Innovative Perspectives on Addressing Realities Confronting Humans in Aesthetic Natural Environments: A Reviewed Communication Based on Sun Tzu’s Leadership Philosophical Concepts

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Abstract: Holistically, philosophy highlights quality assurance concepts of critically thinking and finding solutions to divergent humanity issues. The review approach analyzed Sun Tzu’s contributions compared with the characteristics of other renowned Western and Classical Chinese Philosophers on questions formulation, seeking understating to complex issues and finding answers. Influential Sun Tzu’s ideologies enormously transformed China’s militarism, sprawled worldwide through infusion of adventive morality in political administration, defense intelligentsia, business/environmental planning, strategically propelled by religion (Taoism), spiritual existence, intuitive tactfulness as elucidated in “The Art of War” book. The dynamic world could innovatively optimize/exploit Sun Tzu’s ideologies by integrating with Sustainability Development Goals (SDGs).

Keywords: Sun Tzu, philosophy, intelligentsia, morality, quality assurance, innovativeness, sustainability.

INTRODUCTION

Philosophy could be defined as the rational investigation of the truths and principles of human beings, their knowledge, and or conduct and approach towards finding appropriate solutions to common sense, real-life problems confronting them in their natural environments. It broadly embraces any of the three branches, namely natural philosophy, moral philosophy, and metaphysical philosophy, which are generally accepted as composing this subject [1]. Having read about some of the contributions of the early, renowned Western and Chinese Philosophers about the meaning of philosophy in their detailed expositions and elucidations [2], philosophy conceptually has been summarily redefined in carefully chosen words as captured (box 1).

Box 1: Conceptual definition of philosophy

| Philosophy from the several schools of thoughts could be defined as - the rational attempt to formulate, analyze, understand and answer fundamental questions regarding nature and the set of human experiences surrounding real life situations, which are interpreted and applied to shape human perceptions/behaviors/actions/functions in a dynamic society/environment, whereby the humans are confronted with numerous challenges and opportunities as well. |

Three cardinal points in the above definition of philosophy are clearly juxtaposed, and stress on:

i. **Formulating questions**, as very important. What we ask and how we ask it determine to a large extent, where we look for answers and the kinds of answers found. Progress in many fields, consists in part, of an ever-greater refinement of our questions and more precision and sophistication in our methods of interrogation. Good answers will not be found if good questions are not asked.

ii. **Understanding** that what we are after, when we ask questions is as important as formulating questions as precisely as we can in order to address the many real life situations confronting humans in
every day natural working environments, and suggest or identify possible ways of solving time bound problems or initiating new and appropriate steps towards;

iii. **Finding appropriate answers**: although many answers suggested often lead to more probing questions. Generally, philosophical questions seem abstract but relate to concepts that we apply daily.

**METHODOLOGY**

Some main branches of Chinese and western philosophy were distinguished by the kinds of fundamental questions they pose in an attempt to differentiate appearance from reality. The branch of philosophy called metaphysics, which deals with this and related issues was applied in this study. The gross analysis of the unique aspects of Chinese Philosophy was compared with the Western Philosophy which revealed some similarities in scope of both approaches to deeper synthetization of leadership skills dynamics summarily indicated in tables 1 and 2 key elements captured. These key philosophical elements in tables 1 and 2 were elucidated with special emphasis on the contributions of Sun Tzu in demonstrative philosophical concepts. These morality and disciplinary concepts could as well be interpreted and applied in the execution of current educational, developmental, scientific, managerial/administrative roles as exemplified by various cross-sectional fields of studies. The interpretation and synthetization of these conceptualized analytical approaches postulated by Sun Tzu in solving real life problems later dwelt on suggested comparative linkages with innovative ideas on how to promote or achieve a holistic improvement on Ghana’s specific tertiary educational sector reforms strategy for present and future generations in the meaningful attempt to promulgate the agenda of the sustainability development goals (objectives).

