COGS710
Advanced Topics in Memory
S1 Day 2015
Department of Cognitive Science

Contents

General Information 2
Learning Outcomes 3
Assessment Tasks 3
Delivery and Resources 6
Unit Schedule 8
Policies and Procedures 9
Graduate Capabilities 11
Required and Recommended Reading 14

Disclaimer
Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.
## General Information

<table>
<thead>
<tr>
<th>Unit convenor and teaching staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convenor</strong></td>
</tr>
<tr>
<td>Rochelle Cox</td>
</tr>
<tr>
<td><a href="mailto:rochelle.cox@mq.edu.au">rochelle.cox@mq.edu.au</a></td>
</tr>
<tr>
<td>Contact via email</td>
</tr>
<tr>
<td>AHH 3.731</td>
</tr>
<tr>
<td><strong>Amanda Barnier</strong></td>
</tr>
<tr>
<td><a href="mailto:amanda.barnier@mq.edu.au">amanda.barnier@mq.edu.au</a></td>
</tr>
<tr>
<td>Contact via email</td>
</tr>
<tr>
<td>AHH 3.801</td>
</tr>
<tr>
<td><strong>Glenn Carruthers</strong></td>
</tr>
<tr>
<td><a href="mailto:glenn.carruthers@mq.edu.au">glenn.carruthers@mq.edu.au</a></td>
</tr>
<tr>
<td>Contact via email</td>
</tr>
<tr>
<td>AHH 3.403</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission to MRes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corequisites</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Co-badged status</th>
</tr>
</thead>
</table>

### Unit description

This unit examines the nature of individual and social memory from an interdisciplinary perspective. This unit covers: the nature of memory (eg, its history, definition, characteristics, measurement, explanation, and neural basis); research in memory (eg, autobiographical memory, collective memory); views about the relationship between individual memory, individual memory in small groups, and collective memory; and a selection of theoretically important controversies about the ways in which humans (and animals) remember and forget.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at [https://students.mq.edu.au/important-dates](https://students.mq.edu.au/important-dates)
Learning Outcomes
On successful completion of this unit, you will be able to:

- Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
- Improve your ability to critically evaluate scientific claims, methods, and data
- Improve your ability to draw links between theory, laboratory research and clinical conditions
- Improve your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way
- Improve your ability to design an interesting, innovative study proposal that follows on from a published journal article
- Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit
- Improve your information technology skills (especially accessing appropriate online resources)
- Improve your problem-solving skills
- Improve your creativity (especially in designing a hypothetical study)
- Improve your ability to accurately describe relevant theories
- Improve your ability to critically evaluate theories
- Improve your ability to develop and present a coherent argument
- Improve your understanding of philosophical approaches to particular topics
- Improve your ability to suggest possible experiments to test a particular theory

Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>20%</td>
<td>TBA</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>30%</td>
<td>Tuesday 2nd June</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>50%</td>
<td>Tuesday 16th June</td>
</tr>
</tbody>
</table>

Assignment 1
Due: TBA
Weighting: 20%

1. **Assignment 1 (20%)**: 500 word (approx. 2 page) review of a published journal article on
topics covered in Weeks 2-4 such as clinical delusions, dissociative identity disorder, or hypnotic analogues of delusions. Potential journal articles can be selected from the Additional Reading List and will be decided in class in Week 1. You will also be asked to lead a group discussion on the article. You will be assessed on:

- Your ability to read a theoretical, review, clinical or empirical paper and identify its strengths, weaknesses and relevance; your ability to critically evaluate scientific claims, methods and data; and your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way.

**Due Date:** On the day you discuss the article in Week 2, 3, or 4 (this will be decided in Week 1). Submit a hardcopy in class and email an electronic version to Rochelle Cox (Rochelle.cox@mq.edu.au). Assignment 1 will be double marked by Rochelle Cox and Amanda Barnier.

