Topographic (Non-local, Minimal Needle) Acupuncture in Non-humans

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Teaching TCM?

- I never teach my pupils. I only attempt to provide the conditions in which they can learn.

- Albert Einstein
Fei Boxiong
費伯雄

1800-1870

“There exist no miraculous methods in the world, only plain ones and the perfection of the plain is miraculous”
In mathematics and information science, the property of "fractal-ness" inherent in living forms is referred to as "self-similarity."

Just as the twigs of a tree are similar to the tree's branches, "microsystems" of acupuncture points "mirror" the whole system of acupoints found in the body.
In a "microsystem", the whole body is reflected in just one of its organs, such as the ear or the hand.

Disharmonies of the body, wherever they might be, from head to toe, can be sometimes diagnosed and commonly treated by using points in one microsystem.
Microsystems Acupuncture

- Nature likes to re-use its finest designs over and over, something called "redundancy" in information science.

- In terms of acupuncture, redundancy shows the resiliency of the system of acupuncture meridians, and it demonstrates that there are many ways to access the body's "qi channels"
The microsystems can be used for both diagnosis and treatment.

However, there are three microsystems that are used only for diagnosis: the **tongue**, the **pulse** of the radial artery, and the **abdomen**, called the "hara" in Japanese.

In shiatsu massage, the hara is treated directly while in acupuncture it is primarily a diagnostic area.

Outside the arena of Chinese medicine is a system called **iridology**, in which the iris of the eye is a diagnostic microsystem. Probably, there are other microsystems waiting to be discovered.
Microsystems Acupuncture
Microsystems Acupuncture
Microsystems Acupuncture

Auricular Acupuncture

- Using the microsystem of auricular acupuncture, you can treat the whole body merely by treating points on the external ear, or auricle.
- In other words, the whole body is projected onto the auricle.
- Another way of putting it is that the ear "mirrors" the whole body, or reflects an image of it.
In some acupuncture textbooks, there is an illustration of an inverted near-term fetus projected onto the auricle.

While comparing this illustration to a map of auricular acupoints, it immediately becomes clear that the classic Chinese acupuncture points on the ear are in a similar position to the various anatomical areas of the fetus.

The head acupuncture points, for example, are located on the ear lobe.
Auricular Acupuncture

Note the Projection of the Entire Body on the Ear
Fig. 17-12  Somatotropic representation of auriculodiagnostic points of dogs. Areas representing the spine and limbs are shown. (Data from Still J: Auriculodiagnostic points in the dog: relationship to disorders of the nervous and locomotor system, Am J Acupunct 15:261-268, 1987.)
Microsystems Acupuncture: Scalp Acupuncture

- Points on the scalp are also commonly used to treat the whole body.
- Scalp acupuncture is very effective for stroke victims.
- There are other microsystems which are less commonly used.
- One can find a picture of the face with points around the nose that treat other parts of the body.
Scalp Acupuncture

Scalp Lines of Division

Antero-posterior midline
Midpoint of the antero-posterior midline
Glabella
Upper border of the midpoint of eyebrow
Occipital protuberance
Eyebrow-occiput line (A line drawn from occipital protuberance to the upper border of the midpoint of the eyebrow)

Intersection point where the anterior hairline meets the eyebrow occiput line. (This is the inferior border of the Motor line) If hairline is not present then the point is directly above the midline of the zygomatic arch.

Chorea tremor control area (line)
(1.5 cm. anterior to Motor line)
Blood vessel dilation and constriction area (line)
(1.5 cm. anterior to Chorea Tremor Control line)
Motor area (line)
(1.5 cm. posterior to Midline)
Sensory area (line)
(1.5 cm. posterior to Motor line)

Note: A Suggestion
To help remember the lines use the letters that correspond to the line from the posterior to the anterior SMTV.
Scalp Acupuncture

In the canine model, GV22 is the point at which the Motor Area starts and it goes cranial and ventral to TH23 on the lateral eyebrow. GV 22 is in the small triangular area formed by the ridges of the external frontal crest. The ridge is not as distinct in the brachycephalic, but it can be palpated.

