

SOCIETY FOR TEXT AND DISCOURSE

[ABSTRACTS OF PRESENTATIONS](#)

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Alphabetical Listing of Authors

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Spoken Presentations

Thursday, July 11

Conceptions of Understanding

Herbert H. Clark (Stanford University)

Understanding is a process, like speaking, that is dear to the hearts of many students

of language. But what is understanding? The answer traditionally has been taken as self-evident, as a matter of definition, but it is hardly that. Over the past twenty-five years, our conception of what understanding is has changed dramatically as we have learned more about how people use language, and our conception continues to deepen. What are these changes? And what do we do with theories and research that are based on earlier misconceptions about understanding?

Use and acquisition of idiomatic terms in referring by native and non-native speakers

Heather Bortfeld and Susan E. Brennan (State University of New York at Stony Brook)

Conversations between native and non-native speakers are commonplace, even in an ostensibly monolingual country like the U.S. Such conversations provide settings for L2 acquisition. In a referential communication task, natives and non-natives distinguished pictures of chairs. Both partners adjusted their speech to one another; non-natives acquired some vocabulary, and natives sometimes sacrificed idiomaticity for comprehensibility. Results are consistent with a Least Collaborative Effort hypothesis and not with an Ideal Input hypothesis.

Scripted vs. collaborative interaction:

The case of response accuracy in survey interviews

Michael F. Schober (New School for Social Research) and
Frederick G. Conrad (Bureau of Labor Statistics)

The use of standardized wording in survey interviews may decrease understanding (and thus response accuracy) because respondents can't collaborate with interviewers to make sure they have understood what survey designers intended. In a laboratory experiment, standardized and collaborative interviewing techniques led to equally high accuracy when the questions clearly mapped on to the fictional situations that respondents studied. When the mapping was less clear, standardization reduced accuracy substantially. We discuss theoretical and practical implications.

Inference making and intonation in discourse comprehension

Brian Sundermeier (University of Minnesota)

Participants were given a set of stories to be read aloud. Some stories required that an inference be made; others required no inference. Participants stressed those words that had not been previously inferred relative to those that were inferred, thus treating inferences as given information. The results suggest that examining intonation patterns of certain words in discourse may be a natural and effective method for exploring inference construction during reading and the organization of semantic structures.

Not propositions

David A. Robertson, Arthur M. Glenberg and Jennifer L. Jansen
(University of Wisconsin-Madison), and Mina C. Johnson (University of Colorado)

We investigate how people understand negated sentences and conclude that difficulty with negatives is not due to propositional complexity. Although we have replicated classic sentence-picture verification results, we also show that out of context negatives are more ambiguous than affirmatives, and that an appropriate context can make negated sentences as easy to understand as positive sentences.

Narrative as creator and destroyer of cultural cohesion: The case of O.J.

Robin Tolmach Lakoff (University of California, Berkeley)

Cultures use narratives, explicit and otherwise, to create in their members a sense of group identity or cohesion. But when it becomes clear that a significant narrative is not shared by all of a society's members, widespread confusion may arise. Public discourse about the case of O. J. Simpson, from the commission of the crime to the verdict and beyond, is examined as an illustration of the above propositions.

Who knows what? Who said what? Who wants what?:

Multiple agents in literary narratives

Arthur C. Graesser, Cheryl A. Bowers, and Mary E. Cregger
(The University of Memphis)

Do adult readers of short stories track character knowledge, speakers of speech acts, and what characters want? After reading a story, participants completed questionnaires assessing source memory and beliefs about character knowledge and wants. Results indicate that readers track knowledge based on characters' conversational roles during speech acts. In source memory, readers differentially discriminate between third- and first-person narrated items and characters who express speech acts. "Who wants what" data will also be reported.

Some functions of tense and person in narrative interpretation

Erwin M. Segal, Gregory Miller, Carol Hosenfeld, James Julian, William Russell, Aurora Mendelsohn, Joseph Delphonse, and Alyssa Greene
(State University of New York at Buffalo)

Tense and person of three short stories were manipulated to generate short stories varying in these dimensions. Subjects read one story and then answered questions about it. They were more likely to identify with the main character and visualize his thoughts in first person. They also enjoyed the stories more and felt that they had more plot when in present tense. These results are interpreted in terms of the deictic shift theory of narrative interpretation.

Temporal Markov Field models of naturalistic text

Richard M. Golden (University of Texas at Dallas)

Two groups of 12 subjects each read and recalled two of four naturalistic texts consisting of 22-27 propositions each. A small parameter (4-6 parameters) probability model whose parametric structure reflects various types of knowledge

schemata (e.g., episodic, causal, syntactic) was then developed for each text. Model parameters then estimated from the first group of human subject recall protocol data. Statement recall probabilities generated by probability model sampling were positively correlated with human statement recall probabilities from the second group of human subjects.

