Prepared as a Presentation and Discussion of Energy (Hei, Chi, Qi) from the Perspectives of Traditional Chinese Medicine and Chinese Martial Arts

This Requires Formal Presentation & Explanation for Complete Understanding

ENERGY

(Hei / Chi / Qi)

by 金博賢 Gam Bok Yin

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Prepared and updated by Gam Bok Yin for the purpose of formal presentation and discussion with University TCM Teachers, TCM Practitioners, Martial Arts Masters & Practitioners of HungGar, HeiGung and TaiChi. This presentation will continue to be updated.

Brief Bio – Gam Bok Yin

- Practitioner of Traditional Chinese Medicine since 1979 www.hkacupuncture.com
- Practitioner and Teacher of Traditional Chinese Martial Arts since 1961 www.hkhunggar.com
- Formal qualifications
 - D.Ac. 1979
 - Acupuncture & Chinese Medicine
 - Basic Western Medical Sciences Anatomy, Physiology, Biochemistry, Pharmacology
 - B.Sc. 1986, Health Sciences (Western Medical Sciences)
 - Ph.D. 1989, Health Sciences Dissertation: Energy as the Link Between Chinese and Western Medicine
- Professional Memberships
 - Registered with Chinese Medicine Registration Board of the State Government of Victoria, Australia
 - Approved Listed Chinese Medicine Practitioner by the Chinese Medicine Council of the Hong Kong Government
 - Member of Association of Hong Kong and Kowloon Practitioners of Chinese Medicine
 - Member of Hong Kong Chinese Herbalist Association
 - Member of Chinese Acupuncture Association (Hong Kong)
 - Fellow of Australian Natural Therapists Association
 - Member of Australian Traditional Medicine Society
 - Member of Australian College of Acupuncturists
 - St.John Ambulance Senior First Aid Certificate Holder
 - Other
 - Author of Text Books on Traditional Chinese Medicine
 - Martial arts movies in Hong Kong: actor, stuntman, choreographer 1989, 2003
 - Bilingual English / Cantonese

A Start - What is Hei (Chi, Qi) 13 definitions from various sources (dictionaries, etc) - No Absolute Agreement -

- the circulating life energy that in Chinese philosophy is thought to be inherent in all things
- Chinese word meaning energy or universal life force
- Dragon's Breath, the life-giving forces of the universe
- "Spirit," "air," "breath," or "spirit energy."
- The primordial energy which is the basis for the universe and everything in it. It is the matrix out of which matter and energy are formed, and is expressed as the life force in all living things.
- The name given to the energy which flows through points and meridians.
- The life force or essence that is possessed by all living things. Martial artists and swordsmen believe that they can harness and control their chi, using it to produce many powerful techniques and effects.
- It is believed that a form of energy circulates through the Universe. On its path it travels through everything, including people. Many martial arts believe that if this power can be directed, it can be used to put power into techniques. It is also believed that if this energy's path through the body is blocked, illness will follow. The arts of Acupressure and Acupuncture attempt to remove blockages from the meridians (pathways the energy uses to travel through the body) to ensure good health.

- A biophysical energy generated through breathing techniques studied in kung fu. Ideally, chi can infuse a person with tremendous vitality and make him or or her extremely powerful in action, much more so than power developed through the muscular system alone
- the life force or energy that flows in the body; "the root of a human being" (Maciocia)
- In Taoism, chi is the cosmic energy that permeates all things. Within the human body, the chi is seen as the vital force of the body and is closely associated with the breath. During the act of breathing, in addition to oxygenating the blood with the outer breath (wai chi), one breathes in with the inner breath (nei chi) the surrounding cosmic energy to resupply the inner chi or life force of the body
- A concept that refers to life energy. It is thought that one can cultivate healthy, powerful chi through proper breathing and proper living in general. In the martial arts, one should try to focus their chi into their techniques.
- You know how sometimes you walk into a room, like the lobby of an expensive hotel, for instance, and there's lots of light, space, and maybe some nice paintings and furniture? Compare the feeling of that room to that of a cubicle in a cinderblock, fluorescent-lit basement office. Chi is the vital energy of the universe. It is not present in most cubicles.

