

Interdisciplinary Science Down Under

Bertram Malle, Director

From January to March 2002, I traveled in New Zealand and Australia, visiting such magnificent places as the Marlborough Sounds, Franz Josef Glacier, Queenstown, Milford Sound, the Adelaide Hills, and the Barossa Valley. Because this was my sabbatical, I also visited colleagues at Cognitive Science Centers, Law schools, and Psychology Departments in Christchurch (The University of Canterbury), Wellington (The Victoria University), Sydney (Macquarie University), Melbourne (The University of Melbourne), and Adelaide (Flinders University, The University of Adelaide). Through many conversations and observations I learned about the variable commitments and obstacles to interdisciplinary work at these institutions, drawing conclusions about what we at our own Institute are already doing well and what we can do better. Two examples illustrate the variability I encountered.

At one university, three legal scholars work on issues such as intention ascription, legal excuses, and the

judgment of reasonable doubt—topics that would perfectly fit into a psychology department or into our own Institute of Cognitive and Decision Sciences. But these scholars have no connection with researchers at their Psychology Department, and in particular no communication with a research group on Forensic and Applied Psychology. How is this possible? The latter research group has the reputation of being interested mainly in “clinical perspectives,” and so contact has been shunned for a long time. However, the research group’s publication list (available on the university web page) includes works on intention ascription, blame, punishment, and restorative justice! In this case, reputation and prejudice (probably on both sides) hindered interdisciplinary contact. Similarly, it took a foreigner to point out the mutual relevance of said legal scholars’ work on the one hand and two social psychologists’ work on the other, who study excuse making in public contexts and the social construction of intention and motives. Here it was simply lack of knowledge, not prejudice, that hindered interdisciplinary contact.

Are we the same—prejudiced and ignorant? Do we not know what scholars in other departments do, even if their work is patently relevant to our own work? One would hope we have gone beyond at least the stage of ignorance. But have we? Unless we routinely browse the faculty

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Michael Posner Room

We are pleased to announce that the new meeting and seminar room of the Institute of Cognitive and Decision Sciences (Straub 256) will be named *Michael Posner Room*. With the naming of this room we are setting a small gesture of our large gratitude and admiration for Mike’s essential role in the Institute of Cognitive and Decision Sciences.

Michael Posner came to the University of Oregon in 1965 and made a number of groundbreaking contributions to psychology in the decades to follow. His work on attention and on automatic processes is part of the standard curriculum in cognitive psychology, and he received numerous prestigious awards, including the APA Distinguished Scientist Award and the Grawemayer Award. Mike was also one of the founding fathers of the Institute of Cognitive and Decision Sciences and served as Director from 1989 to 1995. During that time he was able to procure substantial grant funding and make the Institute a vibrant forum for interdisciplinary work on cognition, neuroscience, culture, language, and social decision-making.

Director and Executive Committee



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pages of other departments, we would hardly find out what our colleagues are working on. But, surely, careful background research—computer-aided, no doubt—in the journals of our central research topics would uncover like-minded scholars? Unfortunately, many literature search engines are mono-disciplinary, so even thorough probing may fail to identify important intellectual allies in other disciplines.

But here is the other, more cheery example. The Macquarie Center for Cognitive Science (MACCS) is one of the most exciting institutions I have ever visited. Cognitive psychologists, neuroscientists, clinicians, social psychologists, linguists, philosophers, and developmental researchers all come together for weekly meetings, collaborate on numerous publications, co-organize conferences, host international scholars, and supervise a considerable number of post-doctoral researchers. They are active, initiative, and have secured a large national center grant. The talks I gave there were very well attended, and the audience's questions indicated a refreshing breadth of interests and approaches—reminding me, in fact, of the atmosphere I experienced during my first talk at Oregon's Institute of Cognitive and Decision Sciences eight years ago.

So how does the MACCS do it? Half a dozen scholars' primary affiliation is with the Center, and they have their offices in one building wing (across from linguistics and psychology), fostering daily contact during lunches, tea breaks (twice a day, true to British tradition), and research meetings. The newest journals lie on a centrally located table along with recent papers by Center members, providing ample opportunity to find out what others are working on. Significantly, three to six post-doctoral scholars, funded by competitive national grants, ensure an influx of creative new ideas. The Center director, Max Coltheart, is extremely productive, collaborating with many other Center members and maintaining national and international contacts. Of course, he has no teaching obligations, as his entire load is transferred to his administrative role. Perhaps it also helps that the government rewards universities for every published article of its faculty in the amount of AU\$2000 (of which the author eventually gets about AU\$1200), that professors are paid 12-month salaries, and that their sabbaticals are fully paid, often with travel awards *added*. (Are you getting envious yet?)

