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*Find a roommate, ride, or
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 2006.*

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ASIC 2006

Fifth Annual Summer Interdisciplinary Conference



*Sunday, July 2 - Friday, July 7, 2006
 Åndalsnes, Norway*

Announcing ASIC 2006!

The Fifth Annual Summer Interdisciplinary Conference (ASIC 2006) will be held at the Grand Hotel Bellevue in Åndalsnes, Norway (on the Romsdalfjord on the western coast), on July 2 to July 7. Richard M. Shiffrin of Indiana University - Bloomington is the organizer: Email correspondence should be directed to [redacted] (and seconded [redacted] or mailed to Richard M. Shiffrin at Indiana University(select 'Contact' from the menu for the address).

The ASIC conference uses the very successful format of previous ASIC and AIC conferences: Days are free for leisure activities and the talks/posters are in the later afternoon/early evening, followed by dinner. The date has been chosen to make it convenient for attendees to bring family/friends. The conference is open to all interested parties, and an invitation is NOT needed to attend. However, due to the small number of spots for speakers, the organizer will select speakers, and subject to demand other participants will be allowed to present posters on a day and time set aside for this purpose. The subject is interdisciplinary, within the broad frame of Cognitive Science.

Last Year's Website

Several parts of the 2006 website are under construction. For an example of a complete ASIC website, visit [ASIC 2005](#).

Invitation

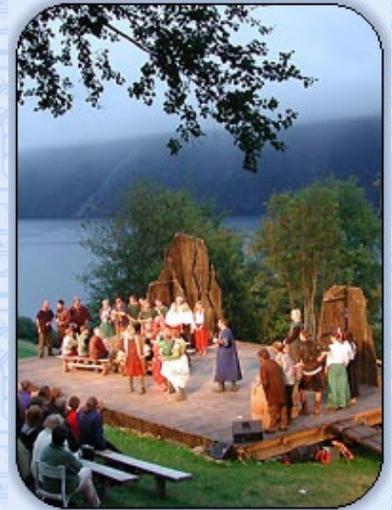
The conference is open to all scholars who fit the very general theme of the conference, and their family and friends. An individual invitation is NOT needed. We encourage you to send the conference information to friends and colleagues.

Conference Aims

The conference will cover a wide range of subjects in cognitive science, including:

- neuroscience, cognitive neuroscience
- psychology (including perception, psychophysics, attention, information processing, memory and cognition)
- computer science and artificial intelligence
- machine intelligence and learning
- linguistics, psycholinguistics and computational linguistics
- philosophy of mind, cognitive science

We especially invite talks emphasizing theory, mathematical modeling, and computational modeling (including neural networks and artificial intelligence). Nonetheless, we require talks that are comprehensible and interesting to a wide scientific audience. Speakers will provide overviews of current research areas, as well as of their own recent progress.



Conference Format

There is a single speaking session each day, excepting one day devoted to posters. Information on submitting proposals for presentations (speaking or posters) will eventually be placed on the page of this website labeled 'attendees and sessions', but this page is still under construction. For now, proposed subjects, titles, and or abstracts may be sent by email to the organizer.

Current plans call for the conference to start with registration and a reception from 15:30-16:30 on Sunday, July 2. On subsequent days there will be drinks and light snacks from 16:15 - 16:30. On all days through Friday, July 7, there will be a session from 16:30 to 20:30, including a mid-session drink break. This will be followed by a buffet dinner at the hotel, including vegetarian options. The dinner on the last day will be deluxe banquet buffet, with wine and beer included.

It will not escape the careful reader that this conference format frees most of the day for various activities with colleagues, family, and friends. We expect all scientific attendees and participants to attend all sessions. The time frame will allow day trips to nearby sites and cities, but travel to more distant sites should be arranged for days preceding and following the conference.

Lodging

The Grand Hotel Bellevue may be reached by telephone at 47-71-22-75-00, and by fax at: 47-71-22-60-38. See [Lodging](#) page for details.

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Registration Information for ASIC 2005

If you are planning to attend ASIC 2005, please fill out the [registration form](#) and submit your registration fee. This fee pays for room and equipment rentals, snacks, banquet, etc.

This year's fee schedule, in US dollars:

Payment prior to:	By check in US dollars:	By Paypal:
Jan 1, 2006	150	155
Mar 1, 2006	175	180
May 1, 2006	200	205
Later	225	230

There are two ways to pay the registration fee:

1. Send a check for the correct amount to ASIC 2006, c/o Richard M. Shiffrin, Psychology Dept., Indiana University, Bloomington, IN 47405.
2. Online by PayPal (this will entail a \$5 handling fee).

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TRAVEL TO AND ABOUT ÅNDALSNES

AUTOMOBILE:

General Considerations:

As usual for ASIC, a car for local transport during the conference would be useful and helpful, although sharing cars for daily outings is possible, so that not everyone needs a car. Although there is regular bus service (and a rail line) serving Åndalsnes, having the freedom to go to sites of one's own choosing at times of one's own choosing is a great advantage. There are many outstanding sites worth a drive from Åndalsnes, and many daily activities require some form of transport, to and from.



Because a car for local use would be desirable, many attendees may rent cars elsewhere, and drive to and from Åndalsnes. Others might prefer to arrive by train or bus, allowing more carefree viewing of the (spectacular) scenery.

Rental Agencies:

Hertz has been selected as the conference preferred provider. They have agencies in all the Norway sites from which our attendees are likely to want to rent vehicles, including Oslo, Bergen, Ålesund, Molde, and Åndalsnes. Hertz is offering a 10% discount off their 'Affordable Travel' rates. To obtain this discount, you must print out a copy of the discount coupon and present it physically when you pick up your car at the Hertz counter. Click on the [link](#) here to obtain this coupon. If you have trouble downloading this coupon, email a request to [\[redacted\]](#) and she will send you a printable coupon by return email.

NOTE WELL:

At Hertz and other Norwegian auto rental agencies, there is a tendency to pile on hidden, extra charges, so one must be sure to establish the exact price, everything included, at the time of making a reservation. It would be best to obtain an all inclusive rate with unlimited mileage, and all other extras included. Possible extras that might well be charged if you do not insure they are included are: 1) mileage charges; 2) various insurance charges (damage, collision, theft, etc); 3) Norwegian VAT (government tax, 25% in 2005); 4) charges for gas if a tank is not returned full; 4) a fee for picking up a car at the airport rather than in town; 5) an out-of-opening hours fee for picking up a car at hours not within some specified time/day; 6) possible others.

Automobile Rental Sites: Attendees living in Europe out of Scandinavia (including the UK), or attendees vacationing before and after the conference in non-Scandinavian parts of Europe, can take car ferries to and from various ports in Scandinavia. Most attendees will fly or otherwise arrive in Norway and rent automobiles at Norwegian sites. The most likely sites for rental (city or airport) include: 1) Oslo (one takes the scenic highways E6, E136 that follow the rail line through the Romsdal valley directly to Åndalsnes); 2) Bergen (a spectacular drive through fjordland on E39 involving ferry crossings, bridges, etc; some may prefer to take passenger ships through the fjords north to Molde or nearby, and rent there instead); 3) Ålesund (has an airport, and there is a direct highway without a fjord crossing to

Åndalsnes); 4) Molde (has an airport, and is closest to Åndalsnes; involves a ferry crossing, but the waiting times for the ferry are quite short); Åndalsnes (one must arrive by train or bus in this case).

Travel by Auto to Åndalsnes:

- From Bergen: Take E39 north, through fjordland, crossing fjords and mountains by ferries, bridges, causeways, roads, and tunnels; eventually connect with E136 near Åndalsnes. Without sidetrips (most will want to take sidetrips to enjoy the spectacular fjordland scenery), the driving distance is 440 km and the estimated driving time (excluding waiting, loading, and transport times for ferries) is 7.25 hours.
- From Oslo: Take E6 and then E136 to Åndalsnes. This scenic drive follows the rail line, and near Åndalsnes passes the spectacular Trollveggen cliffs/mountains. The distance is 448 km, and the driving time should be 6.5 hrs.
- From Ålesund: Take E39 and then E136. A beautiful fjord/mountain drive of 121 km, taking about 1.8 hrs.
- From Molde: Take (mainly) route 64. The distance is 55 km, and the driving time is 1.2 hrs, excluding the ferry crossing at Afarnes that leaves every 30-40 minutes.



For detailed directions, for these routes and others, and other information, I recommend the Michelin driving direction website:

http://www.viamichelin.com/viamichelin/gbr/dyn/controller/Driving_directions And also the general Michelin travel site:

<http://www.viamichelin.com/viamichelin/gbr/tpl/hme/MaHomePage.htm>

AIR



International Flights:

Most international flights arrive in Oslo or Bergen. Travelers can continue to Åndalsnes by auto, rail, bus (or from Bergen by boat to sites near but not at Åndalsnes), or by additional internal flights.

Internal Flights:

There are several airports in fjordland near Åndalsnes. A few are north of Åndalsnes, but most travelers will fly to Ålesund (west and a little south, 121 km distant) and Molde (west and a little north, 55 km distant), and continue by auto or bus to Åndalsnes.

RAIL



There is regular rail service direct from Oslo to Åndalsnes. The travel time is about 5 - 6 hrs, and the current schedules show departures from Oslo at about 8, 10:30, 3, and 4, and departures from Åndalsnes at about 8, 9:30, 3, and 5:30.

NOTE WELL: There are many packages available for purchase abroad that will give reduced rates for train travel, and or/reduced rates for combined travel with train and car/boat/bus, in various combinations. More information about some of these may be added to this site later.

A useful website is: <http://www.nsb.no/internet/en/index.jhtml>

BUS



Although Norway's scenic railway journeys are among the country's main highlights, Norway's bus routes are far more extensive than its rail network, and also spectacularly scenic.

There are quite a few bus companies operating in Norway although Nor-Way Bussekspress (website www.nbe.no) is by far the most dominant player. Nor-Way Bussekspress operates throughout the country extending well into the Arctic Circle providing connections with intersecting bus routes and other forms of transport including trains and ferries.

