What does this book achieve? First of all, it gives an impression of what formal philosophy is, not by definition but rather by examples indicating the range of formal philosophy. Second, it gives an impression of what kind of scientists are working in this field, what their motivations for doing formal philosophy are, and which or what kind of insights and results they have obtained and which methods they have developed or applied. Third, the book presents an interesting snapshot of intellectual history, and it is not for the least part that the latter aspect makes the book a very interesting reading.

It will come as no surprise that formal philosophy is a field of interdisciplinary research. Among the contributors there are some well-known mathematicians, and it is particularly interesting for a philosopher to see what they have to say about formal philosophy.
Formal epistemology explores knowledge and reasoning using formal tools, tools from math and logic. For example, a formal epistemologist might use probability theory to explain how scientific reasoning works. Or she might use modal logic to defend a particular theory of knowledge. The questions that drive formal epistemology are often the same as those that drive informal epistemology. What is knowledge, and how is it different from mere opinion? What separates science from pseudoscience? When is a belief justified? Formal philosophy, as others pointed out, is an approach with formalized language. To ease things here, let us assume that the main idea is that by formalization it is possible to infer the truth value and propositional content directly from grammar and syntax. The ultimate goal is a perfect scientific language where equivocations and misunderstandings are impossible (like in mathematics), but still a language. And not only in an analogic sense like mathematics are called a language, but a medium for communication about the world. A formal language is a set of strings that are formed from an alphabet such that the elements conform to a grammar or set of formation rules (also known as syntax). Elements of the formal language are called well-formed formulas. Formal languages may have a Deductive system put on top of them to create a formal system. Let $ \Sigma $ be an alphabet. Then a formal language $ \mathcal{L} $ is a subset of $ \Sigma^* $, where $ * $ is the kleene star operator.