

First World (Virtual) Congress on *RELATIONISM*

NOTE ON THE NOTIONS OF *RELATION* and *WHOLE (HOLISTIC)*: In *RELATIONISM* the notion of *RELATION* depends ontologically on both the notions of *SYSTEM* and *RELATION*, but uniquely with the emphasis on the latter. The common experience of *SYSTEM* is of a *total-system* (picture puzzle) reality in which a *TOTOSYSTEM* is achievable by having all the pieces in the right place at the right time. By contrast, a *whole-system* [holo(graphic)] reality requires the presencing of the *THE WHOLE (HOLOSYSTEM)* in each part. However, as such, *THE WHOLE* is No-Thing and hence can not be represented as a *SYSTEM* alone, but is in essence *RELATION*, specifically *INTERRELATED RELATION*.

MAE-WAN HO
TOWARDS A NEW ETHIC OF SCIENCE

 KurzweilAI.net

BIG THINKERS

Dr. Mae-Wan Ho, long-time critic of neo-Darwinism and genetic engineering and pioneer of a "physics of organisms," is one of the most influential and widely sought-after speakers in the new paradigm of organic science. As Director and co-founder of the Institute of Science in Society and scientific advisor to the Third World Network, she has had plenty of opportunity to put her science in action.



She has more than 300 publications and a dozen books spanning several disciplines, including *The Rainbow and the Worm*, *the Physics of Organisms* (1993, 1998), *Genetic Engineering Dream or Nightmare?* (1998, 1999), and *Living with the Fluid Genome* (2003). She also edits the radical science magazine, *Science in Society*.



Institute of Science in Society

science society sustainability

The Institute of Science in Society, PO Box 32097, London NW1 0XR
telephone: [44 20 7383 3376] [44 20 7272 5636]

General Enquiries sam@i-sis.org.uk - Website/Mailing List press-release@i-sis.org.uk - ISIS Director m.w.ho@i-sis.org.uk

**MATERIAL ON THIS SITE MAY BE REPRODUCED IN ANY FORM WITHOUT PERMISSION,
ON CONDITION THAT IT IS ACCREDITED ACCORDINGLY AND CONTAINS A LINK TO
<http://www.i-sis.org.uk/>**

Towards "A CONVENTION ON KNOWLEDGE" - Draft 7

Institute of Science in Society, ISIS:

Dr. Mae-Wan Ho, PO Box 32097, London, NW1 0XR, UK, e-mail: m.w.ho@i-sis.org.uk

Scientists for Global Responsibility, SGR:

Dr. Phil Webber, PO Box 473, Folkestone, Kent, CT20 1GS, UK. Email: PhilW@sgr.org.uk

Third World Network, TWN:

Mr. Martin Khor, 228 Macalister road, 10400 Penang, Malaysia, e-mail: mkhor@iqc.apc.org

Philip Webber, Vice Chair of SGR writes:

In the run-up to the World Summit on Sustainable Development (WSSD), Scientists for Global Responsibility (SGR) wants to help initiate a wide-ranging discussion on how science and knowledge should be developed and used. For the purpose, we are circulating this paper, originally drafted by Mae Wan Ho, which now reflects contributions from many sources and individuals.

Preface

Acknowledgment

What Does A "Convention" Imply?

Why 'Knowledge'?

Why We Need It

Proposed Elements for A 'Convention on Knowledge'

Background Considerations

- The predominant model has failed
- Science, ethics and precaution
- Corporate science endangers lives
- Independent science and scientists becoming extinct
- Destruction of indigenous knowledge

Globalisation and biopiracy
Mechanistic science and big business share the same ideology
Holistic, organic sciences emerging

The Way Forward

Working science partnerships
Science and technologies that should be supported
Ecology & energy use in sustainable systems
Science of the organism and holistic health
Criteria of appropriate technologies

WHY 'KNOWLEDGE'?

'Knowledge' is to be read in the widest sense to include all knowledge systems that exist in the world today, to underscore the holistic nature of knowledge systems and their independent and equal status. Thus, 'knowledge' in the west will include science and other ways of knowing, whereas for indigenous communities, 'knowledge' might be synonymous with 'indigenous science'.

Focusing on knowledge also stresses the important point that knowledge is not independent of technology, or the application of science. Knowledge inspires and guides and misguides technology. This is as true for western science as it is for holistic indigenous knowledge systems.

WHY WE NEED IT

The commercialization of science and the increasing intimate relationship between universities and industry have undermined public trust in science and scientists. More seriously, independent science and scientists working for the public good are becoming things of the past. This is coming at a time when technologies are getting more powerful and uncontrollable, both as weapons of mass destruction and in terms of destroying the social and moral fabric of human societies.

But western science itself is undergoing a profound paradigm change towards an organic perspective that has deep affinities with indigenous knowledge systems around the world. We have all the means to bring a truly sustainable and equitable world into being, only the political will is missing. We need a collective vision that could underpin a new model of world governance and finance. Towards that end, we have drafted some elements towards a 'convention on knowledge' that could also serve as the focus of a concerted campaign to reclaim all knowledge systems to the service of public good.