The Sensory Area starts at GV 21 and extends ventrally to a point just cranial to the coronoid process of the mandible above the zygomatic arch.

The Auditory and Vertigo Area is over the ectosylvian gyrus and is in the dorsal temporal region in all mammals.

The Visual Area in carnivores occupies the medial and dorsocaudal occipital lobe, whereas in primates it is restricted to the medial surface of the occipital lobe. Energetically, this zone may be wider in carnivores.
Microsystems Acupuncture: Foot Reflexology

- Another microsystem commonly used in acupressure, rather than acupuncture, is the foot.
- We see in charts of foot reflexology that the whole body is projected onto the foot, and practitioners of foot reflexology treat a client by massaging primarily the feet, and secondarily the hands and ears.
- The foot is not a popular microsystem for use in acupuncture because it hurts to needle points on the sole of the foot, unlike points on the hands and ears.
Microsystems Acupuncture: Foot Acupressure Points
In the 20th century, a Korean acupuncturist named Tae Woo Yoo discovered that the hand is also a microsystem.

It is interesting to see on hand acupuncture charts that the twelve acupuncture meridians of the body are mapped out on the hand as well, in miniature form.

As with the ear, by treating the hand alone, the whole body can be treated.
Microsystems Acupuncture: Korean Hand Needling
Investigations in and proof of the existence of the metacarpal/-tarsal ECIWO systems Based on the results of 12,265 treatments (7,560 humans, 4,705 canine) during a period of 4 years

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ECIWO vs Microsystems

- ECIWO seems to be a modern version of Microsystems acupuncture that, perhaps, offers a better current explanation of the mechanisms behind Microsystems.

- Please note how most Microsystems appear to be based upon Homunculi built into various tissues or organs.
ECIWO Acupuncture
ECIWO Acupuncture
ECIWO or Microsystems
Acupuncture?
Microsystems Acupuncture?
Master Tong’s Acupuncture: Microsystems without knowing it?

POINTS ON THE UPPER EXTREMITIES

Zhong Bai (22.06) 中白

[Translation: Zhong, middle; Bai, white]

Indications: Kidney organ disease causing low back pain, lower back soreness, upper back pain, dizziness, vision problems, sciatica due to inadequacy of kidney function, outer ankle pain, swelling and edema of the four limbs, exhaustion, soreness of the low back and flanks especially upon standing up and sitting down, astigmatism.

Locating the point: Fold the patient's hand into a fist. Measure 1.5 cm to the ulnar side of Shang Bai (22.03) and 5 fen proximal to the metacarpal-phalangeal joint of the ring finger. Reaction area of the kidneys. (See Figure 9.)

Method of manipulation: Needle 3-5 fen in depth.

[This point is located at Zhong Zhu (TB 3).]
Are these different viewpoints of the same phenomenon?

What happens if we introduce “Balance” in Dr. Tan’s sense as a concept?
- Anatomic Tissue Similarity
- Mirror
- Image
- Dynamic and Static Balance

Can you see that the most basic result is to treat front and rear (carpel and metacarpel) channels to bolster one channel?

E.g. GB 41, TH 3 for hip OR shoulder disharmonies
Richard Tan’s Balance Method

- Dr. Tan’s Balance Techniques are based upon the *I Ching* (Ba Gau/Eight Trigrams and 64 Hexagrams) and Taoism, as well as the Chinese Circadian Clock
- I will omit his philosophical development of the Balance Method and focus on the clinical applications
Richard Tan’s Balance Method

- Minimal needle
- Distal point-only
- Obtains clinical results very rapidly
- Easy to use in the clinic
- Effective in the treatment of a wide range of both internal and external channel blockages and imbalances
Clinical application of the penetrating needling technique from Yemen (TE 2) to Zhongzhu (TE 3)

- Source: College of Acupuncture-Moxibustion and Massage, Henan University of TCM, Zhengzhou 450008, China

Abstract: The penetrating technique of acupuncture from Yemen (TE 2) to Zhongzhu (TE 3) acts on the extraordinary effect of promoting Shaoyang meridian qi.

