

University of Victoria

Elder Academy Nov 2nd 2019

**“Complementary Medicine” in context:
Where does it come from – and where is
it going?**

Peter Conway
Medical Herbalist



Peter Conway

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Fellow of the National Institute of Medical Herbalists (UK)

Fellow of the College of Practitioners of Phytotherapy (UK)

Member of the Canadian Herbalists Association of BC

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Author of *The Consultation in Phytotherapy*, 2011 Elsevier

The Consultation in Phytotherapy

The Herbal Practitioner's Approach to the Patient



Peter Conway

Foreword by Simon Mills

CHURCHILL
LIVINGSTONE
ELSEVIER

2011

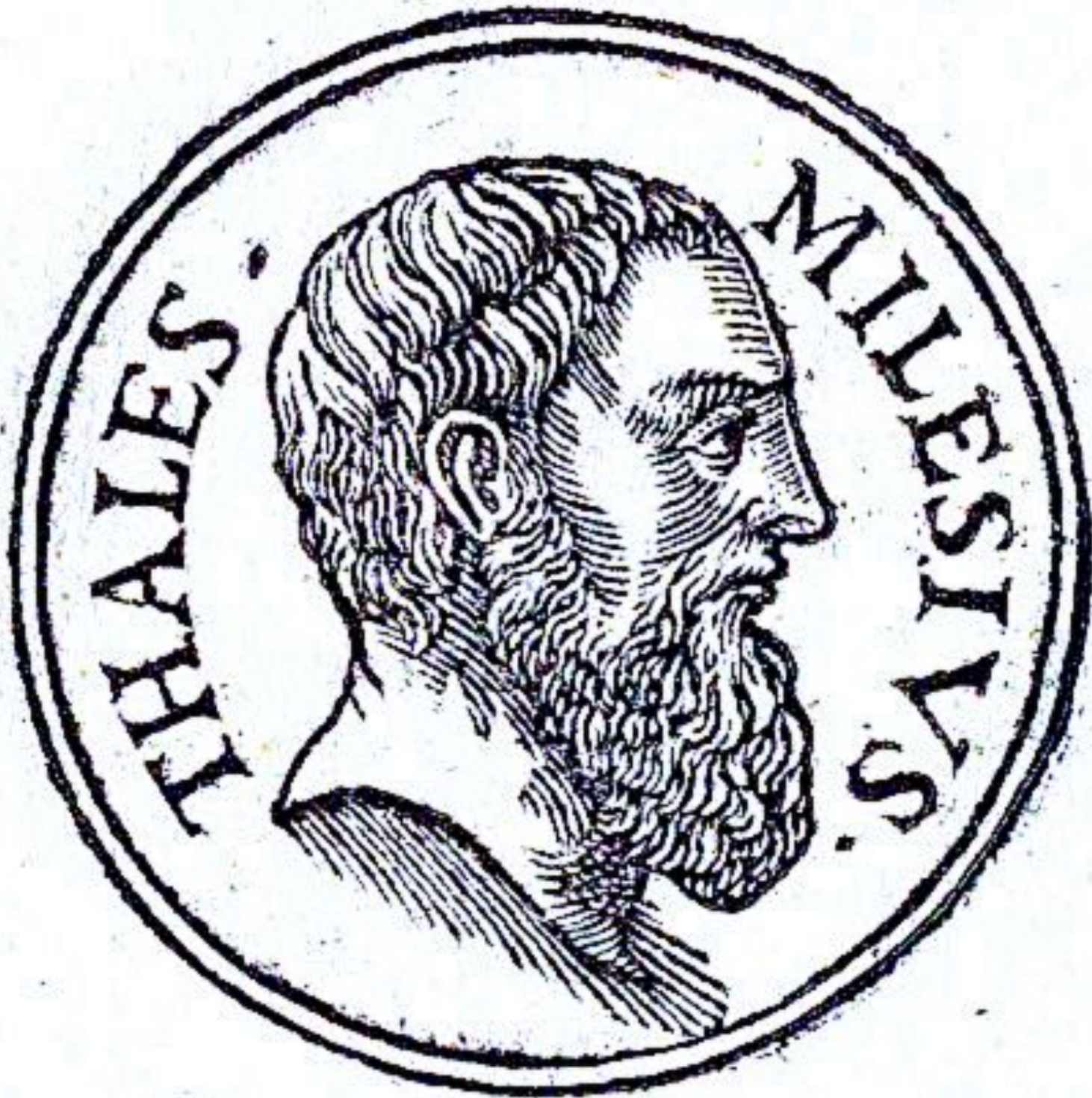
**Where does
complementary
medicine come from?**

**It depends on which
modality you are
referring to!**

**Let's look at the most
ancient forms...**

**What we now call
“complementary
medicine” begins as an
approach situated
within a cosmological
context**



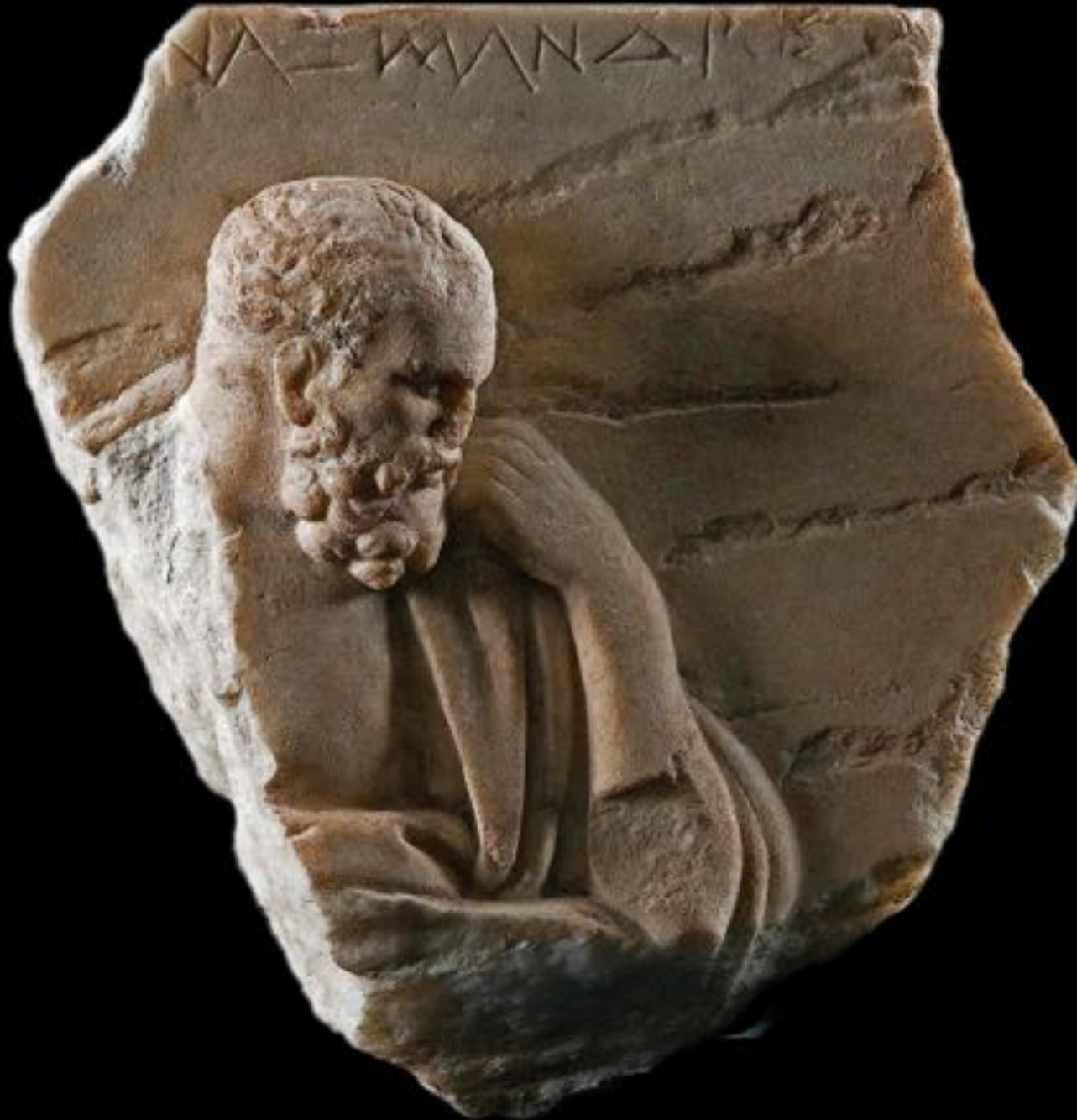


**Thales of
Miletus**

c620BCE
to c546BCE

The primal
material is:

Water



Anaximander
c610BCE to
c546BCE

**Interaction of
hot, cold, wet
& dry**

5 MINUTE PHILOSOPHY

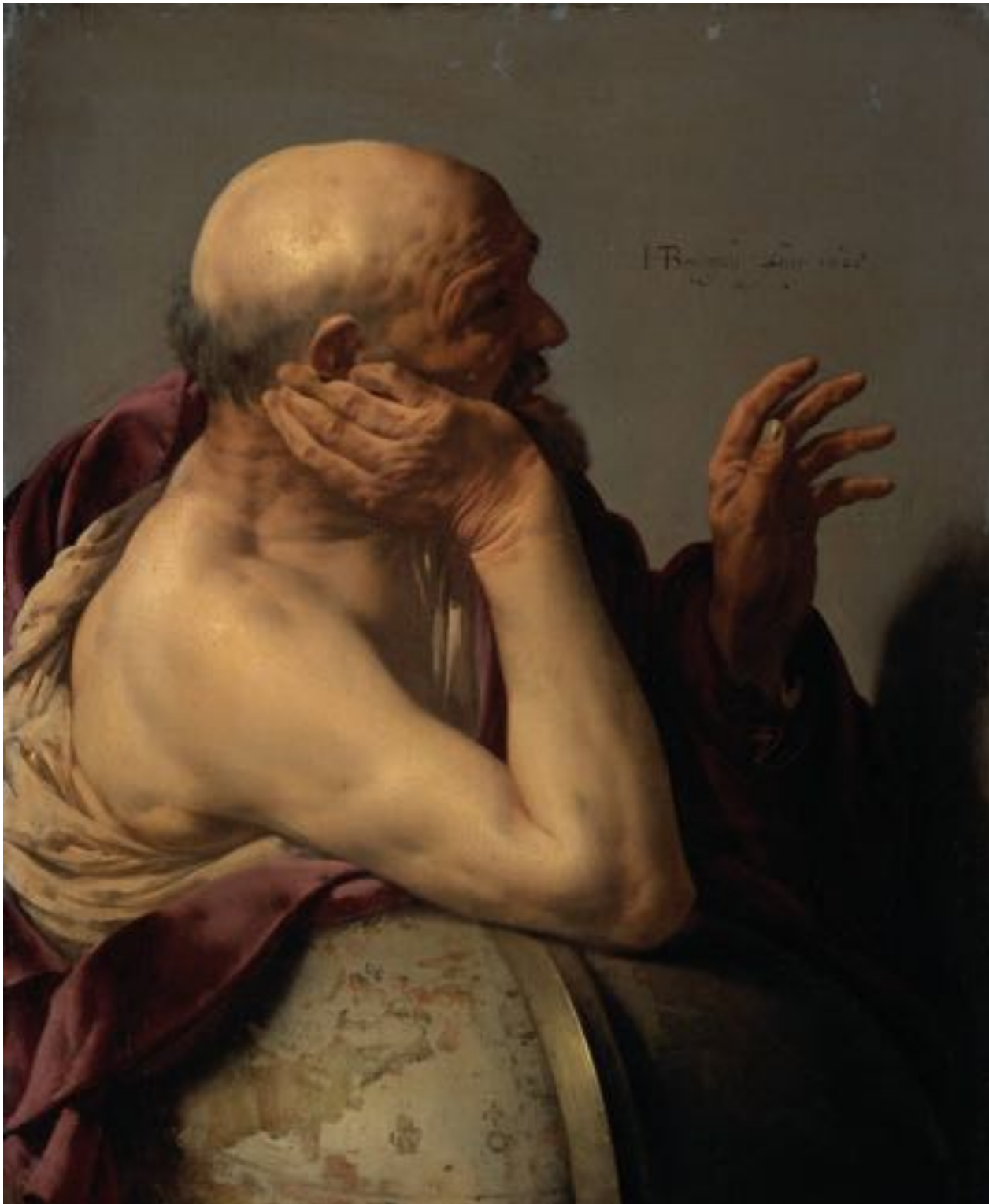


ANAXIMENES

"EVERYTHING IS AIR"



c585BCE to c528BCE



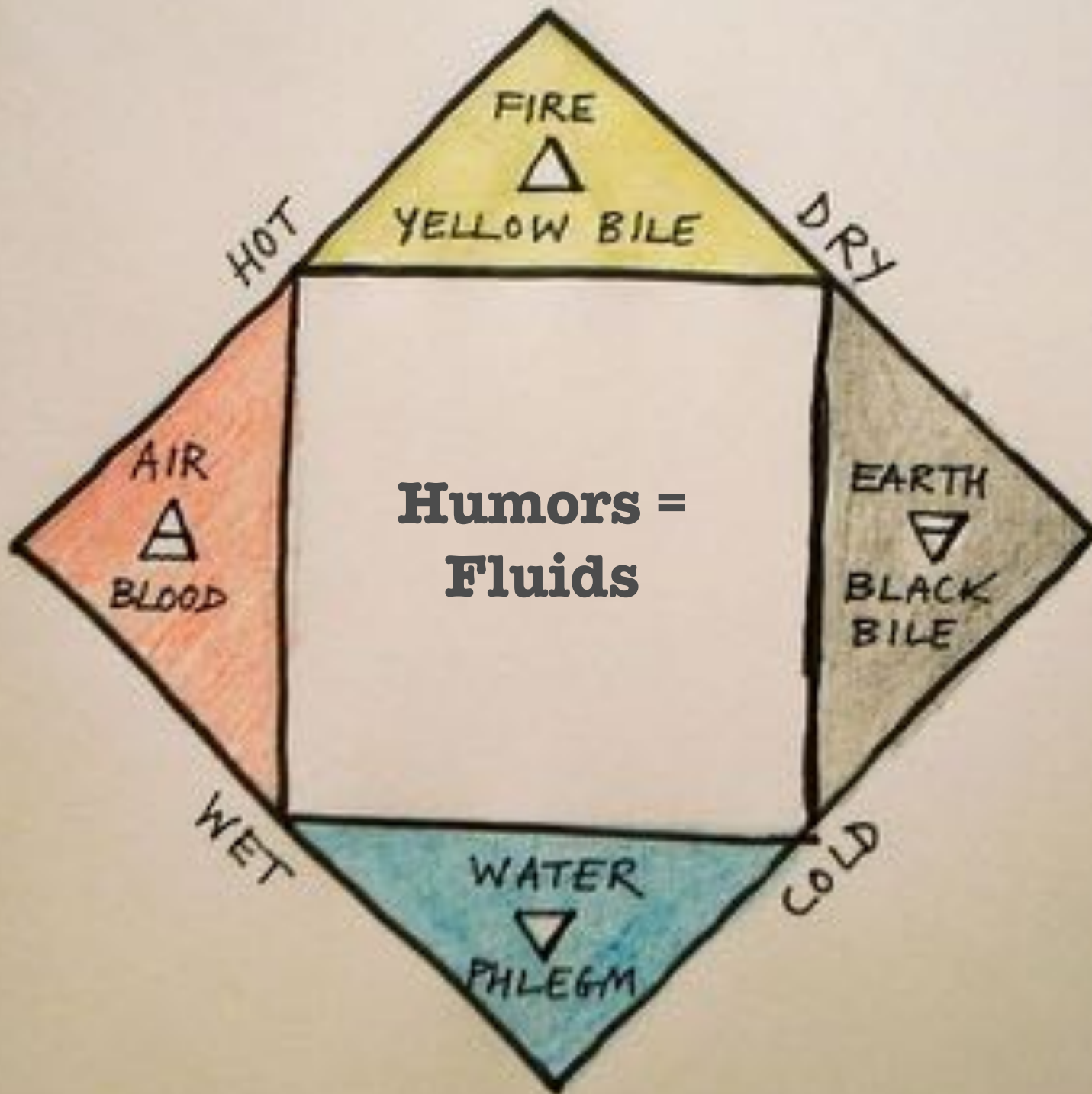
Heraclitus

c535BCE to
c475BCE

Fire

By Hendrick ter
Brugghen,
1588 to 1629

Traditional Medicine Cosmology





Four Humors

Temperament
Constitution
Personality





LAO TSU 道
TE
經 TAO
CHING

A NEW TRANSLATION BY GIA-FU FENG AND JANE ENGLISH

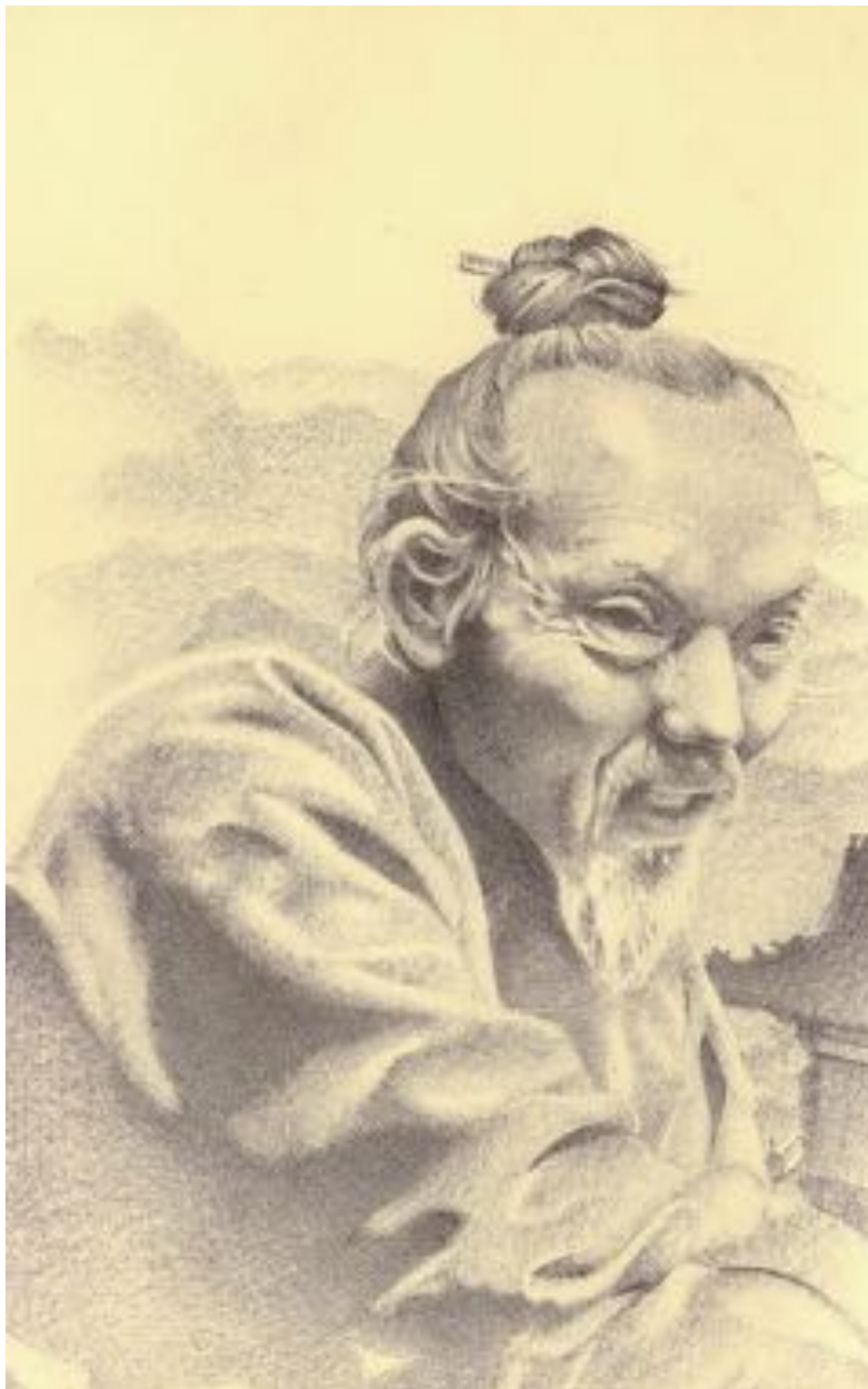
“Tao te Ching”

(c500BCE)

“**The Tao** begot one. One begot two. Two begot three. And three begot the ten thousand things. The ten thousand things carry yin and embrace yang. They achieve harmony by combining these forces.”