Other bus companies include JVB (website www.jvb.no) which operate an East-West express service between Bergen and Lillehammer and Narvik based Ofotens Bilruter (website www.ofotens-bilruter.no) with its route network in Lapland.

There are various special fare plans that allow unlimited mileage/travel for specified periods, and combined travel with rail/boat/auto. Some are available only for purchase abroad (out of Norway). We will try to provide more information about these on this website at a later time.

COMBINED ITINERARIES

The scenic and touring opportunities in Norway offer many attendees a once-in-a-lifetime opportunity that should not be missed, opportunities that can be pursued before and or after ASIC 2006. We will try to provide more information about some of these on this website later. We mention now two outstanding possibilities.



Fjordland Tour via Oslo/Bergen/Oslo:

One can take this tour in either direction. Starting in Oslo, take the train to Bergen, not forgetting to take the side trip on the spur rail line down to the fjord at Flam. (See the website: <http://www.visitflam.com/>). One then takes a boat tour through the various fjords, including the Sognefjord and its near associated fjords, transitting to ferries/steamers that eventually reach Ålesund, Molde, or other sites in Romsdalfjord, where buses can be taken to Åndalsnes (or autos can be rented though these will likely have to be returned to the rental site, making a round trip inconvenient). Finally, the train can be taken through Romsdalen back to Oslo. Many opportunities for stopping, and for sidetrips, exist on this itinerary.

Arctic Circle Trip:

A trip to the Arctic Circle and the midnight sun is on many travelers' must-do list. There are various steamers that go up the western coast and return, combining these trips with various opportunities for touring above the arctic circle. We hope to provide more information about these trips on this website later, but one site to visit now is: http://www.arctic-circle.no/arctic_circle.htm



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LODGING



ASIC 2006 will be held at the Grand Hotel Bellevue, in Åndalsnes, Norway. The hotel is very well designed for our meetings, with a large well designed meeting room set up classroom style, with audio-visual capabilities in place.

The hotel has about 80 rooms, singles and doubles, and is holding 50 for our group, though this number will be adjusted downward later, if the number of advance reservations is smaller than anticipated. These rooms are being held starting Sunday, July 2 through Friday, July 7 (check out in the morning of Saturday, July 8), but additional days before or after can probably be accommodated if reservations are made before the hotel fills.

Reservations should be made directly with the hotel. By telephone, call 47-71-22-75-00. The first two digits are the country code for Norway. By fax, the number is 47-71-22-60-38. By email: res@grandhotel.no The website for the hotel is www.grandhotel.no.

Prices: Norway uses the Kroner currency, and the exchange rate fluctuates. As of September 7, 2005, the exchange rate was 6.2652 Kroner per \$1. The charge per room per day for ASIC attendees is K 1070 for a single and K 1270 for a double. This charge includes daily breakfast and dinner for each person. Norway is more expensive than most countries, and the single room rate may be too high for some attendees. We therefore encourage attendees who wish to share a double room to use our link on the left, 'Find a roommate'.

NOTE: The registration fee (sent to the organizer, not the hotel) includes food, drink, and hotel charges for the opening reception on Sunday, daily drink/snacks at the start of each session and at the midway break, and the conference banquet on Friday. The registration fee rises as the conference date gets closer in time.

NOTE: The hotel can provide lunch, at their restaurant, or to take out, for an additional charge of K 155. There are also local markets in town at which one can obtain lunch materials.

Alternative Lodging: See <http://www.romsdalsalpene.com/sove1.html>. Aside from hotels and youth hostels, a few attendees each year prefer to camp in nearby areas. There are quite a few very nice campsites, many with cabins in addition to tentsites, in the Åndalsnes area, at various distances, although at most one or perhaps two are close enough for to allow walking access to the daily meetings. Thus for most campsites a car or other transport will be needed to get to the meetings each day.

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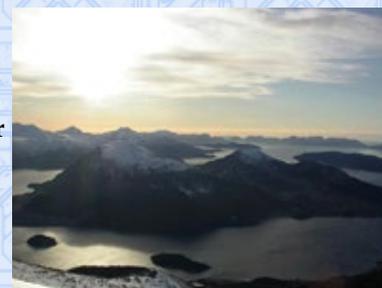
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Climate, Weather, Clothing

The weather in Andalsnes is almost always quite pleasant in July. High temperatures are generally about 18°C, or 65°F. Because sunlight extends almost 24 hours, low temperatures do not differ very much from these highs. In addition, although the nearby mountains rise almost 6000 ft from the fjords, this elevation difference is not sufficient to cause large temperature differences, except in bad weather.

Fjordland is on the west coast of Norway, facing the North Atlantic, so that even in July it is relatively common to find unsettled weather, usually for short stretches of time. Some precipitation occurs on about half the days of the month, for at least a brief period, but only on about eight days does more than 0.12 inches fall and only on about two days does more than 0.4 inches fall. Nonetheless, it is important to bring clothing for the possibility of rain and wind, and at least some clothes for possible cool conditions. For those going on hikes or other outdoor activities, especially away from roads, or high in the mountains, be sure to bring appropriate protective clothing, in case poor weather moves in.



On days with particularly poor weather in Andalsnes, it is usually possible to drive inland, up the Romsdal valley, toward Bjorli and Dombas, and reach good weather after 30-40 km.

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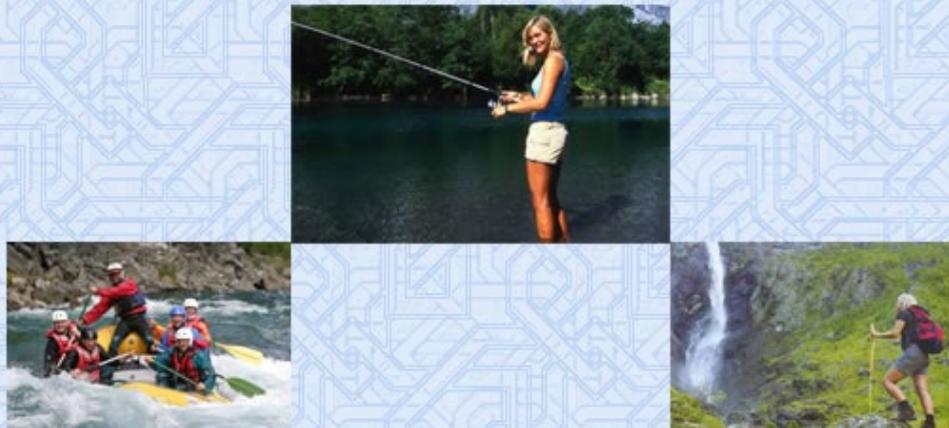
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ACTIVITIES



Note: This page of the website will continue to grow. Descriptions of additional activities will be given and highlighted, and group activities and sign up information for these will be listed.

For activities not described below, visit the website: www.visitandsnes.com

This is an excellent website for the immediate area of Åndalsnes, available in English, with many of the links in English as well. We highly recommend you visit and explore this website.

Area Maps

We give here several area maps, at various scales, some interactive, that should allow attendees to orient themselves to the town, the local area, and the greater surrounding area.



Click the image to view a full version of Åndalsnes Center Map



Click the image to view a full version of Romsdal Map



Click the image to view a full version of a Regional Map



Click the image to view a full version of Fjordane Area Map

A good and useful topographic map of the area is the Romsdals-alpene 1:80,000 map 'Turkart I malestokk'. It is available through the local tourist office 'Turistkontoret' tel 47-

71-22-16-22; fax: 47-71-22-16-82, email:

Touring Away From Åndalsnes

Norway presents many outstanding opportunities for tourism, including many sites in fjordland, near and more distant from Åndalsnes, and extending north to the Arctic Circle. Some information is given under TRAVEL elsewhere on this website. Some of these possibilities require too much time to carry out during the conference and would have to be planned for days prior or after. Other touring activities, by car, bus, train, and/or boat can be planned for the days of the conference, and still allow attendees to return in time for the conference (at 4:30). This includes many/most of the activities listed on the visitandalsnes website.

Climbing/Hiking/Mountaineering



The official guides service for ASIC 2006 is *Norgesguidene*, our chief contact being the mountain guide Åndalsnes Haslestad. He is available by email (when not guiding in the field) at [redacted]. His telephone is 47-48-15-68-45. The *norgesguidene* website is www.norgesguidene.no. At the moment it is only available in Norwegian, but they hope to have an English version before long. The guides will be available for a variety of local activities, including rock climbing, mountaineering, scrambling up peaks with and without ropes, and hiking. Andreas Haslestad will be teaching a course in the Alps during our conference, so tours will take place with other guides in his group.

I have arranged with the guides that group activities will be offered for Tuesday and Thursday (other days or other tours can be arranged privately with the guides).

The local guides for these services can be reached at: [redacted] and booking will be made through this group. The web site (in Norwegian) is: www.norgesguidene.no. Three group tours are offered, one hiking, one hiking/scrambling, and one hiking on a glacier. These are listed below. *Norgesguidenes* also offers climbing guiding, as described below (it may be possible to combine technical climbing trips with me and my guide, Guido Bonvicini, and the local guides). (Other activities, such as rafting, kayaking, biking, and so on, are offered by other groups). For the group tours we begin with some clothing recommendations, and for climbing offer some equipment recommendations:

Equipment and clothing for the tours:

Even in the summer, it can be cold in the mountains. The tours booked in advance will take place even if weather is marginal (although weather may necessitate a change in target), so participants need to be prepared with appropriate clothing:

- Warm underwear
- Warm sweater or jacket
- Windbreaker and trouser
- Some rain clothing or gore-tex
- Hood and gloves

- Sunglasses and sun cream
- Small backpack (minimum 30 litres)
- Gaiters and/or mountain walking boots (because some tours might cross some snow-covered areas)

For those who want to do climbing routes you could also bring:

- Climbing harness
- Climbing helmet
- Climbing shoes
- Belay device
- Belay sling
- 3 screw gate carabineers

All of the above climbing gear except for climbing shoes can be rented from the guides. Climbing shoes must be brought or rented separately.

