

Technology in the Aquarian Age

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Epoch-making discoveries or breakthroughs in science have always faced the barrier of official recognition before eventually gaining universal acceptance. There are indications that the present generation is on the threshold of a new era of scientific development. Larson's *Reciprocal System* is revealing realms of existence not limited to the age-old concepts of space and time. A magnificent world experience is in the offing.

Limitations of Forecasting Breakthroughs in Science

Technological forecasting depends on the knowledge of two things: the state of the present technology and the trends in the technological development. It is implicitly assumed that the trend could be extrapolated on the basis of our knowledge of its previous changes. This works as far as it goes but miserably fails as to correct forecasting if unforeseen developments take place, which take knowledge into a new dimension on perspective.

Such a breakthrough, for example, in science had occurred at the turn of the present century, when Max Planck discovered the quantum of action. This changed the entire course of development of the science, and hence of technology, and resulted in the present technological society, bringing in its wake altered human values. As we are fast approaching the end of the present century humanity might be in for another of these unforeseen breakthroughs.

In fact, there are already indications that presage this age of new science and technology. It is a truth, that every time such a breakthrough has occurred, the people of the time hardly succeeded in seeing its implications. Nearer to the mountain one always misses its majesty and magnitude. It is only in the historical retrospect that one can see these developments in their true significance. It would invariably be the case that such a breakthrough would be too far beyond the ken of the Scientific Establishment of the epoch that hardly any "official" recognition is ever bestowed on it. Planck's case is itself a classical example. But fortunately truth prevails and a succeeding generation would be quick to see it.

Larson's Reciprocal System

This time, such a revolution in science seems to have already taken place silently, due to the researches of Dewey B. Larson into the nature of the most fundamental entities of the universe—space and time. His *Reciprocal System*—a *system of theory* rather than merely a *theory*—might be the single theory of the twenty first century of the entire physical universe, or at least, would be the nucleus from which such a theory might emanate, a new science would engender new technology; new technology a new culture and set of values. A forecast of this new technology is not possible since the full implications and the ramifications of the new science are not yet known. However, enough of them is already known to establish its imminence. Therefore, some of the highlights of the *Reciprocal System* will be mentioned here to indicate the nature of the revolution in the offing.

The Familiar Space-Time Concept

For over 3000 years, the prevailing conception of the universe in which we live has been a universe of matter set in a background of three-dimensional space and one-dimensional time. Both the scientist and the common man have subscribed to this view unswervingly. Indeed it has been so deep-rooted in our

mental make-up that we tend to think of even abstract things as embedded in space. We see the drama of the universe unfolding on the stage of space and time. During the ebb and tide of scientific thinking, so many concepts have undergone radical changes; but this concept of “setting” in space and time, is the only one that remained unchanged. Larson discovers that this concept is untenable. He finds that the basic constituents of the physical universe are not units of matter but units of motion. Space and time, being the constituents of *scalar motion*, then become the *content* of the universe and not a setting.

Larson demonstrates that our familiar three-dimensional spatial system of reference is a very limited reference frame. One of its deficiencies is that it cannot represent some type of physical processes at all while it cannot represent some other in their true nature. All the long-lasting problems in science are due to the ignorance of this fact. Even to the present day—the enormous success and prestige of science notwithstanding—there is no understanding of many fundamental entities in science. The question “what is electricity?” illustrates one case: lack of explanation of the origin of gravitation or how it cannot be screened off is another. While the mathematical aspects of the constituents of an atom are well-known, there is an utter lack of conceptual understanding of their intrinsic nature. Indeed, by the consideration of the set of properties the scientists are driven to ascribe to these hypothetical constituents of the atom, the scientists deny that they belong to the realm of reality that we otherwise seem to comprehend.

The Dawn of the Grand Unification Theory

Most strenuous efforts of generation after generation of scientists have consistently failed to produce the much sought after grand unification of the various types of basic forces that pervade the physical universe. Larson has shown that this was due not to the lack of intellectual acumen on the part of the investigators but to the fact that they all, without exception, had subscribed to the wrong fundamental concepts about the nature of the basic constituents of the universe. This discovery leads him to the development of the first truly general theory of physics.

Besides resolving all the recalcitrant difficulties in the conventional theories, the insights gained through the Reciprocal System, to the extent one is able to comprehend its altogether new line of approach, unmistakably point to breakthroughs in the technologies of energy generation, transportation and the like.

Future Potential of the Reciprocal System

Science depicts all existence to be embedded in space and time. As such there is no room in such a scientific attitude for asseverating, the reality of the existence of those intimate human values, aesthetic, cultural and spiritual. By demonstrating the true status of space and time, the *Reciprocal System* removes the bar against the possibility of realms of existence not limited to space and time and thereby opens the door for a new science that does not entail a spiritual vacuum. Though it is too premature to endeavor to forecast the actual effects on the future of human civilization of this new science, it is not difficult to foresee the holistic world experience that they are going to bring forth.

Books for further reading (available from <http://store.rstheory.org>):

1. D. B. Larson, *Nothing but Motion*, The North Pacific Publishers, P. O. Box.13255, Portland, Oregon 97213, USA (1971).
2. D. B. Larson, *The Universe of Motion*, The N.P. Pub., Portland, Oregon, U.S.A. (1984).
3. D. B. Larson, *Basic Properties of Matter*. The International Society of Unified Science, 1680 East Atkin Avenue, Salt Lake City, Utah 84106, U.S.A., (1988).