Heaven, Earth and Humans: Color Harmony in Chinese Culture

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Abstract: The Five-Elements-Theory (also called phases, essences or stages) is an important doctrine of ancient China: merging the wisdom and life experience of our ancestors, it is a reflection of Chinese culture that certainly has practical value and completeness. The Five-Elements-Theory discusses the harmonious relations and interactions of heaven, earth and humans, which provide considerable research value not only in a cultural connotation, but also in the field of natural sciences.

Keywords: color, pattern, harmony

1 Introduction

The Five-Elements-Theory in parts dates back as early as 1600 BC [1]. It discusses the harmonious relations and interactions of heaven, earth and human beings, providing a coherent and systematic approach to understand and interpret nature and its interdependent processes of creation and decay. Starting with the threefold structure of the universe in Chinese philosophy, the three spheres of origin, 三才 (San Cai), which are 天 (Tian) heaven, 地 (Di) earth, and 人 (Ren) humans, are interconnected by universal powers generating creative and destructive impact. Central to this structure is the idea of the 道 (Dao), literally meaning "way" or "path". As mentioned in the the Dao-De-Jing by Lao-Zi [2], the most important compendium on philosophical Daoism, nature is structured by the Dao principles. A basic explanation of the character of the Dao says that there is reason in everything: the Dao transcends the three spheres of origin and the life and death promoting powers that rule organic nature and inorganic matter. The principle of the Dao is to sustain universal harmony, and this principle can therefore be found in every experience of daily life: understanding the meaning of Dao thus helps the individual grasp the rationale for life and the universe, and to arrange life in harmony. Lao-Zi says:

「人法地,地法天,天法道,道法自然。」- Humans follow the principle of earth / ground; earth follows the principle of heaven; heaven follows the principle of nature.

2 Color Harmony

The Dao of heaven covers the realm of eternal principles guiding creation through time and bringing matter into being, while the Dao of earth / the ground is the place where all things materialize through striving for shape: 「立天之道曰陰與陽,立地之道曰柔與剛,立人之道曰 仁與義, 兼三才而兩之。」

Heaven's activity is driven by the universal powers 陰yin and 陽Yang, complementary in their mutual exchange bringing up darkness and light, heat and cold, strength and weakness etc., and earth is attributed the material qualities of \mathbf{x} (Rou) softness and 剛 (gang) solidity. While 天理 (Tian Li) can be understood as the heavenly principle, the realm of human beings is guided by 仁 (Ren) benevolence and 義 (yi) righteousness [3]. As the Dao is effective by generating Yin and Yang, the two principle cosmic energies, which are complementary, inseparable, and in balance with each other, through these binary universal forces, the five elements are brought in being: Water, Metal, Fire, Earth and Wood, representing the seasons. Each of the elements is associated with one of the five colors: Black (water), White (Metal), Blue-Green (Wood), Red (Fire) and Yellow (Earth). The five elements transcend life conditions: like the seasons, perception, the physical body etc. They are supposed to have innate qualities that correspond to nature, human life and the physical body. According to the Book of History or 尚書 (Shang Shu), which counts as the earliest available written source mentioning the Five Elements, the theory is linked with heavenly law, virtue, mankind and noble-mindedness [4]. It seems to have undergone a continuous systematization from Shang Dynasty (1600-1029 BC) till Zhou Dynasty (1029-256 BC) while more and more sophisticated definitions were added, such as the five directions, four times, five kings, and five spirits. Since the Ming Tang period of the Zhou Dynasty, the Five-Elements-Theory was integrated with political principles, marking the first trial of combining religious and secular thinking.

By definition of the Five Elements, color is introduced as a central means to identify all existing phenomena. As a decisive factor of differentiation, color helps

to define distinctive qualities of matter according to the five elements. Color thereby reflects assumed qualities which are assumed to be inherent to matter. Color acts as an interface between the three spheres of origin, reflecting the harmonic principle of the Dao. Countless customs of Chinese culture followed the concept of the Five-Elements-Theory: color selection has thus played a distinctive role in Chinese culture throughout several thousand years. The Chinese society relied to a large extent on certain colors meant to be auspicious or otherwise directly influential to people's lives and environment.

Moon and Spencer can be chosen as an example of how color harmony is visually represented in the Western perspective by using a quantitative model: predictors like color interval, area factor, and an aesthetic measure [5]. They believed that colours should harmonise when the colour difference between each component colour is unambiguous. Unambiguous colour difference is defined as intervals labelled identity, similarity and contrast. Between identity and similarity and between similarity and contrast are called "intervals of ambiguity". Moon and Spencer believed that a harmonious balance among colour patches can be obtained if the scalar moments about an adaptation point in a uniform colour space are either equal or simple multiples of each other, i.e. the proportion of the scalar moments should be either 1, 2 or 3. The adaptation point is the point in a uniform colour space corresponding to the state of adaptation of the eye, normally a medium grey. The scalar moment of a colour is the product of the colour area and the distance in a uniform colour space between the adaptation point and the colour point. This distance represents the colour strength. The balanced colour areas have the following relationship (also called "scalar moment ratio").