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Energy in the Western Sense

- Energy is the **foundation** upon which our universe, life and very existence depend
- That which is capable of **altering** the conditions upon which matter exists
- That which has the ability to do work
- It is well known from its many **different forms**
 - electrical; gravitational; chemical; mechanical; nuclear; atomic; magnetic; radiation; biological; etc

$E = MC^2$

- The amount of energy that can be generated is represented by $E = MC^2$
- Which means
 - The energy potential contained in an object is the object's mass multiplied by the square of the speed of light.
 - Energy increases according to the velocity at which an object moves
- Relativity theory further indicates that **mass** is nothing more than a **form of energy**
- Atomic and nuclear energy = converting small amounts of mass into huge amounts of energy
- Unified field theory & the zero point field

Energy at the Macro and Micro Level

- Activities, processes and exertion
- The existence of objects in the animal, vegetable and mineral world is as a result of energy in **various stages of formation** and process
- At the subatomic level, physics shows us that matter and activity are different aspects of the same objective reality, and
- Matter is really the result or concept of activities and interactions
- i.e. an object is not really a substance or a thing, but rather a **process**
- Hence everything may indeed be energy (zero point field!)
- A state that has no opposite word in English

What Do We Know About Human Energy

- Converts chemical energy (food) to kinetic energy (movement) and heat
- Maintains electro-chemical processes (brain, heart, nervous system, muscular system) based on low frequency pulses
- **Pumps** blood & **moves** things **expels** waste products to bloodstream, respiration, bladder and colon
- Varying **electrical impulses** on skin (acupuncture points?)
- Consider the polygraph raising or lowering of the body's resistance as a whole, as a result of general **cortical** arousal.
- Work of Valerie Hunt UCLA, 1976
 - **EM waves emanate** from the body (100-1600Hz) that do not emanate from the heart, muscles or brain
 - The fields change in different locations
 - It varies according to time of day
 - It essentially closes down at night
 - It varies according to which way you are facing
 - People standing near you affect your field
 - State of health may be reflected in the height of the low frequency peaks
 - EM waves outside the body influence those within the body
 - The frequencies relate to those of the color spectrum

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Energy of the Human Body

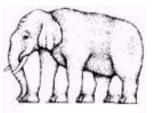
- As energy is **activity, process, transformation and matter**, then the following are all forms of energy
 - nervous system; cardiovascular system; lymphatic system; skeletal system; muscular system; respiratory system; endocrine system; reproductive system; digestive and absorption system
- The human body is a highly complex **system of energies** all playing a vital and cooperative part in the development of the person, and striving for a state of homeostasis in an **ever changing environment**
- Each cell has a very short life span and is replaced we are a constantly changing structure continually evolving at the cellular level
- In all of us over a few years old we do not have a single cell present in our bodies that was present when we were born what is it that **controls** cell replacement, tissue regeneration and metabolic energy?

Human Senses

- We not only dynamically adapt and cope with internal changes but those of an external nature also
- Our sensory organs provide us with a **link** into the external world and its interpretation
- The external world is also a complex system of energies in which we must exist and adapt
- But our senses are **not infallible**
 - Rainbows aren't really there (changing frequencies of light)
 - People, birds, insects bump into glass
 - Television is an electronic deception
 - Optical illusions
 - We don't hear all frequencies of sound
 - We tune-out certain sounds
 - Amputee's phantom limbs are not really there
 - Chemicals in food add flavor of other foods
- Our perceptive abilities have **limitations** and may often be subjective
- These limitations often pervade western science, which inhibit understanding and explanations
 - Controlled reduction of heart rate
 - Controlled reduction of body temperature
 - Control over bleeding
 - Suppression of pain
 - Recovery from terminally ill disease

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Perception and Reality

- Reality is limited by our ability to conceive its possibilities – Ian Gawler "You Can Conquer Cancer"
- It is not possible to understand all things in terms of what we already know. To pursue such an exercise will conclude in finding only what we already know – Alan Watts "The Wisdom of Insecurity"

