IMPORTANT

THIS IS THE HANDOUT AND SYLLABUS USED IN THE PREVIOUS ACADEMIC YEAR (2013-14)

SPECIFIC CONTENTS AND DETAILS LIKE TIMETABLING MAY CHANGE IN 2014-15

FOR FURTHER INFORMATION CONTACT THE LECTURER
This advanced module analyses the development and evolution of *Mindreading* or *Theory of mind* skills—the ability to respond to or understand the mental states of oneself and others, which lies at the heart of many of the key cognitive achievements of humans. This ability (or rather this set of abilities) is studied at the confluence of different disciplines in cognitive science: biology, philosophy of mind, ethology, developmental and comparative/evolutionary psychology, psychopathology, neuroscience... This module concentrates mainly on the contributions of developmental and comparative psychology, but situating them in their wider interdisciplinary context and exploring their implications for the understanding of atypical cognition, specially autism. The course will discuss the current state of research in this area, emphasizing both empirical and conceptual aspects and combining the evolutionary and developmental approaches.

This is an advanced module and as such it follows a discussion seminar format in which material (mainly journal articles) must be read by the students before the seminar and discussed together under the lecturer’s guidance. In some sessions there will be introductory lectures that may be followed by group discussion of target papers. Other sessions will entirely consist of discussions of papers introduced by students. The key to the success of this module format and your own learning is reading the papers before the sessions and actively participating in the discussions with questions, ideas, and queries suggested by your reading.

The reading list consists of Core Readings and Further Readings. Core Readings are of two types: Discussion Readings (the papers that will be presented and discussed in the seminars) and Background Readings (essential papers to understand the state of the art and the significance of the core readings material). Both Discussion and Background Core readings are expected to be known and used in the assessments by students. In addition, in some sessions I will indicate Further Reading references: these provide supplementary materials for those who wish to know more about particular subjects, but they are not compulsory reading.
You will also find recommendations for books or reviews that provide more general sources of information about the history of the debates or overviews of the current state of the art in some of the key areas of the Module.

Sessions topics and their corresponding readings will be provided in a separate document.

**ASSESSMENT**

**Continuous Assessment** (25% of total mark) consists of an essay (maximum 2,000 words excluding references) whose topic will be provided by the 3rd week of semester. Deadline for submission is 14/04/2014 at 14:00pm. In the **2-hour exam** (75% of final mark) you will answer two questions out of four.

**MARKING CRITERIA**

<table>
<thead>
<tr>
<th>Grade……</th>
<th>0-6.9</th>
<th>7</th>
<th>8-10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>No evidence that appropriate sources have been used OR copying* from other sources (even if source is cited).</td>
<td>Minimal reference to appropriate sources OR over-reliance on other work (e.g. close paraphrasing*, perhaps with lack of understanding of the material).</td>
<td>Major omissions, Use of a narrow range of sources. General reliance on secondary or out-of-date material.</td>
<td>Major theories/ideas presented, but use of a narrow range of sources, particularly secondary sources.</td>
<td>Covers all the major issues with use of a range of appropriate and up-to-date primary sources.</td>
<td>Thorough and detailed grasp of the issues with widespread use of primary sources and widespread evidence of independent use of sources.</td>
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<tr>
<td><strong>Referencing</strong></td>
<td>Missing references and referencing of material not cited in the text</td>
<td>Minimal and generally inaccurate use of referencing</td>
<td>Frequent errors both in the content and style of references.</td>
<td>Reference list broadly comprehensive, but frequent failure to use appropriate style in citing references</td>
<td>Referencing accurate, though some stylistic errors in the reference list</td>
<td>Thorough and proper referencing throughout.</td>
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<tr>
<td><strong>Factual accuracy</strong></td>
<td>Little or no accurate material</td>
<td>Many substantive errors</td>
<td>Some substantive errors</td>
<td>Occasional substantive errors</td>
<td>Only minor errors.</td>
<td>No substantive errors, virtually no minor errors.</td>
</tr>
<tr>
<td><strong>Relevance</strong></td>
<td>Little or no material relevant to the question</td>
<td>Most of the material irrelevant to the question</td>
<td>Much of the material irrelevant to the question</td>
<td>Some material irrelevant to the question</td>
<td>Little material irrelevant to the question</td>
<td>No or very little material irrelevant to the question</td>
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<tr>
<td><strong>Organisation and coherence</strong></td>
<td>No organisation of material</td>
<td>A list of disjointed material that does not amount to a coherent argument or thesis</td>
<td>The outlines of an argument, but mostly a list of material with no development of ideas</td>
<td>Some development of an argument, but often disjointed and some listing</td>
<td>For the most part, clear and well structured with the argument or central thesis well developed</td>
<td>Argument or central thesis well structured, well developed and sustained throughout, leading to well-argued conclusion</td>
</tr>
<tr>
<td><strong>Precision of expression</strong></td>
<td>Absence of scientific precision in the use of terms and concepts</td>
<td>General failure to use terms and define concepts precisely</td>
<td>Some instances of scientific precision in the use of terms and concepts, but predominant slowness and redundancy</td>
<td>Adequate precision in overall terms, but still widespread instances of slowness and redundancy</td>
<td>General use of precise scientific language with few instances of slowness or redundancy</td>
<td>Clear analytic use of language, with precise use of concepts and negligible redundancy of expression.</td>
</tr>
<tr>
<td>Critical evaluation</td>
<td>No valid evaluation of evidence</td>
<td>General lack of evaluation</td>
<td>Trivial or underspecified criticisms (e.g. 'need more research')</td>
<td>Raises some issues but displays some illogical reasoning</td>
<td>Identifies all the main issues relating to topic/evidence/methodology. Shows signs of independent evaluation</td>
<td>Sound and thorough data evaluation. Widespread evidence of original thought.</td>
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*In some cases, the nature and extent of plagiarism will not merely attract a failing grade, but will also require referral to the Academic Disciplinary Process.

