other artifacts or waterways located near the bridge. The notion of referential conceptual metaphors (i.e. conceptual mappings that involve people's embodied experiences of the specific source domain concepts that speakers refer to in metaphorical language, cf. Johansson Falck & Gibbs, 2012) is thus introduced in order to explain the collocational patterns. This type of metaphorical mapping constitutes a third level of conceptual metaphor that is coherent with conceptual metaphors at more schematic levels of abstraction, but also guided by people's ongoing experiences of the world and cognitive salience.

References:

- Gibson, J. J. (2014). *The Ecological Approach to Visual Perception*: Classic Edition: Psychology Press.
Johansson Falck, M., & Gibbs, R. W. (2012). Embodied motivations for metaphorical meanings. *Cognitive Linguistics*, 23(2), 251-272. doi:10.1515/cog-2012-0008
Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford: Oxford Univ. Press.

**What happens when people from different language backgrounds
use metaphor when communicating with each other?**

*Jeannette Littlemore
Birmingham University
Fiona Macarthur
Universidad de Extremadura*

There is a large body of research describing the different metaphors believed to underlie the world view of particular communities of speakers. The hypothesis seems to be that differences or similarities in these alternative conceptualizations are capable of facilitating or impeding communication between speakers with different language backgrounds. However, support for this hypothesis rests largely on anecdotal evidence or that provided by monologic texts, or paper-based studies which require participants to interpret the metaphors used by another, when their meaning is not subject to negotiation.

In our presentation, we will draw on a body of evidence gathered since 2010 which casts a somewhat different light on what happens when people from different language backgrounds use metaphor when talking to each other. The video recordings we have made of international students in face-to-face conversation with their lecturers at English-speaking universities reveal the dynamic, adaptive nature of participants in intercultural communication, where verbal and non-verbal behaviour displays how alignments between meanings and understanding are achieved or not.

We found that, contrary to expectations, so-called “core” metaphors, such as UNDERSTANDING IS SEEING do not necessarily facilitate communication, but nor do unfamiliar ways of reasoning metaphorically necessarily result in communication breakdowns. Rather, participants in face-to-face interaction adapt more or less successfully, or listen and respond to metaphor in the context of the particular conversation they are engaging in in different ways. Particular types of verbal or non-verbal behaviour in our data reveal how gaps in understanding are sometimes bridged, allowing learning to take place.

Our study sheds light on the role played by metaphor in the creation of the interpersonal mind, and reveals how this can contribute to understanding intercultural dialogue. In sum, through our analysis, we show how participants in the exchanges ‘do metaphor’, and how metaphorical meaning is negotiated in contextualized cross-cultural interactions.

Friday 10.30-12.30

Parallel session Room O94

Entropy, systems theory and metaphor

Chair: Linda Greve

Emergent structures in the ontological model of the lexical concepts and constructions

Benedikt Perak

University of Rijeka, Croatia

Living Technology and/or Artificial Life:

Entropic Cognition, Metaphors and schematizations in scientific discourse

Svend Østergaard

Aarhus University, Denmark

Juani Guerra

University of Las Palmas de Gran Canaria

Cognitive entropy in the conceptualization of ENTROPY.

Back and from Pynchon's The Crying of Lot 49

Marta Silvera, Juani Guerra & Juan José Martínez

University of Las Palmas de Gran Canaria

Entropic cognition.

Consuming order for specific cognitive action as the origins of conceptual metaphors

Juani Guerra

University of Las Palmas de Gran Canaria

Svend Østergaard

Aarhus University, Denmark

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Entropy, systems theory and metaphor

Emergent structures in the ontological model of the lexical concepts and constructions

Benedikt Perak

University of Rijeka, Croatia

Science is a formalized method of researching things and relations that exist in a reality. Scientific methodology of research implies disciplinary perspectivization that describes a segment of the reality, allowing a rich, detailed and structurally coherent description of a domain. This ontological segmentation of scientific research often leads to disregard of other scientific perspectives. Wholesome ontology model that can bridge the epistemic gap from material and psychological to cultural domains are becoming necessity for the interdisciplinary research projects that want to include emergent phenomena from the more complex levels without reductionist tendencies. This paper proposes such a general Ontological model on the basis of system theory and emergence principle (Capra & Luisi, 2014). It describes the categories of the human reality as (unique) superclass (15) -subclass network structure with edges denoting mereological connections of concepts, linking constructing concepts to the emerging concept from the next superclass in the hierarchical ontology structure.

The emergent structure of the categorical model is further designed to include a linguistic representation of embodied, enacted, embedded and extended cognition knowledge forming the Ontological model of Concepts and Constructions. Linguistic constructions modify the conceptualizations by profiling specific aspects of a domain.

OMLCC expresses the epistemological and ontological status of the concepts referenced by the lexical units. The goal of the OMLCC is to a) formalize the ontological classification of lexical units in language(s), b) identify metonymic constructions as congruence between the construed linguistic conceptualization and the mereological ontological relations, b) identify metaphoric constructions as incongruence between the asserted semantic-syntactic conceptualization and the mereological ontological relation. This emergent ontological network approach enables cross-linguistic formalization of the creative semasiological processes (etymology, metonymy, metaphor extensions) that language(s) as an instrument of cognizing and cultural conceptualization tool adds to the representation of the 4-E cognition.