**RESULTS**

**Table-1: Review of basic features of some Western philosophers and their ideologies**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Key features</th>
<th>Examples of renowned Western philosophers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world</td>
<td>Reality, the physical world; the supernatural; cause; idealism; phenomenology; truth; mathematics; the infinite; time and space;</td>
<td>Plato ca (429-377 BCE); Aristotle (384-322 BCE); David Hume (1711-1776); George Berkeley (1685-1753); George Wilhelm Friedrich Hegel (1770-1831); Gottfried Wilhelm Leibniz (1646-1716)</td>
</tr>
<tr>
<td>Mind and the body</td>
<td>Thinking; consciousness; feeling and emotions; language; free will; the self; sanity and insanity; life and death;</td>
<td>Rene Descartes (1596-1650); Jerry Fodor (1935- ); Ludwig Wittgenstein (1889-1951); Benedict (Baruch) Spinoza (1632-1677)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Meaning of knowledge, perception and experience, scepticism; relativism, logic and reasoning; induction and deduction; science; rationality, common sense, pragmatism; wisdom;</td>
<td>Plato ca. (429-377 BCE); John Locke (1632-1704); Michel Foucault (1926-1984); Willard Van Orman Quine (1908-2001); Rudolf Carnap (1891-1970); Francis Bacon (1561-1626); Denis Diderot (1731-1784);</td>
</tr>
<tr>
<td>Faith</td>
<td>Existentiality of God and Supremacy; faith and reason; miracles; the afterlife; atheism and agnosticism; pain and evil; the meaning of life; futility and eternity;</td>
<td>Thomas Aquinas (1224-1274); Augustine (354-430); Blaise Pascal (1623-1662); Voltaire Francis-Marie Arouet (1694-1778); Soren Kierkegaard (1813-1855)</td>
</tr>
<tr>
<td>Ethics and aesthetics</td>
<td>Morality; stoicism; lying; conscience; altruism and egoism; responsibility; moral absolutes; existentialism; goodness; love and friendship; sex; reproduction; animals; technology and nature; beauty; art; taste and decency;</td>
<td>John Stuart Mill (1806-1873); Immanuel Kant (1724-1804); Friedrich Nietzsche (1844-1900); Jean Paul Sartre (1905-1980); Arthur Schopenhauer (1788-1860);</td>
</tr>
<tr>
<td>Society</td>
<td>Meaning of society; authority; democracy; freedom; tradition; rights; laws; crime and punishment; social justice; equality; ownership; rich and poor; globalization; war</td>
<td>Thomas Hobbes (1588-1679); Jean Jacques Rousseau (1712-1778); Jeremy Bentham (1748-1832); John Rawls (1921-2002); Karl Marx (1818-1883)</td>
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**A metaphysical analysis of the perspectives on Chinese philosophy**

Chinese Philosophy is the soul of traditional Chinese Culture and has developed, independent of Western philosophies over several thousands of years. In general, the contents of Chinese Philosophy typify its richness and spans from:

i. The pre-Qin Times: marked by emergence of various ancient philosophical views with the most influential schools of thought
ii. Confucianism - presented by Confucius and Mencius and advocating benevolence, justice, allegiance and forbearance, the doctrine of the golden mean and values the ethical relations of men, emphasizing the importance of family and social order of respect and obedience;

iii. Mohism - promoted by Mozi which cherishes universal love and states that if all people in the world loved one another, there would be no hatred or calamities and hostilities. In politics and ethics Mohism advocates honoring virtuous people and opposing fatalism and aggressive wars, and upholding thriftiness and simple funerals.

iv. Legalism – (promoted by Hanfeizi) called for laws to be laid down to unify the thoughts of people, promote agriculture to achieve affluence, to wage wars to gain strength and power and to establish a system of bureaucracy. It strongly holds the belief that contradiction is present everywhere and two sides of a contradiction are changeable.

v. Taoism – founded by Laozi and Zhuangzi and promotes the belief of living a simple life, not striving for wealth, fame or power which ends up with worries and troubles (summed into proper behavior and self-restraint).

