



FIGURE 2.1.

Three theories of the origin of the Universe: (a) big bang; (b) steady state; (C) oscillation. Dots represent galaxies.

any one of these properties would render any life improbable and life as we know it impossible.

Probably the most profound question about the Universe we live in is *why* it is the way it is. Some scientists are even beginning to ask if the Universe were somehow designed for us. There are some very fundamental and unique properties in our Universe that raise important questions about the existence of life itself. For instance:

- Why are there ninety-two naturally occurring elements? Why not only two? Or why not five thousand?
- Why do the galaxies and stars have the particular sizes they have in the Universe?
- Why is the proton 1,836 times heavier than the electron and not heavier or lighter?
- Why does the heat radiation from the Big Bang have the present value of three Kelvin degrees? Why not three hundred Kelvin degrees?

According to theoretical physicist Paul Davies, "The laws of physics do not seem to determine the values of physical quantities, or the