This paper specifically describes the process of: a) modelling the emergent ontological hierarchy of entities and categories lexical units necessary and sufficient to describe emotion domain(s) as represented by Component Process Model (CPM) of Emotion (Scherer 2013) and formalized by MFOEM ontology, and b) formalizing the semantic-syntactic properties of linguistic constructions in English and Croatian used to construe the meanings of emotion domain(s) within large corpora hrWaC (1,3 GW).

References:

- Capra, F. & Luisi, P. (2014). *The systems view of life*. Cambridge University Press.
Scherer, K.R. (2009) Emotions are emergent processes: they require a dynamic computational architecture. *PhilTrans.of the Royal Society*, 364, 3459-3474
<http://www.ontobee.org/ontology/MFOEM>
<https://the.sketchengine.co.uk>

Entropy, systems theory and metaphor

Living Technology and/or Artificial Life: Entropic Cognition, Metaphors and schematizations in scientific discourse

*Svend Østergaard
Aarhus University, Denmark*

*Juani Guerra
University of Las Palmas de Gran Canaria*

In this paper we present a case study of how metaphor, metonymy, category extension and schematization/framing are working together in scientific discourse. The cases in question are the fields named Living Technology and Artificial Life.

The study follows the common assumption in contemporary cognitive linguistics that our verbalizations of the world encode abstract ‘image schemas’ or ‘cognitive schemas’ grounded in our early experiences of having a body and moving in space. However, while the notion of ‘schema’ is most often thought of as static, internal structures unidirectionally mapped onto experience (for a related critique, see Thibault 2004; Visetti 2004), we will conceive of schematization as an entropic, dynamic and reciprocal process transcending the classical cognitivist boundaries between internal/external and individual/social (Clark 2006). The schematization process is thus rather conceived of as the result of experimentation and order-consuming interaction in a scientific community. We intend to illustrate this in the literature on Living Technology in view of how linguistic forms that encode standard image schemas, such as out of, into, upon etc. are used.

The notion of schematization/framing is important as well in the metaphoric and metonymic meaning extensions as exemplified in the very compounds living technology and artificial life. For instance, we can view living technology as a metonymic extension of the technology frame, but we can also view it as an – possibly metaphoric – extension of the living frame into the technology domain. We will trace the tension between these two possibilities in the literature and we will explain this tension in terms of entropic cognition.

Entropy, systems theory and metaphor

Cognitive entropy in the conceptualization of ENTROPY. Back and from Pynchon's The Crying of Lot 49.

*Marta Silvera, Juani Guerra & Juan José Martínez
University of Las Palmas de Gran Canaria*

As stated by Ilya Prigogine there is not contradiction between evolution and entropy (Prigogine, 1980), for the second law of thermodynamics describes cosmic realities but not local conditions. The artful mind, as described in Turner (2008), in its situated, distributed, synergic, and dissipative nature, does create robust negentropy. Thus, artful creation can be postulated as the complex cognitive action through which human beings oppose to cosmic entropy.

Guerra (1992, 2013) applies the term dissipative cognition to describe the creative dynamics of the literary text -as a complex adaptive system- that represent the biocultural scaffolding of negentropy.

By studying a literary text not as cognitive energy consuming, but as conceptual order consuming, we will operate in a new scientific epistemological frame as expressed in the novel The Crying Of Lot 49 (1966), written by the Postmodernist writer Thomas Pynchon.

Here, we explore the concept ENTROPY as local conceptual extension in the global cognitive map of the text. By applying different Idealized Cognitive Models, we describe how does the author (as a Physicist expert in irreversible systems and an artist-fiction writer) create negentropic affordances of meaning to the very concept ENTROPY out of a highly dynamic interaction between his body/brain-world, and how do readers construct such a complex (expert) meaning but anchored in pervasively entrenched image schemas.

Entropic cognition.

Consuming order for specific cognitive action as the origins of conceptual metaphors

Juani Guerra

University of Las Palmas de Gran Canaria

Svend Østergaard

Aarhus University, Denmark

Explaining how the cognitive system can create new meaning structures has been a major challenge for cognitive science. Entropy, as defined by the theory of nonlinear dynamics, offers an account of this significant phenomenon.

Entropy will be here explored as a basic dynamic attribute of creative human understanding, endowing it with mental affordances that produce conceptual emergences. The non-equilibrium cognitive system evolves (changes) along fundamentally temporal dissipative dynamics of phylogenesis, ontogenesis and cultural emergences (Johnson & Rohrer, 2007). These biocultural meaningful structurings emerge and dissipate in the form of conceptual metaphors/metonymies out of a complex biophysical and sociocultural process of embodied (Lakoff & Johnson 1980), situated (Zlatev 1997), distributed (Hutchins 1995), synergic (Bernárdez 2006), and dissipative (Guerra 1992) sense construction. Well known cognitive principles in this living sociocultural process are entrenchment, figure/ground distinction, the creation of mental spaces/frames/blends, and extensions like conceptual metaphor/conceptual metonymy.