Organized and Guided Activities

Type of Tours

The guides have recommended group non-technical tours in three categories: Walking, scrambling, and glacier, which can be booked for Tuesday and/or Thursday. Because some participants might not have transport, the guides arranged a bus or other transport to Trollstigen (at the top of the waterfall, where there are shops and parking) and all the tours can start from that location.

Note on geography: If one heads south from Andalsnes there are two roads: The eastern road (still heading south) goes through the Romsdalen valley, which has the Trollswall to the west and other mountains and walls to the east. The western road (also heading south) goes through the Isterdalen valley, and shortly climbs a zigzag road (Trollstigen) adjacent to and over a large waterfall (the Stigfossen). At the top of the waterfall (at about 2000 foot elevation), there are parking, shops, and a dramatic viewpoint, and this is where the organized tours will begin.

For the three following tours, make reservations directly with Norgesguidenes, but also let me know which tour or tours you are booking, which days, and how many are in your group.

I. Walk to the top of the Trollwall:

Start from the viewpoint on top of Trollstigen. From here it is a 3-4 hours walk east to the top of the Trollwall. At the ridgetop there is a magnificent view down into the Romsdalen valley (almost 5500 feet below-the top 3000 feet are overhanging)and across towards the Romsdalshorn and Venjetind. The tour takes about 6-7 hours from Trollstigen and back again. Price: 700,- nok pr person. Minimum 3 persons, and maximum 15 persons. On the Norgesguidene website <http://www.norgesguidene.no/> (not in English) click on Romsdalen and Romsdalshorn. This has two pictures of the Trolls Wall from the peak Romsdalshorn, across the valley. This hike brings one to the ridge line one can see in the photos.

II. Scramble up Bispen via the north ridge:

This is a nice walk/scramble to the top of Bispen, a mountain to the west of Trollstigen, at about 4750 ft. elevation. There are some exposed places on the way, and some scrambling. The top opens up spectacular mountain scenery. The tour will take about 6-7 hours from Trollstigen and back again. Price 700,- nok pr person. Minimum 3 persons, and maximum 10 persons. On the Norgesguidene website, click on Romsdalen and click the plus next to Bispen (under Sommer), then one the links below. These show photos of both the hike and the climbing routes on Bispen.

III. A walk up the Finnanglacier:

This hike starts from Trollstigen and heads west and a little south. It follows a path up to the glacier west of Lake Bispevatnet, and continues along this glacier to the Finnanglacier. The glacier is climbed up to a high ridge (at about 5500 ft.) that affords a look down into a fjord (the Innfjorden). This tour provides superb scenery toward the west coast of Norway, including glaciers and fjords. The return follows the same way back to Trollstigen. The tour will take about 6-7 hours. 600,- nok pr person. Minimum 3 persons, and maximum 10 persons. On the Norgesguidene website click Romsdalen, then the plus next to Finnan, then one the links below for photos.

Climbing Tours:

There are some spectacular local mountain climbs that are long and include some rock climbing, but not very difficult technically, and there are many opportunities for rock climbing, at all levels of difficulties and all lengths. These can be booked individually with the guides. Here are some recommended options. The first three are spectacular peak climbs, and the last two are rock climbing on cliffs that also afford fine views and scenery.

I. Romsdalshorn:

The spectacular appearing Romsdalshorn is a sharp peak to the east of the Romsdalen valley, and across from the Trollswall (at about 5000 ft. elevation). The climb to the top is Norwegian grade 4-. Although it's an advantage to know a bit of climbing beforehand, it's not an absolute demand, because the technical climbing is quite easy. For beginners, the guides offer a half day introduction to climbing before the climb. It is an absolute necessity that participants be in good shape, used to walking in high and wild mountain environs, and able to handle the heights and exposure. This is a Norwegian classic climb, famous the world over. Note well: The tour takes from 8-10 hours. Price: 1800,- nok for the guide + 700,- nok pr each person. Maximum 3 persons pr guide. On the Norgesguidene website, click on Romsdalen then Romsdalshorn for photos.

II. Venjetind via 'the Standard Route' (scramble):

This is an easy scramble to the highest peak in Romsdalen (6000 ft.). Venjetind is east of Romsdalhorn and reached not from the Romsdalen valley, but from the valley to the east, Venjedalen. The route follows paths to the northern ridge, and thence south to the top. This is the easiest way up, and opens up spectacular views. The summit is itself not difficult to reach, but it's a long and exposed scramble, taking about 7-8 hours. Price: 1500,- nok for the guide + 500,- nok pr each person. Maximum 3 persons pr guide. On the Norgesguidene website click on Romsdalen, then the plus next to Venjetindene, then one of the links (all the photos are the same, of the top).

III. Bispen via the east ridge:

A fine climb, on the east ridge of Bispen (see the scramble listed above). On the ridge, the view of Romsdalen is outstanding. The climb starts on a path up from Trollstigen until the climbing begins on the east ridge. There are seven pitches of Norwegian grade 4+. The return is via the northern ridge. The tour takes in all about 8-10 hours. Price: 1800,- nok for the guide + 700,- nok pr each person. Maximum 2 persons pr guide. On the Norgesguidene website click Romsdalen, then the plus next to Bispen, then one of the links below for some photos.

IV. A day on the crag Norafjell:

The ridge separating Romsdalen and Isterdalen ends nearest Andalsnes at the crag Norafjellet (~3000 ft). Norafjell is a great crag with many routes that were highly frequented in the 70's. This recommended climbing route takes place on a pillar facing south-east, and offers great views of the Troll Wall), Romsdalshorn and the Venje

Peak Massif.

The lower part has easy and varied climbing. The approach is short and the climbing easy, so it makes for a pleasant place to try climbing multipitch routes. Up higher on the pillar (e.g. Storsvaet) there are several choices, including challenges for the more experienced climber. The return is by rappel back to the foot of the wall. It's up to the participants to decide how long the day will be. Price: 1500,- nok for the guide + 500,- nok pr each person. Maximum 3 persons pr guide. One photo of the crag is given here.



V. A day on the crag Hornaksla:

Hornaksla is a beautiful cliff in Romsdalen valley, across from and a little south of the Trolls Wall. It faces south and starts right at the road. It's naturally divided into two sections: The Slabs and the Main wall. The quality of the stone in this area offers fine and firm climbing in nice formations.

On the Slabs one can try routes from Norwegian grade 3 to 7, including many one pitch routes, and some up to eight pitches. For beginners, this is a good place to become familiar with the use of ropes and belay devices, on rock that is not too steep.



The Main Wall is steep (near vertical, or some overhangs on some routes), with routes up to 10 pitches in length. This is for those who climb quite a lot and are comfortable with Norwegian grade 5+ and up.

Price: 1500,- nok for the guide + 500,- nok pr each person. Maximum 2 persons pr guide. One photo of the crag is given here.

General Description of Activities:

Rock Climbing:



There are numerous rock climbing sites, and bouldering sites, many quite close to Åndalsnes, and others up to an hour distant by car. The most famous is undoubtedly Trollveggen, the largest cliff face in Europe, rising about 5500 feet from the road, the top 3000 feet being overhanging cliff. We do not expect attendees to climb any routes on this face for three good reasons: 1) The route is not entirely stable and a few years ago had a large rock fall destroy the center of the traditional routes; 2) The difficulty of climbing up the overhanging face is extreme, and the route requires several days at least; 3) The easiest route, one available at the probable ability level of the most skilled attendees, climbs buttresses and cliffs adjacent to the main face, but is 48 pitches long.

However, there are numerous excellent quality sites for rock climbing, from single pitch areas, to very long multi-pitch faces, in the area, some very near the Trollveggen, on both sides of the Romsdal valley. There is additional climbing available in other valleys that are accessible from Åndalsnes for day outings. Many of the easier climbs, especially those on the multi-pitch routes, are not bolted, or just have anchors for belay stations at the end of pitches, and traditional protection must be used. There are however, some areas with easier climbing that are equipped with bolts, so that only quick draws would be needed.

For the primary book on local rock climbing, with English descriptions included, see *Klatring i Romsdal* by Anne Grete Nebell and Bjarte Bo (ISBN 82-995032-0-5). It is usually available via various sources on the web, and can be obtained locally in the Åndalsnes area. These authors also have a website: <http://home.no.net/bjartebo/main.html>. See also www.norgesguidene.no, and of course the links on www.visitandalsnes.no.

Light Mountaineering/Scrambling:



Under the assumption that most attendees will not be attempting serious mountaineering, if for no other reason than time would not allow attendance at the conference, the information here will focus on what might be described as relatively non-technical hiking, and scrambling. Many of these tours achieve the dramatically situated tops of local peaks. Many of you have seen such pictures or will see them if you visit the various Romsdal/Åndalsnes websites-these are the pictures of hikers sitting or standing on out-jutting rock formations, their feet hanging over thousands of feet of air, with valleys, lakes, and fjords far below. These objectives are available to people without much technical background. Of course the approaches tend to be long, so a certain amount of fitness and hiking experience is a good idea. In addition some approaches, while not technically challenging, require a good deal of 'exposure' (e.g. ridges or faces with long drop offs to the side), and these sections often require that the group use ropes for safety and assurance (ropes are provided by the guide(s)).

Some peaks are accessible on signed/marked routes, and do not (necessarily) require guides. Perhaps the best known is a hike/scramble on a route marked with cairns that starts above the Stigfossen waterfall on the Trollstikken road (the valley to the west of Trollveggen), at the parking lot and buildings. It then climbs east in the direction of Semletind achieving the crest (termed Trolltindan) near the top of the Trollveggen face. This is in fact one of the hikes listed in the section below: Hiking.

One book describing access to peaks in the area is *Fra topp til topp i Romsdal* by Iver Gjelstenli (ISBN 82-91883-00-9). It is available locally and possibly through the web. It is mostly in Norwegian, but has a brief English summary for each route.