Energy in the Eastern Sense Conceptual Understanding

Hei Chi

The simple translation of 'hei' or 'chi' as 'energy' **does not compare** to its literal English meaning

It would be misleading to propose a parallel between the concept and forms of 'hei' and the simple, clear and universal concept of 'energy' in modern physics – Manfred Porkert

The relativity of 'energy' to the field of electrical engineering bears only some semblance to the relativity of 'hei' to the field of Chinese medicine





Cultural Differences

 Chinese thought perceives things on a functional basis

 So to understand the meaning of 'energy' one needs to appreciate its functions

'Hei' in the Cantonese Language Broad Range of Meaning

• An important derivative 'word'

• Attached to many other 'words' to give specific meanings

Examples- the 'hei' derivative

English Translation	Literal
Weather	Sky air/energy
Long-winded	Long air/energy
Narrow minded	Little air/energy
Sigh	Big air/energy
Temper	Skin air/energy
Lucky (usually gambling)	Hand air/energy
Luck; generate energy	Send air/energy
	WeatherLong-windedNarrow mindedSighTemperLucky (usually gambling)

The Broad Meaning of 'Hei'

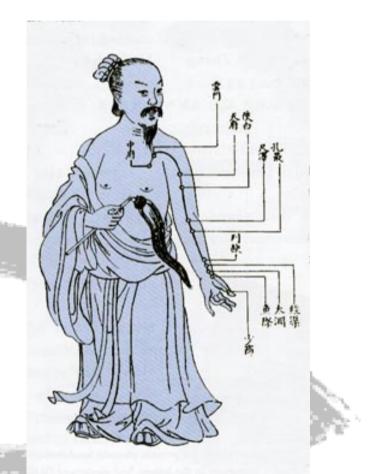
- Air
- Breath
- Vapor
- Energy
- Vital energy
- Life force
- Spirit

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Chinese Medicine and 'Hei'

- Chinese medicine is based on the fundamental principle, that within the body there circulates a vital energy or life force called chi (or Qi or Hei) which flows through all the organs of the body and extends along special channels or pathways that can be accessed near to the surface of the body.
- These channels form a network known as the **Jingluo** and it is here that the 'energy' can be reached through acupuncture or massage.
- 'Hei' has many different forms within the body
 Manfred Porkert describes 32 types in "The Theoretical Foundations of Chinese Medicine"



'Hei' – the Motive Force

from the book "Between Heaven and Earth"

- That which **animates life** is called Qi.
- The concept of Qi is absolutely at the heart of Chinese medicine.
- Life is defined by Qi even though it is impossible to grasp, measure, see or isolate.
- Immaterial yet essential, the **material world is formed** by it.
- An invisible force **known only by its effects**, Qi is recognized indirectly by what it fosters, generates and protects.
- Matter is Qi taking shape.
- Mountains forming, forests growing, rivers streaming, and creatures proliferating are all **manifestations of Qi**.
 - In the **human being**, all functions of the body and mind are manifestations of Qi: sensing, cogitating, feeling, digesting, stirring and propagating.
- Qi begets movement and heat. It is the fundamental **mystery** and miracle.

Chi Gung – Hei Gung - Chi Kung - Qi Gong - Qigong

- "Energy cultivation" a **path** not a destination
- In theory anything that **benefits one's energy** may be regarded as Hei Gung
- **Practices** which improve health and longevity as well as increase the sense of harmony within oneself and in the world.
- Its practices usually involve the mind (presence), movement (action), breath (flow) and vision (focus) with the prime objective of identifying and achieving **specific intent**
- Process of exercising mental intent to **direct one's internal energy** through the body. Imagination, visualisation, breathing, movement, meditation.
- Logical extension refer the eightfold path of <u>Buddhism</u>
- Nei Gong "inner cultivation". Involves a variety of additional practices standing, sitting, moving, dreaming, internal martial arts, etc

