Visual Word Recognition MSc course

This course is designed to bring students who may or may not be from a Psychology background, up to speed with a range of issues in the recognition of isolated words and words in text. We will consider important advances over the last two or three decades, along with input from a more distinctly Edinburgh-based view of the field, giving more weight to anatomical constraints, to computational modelling, and to cross-linguistic data.

There will be 5 2-hour lecture slots (we will break halfway in each) and two tutorials.

Reading list

Each lecture has an accompanying reading, available electronically, which complements material in the lecture. The reading is not critical to understanding the lecture. The lecture slides are also available electronically. It is critical to attend the lectures as only the outline content is present in the slides. Research suggests that students who do not have English as their native language may benefit from looking at the slides in advance of the lecture. The majority of the readings are recent papers that should provide a good starting point for further reading. The assessment for this course is a single essay, and it is expected that students will quickly augment the set readings with further reading of recent papers in the area that attracts them most. Students are able to choose their own essay titles, subject to approval by the course organizer; alternatively, a list of potential titles will be provided during the course.

Week 1:

Read as much of this as you need to get an idea of some of the issues of visual word recognition in Chinese. The authors propose a particular model of the reading of Chinese, but we are more concerned here with the general introduction they give to the problems of processing Chinese orthography.

Week 2:

This is a short conference paper on the role of attractors in modelling, but which also deals with the issue of choosing useful representations.
Week 3:

This paper deals with some of the issues relevant to anatomical pathways and locations in the brain concerned with visual word recognition, and the issue of timing.

Lecture 4:

This book chapter summarises some of the issues involved in reading text.

Lecture 5:

This lengthier paper deals with the latest elaboration of the “triangle model” framework, which has been arguably the most influential approach to understanding visual word recognition (in part because of its critique of the DRC model). Over the last 20 years it has forced researchers to think about new distinctions in processing, and has generated novel concepts in research into visual word recognition.

Tutorial 1:

The reading for the first tutorial (in Week 2) on xx/x/06 paper raises various issues of representation that we will take up during the course.

Week 2:

The reading for the second tutorial gives an alternative introduction to some basic concepts in connectionist modelling.