Yin Yang Theory

Yin	Yang
Earth	Sky (Heaven)
Descending	Ascending
Moon	Sun
Night	Day
Shade	Light
Winter	Summer
Coolness	Heat
Stillness	Movement



It is important to be clear that there is no complacency here. As Chuang Tzu said: **“The torch of chaos and doubt, this is what the sage steers by”**

It is “sagely” to not only be comfortable with uncertainty but to know that uncertainty is the source of creativity and knowing

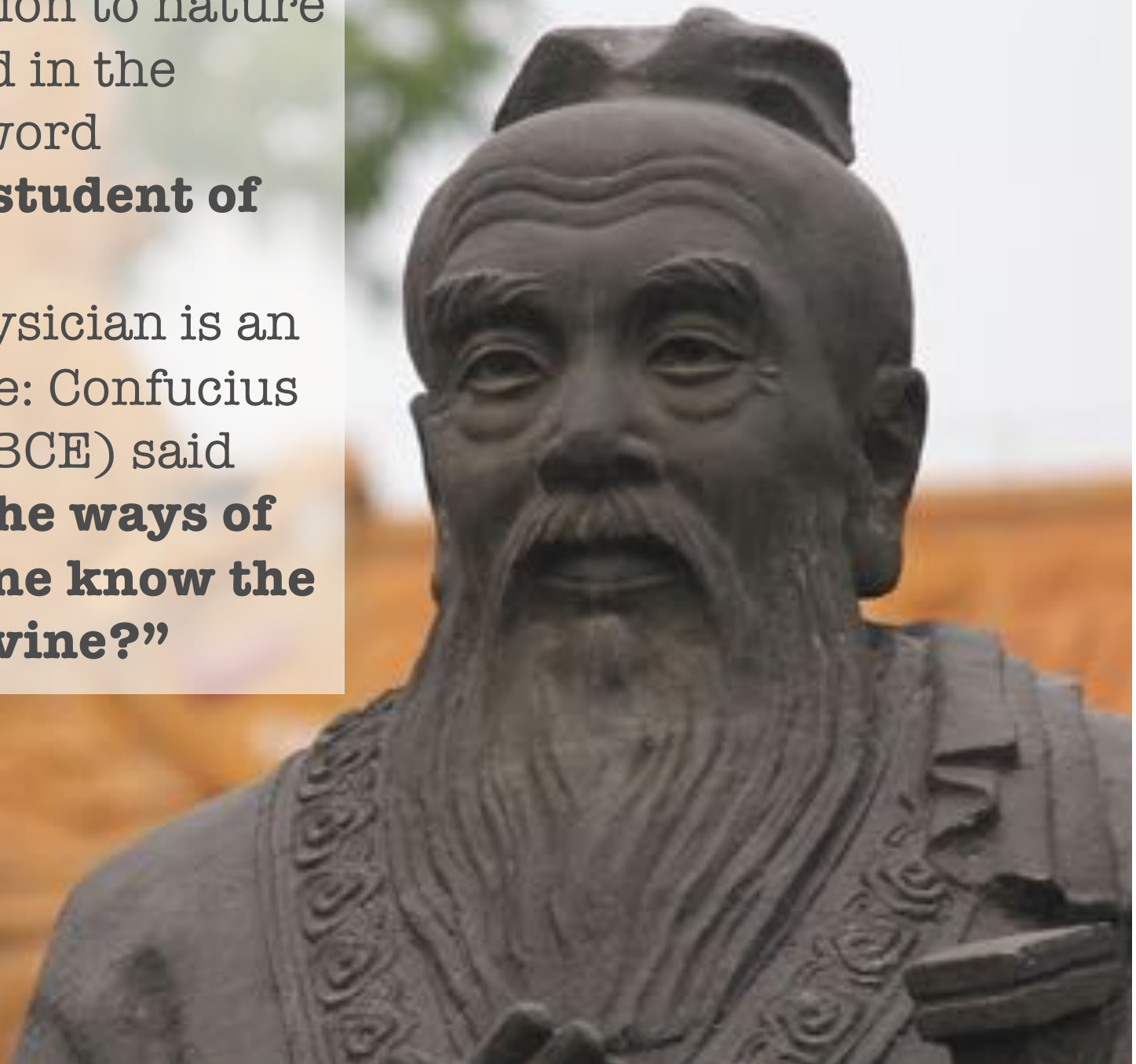
The aim of the sage is an **“understanding of how all things move in a total system”** (Mou, B.; Ed. 2003. *Comparative Approaches to Chinese Philosophy* Ashgate)

Note that the sage proceeds by paying attention to nature – this is reflected in the meaning of the word

“physician” = “student of nature”

A traditional physician is an expert on change: Confucius (551BCE to 479BCE) said

“If one knows the ways of change, could one know the doings of the divine?”

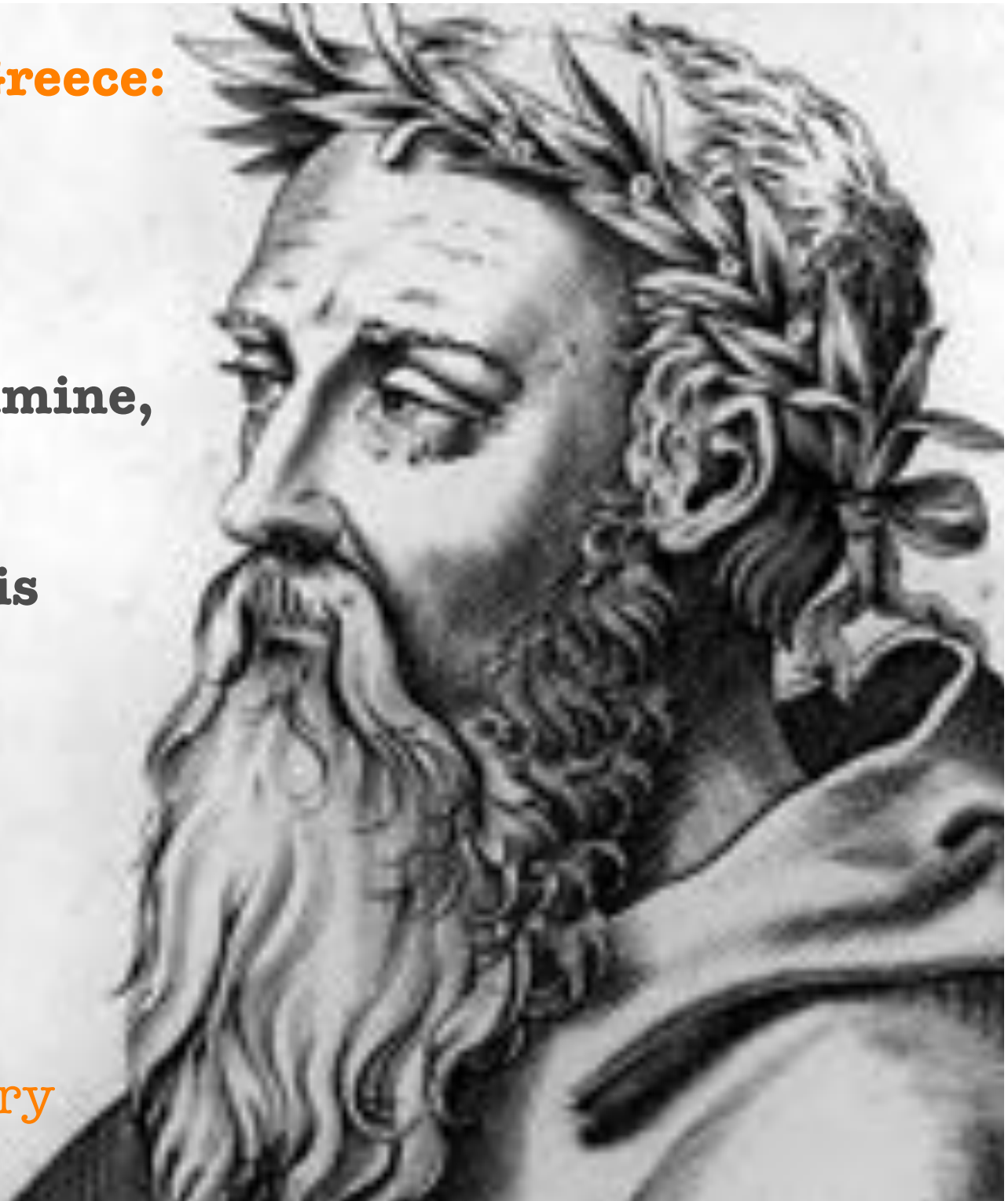


Change in Ancient Greece:

**By cosmic rule,
as day yields night,
so winter summer,
war peace, plenty famine,
All things change**

**The only thing that is
constant,
is change
All is flux,
Nothing stays still
Panta rhei
(everything flows)**

**Heraclitus (6th century
BCE)**



The Key Role of Change

What is the nature of life?

Change

What is the nature of death?

Change

What is the nature of health?

The ability to cope with change

What is the nature of illness?