Hiking:

Several sources are on the web on the Åndalsnes site, but not all are in English. Available locally and reproduced here is a single sheet giving a summary of 20 or so hikes in the Åndalsnes area, with a map on the reverse side showing their location. One interesting listed as 3.1 below, hike rises directly from town, up a steep tree covered hill. This steep but not too long trail rises a few thousand feet, and offers some outstanding views of the immediate area. The list of hikes below gives the name of the hike, denoted 'route', the location reference to the map, denoted 'code', the difficulty of the hike, denoted 'grade' (A is easy, B+ harder), the time for a one way trip (or round trip denoted t/r), and the amount of meters of climbing (H-stff)



Walks (Click here to get a location map of various walks)					
Code	Route	Grad	Time	H-stff	Description
1.2	TorvIk - Skorgedalen	A	2	300	This walk goes along a tractor track. You pass the idyllic Skardvatnet (lake). Beautiful view especially from the Torvik side.
1.3	Skorgedalen - Selseter	A+	0,5	70	An easy walk on good dry ground - along a tractor track. Nice area around the Selsetervatnet. Fishing by permit.
1.4	Hegerholm - Nakkensetra	B	4	430	A fairly steep, but dry path. Beautiful view towards the Romsdal Alps with superb photo possibilities.
1.5	Skorgedalen - Ingridseter	B	2	550	A nice walk through the idyllic Ljosadalen valley. Some wet ground. many possibilities for continuing from Ingridseter.
1.6	Brevik - Ingridseter	B	2	550	A relatively heavy ascent up to the pass of Brevikskardet. The path is good and dry though, and the second half of the walk to Ingridseter is easy. Fishing by permit in Brevikskardet.
1.7	Hatlen - Masvassbu	B+	4	660	Moderate ascent to Loftskardet, subsequently descent followed by almost flat ground. Fishing in Masvatnet. Accomodation available at Masvassbu (DNT standard key, off season)
1.8	Skrokkenseter - masvassbu	A	1,5	190	A very obvious path, but wet terrain. Fishing in masvatnet. Accomodation available at masvassbu (DNT standard key, off season)
1.9	Skrokkensetra - Brevik	B	5	700	A good, but fairly long walk in varied terrain. fishing in Satvatnet and Brevikskardatnet. A quite demanding descent from Brevikskardet on the end of the walk.
2.4	Vengedalen - Litlefjellet	B+	0,5	140	A short but somewhat steep path. marvellous roundview towards Trollveggen, Romsdalen, Romsdalshorn and Vengetindene.
3.1	Åndalsnes - Nesaksla	B+	2 t/r	700	A rather steep but very good path with a beautiful view over Åndalsnes, Isfjorden, up the Romsdal Valley and out the Romsdalfjord.
3.2	Nesaksla - Isfjorden/Venged	B	5	800	A moderately long walk through varied and nice high-mountain terrain. Some ascents and descents with interesting views.
3.7	Vermedalen	B	4 t/r	330	Moderately ascent up from the

					Romsdalen valley, but the Vermedalen itself is flat and easy, with a very idyllic and peaceful landscape.
4.1	Klovstien	B+	1	850	An exiting climb up the old track. Marvellous view towards Stigfossen (waterfall) and the famous mountains surrounding the Isterdalen (valley).
4.2	Trolltindene	B	8 t/r	750	A fairly easy, but demanding walk up to the backside of the Trollveggen. About half the route goes over quite rough terrain with rocks and screes. Impressive landscape.
5.1	Innfjorden - Sjolbotnen	B	6 t/r	750	The first part ascends up from Innfjorden before you descend more easily down into the peaceful valley of Sjolbotn. Nice view.
5.2	Bostolen - Storvatnet	A	4	150	An easy walk in a idyllic landscape. Mountain dairy farm at Bostolen. Fishing in Storvatnet. Some wet ground.
5.4	Masvatnet - Stortrollvatnet	A	2 t/r	160	An easy walk with nice view over Mandalen mountains. Fishing in Skardvatnet. Some wet ground.
5.6	Stavvatnet	A	2	220	An easy walk with nice view over Mandalen mountains. Fishing in Stavvatnet. Some wet ground.

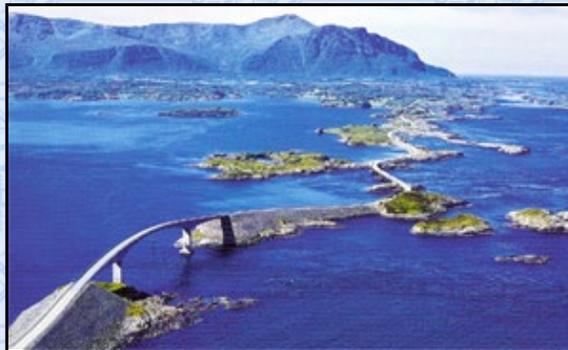
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As this Activities portion of the website develops, we will add sections on additional activities including fishing, biking, skiing, golf, tennis, boat and fjord trips, kayaking, rafting, helicopter touring, glacier tours, train tours, and automobile tours.



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Schedule

Note: Order within some sessions to be arranged later

Sunday, July 2:

Chair: Colin Allen; Dinner at 8

3:45 - 4:30 PM: *Reception and Registration*

4:30: *Welcome remarks - Rich Shiffrin*

4:45 - 6:15 PM: *Visual Attention (Chair: Eddy Davelaar):*

Moors, Agnes: *Five sources and five solutions to the all-or-none view of automaticity*

Ohnesorge, Clark: *The modulation of visual attention by emotion-eliciting stimuli*

Eddy Davelaar; David Huber: *Preview benefits in visual selective attention: "Hang-on-a-second!"*

6:15 PM: *Break*

6:30 - 8:00 PM: *Philosophy of Cognitive Science: Where does the mind stop? (Chair: Colin Allen)*

Allen, Colin: *Brief introductory remarks*

Rupert, Rob: *A dilemma for the extended mind*

Aizawa, Ken: *Extended cognition and cognitive systems*

8:15 *Dinner*

Monday, July 3:

4:15 PM: *Refreshments*

4:30 - 6:00 PM: *Perceptual Learning (Chair: Watanabe, Takeo)*

Yu, Chen: *Statistical cross-situational learning to build word-to-world mappings*

Watanabe, Takeo: *Perceptual learning without perception is not passive and results in robust perception*

Seitz, Aaron: *Reinforcement and blinks in perceptual learning*

6:00: *Break*

6:15 - 8:15 PM: *Memory and Learning I (Chair: Raaijmakers, Jeroen)*

Raaijmakers, Jeroen; Jakab, Eموke: *A non-inhibitory explanation of retrieval inhibition*

Pecher, Diane: *Retrieval induced forgetting*

Malmberg, Ken: *Directed forgetting in free recall and recognition*

Zeelenberg, Rene: *False recognition of nonwords*

8:15 *Dinner*

Tuesday, July 4:

4:15 PM: *Refreshments*

4:30 - 6:00 PM: *Decision Making I: Learning (Chair: Rieskamp, Joerg)*

Stewart, Neil; Chater, Nick; Brown, Gordon: *Decision by sampling*

Wagenmakers, EJ: *Modeling choice behavior in the Iowa gambling task*

Rieskamp, Joerg: *Perspectives of probabilistic inferences: Reinforcement learning and an adaptive network compared*

6:00: *Break*

6:15 - 7:15PM: *Cognitive Neuroscience*

Biederman, Irv *Neural basis of object recognition*

Nikolic, Danko; Havenith, Martha; Yu, Shan; Singer, Wolf: *Phase precedence and time delays in the visual cortex*

7:00 - 8:00 PM: *Priming and Cognition (Chair: Huber, Dave)*

Borghgi, Anna; Riggio, Lucia; Oggianu, Luca: *Language and objects: Simulation and affordances*

Huber, Dave: *Face perception and priming*

8:00 PM: *Dinner*

Wednesday, July 5:

4:15 PM: *Refreshments*

4:30 PM - 5:30 PM: *Memory and Learning II (Chair: Lewandowski, Steve)*

Criss, Amy: *The consequences of differentiation in episodic memory*

Lewandowski, Steve; Brown, Gordon; Nimmo, Lisa: *Temporal isolation in short-term memory*

5:30 PM: *Break*

5:45 PM - 7:45 PM: *Philosophy of Cognitive Science II (Chair: Allen, Colin)*

Harris, Steve: *Extended cognitivism and intrinsic content*

Adams, Fred: *Why there still has to be a mark of the mental*

Allen, Colin: *Mind and world -- an unprincipled distinction?*

Fuller, Gary: *Empty names & pragmatic implicatures*

8:00: *Dinner*

Thursday, July 6:**4:15 PM: Refreshments****4:30 - 5:30 PM: Visual Processes**

Sperling, George; Ding, Jian: *How the two eyes combine information: A neurally-plausible mathematical theory and some supporting evidence*

Sasaki, Yuka: *The primary visual cortex fills in color*

5:30 - 6:00 PM: Knowledge and Episodic Memory a:

Reder, Lynne: *The interaction of implicit and explicit memory processes in learning and behavior*

6:00: Break**6:15 - 6:45 PM: Knowledge and Episodic Memory b (Chair: Mueller, Shane):**

Mueller, Shane; Shiffrin, Richard: *REM-II: A model of the formation and use of episodic memory and semantic knowledge*

6:45 - 7:45 PM: Learning Concepts

Anderson, John: *Mastering a novel algebraic concept*

Sanborn, Adam; Griffiths, Thomas; Navarro, Daniel: *Alternative algorithms for the rational model of categorization*

8:00PM: Business Meeting**8:15 PM: Dinner****Friday, July 7:****4:15 PM: Refreshments****4:30 - 5:15 PM: Cognitive Science**

Shiffrin, Richard: *Paradoxes real and imagined*

5:15 - 6:15 PM: Extracting features from noise (Chair: Tjan, Bosco):

Tjan, Bosco: *Classification images, spatial uncertainty, and visual crowding*

Cohen, Andrew; Michael Ross: *Inducing multiple independent classification templates from stochastic stimuli*