'Hei' and the Life Force

- 'hei' is **not** simply the 'vitalist-principle' of the 19th century western pre-scientific era promoted by the French philosopher Henri Bergson
 - vitalism; the life force; elan vital
 - which was essentially an intangible theory
- Chinese medicine has an intricate explanation of the basic production, generation, and cycle of the various types of 'hei' – devised several thousands of years ago and still in use today
 - a complete system of the body's 'energetics' taking into account conception, growth, death, organs, meridians, muscles, bones, blood and fluids, waste products, thoughts, emotions, senses, heredity, environment, etc
 - i.e. its own detailed explanation of the complex physiological processes of the body expressed in terms of the production, flow, storage and utilisation of many different types of 'hei' (chi, energy)

TCM View of Basic Production, Generation, and Cycle of the 'Major' Types of Chi (Hei) as Interpreted by Gam Bok Yin Congenital **Acquired** Food **Small Intestine Large Intestine** Stomach Pure Impure Water Pure Mixture Mixture Mixture Pure Fluid Impure Chi Yuan Bladder <u>Chi</u> Ku Chi Impure Fluid Solid Waste Excreted as Faeces Spleen Cosmic Chi Lungs Yin Kidnev **Yang Kidney** Excreted as Urine (Air) Chong Chi Pure Impure Impure Transformed to Pure Fluid Wei Chi Fluid Yuan 5 Flavors Chi Chen Chi Ching Chi is stored and available here when needed as *Yong Chi*. Any excess To each of Ching Chi represents the Tsang Forms body I Chi To each of Ching Chi Enters the Surplus Tsing Chi which (Yin) organs meridians at Chen Chi the organs fluid and circulates circulates when fused with the circulates with *Yong* point Lung where it with Wei heavenly spirit with *Chen* Chi 1 and forms *Yong* Chi produces Yuan Chi Chi to form Chi and circulates and the fetus. To the Yang Liver Yong Chi circulates Kidney where it is stored as Ching Chi August 2004 V3.0 Copyright Gam Bok Yin (Graham Player Ph.D.) 2004 金博賢 21

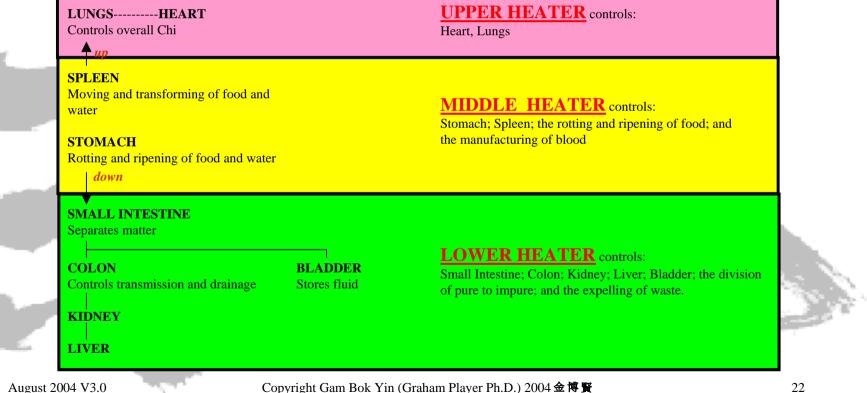
The purpose of these 2 slides in this particular presentation is to demonstrate the **thoroughness of the body's energy system** as defined by TCM several thousand years earlier, which was well before any concept of the contemporary western scientific model of the body.

