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An Overview of the Evolution of Acupuncture Treatment: From

Stone Needle to Laser Beam

Abstract: Drawing from acupuncture's history, we analyze how globalization, data science, and cross-disciplinarity transformed the study and practice of Chinese Medicine. We argue that a thorough understanding of foundational acupuncture theories and metaphors could guide a harmonized way forward: reconstructing lost knowledge and incorporating discoveries.

1 Developing the "Zhen" 针 (Acupuncture Needles)

1.1 Zhen's First Shapes and Materials

We begin by recalling that Zhenjiu is the Chinese name for acupuncture where Zhen stands for the acupuncture's needling objects and techniques and Jiu stands for the moxibustion ones. It is important to notice that archeological evidence places moxibustion as being practiced for longer than acupuncture. Chinese medical texts found in the tomb of Ma Wangdui in Hunan only describe moxibustion channels. Ancient Chinese texts describe the use of sharp stone tools – called Bian – in practices such as bleeding and the draining of abscesses and carbuncles. Sharp bones, pointed crystals, and bamboo also were used for needle manufacture.

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Remember: the character 针 Zhen (needle) is etymologically related to 箴, itself related to bamboo. Needles (sewing and acupuncture both) have the same root, both connecting to bamboo.⁴

Of note is that some needles displayed in museums as acupuncture ones have eyes on them. Their existence shows that the technology for producing metallic sharp objects was already well refined but on the other hand, it raises questions about its therapeutic uses, at least the ones found in tombs. There is no evidence of needles being used simultaneously as sewing and medicinal instruments.

1.2 The Early Systematization of Acupuncture and Moxibustion
The emergence of the monumental works *Huangdi Neijing* at the Spring and Autumn
Period (770–476 BCE)/Warring States Period (475–221 BCE) and *Nanjing* at the Han
Dynasty (206–220 CE) were key moments for acupuncture's evolution and can be
considered the starting point for the systematic practice of acupuncture and moxibustion in China.

Another milestone was the classic *Zhenjiu Jia Yijing* by Huang-fu Mi (215–282 CE), a famous acupuncturist during the Wei (220–264 CE) and Jin (265–420 CE)

Dynasties. This classic contains a summary of achievements in the field of acupuncture

The same bamboo that was important for the Japanese Acupuncture's development of shinkan, the needle guide by the blind acupuncturist Waichi Sugiyama during the Edo Period (1603–1867). Kobayashi, Akiko/Uefuji, Miwa/Yasumo, Washiro: "History and Progress of Japanese Acupuncture". *Evidence-Based Complementary and Alternative Medicine*, 7(3), 2010, pp. 359–365.

and moxibustion from the Qin (221–207 BCE) to the Han Dynasty (206–220 CE) and his own clinical experiences.

Before these systematization efforts (and even after it),⁵ acupuncture practice was linked to Shamanic healing practices. The appearance of these texts sets the beginning of a clear separation between orthodox and heterodox practices in Chinese medicine in general, each group claiming the discourse and vying for practices, traditions, and lineages.

2 Acupuncture's First Epoch of Decline and Disuse

After these efforts, acupuncture all but disappears until the Song Dynasty. Chinese physicians became extremely cautious of using acupuncture in clinical practice, preferring moxibustion instead, being a safer therapy. Possible reasons are pointed by Mathias Vigouroux:

After the disintegration of the Han Empire (206 bce–220 ce), the acupuncture classics circulation was limited to a very small number of physicians in China. Only a few diagrams were available to help practitioners visualize the acupuncture points in the body. Also, over time, discrepancies appeared between treatises.

Immediate risks inherent to the practice of moxibustion were mostly limited to burns and blisters, whereas a needle wrongly inserted could cause bleeding, damage the tissues or the organs, and have even more dramatic consequences.⁶

⁵ Strickmann, Michel/Faure, Bernard: *Chinese Magical Medicine*. Stanford University Press: Stanford (CA), 2005.

⁶ Burns, Susan L./Elman, Benjamin A.: *Antiquarianism, Language, and Medical Philology: From Early Modern to Modern Sino-Japanese Medical Discourses*.

Brill: Leiden, 2015.