The technique is specially good for heat pattern/syndrome of the triple energizer and it is commonly used in the treatment of common cold, high fever, anhidrosis in heat pattern/syndrome, migraine, redness, swelling and pain of the eye, tinnitus, ear pain, swelling and pain of the teeth, ulcers in the mouth and tongue, sore throat, neck rigidity, etc.
Clinical application of the penetrating needling technique from Yemen (TE 2) to Zhongzhu (TE 3)

- In the manipulation, the needle is inserted from Yemen (TE 2), going obliquely upward along the metacarpal interspace to Zhongzhu (TE 3)
- With this technique, the Ying-spring and Shu-stream acupoints can be stimulated simultaneously with one needle
- This method is characterized as less acupoints, exquisite needling, strong sensation, easy and safe manipulation, remarkable immediate effect and high curative rate of single treatment
- Hence, it is worthy of application in clinical practice
An Acupuncturist’s Acupuncture

- An “acupuncturist’s acupuncture” is focused on adjusting the Qi in the Jing-Luo Channels and Collaterals, commonly after making a channel diagnosis.
- Essentially the acupuncturist wants the patient to “point” to the problem which is then rectified by various acupuncture point applications based upon “Balance” and microsystems techniques.
An Acupuncturist’s Acupuncture

The effect of “an acupuncturist’s acupuncture” is described in Chinese as
- *Li*, Stand
- *Gan*, Under
- *Jian*, See
- *Ying*, Shadow

This implies that the effect of such treatment should be as rapid as seeing one’s shadow when standing in the sunshine.
Can We Rationally Organize Acupuncture Point Function?

- Humans create interpretations or “models” of natural systems in order to
  - Organize seemingly disparate data
    - For example, Master Tong’s Acupuncture consists of seemingly endless lists of novel points, each with a plethora of functions
  - Test hypotheses
  - Generate novel uses of current knowledge
Can We Rationally Organize Acupuncture Point Function?

- Richard Tan believes that there is a hidden “code” in the Ba Gua and Circadian Clock which allows us immediate, rational access to acupuncture point functions.
- Let’s examine his “model” or Balance Systems/Techniques/Methods.
Overview of Dr. Tan’s “1,2,3”

- Step 1: Diagnose which acupuncture channel or channels is/are involved
- Step 2: Choose a Balance Technique
  - Local Balance for well-localized dysfunction
  - Global Balance for functional disorders or broad pain
- Step: Choose Points to Treat
  - Mirror
  - Image
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- Bob Doane is a brilliant, spiritual yet scientific acupuncturist who has the busiest human acupuncture clinic in North America.
- Bob used his own version of Dr. Richard Tan’s “Balance Method” for both diagnosis and treatment.
- Bob called his method Distal Needle Acupuncture (DNA).
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- This technique, upon examination of almost 250,000 visit hours by clients for a large number of Disharmonies, was effective about 90% of the time.
- Bob notes that in his own “Classical TCM” practice, directly following graduation from human acupuncture school, his results were closer to 50% helpful.
- He found this unsatisfying, calling it “Poke and Pray” acupuncture.
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- A Short Aside: You May Forget the Channels
- For those readers and participants who have not studied acupuncture, here are simple “rule” modifications that may be used without knowledge of the acupuncture Channels:
  - In the case of appendicular or limb pathology, the basic “rules” are these:
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- The medial forelimb may be treated by the contralateral lateral forelimb or the contralateral medial hindlimb.
- The lateral forelimb may be treated by the contralateral medial forelimb or the contralateral lateral hindlimb.
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- The hindlimbs follow the same rules
- Thus, the medial Hindlimb may be treated by the contralateral lateral Hindlimb or the contralateral medial forelimb
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- The lateral Hindlimb may be treated by the contralateral medial Hindlimb or the contralateral lateral forelimb
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- Where on the corresponding limb do we treat? We simply look at the tissue pathology and mirror it.
- So, for the hind toes, we mirror with front toes.
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- For the metatarsi, we mirror with the metacarpi
- For the tarsi, we mirror with the carpi
- For the stifles we mirror with the elbows
- And for the hips, we mirror with the shoulders
- The system works equal and opposite if the lesion is on the foreleg
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- Where on the corresponding limb do we treat? We simply look at the tissue pathology and mirror it.
- What is meant by this?
- Let us use an example of an elbow dysplasia causing pain and lameness in a canine patient.
- If the primary painful area found by firm palpation on physical examination is at the olecranon on the left leg, how do we proceed?
Where is the Needle Placed?