Fixity/disorder in the face of change

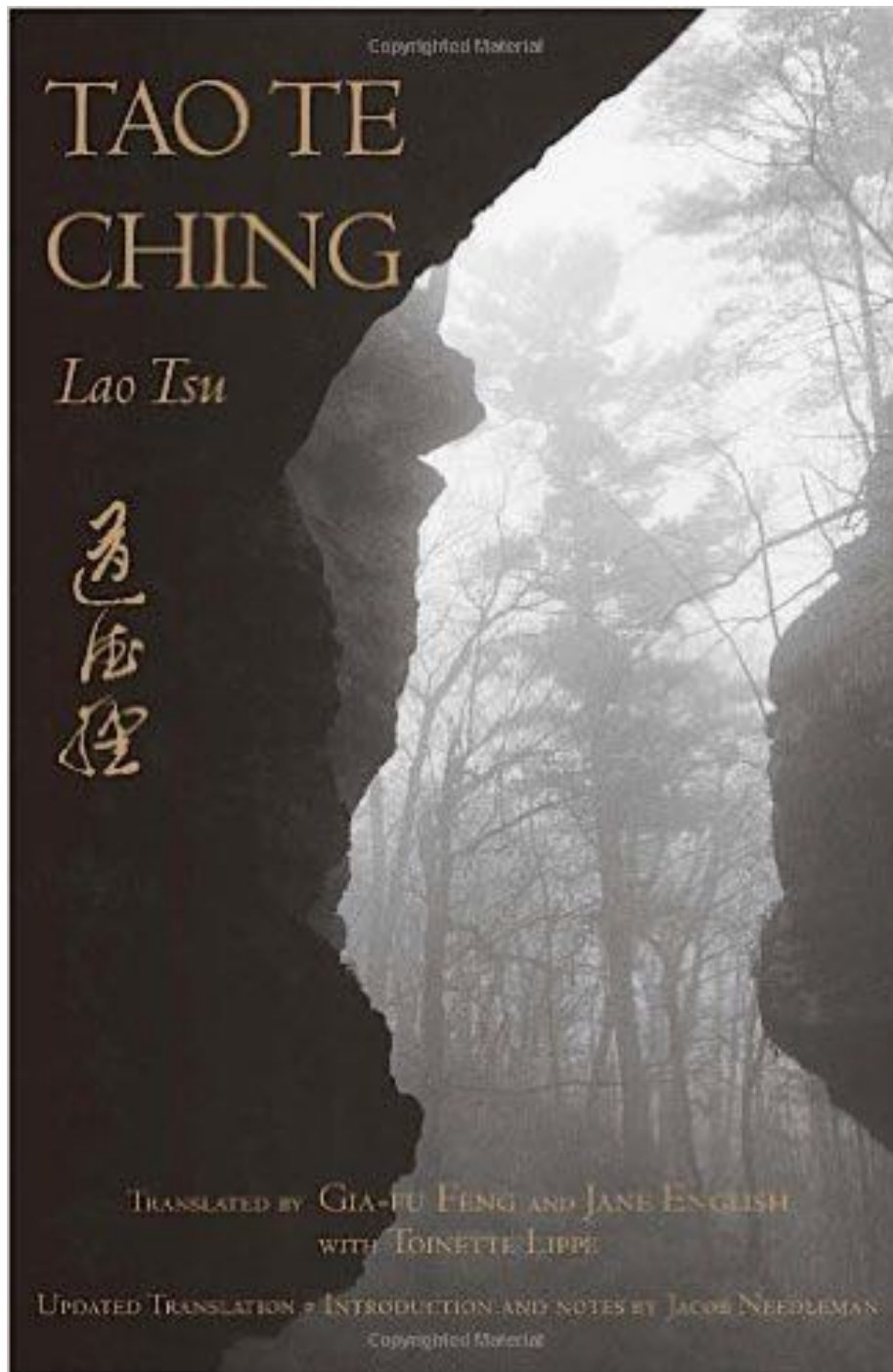
How do you enable change?

By learning

Remember:

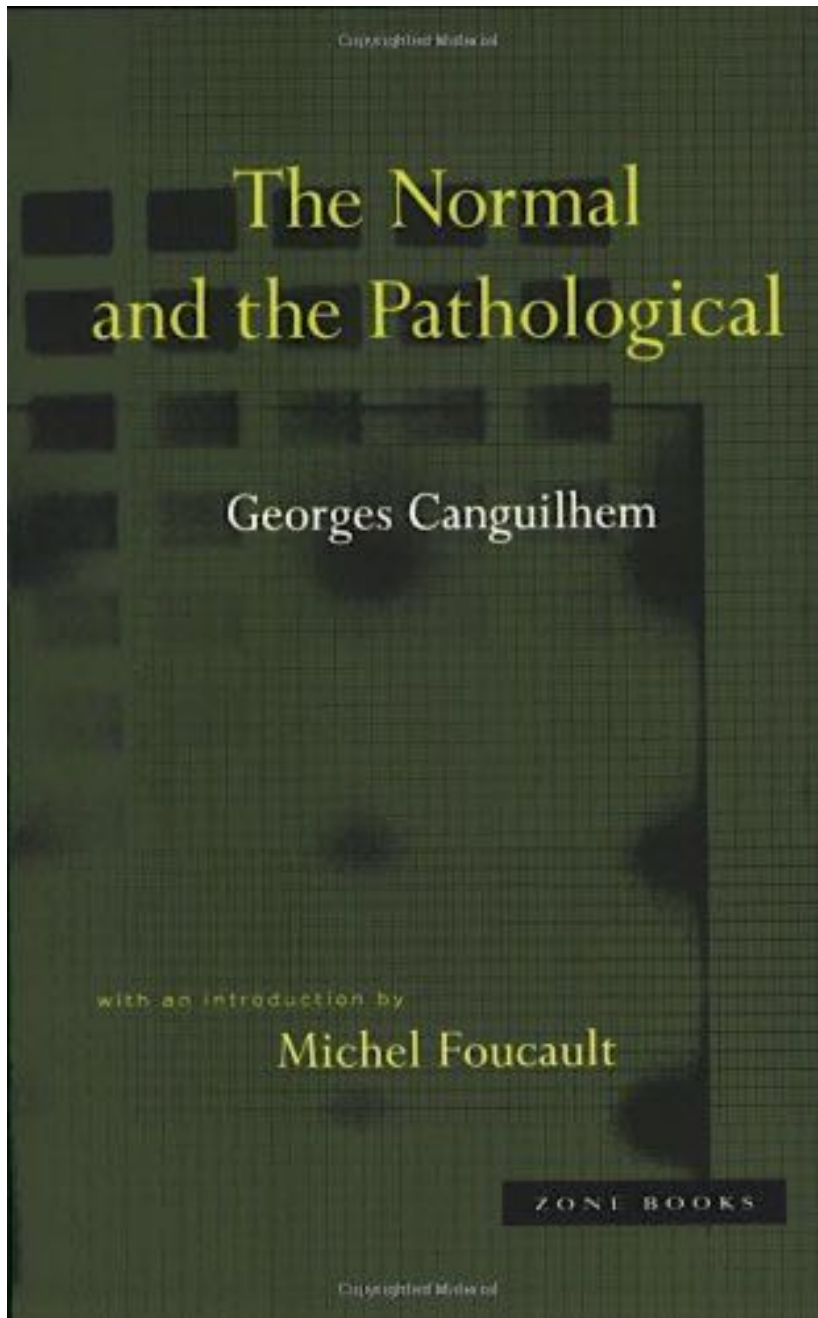
“physician” means “student of nature”

“doctor” means “teacher”



The nature of illness then is stagnation (fixity in the face of change)

As it says in the Tao te Ching (by Lao Tzu) – “the stiff and unbending are the disciples of death”



Given that the nature of life is change then, as Georges Canguilhem (1904 to 1995) puts it: **“health is the ability to cope with change”**



1943

Navigating Change:

The *I Ching* is the core foundational text of Chinese philosophy

I means “change” and
Ching means a classic text

I Ching = the classic text on how to deal with change



Nature Analogy

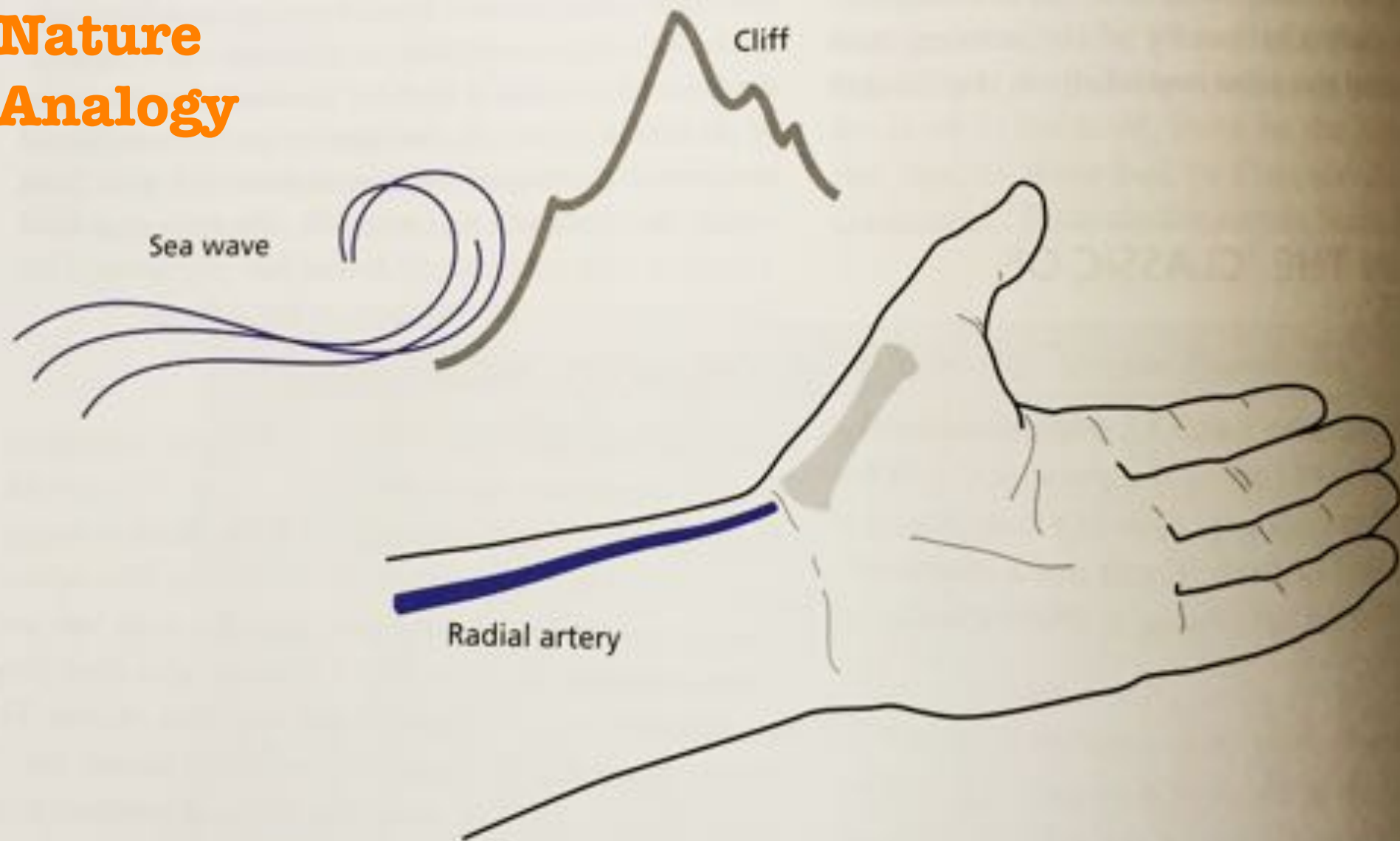
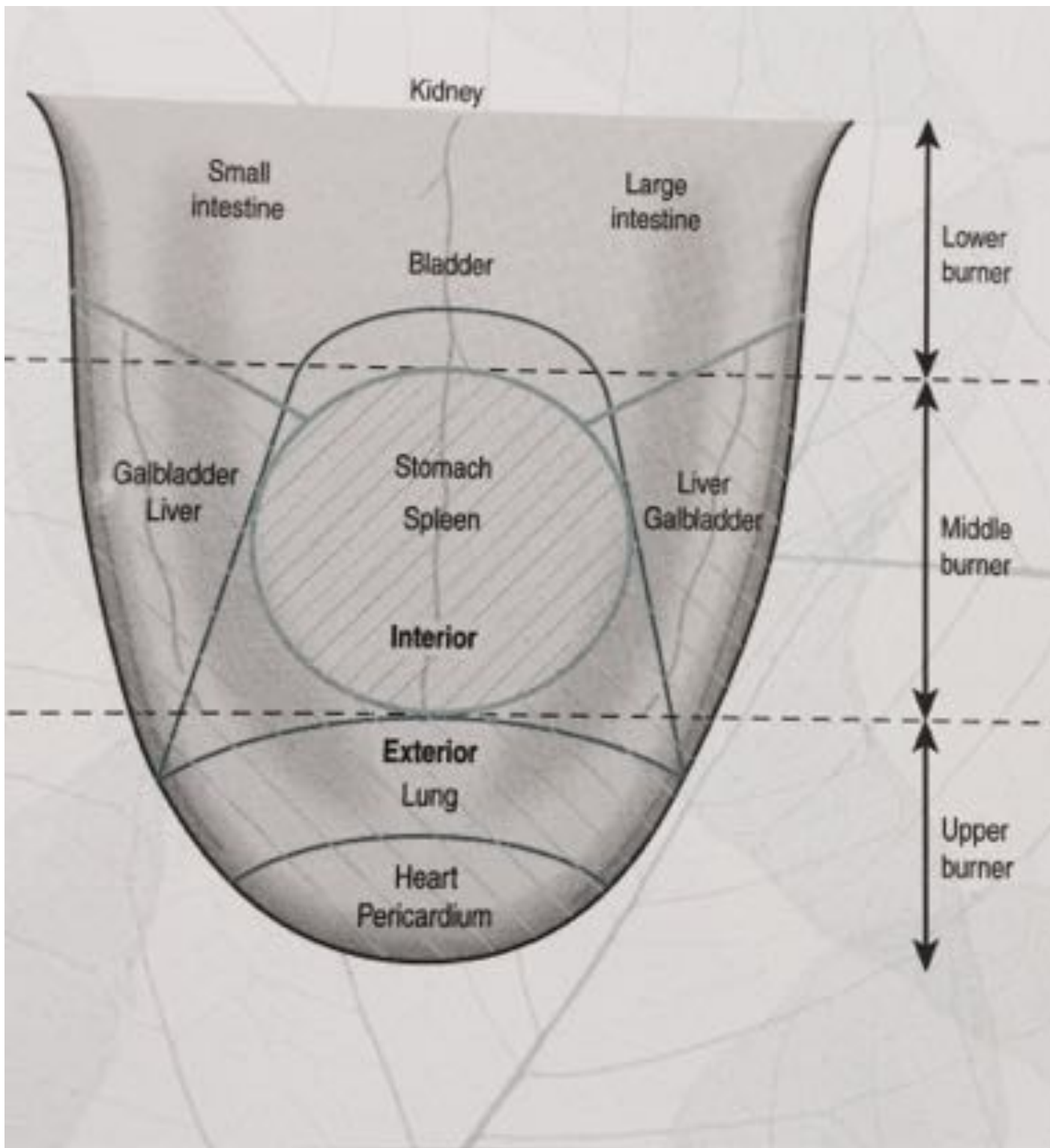