6:15 PM: Break**6:30 - 8:00 PM: Decision Making II (Chair: Schooler, Lael):**

Gonzalez-Vallejo, Claudia: *The role of scaling in models of choice: Comparing the proportional difference model to decision field theory in consumer-product decisions*

Thomas, Rick: *A model of hypothesis generation, probability judgment, and information search*

Schooler, Lael; Volz, Kirsten; Schubotz, Ricarda; Raab, Marcus; Gigerenzer, Gerd; Cramon, Yves von: *Why you think Milan is larger than Modena: Neural correlates of the recognition heuristic.*

8:00 PM: Banquet Dinner



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ATTENDEES AND SESSIONS

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Abstracts

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Speaker: Adams, Fred: University of Delaware

Title: *Why there still has to be a mark of the mental*

Abstract: Proponents of embodied cognition and extended mind have repeatedly stressed the close relationship between the human brain and the human body. It is noted that the brain not only controls mental processes, but that the mental processes it controls are closely connected with the bodily processes it controls. In fact, it has been claimed that it is a mistake to try talk about mental processes in isolation from the bodily processes that the brain controls. It has even been claimed that one can in some cases "read off" properties of the human body from properties of the human mind, and that one should think of the mind as realized by the entire brain and body. However, surely not every process in the body or brain is a mental process. Without some mark of the mental (or the cognitive), there is no way to distinguish a mental process from a non-mental bodily process. With a mark of the mental, some of the claims about embodied cognition and mind extension may well be false.

Speaker: Aizawa, Ken: Centenary College of Louisiana

Title: *Extended Cognition and Cognitive Systems*

Abstract: Dotto is 75 years old. He suffers from late onset diabetes. In order to more effectively control his blood sugar level, he sometimes keeps a small 2"x4" notebook. In it he records such things as his measured blood glucose levels, what and how much he eats, and when he takes what medications. Sometimes he uses the notebook to make grocery lists and sundry "to do" lists. Sometimes, when he gets into a routine where his blood sugar is well under control, he stops using his

notebook. When he is most active with his notebook, he tries to take it wherever he goes. He carries it in a small black bag that also contains some of his other diabetic supplies, such as insulin, syringes, and hard candies. Figure 1 is a page from his notebook. Part way down the top page he has "11/23" for November 23, 2004. The left hand column is dedicated to his diabetic regimen, the right hand column is about his other medications. On the morning of November 23, he records that his blood glucose (BG) was 135 and he took 9 units of Humeral brand insulin (9H). For breakfast, he had 1 ½ cups of rice, which he calculated contains 67 grams of carbohydrates, and 4 ounces of orange juice, which contains 12 grams of carbohydrates, giving him a total of 79 grams of carbohydrates for breakfast. For lunch, he only lists his blood glucose and how much insulin he took. For dinner, he lists his blood glucose level, the restaurant where he had dinner, and how much insulin he took. In the right hand column, he notes, for example, that at 5:15 a.m., he took Synthroid, a synthetic thyroid hormone. He had his thyroid removed more than 20 years ago. At 6:27 a.m., he took Lortab, a pain reliever for a back problem. At 6:46, he took eye drops that were part of his regimen for recovering from cataract surgery. Lest one worry too much about Dotto, we should note that this disciplined regimen seems to play an important part in his enjoying a high quality of life. He is a capable driver, he goes to exercise class three times a week, plays bridge once a week, and manages a handsome financial portfolio. The common sense thing to say about this situation is that Dotto can't remember all the information he would like to have concerning his medical condition, so that he has to rely on notes. Dotto's cognitive apparatus is not up to managing all this information, so he relies on something else. On this view, Dotto's cognitive processes are confined to his central nervous system (CNS), where supplementary non-cognitive processes are found in his pencil and notebook. There are, of course, causal connections between Dotto and his pencil and notebook, but Dotto's cognitive processing is strictly limited to the confines of his central nervous system. In other words, causal processes are extended beyond the boundaries of the CNS, but cognitive processes are not. In the face of such common sense, a number of philosophers and psychologists have recently been advocating an alternative. They have argued that cognition is extended beyond the boundaries of the brain. According to this view, Dotto's cognitive processes literally extend from his brain into the pencil and paper of his notebook. Dotto's cognitive processing spans his brain, body, and the material pencil and notebook. Stated generally, the Extended Cognition Hypothesis (ECH) maintains that in (certain cases of) tool use, cognitive processes literally extend from the central nervous system into the external tools one uses. Many of the very same philosophers who endorse the Extended Cognition Hypothesis also defend a somewhat different hypothesis which we might call the Cognitive System Hypothesis (CSH). This hypothesis maintains that in (certain cases of) tool use, the central nervous system, body, and external tools one uses form a cognitive system. Although it is common to find these two hypotheses articulated almost interchangeably, I want to explore their inter-relations more carefully. In particular, I will argue, first, that the truth of the CSH does not

support ECH. Second, and more surprisingly, I will argue that reflection on systems suggests that ECH encourages a pointless conceptualization of things as cognitive. Third, and most surprisingly, the truth of CSH actually conflicts with ECH.

Speaker: Allen, Colin: Indiana University

Title: *Mind and world -- an unprincipled distinction?*

Abstract: Philosophical arguments about "extended mind" often hinge on the question of whether there are principled reasons for drawing the boundaries of mind and cognition at the boundaries of the brain. Both sides seem to accept as common ground the idea that their position stands or falls on the answer to this question. I will examine this common assumption and argue that its uncritical acceptance may have distracted philosophers' attention away from a proper understanding of recent scientific attempts to model cognition as a continuous process between brain and environment.

Speaker: Anderson, John; Carnegie Mellon University

Title: *Mastering a Novel Algebraic Concept*

Abstract: I will describe the success students have learning a novel algebraic concept from minimal instruction. They are able to apply the concept in ways that they were not instructed and deal with cases that were not anticipated in the instruction. Their success in doing so poses challenges for cognitive architectures like ACT-R and perhaps more generally for current ideas about learning and performance. I will try to highlight these challenges.

Speaker: Biederman, Irv: University of Southern California

Title: *The Neural Basis of Object Recognition*

Abstract: Almost 20 years ago, a proposal was advanced that a considerable range of behavioral phenomena associated with human object recognition can be understood in terms of a representation positing an arrangement of simple part primitives distinguished by viewpoint invariant properties (= geons). Recent research on optical imaging as well as single unit activity of cells in macaque IT and behavioral and fMRI studies in humans provide a surprisingly strong confirmation of this proposal.

Speaker: Borghi, Anna: University of Bologna, Italy

Title: *Language and objects: Simulation and affordances*

Abstract: I will describe two experimental lines, one in collaboration with Luca Oggianu and the other with Lucia Riggio. In a first line we investigated the effects of different kinds of visual primes on the processing of action words. Participants were presented with visual primes followed by verbs; their task consisted in deciding whether the verb referred to a concrete or to an abstract action (Buccino et al., 2005). The prime could consist of the photograph on a hand performing an action (e.g., to press), of the object (e.g., the switch), or of the interaction between hand and object (e.g., a hand pressing a switch). Response times were faster

in the interaction condition than in the other two conditions, probably due to the fact that both canonical and mirror neurons were activated. More interestingly, even if the task required judging a verb, object primes were processed faster than action primes. This is consistent with studies on motor resonance showing that mirror neurons are activated by goals rather than by means (Umiltà et al., 2001), and with studies showing that actions are encoded at a distal rather than at a proximal level (Hommel et al., 2001). In a second experimental line participants read action or observation sentences (Take the / vs. Look at the /) and had to decide whether or not the target represented the same object described in the sentence. The target was the photograph of an object graspable either with a power (e.g. brush) or with a precision grip (e.g. pen); the objects could be presented either with the affordances in the canonical position or not (e.g., a brush with the handle on the bottom part of the screen or an upright brush). Results showed that action sentences were processed faster than observation sentences, suggesting that during sentence comprehension a simulation process occurs. This was confirmed by the fact that objects with the affordances located in the canonical way were processed faster than objects not affording actions; this was true in particular for objects graspable with a power grip and when objects were preceded by an action sentence. The results are compatible with the idea that action words as well as visual objects activate canonical neurons. The results of both experimental lines will be discussed within the framework of an embodied view of cognition.

Speaker: Cohen, Andrew: University of Massachusetts Amherst

Title: *Inducing multiple independent classification templates from stochastic stimuli*

Abstract: Current techniques for determining the pixel values used by an observer to classify an image usually assume linear classification and a single template. Psychological evidence suggests, however, that certain image features are detected independently and then combined to produce a classification. We propose a Bayesian network model of classification that encapsulates this more complex structure. The model is used in conjunction with machine learning techniques to discover a set of templates that describe the independent features used by both simulated and human classifiers.

Speaker: Criss, Amy: Carnegie Mellon University

Title: *The consequences of differentiation in episodic memory*

Abstract: When items on one list are studied longer than items on another list, the improvement in performance typically manifests as an increase in the hit rate and a decrease in the false alarm rate. This finding is referred to as the strength based mirror effect and has been accounted for by assuming that participants adopt a more strict criterion following a list containing items studied several times. An alternative account is found in differentiation models where longer study leads to a more accurate memory representation for the studied item. The more accurate the stored representation, the less it is confusable with a randomly chosen foil, resulting in a decrease in the false alarm rate. Differentiation models make additional a priori predictions that the level of

differentiation of a study list interacts with the similarity between the studied items and the foils. These predictions are empirically tested and confirmed.