- We have two primary options, some of which may be dictated by the real life exigencies of daily practice.
We may use either the contralateral forelimb or Hindlimb to treat.

Let us say, for the purpose of education and health, that this left olecranon pathology is found on an aggressive, large breed dog.

Which limb do we want to choose to treat? The one that is the greatest distance from the mouth and teeth would be my choice.

So, for a left forelimb lesion we choose the right Hindlimb.
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- For a ventral or caudal olecranon lesion, we choose the ventral or caudal aspect of the right Hindlimb.
- Because this lesion is at the elbow joint, we choose to treat in the area of the right stifle, caudoventral or in the popliteal area.
- Finally, we palpate the popliteal fossa and find EITHER an area of tissue dissimilarity to surrounding tissue OR an area that itself is painful to the patient on palpation.
- The needle is place into that tissue, and the patient gets 60-100% pain relief, typically within 5-30 seconds.
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- Many disharmonies of the body respond rapidly, not just pain
- Commonly other complex pathologies besides pain can have excellent and long-lasting results
- Of course, for real healing of the body’s pathological changes, species-appropriate diet, good husbandry, adequate species and age-specific exercise, herbal medicines, and bodywork are usually required
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- How do we treat pathologic changes on the axial body (head, neck, torso, abdomen, pubis, and lumbus)?
- This is where we employ the concept of Imaging instead of the Mirror
- In this system, we can visualize the entire body being “drawn” or Imaged on each limb, each part of a limb, each carpal or tarsal bone, and each phalanx
- I am saying that the body is almost infinitely divisible into smaller and smaller areas which still contain all of the information for the entire body
Overview of Bob Doane’s DNA (Distal Needle Acupuncture)

- This is why the Europeans tend to call this descriptive and treatment system, ECIWO.
- Many readers and participants will recognize this idea as the basis for Foot Reflexology.
- The same principle can be used to find acupuncture points on any other part of the limb.
- Please see the following examples of finding the points on the whole hand, and then on the second metacarpal bone itself.
Microsystems Acupuncture:
Korean Hand Needling
ECIWO Acupuncture
Point Location

- It is important to palpate *ahshi* or tender points when locating distal points for treatment.
- The textbook descriptions of point locations are intended to help you “get close” to the actual point, which is then found by palpation.
Importance of Sensitive Points


- To discuss the hypothesis of the sensitization state of acupoints based on the original definition and the localization method of acupoint from Internal Classic as well as the clinical evidence of heat-sensitive moxibustion

- Acupoints are different in the states, named resting and sensitization

- The acupoints of sensitization state are the reactive sites of disease on the body surface, also the best sites for acupuncture and moxibustion treatment
Importance of Sensitive Points

- The acupoints are the specific sensitive sites on the body surface relevant with diseases with the best therapeutic effects.
- Hence, the acupoints of sensitization state are of dynamic variability.
- In clinical application, only the two-step location method, preliminary and accurate localizations (sensitive probing localization) from Internal Classic can localize the acupoints precisely, rather than one-step location method such as proportional measurement or body surface landmark localization.
- The nature and property of acupoints are different based on the functional state, not just on the fixed locations.
Importance of Sensitive Points

- Zhen Ci Yan Jiu. 2010 Aug;35(4):311-4. [Paying attention to the heat thermal sensitivity of moxibustion is the key for raising the curative effect]. [Article in Chinese] Chen RX, Chen MR, Kang MF, Chi ZH, Zhang B. Department of Acu-moxibustion and Rehabilitation, the Affiliated Hospital of Jiangxi College of Chinese Medicine, Nanchang 330006, China. chenrixin123@yahoo.com.cn

- When moxibustion is applied to a certain acupoint in the patient, a regional heat sensitive reaction may be found

- In the present paper, the authors expound its conception and appearing regularities, its relationship with the "arrival of qi" of Chinese medicine, and its clinical application in guiding acupoint selection and heat-stimulation quantity
Importance of Sensitive Points

- Heat sensitive reaction during moxibustion ("heat sensitive moxibustion") is frequently seen in people undergoing pathological conditions and correlates highly with the diseases.