3 The Five-Elements-Theory

The Five Elements correlate to all situations of life: animals, food, sensuality, life phases etc. [6]:

Category	Water	Wood	Fire	Earth	Metal
Direction	North	East	South	Centre	West
Color	Black / Blue	Green	Red	Yellow	White
Climate	Cold	Wind	Hot	Damp /	Dry
Human	Groaning	Shouting	Laughing	Humid	Weeping
Sound	Courage	Humour	Joy	Singing	Positivity

Table 1: Qualities of the Five Elements

PositiveFear/FrightAngerHysteriaSympathyGriefEmotionSaltySourBitterSelf-pityMelaNegativeKidneyLiverHeartSweetPung	ncholy
	2
Yin Bones Muscle/Ligaments Tongue Mouth Intest	ine
Organ Putrid Rancid Vascular Flesh Nose	
YangStorageBirthSystemFragrantSkin	
Organ Midnight Morning Burning Trans Rotte	
Body Winter Spring Growth formation Harve	est
part Mercury Jupiter Noon Afternoon Even	ing
Tissue Hearing Sight Summer Late Autur	mn
Smell / Head Hair Nails Mars Summer Venu	s
Odour Saliva Tears Speech Saturn Smel	
Process 3pm - 7pm 11pm - 3am Complexion Taste Body	Hair
Time of Liquid State Gaseous State Sweat Lips Mucu	is
DayAmbition/WillpowerPlanning11amLymph3am	- 7am
Season Flows in curves, Crush, expand, 3pm* 7am - Solid	State
Planet shoots suddenly contract Plasmic 11am Elimit	nation
Sense simultaneously State Semi - Splitt	ing,
Reflected Spiritual Condensed axe	
In awareness Ideas / chop	oing
Fluid Sudden, fast Opinions	
Organs pounding Strike with	
Active	
Energy energy,	
Capacity crossing	
Form	

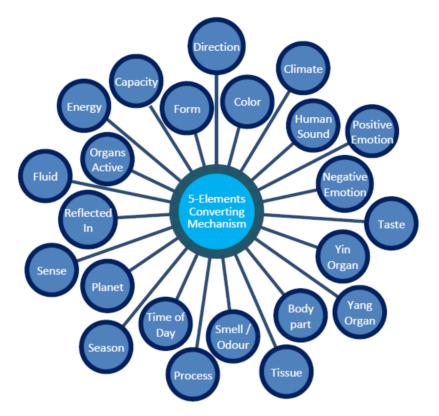
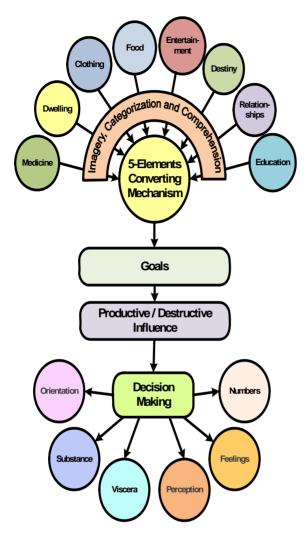


Fig. 1: Five-Elements-Theory Converting Mechanism

Wood is related to spring, as nature prospers during spring time. The direction is east (where the sun is rising), and the taste is considered to be sour. Fire is related to summer, when the sun reaches its peak and the crops ripen. The direction is south, the taste is considered bitter. Earth is related to late summer when the harvest is brought in, the related taste is considered sweet. Metal is related to fall, when nature prepares for winter and the fields have been reaped. The direction is west, the taste is considered pungent.Water is related to summer, when the sun reaches the nadir, and nature comes to rest. The direction is north, the taste is considered salty.

In understanding the Five-Elements-Theory in its full traditional sense, the converting mechanism at its core



comprises and resembles all processes that can be watched mankind's in natural environment: Like the gold standard. а monetary system in which the standard econ-omic unit of account is a fixed weight of gold. this converting mech-anism represents a tool to be applied as a general means from which sub-categories can be deducted at fixed terms of equivalence:

100%-reserve А gold standard, or a full gold standard, exists when a monetary authority holds sufficient gold to convert all of the repres-entative money it has issued into gold at the promised exchange rate. Similarly, the Five- Elements-Theory is arranged by a systematic order where one chosen element corresp-onds to its specific natural phenomena in a strictly defined way [7].

In the Five-Elements-Theory, color becomes an interface between the realms of human beings (perception), nature (phenomena) and the universe (physical energies), in order to seek a for harmonic life.