On successful completion you will be able to:
- Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance.
- Improve your ability to critically evaluate scientific claims, methods, and data.
- Improve your ability to draw links between theory, laboratory research and clinical conditions.
- Improve your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way.
- Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit.
- Improve your ability to accurately describe relevant theories.
- Improve your ability to critically evaluate theories.
- Improve your ability to develop and present a coherent argument.

**Assignment 2**

**Due:** Tuesday 2nd June  
**Weighting:** 30%

1. **Assignment 2 (30%)**: Design a research poster of a hypothetical study that follows from or builds upon a published journal article on topics covered in Weeks 6-8.
Your poster should consist of an Introduction (describing background research, aims, hypotheses), Method, Results (make up some pretend results), Discussion (describing implications, limitations, future research suggestions, etc).

We will hold a poster session on Tuesday 2\textsuperscript{nd} June 1pm-3pm, where you will describe your poster to the group. You will be assessed on:

- The significance and feasibility of your research proposal, your ability to design a concise, interesting research poster, your written communication skills, your critical analysis skills, your problem-solving skills

**Due Date:** Tuesday 2\textsuperscript{nd} June (Poster presentation day). Also, submit an electronic version of your poster to Professor Amanda Barnier (Amanda.barnier@mq.edu.au). Assignment 2 will be double marked by Amanda Barnier and Glenn Carruthers

On successful completion you will be able to:

- Improve your ability to draw links between theory, laboratory research and clinical conditions
- Improve your ability to design an interesting, innovative study proposal that follows on from a published journal article
- Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit
- Improve your information technology skills (especially accessing appropriate online resources)
- Improve your problem-solving skills
- Improve your creativity (especially in designing a hypothetical study)
- Improve your ability to accurately describe relevant theories
- Improve your ability to critically evaluate theories
- Improve your ability to develop and present a coherent argument
- Improve your ability to suggest possible experiments to test a particular theory

**Assignment 3**

**Due:** Tuesday 16\textsuperscript{th} June

**Weighting:** 50%

1. **Assignment 3 (50%):** 2000-3000 word essay on any topic related to theories of the sense of embodiment. You will be assessed on:
• Your ability to accurately describe a theory and develop arguments for or against the theory, including but not limited to, possible experimental tests.

**Due Date:** Tuesday 16th June. Email an electronic version to Dr Glenn Carruthers (glenn.carruthers@mq.edu.au). Assignment 3 will be double marked by Glenn Carruthers and Rochelle Cox

On successful completion you will be able to:
- Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
- Improve your ability to critically evaluate scientific claims, methods, and data
- Improve your ability to draw links between theory, laboratory research and clinical conditions
- Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit
- Improve your information technology skills (especially accessing appropriate online resources)
- Improve your problem-solving skills
- Improve your creativity (especially in designing a hypothetical study)
- Improve your ability to accurately describe relevant theories
- Improve your ability to critically evaluate theories
- Improve your ability to develop and present a coherent argument
- Improve your understanding of philosophical approaches to particular topics
- Improve your ability to suggest possible experiments to test a particular theory

**Delivery and Resources**

This unit forms part of a four-unit core sequence covering a range of foundational and cutting-edge research topics in cognitive science, with an emphasis on active research programs at MQ. This team-taught unit is made up of a selection of 3 topic modules, led by experts specialising in these fields. Topics covered include the nature of individual and social memory from an interdisciplinary perspective, disorders of self and delusional beliefs, identity, and body representation. We discuss how cognitive scientists approach research questions and design experiments in these domains.

The aims of this unit are to:
Unit guide COGS710 Advanced Topics in Memory

1. Assist you in becoming familiar with important research, theories, methods, and recent findings in these areas;
2. Highlight interdisciplinary ways to approach and investigate these topics;
3. Assist you in developing the ability to critically evaluate scientific claims, methods and data

There will be 12 weekly seminars that run for 2 hours each.