vi. Further, Orthodox Philosophy during the Han Dynasty; Metaphysics during the Wei and Jin Dynasties; the Buddhist Philosophy during the Sui and Tang Dynasties and Neo-Confucianism during the Song and Ming Dynasties entirely characterize the richness of Chinese Philosophy in unique transition.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Key features</th>
<th>Philosophers</th>
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<tbody>
<tr>
<td>Stress on spiritual</td>
<td>Study of different kinds of philosophical problems based on reality and</td>
<td>Almost all the Chinese Philosophers including Sun Tzu</td>
</tr>
<tr>
<td>existence</td>
<td>experience with focus on the reality of existence. Example</td>
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<td></td>
<td>Confucianism’s knowledge of life through disposition and consciousness,</td>
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<td></td>
<td>Taoism’s search for spiritual freedom and Buddhism’s Nirvana all reflect</td>
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<tr>
<td></td>
<td>their pursuit of complete spiritual happiness</td>
<td></td>
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<tr>
<td>Stress on practice</td>
<td>Linking of knowledge to practice. According to Confucius “to prefer it is</td>
<td>Confucius is the key proponent</td>
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<tr>
<td></td>
<td>only better than to know it” To delight in it is merely better than to prefer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>it”. “To delight in it means “to put it into practice and gain pleasure from</td>
<td></td>
</tr>
<tr>
<td></td>
<td>it”</td>
<td></td>
</tr>
<tr>
<td>Stress on morality</td>
<td>Almost all of Chinese Philosophers stressed on moral practice. Through it,</td>
<td>Almost all of Chinese Philosophers including Sun Tzu</td>
</tr>
<tr>
<td></td>
<td>individuals could realize moral achievements and enjoy the benefits of a</td>
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<td></td>
<td>health social environment (including the monarch benevolence and lower official’s</td>
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<td></td>
<td>loyalty, the father’s kindness and the son’s filial piety, the elder brother’s</td>
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<td></td>
<td>friendliness and younger one’s respect, and mutual trust between friends</td>
<td></td>
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<tr>
<td>Stress on harmony</td>
<td>Harmony between man and nature and between man and man. Mencius said</td>
<td>Mencius</td>
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<td></td>
<td>opportunities vouchsafed by heaven are less important than terrestrial</td>
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<tr>
<td></td>
<td>advantages, which in turn are less important than the unity among people.</td>
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<td></td>
<td>This well expressed the idea that harmony was the highest principle.</td>
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<tr>
<td></td>
<td>Confucius further explained how to realize harmony between man and nature,</td>
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<tr>
<td></td>
<td>man and man and man and society, and man and Heaven through the golden</td>
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</tr>
<tr>
<td></td>
<td>mean.</td>
<td></td>
</tr>
<tr>
<td>Stress on intuition</td>
<td>Through intuition and reflection, philosophical ideas are formed.</td>
<td>Most Chinese Philosophers including Sun Tzu</td>
</tr>
<tr>
<td></td>
<td>Chinese Chan Buddhism, which is an integration of Buddhist theology with</td>
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<td></td>
<td>Chinese traditional thinking, preaches epiphany and emphasizes self-restraint</td>
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<td></td>
<td>and self-reflection by sitting still and reciting Buddhist scriptures.</td>
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</tbody>
</table>

**Table-2: Basic features of ancient Chinese philosophies**

**Brief analysis from the introductory key notes**

The most important point we deduce from above is how to apply the Chinese Philosophies well highlighted during the Ming and Qing Dynasties. These philosophies focused on “self-examination” during the Ming and Qing Dynasties and its application targeted “state affairs” whereby people were searching for “answers to specific” issues instead of abstract study. “Creativity or innovativeness” (the concept of philosophizing or propounding, and adopting new ideas for positive change and sustainable development) was encouraged then; symbolizing the pride many of us (humans) continue to derive from these Chinese Philosophies to “improve our daily lives, the natural environments or occupational endeavors” due to potentially existent/emerging new opportunities, challenges, ideas, technologies, resources richness and
diversity *et cetera*, discovered or naturally available to our rational exploitative advantage/benefit.

Therefore, the writers perceive that current and future generations should also learn/adopt innovative ideas such as those embedded in the Sustainable Development Goals (SDGs) to better their lives by reconditioning their mentality that, there is a possible solution to every challenge or existing problems. Albeit, it takes boldness, determination, concerted and timely effort with prompt actions (proactiveness) to deal with even more complex educational, social, environmental, business, and other daily issues. It is however, extremely necessary to deploy common sense, academic or military intelligence in science, history, environmental philosophies *et cetera*, cautiously and candidly in addressing many robust issues confronting humans in our daily endeavors through discipline and hard work, innovativeness, accountability and consciousness (quality assurance) about Sustainability Development Goals (SDGs) which underpins human endeavors[47].

