

College of Arts and Sciences

(<http://artsci.case.edu>)

Department of Cognitive Science (<https://cognitivescience.case.edu/>)

[Home](#) / [Colloquia](https://cognitivescience.case.edu/colloquia/) / [Past Colloquia: 2011](#)

Past Colloquia: 2011

Robert F. Williams. Wednesday, 20 April 2011, 10:30 am-12:00pm. 618 Crawford. Title: Gesture coupling body, mind, and world. Robert Williams (<http://www.lawrence.edu/fast/williaro/>) is Associate Professor of Linguistics and Cognitive Science in the Education Department at Lawrence University in Appleton, Wisconsin.

Abstract: Working from the perspectives of distributed cognition, embodied cognition, and cognitive semantics, I will present evidence of how gesture couples body, mind, and world to produce functional cognition and communication. In problem-solving, humans use bodily actions, including gestures, to bring elements of functional systems into coordination to generate specific outcomes. In communication, a speaker's gestural forms are structured by and exhibit image-schematic structure inherent in the speaker's conceptualization, making this structure available for the listener's apprehension. In instructional discourse, gestures guide the mapping of conceptual entities to structures in the world, building the anchored conceptual blends used to do cognitive work. In joint reasoning, gestures anchor conceptual elements, depict relations, and enact processes being contemplated and explored in the discourse. In arguing for these functions of gesture, I will show examples from studies of everyday cognition, including solving problems through counting, telling time, and reasoning with others about the causes of the seasons, tides, and phases of the moon.

Esther Pascual. Saturday, 16 April 2011, 3:20-4:50pm. Bellflower Lounge, Thwing Building. Title: The Conversation as a Frame in Language, Discourse, and Cognition. Esther Pascual (<http://www.rug.nl/staff/e.pascual/index>) is Assistant Professor of Communication and Information

Sciences at the University of Groningen, Holland. This talk is sponsored by the Cognitive Science Student Organization.

Marina Terkourafi. Friday, 15 April 2011, 2:30-4pm. 618 Crawford. Title: Constructing intersubjectivity in Cypriot Greek: an experimental account. Marina Terkourafi (<http://faculty.las.illinois.edu/mt217/>) is Assistant Professor of Linguistics at the University of Illinois at Urbana-Champaign.

Abstract: I present an analysis of the expression *oi na+V* (roughly: 'Don't go V-ing') used to perform mild prohibitions in Cypriot Greek based on spoken corpus and experimental data. Analysis of the spoken corpus data shows that this expression is typically used between familiar interlocutors in informal settings and when the prohibited act has already occurred prior to the prohibition or temporally overlaps with it. Additionally, the results of a perception experiment reveal that two prosodic cues are important for obtaining the prohibition reading of *oi na+V*: (1) delayed alignment of the pitch peak on the *oi* syllable at the start of the phrase, and (2) reduced pitch height of any subsequent lexical accents in the rest of the phrase. Building on these findings, I propose that a speaker who utters the expression *oi na+V* at once expresses: (1) a prohibition against performing some act; (2) the assumption that this act is likely (part of the interlocutors' common ground). Despite appearing within the scope of negation, the prohibited act is not automatically suppressed but remains available for further processing, furnishing a cognitive baseline, a common vantage point from which speaker and hearer can look at the situation and coordinate their 'take' on it. In this way, the expression *oi na+V* serves to promote intersubjective coordination between interlocutors (i.e., it is a Construction of Intersubjectivity; Verhagen 2005) in Cypriot Greek, as well as to constitute the hearer's positive face, corroborating previous findings regarding the importance of positive face in contemporary Greek Cypriot society.

Charles Forceville. Wednesday, 13 April 2011, 10:30am-12:00pm. 618 Crawford. Title: Creative use in advertising metaphors and comics balloons. Charles Forceville (<http://home.medewerker.uva.nl/c.j.forceville/>) is Professor at the University of Amsterdam. (This colloquium will be available to remote viewers via webcast.) (<http://www.case.edu/artsci/cogs/webcastinstructions.html>)

Abstract: Fauconnier and Turner's (2002) Blending Theory claims that it can explain "emergent structure." Briefly, advisedly combining two or more "input spaces" results in a creative "blend," exemplifying insights that could not be generated from either input space separately. Examples:

Input Space 1	Input Space 2	Blend
"Language-using chimpanzee	Noam Chomsky	"Nim Chimpsky"
Big car	Yacht	Land Yacht