Entropic Cognition will be introduced here as a temporal, dynamicist approach to cognitive complexity and conceptual organizations like metaphor that highlights the counterintuitive reality that there is no conflict between evolution and entropy (Prigogine, 1980). Human understanding evolution is here seen, like for other complex phenomena in Nature, as a bottom-up evolution throughout three biocultural scales that creatively increase the system's complexity based on entropy conditions: these biocultural scales are body, metabolism, and information.

Any enactive semiotic mind, in its embodied, situated, distributed, synergic, and dissipative nature, does create vital entropy (Guerra 1992, 2011) that will be later recruited to make the system more robust. In this view, enactive cognition as self-regulating action will be here studied as the biocultural action through which human beings locally oppose to cosmic sense entropy.

Distinctive cognitive dynamics of entropy involving conceptual extensions will be exemplified in this panel in different texts and different languages at different compositional scales.

Furthermore, any semiotic system as complex adaptive system, like human language, is here essentially considered a biopoetic system. From a view of Biopoetics that primarily understands metaphorization as a synergic and dissipative process based on emergence and feedback conditions, structuring negative entropy (Prigogine & Stengers 1984; Guerra 1992) will be postulated as the basic motivation for creative human understanding. Vitally, meaning dissipation and emergence will be here analyzed in terms of order consumption rather than of energy consumption. Rather than 'consuming energy' for a specific cognitive action we will talk about 'consuming order' for a specific cognitive action.

Friday 10.30-12.30

Parallel session Room O98

Metaphor in political discourse

Chair: Astrid Jensen

"The immigration law has done its homework":

On the "homework" metaphor in the European public debate

Mario Bisiada

Universitat Pompeu Fabra, Spain

Floods, streams, and trickles:

How source domain magnitude influences reasoning about immigration

Karie Moorman & Teenie Matlock

UC Merced, USA

Metaphors of pregnancy loss

Sarah Turner, Jeannette Littlemore & Meera Burgess

University of Birmingham, UK

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphor in political discourse

"The immigration law has done its homework": On the "homework" metaphor in the European public debate

Mario Bisiada

Universitat Pompeu Fabra, Spain

The metaphor of “doing one’s homework” is being used frequently in political discourse across European languages and countries (see example (1)).

(1) “Alexis Tsipras’s homework has been thrown back in his face.” (The Guardian, 2015)

Metaphors fortify social and economic views (Holmgreen 2003), partly because they are “persuasive efforts that encourage intersubjective agreement about how to see the world” (Schiappa 2003: 129). The use of the “homework” metaphor may be seen as a discourse strategy to variously “label social actors more or less positively or negatively”, justify positive or negative attributions or construct “in-groups and out-groups” (Wodak 2001: 73).

This talk is based on a cross-linguistic study of European newspapers investigating the pragmatic development of the “homework” metaphor. The aim of the study is to trace the origin of this metaphor and its illocutionary potential and function in discourse, bearing in mind that “conventional metaphors of a linguistic community correspond to the conventional patterns of thought of that community [and] one’s conception of economics may partially be predisposed by the metaphors used.” (Boers & Demecheleer 1997).

Here I will present first results for the languages English and German. The analysis draws on publicly available corpora of newspaper articles up to 2015: The Guardian for English and Die Zeit for German articles. It combines a quantitative and qualitative analysis. The quantitative part aims to find out when the metaphor was adopted in English and German and how it diffused from then onwards based on a frequency analysis of the corpora. The qualitative part will analyse the evaluative context (cf. Charteris-Black 2004) by differentiating the use of the metaphor in positive appraisal, e.g. where someone has done their homework, neutral stance, e.g. where someone has been set homework, and negative appraisal, e.g. where someone has not done their homework.

**Floods, streams, and trickles:
How source domain magnitude influences reasoning about immigration**

*Karie Moorman & Teenie Matlock
UC Merced, USA*

Metaphor is far more than a literary flourish. It pervades all kinds of language and helps us reason about many aspects of everyday life (Gibbs, 1994; Lakoff & Johnson, 1980). This includes our reasoning about important social issues, such as climate change (Flusberg et al., *in press*; Lakoff, 2010), crime (e.g., Thibodeau & Boroditsky, 2011, 2013), terrorism (e.g., Pelosi et al., 2014), and epidemics (e.g., Wallis & Nerlich, 2005).

What metaphors do we see in discourse about immigration issues in the U.S.? What do these metaphors reflect regarding views of immigrants and their status after immigration? Some research has examined immigration metaphors (e.g., Ana, 1997; O'Brien, 2003; Hart, 2011; Cunningham-Parmeter, 2011), but none has looked at the force dynamics or fine-grained semantics that structure and drive our metaphorical understanding and framing of immigration.