**Reflection on “Sun Tzu” in the history of Chinese philosophy**

In making references to the philosophy of Sun Tzu, we refer to the richness and diversity of his ideas on military defense intelligence strategy which connected well with the thoughts of the Classical Chinese philosophers and the focus of their philosophical subject matters.

**Descriptive philosophical and historical lineage of Sun Tzu**

<table>
<thead>
<tr>
<th>Transcriptions depicted on the statue of Sun Tzu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born</td>
</tr>
<tr>
<td>Died</td>
</tr>
<tr>
<td>Occupation</td>
</tr>
<tr>
<td>Ethnicity</td>
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<tr>
<td>Period</td>
</tr>
<tr>
<td>Subject</td>
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<tr>
<td>Notable works</td>
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</tbody>
</table>

### Chinese characters

<table>
<thead>
<tr>
<th>Sun Tzu</th>
</tr>
</thead>
<tbody>
<tr>
<td>孫子</td>
</tr>
<tr>
<td>孫子</td>
</tr>
<tr>
<td>“Sunzi” in ancient seal script (top), regular Traditional (middle), and Simplified (bottom)</td>
</tr>
</tbody>
</table>

### Transcriptions

<table>
<thead>
<tr>
<th>Sun Wu</th>
</tr>
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<tbody>
<tr>
<td>Traditional Chinese</td>
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<tr>
<td>Simplified Chinese</td>
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</tbody>
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<table>
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<tr>
<th>Changqing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Chinese</td>
</tr>
<tr>
<td>Simplified Chinese</td>
</tr>
</tbody>
</table>

Sun Tzu was born in 544 BC in the Traditional Qi State. Summary of his biography is captured in the transcription on his monumental statue captured (Plate 1).
Sun Tzu (/ˈsuːnˈdzuː/;[4] also rendered as Sun Zi (孙子)) was a Chinese general, military strategist, and philosopher who lived in the Spring and Autumn period of ancient China. Sun Tzu is traditionally credited as the author of The Art of War, a widely influential work of military strategy that has affected both Western and Eastern philosophy. Aside from his legacy as the author of The Art of War, Sun Tzu is revered in Chinese and the Culture of Asia as a legendary historical figure. His birth name was Sun Wu, and he was known outside of his family by his courtesy name Changing. The name Sun Tzu by which he is best known in the West is an honorific which means “Master Sun.”

Sun Tzu's historicity is uncertain. Sima Qian and other traditional historians placed him as a minister to King Helü of Wu and dated his lifetime to 544–496 BC. Modern scholars accepting his historicity nonetheless place the existing text of The Art of War in the later Warring States period based upon its style of composition and its descriptions of warfare [4]. Traditional accounts state that the general's descendant Sun Bin also wrote a treatise on military tactics, also titled The Art of War. Since both Sun Wu and Sun Bin were referred to as Sun Tzu in classical Chinese texts, some historians believed them identical prior to the rediscovery of Sun Bin's treatise in 1972.

Sun Tzu's work has been praised and employed throughout East Asia since its composition. During the twentieth century, The Art of War grew in popularity and saw practical use in Western society as well. It continues to influence many competitive endeavors in Asia, Europe, and America including culture, politics [5, 6] business [7], and sports [8], as well as modern warfare.

**The life of Sun Tzu**

Plate-2: The unearthed Bamboo slips of the "Art of War" discovered in 1972 in the is now Shandong Province, it is now safely kept in the Shandong Museum

The oldest available sources disagree as to where Sun Tzu was born. The Spring and Autumn Annals states that Sun Tzu was born in Qi [9], while Sima Qian's later Records of the Grand Historian states that Sun Tzu was a native of Wu [10]. Both sources agree that Sun Tzu was born in the late Spring and Autumn period and that he was active as a general and strategist, serving king Helü of Wu in the late sixth century BC, beginning around 512 BC. It is also worth noting that Sun Tzu's surname 'Sun (孫)' originated only in the Central Plains and nowhere else. Sun Tzu's victories then inspired him to write The Art of War. The Art of War was one of the most widely read military treatises in the subsequent Warring States period, a time of constant war among seven nations – Zhao, Qi, Qin, Chu, Han, Wei, and Yan – who fought to control the vast expanse of fertile territory in Eastern China [11].