Time: Tuesdays 1 - 3pm
Location: AHH, room 3.610
Credit: 3 credit points

Attendance Students must attend 80% of all seminars. If unable to attend a seminar, email Rochelle Cox (rochelle.cox@mq.edu.au) BEFORE the class

GENERAL LEARNING OUTCOMES

Knowledge outcomes: Increase understanding of:

1. The nature of hypnosis and research methods in hypnosis
2. The two-factor theory of delusions and the logic of using hypnosis to model delusions
3. Disruptions of self, delusions of misidentification, socially shared delusions
4. The nature of memory and the relevance of ecological validity
5. The role and mechanisms of remembering and forgetting, functions of memory, and the relationship between individual and social memory
6. Methods of natural philosophy
7. Theories of sense of embodiment (as an example, consciousness experience)

Specific skill outcomes: Improve and/or develop ability to:

1. Read an empirical paper and identify its strengths, weaknesses and relevance
2. Critically evaluate scientific claims, methods and data
3. Draw links between laboratory research and clinical conditions (within a scientist-practitioner approach)
4. Present research to an audience in a clear and engaging way
5. Design a concise and engaging scientific research poster that follows up/builds upon a published study.

https://unitguides.mq.edu.au/unit_offerings/46422/unit_guide/print
### Unit Schedule

**TOPICS**

**Weeks 1 – 4: Introduction + Hypnosis and Delusions**

Here we will cover the logic of using hypnosis to model delusions, disruptions of self (e.g., identity delusions, dissociative identity disorder, mirrored-self misidentification), and socially shared delusions.

**Weeks 5 – 8: Autobiographical, Social and Collective Memory**

Here we will discuss memory research from theoretical inspiration to methodological innovation to empirical implementation and to real world relevance. We will consider remembering and forgetting, what memories are for, and social scaffolding of memory especially as we age.

**Weeks 9 – 12: Body Experience: Testing Theory in the Lab**

Here we will consider how explanations of particular experiences (in this case, the experience of the body as oneself) derived from philosophical theory, can be tested in the lab. We will also see how theory can be refined and developed in light of new data.

**Week 13: Poster Presentation Session**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>Feb</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Mar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>Mar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>Mar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>Mar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Autobiographical remembering and forgetting

What we remember vs forget; motivated forgetting; forms of forgetting; modelling forgetting in the laboratory

**Read:** Erdelyi (2006); [Students review papers](https://unitguides.mq.edu.au/unit_offerings/46422/unit_guide/print)

---

**Policies and Procedures**

Macquarie University policies and procedures are accessible from [Policy Central](https://unitguides.mq.edu.au/unit_offerings/46422/unit_guide/print). Students should be aware of the following policies in particular with regard to Learning and Teaching:
Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html


Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

**Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

**Results**

Results shown in iLearn, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au.

**Student Support**

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

**Learning Skills**

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

**Student Enquiry Service**

For all student enquiries, visit Student Connect at ask.mq.edu.au

**Equity Support**

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.
IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/help.

When using the University’s IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

• Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
• Improve your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way
• Improve your ability to design an interesting, innovative study proposal that follows on from a published journal article
• Improve your ability to accurately describe relevant theories
• Improve your ability to critically evaluate theories
• Improve your ability to develop and present a coherent argument
• Improve your ability to suggest possible experiments to test a particular theory

Assessment tasks

• Assignment 1
• Assignment 2
• Assignment 3

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:
Learning outcomes

• Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
• Improve your ability to critically evaluate scientific claims, methods, and data
• Improve your ability to draw links between theory, laboratory research and clinical conditions
• Improve your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way
• Improve your creativity (especially in designing a hypothetical study)
• Improve your ability to accurately describe relevant theories
• Improve your ability to critically evaluate theories
• Improve your ability to develop and present a coherent argument
• Improve your understanding of philosophical approaches to particular topics
• Improve your ability to suggest possible experiments to test a particular theory