Our study examines the use and understanding of immigration metaphors in English, especially IMMIGRANTS ARE FLUID, seen in statements like "immigrants are flooding the border," "the flow of immigrants to the U.S.," and "a tsunami of immigrants flood into the U.S.." In our presentation, we provide a deep semantic analysis of this metaphor, giving special attention to variations within the FLUID source domain, such as viscosity of liquid, rate of flow, and fluid dispersal. We will then discuss preliminary research on how people interpret linguistic instantiations of IMMIGRANTS ARE FLUID. In doing so, we alter source domain information with respect to force dynamics, and measure how it affects attitudes toward immigration.

This work contributes novel insights into the connection between metaphor and reasoning about social problems like immigration. Examining how variations in information within a single source domain influence people's opinions and attitudes about social issues is important. Like many aspects of language and cognition, metaphor is not all or nothing.

Metaphor in political discourse

Metaphors of pregnancy loss

*Sarah Turner, Jeannette Littlemore & Meera Burgess
University of Birmingham, UK*

On 13th October, 2016, a debate on miscarriage and stillbirth was held in the UK Houses of Parliament on the occasion of Baby Loss Awareness Week, in which accounts of some MPs and their constituents who had first-hand experience with baby loss were shared with the House. In this debate, it was noted that miscarriage and stillbirth are rarely talked about, with women and their families who have suffered such losses reporting a sense of isolation and difficulties in talking about their experiences. The debate was rich in metaphor, which is unsurprising given that metaphor has been shown to be particularly prevalent in the language used when people are communicating about, and trying to come to terms with, emotionally charged, life-changing experiences such as pregnancy loss (Semino, 2011).

We are currently conducting an ESRC-funded study investigating the ways in which people who have experienced miscarriage and stillbirth communicate their experiences to those who are there to support them. Our aim is to explore how they use metaphor to make sense out of the trauma they are experiencing, both in terms of their own physical, bodily experiences and the reactions they have received by those around them. We also investigate how the metaphors used provide insight into the experiences of the bereaved.

We used the transcripts of the parliamentary debate as data for a pilot study, seeking to identify and categorise the types of figurative language used. The challenges experienced in doing this emphasise the shortcomings of traditional, static, domain-focused views of metaphor when it is used to communicate such a complex and multifaceted experience. To respond to these challenges we are developing a more ecological approach to identification and analysis of metaphor which emphasises its embodied and contextually embedded nature.

References:

- Semino, E. (2011). 'Metaphor, creativity, and the experience of pain across genres', in . J. Swann, R. Carter and R. Pope (Eds.). *Creativity, Language, Literature: The State of the Art*, Basingstoke: Palgrave Macmillan, pp. 83-102.

Friday 10.30-12.30

Parallel session Room O99

Metaphor and emotion

Chair: Cornelia Müller

Verbo-pictorial aphorisms on emotions. A case study

Elżbieta Górska

University of Warsaw, Poland

Connecting colours and emotions: a cross-cultural study

Jeannette Littlemore, Paula Prez-Sobrino & David Houghton

University of Birmingham

Danny Leung & Vanliza Chow

Open University Hong Kong

Metaphors and Feelings:

How Metaphorical Expressions Influence Readers' Engagements with Fictional Narratives

Carina Rasse

Alpen Adria University, Klagenfurt, Austria

Conceptual Metaphors of Love in the Poetry of Suad Alsabbah

Marwa Al Amin

University of Hafr Albatin, Saudi Arabia

Presentation format:

All presenters are given 20 minutes to present their paper.

Following the presentation will be 10 minutes for questions and discussion moderated by the session chair.

Metaphor and emotion

Verbo-pictorial aphorisms on emotions. A case study

*Elżbieta Górska
University of Warsaw, Poland*

Often evoked to provide evidence for some of the fundamental assumptions of cognitive linguistics, emotion concepts have attracted a lot of attention ever since Lakoff and Johnson's (1980) seminal work (see e.g., Lakoff and Kövecses 1987, Kövecses 2000, 2008, 2014; Mikolajczuk 1998, Fabiszak and Hebda 2010, Foolen 2012, Zlatev et al. 2012). They were used to argue for the metaphorical and metonymic nature of abstract thought and its bodily basis in particular. With reference to their frame-like structure, it was argued that emotion concepts are represented as cognitive cultural models in the mind. Such claims, however, have been commonly based on linguistic analyses alone, and therefore they raised doubts on account of their "language-thought-language" circular argumentation (see Gibbs and Colston 1995). One way to break this circle is to consider emotion concepts in a multimodal perspective (for the latter see, e.g. Forceville and Urios-Aparisi 2009, Pinar Sanz 2013). Adopting such perspective, I focus on coding of selected aspects of LONELINESS, LOVE, HAPPINESS and WORRIES in cartoons by Janusz Kapusta, a Polish artist, whose verbo-pictorial aphorisms have appeared in the Polish magazine Plus-Minus for over ten years. It is argued that Kapusta's multimodal rendering of emotion concepts is based on a creative reworking of conventional conceptual metaphors, such as STATES ARE LOCATIONS, EMOTIONS ARE FORCES, THE BODY IS THE CONTAINER FOR EMOTIONS, or EMOTIONAL DIFFICULTIES ARE BURDENS. The study thus provides supportive evidence for the claim that spatialization of emotion concepts has its manifestations not only in the verbal mode, but also in other modalities. It is shown also that the coding of source domains of such concepts in the visual medium may be independent from how they are expressed verbally, which provides yet another argument for the conceptual nature of metaphor and metonymy.