Speaker: Davelaar, Eddy: University of California, San Diego

Title: *Preview benefits in visual selective attention: "Hang on a second!"*

Abstract: In the Eriksen flanker paradigm, peripheral flankers can help or harm performance depending on whether they indicate the correct or incorrect response of a central target. With this paradigm it has been observed that immediate preview of the flankers reduces flanker effects. The reported experiments investigated this phenomenon, establishing the separate contributions of identity preview and response preview. Participants made CV judgments on the middle letter of a five-letter string and different durations of preview were examined. The results indicate that response preview effects are small, and apply similarly across location. In contrast, identity preview is location specific, producing results that reverse depending on flanker preview versus target preview. We explain these effects in terms of perceptual discounting that accrues over time as a function of preview durations. Depending on which locations and items are previewed, this can result in a "repetition blindness" for flankers, which reduces flanker interference, or a repetition blindness for the target, which greatly harms performance. This theory is implemented in a model with dynamic neural accommodation within spatially specific identity detectors and spatially non-specific evidence accumulators (response units).

Speaker: Fuller, Gary, Central Michigan University

Title: *Empty Names & Pragmatic Implicatures*

Abstract: What are the meanings of empty names "Vulcan," "Pegasus," or "Santa Claus" in sentences such as "Vulcan is the tenth planet," "Pegasus flies," or "Santa Claus does not exist"? Our view Adams et al. 1992, '94, '97a, 2004) is a direct-reference account on which empty names lack meaning, in combination with a pragmatic-implicature account of why empty names seem to have meaning. The appearance of meaning comes from associated implicated descriptions that do not give the meaning of the names. In a recent article (2005) Mitch Green criticizes our view of empty names. He argues that our "pragmatic defense" fails. He thereby implicitly casts doubt on our whole direct-reference package. According to Green there are a number of familiar mechanisms that can generate pragmatic implicatures: conversational and conventional mechanisms, discussed in detail by Grice (op. cit.), and other mechanisms, such as ones involving expression, that are neither conversational nor conventional. Green argues that none of these familiar mechanisms; can generate the implicatures needed by our view. We could try to counter Green by showing that there are unfamiliar mechanisms, mechanisms other than those that he mentions, that can generate the kind of implicatures that we need. Indeed, towards the end of his paper Green allows that this is a possible way to save the pragmatic defense, although he is skeptical of it (23-24).

Luckily, we will not have to take this route. The main purpose of our paper is to show that our view works despite Green's suggestions to the contrary. We shall show that Green's arguments that the Gricean mechanisms of conversational or a conventional implicature cannot generate the implicatures that our view needs are seriously flawed. Towards the end of our paper we also briefly sketch an account of what the relevant Gricean mechanisms might be.

Speaker: Gonzalez-Vallejo, Claudia: Ohio University

Title: *The role of scaling in models of choice: Comparing the proportional difference model to decision field theory in decisions over consumer products*

Abstract: Three studies tested the stochastic difference choice model (proportional difference, PD, version in Gonzalez-Vallejo, 2002) in the domain of decision making under certainty. Consumer services and products, hotels defined by price and quality and MP3 players defined by price and memory size, served as choice pairs. The ordinal prediction relating the proportional difference variable, d (computed from stimuli pairs), and the observed choice proportions was supported. Model fitting showed that PD's estimated decision threshold measured within-person sensitivity to value attribute differences both at baseline and after persuasion manipulations. The threshold was also related to whether individuals were low or high in Need for Cognition (NFC, Cacioppo & Petty, 1982). Cross-validation strategies also showed PD to be descriptive and robust.

Speaker: Harris, Steve; Indiana University

Title: *Extended Cognitivism and Intrinsic Content*

Abstract: I defend the thesis of extended cognitivism against a particular type of objection that is insightful but incorrect. I call it the intentionality objection. The extended cognitivist argues that human cognition (and consequently, quite plausibly, the human mind) is something extended, something literally comprised of external as well as internal states and processes. The popular account emphasizes the role that technological artifacts play in extending the human cognitive system by becoming functional parts of that system. The claim is that technologies in use sometimes constitute, in part, the vehicles of cognitive (and perhaps even mental) content. Intentionalist critics take such radical anti-individualist consequences to indicate a failure on the part of the extended cognitivist to properly distinguish what is cognitive from what is not cognitive. According to the internal intentionalist, cognition extends no further than the individual, since cognition requires intentionality and intentionality extends no further than the individual. In this talk I consider a specific version of the intentionality objection that assumes that cognitive systems involve states and processes that have intrinsic content. Since the states and processes implemented in tools (or, "external, nonbiological vehicles" generally) never involve intrinsic content, there is no good reason for believing that cognition ever extends into tools and other artifacts. This objection fails, however, to show that extended cognitivism is false of human cognition. For the purposes of bounding the cognitive system anyway, the appeal to

intrinsic content is deeply and systematically problematic. The notion is either too weak to uniquely identify human cognitive agents or else it is too strong to be plausibly applied to them. The missing element in an adequate appeal to the intentional capacities of human cognitive systems, I argue, is wide-world human technology.

Speaker: Huber, Dave: University of California San Diego

Title: *Individual Differences in Face Processing as Revealed with Priming*

Abstract: Recent experiments with the immediate repetition of words demonstrated that brief prime presentations help target perception whereas long prime presentations harm target perception (Weidemann, Huber, & Shiffrin, 2005). In this paradigm, targets are briefly flashed and masked and performance is assessed through a two-alternative forced choice in which the prime can be identical to the target, the foil, or neither choice. In a series of experiments, we extended this paradigm to face perception, mapping out similar costs and benefits of immediate face repetition as a function of prime duration. Unlike words, qualitative individual differences were observed: the change from positive to negative priming was greater for participants with lower perceptual face thresholds. In a second experiment, this effect was only seen with upright, but not inverted faces. In a third experiment, these individual differences were found to be resistant to manipulations designed to change the basis of strategic responding in terms of featural or configural information. A fourth experiment demonstrated that the target duration needed for perceptual threshold does not itself explain these effects, and, instead, increasing target duration produced stronger negative priming effects. We implemented a multi-layer dynamic neural network model of these results that includes synaptic depression to produce the transition from positive to negative priming. The model assumes that higher level configural processing is less developed in some individuals, forcing them to rely more heavily on featural information.

Speaker: Lewandowski, Steve: University of Western Australia

Title: *Temporal isolation in short-term memory*

Abstract: According to temporal distinctiveness models, items that are temporally isolated from their neighbors during list presentation are more distinct and thus should be recalled better. While there is clear evidence that free recall benefits from temporal isolation, we conclude on the basis of several recent studies that no reliable temporal isolation effects exist in serial recall. We present two additional experiments which reconciled those two discrepant outcomes by comparing a retrieval task in which output order is controlled (forward serial reconstruction) with a virtually identical task in which report order is unconstrained (free reconstruction). Temporal isolation effects emerged in the unconstrained task irrespective of actual report order if (and only if) people expected free report at the time of study. The data suggest that people can choose to rely on the temporal dimension at encoding, but do so only when they expect report order to be unconstrained. By contrast, when people expect strict forward serial retrieval, they do not

use time to differentiate between items at encoding.

Speaker: Malmberg, Ken: University of South Florida, Tampa

Title: *Directed Forgetting in Free Recall and Recognition*

Abstract: Forgetting can occur as the result of unconscious or automatic memory processes or as the result of their conscious control. The latter form of forgetting is often referred to as suppression, repression, or inhibition, and it is often investigated in the laboratory using the directed forgetting procedure. The authors describe and empirically test a formal model of directed forgetting, implemented within the framework of the Search of Association Memory Theory (SAM). The critical assumption is that episodic memory can be suppressed by a conscious attempt to alter the mental context in which new memories are encoded. This model captures much of the data. However, additional assumptions are required to account for serial position and output order effects and the effect of forgetting instructions on recognition memory.

Speaker: Moors, Agnes: Ghent University, Belgium

Title: *Five sources and five solutions to the all-or-none view of automaticity*

Abstract: Feature-based accounts define the concept automatic in terms of a number of features such as unintentional, goal-independent, autonomous, purely stimulus-driven, unconscious, uncontrolled (in the sense of alter/stop), efficient, and/or fast. The concept nonautomatic covers the opposites of these features. Different feature-based accounts differ with regard to the features they emphasize most and with regard to the amount of coherence they assume among features. The best known feature-based account is the dual-mode view, which assumes a perfect coherence among the features of each mode (automatic processes hold all automatic features; nonautomatic hold all non-automatic features). The dual-mode view has been criticized on the basis of empirical evidence showing a lack of cooccurrence among the features of each mode (cf. Bargh, 1992; Logan, 1985). Nevertheless, the dual mode view seems difficult to shake off. I discuss five sources that have been or can be appointed as responsible for the creation and/or persistence of the dual mode view: The capacity view of attention (Shiffrin & Schneider, 1977), the New look in perception (Bruner & Goodman, 1947), the computational framework of cognition in general, assumptions of conceptual overlap among features, and assumptions of one-to-one modal relations (i.e., the presence of one features is considered a necessary and/or sufficient condition for another). After that, I discuss five alternative views that have been proposed to replace the dual-mode view: The triple mode view (e. g., Carver & Scheier, 2002), the decompositional view that does away with the general concept of automaticity (Regan, 1981), the decompositional view that conceives of automaticity as a gradual concept (Logan, 1985; Shiffrin, 1988), the view that chooses one minimal feature of automatic processes (Bargh, 1989), and the construct-based approach (Logan, 1988). A critical review of these alternatives favors a gradual decompositional view. This view faces its own limitations, which I propose can be accommodated by a

relative rather than a purely gradual view.

Speaker: Mueller, Shane: Indiana University

Title: *REM-II: A model of the formation and use of episodic memory and semantic knowledge*

Abstract: Episodic memories form through the interpretation of events by semantic knowledge, while semantic knowledge forms by the accumulation of episodic memories. Through this two-way process, our extensive episodic memory for events in the past co-evolves with our vast knowledge about the world. We present REM-II, a new bayesian account of episodic and semantic memory that explicitly models the development of these two aspects of our long-term memory. REM-II encodes episodic traces as sets of features with different values, and semantic knowledge as a set of co-occurrences of these features, while assuming that co-occurrence of concepts allows for relational and semantic similarity to emerge. The use of feature co-occurrence allows polysemy and connotation of meaning to be encoded within a single structure, based on the distinct contexts in which a concept appears. We demonstrate knowledge formation in REM-II and show the emergence of semantic spaces through experience and the resultant polysemy and biasing of encoding that REM-II produces.

