

BIOENERGY

update

By Bernard Brom

The Bioenergy Association of South Africa was initiated in 1992 in order to create an interest in the subject of Bioenergy. We will attempt in these reports, which will appear bimonthly in the Journal, to keep medical doctors updated on the latest development in the field of medical bioenergy.

Once again, a letter has appeared in the SAMJ suggesting that Orthodox medicine has a sound scientific basis compared to other forms of medicine which is based more on faith and magic. Science has come a long way in the last 100 years and has made some quantum leaps even in recent times. Before Newton appeared on the scene, man was much more fluid and less solid than he appeared later. He had a spirit and angelic beings surrounded him. Newton was fascinated by the mechanical clocks of the time and it seemed to him that man was not different. The apple falling off the tree started a revolution. The revolution related to the speed at which the apple fell. Not much more was added regarding the quality or any other special features of the apple itself.

With Newton, spirit and magic disappeared to be replaced by a science which could measure and predict. Descartes described the four essentials of the scientific method.

- (1) Accepting only that which is clear in the mind.
- (2) Breaking down large problems into smaller ones.
- (3) Arguing from the simple to the complex.
- (4) Checking.

The world we have today is largely the result of this revolution called the scientific method but science has not stood still. It is clear now that the four essentials as described by Descartes is an oversimplification and is only true under certain circumstances. Those circum-

stances relate to bodies of certain size and weight under special conditions but are not true under all circumstances.

Newton robbed man of his spirit and turned him into solid matter whose characteristics could be described in the same way that we could describe the movement of billiard balls. He now became the object of the scientific method and was dissected and separated into his parts. The parts were then studied and conclusions regarding the whole became the subject of debate.

The author of the letter correctly surmised that Orthodox medicine today is still "guesswork, unpredictable, even magical and based on faith in the physician and his methods but in principle is grounded in the scientific method." What needs to be considered is what scientific method one is considering, and more specifically, what is the principle underlying the scientific method. Was the discovery and utilisation of fire to be regarded as scientific or merely a chance occurrence from beginning to end, and at which point does the use of fire become scientific. Both Newton and Einstein had very profound intuitive insights and used these insights to develop their theory. Is intuitive insight separate from the further development of those insights? Once the intuitive insight has been received, does that intuitive insight then stop while the logical mind goes into scientific mode to make scientific discoveries? And are only the physical experiments carried out in a specific way scientific and not the thoughts part of the scientific method? Is the operator separate from the scientific method? Can biological systems and especially man, with the ability to change directions at a whim, be subject to a system of investigation which is dependent on simplicity, reproducibility and separation into parts?

Art and science, intuition and logic are in fact not separate in the real world. They are a unity which feed each other. Intuition nourishes the logical aspects of man and logic disciplines and directs the energy of man's intuitive insights. The best scientists know this well and have an easy and flowing relationship with their intuition or spirit.

One needs to consider also the limitation of a science separated from spirit or magic or intuition. Consider the problem of light. Light is known to be either particle or wave. That is, it has wave-like properties under certain clearly defined circumstances and particle-like properties under other clearly defined circumstances. What makes the difference are the tools one uses to measure light. Light itself does not change, but rather the tools one uses makes light either particle or wave. In essence, light is neither particle nor wave. One cannot measure light. What one measures is merely the ability of certain tools to shape light in a particular way, creating the effects of particle or wave. We can, in fact, never know light. Any tool merely reduces it to the limitation of that tool. One can perhaps speculate whether intuition allows one to transcend the limitation of physical tools and enter into another experience of light. The actual experience of knowing light, love, a tree, a flower, the moon, at that moment when the logical thinking mind stops chatting or when intuition finds a space between thinking, to pass on some information which is enlightening, appears to be much more holistic or magical, artistic or entrancing and uplifting. The tools of science on the other hand, pass on information which merely reflect their own limitations. Only man can raise that information to the level of inspiration and be creative with it. Light, as it is, cannot be known by a science of physical measurements. The physical measurements, however, nourish our intuitive insight of light and allow for more colour to emerge in our perception of light. We can experience light, but any measurement or vocal expression of that experience will not reflect that experience any more than the experience of the presence of God can be measured or conveyed to anyone else.

I am not attempted to trivialise the role of science but merely to put it in its place. What we measure is not the real thing and can never be. That does not deny the value of measurement because measurement allows us to use the effects of measurement in ways to improve or destroy life on earth.

The world outside the laboratory is, however, not the same as defined by traditional science. "Turbulence, irregularity, and unpredictability are everywhere but it has always seemed fair to assume that this was 'noise', a messiness that resulted from the way things in reality crowd into each other ... now scientists are discovering that this assumption was a mistake."

In order to cope with this reality, new laws have been invoked and proved to be true under certain circumstances. Heisenberg's Uncertainty Principle showed that it is impossible to know with total accuracy both the position and momentum of any sub-atomic particle. Non-Linear Equations showed that a small change in one variable can have disproportional, even catastrophic, impact on other variables. Chaos theory suggests not that the world is chaotic but that all measurements are approximations and according to Einstein, the observer and what

he observes, are not separate. This is the science that begins to make some sense in reference to biological systems. Bruce West, a physicist at the University of California described it this way: "Most biological systems and many physical ones, are discontinuous, inhomogeneous, and irregular."

Living systems are characterised by (a) Self organising forces eg homeostasis (b) Preservation of integrity eg healing and regeneration (c) Survival of organism and species (d) Creative processes which seemingly transcend the apparent limits of that species. This is what characterises human beings. The science of Newton is far too simple to contain this creative multidimensional being.

The newer approaches coming out of Quantum mechanics, in particular, have not given us final answers but certainly should humble any scientist in his treatment of biological systems and certainly explains why there are so many contradictions in medical practice. Chaos Theory, Non-Linear equation, Uncertainty Principle is probably much closer to the science of man than predictability and logic. For this reason attempts to work from the simple to the complex just won't really work.

Edward Lorenz is an MIT Meteorologist, who in 1960, was working with some figures on the computer regarding the forecasting of weather conditions. He ran through the material once and then decided to check his figures, but because he was in a hurry he rounded the figures in the second run to 3 decimal places instead of 6 as in the first run. He did not expect that there would be a great difference. Instead he obtained a totally different forecast. The small apparent difference when projected forwards created a different weather pattern. "I knew right then that if the real weather behaved like this (mathematical model) long range weather forecasting was impossible." What is clear now is that no amount of additional detail will help perfect the prediction.

If the above is true of the weather it will apply even more so to man. Man is and will remain unpredictable both on a cellular level and psychological level. No amount of statistics are going to resolve the issue of the individuals reaction. This does not, of course, mean that we must abandon research. It needs to be a different kind of research. One that recognises that intuition and logic work hand in hand, that there is a creative process at work in which emerging properties may enter at any time changing the course of the process in a totally unpredictable direction. The unpredictability of the placebo response and its powerful effect should have warned us.

In our next issue we will be considering a little further the direction Newtonian Science has taken medicine today and highlight some of the exciting new ways that one can approach the study of man using some of the models of the newer approaches developed in recent times in particular that of Man as a Bioenergetic being.