We cannot change our state government or hope for a sudden financial boost from a shoe corporation. But we should consider the communicative and intellectual opportunities that routine spatial contact affords; the momentous impact that post-doctoral scholars can have

on an intellectual climate; and the value of maintaining strong contacts with other institutions of similar interdisciplinary convictions. I left Macquarie with the strong hope, and some initial plans, to implement these goals here at the Institute of Cognitive and Decision Sciences.

- We are currently working on turning the new ICDS office suite in Straub Hall 251-259 into an inviting place for research and communication and, for some of us, into a refuge from occasionally narrow-minded departmental politics.
- Max Coltheart from the Macquarie Center and I sketched out some ideas for creating a network of four to six institutes around the world whose mission it is to support interdisciplinary research through conferences, a scholar exchange program, student referrals, and research collaborations. As a start, the Institute of Cognitive and Decision Sciences will host one or two international scholars next year for short-term visits that include talks, seminars, and informal intellectual exchange.
- I will discuss with the executive committee a plan to attract to the Institute a number of post-doctoral scholars from a variety of disciplines, sponsored primarily through federal grants (e.g., NRSA fellowships).

Eventually, we may also take colloquia and subsequent receptions as opportunities to engage our senses and taste some of the fantastic New Zealand *Sauvignon blancs* and Australian *Shirazs*, which—despite my sabbatical duties—I happily sampled and heartily recommend.

With best wishes for a beautiful Oregon summer,

Bertram Malle

Personals

In May, neuroscientist **Jean Decety** from the University of Washington visited the psychology department. Dr. Decety works on issues of social cognition and shares interests with several Institute members. He will therefore be one of the first invitees to the new scholars program (see other article). His visiting is tentatively scheduled for end of July 2002.



Personals

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Animal researcher **Warren Holmes**, formerly with the University of Michigan, is in the process of moving to Eugene and taking his place in the biology and psychology departments and the Institute of Cognitive and Decision Sciences. He was hired with funds from the two departments and new Vice Provost funds released to the Institute specifically for attracting Dr. Holmes. His research concerns the biological and evolutionary foundation of basic social-cognitive processes, such as kin recognition in ground squirrels. Dr. Holmes will strengthen increasing interest among several Institute members in evolutionary processes of human behavior and cognition.

In April, the Institute of Cognitive and Decision Sciences co-sponsored a retirement party for **Mick Rothbart**. In his honor, invited speakers Bernadette Park (University of Colorado, Boulder), Joachim Krueger (Brown University), and David Hamilton (UC Santa Barbara) gave talks about stereotyping, racial profiling, and social categorization. Other guests who honored Mick with their presence included Robyn Dawes (Carnegie-Mellon University), Jim Sherman (Indiana University), and Chick Judd (University of Colorado, Boulder).

The first two graduate student research awards from the Institute of Cognitive and Decision Sciences will go to **Bayta Maring** and **Sarah Nelson**, in the amount of \$500 each.

Bayta Maring's doctoral dissertation research integrates theories from philosophy about conceptual metaphor with existing research on children's understanding of the mind. In her studies, she tests the proposition

that theory of mind development coincides with shifts in children's metaphorical mappings of the mind onto various concrete entities—for example, the mind as a container vs. the mind as a homunculus. To demonstrate the impact of metaphors on theory of mind processes, she will try to experimentally improve children's performance on theory of mind tasks by teaching them the metaphor that they normally would not apply to the mind.

Sarah Nelson's doctoral dissertation research combines field studies on victim-offender mediation programs (led by the Oregon Department of Youth Services) with laboratory experiments on perspective taking in mediation settings. As a trained mediator, Sarah studies the changing perceptions of victims and offenders in the mediation setting and the role of accusations, excuses, and admissions of responsibility in fostering the success or failure of such mediations. In the laboratory, she studies conflicts between roommates and thus is able to examine more systematically some of the factors that prove critical in her field studies. This research project cuts across the traditional lines of psychology, law, and social intervention work and also combines in an ideal way the strengths of field and laboratory approaches.