- It characterizes in dynamic changes in the location along with the state of the disorders and in being not always to coincide with the standard meridian acupoint location.
The heat sensitive phenomenon of moxibustion is one of the manifestations in the activated functional activities of meridian of Chinese medicine just like the arrival of the qi caused by acupuncture stimulation.

It is also a sign of activation of the human endogenous functional regulative system.

Therefore, thinking highly of the heat sensitive reaction of moxibustion is the key point for raising the curative effect in clinical practice.
Richard Tan’s Balance Method

- **Point Location**
  - In this system, acupuncture points are 3-dimensional
  - Generally the Balance Method works best when needles are inserted to a depth which allows the needles to “stand up” on their own
Richard Tan’s Balance Method

- **Point Location**
  - In deciding where to look for possible appropriate points, use either the “Anatomical Image” of the limbs
  - “Mirror”
    - Digits correspond on hands and feet
    - Carpus corresponds to the tarsus
    - Elbow to the knee
    - Shoulder to the hip
Richard Tan’s Balance Method

- Point Location
  - Or in deciding where to look for possible appropriate points, use the “Anatomical Image” of the thorax and abdomen
  - “Image”
    - The hand and foot “images” the head
    - The carpus and tarsus “images” the neck
    - Elbow and knee “images” the central abdomen
    - Shoulder and hip “images” the lower abdomen and genitals
Anatomic Tissue Similarity

- Whether we use the “mirror” for the limbs or the anatomic “image” for the axial body
- We should first choose to needle tissues that have an anatomic tissue similarity to the primary affected tissue
Dr. Tan’s 6th System?

- Similar to “Channel Clearing” technique with distal points
- Or microsystems application
  - Why choose Hou Xi SI 3 for shoulder and neck pain?
  - Why choose Zu Ling Qi GB 41 for lateral headache?
  - Why choose Lie Qi LU 7 to “clear” the head and neck?
Distal Acupuncture Points

- Channel clearing is my favourite technique

- Primary concern:
  - Choose the correct channel which crosses the area of pathology
  - Choose a representative point on that channel that is Active or Sensitive
  - Place a needle and seek De Qi or Zhi Qi

- Primary disadvantage: Painful?!
Anatomic Tissue Similarity

Why does the Nan Jing tell us “needle skin deep to treat skin diseases, needle muscle deep to treat muscle diseases, needle into the tendons and ligaments to treat tendons and ligaments, and needle bone deep to treat the bones”? 
Richard Tan’s Balance Method

- **Needles/Technique**
  - Needle until *De Qi* response is elicited
  - *De Qi* sensation delivers a powerful signal to the patient’s channel system
  - This is very important in making the distal point approach both efficacious and rapid
  - Sensation should be somewhere between “can’t feel it” and “let me out of here!”
Richard Tan’s Balance Method

- Treatment Time and Frequency
  - Rapid improvement in pain, numbness and range of motion
  - Needle retention should be 45 min-1 hr
  - Re-treat before clinical signs fully reappear
  - This allows the clinician to “stay ahead” of the condition with continued and additive reduction in clinical signs
AP reduces crying in infants with infantile colic: a randomised, controlled, blind clinical study


OBJECTIVE: To investigate whether AP reduces the duration and intensity of crying in infants with colic

Patients and methods 90 otherwise healthy infants, 2-8 weeks old, with infantile colic were randomised in this controlled blind study
AP reduces crying in infants with infantile colic: a randomised, controlled, blind clinical study

