

# 9



## *The Three Worlds framework*

Research problems are usually formulated in order to address “real-life” problems: problems in the social and physical world such as stress, unemployment, crime, violence, poverty, and many more. When we talk about defining or conceptualising the research problem, we refer to the process by which someone has identified a real-life problem and “translated” it into a research problem. In order to describe and clarify this and other aspects of the logic of research, we make use of a simple structure – the Three Worlds framework.

This framework, first developed in *Understanding social research* (Mouton, 1996), has proved to be helpful for several reasons:

- To understand the differences in levels of analysis in scientific reasoning.
- To make sense of the differences of “status” between different knowledge claims.
- To understand the interplay between the world of scientific research and everyday life better.
- To help students distinguish between research problems (World 2) and real-life problems (World 1), a distinction that is crucial for developing the research proposal.
- To show how methodological choices (World 2) impact on the way in which we investigate real-life phenomena (World 1).
- To show the links between meta-methodological issues such as philosophical and ethical considerations (World 3) and methodological issues (World 2).

The framework is based on a distinction between three “worlds” (or “frames” or “contexts”):

- World 1: The world of everyday life and lay knowledge
- World 2: The world of science and scientific research
- World 3: The world of meta-science



### World 1: The world of everyday life and lay knowledge

Most of our lives are spent in World 1 – the ordinary social and physical reality that we exist in. In this world, we live as ordinary human beings in multiple contexts – the family, the workplace, the school, the church and many more. In the world of everyday life we produce and use knowledge of different kinds. We refer to this as *lay knowledge*: the stock of knowledge that we use in everyday life that enables us to cope effectively with our daily tasks. This is the knowledge that we have acquired through learning, experience and self-reflection. Different terms are used to refer to this body of lay knowledge: common sense, wisdom, experiential knowledge, self-knowledge, insight, practical knowledge, and know-how. We apply our lay knowledge to solve problems, to reach consensus and gain insight into everyday tasks. Such knowledge is essential to being human and enables us to lead a human life.

### World 2: The world of science and scientific research

This book is primarily about the world of scientific research. Once you have decided to embark on a master's or doctoral study, you have "entered" the world of science. What, therefore, is distinctive about the world of science and how is it different from the world of everyday life?

Perhaps the most distinctive feature of the scientific enterprise is that the scientist selects phenomena from World 1 (the world of politics, business, social interaction, living things, matter) and *makes these into objects of inquiry*. Although ordinary people in World 1 also occasionally reflect on the nature of things, it is only in the world of science that we subject objects to systematic and rigorous enquiry.

The search for "truth" or "truthful knowledge" is the overriding goal of science. Whereas in everyday life we search for knowledge that will help us cope better with the challenges and demands of each day (a very pragmatic interest), the aim of science is to generate truthful (valid and reliable) descriptions, model and theories of the world. I have referred elsewhere to this as the *epistemic interest* of science (Mouton, 1996, Chapter 7). "Epistemic" is derived from *episteme*, the Greek word for "truthful knowledge". Although it is, of course, not possible to produce scientific results that are infallible and "absolutely" true for all times and contexts, we are motivated, as scientists, to constantly strive for the most truthful and the most valid results.

### World 3: The world of meta-science

Human beings continuously reflect on their actions. This is true in World 1, where we regularly subject our own actions and decisions to self-criticism, where we wonder why we decided to do something in the way that we did, and where we reflect on the reasons and justifications for certain actions.

Reflection is even more prevalent in the world of science. As scientists, we have to constantly submit our research decisions to critical reflection (which theory to select; which indicators to use in the measurement of a phenomenon; which research design

to choose, etc.). It is precisely, as Karl Popper has argued, because science is a *self-correcting* enterprise, that we constantly submit our decisions to quality checks in order to attain truthful and valid results.

Over the years, this practice has led to the development of various meta-disciplines, such as the philosophy and methodology of science, research ethics, and the sociology and history of science. These disciplines are referred to as *meta-disciplines* (and located in World 3) because they all involve reflection on the nature of science and scientific research. The word *meta* is derived from the Greek meaning "beyond" or "over" (compare "metaphysics").

Figure 9.1 presents the basic framework with the focus on the three worlds from a perspective of general knowledge production. It also emphasises the different interests or motives that underlie knowledge production in each world (pragmatic, epistemic and critical).