TCM Concept of the Three Heater System

as Interpreted by Gam Bok Yin

- Not a physical organ
- A controlling system of energy responsible for the entire process of Chi production and circulation, and the circulation of all blood and fluid

THE THREE HEATER SYSTEM



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'Hei' and Heaven / Earth / Man

- 'Hei' is **not limited** to the human body
- It is the essence of all natures processes and living things
- Five broad phases

 (elements) of 'energy'
 exist within nature and
 relate to various
 aspects (concordances)





Martial Arts and 'Hei'

- Chinese martial arts is **based on the philosophy of 'energy'** channels flowing within the body and the **daan tin** (explained later)
- One major channel group starts from the chest in the Lung Channel
 - The energy then flows along the three yin channels of the arms, down the inside of the arm to the fingertips.
 - After reaching the fingers, the energy then moves up the arm towards the head, along the outside of the arm on the three Yang Channels.
 - From the head, the energy flows down the back to the feet along the three Yang Channels.
 - From the feet, the energy moves up the legs on the three Yin Channels to the chest.
- Other major channels (Du Mai / Ren Mai) travel in the opposite direction along the **centre line** of the body front and back.
- These **major** channels provide a key to the understanding of using **core strength** (explained later) and **maintaining balance and stability while in motion**

• Chinese martial arts is the combination of hei (chi, energy), movement, balance, intent, power and strength – hei gung August 2004 V3.0 Copyright Gam Bok Yin (Graham Player Ph.D.) 2004 金博賢

Daan Tien

- 'hei' (chi) is believed to **accumulate** at a special point called daan¹ tin⁴ [TCM = CV6 Sea of Chi; CV17 Chi Meeting Point]
- Literal meaning = elixir field
- A point at the centre of gravity of the body
- By concentrating hei (chi) at the daan tin the martial artist's **stance** becomes well rooted and balanced, the **mind** becomes clear, and the **core** strength becomes engaged
 - To be accurate there are actually 3 daan tin.
 - The upper daan tin is located between the eyes and is the body's centre of mental and spiritual dimensions.
 - The middle daan tin is at the level of the heart and is where the emotions are located.
 - The lower daan tin is that described above and is considered to be the **centre of power** in the body.

tin⁴

daan 1

Does the Principle of Daan Tin Really Exist?

• If we accept the **fundamental importance** and dependence on energy in the body (either the western view or the eastern view)

then

- It is **conceivable** that the body may have/need a way of protecting, storing, generating, releasing that critical resource (energy)
 - Certainly in the field of Chinese Medicine the answer is **yes**

The Core (Strength) of the Body

- Mid-lower torso (daan tin at the epicentre); **lumbopelvic-hip** complex
- Body's centre of power
- Foundation of functional strength and movement all movement (even of the extremities) begins in the body's core
- Core training emphasizes muscle activation or stabilisation of the entire body, working together as a unit
- Because core training is a very thoughtful, awareness-centered activity, it helps develop a **mind-body connection** – particularly as core training should include the use of an **unstable base** which therefore engages the mind to help maintain balance
- The **relationship between core strength and speed and power** capabilities is very important
- You must have the core strength to handle the power you are capable of generating/delivering peripherally. Therefore, an increase in speed or power requires an increase in core strength
- Young children and elderly people are useful groups to observe in terms of core strength not yet fully developed, or core strength being lost
- Core strength erosion often masquerades as postural and alignment problems. It is often indicative of lifestyle issues such as stress, poor nutrition, hydration, or sleep habits

How Do You Develop Core Strength

- Muscles work
 - **concentrically** (contractions that start movement)
 - eccentrically (contractions that stop movement)
 - **isometrically** (contractions that hold a position)
- In functioning, **muscle forces** are accelerating, decelerating, or stabilizing your body as it moves. In order to develop core strength, you need to **involve all of those forces** when training
- Core competency exercises involve **balancing**, and demand the efforts of many muscles to work synergistically. It is also very much a **neurological exercise** in stabilising the body on an unstable base
- Core strength training involves **neurological adaptations at least as much as gains in strength**
- Continual **adaptation to constantly changing forces** in order to maintain balance **while moving**

Movement and 'Energy'

- Through movement you learn to open the body's 'energy' channels
- 'hei' is then used to support the body's structure
- Physical balance through movement and neurological adaptations also helps to **engender emotional balance and health**, and vice versa
- When all aspects of our **core and self are fully aligned** we have a much greater ability to think, feel, and act in accordance with what is best for us in any given moment. We are better able to adapt and change in a manner that supports the well being of our entire self