Both of these young scholars exemplify the interdisciplinary spirit of the Institute of Cognitive and Decision Sciences and are very worthy recipients of our 2002 research awards.

This winter **Mike Posner** returned to Eugene for good, after an extended sojourn at the Sackler Institute of the Cornell Medical School in New York (see his article *Sackler Ducks* in ICDS Newsletter, Vol. 12, No. 1). Several events are

being organized in honor of his retirement—or rather, in honor of his lifetime achievement. Next spring a conference will take place, co-sponsored by the Institute (details in the next newsletter), and Mike will receive an honorary doctorate from the University of Nottingham. The Institute of Cognitive and Decision Sciences has also decided to name the new conference room (Straub 256) the *Mike Posner Room* (see announcement on page 1).

Scholarly Events

In the fall, the Institute of Cognitive and Decision Sciences and the Humanities Center had several collaborative discussions on multi-disciplinary perspectives regarding the events of and after September 11. Among others, **Steve Shankman**, **Arif Dirlik**, **Holly Arrow**, and **Tom Givón** gave brief presentations. The hope was that such collaborative discussions would occur again in the future but in response to less disconcerting events.

Institute of Cognitive and Decision Sciences Colloquia

Monday, October 1, 2001

Jack Knetsch

Economics Department
Simon Fraser University

"Context Dependence of Economic Values: Some Evidence (from Eugene and the Rest of the World) and Some Sleights-of-Hand"

Instead of the stability of preferences generally assumed in economic analyses, recent, and not so recent, empirical findings demonstrate that people's valuations depend on context - with the disparity between the value of gains and

Scholarly Events

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losses being perhaps the most well-known example. Some recent findings indicate the same pattern holds for rates of time preference for future outcomes. Among the many implications of all this is the importance of the choice of measure and framing of policy choices: a, presently minority, view will be presented suggesting that current practice (e.g. to focus on how much people would pay to avoid a loss) may well introduce serious distortions in policy design and decisions.

Friday, April 5th, 2002

14th Annual Fred Attneave Memorial Lecture

John Gabrieli

Psychology Department
Stanford University

Co-sponsored by Psychology Department and the
Institute of Cognitive and Decision Sciences

"Memory Systems of the Human Brain"

Professor Gabrieli's is one of the leading figures in the field of cognitive neuroscience and certainly in the field of human memory. He provided an overview of his work on memory, which is impressively broad (e.g., he has studied declarative, procedural, affective memory in normal adults, brain damaged populations, children, older adults, people with Alzheimer's, Amnesia, Parkinson's, Huntington's), programmatic, and of fundamental theoretical and practical importance. John spoke of his recent work, which has turned towards individual differences in memory (e.g., for men and woman, for different racial groups) as reflected by neuroimaging studies.

Tuesday, April 16, 2002

Sherman Wilcox

Linguistics Dept.
UNM, Albuquerque

"The Gesture-Language Interface: Evidence from Signed Languages."

At times, scholars have seen the origin of language as continuous with the origin of signs. Currently modern structuralist-formalist linguistics seems to require us to sever the link between the origin of signs and the origin of language, to the point where some linguists have proposed that there is an evolutionary gap between communication and language, bridged only by some "miraculous" genetic mutation which did not kill off our species but, instead, left us with linguistic ability. The data for this talk will come from ongoing cross-linguistic study of the expression of modality in three signed languages: American Sign Language, Italian Sign

Language, and Catalan Sign Language. The conclusion reached was that the interplay of gesture and iconicity with grammatical features of these languages is far more complex than previously thought.

Monday, April 22, 2002

Joachim Krueger

Department of Psychology
Brown University

"Perceptions of Similarities Between Self and Social Group: A Matter of Top-Down or Bottom-Up Inferences?"

Perceptions of similarity between self and group may result from projection or self-stereotyping. Projection involves bottom-up processes of sampling the self and inferring group attributes; self-stereotyping involves top-down processes of applying known group-attributes to the self. I present a comparative review of a variety of studies and conclude that the social-projection hypothesis does rather well, whereas evidence for self-stereotyping is weak, unstable, and highly conditional. Social projection also accounts for the in-group bias commonly found in minimal laboratory groups. Top-down theories stressing the role of social identity and self-categorization lack convincing evidence.