Speaker: Nikolic, Danko: Max-Planck Institute for Brain Research

Title: *Phase precedence and time delays in the visual cortex*

Abstract: Despite extensive investigation, we still do not fully understand how the brain represents visual information. Here we present results indicating that time delays between action potentials, that are as small as one millisecond, can be highly informative and can carry stimulus-related information. Based on cross-correlation analysis of simultaneous extracellular recordings from a large number neurons in cat area 17, we show that such small temporal delays form precise and repetitive spatio-temporal patterns, such that each neuron has its own preferred time of firing relative to the firing times of the other neurons. The delay between two neurons rarely exceeds 3 ms and thus, the time scale of the resulting spatio-temporal patterns fits within a single cycle of a the gamma oscillation. Moreover, the preferred relative firing times of neuronal discharges change with stimulus properties. These changes are partially related to neuronal activation but are, for the most part, not correlated to the other neurophysiological measures that contain stimulus-related information (i.e., neuronal rate responses and synchrony). Instead, these fine spatio-temporal patterns seem to constitute an independent source of information. These results open up the possibility that downstream readout units take advantage of these spatio-temporal patterns during computation. If true, small time delays would play an important role in the cortical representation of visual stimuli. Brain connections revealed by reverse correlation

Speaker: Ohnesorge, Clark: Carleton College

Title: *The modulation of visual attention by emotion-eliciting stimuli*

Abstract: The emotional valence evoked by visual stimuli has been shown to

influence performance across a large range of cognitive and perceptual tasks. Generally the concept of attention is invoked in developing theoretical explanations for this phenomenon with a conclusion that negative stimuli attract or receive more attention than do positive or neutral stimuli. In prior research using lexical stimuli we explored the temporal unfolding of an attentional window that differed with the valence of the eliciting stimulus and opened and closed within a time envelope of about 500 milliseconds. In the current research, we extend our manipulation to include arousal as well as valence and adopt pictorial stimuli to further address the phenomenon of attentional modulation.

Speaker: Pecher, Diane; University Rotterdam, The Netherlands

Title: *Retrieval Induced Forgetting*

Abstract: Retrieval practice with particular items from memory can impair the recall of related items on a later memory test. Both inhibitory and associative explanations have been offered for this retrieval-induced forgetting effect. The independent probe technique has been developed to distinguish between these two accounts. In this paradigm, memory of a suppressed item is tested with an extralist cue that is unrelated to the practiced item. We argue that different versions of this paradigm cannot adequately distinguish between inhibitory and associative accounts. Using an adapted version of the paradigm, we demonstrate that retrieval-induced forgetting of both semantic and episodic memory items does not occur using item-specific independent cues, but does occur when related cues are used. These results pose problems for inhibitory accounts.

Speaker: Raaijmakers, Jeroen; University of Amsterdam, The Netherlands

Title: *A non-inhibitory explanation of retrieval inhibition*

Abstract: Retrieval inhibition refers to the phenomenon that practicing some items leads to generalized (cue-independent) inhibition of related items. The cue-independent nature of these effects appears to make these effects difficult to explain from by traditional interference accounts based on competitive retrieval processes. An alternative explanation based on the REM model will be presented. I will also present the results of new experiments aimed at testing this alternative account of inhibition effects.

Speaker: Reder, Lynne, Carnegie Mellon University

Title: *The interaction of implicit and explicit memory processes in learning and behavior*

Abstract: I have long argued that most tasks labeled as part of implicit memory operate on the same representations that are used for explicit memory tasks. I will review the evidence for why these assumed separate memory systems are really not separate at all and speculate as to why the erroneous assumptions developed. I will go on to argue why so much of learning is implicit and should be implicit and when learning should be explicit.

Speaker: Rieskamp, Joerg: Max Planck Institute for Human Development, Berlin, Germany

Title: *Perspectives of probabilistic inferences: Reinforcement learning and an adaptive network compared*

Abstract: The assumption that people possess a strategy repertoire for inferences has been raised repeatedly. The strategy selection learning theory specifies how people select strategies from this repertoire. The theory assumes that individuals select strategies proportional to their subjective expectations of how well the strategies solve particular problems; such expectations are assumed to be updated by reinforcement learning. The theory is compared to an adaptive network model that assumes people make inferences by integrating information according to a connectionist network. The network's weights are modified by error correction learning. The theories were tested against each other in an experimental study with a dynamic environment in which the performance of inference strategies change. In this situation a quick adaptation to the new situation was not observed; rather individuals got stuck on the strategy they had successfully applied previously. This "inertia effect" was most strongly predicted by the strategy selection learning theory.

Speaker: Rupert, Rob: University of Colorado

Title: *A dilemma for the extended mind*

Abstract: The hypothesis that human cognition extends into the environment can be understood as a claim about the subjects of cognitive states or, instead, as a claim about the implementation or realization of cognitive states. In this paper, I argue that neither approach offers a promising theoretical framework within which to pursue empirical psychology. Considered as a theory of the subjects of cognitive states-i.e., as a claim about the systems that instantiate cognitive properties-the extended framework does substantial violence to productive research programs and methods in cognitive psychology. Such research compares systems' reactions across different experimental conditions, constructs theories to account for subjects' various responses, and designs new experiments to test those theories. These methods presuppose that the same systems (or the same kinds of system) persist through variations in conditions and experiments. In contrast, the actual extended systems discussed in the literature are fleeting systems, often composed of organisms together with items presented in experimental conditions. The extended view fares no better when interpreted as a claim about the realizers of cognitive states. Not just anything causally related to a cognitive state can count as part of the realizer of that state. The causal role of the realizer of a personal-level cognitive state must mirror the causal profile of the state so realized. Extended realizers typically do not satisfy this requirement, and for principled reasons.

Speaker: Sanborn, Adam: Indiana University

Title: *Alternative algorithms for the rational model of categorization*

Abstract: The rational model of categorization (RMC; Anderson, 1990) assumes

that categories are learned by clustering similar stimuli together using Bayesian inference. As computing the posterior distribution over all assignments of stimuli to clusters is intractable, an approximation algorithm needs to be used. The original algorithm used in the RMC was an incremental procedure that had no guarantees for the quality of the resulting approximation. Drawing on connections between the RMC and models used in nonparametric Bayesian density estimation, we present two alternative algorithms for the RMC that are asymptotically correct. Using these alternative algorithms allows the effects of the assumptions of the RMC and the particular inference algorithm to be explored separately. We look at how the choice of inference algorithm changes the strength of predicted order effects.

Speaker: Sasaki, Yuka: Harvard medical School

Title: *The primary visual cortex fills in color*

Abstract: One of the most important goals of visual processing is to reconstruct adequate representations of surfaces in a scene. Surface representation is thought to be produced mainly in the mid-level vision and that V1 activity is solely due to feedback from the mid-level stage. However, contradicting empirical and theoretical reports have also been proposed. One reason for this controversy may be due to the tacit assumption that surface representation is made by single processing rather than multiple processing. Surface representation could be a result of many different aspects of processing. Another reason for the controversy may be that most studies have not controlled effects of attention on a surface. Thus, it is necessary to examine how subcomponents of a surface contribute to surface representation with attentional effects controlled. Here, we measured fMRI signals corresponding to "neon color spreading" that is thought to be due to interactions between mechanisms for two surface subcomponents --- color filling-in and illusory contours. In the present study, we used 3T fMRI that provides a fine spatial resolution so that brain activity corresponding to illusory contours and filling-in both as surface subcomponents could be spatially dissociable if surface representation occurs in the retinotopic visual areas. To eliminate or decrease the attentional component of feedback signals, subjects performed an attentionally-challenging task unrelated to the surface perception. Activity for filling-in was observed only in the primary visual cortex, whereas activity for illusory contours was observed in multiple visual areas. These findings indicate that surface representation is produced by multiple rather than single processing, and that V1 activity for surface representation is not solely from feedback from higher cortical stages.

Speaker: Schooler, Lael: Max Planck Institute for Human Development, Berlin, Germany

Title: *Why you think Milan is larger than Modena: Neural correlates of the recognition heuristic.*

Abstract: When ranking two alternatives by some criteria and only one of the alternatives is recognized, participants overwhelmingly adopt the

strategy, termed the recognition heuristic (RH), of choosing the recognized alternative. Understanding the neural correlates underlying decisions that follow the RH could help determine whether people make judgments about the RH's applicability or simply choose the recognized alternative.

Speaker: Seitz, Aaron: Boston University

Title: *Reinforcement and blinks in perceptual learning*

Abstract: We are constantly learning new things as we go about our lives. In addition to learning new facts, procedures and concepts, we are also refining our sensory abilities. How and when these sensory modifications take place is the focus of intense study and debate. While sensory improvements were thought only to occur when attention is focused on the stimuli to be learned (task-relevant learning), recent studies demonstrate performance improvements independent of the focus of attention (task-irrelevant learning). I will present research that shows that task-irrelevant learning can occur for motion stimuli that are paired with the targets of a letter identification task. These results are consistent with a learning model in which long-term sensitivity enhancements to task-relevant or irrelevant stimuli occur as a result of timely interactions between diffused signals triggered by task performance and signals produced by stimulus presentation. To test this model and demonstrate that high-level processing is necessary for this unconscious, automatic learning, research of a "blink" in attentional processing, which occurs when subjects must process two task-targets presented in rapid succession, is adapted to study perceptual learning. This "blink" has been shown to result from a bottleneck in high-level processing (such as decision making and memory encoding) but does not affect perceptual and semantical processing. Results show that while subjects obtain sensory improvements for motion stimuli presented outside of the time-window of this "attentional blink", no learning occurs for stimuli presented during the attentional blink.