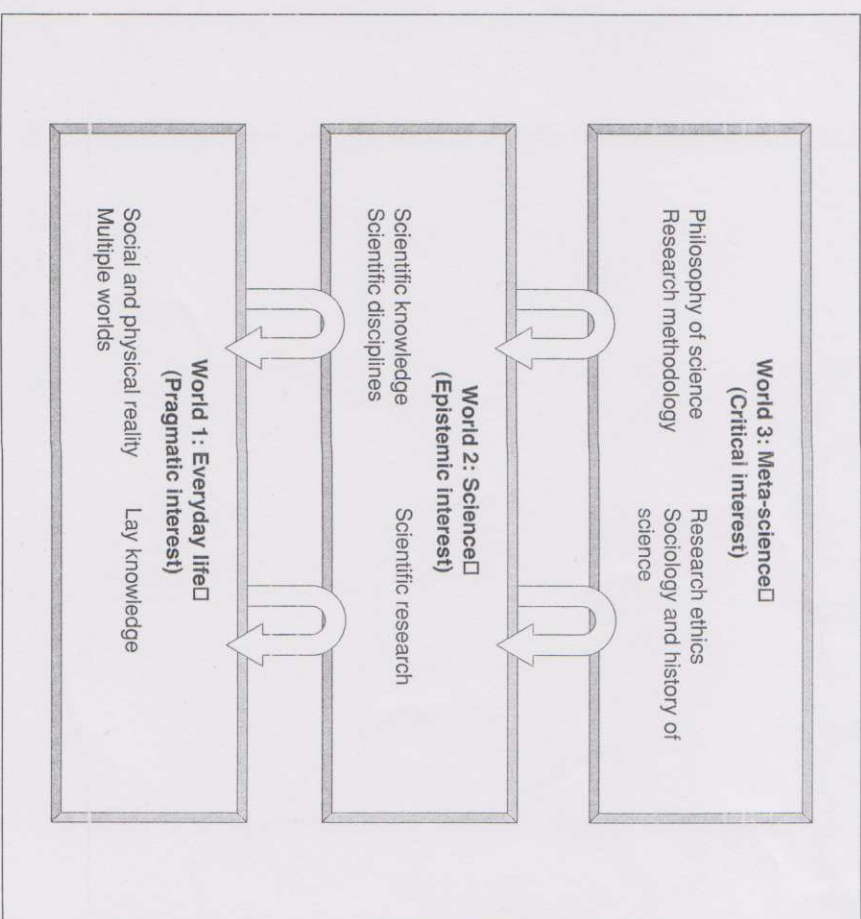


Figure 9.1: The basic framework: the three worlds



Figure 9.2 has a different focus, looking at the three worlds from the perspective of doing research and, specifically, at how to distinguish between research problems in World 2 and real-life problems in World 1.

