

THE COMPUTER REVOLUTION IN PHILOSOPHY (1978)

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ACKNOWLEDGEMENTS

I have not always attributed ideas or arguments derived from others. I tend to remember content, not sources. Equally I'll not mind if others use my ideas without acknowledgement. The property-ethic dominates too much academic writing. It will be obvious to some readers that besides recent work in artificial intelligence the central ideas of Kant's *Critique of Pure Reason* have had an enormous influence on this book. Writings of Frege, Wittgenstein, Ryle, Austin, Popper, Chomsky, and indirectly Piaget have also played an important role. Many colleagues and students have helped me in a variety of ways: by provoking me to disagreement, by discussing issues with me, or by reading and commenting on earlier drafts of one or more chapters. This has been going on for a long time, so I am not sure that the following list includes everyone who has refined or revised my ideas, or given me new ones:

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The U.K. Science Research Council helped, first of all by enabling me to visit the Department of Artificial Intelligence in Edinburgh University for a year in 1972/3, and secondly by providing me with equipment and research staff for a three year project on computer vision at Sussex.

Bernard Meltzer was a very helpful host for my visit to Edinburgh, and several members of the department kindly spent hours helping me learn programming, and discussing computing concepts, especially Bob Boyer, J. Moore, Julian Davies and Danny Bobrow. Steve Hardy and Frank O'Gorman continued my computing education when I returned from Edinburgh. Several of my main themes concerning the status of mind can be traced back to interactions with Stuart Sutherland (e.g. see his 1970) and Margaret Boden. Her book *Artificial Intelligence and Natural Man*, like other things she has written, adopts a standpoint very similar to mine, and we have been talking about these issues over many years. So I have probably cribbed more from her than I know.

She also helped by encouraging me to put together various privately circulated papers when I had despaired of being able to produce a coherent, readable book. By writing her book she removed the need for me to give a detailed survey of current work in the field of A.I. Instead I urge readers to study her survey to get a good overview.

I owe my conversion to Artificial Intelligence, towards the end of 1969, to Max Clowes. I learnt a great deal by attending his lectures for undergraduates. He first pointed out to me that things I was trying to do in philosophical papers I was writing were being done better in A.I., and urged me to take up programming. I resisted for some time, arguing that I should first finish various draft papers and a book. Fortunately, I eventually realised that the best plan was to scrap them.

(I have not been so successful at convincing others that their intellectual investments are not as valuable as the new ideas and techniques waiting to be learnt. I suspect, in some cases, this is partly because they were allowed by the British educational system to abandon scientific and mathematical subjects and rigorous thinking at a fairly early age to specialise in arts and humanities subjects. I believe that the knowledge-explosion, and the needs of our complex modern societies, make it essential that we completely re-think the structure of formal education, from primary schools upwards: indefinitely continued teaching and learning at all ages in sciences, arts, humanities, crafts (including programming) must be encouraged. Perhaps that will be the best way to cope with unemployment produced by automation, and the like. But I'm digressing!).

Alison, Benjamin and Jonathan tolerated (most of the time) my withdrawal from family life for the sake of this book and other work. I did not wish to have children, but as will appear frequently in this book (e.g., in [the chapter on learning about numbers](#)), observing them and interacting with them has taught me a great deal. In return, my excursions into artificial intelligence and the topics of the book have changed my way of relating to children. I think I now understand their problems better, and have acquired a deeper respect for their intellectual powers.

The University of Sussex provided a fertile environment for the development of the ideas reported here, by permitting a small group of almost fanatical enthusiasts to set up a 'Cognitive Studies Programme' for interdisciplinary teaching and research, and providing us with an excellent though minuscule computing laboratory. But for the willingness of the computer to sit up with me into the early hours helping me edit, format, and print out draft chapters (and keeping me warm when the heating was off), the book would not have been ready for a long time to come.

I hope that, one day, even better computing facilities will be commonplace in primary schools, for kids to play with. After all, primary schools are more important than universities, aren't they?

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