

Introduction to Cognition and Communication

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Preface

This book grew out of a course, and the course grew out of a very particular set of intellectual and institutional needs. The Centre for Cognitive Science was a department founded in 1969 (with the name, later changed, of “Epistemics”) and that department initially taught only graduate-level courses in the interdisciplinary study of cognition. In 1994, we sought to extend the Centre’s teaching into the undergraduate syllabus. It would have been possible to “start at the end” and teach final-year undergraduates a specialized course. Instead we decided to teach an introductory “service” course open to students from any department in the university.

We did this because the disciplines involved (linguistics, logic, AI, philosophy, and psychology) are all subjects that are not much taught in high school, and we wanted to put on a course that would give students from any background a grounding in how these disciplines combined to provide interdisciplinary theories of human communication.

This goal meant that surveying the various literatures was not really an option. Instead, we would have to isolate only a few topics for study, chosen on the basis that they brought several disciplines to bear on a single phenomena involving human communication. Our intention was to explore these few topics in some depth from several disciplinary angles.

We were assured by some that this would not work—how can students learn to put together several disciplines before they have been inducted into any discipline? Our view is that students start out with an interest in certain problems, and are often baffled by the way that different disciplines slice these problems up. In Edinburgh, the various relevant disciplines (Psychology, Philosophy, Artificial Intelligence, Computer Science, and Linguistics) are housed in departments with some miles between them. These kinds of distances between departments in the humanities and the sciences are not unusual in any university, even campus-based ones. And students bouncing between departments sometimes find a radical translation problem between the languages spoken on the different sides.

We felt that a “service” course that examined the difference in perspectives was what was needed. How much easier for the student if we started with target problems and tried to show how the various disciplines developed their distinctive views, and how those views relate, or fail to relate. This can serve two kinds of student: ones who would never pursue any of these disciplines any further, at least giving them an

insight into some of the concepts underlying modern scientific treatments of human mental processes, and the technology that is all around them; and another group who might actually discover that one or more of these disciplines could be what they wanted to pursue. They would then have a rational basis for selecting their direction.

The course can, with different surrounding environments, be taught at a number of different levels. Certainly first year nonspecialist students have demonstrated that they can come to grips with this material. For them we have kept intratext references to a minimum and listed further readings at the end of each chapter. We have included some suggestions about how to go about studying this material. There is a website with multiple choice questions intended mainly as a study aid for such students (see <http://www.inf.ed.ac.uk/teaching/classes/hc1h> for a number of teaching resources that accompany this book, including slides). But it would not be difficult for lecturers to supplement this book with readings that would take any of the topics covered here into as much depth as desired (again, some leads in this direction are supplied at the end of each chapter). We have taught large parts of this course at the masters level to interdisciplinary classes of students, many of whom already know their own discipline's treatments of these topics. None have complained that the duplication has been mere redundancy, and some have commented that hearing the other perspectives on the same topic can be a source of ideas for their own research.

The course was a team effort from the start, and the book even more so. The author order is reverse alphabetical. Although the first author started the whole process off, each of the authors is an equal contributor to the text. We of course owe huge debts: first and foremost to the several years of students who have taken the course. Their feedback has substantially reshaped the end product. We also owe a debt of gratitude to our colleagues who supported the course, without which the book would not have happened, particularly to Jon Oberlander and John Lee who have taught the course in our periodical absences and to the many tutors (too numerous to mention individually)—their suggestions and feedback have greatly influenced the way this book is written. We would like to thank the reviewers for MIT Press, especially Georgia Green, whose detailed comments significantly improved the quality of the text. We are also indebted to the several editors and copy editors at MIT Press who made this book possible. And we apologize for delivering the

final manuscript four years late! Last, but definitely not least, we would like to thank all staff at the Human Communication Research Centre at the University of Edinburgh for their support and encouragement over the years and for providing such a collegial and stimulating environment in which to do teaching and research.

We end with some remarks about the form of this book:

Conventions We use the following conventions in these notes. When we use a word or words as an example, we will write them like this: *Two dogs barked*. That style of typeface is also used to *emphasize* words in the text. A ‘?’ preceding a sentence indicates that that sentence is judged to sound odd. We will introduce technical terms in the following way: SYSTEMATICITY.

Exercises At a number of places below, we include exercises. Attempting the exercises may help you to improve your understanding. If you don’t have time to complete the exercises, just making sure that you understand what each exercise is asking will be of benefit to you.

Experiments and intuitions Often we want you to reflect on your opinion on a particular claim, or to try a small psychological experiment on yourself. In some cases, reading ahead without thinking about the problem or doing the experiment may spoil the intuition you have about a problem, or may mean that you know what the “correct” result is.

Citations and References As we mentioned above, we have kept citations in the running text to an absolute minimum. Instead, at the end of each chapter, we have included a section entitled *Further Reading*, where we give details of not only the original references where content presented in the chapter first appeared, but also details of how one can follow up certain topics in more depth.

Glossary and Index An integrated glossary and index is supplied as appendix C. This is intended to help those readers who don’t read the book from cover to cover to come to grips with the jargon. The glossary gives the page reference where the term in question was first introduced and defined; on occasion, the glossary itself will also include a short

definition of the term in question. The index supplements this glossary with the page references where the various topics are discussed.