Fig. 49.1 The radial artery pulse according to Dr Shen



Microcosm
Macrocosm

Shigehisa Kuriyama

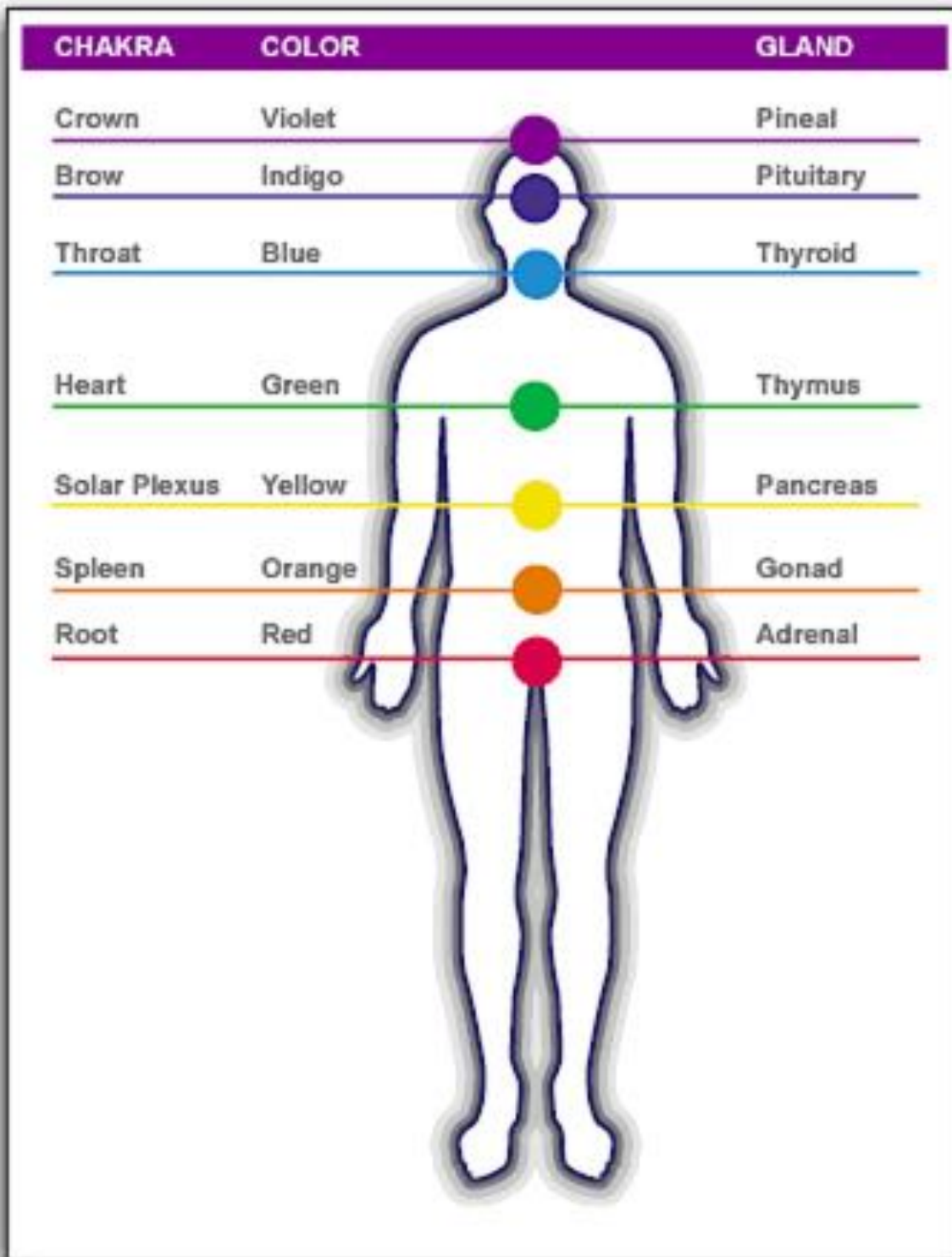
**The
Expressiveness
of the Body**

*and the Divergence of
Greek and Chinese Medicine*

ZONE BOOKS

1999





**Traditional ways
of seeing/ being**

Chakras & Hormonal Glands

Cosmological Schema

Table 1. Correspondences in Ancient Hippocratic-Galenic Medicine.

Season	Spring	Summer	Autumn	Winter
The 4 elements	Air	Fire	Earth	Water
The primary qualities	Hot & moist	Hot & dry	Cold & dry	Cold & moist
The 4 humours	Blood	Yellow bile	Black bile	Phlegm
The 4 temperaments	Sanguine	Choleric	Melancholic	Phlegmatic
Development	Childhood	Youth	Middle age	Old age
Direction	West	South	East	North
Associated emotion	Joy	Anger	Fear/worry/grief	Indifference

Adapted from: Tobyn, 1997.

Table 2. Correspondences in Chinese Medicine.

Category	Wood	Fire	Earth	Metal	Water
Season	Spring	Summer	Late summer	Autumn	Winter
Direction	East	South	Centre	West	North
Colour	Green	Red	Yellow	White	Black
Taste	Sour	Bitter	Sweet	Pungent	Salty
Odour	Rancid	Scorched	Fragrant	Rotten	Putrid
Sound	Shouting	Laughing	Singing	Crying	Groaning
Zang (yin organs)	Liver	Heart	Spleen	Lungs	Kidney
Fu (yang organs)	Gallbladder	Small Intestine	Stomach	Large Intestine	Bladder
Sense organ	Eyes	Tongue	Mouth	Nose	Ears
Emotion	Anger	Joy	Pensiveness	Sorrow	Fear
Development	Birth	Growth	Transformation	Harvest	Storage
Climate	Wind	Heat	Damp	Dryness	Cold

