

[Transcript of a videotaped interview of Terence McKenna by Paul O'Brien]
Hello. I'm Paul O'Brien, producer of the Oracle of Changes, the first interactive I Ching CD-Rom. We're happy to include the following interview with Terence McKenna. Hello Terence ... and thank you for contributing in this way to our CD-Rom!

Terence McKenna: It's a pleasure to be a part of it.

P: Let's start by asking why would you consider the I Ching to be relevant in today's world, considering that it is an ancient Chinese book?

T: Well, the people who put together the I Ching were very interested in change and time, in the same way that our culture since classical Greece has been interested in matter. The people who put together the I Ching were interested in time and I think they got quite far in their exposition of it. They were interested in why things happen as they happen. This is a different question than the one we ask in the West. The one we've asked in the West is 'what are things made of?' and we've come a great distance toward understanding that. I think the I Ching represents an effort to answer a different question: the question 'why do things happen the way they happen?' Our answers in the West, probability theory, causal unfolding, logical necessity, are really not very satisfying when applied to the world of politics, love affairs, the social world of human beings, and that was where the Confucian and Taoist mentality was focused was on the world of human interaction and so rather than viewing the I Ching as a primitive cultural artifact from the distant past I view it as a, uh, arguably very sophisticated cultural artifact representing a cultural point of view about which we know very little and in order to understand this point of view we're going to have to educate ourselves in the worldview of the I Ching which is very different from the worldview we're familiar with.

P: Terence, do you see any evidence in scientific circles of a renaissance in our orientation toward time that you just referred to?

T: Well there's certainly a growing awareness in Western science that the situation is a good deal more complex than cheerful rational materialism would have us believe. Taoism is essentially an appreciation of pattern. It's a wave theory of nature. Things have influences on other things at a distance. It's a holistic theory of nature. Things are seamless. It is an acausal theory of nature. Things are not only connected through logical necessity, but they are connected in other ways, through what we would call morphogenetic resonance. So, yes, I think science in the 20th century has grown generally more holistic. This comes from psychology at one end, and quantum physics at the other. And of course quantum physics and psychology meet in biology and the I Ching, one of the striking things about it to the Western mind, is its incredible isomorphism to the DNA and the way in which molecular coding of hereditary material takes place. So in a way this turn of Western science toward more holistic and unified theories of nature also represents a turning toward oriental ideas. In someone like Joseph Needham, these two impulses -- the oriental and the philosophical and scientific -- are unified and Needham had a great and deep respect for the I Ching and wrote extensively about it.

P: What do you know about the impact of the I Ching on the earliest inventors of binary mathematics in the West?

T: Well the Jesuits penetrated China very early. Gottfried Wilhelm Leibniz, who was a German mathematician and philosopher best known for... Bertrand Russell said Leibniz invented the smallest form of God. Leibniz invented something called the monad, which was basically the first attempt to solve philosophical problems with holographic matrices. But he was a very wide-ranging thinker and his Jesuit correspondents sent him (I don't know if they sent him the entire I Ching but they sent him the table of the hexagrams) and he quickly saw that this could be expressed as a binary number system and he in fact rearranged it in what to the Western mind is the logical way the hexagrams should be presented, in other words, according to binary unfolding of the integers in a binary system. That is not the traditional sequence of the hexagrams but from Leibniz then the I Ching lay fallow for at least a hundred years and then the English sinologist James Legge translated it in the late 19th century in a burst of oriental mania that was sweeping Europe at that time. And then of course Carl Jung, the founder of depth psychology, found in the images of the I Ching a mirror for his own assumptions about the structure of the unconscious, as he had found those things in dreams and alchemy and other concerns. And physicists—Jung published at one point on the I Ching with the physicist Wolfgang Pauli—...physicists found in the acausal connectedness upon which the I Ching was founded something similar to the non-Boolean logic that they were forced to use in constructing quantum theory. Ultimately I believe the power of the I Ching lies in the fact that it's an insight into the structure of nature not the structure of matter, atoms, molecular systems, but the structure of process. In the West we really have gotten no further than that a process has a beginning, a middle, and an end. The Chinese saw it in that that's essentially a four element or a three-element theory of process. The Chinese have a 64-element theory of process that allows them to perform a complex algebra of calculation as to what forces are impinging on any event and then they have this method of sortilege, of divination, which allows them to extract out of a unique moment a hexagram appropriate to that moment and then to refer to a body of interpretation that illuminates that.