Continuing Initiatives

Student research funding. Beginning this year we will award small research grants to graduate or undergraduate students who are engaged in interdisciplinary research. Inquiries or application letters can be submitted at any time to the institute director:

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A letter of application, no more than two pages long, must include: (a) a brief description of the proposed research, (b) an argument for the interdisciplinary nature of the research, (c) name and contact information of a faculty sponsor, and (d) suggested use of the grant money (e.g., for paying research subjects, purchasing equipment, paying a programmer). Grant amounts will be limited to \$500 or less.

Technical reports. We would like to encourage Institute members to add to our collection of Institute Technical Reports. Besides submitting genuinely



Continuing Initiatives

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technical documents (e.g., describing a method, instrumentation, or a computer program), consider submitting manuscripts under review, unpublished conference papers, chapters in progress, or student theses. We have begun to make Tech Reports available electronically and will try to post all future Reports on the Institute web page.

Indirect cost returns on research grants. The Institute's new funding system allows us to reclaim a portion of the overhead costs of any Institute-run research grant and use the money for communal resources that benefit the grant holder and some other Institute members. We strongly encourage members to consider running a grant through the Institute, because it benefits both the researcher and the Institute as a whole.

Call for scholarly meetings. In the past, the Institute has funded a number of successful conferences, many of which have led to published proceedings. Members are encouraged to propose high-profile conferences, but also variants of the typical conference format, such as workshops (e.g., a weekend during which a particular scientific method is presented and discussed), summer schools (a meeting for top graduate students working on a particular topic) or community events (e.g., a day of presentations and discussions on problems of decision making for local business leaders or on group dynamics and conflict resolution for local law enforcement).

Future Activities

The Evolution of Social Intelligence and Moral Sentiments

The Cognition and Evolution focus group is in the early stages of planning a conference on "The Evolution of Social Intelligence and Moral Sentiments" to be held, most probably, during the Spring of 2003. A major theme of the burgeoning theoretical and empirical literatures framed by evolutionary psychology is social intelligence (or, in some versions, Machiavellian intelligence). A related theme addresses how "moral sentiments" might have evolved; this has been addressed in recent years by a range of scholars, including primatologists, ethologists and comparative psychologists. We are planning a conference to bring these two themes together, hopefully in a manner that will be interesting and provocative to a range of scholars beyond the fields most immediately involved. While we do not (necessarily) agree with de Waal's comment at

the end of his good natured *The Origins of Right and Wrong in Humans and Other Animals*, that "We seem to be reaching a point at which science can wrest morality from the hands of philosophers", we do believe that the time is ripe for a profitable discourse between science and philosophy on this issue.

Conference on Essentialism

The topic of essentialism is a central one in several disciplines. Philosophers have long disputed whether category membership is defined by a nonobvious, immutable core or essence that constitutes the underlying nature of the category. In addition, the view that biological and social categories have essences has been challenged on a number of fronts by geneticists and physical anthropologists, as well as by philosophers of biology. Cognitive scientists have examined a different, and equally important, set of issues concerning whether an implicit belief in essences (psychological essentialism) characterizes people's thinking about categories. Developmental psychologists have explored whether essentialist beliefs underlie young children's thinking about concepts, or whether early concepts are instead formed merely on the basis of more primitive, perceptual features. Social psychologists have studied essentialist beliefs about racial and gender categories and how such beliefs contribute to stereotyping and prejudice. Social psychologists have also addressed whether essentialist notions underlie judgments about personality and continuity in personal identity across time. Finally, cultural anthropologists have investigated the extent to which psychological essentialism is a universal characteristic of human reasoning.

We are organizing a conference on essentialism for 2003 that will address these and related aspects of essentialism. The conference will showcase current theoretical and empirical work on essentialism, highlighting the importance of interdisciplinary approaches to fundamental questions about human nature. The conference is sponsored by the Honors College, the College of Arts and Sciences, the Psychology Department, and the Institute.

