

Future Trends

Spotlight on the Exponential Growth of Medical Utopias including Jewish Reflections on Stem Cell Research, Nanotechnology, Biogenetic Engineering and Radical Life Extension

Lesson 1: Exponential Growth

Overview:

- Looking around at the mind-boggling changes that have swept over the planet in terms of technological advance, one cannot help but wonder as to what it all means and where it is all headed. These revolutions in science and technology are often mistaken as linear step-by-step developments, when in fact they are non-linear exponential explosive jumps. As the rate of change itself accelerates, we may come to realize that we have now reached the knee of the growth curve where transformations begin to rapidly look asymptotic. According to the inner teachings of the Torah, we find clear instances where this flood of new knowledge is identified with the advent of the Messianic era, paving the way for global shifts, an age of material abundance and ultimately a profound spiritual awakening.
- Maimonides, weighing in on the future transformation of the world, cites a number of specific benchmarks that will be achieved. We may expect to see an end to the economics of scarcity, conflict and competition which ushers in a permanent state of world peace and plenty. People, once liberated from the toil of earning a livelihood in the conventional sense, will experience the end of work and the beginning of a time when we will all pursue the knowledge of G-d.
- As the text of Kabbalah *par excellence*, the Zohar offers a compelling explanation for the seismic changes felt through the world due to the industrial revolution and the information ages. Patterned on the Biblical flood of Noah, the Zohar foretells of a future flood which began over 150 years ago, only this time it is a flood of knowledge. This knowledge is from a twofold source: 1) the higher waters allude to the unprecedented revelation of spiritual wisdom from the mystical dimensions of the Torah and 2) the uprising of the lower waters of natural wisdom blanketing the earth with uncanny technological alterations to the course of human existence. All of this is in order to enable us to have an even greater perception of the Creator through the unfolding promise of creation.
- Examples of the technological flood are numerous. We moved in rapid succession through the disruptions of the old way of life with the invention of the telephone, automobile, airplane, television, computer, internet, cell phone and electricity to name just a few. The wide-spread accepted view of scientists today is that all technical knowledge now doubles every couple years and this doubling time is itself shrinking. The world is undergoing phase transition, or a tipping point, like water turning into ice, at the appropriate temperature.

In Summation:

- Learning to recognize the signs of the Messianic age includes an awareness of the rapid overturning of the world as we know it. Technology is a key component redefining every aspect of our lives. The proliferation of technological developments is following a 'law of accelerating returns' wherein the future is always much closer than we might first think. This is the character of the flood of knowledge which we have been living through and will continue to experience until the full revelation of the Messianic age and beyond.