Modeling readers' situation models with Latent Semantic Analysis

Peter W. Foltz (New Mexico State University)

Latent Semantic Analysis (LSA) is a statistical model of word usage that generates a high dimensional semantic space that models the semantics of the text. In two experiments, LSA was used to model readers' situation models. In the first experiment, knowledge structures of readers of history texts were compared to the representation generated by LSA. In the second experiment, students' performance on an introductory psychology multiple-choice exam was compared to LSA's representation of psychology knowledge. The results from both experiments indicate that LSA captures an accurate representation, similar to that of the readers' situation models.

Generic concepts of words

Deborah Lawrence (Columbia University, Teachers College and
NYNEX Science and Technology)

It was proposed that in contexts where the superordinate category of a word is important and its specific identity is not important, the word can be conceptualized with two foci: itself plus its superordinate category. As a result, the specific meaning of *the word* per se becomes relatively inaccessible and less salient than when its identity is foregrounded. Experiments presented the same words in different contexts and measured the accessibility of their meanings using four dependent measures: (1) response time to confirm a property, (2) response time to reject a property, (3) ratings of presence-to-mind of the property, and (4) production of

associates. Results overall confirmed predictions.

Spoken Presentations

Friday, July 12

Speaking and attending in group learning activities in varying cultural communities

Barbara Rogoff and Chikako Toma (University of California, Santa Cruz)

This presentation focuses on the interpersonal processes of coordinating shared thinking in group activities. We examine how children and adults attend to other people's speaking and other actions in several sociocultural settings: engagement of toddlers and their families exploring novel objects in their homes and attending to competing events, in Guatemalan Mayan and middle-class European-American communities, and engagement of elementary school children in group conversations in which the students build on each other's ideas with the support of their teachers, in a Japanese and an innovative US school.

Learner-directed interaction vs. teacher-led recitation: Comparing knowledge assessment segments and topically related sets

Timothy Koschmann, Phillip J. Glenn, and Melinda Conlee
(Southern Illinois University)

We have been studying a particular instantiation of a learner-directed method of instruction, known as Problem-Based Learning (PBL). We previously described a recurrent interactional structure arising in PBL meetings, that we have termed a *Knowledge Assessment Segment*, in which one participant raises an informational topic for discussion, and one or more members elect to display their understanding of that topic. The goal of the current presentation will be to clarify the relationship of these interactional segments to previously studied elements of classroom discourse.

On understanding familiar and less-familiar figurative language

Rachel Giora and Ofer Fein (Tel Aviv University)

Contrary to current beliefs, our findings attest that metaphor and literal interpretations do not involve equivalent processes. A word fragment completion test reveals that (a) comprehension of familiar metaphors involves activation and retention of the literal meaning in the metaphorical context, whereas in the literal context the metaphorical meaning is suppressed; and (b) less-familiar metaphors involve processing the literal meaning in the metaphorical context, whereas in the literal context, the metaphoric meaning is not activated.

The effects of syntactic structure and causal relations on the allocation of attention during narrative comprehension

Charles R. Fletcher (University of Minnesota),
Kieran Snyder (University of Pennsylvania), and
Jeremy T. Jobling (University of Minnesota)

Previous research has shown that attention flows to the event that is causally last in a narrative. We test the hypothesis that writers can override this by placing the causally last event in a subordinate clause. In one experiment, we found that reader-generated continuations are less likely to be related to the causally last event if that event is described in a subordinate clause. In a second experiment, we found that subjects prefer to place the causally last event in a subordinate clause when that event is unrelated to the event that follows it.

The role of spatial information in reading comprehension

Paul van den Broek (University of Minnesota), Rolf Zwaan (Florida State University),
Brian Sundermeier (University of Minnesota), and
Timothy Truitt (Florida State University)

Is spatial information encoded and accessed during reading comprehension? We propose the answer depends on the potential inference's function in a reader's mental representation of the text. Specifically, we hypothesize that readers activate spatial information if it is causally relevant to a later event. Evidence from a speeded probe-recognition task shows that spatial information is indeed activated to allow readers to make backward (Exp. 1) and forward (Exp. 2) causal inferences. Think-aloud data provide convergent evidence.

Text, discourse, action, interaction

Emanuel A. Schegloff (University of California at Los Angeles)

Three themes inform my plenary talk. I reconsider the notions "text" and "discourse" as analytic takes on the empirical domain which is the focus of our inquiry, and explore the appropriateness and the import of featuring "action" and "interaction" in research in this area. A sample analysis embodies an effort to ground the discussion in features of the target domain rather than in conceptual or theoretical stipulation.