Lou Moses and Dare Baldwin

Visiting Scholars Program

For many years, the Institute has invited scholars to give colloquium talks and to visit the Institute for one or two days. Such visits raise interest in a scientist's work, but substantial intellectual contact is unlikely under these circumstances. We are therefore initiating a program that finances a small number of one-week visits by scholars who share research interests with several Institute members. These visits will include a colloquium,



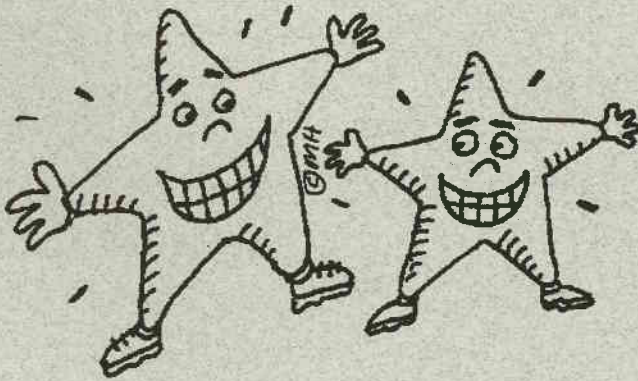
Future Activities

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one or two informal seminars, and copious opportunity for conversation. Institute members are encouraged to propose candidates for this program, and the executive committee will select at least two visiting scholars each year.

PAST FRED ATTNEAVE MEMORIAL SPEAKERS

- 1989 Roger Shepard, Stanford University
"Two Fundamental Contributions to Cognitive Psychology: Dimension of Similarity and Morphophoric Media"
- 1990 George Sperling, New York University
"Stages of Visual Processing"
- 1991 Renée Baillargeon, University of Illinois
"Qualitative and Quantitative Physical Reasoning in Infants"
- 1992 Diana Deutsch, UCSD
"Some New Musical Paradoxes and their Implications"
- 1993 Larry Jacoby, McMaster University
"Unintended Influences of Memory: Attention, Awareness and Control"
- 1994 Willem Levelt, Max Planck Institute, The Netherlands
"How Do We Produce Words When We Speak?: Lexical Access in a Theory of Speech Production"
- 1995 Anne Treisman, Princeton University
"Object Tokens, Attention, and Visual Memory "
- 1996 Vilayanur Ramachandran, UCSD
"Illusions of Body Image: What They Reveal About Human Nature"
- 1997 Daniel Kahneman, Princeton University
"Decisions and Consequences"
- 1998 Patrick Cavanagh, Harvard University
"Attention: Exporting Vision to the Mind"
- 1999 Keith Holyoak, UCLA
"Relational Reasoning in a Biological Symbol System"
- 2000 John Jonides, University of Michigan
"Behavioral and Neuroimaging Studies of Executive Control"
- 2001 Helene Intraub, University of Delaware
"Anticipatory Representation of Natural Scenes: Integrating Past and Future in Vision, Touch and Imagination"
- 2002 John Gabrieli, Stanford University
"Memory Systems of the Human Brain"



INSTITUTE TECHNICAL REPORTS

- No. 01-1 "Anatomy of the N400: Brain Electrical Activity in Propositional Semantics"
by **G.A. Frishkoff and D.M. Tucker**
- No. 01-2 "On The Pre-Linguistic Origins of Language Processing Rates"
by **T. Givón and Mitzi Barker**
- No. 01-3 "Toward a Neuro-Cognitive Interpretation of 'Context'"
by **T. Givón**
- No. 01-4 "Embodied Meaning: An Evolutionary-Developmental Analysis of Adaptive Semantics"
by **D.M. Tucker**
- No. 01-5 "Implications of Pathology Risk and Disability Care for Human Life History Evolution:
Evidence From Shiwiar Forager Horticulturalists"
by **L. Sugiyama**
- No. 02-1 "From Attributions to Folk Explanations: An Argument in 10 (or so) Steps"
by **B.F. Malle**
- No. 02-2 "People's Praise and Blame for Intentions and Actions: Implications of the Folk Concept of
Intentionality"
by **B.F. Malle and R.E. Bennett**
- No. 02-3 "The Relation Between Language and Theory of Mind in Development and Evolution"
by **B.F. Malle**
- No. 02-4 "F.Ex: A Coding Scheme for Folk Explanations of Behavior"
by **B.F. Malle**
- No. 02-5 "The Role of Orienting Attention for Learning Novel Phonetic Categories"
by **S.G. Guion and E. Pederson**