In our opinion, we also must remind the high risks of cross infections from neglecting or lack of adequate methods to properly sterilize needles.

Keiji Yamada proposes that the development of the treatments begins with moxibustion practices, evolves to fire-needles and finally reaches filiform needles. When studying practitioners after the classics *Huangdi Neijing*, *Nan Jing* and *Zhenjiu Jiayi Jing*, we notice that moxibustion was almost exclusively the only technique used. This is particularly clear in the works of Ge Hong (葛洪, 284–364 CE), Tao Hong-jing (陶弘景, 456–536 CE), Xu Zhi-cai (492–572 CE), and Chao Yuanfeng (徐之才). But the biography of Dr. Liu Juanzi (刘涓子), practicing during the Song dynasty, describes an acupuncture technique using fire-needles. This gives strength to Prof. Yamada's theory of gradual transition: moxibustion-fire needle-filiform needle. Fire needling is also hygienically safer, possibly removing one risk factor mentioned above needle contamination and cross-infection.

3 The Beginning of a Restructured Acupuncture Practice

⁷ See Yamada, Keiji: *The Origins of Acupuncture, Moxibustion, and Decoction: The Two Phases of the Formation of Ancient Medicine: The Origins of Acupuncture and Moxibustion, The Origins of Decoction.* International Research Center for

Japanese Studies: Kyoto, 1998, also, Yamada, Keiji: "Formation of Prototype for

Chinese Medicine". *Japan Review*, 2, 1991, pp. 203–207.

Acupuncture was still being studied by scholars – even if rarely practiced – and always present in varying degree on almost every academic text. That allowed its continued acceptance as an orthodox therapeutic practice over the centuries.

4 Sui (581–618 CE) And Tang (618–907 CE) Dynasties

Acupuncture and moxibustion developed rapidly along with the increasingly prosperous economy and culture of the time.

Sun Simiao, known for Qianjin Yaofang (Prescriptions Worth a Thousand Gold for Emergencies or Precious Prescriptions for Emergencies) and the Qianjin Yifang (A Supplement to the Essential Prescriptions Worth a Thousand Gold or Supplement to Precious Prescriptions), develops the first known colored maps of channels and points and provides the first description of the Ashi points.

Wang Tao (670–755 CE). Wang Tao wrote an important reference book for moxibustion, *Waitai Miyao* (Essential Secrets from the Imperial Library), in which recorded a host of **moxibustion** applications of various schools.

5 Song Dynasty (960–1279 CE): Standardizing the Teaching of Acupuncture and the Popularization of its Practice

During the Song dynasty (960–1279 CE) a renewed interest in the study of acupuncture and moxibustion, improvements in printing technology and governmental support were important factors in facilitating the creation and dissemination of study materials.

Wang Wei-yi (987–1067 CE) – *Tongren Shuxue Zhen Jiu Tujing* (Illustrated Manual of the Bronze Man Showing Acupuncture and Moxibustion Points). One of the most important work in acupuncture's history, it documents the location of acupuncture

points and channels in a way that allowed the transmission of such knowledge to happen in a standardized way.

He also designed two life-size male bronze statues. The bronze statues were considered exquisite teaching models at that time and an advance in medical education and with the help of the models, meridian theory became more popular.

Neo-Confucianism, analyses regarding the nature of Qi (especially by the philosophers Zhangzai and Chen Brothers) and careful studies of The Book of Changes (Yijing) are defining moments of the Song dynasty. Also, neo-Confucianism philosophy provided for an ethics where the study and practice of medicine were highly prized and even some emperors became students and practitioners of medicine.⁸

6 Jin (1115–1234) and Yuan (1271–1368) Dynasties

With standardized teaching came a safer practice and more detailed clinical observations thus making acupuncture a fertile ground for new proposals. The influence of the philosophies in Zhou Yi and the concept of "Changes with Current Situation" has become an important theoretical foundation for guiding Chinese medicine to understand the physiological function and pathological changes of the human body as well as developing the treatment methods like the "chronobiological" use of acupuncture points by techniques such as, Zi Wu Liu Zhu 子午流注 and Lin Gui Ba Fa 灵龟八法.9

⁸ See Goldschmidt, Asaf: *The Evolution of Chinese Medicine: Song Dynasty*, 960–1200.
Routledge: London, 2011, pp. 19–42.

