Chapter 3 of this book, ‘The Philosophy of Management and Business Research’, outlines how a tree can be used as a metaphor to help us understand the importance of key traditions and concepts in the research process.

The roots, trunk, branches, leaves and fruit play vital roles which run parallel to important aspects of conducting research.

1. **The roots** of the tree symbolize the research traditions within particular disciplines. The soil in which the roots are anchored is made up from the experience of previous research projects all designed to answer the problematics that exist within particular management disciplines or fields. Your research is rooted in these traditions and builds on existing theory and knowledge.

2. **The trunk** transports nutrients from the roots through the branches to the leaves and fruit; as well as being a tree’s definitive structure. This metaphor continues with figure 2’s cross-section, which compares the rings of a tree-trunk to the 4 factors that are integral to a research design.

3. **The leaves** of a tree collect energy from sunlight, and so represent the collection and analysis of research data. It is the collection of what is already known about the subject (drawn up from the soil), together with new empirical research data collected from the leaves, from your original research study, which enables the evolution of theory.

4. **The fruit** represents the research output, which reflects the integrity of research design just as the fruit reflects the tree’s quality.

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**CROSS-SECTION OF TREE TRUNK**

1. The inner ring of the trunk is the densest part, and represents the ontology, your basic assumptions about the nature of reality.

2. The second ring represents the epistemology, the assumptions about the best ways of inquiring into the nature of the world.

3. The third ring from the centre represents the methodology or how methods and techniques are combined to form a coherent research strategy.

4. The bark represents the individual methods and techniques that are used for data collection and analysis, such as interviews and questionnaires. The bark is the only aspect of the research that is visible to others but behind it lie many assumptions and decisions.

Just as a weakened or rotten trunk can fall due to adverse weather, a research project where ontology, epistemology and methodology do not align cannot withstand evaluation or critical review.

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**DEEPER ROOTS**

Just as roots draw up nutrients, research traditions are drawn upon to form the basis of research design. There are three possible ontological traditions explained in chapter 3: A realist perspective, nominalist perspective and 'various other third ways' which combine realist and nominalist.

**THE TREE AS A METAPHOR FOR THE RESEARCH PROCESS**

We distinguish between three main kinds of data based on the underlying epistemology (second ring in the trunk cross-section), according to whether they are essentially positivist, constructionist or hybrid (mixed methods) approaches.