BACKGROUND CONSIDERATIONS

Holistic, organic sciences emerging

It was the failings of the dominant knowledge system that brought fifty thousand to the streets at the World Trade Organisation conference in Seattle in November 1999.---- The dominant paradigm has also failed within science. Across the disciplines, from the study of complexity in mathematics

and co-operative phenomena in physics to the 'fluid genome' in molecular genetics, the mechanistic conception of nature has been found thoroughly inadequate.

Western science is facing its greatest challenge, to transcend the ruling paradigm to holistic, ecological perspectives that can foster the necessary shift to sustainable ways of life.

Many individuals and local communities are already changing their own lives and the world around them for the better. They do so by learning from nature, and recognising the harmonious, symbiotic, mutualistic relationships that sustain ecosystems and make all life prosper, including the human beings as active, sensitive participants in the whole ecosystem.

The same organic revolution is happening in western science over the past thirty years. Lovelock's Gaia theory, for example, invites us to see the earth as one super-organism with a geo-physiology that maintains it in a dynamically stable state. This is an acknowledgement that we are ecologically entangled with all life on earth.

Even more remarkable, for some of us, is the message from quantum theory: that we are inextricably entangled with one another and with all nature, which we participate in co-creating. It restores and reaffirms the holistic perspectives that many indigenous cultures have never lost touch with. At the same time, it provides a western scientific perspective that can begin to connect with indigenous health and food production systems and practices, offering much scope for creative partnerships between western and indigenous knowledge.

A holistic science for the west has the potential to transform the meaning and texture of the lives of all who live under the dominant knowledge system, and to create a social reality that genuinely serves the emotional, spiritual and physical needs of everyone. It would capture the common values that underlie the immense cultural diversity of our species.

THE WAY FORWARD

We need to substantially alter the way knowledge is acquired and applied. In particular, we need to transform the way scientific research is conducted in the west as well as the areas funded.

Science of the organism and holistic health

Many new research programmes fall potentially within the general area of "science of the organism". The emphasis is on non-linear complex dynamics, feedback and coherence, which are necessary for understanding complex systems in general. Especially important is the scientific underpinning of complementary and alternative medical practices, in view of the fact that homeopathy is entering mainstream medicine.

Site Map

Biotechnology

- [Agriculture](http://www.i-sis.org.uk/GE-agriculture.php) (<http://www.i-sis.org.uk/GE-agriculture.php>)
GM crops, horizontal gene transfer, terminator insects
- [Biomedical applications](http://www.i-sis.org.uk/GE-biomedical.php) (<http://www.i-sis.org.uk/GE-biomedical.php>)
Genetic Engineering Superviruses, xenotransplantation etc
- [Biopatents](http://www.i-sis.org.uk/GE-biopatents.php) (<http://www.i-sis.org.uk/GE-biopatents.php>)
Biotech patents, TRIPS (Trade Related Intellectual Property Rights)
- [Books and Book Reviews](http://www.i-sis.org.uk/GE-books.php) (<http://www.i-sis.org.uk/GE-books.php>)
- [Conceptual Articles](http://www.i-sis.org.uk/GE-conceptual.php) (<http://www.i-sis.org.uk/GE-conceptual.php>)
Human Genome etc.
- [Ethics](http://www.i-sis.org.uk/GE-ethics.php) (<http://www.i-sis.org.uk/GE-ethics.php>)
Ethical aspects of biotechnology - cloning, biopatents etc.
- [Interviews](http://www.i-sis.org.uk/GE-I.php) (<http://www.i-sis.org.uk/GE-I.php>)
- [Legal Briefs and Legislation](http://www.i-sis.org.uk/GE-legal.php) (<http://www.i-sis.org.uk/GE-legal.php>)
Witness briefs and other legal submissions
- [Public Debates and Lectures](http://www.i-sis.org.uk/GE-debates.php) (<http://www.i-sis.org.uk/GE-debates.php>)
Talks, lectures and debates
- [Public Health](http://www.i-sis.org.uk/GE-publichealth.php) (<http://www.i-sis.org.uk/GE-publichealth.php>)
Superviruses, biowarfare and bio terrorism
- [Regulation](http://www.i-sis.org.uk/GE-regulation.php) (<http://www.i-sis.org.uk/GE-regulation.php>)
Field trials, substantial equivalence etc.
- [Science and Government](http://www.i-sis.org.uk/GE-scigov.php) (<http://www.i-sis.org.uk/GE-scigov.php>)
- [Scientific Papers](http://www.i-sis.org.uk/GE-scientific.php) (<http://www.i-sis.org.uk/GE-scientific.php>)
Papers published in scientific journals

