An ideal philosophy is one that is built as a logical calculus, structured axiomatically. It is perfect not because it is necessarily true – its definitions might be unfruitful, its axioms false and its inferences fallacious – but because it is transparent, and allows the reader to follow the arguments. Indeed, particularly because of the many potential mistakes, the formal, logical path is the ideal one: It forces the author to reveal his building blocks and offer them to the readers’ judgment. He can much less easily hide behind lofty words or vague phrasings. When readers are acquainted with the definitions, the axioms and the inferences, they can criticize them, and, if they are not good enough, suggest others instead.

But in addition to the clarity of the text and its openness to criticism, this method has another value – the investigation of the foundations of the issues. Philosophy, any philosophy, aspires to take different segments of the world and explore their underlying foundations. These foundations are primitive, irreducible, and therefore arbitrary to some degree. The construction of a logical calculus, as well as the more geometrico manner of writing, impel the author to declare his foundations at the outset, and show how all the rest follows from them. If he finds that they are not sufficient, he will need to add more; if he learns that some of them are superfluous, he will reduce them to others. The author himself, and not just the reader, is thus more aware of the foundations. Thus, in a utopian philosophical world where we discover the foundations of all the branches of philosophy – namely, of all the various segments of the world – all these foundations will be able to cohere into a single unified set that will be the underlying foundations of the world as a whole.

Indeed, there are issues for which the formal logical tools seem absolutely inappropriate. An essay in political philosophy, for instance, would seem weird if written more geometrico. But even there, scholars can and should aspire to set clear definitions and infer their arguments as much as possible from the simple...
and agreed-upon to the complex and question-begging. Even if this style still falls short of the perfect exploration of the underlying foundations, it will at least come closer to this ideal.

But what happens when such formal argumentation leads to a dead end? Should we then give up all the achievements of the formal line of argumentation and discard the philosophical construction founded on it? The best example of such an “accident” is a paradox. If a formal calculus leads to paradox, does it render the whole calculus valueless? Frege thought it does. For years he toiled on his logical formalism, using it to discover the foundations of arithmetic. But in 1902, shortly before he completed his *Grudlagen der Arithmetik*, Russell sent him a letter with his famous paradox. Frege added an appendix to his book, but nearly discarded his entire project. The paradox similarly threatened Russell’s own logic in *The Principles of Mathematics* which he co-authored with Whitehead, and therefore he too added an appendix to the book. Whether or not he, or others after him, succeeded in solving the paradox is disputable. But if they did not, should this be a reason for abandoning Frege’s and Russell’s logics?

I think we should not abandon them. A single flaw in a system (and I’m using the word *system* freely, not bound to the strict technical sense that appears later in this book), even an axiomatic one, does not have to render the whole system wrong. We should abandon it in those areas directly affected by the paradox, but we do not have to refrain from using it in the areas where it works perfectly well. The paradox may await a solution, or even remain unsolved, but the system can continue.

We all know the problem of the number 0/0 (zero divided by zero). According to one arithmetical rule, 0 divided by any number is equal to 0; according to another rule, any number divided by 0 is equal to infinity, or undefined; according to a third rule, any number divided by itself is equal to 1. Thus we have three different results to the very same fraction, produced by three different valid rules! This flaw undoubtedly undermines the universal validity of all three rules, but does this mean that we have to discard all our arithmetic? Should we say that from now on 0/5 will not be 0, and 5/5 will no longer be 1? Obviously, the whole system will continue to be useful, because it has proven itself useful – and true – in all other areas aside from these special irregularities. We will keep employing it, then, in all the areas where it works, and will abandon it only in the areas where it does not.

Some will surely say that this is a pragmatist move, and indeed it is. It does not demand that the logical calculus have an all-embracing flawless purity; it only requires that it work – and this is the main test of the calculus. It is the pragmatists’ test for truth, and especially for the correctness of systems and theories that transcend the scope of an isolated assertion. When strict formalism fails, but our healthy intuition insists that there is no need to give up the whole system for this reason, we may well use the pragmatist approach as an alternative.
We can conclude, then, that once the formalist line of argumentation comes to a dead end, the way out is to use a pragmatist line of argumentation. We may hope that this method will be accepted to some degree by both formalists (“rationalists”) and pragmatists. The formalists may agree to give up the dominance of logic where logic itself declares its own helplessness, while the pragmatists will agree to comply with the demotion of pragmatism to a lower priority or no priority at all, which is used only when logic fails to give an answer. Indeed, even the founders of pragmatism admitted the supremacy of logic as a first priority, although some of them justified logic through psychological reasons and refused to acknowledge its absoluteness.

The pragmatist test – whether or not “it works” – is not restricted to the rehabilitation of formal calculi flawed by paradoxes. We may employ it whenever and wherever strict “rationalist” tools lead us to dead end.

When should we say that a system works? It depends very much on the system at issue. When it is a logical calculus, we will be satisfied if it’s intuitive and consistent in all the areas where the flaw does not appear; but when richer and more complex systems – such as the ones we discuss in the coming chapters – are involved it is likely that we will have to consider different tests. This question is addressed at the beginning of Chapter Four. At any rate, it is noteworthy that among the founders of pragmatism – in particular William James and F.C.S. Schiller – two tests appear interchangeably, without sufficient distinction between them. One may call them the test of pleasure and the test of functioning. The test of pleasure, which is basically a psychological, utilitarian test, suggests that we should choose one system over another if it provides more pleasure to its users, while the test of functioning is a socio-cultural test, and determines that we should choose one system over another if it has been tested and proven workable by many users, on a variety of occasions, for long periods of time, and provides them with more or less coherent answers, applicable to life. Even if the test of functioning also has some sort of utility, this utility is not defined in subjective, “hedonistic” terms, but rather in objective, “intellectual” ones. As far as we are concerned, we will certainly apply the pragmatist line of argumentation by using the test of functioning. The test of pleasure might lead to ridiculous consequences, such that whoever is more pleased holds a greater amount of truths. Thus we could invent a pleasurometer to isolate pleasures and match them one-to-one to the stimuli that evoke them, and so, in every case of principled controversy between two people about two competing theories, connect both of them to the device, examine who is more pleased and so determine whose theory is right. This is an intolerable absurdity for anyone who takes philosophy, science or any other discipline seriously. True, the test of functioning is not altogether acquitted of the same charge, either, but it is clear that it would look for more objective “truth signs” in the theories presented to it than just a subjective feeling of their holders.

We can summarize as follows: A well-conducted philosophical inquiry is one that seeks to develop as many formal, logical systems as possible to suit the
various fields of philosophy, and prove its arguments through those systems; in branches of philosophy where this path is not suitable, we should at least take a path that is as close as possible to this ideal, enables us to the arguments critically and avoids rhetorical vaguenesses. However, when the rigorous path leads to a dead end – in cases of paradoxes and similar problems – we should use the pragmatist line of argumentation, and apply it by the test of functioning.

Having said all that, we can now attempt to build a new calculus, aimed at epistemological uses, which we call the *Source Calculus.*