In the course of my training as an economist I have learned that true economic theory should take the form of the dialectic of capital, whose structure is a mirror image of Hegel’s logic. My reason for writing this chapter is to explain to you what all that means. With this preamble-caveat, I wish to begin with a personal episode relating me with Hegel.

Kozo Uno (1897–1977) taught me economic theory when I was an undergraduate. But he never related his approach to economic theory to Hegel’s logic. Nor did he, unlike Lenin, ever recommend his students to familiarize themselves first with the Hegelian logic in order to understand correctly Marx’s Capital. Much later, when I finished my doctoral dissertation in neoclassical economics at the London School of Economics (LSE), I had not the faintest idea of what ‘scientific method’ was all about. I did not even know of Karl Popper, who was then still lecturing at LSE. But upon arriving at Simon Fraser University, I met Larry Boland, who introduced me to Popper. I read a few of his writings. Though I was not so terribly impressed by his ideas, I learned for the first time what ‘scientific method’ involved, and took some interest in the subject. A few years later I had a sort of intellectual crisis in that I could no longer live with seriously, let alone enjoy, neoclassical economics. It was then that I met Uno again after many years of lapsed contact. I tentatively threw at him some logical positivist and Popperian ideas to see his reaction, only to find out that he was totally unperturbed. In fact, his aloofness to that sort of discussion impressed me greatly, for it was so complete and total. This made me suspect that Uno was hiding a scientific method of his own behind his economics, a kind that was not shared by any Western-trained scholar in social science around at that time. It took me a while before I worked out that it was indeed the Hegelian logic.

Uno claimed, on numerous occasions, that Marx’s economics was a ‘science’ and not a mere ‘ideology’. By this he meant that it constituted an objective knowledge that should make sense to anyone regardless of class or ideology. This greatly angered some Marxists who stuck to the ‘partisan
character’ of Marxism, but pleased others who believed in its universal scientific validity. This ‘science-but-not-ideology’ thesis of Uno’s soon became a holy canon of all his followers. But few, even into the twenty-first century, have inquired seriously into what Uno in fact meant by ‘science’ or ‘objective knowledge’, despite his strenuous (but alas not so successful) efforts to insist on a (scientific) method peculiar to Marxian economics. The commonsensical view, promoted vigorously by the positivists, that only natural science constitutes a genuinely objective knowledge, is still quite widespread and persists even among Unoists. Perhaps to some extent Marx himself was responsible for this, as he never stinted praise of Newtonian mechanics as a model of science. Yet it is my belief that what Uno called ‘[scientific] method peculiar to Marxian economics’ was nothing other than the Hegelian dialectic, which, I believe, does not apply to natural science. I regard this to be a matter of vital importance methodologically, epistemologically and ontologically in our apprehension of the Marxian scientific tradition. First, I wish to explain why social science needs its own method distinct from that of natural science.

Natural science

Let me begin by reviewing the widely accepted idea that a knowledge of nature is predictive, prescriptive and prospective. This comes from the fact that nature exists out there (that is outside of ourselves, human beings), so that we cannot know it totally. It, in other words, jealously guards its thing-in-itself and never reveals itself totally. In consequence, our knowledge of nature is bound to be empirical and partial.

All natural scientific propositions take the predictive form: \((a, b, c, \ldots) \rightarrow x\), meaning that, if the conditions \(a, b, c, \ldots\) materialize, the event \(x\) will occur. Mathematical theorems too are always formulated in this way, except that the conditions and the event are axiomatic in mathematics, whereas they are factual in natural science. For example, ‘if water is heated to 100 degrees centigrade, it vaporizes’ would be a natural-scientific statement. This kind of statement refers to a phenomenon pertaining to an aspect or a phase of nature, and gives us only a partial knowledge of nature. Because, if we ask how condition \(a\) did in fact materialize, we must seek to establish another proposition such as \((a_1, a_2, a_3, \ldots) \rightarrow a\), and, if we further ask how \(a_1\) did the same, we must again verify a conjecture such as \((a_{11}, a_{12}, a_{13}, \ldots) \rightarrow a_1\), and so on ad infinitum. Clearly, there can be no end to this type of inquiry. Furthermore, there is also the tricky issue (known as Hume’s problem) that a factual verification of both the conditions and the event is never conclusive, so that the truth of a natural-scientific proposition is always tentative, being relative to the existing state of knowledge. Even the widely accepted, factual proposition that water vaporizes at 100 degrees centigrade is only a so-far, so-good hypothesis, and is never established