⁹ See Lo, Kwaiching/Li, Lei: "Tao of Changes and Tao of Medicine – The Influence of the Philosophy of the Concepts of Time and Space in Zhou Yi on the Academic

Acupuncture practice became even more personalized – e.g. taking into consideration the time of day. These methods allow the practitioner to select a time of day that would be best for acupuncture and choose points that resonate with it, i.e. have the best clinical while the consultation is happening. These are methods still employed today.¹⁰

Yuan dynasty Hua Boren's 《十四经发挥》 (Exposition of the Fourteen Meridians) studies the relationship between meridians and points, making important contributions to its understanding, including Ren Mai and Du Mai [and/with] the 12 regular meridians. The book had a significant influence on the science of acupuncture.

7 Ming Dynasty (1368–1644)

Arguably, the golden age of acupuncture practice began during the Imperial period. All previous dynasties developments – especially post-Song – bear fruit and both the practice and academic research of acupuncture bloom.

Xu Feng 徐凤 discussed needling techniques for supplementation and drainage as well as techniques for massaging channels to direct qi in his book (Zhēn Jiǔ DàQuán, 针灸大全).

Development of Chinese Medicine". *Journal of Beijing University of Chemical Technology (Social Sciences Edition)*, 1, 2014 (In Chinese).

¹⁰ The Mianyang TCM Hospital (Sichuan Province People's Republic of China) has a section solely devoted to using these methods to treat patients.

Gao Wu 高武 wrote 《针灸聚英》 Zhenjiu Juying (An Exemplary Collection of Acupuncture, Moxibustion and their Essentials) around 1529.11

Yang Jizhou 杨继洲 (1522–1620) published the most significant text of the period on acupuncture, *Zhengjiu Dacheng* (The Great Compendium of Acupuncture and Moxibustion).

8 Qing Dynasty (1644–1912 CE): Decline of acupuncture and moxibustion usage

With the rise of Western medicine presence, acupuncture uses steadily declines while phytotherapy manages to still be in widespread use.¹² Politically, this was a troubled period: Opium War, unequal treaties, Taiping Rebellion (1850–1864), and Dungan Revolt (1862–1877).

9 Republic of China (1912–1949 CE): Redefining Chinese medicine and the emergence of a new professional class

This book influenced deeply the foundations of Korean Acupuncture. See
"Characteristic Of Korean Medicine – In Clinic; Saam Acupuncture". All That
Korean Medicine. Seoul, 2011, retrieved on April 28, 2017 from
http://tkmedicine.blogspot.sg/2011/07/3-characteristic-of-korean-medicine-in.html.

Cheng, XN: Chinese Acupuncture and Moxibustion. Foreign Languages Press:
Beijing, 1987.

The Western medicine influence completely reshapes the medical landscape in China and drastic measures such as banning the practice of Chinese medicine and replacing it with its western counterpart. As an act of resistance to this hostile encroachment, the practitioners of Chinese medicine rise as a professional class, struggling to survive and define a properly independent identity.

This becomes one of the most fascinating (and problematic) periods of the history of Chinese medicine: the coalescing of a fragmented collection of practitioners into an organized group, using its influence and abilities to urge politicians against banning Chinese medicine and ensuring its survival.¹³

In 1935, a resolution backed by a petition from traditional medicine societies demanding equal status for Chinese and Western medicine passed.¹⁴

Also in the early 1930s, Cheng Danan, a Chinese scholar-physician, used

Euroamerican anatomy to rehabilitate acupuncture as a respectable skill and insisted that

1960. University of Hawaii Press: Honolulu, 2015, pp. 207–217.

¹³ See Taylor, Kim: Chinese Medicine in Early Communist China, 1945–63. Routledge: London, 2005 and Scheid, Volker: Chinese Medicine in Contemporary China.
Duke University Press: Durham (NC), 2002, pp. 66–106. (Unschuld, op. cit. pp. 229–260), and Andrews, Bridie: The Making of Modern Chinese Medicine, 1850–