New Science of the Organism

- [Biophysics](http://www.i-sis.org.uk/SO_biophysics.php) (http://www.i-sis.org.uk/SO_biophysics.php)
- [Gaia Theory](http://www.i-sis.org.uk/SO_gaia.php) (http://www.i-sis.org.uk/SO_gaia.php)
- [Public Lectures](http://www.i-sis.org.uk/SO_lectures.php) (http://www.i-sis.org.uk/SO_lectures.php)
- [Holistic Health](http://www.i-sis.org.uk/SO_holhealth.php) (http://www.i-sis.org.uk/SO_holhealth.php)
- [Scientific Papers](http://www.i-sis.org.uk/SO_papers.php) (http://www.i-sis.org.uk/SO_papers.php)
- [Books and Book Reviews](http://www.i-sis.org.uk/SO_books.php) (http://www.i-sis.org.uk/SO_books.php)
- [Nanotechnology](http://www.i-sis.org.uk/SO_nano.php) (http://www.i-sis.org.uk/SO_nano.php)
- [Interviews](http://www.i-sis.org.uk/SO_interviews.php) (http://www.i-sis.org.uk/SO_interviews.php)
- [Water](http://www.i-sis.org.uk/SO_water.php) (http://www.i-sis.org.uk/SO_water.php)
- [Workshops](http://www.i-sis.org.uk/SO_workshops.php) (http://www.i-sis.org.uk/SO_workshops.php)

Science in Society

- [Science and Commerce](http://www.i-sis.org.uk/scicom.php) (<http://www.i-sis.org.uk/scicom.php>)
- [Science and Government](http://www.i-sis.org.uk/scigov.php) (<http://www.i-sis.org.uk/scigov.php>)
- [Science and Art](http://www.i-sis.org.uk/sciart.php) (<http://www.i-sis.org.uk/sciart.php>)
- [Science and Education](http://www.i-sis.org.uk/sciedu.php) (<http://www.i-sis.org.uk/sciedu.php>)
- [Science and the Environment](http://www.i-sis.org.uk/scienv.php) (<http://www.i-sis.org.uk/scienv.php>)
- [Science and Ethics](http://www.i-sis.org.uk/scieth.php) (<http://www.i-sis.org.uk/scieth.php>)
- [Science and Food](http://www.i-sis.org.uk/scifood.php) (<http://www.i-sis.org.uk/scifood.php>)
- [Sustainable and Agriculture](http://www.i-sis.org.uk/susag.php) (<http://www.i-sis.org.uk/susag.php>)

Publications

- [Science in Society 23](http://www.i-sis.org.uk/isisnews/sis23.php) (<http://www.i-sis.org.uk/isisnews/sis23.php>) Autumn 2004
- [Science in Society 22](http://www.i-sis.org.uk/isisnews/sis22.php) (<http://www.i-sis.org.uk/isisnews/sis22.php>) Summer 2004
- [Science in Society 21](http://www.i-sis.org.uk/isisnews/sis21.php) (<http://www.i-sis.org.uk/isisnews/sis21.php>) Spring 2004
- [Science in Society 20](http://www.i-sis.org.uk/isisnews/sis20.php) (<http://www.i-sis.org.uk/isisnews/sis20.php>) Autumn/Winter 2003
- [Science in Society 19](http://www.i-sis.org.uk/isisnews/sis19.php) (<http://www.i-sis.org.uk/isisnews/sis19.php>) Summer 2003
- [Science in Society 18](http://www.i-sis.org.uk/isisnews/sis18.php) (<http://www.i-sis.org.uk/isisnews/sis18.php>) Spring 2003
- [Science in Society 17](http://www.i-sis.org.uk/isisnews/sis17.php) (<http://www.i-sis.org.uk/isisnews/sis17.php>) Winter 2003
- [Science in Society 16](http://www.i-sis.org.uk/isisnews/sis16.php) (<http://www.i-sis.org.uk/isisnews/sis16.php>) Autumn 2002
- [Science in Society 15](http://www.i-sis.org.uk/isisnews/sis15.php) (<http://www.i-sis.org.uk/isisnews/sis15.php>) Summer 2002
- [i-sis news13/14](http://www.i-sis.org.uk/isisnews/i-sisnews13.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews13.php>) Febraury 2001
- [i-sis news11/12](http://www.i-sis.org.uk/isisnews/i-sisnews11.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews11.php>) October 2001
- [i-sis news9/10](http://www.i-sis.org.uk/isisnews/i-sisnews9.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews9.php>) July 2001
- [i-sis news7/8](http://www.i-sis.org.uk/isisnews/i-sisnews7.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews7.php>) February 2001
- [i-sis news6](http://www.i-sis.org.uk/isisnews/i-sisnews6.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews6.php>) September 2000
- [i-sis news5](http://www.i-sis.org.uk/isisnews/i-sisnews5.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews5.php>) July 2000
- [i-sis news4](http://www.i-sis.org.uk/isisnews/i-sisnews4.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews4.php>) March 2000
- [i-sis news3](http://www.i-sis.org.uk/isisnews/i-sisnews3.php) (<http://www.i-sis.org.uk/isisnews/i-sisnews3.php>) December 1999
- [i-sis news2](http://www.i-sis.org.uk/isisnews/wss2.php) (<http://www.i-sis.org.uk/isisnews/wss2.php>) Septemer 1999
(Originally posted as World Scientists Statement, update of concerns)
- [i-sis news1](http://www.i-sis.org.uk/isisnews/wss.php) (<http://www.i-sis.org.uk/isisnews/wss.php>) July 1999
(Originally posted as World Scientists Statement, update of concerns)