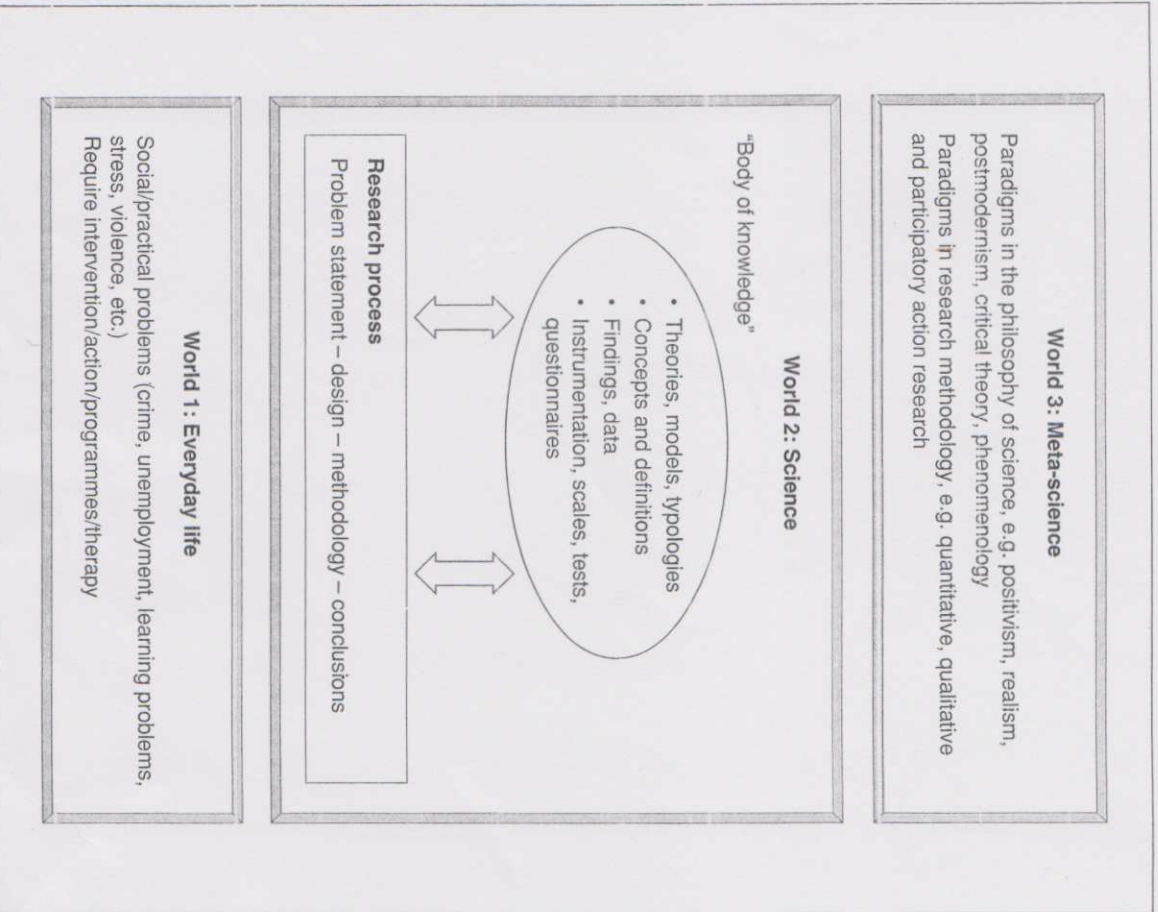


Figure 9.2: The relationship between meta-science, science, and everyday life knowledge (a focus on research problems)

Figure 9.3 shows how the framework can be used (especially in the social sciences) to understand the epistemological and methodological differences between the main research approaches. For example, it shows how a quantitative methodological paradigm has links with certain meta-scientific positions on the one hand, and also how it differs from the other main approaches to World 1 in terms of its "positioning" vis-à-vis real-life "objects".

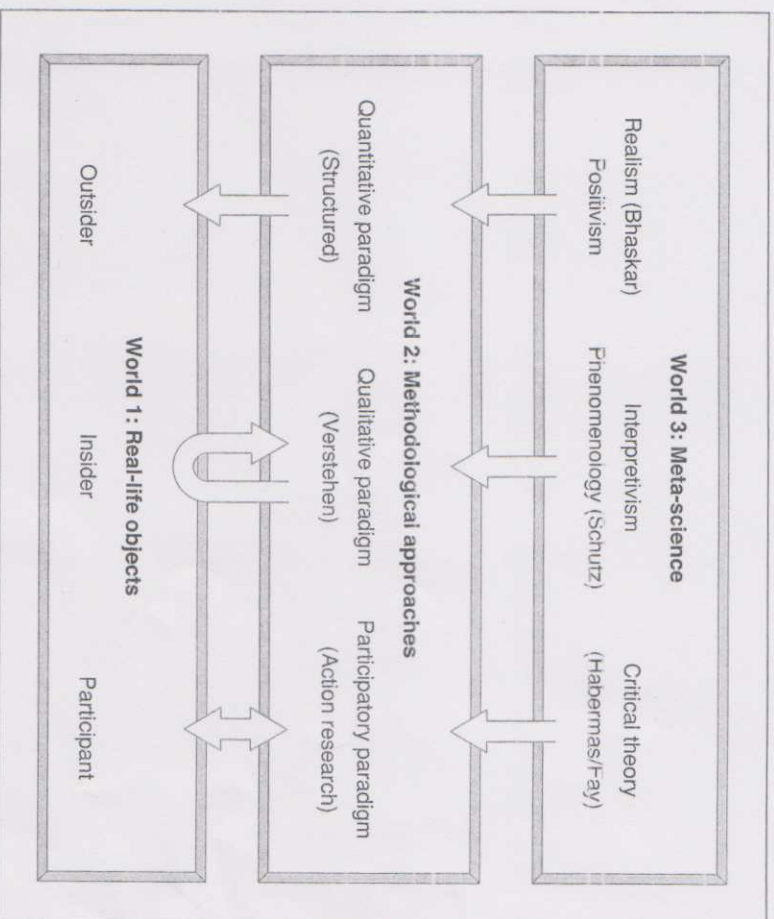


Figure 9.3: The relationship between philosophical paradigms (meta-science), methodological approaches and the real world

**Concluding comments:** The Three Worlds framework is a tool or instrument that helps to organise one's thinking about science and the practice of scientific research. Like any tool, it has its strengths and limitations. Its strengths, I would argue, lie in its ability to help you make sense of different levels of reflection about the world. In everyday life we reflect in a non-scientific manner about the world around us. In the world of science we enter a much more rigorous and systematic mode of reflection about the world. In meta-science we engage in critical reflections on our scientific endeavours in