

## TIME AND RYTHM

Sir Issac Newton in the early part of his great work defines absolute time as evenly moving on quite independent of any phenomena that might take place within it.. Evenly moving time would be analagous to our concept of motion of uniform velocity in a straight line or in the path of a circle or of an uniform spiral. At first this concept makes strong appeal to one, perhaps largely because of its simplicity. But difficulties arise as soon as one begins to question how such a time may be known. Whether or not metaphysical time may be of that nature there is no way in the relative world that we may know of it, and thus it is a concept that becomes practically meaningless.

In these later days physical research has become cognisant of the epistemological problem as one having direct bearing upon the definition of physical fact and law. All knowledge is limited by the knowing process. If that process is dependent upon the principle of relationship then all such knowledge must be subject to a law of relativity. The critical study of reason has shown that its operations are strictly confined to a world of relationship. No concept of an Absolute can have a purely rational justification. Whatever <sup>the</sup> light it may derive from super- or sub-rational sources, science, whether exoteric or occult, must be based on reason. Hence scientific knowledge must ever be relative. Thus there can properly be no explicit absolute in any science.

In our rational thinking, then, we must drop the notion of an absolute time, and seek instead a definition of time compatible with our process of time-cognition. This has already been done in the modern theory of relativity. The basis of time measurement there given has as the fundamental unit the velocity of ~~time~~ light in a vaccuum,

But while the logical coherence of this system is such that if it fails in any part the whole system falls, yet the principle of the relativistic interpretation of time, space and matter would not be weakened by the failure of a particular theory of relativity. It is quite possible that the development of relativistic theories may have to go behind the velocity of light in a vaccuum as a basis of time measurement.

It is our thesis that the more ultimate basis of time measurement is rythm. This basis is implied when the velocity of light is taken as an unity. So there is no conflict between the two concepts. The velocity of light, however, would stand as only one out of several possible practical bases of time measurement.

As students of the ancient Wisdom Religion we are familiar with the doctrine of the periodical outbreathing and inbreathing of the Universal All. This periodicity is fundamental throughout all Being from the greatest to the smallest. Now it is in this principle of periodicity that lies the only possibility of time measurement. Periodicity is not necessary to the awareness of time, change alone would produce that awareness. But in a universe where there was change without periods, how could there be any meaning in the statement that one period of time was equal to another?

Our dependence upon periodicity or rythm in the matter of time measurement will be brought more clearly to our consciousness if we analyse the more familiar methods of time measurement. We associate such measurement generally with the movement of the hands about the dial of a watch or clock. Equal distances are marked off on the periphery of the dial and we assume that equal times have elapsed when the hand has passed over equal distances. This assumes, however, uniform velocity of movement on the part of the hand, and in turn this

uniformity is based upon the rythm of an escapement spring or of a pendulum.

Can we go behind the assumption of the equality of parts of the rythmical cycles of the escapement spring or the pendulum? In one sense, the answer would be yes. We can check our escapement springs and pendulums by the daily rotations of the earth, by the period of its orbital movement about the sun or some other such manner, but in every case the assumption of the uniformity of the cycles of some rythm remains. If we take the velocity of light as a basis of time reference again we find our problem still one related to rythm, for the velocity of light is a function of vibratory rate and wave length, and in its turn the wave length is a function of vibratory rate. A vibratory rate is a rythm, hence again the measurement of time is based upon the assumption of an uniformity in the cycles of a rythm. Thus while we have gone behind the periodicity of an escapement spring or a pendulum we have in no case been able to free ourselves from the assumption of equality of parts in a rythmical cycle as the necessary basis of time measurement.

Now, for the sake of argument, let us assume that the time that we know know is uniform and synchronous with the absolute time of Newton. That would mean that the parts in the various rythmical cycles were of uniform length. Now imagine this time world transformed into another time world that bears a definite functional relationship to the original, so that all rythmical cycles were distorted relative to themselves while still synchronizing as before with the other rythms of the system. To illustrate we will suppose that the movement of the pendulum becomes so distorted that relative to our assumed initial absolute time its swing in one direction takes twice as long as its return swing. All other rythms would be similarly distorted so that

within the system there would be no change of relationships between different cycles as compared with the original system. Suppose further that this change took place instantaneously without anyone having been warned of it. There would be no way of knowing that the change had taken place. There would be no way of knowing that the swing of the pendulum in one direction took twice the time that it had in the original system for the only way of making a check would be by reference to some other rythm and by assumption all rythms have the same synchronizing relationship as held originally.

As between the two systems time measurement would be very different, but to the pentems of consciousness of the Universe that had made the supposed change, time measurement would seemingly have remained the same.

What then must we conclude about our actual world? Simply this, that time uniformity is based on the assumption of uniformity of rythmical process. Relative to some portion of the Universe outside the range of our knowledge our apparently uniform rythmical rates may be increasing, decreasing or fluctuating but we would remain wholly unaware of it. Time would seem to be always evenly flowing on.

The argument has now led us to vitally important conclusiinns. Time can have only a relative objectivity. For those on a given plane of consciousness it would be objective to each individual center of consciousness. That is, there would be a common time for all the centers of consciousness on that plane. This, indeed, would be a necessary condition of co-ordination of action. But as a center of consciousness moved from one plane to another there would be a change in time measurement corresponding to the change of the vibratory rates that dominate the two planes. But this change would remain unknown to the given center of consciousness unless it had won the power to be conscious on more than one plane at once.

Striking results follow. Changing of the rythm of a center of consciousness might very well lead to an experience of ages of time taking place in a very short span of time as measured on this plane. This would happen if the rythmical rates were increased in a large measure. On the other hand, by slowing down that rate a long period of our time might pass in what would seem to be a brief period. Does not this explain the statement that a day of our time is as a thousand years and a thousand years of our time is as a day?

Consider occult time. There are many figures given as to the length of cycles from the 100 years of Brahma downward. The meaning of these periods may be missed entirely if they are taken in the sense of the time measurement of this plane. They may be periods much greater or much shorter. That which they do measure, however, is the filling of consciousness involved in those periods. The rate of evolution is not restricted by the time measurement of, say, this plane of consciousness. The law of cycles is, we must believe, rigid. But it is within the power of the individual center of consciousness to change its rythmical rate. It would have to pass through the years of time that measure each and every cycle, but by the process of changing its rythmical rate such periods of time might be much less or much greater than the corresponding time period on this plane. A period of time measured by 1000 years on this plane might occupy for one center of consciousness, say, but a year as measured on this plane and for another a million years as so measured. But in each case the experience would have the value of 1000 years.

There is another interesting implication. What about the sense of the passage of time in the state of consciousness where there is no rythm? Such time might be of vast length when objectively measured and seem but a very short time or visa versa. There is a story told of

one who had won the privilege of hearing a great chorus singing before the throne of God. It was wonderously beautiful music but it had the peculiarity of having no rythm. The privileged one listened with wrapt attention for what seemed to him ten minutes when the chorus ceased. Imagine his astonishment when his conductor told him that during that period 30,000 years of ~~xxx~~ earth time had elapsed!

I write