- 81 completed a structured programme consisting of six visits during 3 weeks to an AP clinic in Sweden
- Parents blinded to the allocation of their children met a blinded nurse
- The infant was subsequently given to another nurse in a separate room, who handled all infants similarly except that infants allocated to receive AP were given minimal, standardised AP for 2 s in LI04
AP reduces crying in infants with infantile colic: a randomised, controlled, blind clinical study

- RESULTS: There was a difference (p=0.034) favouring the AP group in the time which passed from inclusion until the infant no longer met the criteria for colic.
- The duration of fussing was lower in the AP group the first (74 vs 129 min; p=0.029) and second week (71 vs 102 min; p=0.047) as well as the duration of colicky crying in the second intervention week (9 vs 13 min; p=0.046) was lower in the AP group.
- The total duration of fussing, crying and colicky crying (TC) was lower in the AP group during the first (193 vs 225 min; p=0.025) and the second intervention week (164 vs 188 min; p=0.016).
The relative difference from baseline throughout the intervention weeks showed differences between groups for fussing in the first week (22 vs 6 min; \( p=0.028 \)), for colicky crying in the second week (92 vs 73 min; \( p=0.041 \)) and for TC in the second week (44 vs 29 min; \( p=0.024 \)), demonstrating favour towards the AP group.

CONCLUSIONS: Minimal AP shortened the duration and reduced the intensity of crying in infants with colic.

Further research using different AP points, needle techniques and intervals between treatments is required.
#1- Anatomical Image System

- Employs the Chinese concept of channel-based anatomical zones and imagery
- This system always treats points that are located on the corresponding channel
- Treats on the opposite, diagonal side of the patient’s body
#1- Anatomical Image System

- For this system you must remember the Chinese channel names and locations!
  - *Taiyang*= Small Intestine and Bladder
  - *Shaoyang*= Triple Burner and Gallbladder
  - *Yangming*= Large Intestine and Stomach
  - *Taiyin*= Lung and Spleen
  - *Shaoyin*= Heart and Kidney
  - *Jueyin*= Pericardium and Liver
The Limbs all “Mirror” one another

- Toes and fingers mirror each other
  - E.g. right front lateral 5\textsuperscript{th} finger (SI \textit{Tai Yang} channel) is treated by left lateral 5\textsuperscript{th} toe (BL \textit{Tai Yang} channel)

- Tarsi mirror the carpi
  - Right foot medial ankle injury (SP \textit{Tai Yin} channel) may be treated by left medial carpus (LU \textit{Tai Yin} channel)
The Limbs all “Mirror” one another

- Stifles mirror the elbows
  - Left antero-lateral knee injury (ST Yangming channel) may be treated by right antero-lateral elbow (LI Yangming channel)

- Hips mirror the shoulders
  - Left lateral shoulder injury (TH Shaoyang channel) may be treated by right lateral hip (GB Shaoyang channel)
The Axial Body is “Imaged”

- “Image”
  - The hand and foot “images” the head
  - The carpus and tarsus “images” the neck
  - Elbow and knee “images” the central abdomen
  - Shoulder and hip “images” the lower abdomen and genitals
The Axial Body is “Imaged”

- Chest Pain may be thought to be traversed by the CV, KID, LIV Channels
  - CV is balanced by GV
  - KID is balanced by HT
  - LIV is balanced by PC
- An Image of the chest on the forearm thus places the most effective PC point at the level of PC 6!
Diagnose the channel or channels involved by Chinese channel name

Locate the area(s) along the affected channel(s) where there is pain or blockage

Choose the appropriate diagonal channel

Using the “anatomical image” principle, find and needle *ahshi* points on the diagonal channel (contralateral) that correspond with the area of pain or blockage
#1- Anatomical Image System: Example

- 17.5 year old Corgi cross
- Carpel flexion inhibition
- Pain in dorsolateral carpus
- Which channel?
- Which corresponding channel to treat?
- Roughly which point to treat?
#1- Anatomical Image System: Example

- A 53 year old male complains of lower back pain
- Channels Involved?
- Balancing Channels?
- Area Imaged?
- What Points?