References:

- Fabiszak, Małgorzata and Anna Hebda. 2010. "Cognitive historical approaches to emotions: PRIDE". In Winters, Margaret E. , Tissari, Heli and Kathryn Allan (eds.), Historical Cognitive Linguistics. Berlin: De Gruyter Mouton, 261-297.
- Foolen, Ad. 2012. "The relevance of emotion for language and linguistics". In Foolen Ad, Lüdke Ulrike M., Racine Timothy P., and Jordan Zlatev (eds.). 2012. Moving Ourselves, Moving others. Motion and Emotion in Intersubjectivity, Consciousness' and Language. Amsterdam: Benjamins, 349-368.
- Forceville, Charles and Eduardo Urios-Aparisi (eds.) 2009. Multimodal Metaphor. Berlin/New York: Mouton de Gruyter.
- Kövecses, Zoltán. 2000. Metaphor and Emotion: Language, Culture and Body in Human Feeling. Cambridge: Cambridge University Press.

Connecting colours and emotions: a cross-cultural study

Jeannette Littlemore, Paula Prez-Sobrino & David Houghton

University of Birmingham

Danny Leung & Vanliza Chow

Open University Hong Kong

Abstract concepts and emotions are often associated with particular colours. However, little is known about the extent to which these associations are embodied, how their embodiment relates to their universality and whether embodied associations between abstract concepts, emotions and colours are retained in a second language.

We conducted a two-part study to investigate the extent to which colours that are associated with abstract concepts and emotions vary cross culturally, and the extent to which these associations carry over into a second language.

We first investigated the colours that are most commonly associated with abstract concepts and emotions in English and Cantonese. 286 respondents (130 English, 256 Cantonese) were presented with 40 words for abstract concepts or emotions and asked to select from ten different colours which they felt it was most strongly associated with. Findings show considerable cross-cultural variation for some abstract words. For example, ‘erotic’ was more likely to be red in English, purple in Spanish and yellow in Cantonese. Examples of other words that exhibited strong cross-cultural differences were ‘evil’, ‘happy’, ‘jealous’, ‘joyful’. Possible reasons for these findings, which relate to the 4E approach to embodied cognition, are discussed.

We then created a Stroop word recognition study in the two different languages in order to establish whether word-colour associations extend to a second language. Participants (60 L1 speakers of English, 60 L2 speakers of English, whose L1 was Cantonese) were shown a series of words and non-words for abstract concepts and emotions. Half were displayed in their associated colour (as revealed by the first study) and half were not. Reaction time differences were calculated for word recognition between those words that appeared in their associated colour and those that did not. The findings will be presented and their implications discussed.

**Metaphors and Feelings:
How Metaphorical Expressions Influence Readers' Engagements with Fictional Narratives**

*Carina Rasse
Alpen Adria University, Klagenfurt, Austria*

The current study builds on my MA thesis and aims to investigate the role of metaphors in readers' cognitive and emotional engagements with fictional narratives. More concretely, it will explore whether the presence of metaphorical expressions is likely to enhance Theory of Mind, thus to encourage readers to sympathize and/or empathize with individuals which actually only exist in their imagination (Kidd and Castano 2013; Bowes and Katz 2015; Kidd, Ongis and Castano 2016).

Various theories in Cognitive Linguistics state that metaphoric language is deeply tight to embodiment or recurring patterns of bodily experiences (Lakoff and Johnson 1980; Gibbs 2005). In other words, we understand metaphors by “creating an imaginative simulation of our bodies in action that mimics the events alluded to by the metaphor” (Gibbs and Matlock 2008: 162). Take, for instance, the passage in Helena Maria Viramontes's novel *Under the Feet of Jesus*, in which the protagonist compares ‘words’ to ‘rusted nails which pierce the heels of one’s bare feet’ (1995: 25). Even out of context, this metaphorical expression enables readers to get a very concrete sense of how words have hurt the protagonist of the novel. This experience, in turn, is likely to evoke empathetic feelings in the readers.

Examples like this strengthen the claim that metaphoric ideas are tied to our ongoing embodied actions, and that we use them to better understand, and consequently react to, more abstract concepts (Kövecses 2005; Gibbs 2014; Steen 2014). In the example above, the author compares ‘words’ – which are abstract in this context – to a concrete, physical concept, namely the pain that is caused when a nail pierces into one’s feet. I see my study as a qualitative interpretive investigation into Theory of Mind which implicates metaphor usage in understanding and reacting to others’ emotions, intentions and actions.