P: You are the one who discovered that the traditional sequencing of the I Ching hexagrams known as the King Wen sequence maps out a fractal algorithm or pattern. What are the implications of this discovery?

T: Well yes I guess if I take my own opinions about the I Ching seriously then what I come away with is the idea that the world is more plotted, more structured, more ordered, than science has led us to suppose. In other words science gives us a world where many, many things are called probable but no theory at all about how out of this class of probable things, certain things actually come to be. And this is after all what we want to know: why did A happen and not B? My immersion in the I Ching leaves me with the conclusion that just as where you are in space—whether you're in a narrow mountain valley or in a broad desert—determines much of what is going to happen to you. Where you are in time similarly determines the kind of experiences you're going to have. And not all times are the same. When there are times of novelty and opportunity, chance-

taking is repaid well. In times of resistance and habit, risk-taking can be fatal or at least tragic. So the whole notion of Taoism and then later Confucian thinking too, is this kind of sensing into the moment to know what is appropriate and in much Western thinking it's been sort of presented as a mystical thing or an intuitive thing or an impossible to explain thing, I think it just simply was something that we didn't understand and that, in fact, it's much more like a science, this feeling into the moment. Now in the West we have it with Astrology, a similar tradition of trying to feel into the moment, but again, the Western mind is so obsessed with matter that it turns into observational astronomy under the rule of the calculus and the... shall we call... the psychological dimension of it then appears absurd and is forgotten or debunked or looked down upon. The Chinese, by not having this strong dualism between the internal and the external world, were able to create a kind of physics that was also for them a kind of psychology and the I Ching is the distillation and the quintessence of this way of understanding the world.

P: Would it be possible on a computer to map out a graphical representation of the fractal pattern of the king wen sequence?

T: Oh yes, this is the kind of thing I've worked on for years and the conclusions that it leads to are fascinating. It leads to the idea that what is called Tao is in principle not immune to a mathematical analysis, that what these sages are talking about is an invisible force which moves through the world building structure up and sustaining process at times and at other times impeding structure and tearing down and dissipating process according to mysterious laws. Well, all that mysterious laws mean are laws that you haven't understood yet and I maintain that it is true what the Taoists are saying. There is a mysterious force which ebbs and flows in time. It isn't electro-magnetic. It isn't photonic. It isn't any of these things. But it touches everything—men, atoms, organisms, societies—and these are all playthings in its hands. This is the Tao. So then the sage, the life of the sage, is an attempt to understand this. And I think it can be mathematically understood and this may be what the West brings to it. The mathematical tools and the technology—the computers you mention—to eventually portray this ebb and flow of Tao so that people can order their lives according to it. I think when a life lived in accordance to the Tao, however it is perceived, however it is known, is a life free of anxiety and this is the highest ideal of these Eastern systems of thought: to essentially become one with the flow of nature and thereby an example to emperor, commoner and everybody else.

P: Do you think the use of the I Ching could be described as a high order of *change management*?

T: Definitely, yes. I mean management is not a dirty word. It has a connotation now because it is so associated with rapacious capitalism, but all management means is paying attention to the details that must be paid attention to. A synonym for management is husbandry. Heidegger said the purpose of life is care for the project of being. Well, in a sense that's management. The I Ching is a manual for management, for the guidance of individuals and organizations toward their goals achieved by appropriate means.

P: You mention the use of the I Ching for divination. How much stock do you put in that type of application?

T: Well, it's a complicated question, you see. If what we're saying is that time is fractal, then implicit in that statement is the idea that patterns repeat on many many levels. Well that is really what all systems of divination all over the world have always claimed: that in a pool of water, in a flaw in a crystal, or in a process of sortilege, somehow these objects, these processes, become microcosms of the larger situation in the macrocosm. I think you can't really judge that hypothesis until you judge the physics that it's based upon. But certainly as they say, this is the oldest book in the world. It has persisted among very hardheaded people—politicians, and courtiers, and emperors—for several millennia so I think we need to take it seriously on that basis alone.