Assessment tasks

• Assignment 1
• Assignment 2
• Assignment 3

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

• Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
• Improve your ability to critically evaluate scientific claims, methods, and data
• Improve your ability to draw links between theory, laboratory research and clinical conditions
• Improve your problem-solving skills
• Improve your creativity (especially in designing a hypothetical study)
• Improve your ability to critically evaluate theories
• Improve your ability to develop and present a coherent argument
• Improve your ability to suggest possible experiments to test a particular theory

Assessment tasks

• Assignment 1
• Assignment 2
• Assignment 3

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

• Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
• Improve your ability to critically evaluate scientific claims, methods, and data
• Improve your ability to draw links between theory, laboratory research and clinical conditions
• Improve your ability to design an interesting, innovative study proposal that follows on from a published journal article
• Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit
• Improve your ability to accurately describe relevant theories
• Improve your ability to critically evaluate theories
• Improve your understanding of philosophical approaches to particular topics

Assessment tasks

• Assignment 1
• Assignment 2
• Assignment 3

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:
Learning outcomes

• Improve your ability to read a theoretical, review, clinical, or empirical paper and identify its strengths, weaknesses, and relevance
• Improve your ability to critically evaluate scientific claims, methods, and data
• Improve your ability to draw links between theory, laboratory research and clinical conditions
• Improve your ability to capture the essence of an article and to communicate your point of view on it in a clear and logical way
• Improve your ability to design an interesting, innovative study proposal that follows on from a published journal article
• Improve your knowledge of relevant theoretical approaches and research methods of the topics covered in this unit
• Improve your information technology skills (especially accessing appropriate online resources)
• Improve your problem-solving skills
• Improve your ability to critically evaluate theories
• Improve your ability to develop and present a coherent argument
• Improve your ability to suggest possible experiments to test a particular theory

Assessment tasks

• Assignment 2
• Assignment 3

Required and Recommended Reading

Each week, there will be one main reading, and a selection of additional readings. To prepare for each week, we recommend you read the main reading and one of the additional readings.

HYPNOSIS AND DELUSIONS

WEEK 1: Introduction + Delusions and Instrumental Hypnosis

Main Reading


Additional Readings


**WEEK 2: Disruptions of Self**

**Main Reading**


**Additional Readings**


**WEEK 3: Mirrored-self Misidentification**

**Main Reading**


**Additional Readings**


**WEEK 4: Socially transmitted delusions**

**Main Reading**


**Additional Readings**


**AUTOBIOGRAPHICAL, SOCIAL AND COLLECTIVE MEMORY**

**WEEK 5: Memory in the laboratory and ecological validity**

**Main Readings**


**Additional Readings**


**WEEK 6: Autobiographical remembering and forgetting**

**Main Reading**


**Additional Readings**


**WEEK 7: What memories are for**

https://unitguides.mq.edu.au/unit_offerings/46422/unit_guide/print
Main Reading


Additional Readings


**WEEK 8: Social scaffolding of memory**

Main Reading


Additional Readings


**BODY EXPERIENCE: TESTING THEORY IN THE LAB**

**WEEK 9: The sense of embodiment**

Main Reading


Additional Readings


**WEEK 10: The body schema account of the sense of embodiment**
Main Reading


Additional Readings


4) Kammers et al. (2009). The rubber hand illusion in action. *Neuropsychologia, 47*(1), 204-211

**WEEK 11: The conceptual space account of the sense of embodiment**

Main Reading


Additional Readings


3) Gardenfors (2004). “Chapter 1” in *Conceptual Spaces: The Geometry of Thought*

4) Gardenfors (2004). “Chapter 4” in *Conceptual Spaces: The Geometry of Thought*

**WEEK 12: Testing philosophical theories in the lab**

Main Reading

1) Carruthers et al. (forthcoming). "First tests of the conceptual space account of the rubber hand illusion"

Additional Readings

2) Clark (1992). “Chapter 4” in *Sensory Qualities*

3) Clark (1992). “Chapter 6” in *Sensory Qualities*