Many in the Controversy proposed some sort of construction as an answer to the problem of the external world. Stout, Alexander and Nunn tried to do this explicitly to eschew inference and mere postulation, in order to find some more holistic and fundamental way of connecting our immediate experiences to the physical world. But we have also seen some of the limitations of these constructions, such as the open reliance on wholly psychological processes, and the general and sometimes incomplete procedure of these constructions. This latter point is important to stress, because as we shall now see, Russell believed he could provide a more definite procedure of construction. Russell made both these points, against those in the Controversy, after describing the general details of his logical constructions, he says in *OKEW* that the

problem which the above considerations are intended to elucidate is one whose importance and even existence has been concealed by the unfortunate separation of different studies which prevails throughout the civilized world. Physicists, ignorant and contemptuous of philosophy, have been content to assume their particles, points, and instants in practice, while conceding, with ironical politeness, that their concepts laid no claim to metaphysical validity ... Psychologists, who have done invaluable work in bringing to light the chaotic nature of the crude materials supplied by the unmanipulated sensation, have been ignorant of mathematics and modern logic, and have therefore been content to say that matter, space, and time are ‘intellectual constructions’, without making any attempt to show
in detail either how the intellect can construct them, or what secures the practical validity which physics shows them to possess. Philosophers, it is to be hoped, will come to recognise that they cannot achieve any solid success in such problems without some slight knowledge of logic, mathematics, and physics.374

The question that arises is how does mathematics and ‘modern logic’ contribute to the solution of the problem of the external world? More specifically, what role does mathematical logic play in Russell’s constructions? There will be two directions I shall take in this chapter. The first will be to say a few things about how generally the notion of ‘construction’ is related to the mathematical tradition, as opposed to say the psychological one, and how Russell might have seen the former to be related to the philosophical problem of the external world. The second direction is related to the first; it will bring in the parts played by the principle of abstraction and the logic of relations, and their respective roles in setting Russell’s constructions apart from others. Both these directions are related in that it was Russell’s unique conception of philosophy that allowed him to bring in mathematical methods and logic, in order to provide a solution to a question which was usually framed and solved, as we have seen, within some mix of psychology and metaphysics. Indeed one of the main results of this chapter will be to highlight an analogy that Russell may have seen between the issues already emphasized in the Controversy and certain key developments in nineteenth-century mathematics. This analogy centres on the eschewal of postulation. In fact the methods used to solve the issues involved in the mathematical development could then analogously be used to help solve some of the epistemological issues we have so far been considering. This method was the replacement of logical constructions for inferred or postulated entities.

The last chapter will therefore finally deal with some key issues with regard to Russell’s particular method of logical construction. I will try to demonstrate a few things. The first will be the distinctive motivation Russell shared with a particular strain in the history of mathematics. This motive – the avoidance of the postulational method – seeped into his overall philosophy. In this way, to reiterate, I will suggest Russell saw certain analogies between what took place in the history of mathematics and the construal of the issues involved in the Controversy. It is no wonder then that Russell saw an opportunity to apply the methods he used in the development of his mathematical philosophy to the issues concerning the problem of the external world. This will lead us to the