Hillier, S.: Health Care and Traditional Medicine in China 1800–1982. Routledge, 2013, p. 311.

acupuncture must be an effective medical therapy because its mechanism of action was the stimulation of the nerves described in European medical theory.¹⁵

10 People's Republic of China (PRC) 1949 – Present Days

Traditional Chinese Medicine (TCM) becomes then grounded on Chinese classics but guided by scientific methods and the need to integrate western medicine. This fusion is what Mao Zedong envisioned as "The new medicine".¹⁶

The TCM practiced today is based on standardization efforts that took place in China in the 1950s with the creation of TCM colleges and hygiene schools, hospitals, and clinics. The Communist state-building project mandated that TCM institutions be built in every provincial capital. From 1956 to 1963, TCM textbooks were written and TCM institutions were created.¹⁷

¹⁵ Cheng's new scientific acupuncture was a great success in China. In the 1950s, however, Cheng abandoned his own earlier insistence that acupuncture must work through the nerves alone. Instead, he attributed its efficacy to the power of qi and the doctor-patient relationship, in addition to the physical stimulation of the nerves. See Andrews, BJ: "Acupuncture and the Reinvention of Chinese Medicine". *APS Bulletin*, 9(3), 1999.

¹⁶ Taylor, op. cit.

Hsu, Elizabeth: "The History of Chinese Medicine in the People's Republic of China and its Globalization". East Asian Science, Technology and Society: An International Journal.

The China Academy of TCM was established in 1955¹⁸ and in 1958, the first successful surgical operation with acupuncture anesthesia aroused great attention in the West.¹⁹

From 1966 until 1976, the Cultural Revolution movement affected China politically and produced a huge negative impact on the country's economy and society.

The Cultural Revolution had a tremendous impact in the practice of acupuncture and its aftershocks are still felt today, especially with regards to human resources as many of the practicing acupuncturists of the time were either persecuted or even killed by the regime or committed suicide, and many a book was obliterated.²⁰

In 1975 entrusted by the World Health Organization (WHO) International training centers for acupuncture and moxibustion were set up in Beijing, Shanghai and Nanjing aiming to train physicians and acupuncturists from various countries and regions.²¹

With the 80s came the Chinese economic reform, and a resurgence of scientific publication. It also marks the appearance of new acupuncture techniques, for economic opening also meant information exchange between the then closed China and the world.

See Wiseman, Nigel: Education and Practice of Chinese Medicine in Taiwan. The speech was given at the 31st TCM Congress, Rothenburg, June 2000. Retrieved on April 28, 2017 from http://www.paradigm-pubs.com/sites/www.paradigm-pubs.com/files/files/TAIWAN.pdf.

¹⁹ Zhang, Ji/Zhao, Bai-xiao/Lao, Lixing: Acupuncture and Moxibustion. People's Medical Publishing House: Beijing, 2014, p. 4.

²⁰ Scheid, *op. cit.*, pp. 76–81.

²¹ Zhang/Zhao/Lao, op. cit. loc. cit.

Some of these are readily assimilated back into Chinese practice while others had more acceptance outside China, e.g.: classical electroacupuncture vs. Voll's electroacupuncture; traditional moxibustion vs. TDP; Nogier's auriculotherapy vs. Chinese auriculotherapy; and different approaches to laser acupuncture (Chinese, Japanese, and Western).

11 Globalization of Acupuncture/TCM

The 1980s saw the complete rehabilitation of Chinese medicine from the destructive forces of the Cultural Revolution and reinforcing of its presence within state structures. By 1984, there were twenty-nine academies of TCM in China, eleven medical schools with specialist departments of TCM, and over 26,000 students engaged in its study.²² In 1987, the World Federation of Acupuncture-Moxibustion Societies (WFAS) was established and the first International Conference on Acupuncture and Moxibustion was held in Beijing. Composed of fifty-live acupuncture associations worldwide WFAS is headquartered in Beijing.²³

In the 1990s, TCM was commodified as semi-private industries promoted TCM in global health markets. In China, TCM colleges became "Universities of Chinese medicine and pharmacotherapy"²⁴ and TCM truly enters the global stage, providing

²² Taylor, *op. cit.* p. 151.