**Avoiding Academic Misconduct (Plagiarism)**

You should know very well by now the norms about plagiarism and the advice about how to avoid it provided by the university. Please make sure you pay special consideration to this when writing your assessments.

One of the golden rules to avoid plagiarism is to never use the strategy of copying and pasting from other sources even if you are planning to rewrite the excerpts. Plagiarism will be detected by Turnitin even if the original source is paraphrased. You must always write your own account in your own words.

Links to University Policy and Guide to avoid academic misconduct:
http://www.st-andrews.ac.uk/students/rules/academicpractice/

**Feedback**

*Verbal Feedback on presentations and discussions*

One of the main aims of SH seminar discussions is to allow and encourage students’ exploration and discussion of their own critical views and ideas on the papers and topics discussed. I will provide verbal feedback (sometimes in the form of questions or expansions upon suggested ideas), by intervening in the discussion during the seminars. Please feel free to make use of the Office Hours or book a meeting if you wish to have further feedback or explanations on your presentation or class interventions.

*Office hours*

You can use my office hours (Thursdays 3-4:30 pm) or arrange meetings to seek feedback on specific issues or problems emerged in class discussions or during your readings.

*Written feedback on CA essays*

After submission of your CA you will receive detailed individualized feedback on your piece of work, in the form of a standard feedback form plus extensive annotations and comments on your essay that you will be able to download from MMS. You will receive this feedback two weeks after submission or earlier. Please read it carefully and if in doubt or in need of further clarification, arrange a meeting with me.

*Generic feedback on examination*

After the exams have been marked, a Generic feedback document, explaining what was expected in the answers and strengths and weaknesses of the actual answers will be made available on Moodle. If in doubt or in need of further clarification, please contact me with your query and we can discuss it by email or by arranging a meeting.
Office Hours
Every Thursday I will be available from 3pm to 4:30pm in my office (Room 2.55) for discussion or queries about the module contents. If this is not suitable, you can either send me an email (Jg5) with your query and/or arrange a meeting outside Office Hours.

STUDENT PRESENTATIONS
This module, as all SH modules, primarily relies upon supervised private study combined with class discussion of the module readings. The main aim of the seminars is to discuss and analyze the core readings set for the day. The discussion will be initiated with short presentations by members of the class.

• You are expected to make your presentation using PowerPoint (please remember to use a big enough font — minimum 20pt — to facilitate the reading from the back of the seminar room). ALL students (not only those in charge of the presentation) are expected to have read the core papers and come to the discussion with questions and remarks.

• All students are required to make at least one presentation during the course. Although the presentation itself is not assessed, it is a requirement of the course. I can provide feedback on the presentations if the PPTs are submitted to me after the presentation. You can also seek feedback on a draft before the actual presentation. Failure to contribute a presentation will lead to the issue of an Academic Alert and eventually failure in the module whatever the marks obtained in the assessments.

• Paper presentations must not be uncritical summaries of the contents; rather, they must actively direct the audience towards what you perceive as key contributions and potential points of contention of the paper. Avoid general, unspecific criticisms, like “more participants would have been desirable”.

• When several people are presenting on the same day, make sure that you coordinate your presentations. Do not simply divide the papers and then work independently. The presentation should address the core problem for discussion in a coherent way.

• Use overheads of graphics (results, tables, etc.) as an aid to your discussion and the class discussion.

The list of core papers may be complemented with further reading references. They provide useful background information that may help you preparing a better presentation. It is also useful that you consult other papers or book sections mentioned in the core readings (for example, empirical studies that you think are crucial but may be insufficiently explained in the reading). One of the things that will be more valued in the continuous assessment and in the marking of the exams is your ability to go beyond the core readings: both in terms of providing your own reflection upon their contents and providing connections with material from other papers.

The exact length of a presentation may vary depending upon the length and complexity of a paper, but you should expect to spend only between 5 and 10 minutes per paper. Never more than 10 mins. A maximum of four or five slides should be enough for most papers.
OVERVIEW OF COURSE

[SESSIONS 1 TO 7]


This session will consist of an introductory Lecture in which the topic of the course will be situated in its current context. I will introduce and discuss the notions of mental state, Theory of mind, intentionality, modularity, domain specificity, etc. I will also start explaining the theoretical models of Theory of mind, concentrating mainly on the developmental literature.