Speaker: Shiffrin, Richard; Indiana University

Title: *Paradoxes real and imagined*

Abstract: I use a variant of the 'Exchange Paradox' to motivate a discussion of the psychological basis of rationality, and the consequent appearance and actuality of paradox. To whet the reader's appetite, the paradox follows: Suppose one flips a coin until a heads appears on flip n , and places $10^{**}(n)$ and $10^{**}(n+1)$ dollars in each of two sealed envelopes. The envelope with the larger amount is handed to you with probability 0.8, else you are handed the other envelope. You open your envelope and observe $\$X$. You are to either keep this amount or irrevocably exchange for the contents of the other, with the goal of maximizing expected payoff. Strangely, it can be shown that one should exchange regardless of X . It seems paradoxical to 'always' exchange what you know to be the envelope with the higher probability of having the larger amount.

Speaker: Sperling, George: University of California Irvine

Title: *How the two eyes combine information: A neurally-plausible mathematical*

theory and some supporting evidence

Abstract: In binocular combination, light images on the two retinas are combined to form a single "cyclopean" perceptual image, in contrast to binocular rivalry which occurs when the two eyes have incompatible ("rivalrous") inputs and only one eye's stimulus is perceived. We propose a computational theory for binocular combination based on two neurally plausible principles of interaction: in every spatial neighborhood (1) each eye exerts gain control on the other eye's signal in proportion to the contrast energy of its own input and (2) each eye additionally exerts gain control on the other eye's gain control. For stimuli of ordinary contrast, when either eye is stimulated alone, the predicted cyclopean image is the same as when both eyes are stimulated equally -- a significant nonlinearity that coincides with an easily observed property of natural vision. The gain-control theory is contrast dependent: Very low-contrast stimuli to the left- and right-eyes add linearly to form the predicted cyclopean image. The intrinsic nonlinearity manifests itself only as contrast increases. To test the theory more precisely, 48 combinations of horizontal sinewave gratings that differ in phase and contrast are presented to each eye; the apparent phase of the cyclopean sinewave indicates the relative contributions of the two eyes. In another experiment, noise added to the stimulus in one eye is shown to cause that eye to dominate in binocular combination. In all, six experiments define the parameters of the theory; the theory accounts for 96.9 to 99.4% of the variance of these data. Conclusion: A simple, robust, physiologically plausible gain-control theory accurately describes an early stage of binocular combination.

Speaker: Stewart, Neil: University of Warwick, Warwick, UK

Title: *Decision by sampling*

Abstract: We present a theory of decision by sampling (DbS) in which, in contrast with traditional models, there are no underlying psychoeconomic scales. Instead, we assume that an attribute's subjective value is constructed from a series of binary, ordinal comparisons to a sample of attribute values drawn from memory and is its rank within the sample. We assume that the sample reflects both the immediate distribution of attribute values from the current decision's context and also the background, real-world distribution of attribute values. DbS accounts for concave utility functions; losses looming larger than gains; hyperbolic temporal discounting; and the overestimation of small probabilities and the underestimation of large probabilities.

Speaker: Thomas, Rick: University of Oklahoma

Title: *A model of hypothesis generation, probability judgment, and information search.*

Abstract: The talk will present a summary of our work with HyGene, a cognitive process model of how decision makers generate, evaluate, and test hypotheses. The model is an integration of theoretical constructs from the long-term memory, working memory, and judgment and decision making literatures. In simulations, we illustrate HyGene's account of several judgment phenomena, including the effects of WM limitations

and time pressure on hypothesis generation and probability judgment. Implications of the model for understanding the conditions that lead to diagnostic information search versus positive testing and pseudodiagnostic information search will be discussed. In general, our work with HyGene is focused on understanding how well-known memory constructs (e.g., similarity-graded retrieval and limited working-memory capacity) systematically constrain judgment processes. Much of our work has found that memory processes lead to hypothesis generation, evaluation, and testing behaviors that are quite adaptive.

Speaker: Tjan, Bosco: University of Southern California

Title: *Classification images, spatial uncertainty, and visual crowding*

Abstract: Invariance or constancy is a hallmark of visual processing. Linear techniques such as classification images and spike-triggered averaging are thought to be incapable of recovering the front-end template or receptive-field structure of a higher-order visual mechanism whose response may be invariant to the position, size, or orientation of a target. Higher order techniques such as spike-triggered-covariance) also cannot handle even the simplest kind of positional invariance for spatially broadband stimuli. Using the max-pooling property of a typical uncertainty model, we show analytically, in simulations, and with human experiments (single-letter identification in fovea and periphery, with and without positional uncertainty) that the effect of intrinsic uncertainty (i.e. invariance) can be reduced or even eliminated by embedding a signal of sufficient strength in the masking noise of a classification-image experiment. We refer to this technique as "signal clamping". We show that the signal-clamped classification images from the error trials contain a clear high-contrast image that is negatively correlated with the perceptual template associated with the presented signal; they also contain a low-contrast "haze" that is positively correlated with the superposition of all the templates associated with the erroneous response. In the case of positional uncertainty, we show that this "haze" provides an estimate of the spatial extent of the uncertainty. With the effect of intrinsic uncertainty significantly reduced by signal clamping, we further show that a covariance analysis can be used to different regions of a classification image to reveal the elementary features that are the components of the perceptual template seen in the classification image. We applied this technique to study the change in features and feature integration during visual crowding.

Speaker: Wagenmakers, Eric-Jan: University of Amsterdam, The Netherlands

Title: *Modeling choice behavior in the Iowa gambling task*

Abstract: The purpose of the Iowa gambling task, developed by Damasio and Bechara, is to mimic real-life decision making in an experimental context. The Iowa gambling task has recently been used to assess decision making deficiencies in several different clinical populations. Busemeyer and Stout proposed a reinforcement learning model to account for choice behavior in the Iowa gambling task. Their model incorporates three components of decision making: weighing of gains

versus losses, memory for past payoffs, and response consistency. A test of specific influence demonstrates the validity of the model. Based on a large-sample study, it is argued that despite the validity of the model, care should be taken when the model is applied to clinical diagnosis on the level of the individual. Several extensions of the model are discussed.

Speaker: Watanabe, Takeo: Boston University

Title: *Perceptual learning without perception is not passive and results in robust perception*

Abstract: The brain demonstrates an amazing ability to become increasingly sensitive to important stimuli. It is often claimed that we become more sensitive only to the critical signals in the tasks we attend to. However, our recent series of experiments have shown that perceptual learning occurs with little attention. First, mere exposure to sub-threshold and task-irrelevant motion coherence signals led to enhancement in sensitivity to the motion direction. This finding indicates that attention is not necessary for perceptual learning (Watanabe, Nanez & Sasaki, 2001, *Nature*). Second, exposure to two types of task-irrelevant motion that are processed at different levels of visual processing improved sensitivity only at the lower-level. These results suggest that task-irrelevant perceptual learning occurs at a very low-level (Watanabe et al, 2002, *Nat Neuroscience*). Third, we addressed the question as to whether such task-irrelevant learning occurs purely passively (caused by stimulus-exposure). During exposure, we presented four different directions of motion an equal number of times, but the direction of interest (DOI) was paired with the task targets. If learning is purely passive, thresholds should improve equally for all the presented directions. Surprisingly, the threshold improved only for the DOI. These results show that learning of a task-irrelevant and sub-threshold feature is not purely passive, but it occurs only when the feature is correlated with a task target (Seitz & Watanabe, 2003, *Nature*). Finally, we have recently found that such learning is so robust that it sometimes results in perception of the exposed direction even when nothing is presented (Seitz, et al, 2005, *PNAS*). Based on these findings, we propose a model in which diffuse reinforcement learning signals perform an important role, complementary to focused attention in perceptual learning.

Speaker: Yu, Chen: Indiana University

Title: *Statistical Cross-Situational Learning to Build Word-to-World Mappings*

Abstract: There are an infinite number of possible word-to-world pairings in naturalistic learning environments. This mapping problem might be constrained in the task of word learning by computing distributional statistics across words, across referents, and most importantly across the co-occurrences of these two at multiple moments. As a preliminary test of this idea, we briefly exposed adults to multiple spoken words and multiple pictures of individual objects with no information about word-picture correspondences. Nonetheless, subjects learned over trials the word-picture mappings through cross-trial statistical relations.

Different learning conditions compared the degree of within-trial reference uncertainty, the number of trials and the length of trials. We also propose and implement a computational model and feed it with the same training data used in different learning conditions in experimental studies, to shed light on the possible underlying mechanism of statistical learning. Overall, these results suggest that statistical cross-situational learning may be one of fundamental mechanisms to tackle the word-to-world mapping problem.

Speaker: Zeelenberg, Rene; Erasmus University Rotterdam, The Netherlands

Title: *False recognition of nonwords*

Abstract: Participants studied lists of nonwords (e.g., froost, floost, stoost, etc.) that were orthographic-phonologically similar to a nonpresented critical lure, which was also a nonword (e.g., ploost). Experiment 1 showed a high level of false recognition for the critical lure. Experiment 2 showed that the false recognition effect was also present for forewarned participants who were informed about the nature of the false recognition effect and told to avoid making false recognition judgments. Experiment 3 used an overt-rehearsal paradigm and showed that the lure was almost never rehearsed during study. The present results show that false recognition effects can be obtained even when the critical lure itself is not stored during study. These findings are problematic for currently popular accounts of false recognition which attribute false memories to implicit associative responses or spreading activation but are easily explained by global familiarity models of recognition memory.

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The ASIC Yahoo! Group

A Yahoo! group has been set up for ASIC in order to provide attendees with the ability to find potential roommates and activity partners, and coordinate ride or rental car sharing for the conference this summer.

Instructions:

1. Follow the link <http://groups.yahoo.com/group/ASIC2005>.
2. In order to post messages or reply to others' messages, you must join the ASIC Yahoo! group. Click on the text "Join this group", which should appear on the upper right.
3. This will take you to a login screen. If you have any kind of Yahoo! account (mail, chat, photo, etc.), then you will be able to login here. If not, you will be able to quickly and easily sign up for an account by clicking the text "Sign up now."
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