Conceptual Metaphors of Love in the Poetry of Suad Alsabbah

Marwa Al Amin

University of Hafr Albatin, Saudi Arabia

This paper explores conceptual metaphors of love in “Happy New Year” (Al Sabah, 1994, pp. 9-10) one of the poems of the contemporary Kuwaiti poet, Suad Al sabah, (1942 -). Conceptual Metaphor Theory with special focus on the embodiment hypothesis, is used as a tool for analysis as well as Metaphor Identification Procedure suggested by Pragglejaz Group (2007).

CMT was founded by Lakoff and Johnson 1980 and since then, research in metaphor has taken a new line. Conceptual metaphors reflect people's cultures. Poets communicate creatively through basic metaphors (Lakoff & Turner, 1989). Metaphor affects human thought and ways of conceptualizing life (Lakoff & Johnson, 1980). Expressing emotions such as love metaphorically is proved to be international relying on similar human physical experiences (Kovecses 2010).

The study investigates the way Al Sabah conceptualizes love. It investigates several specific metaphor-related questions: How does Al Sabah, in her attempt to revolt against feminine “weakness” conceptualize love? What source domains does she use in this poem and what do they reveal about the way she thinks? Is Al Sabah affected by her gender when she chooses her source domains? Is she affected by her environment? Does Al Sabah employ the conceptual metaphors that are found common in Arabic such as LOVE IS A JOURNEY, LOVE IS DEATH and LOVE IS MAGIC (Al Amin, 2015)? Does she freely invent metaphors like LOVE IS TIME at the beginning of her poem:

Happy New Year

Happy New Year

I'd rather we say

Happy Love.

And LOVE IS A REVOLUTION in:

Love that revolts against ...

Love that tries to change everything ...?

The study shows how Al Sabah, in her attempt to revolt against a man- dominated society, conceptualizes love in a challenging way.

References:

- Al- Amin, Marwa. (2015) Conceptual Metaphors in English and Arabic: A Contrastive Study. Ph.D. Thesis, University of Khartoum.
- Al- Sabah, Suad. (1994). A Woman without Shores. Suad Al Sabah Publishing House, Kuwait, 1st edition.
- Kovecses, Z. (2010). Metaphor: A Practical Introduction. Oxford: Oxford University Press.
- Lakoff, G., & Johnson, M. (1980). Metaphors We Live By. Chicago: Chicago University Press.
- Lakoff, G., & Turner, M. (1989). More than Cool Reason, A Field Guide to Understanding Poetic Metaphor. Chicago and London: The University of Chicago Press.
- Pragglejaz Group. (2007) MIP. A method for Identifying metaphorically used words in discourse. *Metaphor and Symbol*, London, v. 22. No. 1 pp. 1-39.

Friday 13.30-14.30

Poster session Room O 99

Poster session

An Ecological Cognition and Conceptualization of Floods by Conceptual Metaphors in Thai

*Chatchawadee Saralamba
Thammasat University, Thailand*

The conceptual metaphor theory, formulated by Lakoff and Johnson in their seminal work *Metaphors We Live By* (1980), regards metaphors not as a poetic or rhetorical device, but as a crucial part of our conceptual system. Conceptual metaphors are thus considered to be a matter of thought, not merely language, and they are defined as the understanding of one conceptual domain – the target domain – in terms of another domain – the source domain. Target domains are typically “areas of experience that are relatively abstract, complex, unfamiliar, subjective or poorly delineated”, while source domains are normally “concrete, simple, familiar, physical and well-delineated experiences” (Semino, 2008).

The conceptual metaphor theory postulates that we reason about some concepts in terms of other concepts based on a set of systematic correspondences between or across these two domains called mappings which are grounded in human experience (Kövecses, 2010).

In 2011 and January 2017, a series of devastating floods occurred in several provinces in the Thailand. Due to their catastrophic proportions, the floods received significant attention in the media reports. Drawing on the theory of conceptual metaphor, this paper explores flood-related conceptual metaphors in the newspaper discourse on the 2011 and early 2017 floods in Thailand, aiming to determine how the floods were conceptualized by identifying the most common conceptual metaphors. The possible effects and reasons for the use of the most pervasive metaphors are also considered. While FLOODS have been identified as a source domain in conceptual metaphors such as IMMIGRATION IS FLOOD (Cunningham-Parmeter, 2011), this paper explores floods and flood-related concepts as the target domain seeking to reveal how floods were conceptualized in the public discourse in Thai media reports and what possible implications this had for the way readers thought and felt about the disaster.

The analysis offers an ecological cognition into long-standing, conventional metaphors related to floods and natural disasters as well as the specific realizations and elaborations of these and other metaphors in the context of the 2011, 2017 Thailand floods. The possible functions and effects of the predominant metaphors related to floods are discussed.

METAPHORS WE SAVE THE PLANET BY

*Inna Skynnikova
Volgograd State University*

Due to increasing over-consumption, gas emission and waste resulting in disastrous consequences for the world population, critical changes should be made to slow down or prevent ecological destruction. These changes presuppose not only producing more efficient green products, but forming a different society living by different stories. The problem is that these stories are so deeply rooted in people's minds, that changing them seems to be a challenging task. Stories we are told by economists, advertisers, environmentalists employ powerful metaphors that make our societies think about environmental issues in a particular way.