There is, however, one problem: the assessment of creativity is always post hoc. While it gives some idea about how to model creativity, Blending Theory does not, as yet, provide much insight about how creativity may come into existence. Presumably neither BT nor any other theory will be able to provide algorithms for how to be creative. But with some adaptation, the model can perhaps be used to explain how the flourishing of creativity can be facilitated. Veale, Feysaerts and Forceville (unpublished ms. 2008/ in preparation) propose that in order to say something sensible about "creativity," at least the following conditions must be fulfilled: (1) there is a more or less clearly defined problem ("input space 1"); (2) an ideal but vague result is envisaged ("blend"); (3) the material, technical, and other constraints under which the problem-solver must operate are known; (4) there is a "creative" domain, whose contents are to be determined, that helps generate potentially useful solutions ("input space 2").

In my talk I will show and discuss (inevitably: post hoc) some pictorial and multimodal creative solutions, metaphorical or otherwise, to communicative and rhetorical "problems." The focus will be on aspects of mode/modality (visuals, language, sound, music) in popular discourse.

Michael Anderson. Friday, 8 April 2011, 12:30-2pm. 618 Crawford. Title: Neural reuse: A fundamental organizational principle of the brain. Michael L. Anderson is Assistant Professor of Cognitive Science in the Department of Psychology at Franklin & Marshall College (<http://www.fandm.edu/>), and Visiting Assistant Professor at the Institute for Advanced Computer Studies at the University of Maryland, College Park (<http://www.umd.edu/>), where he is also a member of the Graduate Faculty in the Program in Neuroscience and Cognitive Science. (This colloquium will be available to remote viewers via webcast.) (<http://www.case.edu/artsci/cogs/webcastinstructions.html>)

Abstract: A decade after the decade of the brain, we have by now performed tens of thousands of functional neuroimaging studies. Looking at these data in aggregate offers the exciting opportunity to revisit some of the fundamental assumptions guiding much current research in the cognitive sciences. In this talk I will argue that, when taken as a whole, the data suggest: (1) local brain circuits are used in many different psychological functions, across multiple traditional cognitive domains (e.g., language, attention, motor control, etc); (2) differences between the neural underpinnings of these traditional cognitive domains are reflected more in different patterns of cooperation between (the same) neural regions, and less in differences in which neural regions are used to support tasks in each domains; and (3) more recently evolved/developed cognitive functions tend to depend on more, and more widely scattered local circuits. Together these findings paint a picture of the evolution and development of the brain in which neural circuits originally established for one purpose are often exapted (exploited, recycled, redeployed) and put to different psychological uses, often without losing their original functions. Such a functional architecture would seem to require cross-domain cognitive modeling when assigning function to local structure, and will likely inspire significant revisions of our current cognitive ontology. Moreover, widespread reuse of neural circuitry apparently favors modal, embodied theories of conceptual content over amodal ones, while at the same time challenging theorists of embodied cognition to articulate a more specific neural mechanism for conceptual grounding.

Daniel M. Gross. Wednesday, 6 April 2011, 4-5:30pm. 618 Crawford. Title: Why Do We Need Literature? Reading the Uncomfortable Situation. Daniel M. Gross (http://www.faculty.uci.edu/profile.cfm?faculty_id=5468) is Associate Professor of English at the University of California, Irvine.

Abstract: The “cognition” of situated cognition theory tends to be comfortable: comfortably embodied, comfortably embedded, and comfortably in the world. So how do those of us interested in situated cognition theory deal with the pervasive discomforts of everyday life ranging from the cognitive dissonance of my son’s McDonald’s Happy Meal to the devastating effects of structural racism and sexism? In this talk I will perform a close reading of a famously uncomfortable situation in Lawrence Sterne’s *A Sentimental Journey through France and Italy* to demonstrate some of the ways in which literary criticism – and the literary humanities more generally including rhetoric and critical theory – become indispensable for situated cognition theory.

Chad Sylvester. Friday, 1 April 2011, 12:30-2pm. 618 Crawford. Title: Anxiety Disorders: A Systems Neuroscience Perspective and Implications for Treatment. Chad Sylvester, MD, PhD is a Resident Physician in Psychiatry, Washington State University, St. Louis, MO.

