Many of the conceptual confusions fundamental to modern cognitivist theory had already been identified and widely recognized before the ‘cognitive revolution’ of the 1960s. Yet, whenever such confusions are pointed out, they are either fleetingly acknowledged, only to be quickly forgotten, or, more usually, emphatically denied. And, as I have found to my own cost, cognitive psychologists become outraged if you suggest that they may even be dualists.

The trouble is that when psychologists think of theory, they usually assume that, in the case of theory, surely everything is set out explicitly. Everything is up-front. Yet, as I will try to explain, some fundamental aspects of modern cognitive theory are implicit in (1) metaphors, (2) methodology, (3) long-established scientific terminology, and even (4) the official history of modern cognitivism. They are unconscious. So, when cognitive psychologists flatly deny that they are confused, they are, in fact, in denial. They are saying one thing, and meaning quite another.

My chapter, then, is concerned with the precarious conceptual structure of modern cognitivism. But it is not quite conceptual analysis in the sense in which this has developed within analytical philosophy. It is an attempt to situate the language of psychological theory and methodology historically within research practice. It draws upon discursive approaches to the history of psychology, most notably the work of Kurt Danziger (1990). But it is also, I believe, consistent with Wittgenstein’s insistence that language use needs to be situated within ‘the broader “forms of life” which ultimately give those language-games their significance’ (Toulmin, 1969, p. 61). I will focus upon three examples of unconscious theory that continue to structure modern cognitivist theory.
15.1 The computer metaphor, the ‘active mind’, and mind-body dualism

My first example of unconscious theory concerns the unintended and unanticipated implications of metaphor. Since the earliest days of cognitive psychology, a contrast has been drawn between the poverty of the mechanistic and associationist approach of the neo-behaviourists, and the alternative emphasis upon the ‘active mind’. According to this view, perceiving, remembering and thinking should be understood, as Bartlett (1932) nicely put it, as ‘an effort after meaning’.

One of the main attractions of the computer metaphor of mind has been that it promises to capture the active and organized nature of psychological processes. As its early proponents themselves insisted, the so-called computer metaphor, as it has been explicitly formulated in modern psychology, should be regarded as a program metaphor:

Our position is that the appropriate way to describe a piece of problem-solving behaviour is in terms of a program, a specification of what the organism will do under varying environmental circumstances in terms of elementary information processes it is capable of performing. This assertion has nothing to do – directly – with computers. Such programs could be written (now that we have discovered how to do it) if computers never existed. Digital computers come into the picture only because they can, by appropriate programming, be induced to execute the same sequences of information processes that humans execute when they are solving problems. (Newell, Shaw, and Simon, 1958/1991, p. 388, emphasis added)

In their early work on the ‘Logic Theorist’, Newell and Simon used their relatives and graduate students to ‘run’ their program by following the instructions contained in the program they were given (see Gigerenzer and Goldstein, 1996). And here is the crucial ‘twist’: The people running the program did not themselves know what they were doing: ‘The actors were no more responsible than the slave boy in Plato’s Meno [who “solved” a geometrical problem despite himself], but they were successful in proving the theorems given them’ (Simon, 1991, p. 207).

The implications of the program metaphor have been endlessly discussed, and so I will not to pursue all the different issues here, but simply two of the more neglected ones. The first is that the program metaphor actually undermines the cognitive theorists’ attempt to theorize the active mind, the very reason they invoked this metaphor. As