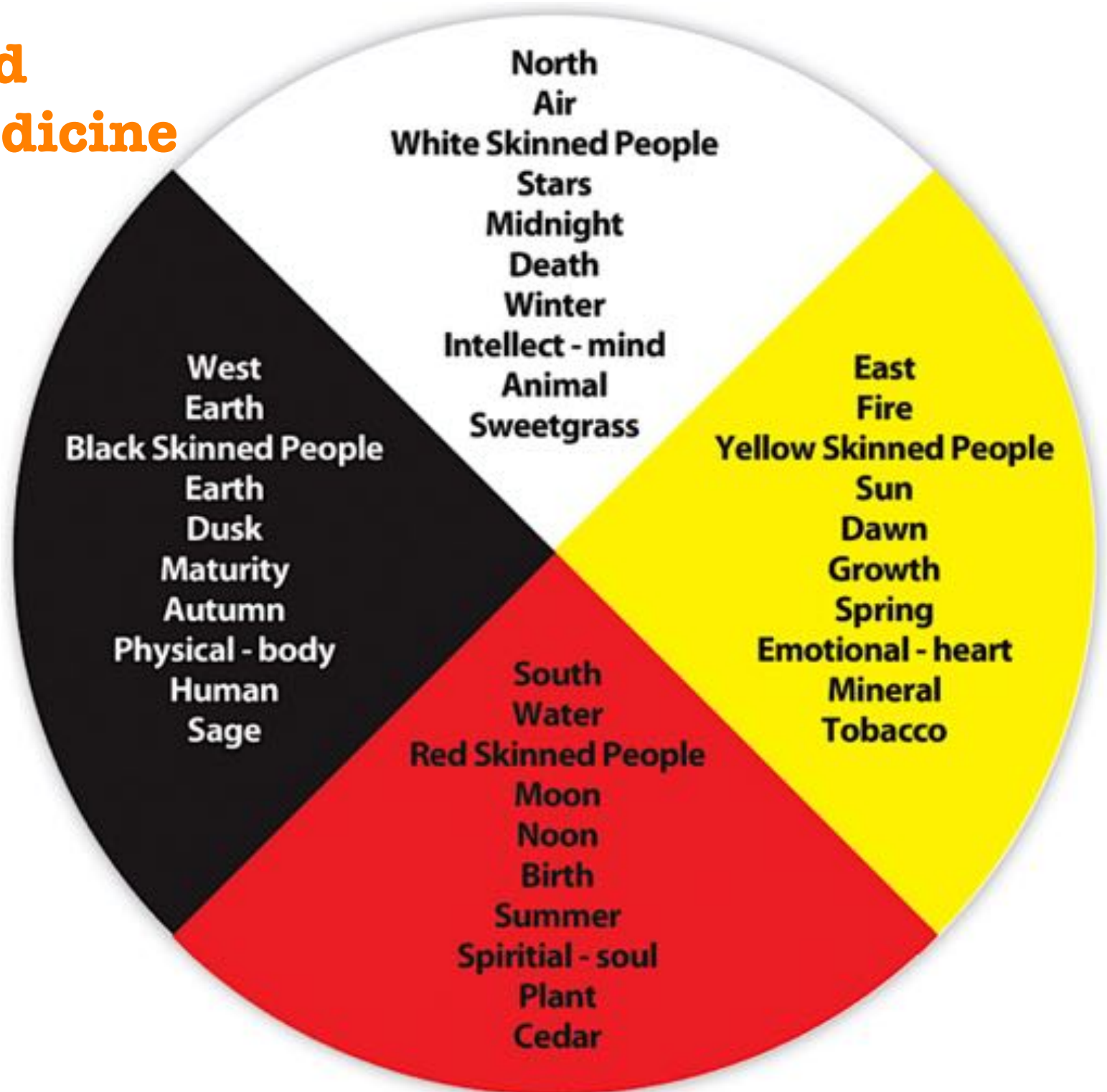
Adapted from: Dowie, 2009; and Ergil, 2001.

Table 3. Correspondences in Ayurvedic Medicine.

Characteristic	Vata	Pitta	Kapha
Elements	Air & Space	Fire & Water	Earth & Water
Qualities	Dry, cold, light, irregular, mobile, rough, abundant	Hot, light, intense fluid, liquid, putrid, pungent, sour	Heavy, unctuous, cold, stable, dense, soft, smooth
Humour	Wind	Bile	Phlegm
Taste	Astringent & Pungent	Salty & bitter	Sweet & sour
Principal Seat	Colon	Stomach	Lungs
Physiology	Responsible for all bodily movement and nervous functions	Governs enzymes and hormones and is responsible for digestion, etc	The principle of cohesion and stability. Responsible for sexual power, etc

Adapted from: Zysk, et al, 2001; and Joshi, et al, 2006.

The Sacred Hoop (Medicine Wheel)



Medical Cosmologies

	Bedside Medicine	Hospital Medicine	Laboratory Medicine
Perception of the patient as	Person	Case	Cell complex
Conceptualisation of illness as	Total psychosomatic disturbance	Organic lesion	Biochemical process
Task of the medical investigator	Prognosis and therapy	Diagnosis and classification	Analysis and explanation
Subject matter of nosology	Total symptom complex	Internal organic events	Cellular function
Research methods	Speculation and inference	Statistically oriented clinical observation	Laboratory experiment according to scientific method
Diagnostic technique	Qualitative judgement	Physical examination before and after death	Microscopic examination and chemical tests
Mind/body relation	Integrated: psyche and soma seen as part of same system of pathology	Differentiated: psychiatry a specialised area of clinical studies	Differentiated: psychology a separate scientific discipline

Jewson, N.D. 1976. The disappearance of the sick man from medical cosmology 1770-1870. In: Beattie, A.; Gott, M.; Jones, L.; Sidell, M. 1993. *Health and Wellbeing: a reader*. Macmillan/Open University.

Indigenous Origins of Medicine

An example from Belize

United States

Gulf of Mexico

Cuba

Caribbean Sea

Mexico

Guatemala

Belize

Honduras



Revised Material

2nd Revised and Expanded Edition



RAINFOREST REMEDIES

One Hundred
Healing Herbs
of
Belize



Rosita Arvigo, D.N. and
Michael Balick, Ph.D.
Text Illustrations Laura Evans

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MESSAGES *from the* GODS

A GUIDE TO THE
USEFUL PLANTS
OF BELIZE



MICHAEL J. BALICK
ROSITA ARVIGO



Dr Rosita Arvigo

Polo Romero

**A diversity of healers using herbs in
Belize:**

Doctor-priest/ priestess

Village healer

Grannie healer

Midwife

Massage therapist

Bone setter

Snake doctor

**Of course none of the
above is
“complementary
medicine”...**

**E.g. herbal medicine is
pre-human (animals
self-medicate with
plants =
zoopharmacognosy)**

**What is
“complementary
medicine”
complementary to?**

**This is a power
relationship**

**To refer to our earliest
forms of medicine as
“complementary
medicine” then is...**

Disrespectful?

Ignorant?

?

**Ancient Medicine now
called “complementary
medicine”, e.g.**

Herbal Medicine

Nutrition

Massage

Meditation

Acupuncture

More recent “complementary medicine”, e.g.

Homeopathy

Samuel Hahnemann 1755 to 1843

Osteopathy

Andrew Taylor Still 1828 to 1917

Chiropractic

Daniel David Palmer 1845 to 1913

Alexander Technique

Frederick Matthias Alexander 1869 to 1955

Feldenkrais

Moshe Feldenkrais 1904 to 1984

Development of Terminology

Fringe Medicine

NATUROPATHY • HERBALISM • HOMEOPATHY

OSTEOPATHY AND CHIROPRACTIC • ACUPUNCTURE

PSYCHOTHERAPY • HYPNOTHERAPY • AUTO-SUGGESTION

CHRISTIAN SCIENCE • HEALING • RADIESTHESIA

by **BRIAN
INGLIS**

Fringe Medicine 1964

Holistic Medicine 1960s

Natural Medicine 1970s

Alternative Medicine

1970s

Complementary

Medicine 1980s

Complementary and

Alternative Medicine

(CAM) 1990s

Integrative Medicine

2000s

What next?

Medicine?

Why Do People Seek Out Complementary Medicine?



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journal homepage: www.elsevierhealth.com/journals/ctim



Complementary
Therapies in
Medicine

Simply because it works better: Exploring motives for the use of medical herbalism in contemporary U.K. health care

C.V. Little*

School of Health and Social Care, Bournemouth House, Bournemouth University, Christchurch Road, Bournemouth, BH1 3LH, United Kingdom

Available online 9 September 2009

Common motive

Although participants reported the usual range of push and pull motives, these were subsequently found to conceal a more fundamental driver that was common to every participant: all had been searching for more effective health care.

This, they found in medical herbalism: “quite simply . . . it just works better” (S13.3).

Health care was deemed effective only when it met each of six essential criteria (Box 1), that were realised through three interdependent processes (incidental constituents): dealing with illness causation, patient–practitioner collaboration and the provision of authentic health care evidence. Herbalism was perceived as effective because it met these criteria more readily than conventional medicine.

Box 1 Participants' criteria for health care effectiveness.

Symptomatic relief

Repair and recovery at physical, emotional and psychological levels

Absence of side-effects

Collaborative patient–practitioner relationship

No recurrence of illness (unless unavoidable)

Minimal disruption to daily life

“Complementary and Alternative Medicine” is:

A sociological, not a medical, definition

It refers to practices excluded from conventional medicine

It is a means by which the dominant medical system protects its power

**“Complementary and Alternative
Medicine” is not:**

A unified, homogenous, cohesive field

So why do we talk of it as such?

**But, hey,
nonetheless.... does
“complementary
medicine” work?**

The EBM Triad



Dr. David Sackett, a giant among giants (1934–2015)

On his first day of medical school, Philip Devereaux learned from a tutor that his academic advisor was Dr. David Sackett. “Who is he?” Devereaux recalls asking. The tutor told him that Sackett was a famous clinical epidemiologist. But Devereaux had no interest in clinical epidemiology; he planned on returning home to Cape Breton and being a “real” doctor.

“My first thought was: how am I going to get rid of this guy and get a real advisor?” said Devereaux.

Then he met Sackett. And like so many other young physicians and researchers, his life was soon set on a whole new path. “He opened up my eyes to a world I didn’t even know existed,” said Devereaux, now an assistant professor in the department of clinical epidemiology and biostatistics at McMaster University, a department founded by Sackett in 1967. “He was a giant among giants.”



Dr. David Sackett founded Canada's first department of clinical epidemiology and biostatistics, at McMaster University in 1967.

opinion, conventional wisdom or wish-

met Sackett — down to the minute, actually. It was July 1, 1975, 12:01 pm. Tugwell, who was planning to go on to practise rheumatology in British Columbia, had just arrived at McMaster University to take clinical exams and looked lost on his way to lunch. Sackett was behind him and struck up a conversation. In short order, Sackett had another mentee, and another medical career was redirected.