Abstract: The human brain and cognitive architecture can be divided into about eight large-scale functional networks. Models of most brain illnesses, however, fail to take this network view into account. Here, we organize the pathology of anxiety disorders by brain and cognitive network. We argue that anxiety disorders are associated with a specific neuro-cognitive profile: increased task-level control and stimulus-driven attention but decreased goal-oriented attention, emotional processing, and emotional regulation. These changes are paralleled by increased activity in the core and ventral attention networks but decreased activity in the dorsal attention, default, and affective networks. This network model provides specific targets for novel behavioral treatments aimed at reversing the pathology of anxiety disorders. Attention training treatments are discussed.

Jean Mandler. Wednesday, 23 March 2011, 4-5:30pm. 618 Crawford. Title: The spatial foundation of the conceptual system ... and how we go beyond it. Jean Mandler (<http://www.cogsci.ucsd.edu/~jean/>) is Research Professor and Professor Emeritus, Department of Cognitive Science, UC San Diego. (This colloquium was available to remote viewers via webcast.) (<http://www.case.edu/artsci/cogs/webcastinstructions.html>)

Abstract: A theory of how concept formation begins is offered that accounts for conceptual activity in the first year of life and describes how increasing conceptual complexity comes about. A small set of primitives used by a mechanism of Perceptual Meaning Analysis redescribes motion and other spatio-temporal information into a schematic spatial form that results in potentially accessible concepts. Combinations of its primitives are sufficient to provide the first meanings used to interpret events and make simple conceptual inferences. These initial interpretations of the world are gradually used to interpret nonspatial information. As infants begin to move themselves around in the world and act on objects, feelings of force get integrated with a spatial concept of causality and feelings of trying get integrated with spatial concepts of goal-directed behavior. Concepts of emotions and sensory concepts such as colors are later acquisitions because of lack of a structured spatial core to provide descriptions that interpret unstructured internal experiences. In these cases, just as for a theory of mind, language is needed to provide conceptual descriptions.

Ricardo Maldonado. Friday, 4 March 2011, 12:30-2pm. 618 Crawford. Title: Objective and subjective reference points. The case of Mexican Spanish aquí and acá 'here'. Ricardo Maldonado (<http://ricardomaldonado.weebly.com/>) is Investigador-Profesor, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México; Posgrado en Lingüística, Facultad de Lenguas y Letras, Universidad Autónoma de Querétaro, México.

Abstract: Objective and subjective locations around ego.

Deictic markers involve locating an element in space taking the speaker as reference point. Most languages develop more than one deictic marker determined by the distance between the conceptualizer and the located object. English here 'proximal' and there 'non-proximal' start an array of subtle contrasts based on distance. Yet distance is not the only parameter determining the behavior of deictic markers. Should that be the case there would be no way to understand why a language would have more than one marker of proximity. This is the case of Spanish where two deictic locative markers compete to cover different facets of the proximal region surrounding the speaker. At first glance *aquí* / *acá* 'here' can be used to refer to elements located near the deictic center with no particular contrast as in (1), however there are contexts where only one form can be used. In 2 only *acá* is legal:

1.a *Aquí* hace mucho frío 'Here it is very cold'

b. *Acá* hace mucho frío 'Here it is very cold'

2.a. *Venga para acá* 'Come here'

b. * *Venga para aquí*

Based on oral and written data from Mexican current Spanish this talk shows that only *acá* develops a wide variety of pragmatic extensions triggering the speaker's involvement in the event. I will show that *acá* provides representations where the located element is consistently closer to the speaker than *aquí*. The contrast extends to more abstract domains in predictable ways. The more objective representations of the referent point are provided by *aquí* (3) while in those representing the speaker's interests *acá* constitutes the norm:

3.a. ¿*Vives por aquí*? 'Do you live around here?'

b. ?? ¿*Vives por acá*? 'Do you live around here?'

Moreover there is an ample variety of pragmatic developments of *acá* that are not available for *aquí* as in (4):

4.a *Ana viste muy acá* 'Ana wears fancy chic/ clothes'

b. * *Ana viste muy aquí*

The more the speaker is involved in the event the more *acá* is accepted in detriment of *aquí*. The development of pragmatic meanings is accounted for as a subjectification process that develops from the schematic representation of the trajectory towards the deictic center only found in *acá*. I propose that the locative path towards the speaker is further developed as a schema operating in abstract domains to represent first speaker's affectedness, then the speaker's interests and finally the speaker's involvement in the event (which also activates a variety of empathy relations). These changes correspond to general

subjectification and grammaticalization patterns (Langacker 1985, 1991; Traugott 1982) where meanings located in the referential world move to that of the speaker. It also conforms to general patterns of subjectification (Langacker 1991) where the representation of the event involves the speaker's presence in the event's onstage region.