Compressing knowledge structures for optimal transmission using principal components

Bruce K. Britton (University of Georgia)

The purpose of instructional text is to transmit experts' knowledge structures to novices. We tested a computational method for selecting the optimal to-be-taught parts of any knowledge structure, using knowledge structures on traffic flow and cocaine sales. The experiments (N = 96 undergraduates) showed that our computational method, based on calculating the principal components of knowledge matrices, successfully selected the parts of the knowledge structure that communicated more of it than any other parts of comparable size.

Laboring to learn: Text induced active processing

Danielle S. McNamara (Old Dominion University)

I will review recent research investigating interactions of text coherence, prior knowledge, and levels of understanding in the comprehension of instructional texts (McNamara & Kintsch, in preparation; McNamara, Kintsch, Songer, & Kintsch, 1996). Three experiments will be presented which collectively demonstrate that reading a high-coherence text results in superior memory for the text but that a low-coherence text produces a deeper, situational understanding of the text -- provided that the reader has sufficient background knowledge.

Remembering information from multiple documents:

Effects of task demands and source information

Jean-Francois Rouet (University of Poitiers and C.N.R.S.) and
M. Anne Britt (Slippery Rock University)

An experiment investigated 17 year-old students' memory for information from multiple documents about a historical situation. Students read four texts about post-World War I revolts in Europe. Two texts were attributed to historians and two were attributed to political leaders at the time. The task was either to present the events or to compare Soviet versus Western interpretations. Memory for information sources was more accurate for main ideas than for details. In addition, argument-oriented instructions promoted the recognition of political leaders' main ideas, although the two groups obtained equivalent scores on content-oriented questions. The results are discussed in terms of levels of representation involved in understanding information from multiple sources.

Information extraction: What are we learning?

Wendy Lehnert (University of Massachusetts)

Although information extraction (IE) systems have made great progress in recent years, the IE effort is somewhat controversial. To understand this, we will consider some key questions. How has IE contributed to our understanding of human text comprehension? Has the emphasis on practical system development inspired basic

research or undermined it? Do IE technologies represent a dead-end in our quest for in-depth text comprehension, or have we unlocked some useful keys to the larger puzzle? In summary, have we learned anything of real value from IE, or have we merely become better software engineers?

Poster Presentations

Thursday, July 11

The information sequence of adverbial clauses in Mandarin Chinese conversation

Flora Yu-Fang Wang (National Taiwan Normal University)

The research reported here is intended as a contribution to an understanding of the adverbial clauses, used by speakers in spontaneous communication. This study aims at exploring adverbial clauses in spoken Mandarin conversations on the basis of quantitative analysis. There are four-hour conversation databases in this research. The adverbial clauses in the database were divided into (i) preposed clauses to their modified material across continuing intonation, (ii) postposed clauses to their modified material across continuing intonation, and (iii) postposed clauses to their modified material with final intonation (rising question intonation or final falling intonation). After an inspection of the data, the results suggest that the temporal and conditional clauses favor to occur before their modified material, and the causal ones, after their associated material. The data also show that causal clauses are fundamentally different from temporal and conditional ones in their use. In conversation, they are well-situated for appearing after the material they modify, to be expanded upon, and for introducing background elaboration. Generally, the prototypical use of an adverbial clause is to pre-pose it before the material they link in Chinese spoken discourse, except the causal clause.

The discourse functions of ANNE in Taiwanese Hokkien

Miao-hsia Chang (China Junior College of Industrial and Commercial Management and

National Taiwan Normal University)

This paper examines the various discourse functions of the Taiwanese Hokkien proform ANNE. The 90-minute corpus of spoken data finds 243 instances of ANNE, where over 70% of ANNE's perform discourse functions. It can occur intrasententially as a focus marker. It can also be a global boundary marker that begins or closes the report of an event. Besides, it fulfills a back channel function. The results show that ANNE exhibits different degrees of grammaticalization and its interpretation lies in the examination of the whole discourse.

The preferred information sequence of adverbial clause linking in Chinese written discourse

Miao-hsia Chang (China Junior College of Industrial and Commercial Management and

National Taiwan Normal University) and

Flora Yu-Fang Wang (National Taiwan Normal University)

This study sets out to elucidate the distribution of adverbial clauses in Chinese written discourse. Eighteen texts, either from Common Wealth monthly magazine (1994-1995) or from the Journalist weekly magazine (1994), were scrutinized to see the preferred information sequence of adverbial clause linking. The results suggest that more than 70% of the adverbial clauses precede their main clause. Therefore, we argue that adjunct-preceding nucleus order is the preferred information sequence in Chinese written discourse.

An investigation of writing plans: What carries over to text?

Brian L. Linzie & Amy R. Briggs (University of Minnesota)

Writers first produced a verbal protocol while planning for five minutes about an assigned narrative topic then composed a narrative for 50 minutes. The researchers parsed two story representations for each writer: the plan and the text. Plans were analyzed for completeness. Researchers coded the plan and text for semantic

overlap. Complete plans resulted in fewer new concepts in the text, yet had the same ratio of concepts translate to text as the in-complete plans.