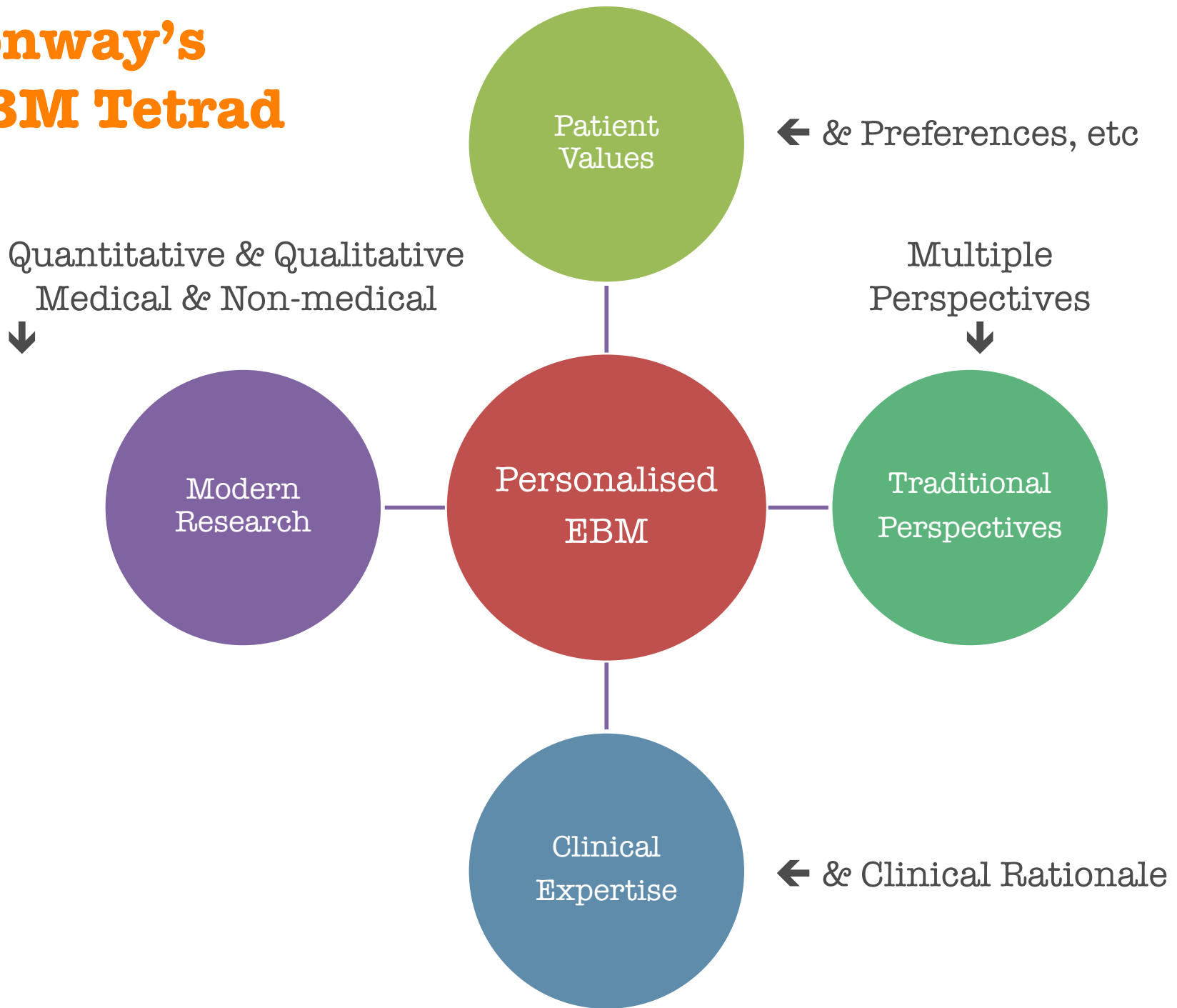
“He persuaded me to give up the lotus land of British Columbia for the excitement of academic medicine at McMaster,” said Tugwell, now a senior scientist in the clinical epidemiology program at the Ottawa Hospital Research Institute.

Sackett is lauded for setting up Canada's first department of clinical epidemiology and biostatistics at McMaster, but according to Tugwell he also deserves praise for discouraging the creation of another department. “He persuaded McMaster not to have an

“...we clinicians who accept the awful responsibility of caring for individual patients with their unique risks, responsiveness, values and expectations have simply failed to communicate key elements of our decision-making to some ethicists and methodologists who don't diagnose and treat individual patients... their definition of evidence-based healthcare stops with external evidence and ignores the other 2 of its 3 vital elements: clinical expertise and patient values.”

Sackett, D.L. Equipoise, a term whose time (if it ever came) has surely gone. *Canadian Medical Association Journal* 2000;163(7):835-836

Conway's EBM Tetrad



Research

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Best matches for phytotherapy:

Phytotherapy: An Introduction to Herbal Medicine.
Falzon CC et al. *Prim Care.* (2017)

What phytotherapy needs: Evidence-based guidelines for better clinical practice.
Colatto C et al. *Phytother Res.* (2018)

Integration of phytochemicals and phytotherapy into cancer precision medicine.
Efferth T et al. *Oncotarget.* (2017)

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- Cinnamon use in type 2 diabetes: an updated systematic review and meta-analysis. Allen RW et al. *Ann Fam Med*. (2013)
- Green tea and the risk of prostate cancer: A systematic review and meta-analysis. Guo Y et al. *Medicine (Baltimore)*. (2017)

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- Effects of lavender on anxiety: A systematic review and meta-analysis.
- 1. Donelli D, Antonelli M, Bellinazzi C, Gensini GF, Finerzucchi F. *Phytotherapy*. 2019 Sep 20;65:153099. doi: 10.1016/j.phymed.2019.153099. [Epub ahead of print] Review. PMID: 31655395 Free Article Similar articles
- Effects and safety of herbal medicines on patients with overactive bladder: A protocol for a systematic review and meta-analysis.
- 2.

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- Adjuvant phytotherapy in the treatment of cervical cancer (*J Altern Complement Med*. 2009)
 - Phytotherapy versus hormonal therapy for postmenopausal bone loss (*Osteoporos Int*. 2009)
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Cardiovascular Protective Effects of *Centella asiatica* and Its Triterpenes: A Review

Nur Nadia Mohd Razali, Chin Theng Ng, Lai Yen Fong

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Abstract

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Abstract

Centella asiatica, a triterpene-rich medicinal herb, is traditionally used to treat various types of diseases including neurological, dermatological, and metabolic diseases. A few articles have previously reviewed a broad range of pharmacological activities of *C. asiatica*, but none of these reviews focuses on the use of *C. asiatica* in cardiovascular diseases. This review aims to summarize recent findings on protective effects of *C. asiatica* and its active constituents (asiatic acid, asiaticoside, madecassic acid, and madecassoside) in cardiovascular diseases. In addition, their beneficial effects on conditions associated with cardiovascular diseases were also reviewed. Articles were retrieved from electronic databases such as PubMed and Google Scholar using keywords "*Centella asiatica*," "asiatic acid," "asiaticoside," "madecassic acid," and "madecassoside." The articles published between 2004 and 2018 that are related to the aforementioned topics were selected. A few clinical studies published beyond this period were also included. The results showed that *C. asiatica* and its active compounds possess potential therapeutic effects in cardiovascular diseases and cardiovascular disease-related conditions, as evidenced by numerous *in silico*, *in vitro*, *in vivo*, and clinical studies. *C. asiatica* and its triterpenes have been reported to exhibit cardioprotective, anti-atherosclerotic, antihypertensive, antihyperlipidemic, antidiabetic, antioxidant, and anti-inflammatory activities. In conclusion, more clinical and pharmacokinetic studies are needed to support the use of *C. asiatica* and its triterpenes as therapeutic agents for cardiovascular diseases. Besides, elucidation of the molecular pathways modulated by *C. asiatica* and its active constituents will help to understand the mechanisms underlying the cardioprotective action of *C. asiatica*.



**Where is
“complementary
medicine” going?**

Paradigm Shifter

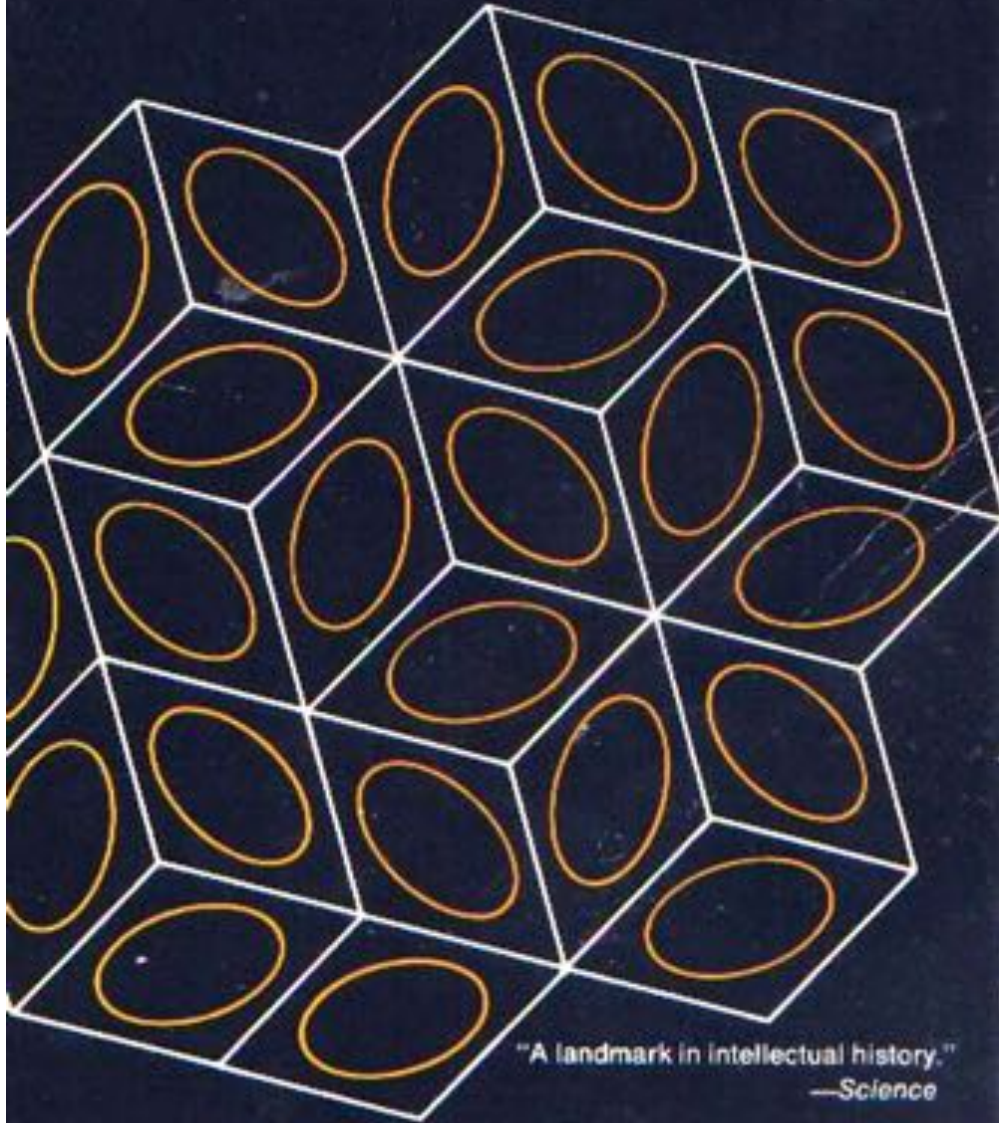
Thomas Kuhn (1922 to 1996)