²³ Zhang/Zhao/Lao, op. cit. loc. cit.

[&]quot;The Globalization of Chinese Medicine". *The Levin Institute – State University of New York*, 2012, last modified 2017, retrieved on April 28, 2017 from http://www.globalization101.org/the-globalization-of-chinese-medicine/.

innovative (or at least new) services, products and research and development opportunities, to any those who pay.

Some of those new techniques include auricular, scalp, abdominal, feet, tongue and hand acupuncture in addition to the traditional body acupuncture. Other developments that enjoy large popularity are filiform and intradermal needling, electrical stimulation, warm needling, ultrasound stimulation, laser acupuncture, magnetic therapy and acupoint injection, catgut, small knife needle, and others.

11.1 Therapeutic Fusions: Creating Synergies beyond the Realm of TCM

With the advances in research, electro acupuncture virtually became the top choice technique when researching acupuncture effects and mechanisms both in China and outside.²⁵

The use of laser beams in acupuncture has a tremendous boost in research and gain immense popularity during these years.²⁶

See Mayor, David F. et al.: Electroacupuncture: A Practical Manual and Resource.
Churchill Livingstone/Elsevier Health Sciences: Edinburgh, 2007.

See Naeser, Margaret A./Wei, Xiu-Bing: Laser Acupuncture: An Introductory
Textbook for Treatment of Pain, Paralysis, Spasticity and Other Disorders:
Clinical and Research Uses of Laser Acupuncture from Around the World. Boston
Chinese Medicine: Boston (MA), 1994. And Naeser, Margaret A./Wei, Xiu-Bing:
Laser Acupuncture: An Introductory Textbook. Boston Chinese Medicine: Boston
(MA), 1994, pp. 197–203.

In addition to these milestones in the late 1990s and early 2000s, acupuncture began being paired with different therapeutical approaches as homeopathy, aromatherapy, flower remedies and non-Chinese phytotherapy. All these initiatives follow the reasoning that, if western medicine can be integrated into Chinese medicine, the same could be attempted with Chinese medicine and other medical systems. Some remarkable examples follow.

12 Revival of Homeopuncture

In the 1950s, Dr. Roger de la Fuye (French Homeopath and Acupuncturist) researched and concluded that homeopathy can be used with acupuncture to treat patients. He was also able to utilize the points to confirm if the remedy was the proper one. With the popularization of acupuncture in West, his approach saw a revival and gained boost during 1990s.

Example²⁷:

Homeopucture Protocol to Vascular Disorders	
Hypotension	Hypertension
Ren6Qihai- Gelsemium	Du20 Baihui
St36 Zusanli- Sempervirens	LI11 Quchi - Aurum metallicum 30C
Sp6 Sanyinjiao	St36 Zusanli- orSp6 Sanyinjiao- Phosphorus 30C
	Liv3 Taichong

13 Aromatic Acupuncture

http://www.acupuncture.org.sg/cos/o.x?c=/wbn/pagetree&func=view&rid=35321

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²⁷ Morais, Justin: "Acupuncture + Homeopathy = Homeopuncture". Retrieved on April 27, 2017 from

Prof. Ephraim Ferreira Medeiros developed the use of essential oils with acupuncture to optimize treatments in 1999,²⁸ based on works of La Fuye,²⁹ Peter Holmes³⁰ and Gabriel Mojay.³¹

14 Phyto Acupuncture

The use of seeds, originally from Brazilian traditional medicinal, on acupuncture (or auriculo acupuncture) points was developed by the Brazilian acupuncturist Dr. Ségio Franceschini Filho.³²

Many other techniques increase in popularity: magneto-acupuncture and bioresonance therapy became popular in West and especially in Japan.

Medeiros, Ephraim F: "Acupuntura Aromatica". Retrieved on April 27, 2017 from http://www.zangfu.com.br/biblioteca/acupuntura-aromatica.pdf. It is important to note that in 1990s it was very hard to find Chinese herbs to work in Brazil but in another hand high-quality aromatherapy essential oils abounded and this was one of the main reasons that motivated this combination and research.

