Other philosophers have openly derided the efforts of AI researchers and, by implication, their philosophical fellow travellers:

> Artificial intelligence *pursued within the cult of computationalism* stands not even a ghost of a chance of producing durable results ... it is time to divert the efforts of AI researchers—and the considerable monies made available for their support—into avenues other than the computational approach. (Sayre, 1993)

> After fifty years of effort, however, it is clear to all but a few diehards that this attempt to produce general intelligence has failed. (Dreyfus, 1992)

The nature of philosophy is such that clear disagreements can continue to exist unresolved for many years. If there were any simple experiment that could resolve the disagreements, the issues would not be of philosophical interest.

We will begin in Section 26.2 by looking at those areas of philosophical investigation in which AI and philosophy are on the same team, so to speak—the "how to" questions concerning the basic capabilities of perception, learning, and reasoning. This will help to clarify the concepts used later.

WEAK AI

In Section 26.3, we look at the question "Can machines be made to act *as if* they were intelligent?" The assertion that they can is called the **weak AI** position. Arguments against weak AI make one of these three claims:

- There are things that computers cannot do, no matter how we program them.
- Certain ways of designing intelligent programs are bound to fail in the long run.
- The task of *constructing* the appropriate programs is infeasible.

The arguments can be, and sometimes have been, refuted by exhibiting a program with the supposedly unattainable capabilities. On the other hand, by making AI researchers think more carefully about their unstated assumptions, the arguments have contributed to a more robust methodology for AI.

STRONG AI

In Section 26.4, we take on the real bone of contention: the **strong AI** position, which claims that machines that act intelligently have real, conscious minds. Debates about strong AI bring up some of the most difficult conceptual problems in philosophy.

Note that one could legitimately believe in strong AI but not weak AI. It is perfectly consistent to believe that it is infeasible to build machines that act intelligently, but to be willing to grant such a machine full consciousness if it could in fact ever be built.

We will try to present the arguments in their simplest forms, while preserving the lunges and parries that characterize philosophical debates. We do not have space to do them full justice, and we encourage the reader to consult the original sources. A caution: one of the most important things to keep in mind when reading the contributions to a philosophical debate is that what often appears to be an attempt to refute some proposition (such as "computers understand English") is actually an attempt to refute a particular *justification* for the proposition, or an attempt to show that the proposition is merely possible rather than logically necessary. Thus, many of the debates are not what they may seem at first, but there is still plenty to argue about.