The Structure of Scientific Revolutions

Second Edition, Enlarged

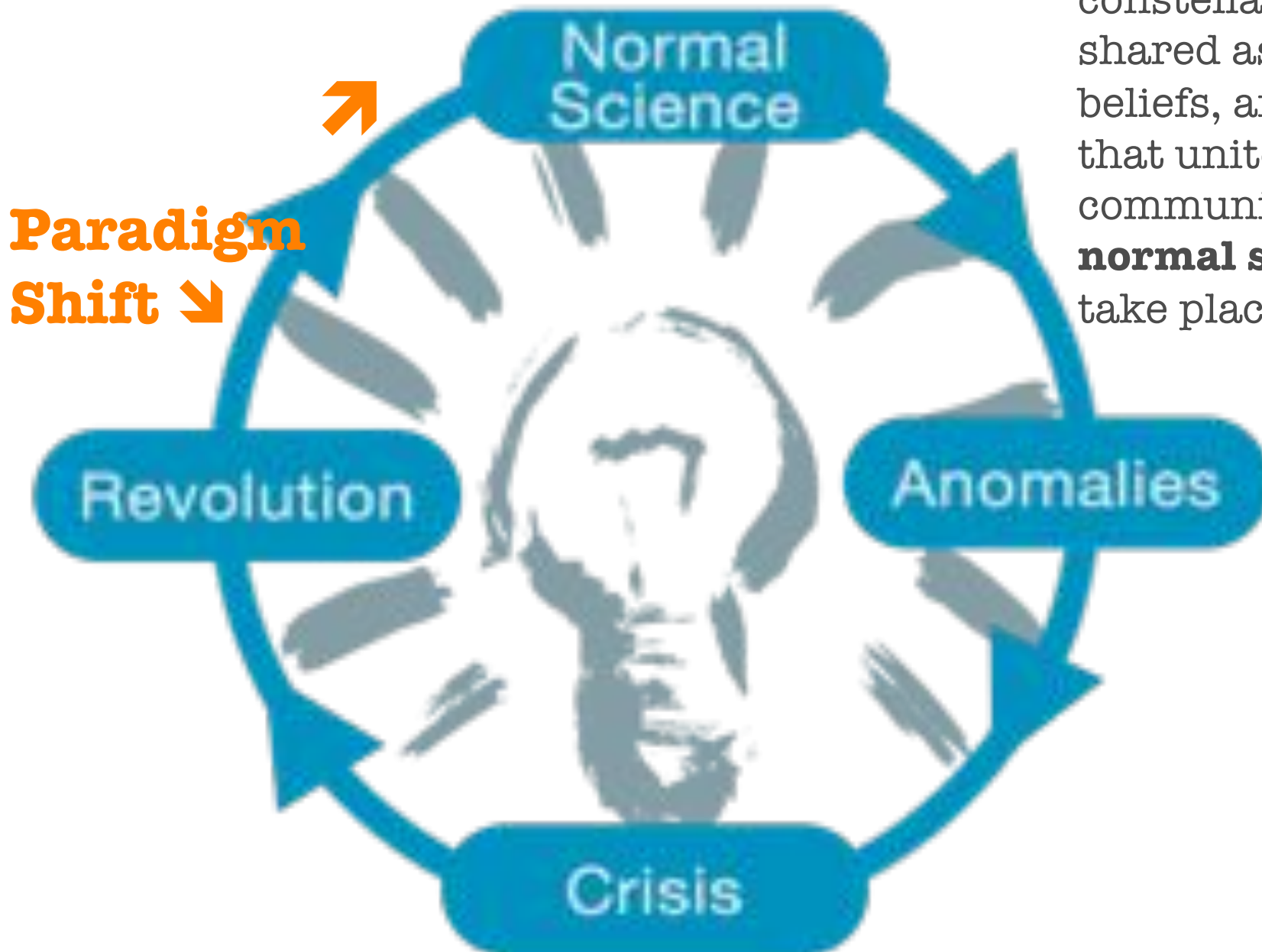
Thomas S. Kuhn



"A landmark in intellectual history."
—*Science*

1962

“a **paradigm** is an entire scientific outlook – a constellation of shared assumptions, beliefs, and values that unite a scientific community and allow **normal science** to take place”



“In searching for new and effective therapeutics, it might be useful to use a **systems-chemistry approach to modify integrated outcomes** rather than targeting single molecules with the hope that the desired systemic effect might be generated. In other words, it is likely that creating a ‘new homoeostasis’ will require the **modification of more than one target**”

Hotamisligil, G.S. *Inflammation and metabolic disorders*. Nature 2006;444(14):860-67

INSIGHT REVIEW

NATURE | Vol 444 | 14 December 2006 | doi:10.1038/nature05485

Inflammation and metabolic disorders

Gökhan S. Hotamisligil¹

Metabolic and immune systems are among the most fundamental requirements for survival. Many

The poet TS Eliot wrote:

**We shall not cease from exploration,
And the end of all our exploring,
Will be to arrive where we started,
And know the place for the first time**

1942

But one more thing...

British Medical Journal (BMJ) 2016

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Too much medicine



The BMJ's Too Much Medicine initiative aims to highlight the threat to human health posed by overdiagnosis and the waste of resources on unnecessary care. In July 2016 the journal joined forces with the overdiagnosis standing group of the UK's Royal College of General Practitioners (RCGP), whose campaign is [Better Medicine: Shared decisions, best evidence](#).

Fiona Godlee (BMJ Editor)

(www.preventingoverdiagnosis.net). There is much to discuss: how should we define overdiagnosis and its ugly siblings overtreatment, medicalisation, and disease mongering; what do we know of their causes; and what evidence based solutions are available, both general and specific? Above all,

There is much to discuss:

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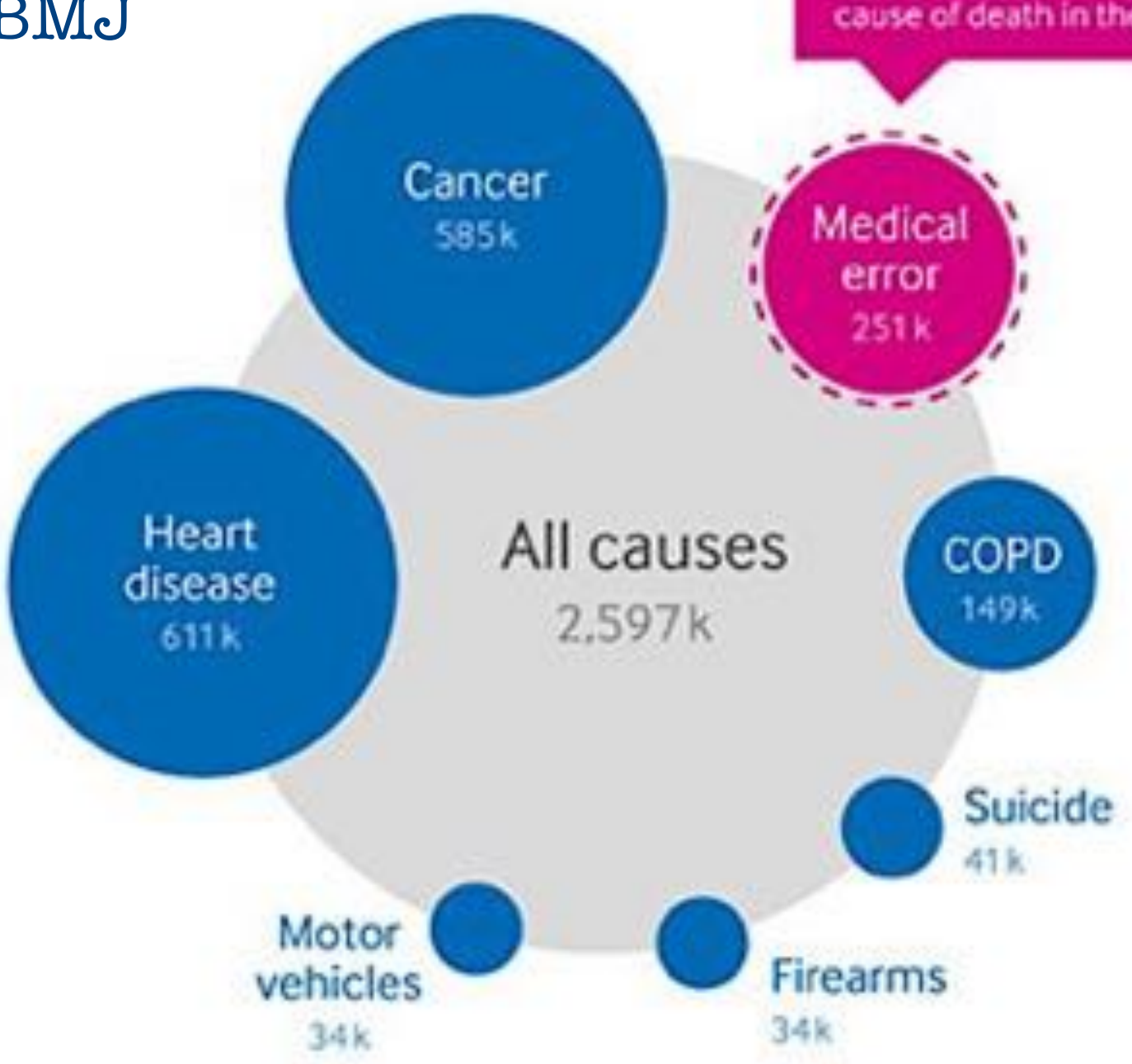
evidence based solutions are

available, both general and specific?

Causes of death, US, 2013

BMJ

Based on our estimate, medical error is the 3rd most common cause of death in the US



A Final Modest/Radical Proposal:

**”Complementary medicine” is safer, cheaper and creates less greenhouse gases than conventional medicine
So shouldn’t the roles of “conventional” and “complementary” medicine now be reversed?**