²⁹ See Jayasuriya, Anton: *Clinical Homeopathy*. Kuldeep Jain for Health Harmony: New Delhi, 2002, p. 718.

Holmes, Peter: The Energetics of Western Herbs: A Materiamedica Integrating

Western and Chinese Herbal Therapeutics. Snow Lotus Press: Cotati, 2007.

Mojay, Gabriel: Aromatherapy for Healing the Spirit: A Guide to Restoring Emotional and Mental Balance Through Essential Oils. Gaia: London, 2005.

Franceschini Filho, Ségio: Fitoacupuntura: A Simplicidade E a Força Das Plantas

Como Facilitadoras Da Saúde, Editora Roca Ltda., 2000.

15 Effects of Globalization

During this period, niches and specializations were created, defining knowledge borders and ascribing them to different professionals. Those efforts also try to distance the study of acupuncture from traditional concepts like Yin and Yang, Wu Xing, and Qi (considered too ambiguous) instead of replacing them with neurophysiological/anatomical terminology.

Resulting from this distancing and separation are therapies that appropriate practices from acupuncture but remove them from any cultural/foundational aspects. One example of such practice is the creation of the "Dry Needling" technique by Janet G. Travell³³ in the late 90s.

Specializing, even more, are practices like Mikio Sankei's Esoteric Acupuncture, removing themselves from both classical acupuncture and western medicine, targeting instead practitioners of western esoteric/mystic traditions.³⁴

Finally, an effort to standardize terms and procedure names in acupuncture (and TCM in general) took place, looking for improvements in teaching and practice of Chinese medicine around the world. While definitely not problem-free, this effort did heavily contribute to the current global reach – and development – of Chinese medicine. 35

Simons, David G./Travell, Janet G./Simons, Lois S.: *Travell & Simons' Myofascial Pain and Dysfunction: The Trigger Point Manual*. Williams & Wilkins:

Baltimore (MD), 1999.

³⁴ Sankey, Mikio: *Esoteric Acupuncture*. Mountain Castle Pub.: Los Angeles (CA), 1999.

WHO standard acupuncture point locations in the Western Pacific Region. World Health Organization, Western Pacific Region: Manila, 2008.

16 The IT, High Tech and Post Needle Era

With internet's explosive popularization in the early 2000s, forums and social networks enabled professionals from across the world to exchange knowledge, removing entry barriers and fostering the creation of new materials and approaches to the teaching of acupuncture. Following the Big Data innovations, these platforms also became a prime source for data-mining opportunities and post-2010 the majority of TCM hospitals in China have electronic data collection and management systems, streamlining everything from inventory management to epidemiologic analysis initiatives.

Research in computer science relevant to TCM³⁶ and the design of wearable sensors and devices³⁷ are opening promising avenues for diagnosing and acupuncture treatment.

Many new techniques have been developed concurrent to these, further removing themselves from classical acupuncture views using these concepts on a surface level and appropriating only a few classes of points and channels. These techniques are also different from other recent *technological* advances in that they eschew altogether the use

Wu, Zhaohui/Chen, Huajun/Jiang, Xiaohong: Modern Computational Approaches to Traditional Chinese Medicine. Elsevier: London, 2012. And Poon, Josiah/Poon, Simon K.: Data Analytics for Traditional Chinese Medicine Research. Springer: Cham, 2014.

³⁷ Lei, H. et al: "A Pilot Clinical Trial to Objectively Assess the Efficacy of Electroacupuncture on Gait in Patients with Parkinson's Disease Using Body Worn Sensors". *PLOS One*, 11(5), 2016 e0155613,
https://doi.org/10.1371/journal.pone.0155613.

of needles. Despite positioning themselves far from the classical body of theories and practices to define an identity of their own, techniques like Dry Needling and Esoteric Acupuncture still use needling as their central practice. Laser beams, which were being used in acupuncture before this period, can be employed with or without needles. This suggests a gradual trend toward substituting needles (Zhen) for other different kinds of stimuli leading to the emergence of a myriad of new approaches that do not employ needles or moxibustion.³⁸

In a counter-parallel movement, there is rising interest in research that studies the importance of the classical forms of Chinese acupuncture, and texts like Liu Lihong's Sikao Zhongyi (《思考中医》)³⁹ are voicing concerns about – and suggesting ways out of – the extended crisis that Chinese Medicine is going through.⁴⁰

17 Final Remarks

Some examples are Crystal Acupuncture – use of stones and crystals in acupoints;

Chromo Acupuncture – LED light and optic fibers to stimulate acupoints with specific colors; and Radionic Acupuncture – radionics and radiesthesia (dowsing) combined with acupuncture theories for the remote treatment of maladies.