Background sources (not compulsory) useful for topics treated in this Session:


—Stanford Encyclopaedia of Philosophy (http://plato.stanford.edu/), especially the following entries: Mental Representation, Intentionality, Belief, Folk Psychology, Modularity.


SESSION 2 (4/2/14). Developmental Models of Mindreading and Key Current problems [Lecture & Readings]

This session discusses the main developmental models of Theory of Mind: The “Theory theory” models (defended by Wellman, Gopnik, and Perner among others), the “Modularity” model (defended by Alan Leslie and Baron-Cohen among others), and the Simulation and Mirroring models. We will discuss what was once considered to be the “litmus test” of theory of mind: the understanding of false belief. We will conclude with an introduction to the beginnings of the “infant False-Belief” revolution, which is currently at the cutting edge of ToM research, through the discussion of two key papers.

The Core Background Readings for this session (compulsory) are:


Critical interpretations and reactions to Onishi and Baillargeon, 2005:


Further Reading (non-compulsory)


SESSION 3 (11/2/14). False belief understanding in infants?

In this session we will discuss in depth the challenge of current cutting edge research on possible early FB understanding in human infants: apparently successful attempts at experimentally demonstrating false-belief understanding in infants under two years of age with non-verbal methods.
The papers listed below will be presented for discussion by students. Each represents a different method of non-verbal research.

**Core Discussion Readings:**


**Further Reading:**

A summary of the first wave of infant FB studies with a suggested explanation from the perspective of Baillargeon and colls. can be found in: Baillargeon, Scott and He (2010), False-belief understanding in infants. Trends in Cognitive Science, 14 (3): 110-118. [PDF]

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**SESSION 4 (18/2/14). False-belief in infants: further studies and explanatory models.**

In this session we discuss further infant FB studies, but this time with a focus on the theoretical controversies that surround them. We start with another study from Baillargeon’s team that also presents their theoretical position in depth, followed by an update of Perner’s objections to infant FB, and a theoretical paper about implications for understanding the ToM system in adults.

**Core Discussion Readings**


SESSION 5 (25/2/14). Precursors of ToM in infancy: is Joint Attention mentalistic?

Independently of the debate about the origins of false-belief understanding addressed in the previous session, a fertile and growing line of research in the last years has addressed the development of other theory of mind skills in young infants, especially the set of skills known as “Joint Attention” that emerge in human infants at the end of the first year of life. Here we will concentrate on some aspects of Joint Attention, initially conceptualized as an ontogenetic and maybe phylogenetic “precursor” to more complex ToM (e.g., false-belief). The three papers address the issue of whether early joint attention behaviours reflect a mentalistic understanding of the other.

Core Discussion Readings:


SESSION 6 (4/3/14). Evolutionary precursors: Joint Attention in non-human primates

Some (but not all) of the joint attention skills described in young human infants as early manifestations of ToM have been discovered in non-human primates and other animals. One of them — gaze following — seems to be evolutionarily very old and present in virtually all non-human primates. But does gaze following involve an understanding of mental states such as Seeing or Attention? Or is it a primitive mechanism that only humans can interpret in mentalistic terms?

Core Discussion Readings


Further reading:

SESSION 7 (11/3/14). Evolutionary precursors: Knowledge and false belief.
More complex forms of Mind-reading involve the understanding of so-called “epistemic states”, linked to how reality is represented rather than what is perceived. The readings in this section comprise attempts at testing the understanding of knowledge and false-belief in non-human primates, as well as a methodological and conceptual critique of the achievements and interpretations so far.

Core Discussion Readings


Further Reading

[EASTER BREAK]

SESSIONS 8 TO 11, AFTER THE EASTER BREAK, WILL ADDRESS THE TOPIC OF ATYPICAL THEORY OF MIND WITH SPECIAL REFERENCE TO AUTISM AND ITS IMPLICATIONS FOR UNDERSTANDING THEORY OF MIND IN TYPICAL DEVELOPMENT. THE READING LIST FOR THESE SESSIONS WILL BE AVAILABLE SHORTLY.
SESSION 8 (1/4/14). Controversies about animal and infant ToMs.
We will devote this session to review and consolidate the material discussed in the previous weeks, using the following theoretical papers as a guide. Lecture plus General Discussion led by Lecturer.

**Core Readings**

**Further Reading:**

SESSION 9 (8/4/14): ToM in Non-Western cultures and Deaf children

**Core Discussion Readings**

**Further reading**
—Jennie Pyers and Peter A. de Villiers (2013): Theory of Mind in Deaf Children: Illuminating the relative roles of language and executive functioning in the development of social cognition. In
SESSION 10 (15/4/14): Autism: the riddle of explicit and implicit Mindreading I.

Core Discussion Readings


Further reading


SESSION 11 (22/4/14): Autism: the riddle of explicit and implicit Mindreading II

Core Discussion Readings

