## Science in culture

## Cycling the cosmos

Prints of "The Four Seasons" Martin Kemp

ny mature culture is sustained by intricate systems of belief in which ideas and practices are mutually self-reinforcing. For much of Western culture, from Greek antiquity to the Enlightenment, understanding of the nature of life in the greater scheme of things was founded upon the profoundly cyclical behaviour of the Universe — the gyrations of the heavenly bodies, the phases of the Moon, the passing of the seasons, the times of day.

On this mortal coil the four ages of man acted out their endless succession. This elemental cycle of all natural things operated according to a periodic base of four.

A remarkable and apparently unique set of prints of "The Four Seasons" in the History of Medicine Collections at Duke University in North Carolina is unrivalled as a compact yet comprehensive visual encyclopaedia of the governance of human existence.

Dating from around 1600 and of northern European or British origin, the prints are of a complexity that defies brief summary — not least because each print is overlaid by strata of superimposed flaps which progressively disclose deeper layers of knowledge, while rotating paper 'volvelles" can be used to plot temporal conjunctions of signs.

God's most divine creation, a progressively ageing Adam and Eve, are anatomized under an astrological arch, flanked by the

> Tree of Knowledge. The busy microcosms of animals and plants within the body of the Earth provide the background against which the two archetypal humans pursue their life cycles, accompanied by the remorselessly ticking clock of cosmological time. In "Autumn", the third in the series, the rich harvest of the implanting of man's seed is made manifest by the woman's swollen belly, which hinges open to reveal the homunculus within.

vitalizing Tree of Life and the dangerous

The Hippocratic mottoes on the ribbons locate the prints within the orbit of the physician's art, which was seen as founded on higher philosophical wisdom. All maladies were treated within the context of humoral medicine, in which the body was governed by four humours: blood, yellow bile, phlegm and black bile. A predominance of one humour would result respectively in the individual manifesting a sanguine, choleric, phlegmatic or melancholic temperament. The humours themselves obeyed the greater governance of the four elements of air, fire, water and earth, and their coupled qualities, moist-hot,

hot-dry, cold-moist and dry-cold.

Looking back, it may be difficult to

comprehend how a system that appears so

erroneous held such sustained sway. But, once

The fullness of time: "Autumn" from the engravings of "The Four Seasons". This is one of a remarkable series that can be seen in "The Physician's Art: Representations of Art and Medicine From Four North Carolina Collections" at Duke University Museum of Art, Durham, North Carolina, from 4 November 1999 to 16 January 2000.

we understand how deeply the parts of the mutually supporting doctrines were embedded in sophisticated patterns of institutional belief and practice, we can better appreciate how each part continued to bear witness to the validity of the others and to the essential rightness of the whole.

Faith in the rule of the planets over our lives, to take just one component, was not unreasonable, given the striking evidence of the Moon's ability to shift great bodies of tidal water, and the cyclical governance evident in all aspects of the natural year.

In societies that were still dominated by the vagaries of agrarian cycles, where the course of events was determined by remote agencies, it was quite rational to believe that some hugely complex clock was at work. There was no reason why humans should prove to be an exception to the rule.

It seems to me that the breakdown in the complex machinery of the set of beliefs in the Four Seasons is profoundly associated with the growing dominance, in the eighteenth century, of the urban environment. This brought an increasing reliance upon technology and the forging of a lifestyle based upon the conviction that scientific and technological progress would accord us mastery over nature.

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We are the heirs to this world-picture of human manipulative potential. But there is no guarantee that our systems of interlocking beliefs will not appear as strange to later cultures as those in "The Four Seasons" now

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