³⁹ Sikao Zhongyi [Contemplating Chinese medicine] 刘力红思考中医广西师范大学出版社.

See Chinese Medicine in Crisis: Science, Politics, and the Making of "TCM".

ClassicalChineseMedicine.org, Hai Shan Center, Inc. Retrieved on September 1,

2017 from https://classicalchinesemedicine.org/gpa/chinese-medicine-in-crisis-science-politics-and-the-making-of-tcm/.

We have shown how the practice and study of acupuncture have changed over the millennia, especially after western theories of medicine began being incorporated into the Chinese medicine practices. Currently, there is renewed interest in acupuncture as providing preventive measures (an ancient focus but neglected over the years) in addition to its efficacy when treating a host of maladies is of particular importance.

Globalization has steadily increased the reach of TCM and acupuncture: more patients, practitioners and researchers and an ever-expanding body of academic work.

Another facet of it, working perhaps via obfuscation or redirection, resulted on "new therapies": niche practices and a discourse that uses (or better, appropriates) only to select concepts from the foundational acupuncture theories in a bid to further their own agenda (e.g. Medical or Esoteric acupuncture). By positioning themselves far away from the practices and discourse of acupuncture in China (or eastern Asia) and claiming to hold "new truths" about it, they end up reinforcing stereotypes and building resistance to the understanding of philosophical concepts as Yin/Yang and the five movements.

Perhaps this is the largest challenge for academic research on acupuncture. Globalization created a new set of challenges to the survival of acupuncture and Chinese medicine, after the arrival of western remedies, technology, and therapies.

To be able to survive, acupuncture had to concede, removing from the discourse concepts like Li and Yi and instead focusing only on its practical and descriptive aspects, a focus imported from Western medicine.⁴¹ This resulted in a fractured transmission and

Alternative Futures." *The Annals of the American Academy of Political and Social Science* **583**(1), 2002, pp. 136–59.

⁴¹ See Scheid, Volker: "Remodeling the Arsenal of Chinese Medicine: Shared Pasts,

comprehension of the knowledge historically associated with Chinese medicine, and we have shown that these gaps are being filled not only by concepts originated from western medicine but from areas far removed from both. For a notable example of these movements, a cursory glance over the curriculum of a typical TCM post-secondary program finds about half of the curriculum filled by western science and medicine disciplines and courses. Another example, in clinical practice, is auriculotherapy.

Auriculotherapy is a practice originated in France, that was (rapidly) assimilated to such a degree in China that it has its maps and prescriptive practices differing considerably from the French ones, and for some maladies like Myopia (especially pediatric Myopia) it is the primary treatment choice. Contemporary Chinese medicine does look outside and forward.

While supported by the government the "export" of acupuncture professionals is not without its problems, mostly stemming from the excessive simplification necessary to make it fit into western paradigms. A possible way to reconstruct – or at least mend some of – these fractures might be to combine the philosophy of Constructive Realism⁴² with a program of study centered on the understanding of the foundational metaphors of Chinese Medicine and acupuncture theories.

This could herald a new cycle of transformation for acupuncture, interested in the *reconstruction* of the missing spaces, not simply be forgoing all modern advances and trying to restore the "golden age" of acupuncture. Such transformation would leave

Chinese medicine and acupuncture in a place where it would be able to better withstand

Braumüller: Wien, 1997.

⁴² See Slunecko, Thomas/Wallner, Fritz G.: *The Movement of Constructive Realism*.

future upheavals, for its metaphorical reasoning is as important for the foundational identity of acupuncture as the needles (Zhen) themselves.

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