One of the more well-known stories about Sun Tzu, taken from Sima Qian, illustrates Sun Tzu's temperament as follows: Before hiring Sun Tzu, the King of Wu tested Sun Tzu's skills by commanding him to train a harem of 180 concubines into soldiers. Sun Tzu divided them into two companies, appointing the two concubines most favored by the king as the company commanders. When Sun Tzu first ordered the concubines to face right, they giggled. In response, Sun Tzu said that the general, in this case himself, was responsible for ensuring that soldiers understood the commands given to them. Then, he reiterated the command, and again the concubines giggled. Sun Tzu then ordered the execution of the king's two favored concubines, to the king's protests. He explained that if the general's soldiers understood their commands but did not obey, it was the fault of the officers. Sun Tzu also said that, once a general was appointed, it was his duty to carry out his mission, even if the king protested. After both concubines were killed, new officers were chosen to replace them. Afterwards, both companies, now well aware of the costs of further frivolity, performed their maneuvers flawlessly [12].

Sima Qian claimed that Sun Tzu later proved on the battlefield that his theories were effective (for example, at the Battle of Boju), that he had a successful military career, and that he wrote The Art of War based on his tested expertise [11]. However, the Zuozhuan, historical text written centuries earlier than the Records of the Grand Historian, provides a much more detailed account of the Battle of Boju, but does not mention Sun Tzu at all[13].

**Historicity**

Beginning around the 12th century, some scholars began to doubt the historical existence of Sun Tzu, primarily on the grounds that he is not mentioned in the historical classic The Commentary of Zuo (Zuo zhuan 左傳), which mentions most of the notable figures from the Spring and Autumn period [14]. The name “Sun Wu” (孫武) does not appear in any text prior to the Records of the Grand Historian [15] and may have been a made-up descriptive cognomen meaning “the fugitive warrior”: the surname "Sun" can be glossed as the related term "fugitive" (xūn 迂), while "Wu" is the ancient Chinese virtue of "martial, valiant" (wǔ 武), which corresponds to Sunzi's role as the hero's doppelgänger in the story of Wu Zixu [16]. Skeptics
citle possible historical inaccuracies and anachronisms in the text, and that the book was actually a compilation from different authors and military strategists. Attribution of the authorship of The Art of War varies among scholars and has included people and movements including Sun; Chu scholar Wu Zixu; an anonymous author; a school of theorists in Qi or Wu; Sun Bin; and others [17]. Unlike Sun Wu, Sun Bin appears to have been an actual person who was a genuine authority on military matters, and may have been the inspiration for the creation of the historical figure “Sunzi” through a form of euhemerism [18]. The name Sun Wu does appear in later sources such as the Records of the Grand Historian (Shiji 史記) and the Wu Yue Chunqiu [17]. The only historical battle attributed to Sun Tzu, the Battle of Boju, has no record of him fighting in that battle [19].

The appearance of features from The Art of War in other historical texts is considered to be proof of his historicity and authorship. Certain strategic concepts, such as terrain classification, are attributed to Sun Tzu. Their use in other works such as The Methods of the Sima is considered proof of Sun Tzu's historical priority [20]. According to Ralph Sawyer, it is very likely Sun Tzu did exist and not only served as a general but also wrote the core of the book that bears his name [20]. It is argued that there is a disparity between the large-scale wars and sophisticated techniques detailed in the text and the more primitive small-scale battles that many believe predominated in China during the 6th century BC. Against this, Sawyer argues that the teachings of Sun Wu were probably taught to succeeding generations in his family or a small school of disciples, which eventually included Sun Bin. These descendants or students may have revised or expanded upon certain points in the original text [21].