P: In modern times the I Ching and systems like it have been denigrated as superstitions. Do you see any of that attitude shifting in the light of modern discoveries in quantum physics?

T: Yes, I mean I think that dinosaur is so dead to its own sensation that the messages are not getting through. Anybody who has any understanding of what is going on in quantum physics or research mathematics or dynamics or chaos theory knows that the world is a far stranger place than the cheerful world of rational materialism inherited from the 19th century. The I Ching is a paragon of rationalism compared to the quantum physics taught in our universities in order to understand matter. You see something rather dramatic has gone unnoticed in Western thinking, which is physics. Which was always the paradigmatic science, the idealized science in the West, because often theory and experiment would agree with each other out to four or five decimal points. Well no other science—no biology, no psychology—can come even close to that so physics was always the paradigmatic science. But physics pushed its frontier then into a domain of irrationality: the realm of the quanta. Well then at that point the paradigmatic science began to babble like the ravings of a madman and the whole edifice of reason and rational apprehension of nature caved in for those who were paying attention to what was going on. Many people were not. The average workbench scientist has many cheerful assumptions about what he's doing and what science is that people who are philosophers of science know to be no more than a simple religious faith. So, yes, I think the I Ching, psychedelic experiences based on the news brought back from aboriginal non-Western peoples—all of these things are telling us that the world is more complex than reason can anticipate and that if we're serious about the intellectual enterprise of understanding nature and understanding ourselves, reason may just have to be viewed as one tool in the toolbox. And the I Ching is another tool in the toolbox, a very powerful and necessary tool.

POB: I'd like to go back to the fractal nature of time that you discovered based on the sequencing of I Ching hexagrams in the King Wen sequence. You came up with a theory, which you called "Time Wave Zero." Please tell us about that.

TM: Well the theory is called novelty theory, the software behind it is called time wave zero. It's basically simply based on these mathematical studies of the King Wen sequence—an effort to put all that in a computer and scale it against time so that we can generate what look like Cartesian graphs, in other words like stock market graphs, but they're not the rise and fall of a market, they're the ebb and flow of Tao. Tao dually conceptualized as habit and novelty. The flow of time is conceived of as a kind of shifting boundary or tension between habit and novelty, and the unfolding of this in its totality then is the Tao. So basically what I did is I tried to create a little mathematical model of how Tao would look if it could be numerically quantified.

POB: Do you consider yourself a scientist?

TM: My method is rational; my techniques are shamanic. Was it Lautréamont or Apollinaire or someone who said, “deliberate disordering of the senses...”? Oh, Rimbaud, Arthur Rimbaud, the symbolist poet.... A deliberate disordering of the senses worked for Rimbaud. I think it's very interesting to use Shamanic techniques and then analyze the data rationally rather than mythologically or psychologically or anthropologically and that's gotten me a long way. Being willing to put myself in these situations of turbulence through strange cultures or bizarre plant experimentation and this sort of thing, but then always to subject the data to the filters of rational inspection and the rules of evidence and analysis. So some people can't tell whether I'm half shaman, half scientist. I think probably the answer is simply half-baked (laughter).

POB: Is there any advice you'd like to give our audience relative to what we've been discussing?

TM: Well I don't know about advice. This is a fascinating area. I mean, you know, you're born, you don't know where you come from, you slip into the grave 50 or 60 or 80 years later, you don't know what that means and so between birth and the grave, where you are is the world of time—the world of time, space, energy and matter. And I think of it as a kind of puzzle or a challenge. If you can figure it out, you're plucked off into some other dimension with new problems and new challenges. If you can't figure it out, you probably just turn back into a sunbeam at the end of the whole thing. Well so then the I Ching is one of these very rare pieces of human literature where people actually understood something and they got it down and they left it as a signpost along the road. And if it resonates with you, if you feel what this is all about, then a life lived in the light of these writings and writings about these writings, is a life free of anxiety, open to the problems of other people and capable of being an example of how to live in the world. I think it's great that you're doing this and I hope it means that people are sensitizing themselves to the felt presence of experience. That's what the Tao is, that's what intuition is, that's what the I Ching can help us toward is an experience of our own being in time.