Investigation of mental representation for narratives with harmony scores and multidimensional scaling stress values

Brian L. Linzie (University of Minnesota)

The writers of 20 short narratives provided pairwise similarity ratings among 12 concepts from their narratives. Two readers per story made the same ratings. Readers' mental representations were compared to those of writers by calculating Harmony scores (a measure of internal consistency) and fitting readers' representations onto writers' using multidimensional scaling. Although readers and writers had equally coherent mental representations, readers did not have the same representations that writers did.

Accessibility of causal information in multidimensional stories

Yuh-Tseun Tzeng and Paul van den Broek (University of Minnesota), and Holly A. Taylor (Tufts University)

How do readers organize information after reading? Taylor and Tversky (1996) have shown that dimensions such as whether events share a protagonist, occur in the same location or at the same time, influence memory organization. In this paper, we propose that functional relations, such as whether two events are causally connected, constitute even stronger organizing principles. In two experiments, we show that causal contingencies indeed yield stronger memory connections than shared protagonist or time.

The question of intentionality in Paul Ricoeur's Time and Narrative: A phenomenology of reading practices premised on a hermeneutics of historical consciousness

Abigail Shorter (Concordia University)

Literary hermeneutics operates as a second order discourse within the phenomenological space of reading itself. Defined then in terms of *a retrograde consciousness*, hermeneutics is, finally, a type of historical understanding premised on a particular cognitive regime involving the use of reflective consciousness and metaphorical language. In order for the 'fusion of horizons' to take place, however, within the space of experience itself between the interpreted past and the interpreting present, certain methodological criteria must first be met with respect to a *phenomenology of reading practices*. A logic of reading, therefore, arguably exists with respect to how this fusion of horizons is to take place between the literary text and the phenomenological reader. The present paper is intended to elaborate upon Ricoeur's thesis of *mimesis* as the interpretive basis of reconstructive historical thought within the social sciences.

Verification of typical versus atypical information in *Einstein's Dreams*

Bonnie McLain-Allen, Arthur C. Graesser, Max A. Kassler, and Roger J. Kreuz
(University of Memphis)

Participants read schema inconsistent texts and rated test statements on their truth/falsity. Participants who scored high on literary expertise supported a schema-pointer plus tag model while low-literary expertise participants supported a filtering model. High-expertise participants are biased toward schema inconsistent information while low-expertise participants filter out inconsistent information and rate consistent information as more true. Different types of readers (high- and low-expertise) more effectively process different types of information (atypical and typical) .

Global strategies in literary text comprehension

Salvio Martin Menendez and Jose Maria Gil
(Universidad Nacional de Mar del Plata, Argentina)

Students who develop the discursive ability of giving account of the meaning of a

text as a whole are capable of improving this ability through some specific activities provided by the teacher. The different types of summaries written by students are useful data which demonstrate how macrostrategies operate recursively. In addition, these summaries deal with different narrative and argumentative structures that students can recognize on their own.

Discourse strategies and the lexicon: AIDS

Salvio Martin Menendez (Universidad Nacional de Mar del Plata, Argentina)

This paper analyzes the occurrence of the word *preservativo (condón)* in different discourse strategies throughout two hundred interviews about AIDS best preventive method. The analysis is framed in the pragmatic discourse analysis, according to which strategies are seen as a tool to analyze discourse. Finally, it was demonstrated that the lexicon plays a crucial role in the creation of discourse strategies, as it enables people to activate cognitive and contextual stored knowledge.

Individual differences model of text learning

Bruce K. Britton, Mark J. Stimson, and Barry Stennett (University of Georgia)

An individual differences model of learning from instructional text was tested and supported using SEM. Learning from text is determined by making connections among ideas. Making connections depends on four abilities: gap-spotting, the metacognitive ability to sense that one's mental representation has cognitive gaps and should be filled by making connections; working-memory, the arena in which the connections are made; and the interaction of inference-making ability with domain-specific prior knowledge, which connects propositions from the text and prior knowledge.

Active learning, passive learning, software, and texts:

Does it really make a difference?

Pamela D. Tipping and Arthur C. Graesser (The University of Memphis)

Two experiments evaluated participants' explicit and inferential knowledge of information presented in multimedia software and illustrated texts. In Experiment 1, twelve participants studied via multimedia software the way two mechanical devices work. Six other participants studied these devices from MacCauley's book (The Way Things Work). In Experiment 2, twenty-one participants studied in three conditions: active on computer, passive on computer, and book. In Experiment 1, book-learners performed significantly better than computer-learners; in Experiment 2, all learners performed equally well.

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