Breath and Energy

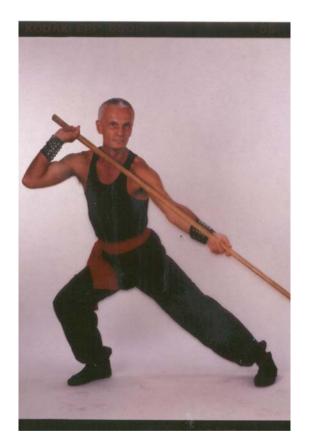
- When the coordination of Balance; Intent; Strength; Spirit and the correct way of **breathing** is achieved
- the body's natural vitality (hei) circulates far more efficiently than would normally be the case
- Direct relationship between breath and movement breath supports movement
- There is no one correct depth and speed of breathing
 - depending on the specific physical, emotional, and mental demands of the moment, our breathing should be able to **fluctuate** in varying degrees from deep to shallow, and from slow to fast in order to **support the intended immediate activity and maintain stamina**
- The downward and upward movements of the diaphragm, along with the outward and inward movements of the belly, not only help to slow down our breath rate and enable us to **take in oxygen and release carbon dioxide more efficiently** with each breath, but they also help to massage all our internal organs, including the heart
 - this "internal massage" has a healthful influence on all of our internal functions, including digestion, elimination, blood flow, our nerves, and our ability to ward off bacterial and viral infections

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Hung Gar Kuen Coordination of Hei (Chi), Movement, Balance, Intent, Power & Focus

Foundations in the feet and strong stances; mastery of balance; forces developed from the ground upwards through the legs; merged with the internal energies, daan tin, spirit and breath; directed by the waist and body position using the core and energy channels; and focused, expressed and delivered through powerful blocks, punches, kicks, and other weapons.



Gam Bok Yin

END

For a more detailed description of Chi production in relation to Traditional Chinese Medicine refer to my previous books:

"Disease and Diagnosis for the Acupuncturist" - HarperCollins; ISBN 0722508220 Hardcover November 1984 - A guide to diagnostic techniques for the advanced student or practitioner of acupuncture

"Everybody's Health – Time to Reap the Benefits of East and West" – Hai Feng Publishing, Hong Kong; ISBN 9622382037 Hardcover 1992 – insight into the Chinese culture and the inherent advantages of Chinese medicine with regard to everybody's health. Demonstrates the importance of "energy" as the platform of Eastern medicine and compares the traditional Chinese medicine with Western medicine, science and society.

You may also be interested in researching Zero Point Fields and energy according to Rife

Eightfold Path

1. Right Understanding

Seeing the world and everything in it as it **really is**.

2. Right Intent

Urges us to decide **what our heart wants**, recognizing the equality of life and compassion for all that life, beginning with yourself.

3. Right Speech

Communicating thoughtfully helps to unite others, and can heal dissention. By resolving never to speak unkindly, or in anger, a spirit of consideration evolves which moves us closer to everyday compassionate living.

4. Right Action

Recognizes the need to take the **ethical approach** in life, to consider others and the world we live in, and includes not taking what is not given to us, and having respect for the agreements we make both in our private and business lives.

5. Right Livelihood

Promotes the principle of **equality** of all living beings and respect for all life - if your work has a lack of respect for life, then it will be a barrier to progress on the spiritual path.

6. Right Effort

Cultivating an enthusiasm, a positive **attitude** in a balanced way to produce steady and cheerful determination leading to positive thinking, followed by focused action.

7. Right Mindfulness

Being aware of the moment, and being **focused** on that moment, and to be clear and undistracted at that moment. By being aware we are able to see how old patterns and habits may control us, and how fears of possible futures limit our present actions.

8. Right Concentration

Once the mind is uncluttered it may then be **concentrated** to achieve worthy directions. The benefits of Right Mindfulness and Right Concentration are significant as they teach the mind to see things, not as we are conditioned to see them but as they really are. At the same time they also lead to a feeling of calm and peace with the world. By being in the moment and being able to concentrate effectively, a sense of joy of the moment is felt.