Skeptics who identify issues with the traditionalist view point to possible anachronisms in The Art of War including terms, technology (such as anachronistic crossbows and the unmentioned cavalry), philosophical ideas, events, and military techniques that should not have been available to Sun Wu [22, 23]. Additionally, there are no records of professional generals during the spring and autumn period; these are only extant from the Warring States period, so there is doubt as to Sun Tzu's rank and generalship [24]. This caused much confusion as to when The Art of War was actually written. The first traditional view is that it was written in 512 BC by the historical Sun Wu, active in the last years of the spring and autumn period (c. 722-481 BC). A second view, held by scholars such as Samuel Griffith, places The Art of War during the middle to late Warring States period (c. 481-221 BC). Finally, a third school claims that the slips were published in the last half of the 5th century BC; this is based on how its adherents interpret the bamboo slips discovered at Yin-ch’ueh-shan in 1972 AD[25].

**Important achievements of Sun Tzu**

**The Art of War**

The Art of War is traditionally ascribed to Sun Tzu. It presents a philosophy of war for managing conflicts and winning battles. It is accepted as a masterpiece on strategy and has been frequently cited and referred to by generals and theorists since it was first published, translated, and distributed internationally [25].

There are numerous theories concerning when the text was completed and concerning the identity of the author or authors, but archeological recoveries show The Art of War had taken roughly its current form by at least the early Han [26]. Because it is impossible to prove definitively when the Art of War was completed before this date, the differing theories concerning the work's author or authors and date of completion are unlikely to be completely resolved [27]. Some modern scholars believe that it contains not only the thoughts of its original author but also commentary and clarifications from later military theorists, such as Li Quan and Du Mu. Of the military texts written before the unification of China and Shi Huangdi's subsequent book burning in the second century BC, six major works have survived. During the much later Song dynasty, these six works were combined with a Tang text into a collection called the Seven Military Classics. As a central part of that compilation, The Art of War formed the foundations of orthodox military theory in early modern China. Illustrating this point, the book was required reading to pass the tests for imperial appointment to military positions [28].

Sun Tzu's Art of War uses language that may be unusual in a Western text on warfare and strategy [29]. For example, the eleventh chapter states that a leader must be “serene and incscrutable” and capable of comprehending “unfathomable plans”. The text contains many similar remarks that have long confused Western readers lacking an awareness of the East Asian context. The meanings of such statements are clearer when interpreted in the context of Taoist thought and practice. Sun Tzu viewed the ideal general as an enlightened Taoist master, which has led to The Art of War being considered a prime example of Taoist strategy.
The book has also become popular among political leaders and those in business management. Despite its title, The Art of War addresses strategy in a broad fashion, touching upon public administration and planning. The text outlines theories of battle, but also advocates diplomacy and the cultivation of relationships with other nations as essential to the health of a state [24]. On April 10, 1972, the Yinqueshan Han Tombs were accidentally unearthed by construction workers in Shandong [29, 30]. Scholars uncovered a collection of ancient texts written on the unusually well-preserved bamboo slips. Among them were The Art of War and Sun Bin's Military Methods [30]. Although Han dynasty bibliographies noted the latter publication as extant and written by a descendant of Sun, it had previously been lost. The rediscovery of Sun Bin's work is regarded as extremely important by scholars, both because of Sun Bin's relationship to Sun Tzu and the work's addition to the body of military thought in Chinese late antiquity [31]. The discovery as a whole significantly expanded the body of surviving Warring States military theory. Sun Bin's treatise is the only known military text surviving from the Warring States period discovered in the twentieth century and bears the closest similarity to The Art of War of all surviving, published texts.

Legacy

Sun Tzu's Art of War has influenced many notable figures in life. Sima Qian recounted that China's first historical emperor, Qin's Shi Huangdi, considered the book invaluable in ending the time of the Warring States. In the 20th century, the Chinese Communist leader Mao Zedong partially credited his 1949 victory over Chiang Kai-shek and the Kuomintang to The Art of War. The work also strongly influenced Mao's writings about guerrilla warfare, which further influenced communist insurgencies around the historic world [32].