Javier Valenzuela Manzanares. Wednesday, 23 February 2011, 4-5:30pm. 618 Crawford. Title: The role of attention in the directionality of on-line metaphorical mappings. Javier Valenzuela Manzanares (<http://www.um.es/lincoing/jv/index.htm>) is Professor of English Philology, Universidad de Murcia, Spain.

Abstract: There is a surge of evidence in recent times that shows that, in the processing of a number of abstract domains, such as affection, emotional valence, morality, importance, or relationships of control, to name but a few, sensorimotor domains are recruited automatically in on-line tasks. In most of these studies, the directionality of this co-activation flows in the manner predicted by Conceptual Metaphor Theory, that is, from a concrete source domain to a more abstract target one. However, this is not always the case: empirical evidence reveals many cases in which the directionality of this flow is reversed, and it is the activation of the target domains which is seen to have an effect in the processing of the source domain. In many of these experiments, the type of task seems to be the factor which tips the balance in one or another direction. I will present a number of experiments which show the role that attentional factors play in the directionality of the mappings between both domains. Some conclusions are drawn with the respect to the current state of the art in conceptual metaphor theory.

Rick Grush. Friday, 18 February 2011, 4-5:30pm. 618 Crawford. Title: Emulation as the seat of mental representation . Rick Grush (<http://mind.ucsd.edu/>) is Professor of Philosophy and Cognitive Science at UC San Diego.

Abstract: In this talk I will try to demonstrate how a very fundamental feature of human mental ability—the capacity to form and manipulate internal representations—might be explained by the brain's ability to construct and use models of the body and environment. I will illustrate this intuitive idea concretely through some tools from modern control theory and signal processing, and describe applications to motor control, motor imagery, visual imagery, and the temporal content of experience.

Yeshayahu Shen. Wednesday, 16 February 2011, 10:30-noon. 618 Crawford. Title: What Can Hybrids Tell Us About the Relationship Between Language and Thought? Yeshayahu Shen

(http://humanities.tau.ac.il/segel_eng/yshen.html) is Professor in the Program of Cognitive Studies of Language Use and the Department of Literature, Tel Aviv University.

Abstract: Do speakers “think differently” in linguistic than in a non-linguistic media? The present study examines this possibility by analyzing people’s perception of specific type of visual stimuli – the visual hybrid. A visual hybrid (e.g., the ‘half-person, half-horse’ creature known as the centaur, or the ‘half-person, half- fish’ known as the mermaid) is a novel composite image that is a configuration of components of two or more familiar objects belonging to disparate categories. Here we examine the role played by (portion of) a basic form of knowledge organization – the Conceptual Hierarchy – in the perception of hybrids. The Conceptual Hierarchy (CH) consists of a hierarchy of ontological concepts, such as humans, animals, and plants (see, e.g., Keil 1979). Here we focus on four levels of the hierarchy which are relevant to the creation of visual hybrids: HUMANS – ANIMALS – PLANTS – PHYSICAL OBJECTS. Arguably, the position of an item in the hierarchy is closely related to salience in that items high in the hierarchy (e.g., HUMANS) tend to be strongly entrenched concepts, typically acquired at an early age (see, e.g., Deane 1992; 1993, Keil 1979). The question we address is: How do we conceptualize hybrids? In particular, is one of the two constituent parts of the hybrid more central to its conceptualization? And if so, which one? The main finding of a series of off-line and on-line experiments suggests that the conceptualization of hybrids is highly dependent on the media (linguistic as opposed to non-linguistic) in which it is expressed: when people are asked to express their conceptualization of the hybrids **verbally**, there is a robust CH effect: people would tend to conceptualize the hybrid as belonging to the higher category (e.g., Humans) rather than to a lower one (e.g., Animals). In contrast, when non-verbal tasks are used (e.g., a visual categorization task) no such effect is exhibited (namely, no preference to conceptualize the hybrid as a member of the higher or lower category). This finding cuts across diverse cultural communities and different age groups. Furthermore, it was found that the CH effect in Non verbal classification is increased when primed by a verbal task. It is proposed that this finding can be accounted for by assuming a “thinking for speaking” process (Slobin 1996), according to which when expressing their conceptualization while using language people tend to adhere to their linguistic conventions which favor grammatical structures that correspond to the hierarchy over those that do not.