An ecolinguistic approach taken in the current research aims to reveal how metaphors as special types of frames can challenge the stories we live by and change people's perspectives of such issues as climate change, global warming and pollution: EARTH is a SPACESHIP, CLIMATE CHANGE IS A TIME BOMB, CLIMATE CHANGE IS A ROLLERCOASTER, or CLIMATE CHANGE IS AN ANGRY BEAST. Some researchers claim we need both the clever technologies, wise policies to respond to environmental crisis and less anthropocentric metaphors (Garrard 2012). By looking at metaphor as a multimodal phenomenon, I will examine print advertisements and try to show how metaphor-rich texts we are exposed to can cause us to act in a more responsible and sustainable way. Central to the examination of discursive and visual data is the fact that ads tend to represent a product or service promoted as being in a relationship with nature. In this case the text works at least on two levels of analysis and sometimes may be classified as environmentally damaging. We have become so accustomed to horrifying pictures featuring our planet that we treat them as something taken for granted. So, by creating a powerful and vivid metaphor advertisements should dramatically reframe environmental issues and make people think about them as problems pressing to be solved.

References:

- Berry, T., 1988. *The dream of the earth*. San Francisco: Sierra Club Books.
- Garrard, G., 2012. *Ecocriticism*. 2nd ed. London: Routledge.
- Korten, D., 2006. *The great turning: from empire to Earth community*. San Francisco: Berrett-Koehler.
- Kress, G., 2010. *Multimodality: a social semiotic approach to contemporary communication*. London: Routledge.
- Machin, D. and Mayr, A., 2012. *How to do critical discourse analysis: a multimodal introduction*. London: Sage.
- Okri, B., 1996. *Birds of heaven*. London: Phoenix.
- Potter, J., 1996. *Representing reality: discourse, rhetoric and social construction*. London: Sage.

Poster session

Drawing QSers' mind – identifying conceptualisation of 'self' and 'data' in prototypical Quantified Self blogs through metaphor analyses

*Mu Cong
University of Nottingham, China*

As novel information infrastructure is changing how we interact with our environment [1], we have been inventing novel metaphors to conceptualise our daily practices involving information technologies, such as big data [2].

An epitome of the adoption of 'big data' at a personal level is the Quantified Self (QS) movement, where the participants seek 'self knowledge through numbers' generated by such devices as Fitbit, tracking their bodily activities. [3]

Although sociologists [4, 5] have already studied the QS and its relations to neoliberalism [6, 7], few linguists have examined the QS language and values (except for Rettberg [8]). Particularly, there is a need to study the QSers' own discourse to understand how the rhetoric of emerging technologies merge into the everyday discourse and affect QSers' language and mind, disrupting some conventional values while reinforcing some others.

I study the metaphors in six prototypical QS blogs, sampled from my proprietary QS corpus. I use MIP [9] and systematic metaphor analysis [10] to discover how the metaphors aid or constrain the QSers' conceptualisation of self in relation to data and QS tools.

Preliminary results show that QSers think of body data as objects and the tools as productive, capable, intelligent and kind people. They also believe that their fuzzy health problems can be tamed by QS gadgets, which represent rationality and control. They demonstrate some interesting frames on data ownership, which can be related to the privacy issues in big data. Through metaphorisation and delexicalisation, QSers blur the boundaries of virtual and real in conceiving their experiences, but also limit alternative conceptions.

Thus, revealing the human values and goals, embodied and embedded in the QS discourse community, can help explain how these values and goals may affect or assist QSers' well-being, especially in terms of consumption of technologies and protecting privacy.

DEAF IS RIGHT and HEARING IS LEFT?
Conceptual mappings in Brazilian Sign Language (LIBRAS)

*Maity Siqueira & Sandro Rodrigues Fonseca
UFRGS, Brazil*

Various signed languages have already been studied under the perspective of Cognitive Linguistics, particularly American Sign Language (ASL) and British Sign Language (BSL). Signed Language researchers have found linguistic instantiations of primary metaphors such as GOOD IS UP (e.g. in the sign COMMUNICATION) and COMMUNICATING IS SENDING (e.g. in the signs HAPPY, RICH, and IMPROVE) (Taub, 2001; Wilcox, 2000). Beyond the lexical level, the signer uses the space around the body to locate the referents of discourse. This study focuses on gestural instantiations of the conceptual metaphors GOOD IS RIGHT/ PRESTIGIOUS IS RIGHT (and its counterparts BAD IS LEFT/ NON-PRESTIGIOUS IS LEFT) that have the potential to be universal, considering the clear majority of right-handed people. We hypothesize that the afore mentioned metaphors, as well as the more specific DEAF IS RIGHT (and its counterpart HEARING IS LEFT), observed in LIBRAS, reflects the Brazilian deaf community's cultural beliefs. To verify if there is regularity in this transversal axis, we studied the choice of different subjects on the right and left side of signers, by comparing five short narratives. These were produced by two Brazilian Deaf poets as follows; Saber e conhecer (To know and to understand), Dia Internacional da mulher (Woman's Day), Bolinha de ping pong (Ping pong ball) by Rimar Romano; Os três touros (The three bulls) by Nelson Pimenta and Os cinco sentidos (Five senses) created by Paul Scott and translated into LIBRAS by Nelson Pimenta. While further research is necessary to explain syntactic preferences by Deaf signers, preliminary results suggest a preference to use the right side of the signer to locate the more prestigious participant. The choice of side does not seem random and can explain the decision to locate the Deaf character on the right side of the proposition to denote their Deafhood (Ladd, 2003).

