340.00 **Expanding Universe**

341.00 In the most comprehensive picture of Universe, we find physical Universe consisting entirely of energy. As the Second Law of Thermodynamics shows, every local physical system continually loses energy to surrounding systems in physical Universe. This loss of energy is called entropy. Because all the local systems of Universe are in constant motion and transformation, the energies are given off nonsimultaneously in multidirections and with increasing diffusion. The scientists call this the law of the increase of the random element. The increasing random element brings about physical Universe enlargement. These nonsimultaneous enlargements bring about *expanding physical Universe.* The expansion is verified by the astronomers' discovery of the red shifts in remote galaxies.

342.00 Entropy is the measurement of disorder within a closed system. Entropy measures the lack of information about a structure in a system. In Eddington's proof of irreversibility, he dumps a box of wooden matches on the table. Each one splinters the others a little; therefore, there are little hairs and fibers sticking out. They could never be put back in the box the same way without pressing, that is, without investing more energy. This is how the law of the increase of the random element operates. The cycle keeps on time and again, from dust to atoms to proton to neutron. This is what nature is doing in high- and low-pressure pulsations.... And then, after maximum dispersal, comes reassociation, because Universe is regenerative. One hundred million years later they will all be back in the box again. After the last *Wow!*

343.00 While energy leaves one local system after another, it does so only by joining other local systems. The energy is always 100 percent accountable. The energies are given off in an ever-increasing diffusion as all the different and nonsimultaneous transformations and reorientations occur. The energies given off alter the environment irreversibly. The biologicals take on and give off more energy than the nonbiologicals

344.00 Universe expands through progressively differentiating out and multiplying discrete considerations.

345.00 All the differences between de-finite conceptual systems and finite, yet nonconceptual total Universe seem to provide a fundamental means of identifying the physical phenomenon entropy. Entropy no longer means inherent -escape of energy from any local system, or decrease of local order, or increase to disorder. Entropy now means the invisible extraction from any local definitive system of the negative conceptual entity; i.e., one negative tetrahedron deposited into Universe. balance of energy conservation, permitting the local extraction of any visible, orderly conceptual system. Entropy is not random: it is always one negative tetrahedron. It can account finitely for any discrete rate of energy loss. (See Secs. 620.12 and 625.03.)

Next Section: 350.00