Vera Tobin. Friday, 4 February 2011, 12:30-2pm. 618 Crawford. Title: The Curse of Knowledge Revisited. Dr. Tobin is the Arnhold Faculty Fellow at the University of California, Santa Barbara.

Abstract: The “curse of knowledge” is a pervasive cognitive bias that makes it very difficult for us to imagine, once we know something, what it is like not to know it. From the point of view of cognitive efficiency, this bias is not surprising—we need to make very quick, backstage assessments of what other people think and know all the time, and projecting information from our own perspective is a fast and efficient way of generating good approximations. Recent work on the role that simulated action and perception play in social cognition and language understanding further underlines how central this kind of projection may be for our understanding of others, and even of our previous selves.

But as useful as these heuristics are, they can also be the source of many mistakes. We think our intentions are transparent to those around us, and are hurt when they take us to mean something else. We don’t recognize how difficult it was to predict an event, once it has come to pass. Experts produce “explanations” that are incomprehensible to the uninitiated. Once we know one solution to a problem, it seems so obvious that it can be almost impossible to consider another approach.

Most research on the curse of knowledge and related biases has focused on these hazards, which are real and important. In this talk, I will present another set of consequences of the curse of knowledge: elements of higher-order cognition and social pragmatics that arise from our awareness of this tendency. People make use of others’ susceptibility to the curse of knowledge for fun and profit, both to put one over on other people and to create entertainments. As I will show, the curse of knowledge thus shapes human interaction in a profusion of ways that have heretofore gone unexamined.

Đorđe Vidanović. Wednesday, 12 January 2011, 2-3:30. 618 Crawford. Title: Conceptual Blending and Intentionality. Dr. Vidanović is Professor of Semantics in the Faculty of Philosophy, University of Niš, Serbia. This colloquium will be held via H.323 high-quality videoconference technology.

Abstract: My original thesis was that conceptual blending was solely based on acts of individual intentionality without addressing collective or multiple intentionality (or “aboutness”). However, after reconsidering the problem, using Arthur Koestler’s examples from *The Act of Creation* and Fauconnier’s and Turner’s examples that were deeply ingrained in shared social contexts, I started to change my initial thesis. What made me switch over to the idea that conceptual blending was, after all, dominantly a tacit and unconscious social act that required shared intentionality was John Searle’s concept of “The Background” and Langacker’s “grounding,” which, although different, both pointed at the socially shared elements of internalized knowledge. Thus, on second thought it appeared to me that conceptual blending hinged a lot on social factors and/or rituals and definitely needed a wider social context. Actually it turned out that I had to try to answer Searle’s question: Can an individual harbor both her own ideas and collective ones at the same time? As Searle claims that this dual

capacity is a biological given that is shared by a variety of species and presupposes “a background sense of the other as candidate for cooperative agency,” I could not help noticing the sheer intellectual effort it takes to break away from the Background. This meant that the only thing that blocked esoteric and weird interpretations was not the semantic content but the shared tacit assumptions. There seems to be a more or less relevant counterpart in linguistics proper, too. and that is Langacker’s concept of modeling local contextual aspects of meaning (the notion of “ground”). In the end, I was able to conclude that conceptual blending must have recourse to collectivity as a shared background in situations that require it.

This talk inaugurates the Cognitive Science Forum (<http://www.cogsci.ni.ac.rs/index.html>) at the University of Niš, Serbia.



© 2023 Case Western Reserve University (<http://www.case.edu/>)

10900 Euclid Ave.

Cleveland, Ohio 44106

216.368.2000 ([legal notice \(https://case.edu/utech/departments/information-security/policies/legal-privacy-notice\)](https://case.edu/utech/departments/information-security/policies/legal-privacy-notice))

DEPARTMENT OF COGNITIVE SCIENCE

Case Western Reserve University

617C Crawford Hall

10900 Euclid Ave.

Cleveland, OH 44106

eric.tolliver@case.edu (<mailto:eric.tolliver@case.edu>)

[Site Feedback \(mailto:cas-cms@case.edu\)](mailto:cas-cms@case.edu)

SOCIAL MEDIA



CWRU LINKS

Apply (<http://case.edu/admissions/>)

Give (<https://giving.case.edu/cas/>)

Visit (<http://case.edu/visit/>)

Directory (<https://webapps.case.edu/directory/>)