Poster session

Metaphor as double metonymy

Ayako Sato

Bangor University, UK

There is a theoretical shift of the boundary between metaphor and metonymy in the literature. Among them, this paper elaborates on the ideas of metaphor as double metonymy. Metaphor is composed of metonymy in some way (e.g., Group U 1981; Riemer 2002; Barcelona 2000). However, the distinction between metaphor and metonymy is still not entirely clear because of the disagreement of semantic domains; metonymic construction occurs in intra-domain while metaphors occurs in inter-domain. Apart from this, this paper attempts to provide further evidence in support of the idea of (some) metaphor as double metonymy through the analysis and exploration of several existing linguistic examples in the literature.

On the basis of the analysis, this paper employs Lexical Concept and Cognitive Models (LCCM) theory (e.g., Evans 2009). The utility of this model is that it helps elucidate the relationship between figurative language expressions, and encyclopaedic knowledge during the course of language understanding. I focus on the meaning construction, in particular, conceptual distance between source and target in the LCCM framework. I model meaning construction in LCCM models, as a result, I find that metonymic meaning construction occurs within a single domain while metaphor is constructed by two metonymic cognitive models. That is, metaphorical source and target is not directly map with each other, instead of that, metonymic operation occurs in each source and target domain first and then the results of the each operation match with each other metaphorically.

The paper contribute to the field of figurative language research: first, this study extends, for the first time, LCCM Theory to the domain of metonymy, and further explores how it is both similar to and distinct from metaphor. Second, the paper provides a theoretical architecture revealing the ways in which individual languages, albeit with divergent bodies of encyclopaedic knowledge process different types of figurative language expressions.

Slain by the dragon: Metaphors of Brexit

*Mark Shuttleworth
University College London*

During the EU referendum campaign in the UK, the European Movement UK published a cartoon portraying Brexit as a fire-breathing dragon threatening jobs, security and the environment and being attacked by a St. George bearing the insignia of England and the EU.

In the event it was the dragon who confounded everyone's expectations by emerging victorious. The public debate over Brexit, both in the run-up to the referendum and in the aftermath of the result, has been characterised by the use of metaphor. While this is true of both sides to some extent, without doubt it is the Leave campaign that particularly relied on the use of figurative language to get its message across.

Much of the on-line discourse of Leave campaigners was characterised by strongly worded, emotive metaphors redolent of uninformed, counter-factual views. Thus – to name just a few examples – the EU was described as ‘sclerotic’, a ‘basket case’ and even a ‘horrific Stanley Milgram experiment’, while the UK’s relationship with it was depicted as one of ‘being shackled to a corpse’. Individual metaphors were interwoven with narratives in a manner that reflected the political worldview of the writers.

In the case of the Brexit dragon, on-line chat participants on both sides of the argument attempted to locate the metaphor within their own favoured narratives: St. George the cosmopolitan European or, alternatively, a short-sighted Brexit dragon that feasts on closed ideas of identity on the Remain side, and the EU dragon consuming the UK who is the maiden tied to the post, or the dragon of unwanted immigrants roaming unhindered throughout the continent on the side of the Leavers.

Poster session

Coherence of metaphorical concepts in narration of scientific films

*Dariia Orobchuk
University Coblenz-Landau*

Metaphors in a film shape the perception, communication and storage of the findings to a large extent. A film as a multimodal medium has several channels of information available to actualize metaphors. This research is conducted by taking the example of the film „Temple care“ produced by the German Research Association to the topic restoration and conservation of the temple complex of Angkor in Cambodia. The present chapter provides the analysis of the explication of metaphor in different modes (verbal, visual and non-verbal sound), focusing on the metaphorical concepts used for narration . The research includes suggestions about the using transcendental metaphors for the presentation of foreign culture. It is argued which preconditions effect metaphor identification, its construal and interpretation. It is outlined that metaphors are mostly used in film to illustrate the problems description of the research and come into play mostly in the verbal mode (collaterally target domain in visual modality), connoting the impact of dramatization due to non-verbal sound. The results of my analysis also suggest that the abstract issues tend to be encoded verbally as anthropomorphic unities with cognitive abilities who act within defined metaphorical concept RESTAURATION IS HEALING and TIME IS ANTAGINIST. The analysis shows how the metonymy functions in the target domain of metaphors depicting temples and time.

References:

- George Lakoff, Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press. 1980, 2003;
- Mark Turner, Gilles Fauconnier: *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books. 2002;
- Charles Forceville, Eduardo Urios-Aparisi. *Multimodal metaphor*. Berlin: Mouton de Gruyter. 2009.

SDU 