Actively applying the Five-Elements-Theory includes the merg-ing of imagery, categorization and comprehension into a harmonic decision

making-process: This will enable the individual

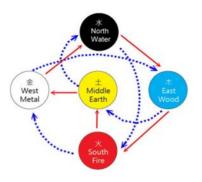


Fig. 2: Harmonic desion-making process

to determine his or her position within the three realms of existence, and the specific chall-enges and opportunities connected with this position. From the individual coordinates, he/she will be able to define his/her most important goals, and then apply the productive and destructive mechanisms.

The two basic influences acting in a mutually productive or destructive manner determine the interdependent relations of the five elements, while the basic equivalence of the five elements makes them compatible (keeps an interdependent balance between them). In its life generating aspect, the interaction of the five elements is productive:

Spring is followed by summer, summer is followed by late summer and fall, fall is followed by winter, followed by spring, or:

Wood /spring supports Fire/summer, Fire supports Earth/late summer, Earth supports Metal/ fall,

Metal supports Water/winter, Water supports Wood/spring.

The Destructive Cycle means that each single element is in control of a specific other one:

Wood exhausts Earth/Earth stops Water/Water extinguishes Fire/Fire melts Metal/Metal cuts Wood.

In the example of wood, metal cuts wood, and therefore everything associated with metal will have a restricting influence on things related to the element Wood. By understanding every phenomenon's qualities and the related categories, the mechanisms of the mutually generative and restrictive cycles can be applied for initiating positive change in life, and for predicting future developments. We suppose that colors help to make life happier and healthier: Colors can either be chosen according to personal preference or we can follow the concept of precise analysis by using the Five- Elements-Theory.



Fig. 3: Productive and Destructive Relations

The Productive and Destructive Cycles offer choices for strengthening positive influence to our lives and preventing bad impact.

4 Application

In the realm of human beings, we find the basic needs listed as 食 (shi) food, 衣 (Yi) clothing, 住 (Zhu) dwelling, 行 (Xing) moving, 樂 (Le) entertainment, and - like access to social and cultural offers has also been added to the understanding of basic human needs in Western societies - 育 (Yu), education. These have been integrated into the daily practice of following the principles of the Dao by using the Five-Elements-Theory as a practical tool.

4.1 Traditional Chinese Medicine (TCM)

In Traditional Chinese Medicine (TCM), the human body is understood in analogy to the three preconditions: it covers the outer appearance **(Yang)**, inner functions **(Yin)**, and the mind \mathcal{W} (Xin). The body's back is Yang while the front is Yin, and the two powers run through the inner body structure. There are Yang-organs (hollow) and Yin-organs (massive), Yang-lines and Yin-lines. Acupuncture follows the idea of balancing the life energy through the meridians

(energy lines) of the human body, restoring a health preserving natural harmony. The origins of TCM date back to the first millennium BCE as written in the classic "Yellow Emperor's compendium on medicine", (Huang Di Neijing, [8]). Based on the Five-Elements-Theory, it links medical treatments to colored food, i.e. as Green is the color related to the liver, green food (such as green beans) is helpful in strengthening this organ. The liver detoxifies and green food enhances this ability. Sour taste is related to the liver, so vinegar will support its functions, and the blood will be improved, but too much sour flavor will hurt the organ.

4.2 Architecture

The roofs of the Forbidden City in Beijing are glazed with yellow tiles, representing the imperial color and symbolizing the centre of the world. There is only one exception to the roofs overall color glaze: the dwellings of the princes east of the site are tiled green as the East stands for the new rise of nature in spring, i.e. the new hope of mankind. Similar examples can be found elsewhere, like the green roofs of the buildings in Chinese Culture University that stand for the new inspiration brought to society by the next generation of students. Consequently, roofs of buildings that need protection from would receive a respective color of choice: a library threatened by fire would be tiled in black, because according to the Five-Elements-Theory, water overcomes fire .

4.3 Social Events

On joyful occasions, like Chinese New Year, weddings, and child birth, the color red expresses the vibrant energy of life and happiness. In contrast and equivalent to autumn's character of nature rebuilding and recollecting, white stands for life's ending and is used at funerals, expressing the inevitable decay by non-colorful means.

Conclusion

The Chinese way of striving for harmony is to follow the wisdom of their ancestors by applying the knowledge of the Five-Elements-Theory, which has been passed down through the ages for gener-ations. It aims at following the life-promoting productive cycle, and avoids the potential dangers of the destructive cycle. However, if one element becomes too strong in an individual's life, it will be neces-sary to re-balance the life energies by restricting the respective overflow, as the (healthy) natural harmony can only be preserved if all elements are held in balance. Because of the all-pervading character and high complexity of the ancient Five-Elements-Theory, there is still much more to explore to fully understand the wisdom that's kept inside, and how its application can support us in conquering the challenges of our modern world.

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