Tao of Physics: A very brief summary

A seminal classic that was one of the first pieces of reading that began to change my worldview, and till today, remains one of the first attempted 'consilience' of science and spirit. Rather than a conventional book summary or review, I would like to capture key sentences/ quotes that adorn the terrain like a string of pearls:

Chapter 1 – Modern Physics: A Path with a Heart

Any path is only a path, and there is no affront, to oneself or to others, in dropping it if that is what your heart tells you....Look at every path closely and deliberately. Try it as many times as you think necessary. Then ask yourself, and yourself alone, one question....Does this path have a heart? If it does, the path is good; if it doesn't it is of no use.

- Carlos Castaneda, The Teachings of Don Juan

Chapter 2 – Knowing and Seeing

A mystical experience, therefore, is not any more unique than a modern experiment in physics. On the one hand, it is not less sophisticated either, although its sophistication is of a very different kind. The complexity and efficiency of the physicist's technical apparatus is matched, if not surpassed, by that of the mystic's consciousness – both physical and spiritual – in deep meditation. The scientists and mystics, then, have developed highly sophisticated methods of observing nature which are inaccessible to the lay person.

- Fritjof Capra

Chapter 3 – Beyond Language

The contradiction so puzzling to the ordinary way of thinking comes from the fact that we have to use language to communicate our inner experience which in its very nature transcends linguistics - D.T. Suzuki

Chapter 4 – The New Physics

Al my attempts to adapt the theoretical foundation of physics to this (new type of) knowledge failed completely. It was as if the ground had been pulled from under one, to no firm foundation to be seen anywhere, upon which another one could have been built - Albert Einstein

Chapter 5 – Hinduism

All actions take place in time by the interweaving of the forces of nature, but the man lost in selfish delusion thinks that he himself is the actor. But the man who knows the relation between the forces of nature and actions, sees how some forces of Nature work upon other forces of nature, and becomes not their slave

- The Bhagavad Gita

Chapter 6 – Buddhism

Ashvaghosa probably had a strong influence on Nagarjuna, the most intellectual Mahayana philosopher, who used a highly sophisticated dialectic to show the limitations of all concepts of reality......Hence he gave it the name 'Sunyata', 'the void', or 'emptiness', a term which is equivalent to Ashvaghosa's 'tathata' or 'suchness'; when the futility of all conceptual thinking is recognized, reality is experienced as pure suchness.

- Fritjof Capra

Chapter 7 – Chinese Thought That which lets now the dark, now the light appear is Tao - I Ching, the Book of Changes

Chapter 8 – Taosim Disputation is a proof of not seeing clearly. - Chuang Tzu

Chapter 9 – Zen

Before you study Zen, mountains are mountains and rivers are rivers; while you are studying Zen, mountains are no longer mountains and rivers are no longer rivers; but once you have had enlightenment, mountains are once again mountains and rivers again rivers. - Zen saying

Chapter 10 – The Unity of All Things

One is led to a new notion of unbroken wholeness which denies the classical idea of analyzability of the world into separately and independently existing parts...We have reversed the usual classical notion that the independent 'elementary parts' of the world are the fundamental reality, and that the various systems are merely particular contingent forms and arrangements of these parts. Rather, we say that inseparable quantum interconnectedness of the whole universe is the fundamental reality, and that reality, and that relatively independently behaving parts are merely particular and contingent forms within this whole

- David Bohm

Chapter 11 – Beyond the World of Opposites

It moves. It moves not. It is far, and it is near. It is within all this, And It is outside of all this. - The Upanishads

Chapter 12 – Space- Time

If we speak of the space experience in meditation, we are dealing with an entirely different dimension....In this space-experience the temporal sequence is converted into a simultaneous co-existence, the side by side existence of things....and this again does not remain static but becomes a living continuum in which space and time are integrated

- Lama Govinda

Chapter 13 – The Dynamic Universe

The stillness in stillness is not the real stillness. Only when there is stillness in movement can the spiritual rhythm appear which pervades heaven and earth - Taoist text

Chapter 14 – Emptiness and Form

We may therefore regard matter as being constituted by the regions of space in which the field is extremely intenseThere is no place in this new kind of physics both for the field and matter, for the field is the only reality

- Albert Einstein

The Great Void cannot but consist of ch'i; this ch'i cannot but condense to form all things; and these things cannot but become dispersed so as to form (once more) the Great Void - Chang Tsai

Chapter 15 – The Cosmic Dance

His gestures wild and full of grace, precipitate the cosmic illusion; his flying arms and legs and the

swaying of his torso produce- indeed, they are- the continuous creation-destruction of the universe, death exactly balancing birth, annihilation the end of every coming-forth - Heinrich Zimmer, on the Dance of Shiva

Chapter 16 – Quark Symmetries – A New Koan?

The discovery of symmetric patterns in the particle world has led many physicists to believe that these patterns reflect the fundamental laws of nature. During the past fifteen years, a great deal of effort has been devoted to the search for an ultimate 'fundamental symmetry' that could incorporate all known particles and thus 'explain' the structure of matter. - Fritjof Capra

Chapter 17 – Patterns of Change

How do we come to think of things, rather than of processes in this absolute flux? By shutting our eyes to the successive events. It is an artificial attitude that makes sections in the stream of change, and calls them things....When we shall know the truth of things, we shall realize how absurd it is for us to worship isolated products of the incessant series of transformations as though they were eternal and real. Life is no thing or state of a thing, but a continuous movement or change. - Dr Sarvapalli Radhakrishnan

Chapter 18- Interpenetration

Each portion of matter may be conceived of as a garden full of plants, and as a pond full of fishes. But each branch of the plant, each member of the animal, each drop of its humours, is also such a garden or such a pond

- Leibniz, in Monadology

<u>P.S.</u>

The review for The Tao of Physics is taken from the website .

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