In this penultimate chapter, I take Witz’s theoretical work on patriarchal exclusion in the medical profession (Witz, 1992) and apply her concepts to a key study from the USA on the history of women’s exclusion from science (Rossiter, 1982; 1995). My aim is to understand the meticulously researched detail of Rossiter’s two books in a sociological way by asking whether Witz’s categories help explain women’s relationship to science in twentieth century America. In so doing, I am trying to ‘see the wood for the trees’ and I am also asking whether Witz’s categories, developed in the context of British medical men’s exclusion of medical women, are adequate in bringing about an understanding of American women’s relationship with the sciences. These categories are: exclusionary, demarcationary, inclusionary and dual closure.

Witz’s work on patriarchal exclusion and her development of analytical categories seems to me to have been of major importance in introducing the concept of patriarchy into the literature on the professions. The use of her categories to reorganize Rossiter’s work has enabled me to make sense of the historical detail on American women scientists. My conclusion is that a further, fifth, category – contingent inclusion – is useful in understanding the position of women in American science. This category alludes to the fact that women were not entirely excluded from scientific education and employment; rather a ‘grateful few’ were included, but in particular sciences and in particular positions within those sciences. I argue that the inclusion of these few has led, ironically, to a situation where it is difficult to argue that discrimination has taken place. The few who had been allowed in could be held up as those who had made the required standard, a standard which had been arrived at by objective, ‘fair test’ scientific criteria. The implication was obvious: the rest should simply try harder to attain the necessary standard.
In using Witz’s categories in this way, a methodological issue arises: I have gone one step further than secondary analysis, where primary data are reanalyzed, since I have reorganized Rossiter’s analysis of the primary data, thereby setting up a three-step process. I have not considered any source other than Rossiter’s and I have not revisited the primary data myself. There is therefore the possibility that any bias which has come in via Rossiter’s interpretation has been magnified by my analysis.

In reading the close detail of Rossiter’s two volumes, it becomes clear that there is major gap: the history of British women in science. There is no equivalent in Britain which has the breadth and detail of Rossiter’s work and there is a clear need for research here. Were the British historical work available, parallels might be found. I cannot of course claim that what I say can be generalized to Britain. Because of the lack of equivalent work on British women scientists, there is no chapter in this book on the way in which Witz’s categories might apply to their history.

In comparison to Britain, American data are plentiful. Yet even there, there are clearly gaps in locating gendered data. For example, Rossiter reports that the American Chemical Society conducted a study in the late 1950s of the aspirations of its members, 7 per cent of whom were women. But women’s responses were excluded from the final report (Rossiter, 1995, p. 307). A major study of the collegiate background of US scientists, the 1952 Origins of American Scientists, excluded women: the authors, Knapp and Goodrich, said that there were so few women in the study that direct comparisons would be unfair. Thus, the major reference work of the time gave the impression that all American scientists were male.

The question arises as to the relevance of examining the historical context in order to understand the situation at the end of the twentieth century. Rossiter argues that the patterns which were laid down from the beginning of the century were hard for subsequent generations to change. For example, she draws attention to the way in which women were used in servicing roles in pre-information technology ‘big science’, such that the concept of ‘women’s work’ was difficult to shift, perhaps particularly because women scientists themselves appear to have mounted such little resistance to being employed in these roles.

**The social, political and economic context**

In addition to ‘big science’, the background which appears to have particularly affected women’s entry into the sciences and the nature of