The Art of War was introduced into Japan c. AD 760 and the book quickly became popular among Japanese army generals. Through its later influence on Oda Nobunaga, Toyotomi Hideyoshi, and Tokugawa Ieyasu [32], it significantly affected the unification of Japan in the early modern era. Prior to the Meiji Restoration, mastery of its teachings was honored among the samurai and its teachings were both exhorted and exemplified by influential Daimyōs and Shoguns. Subsequently, it remained popular among the Imperial Japanese armed forces. The Admiral of the Fleet Tōgō Heihachirō, who led Japan's forces to victory in the Russo-Japanese War, was an avid reader of Sun Tzu philosophical exploits and theories [33]. Ho Chi Minh translated the work for his Vietnamese officers to study. His general Vo Nguyen Giap, the strategist behind victories over French and American forces in Vietnam, was likewise an avid student and practitioner of Sun Tzu's churned ideas [34, 35, 36].

America's Asian conflicts against Japan, North Korea, and North Vietnam brought Sun Tzu to the attention of American military leaders. The Department of the Army in the United States, through its Command and General Staff College, has directed all units to maintain libraries within their respective headquarters for the continuing education of personnel in the art of war. The Art of War is mentioned as an example of works to be maintained at each facility, and staff duty officers are obliged to prepare short papers for presentation to other officers on their readings [37]. Similarly, Sun Tzu's Art of War is listed on the Marine Corps Professional Reading Program [38]. During the Gulf War in the 1990s, both Generals Norman Schwarzkopf Jr. and Colin Powell employed principles from Sun Tzu related to deception, speed, and striking one's enemy's weak points [39]. However, the United States and other Western countries have been criticized for not truly understanding Sun Tzu's work and not appreciating The Art of War within the wider context of Chinese society [40].

Daoist rhetoric is a component incorporated in the Art of War. According to Steven in “Sun-zi and the Art of War: The Rhetoric of Parsimony [41],” warfare is "used as a metaphor for rhetoric, and that both are philosophically based arts [42].” Combs write “Warfare is analogous to persuasion, as a battle for hearts and minds [43].” The application of The Art of War strategies throughout history is attributed to its philosophical rhetoric. Daoism is the central principle in the Art of War. Combs compare ancient Daoist Chinese to traditional Aristotelian rhetoric, notably for the differences in persuasion. Daoist rhetoric in the art of war warfare strategies is described as “peaceful and passive, favoring silence over speech [44].” This form of communication is parsimonious. Parsimonious behavior, which is highly emphasized in The Art of War as avoiding confrontation and being spiritual in nature, shapes basic principles in Daoism [45].

Mark McNeilley writes in Sun Tzu and the Art of Modern Warfare that a modern interpretation of Sun and his importance throughout Chinese history is critical in understanding China's push to becoming a superpower in the twenty-first century. Modern Chinese scholars explicitly rely on historical strategic lessons and The Art of War in developing their theories, seeing a direct relationship between their modern struggles and those of China in Sun Tzu's time. There is a great perceived value in Sun Tzu's teachings and other traditional Chinese writers, which are used regularly in developing the strategies of the Chinese state and its leaders [45]. In 2008, producer Zhang Jizhong adapted Sun Tzu's life story into a 40-episode historical drama television series entitled Bing Sheng, starring Zhu Yawen as Sun Tzu [46].
Perspectives on the key achievements of Sun Tzu

Sun Tzu’s philosophical ideologies were further unique in respect of his key achievements summarized below:

i. Sun Tzu really claimed authorship of The Art of War. It presents a philosophy of war for managing conflicts and winning battles. The Art of War formed the foundations of orthodox military theory in early modern China. Illustrating this point, the book was required reading to pass the tests for imperial appointment to military positions.

ii. Sun Tzu’s Art of War uses language that may be unusual in a Western text on warfare and strategy. For example, the eleventh chapter states that a leader must be “serene and inscrutable” and capable of comprehending “unfathomable plans”. The text contains many similar remarks that have long confused Western readers lacking an awareness of the East Asian context. The meanings of such statements are clearer when interpreted in the context of Taoist thought and practice. Sun Tzu viewed the ideal general as an enlightened Taoist master, which has led to The Art of War being considered a prime example of Taoist strategy.

iii. The book has also become popular among political leaders and those in business management probably because it addresses strategy in a broad fashion, touching upon public administration and planning. The book advocates diplomacy and the cultivation of relationships with other nations as essential to the health of a state.

iv. The Art of War was introduced into Japan c. AD 760 and the book quickly became popular among Japanese generals. Subsequently, it remained popular among the Imperial Japanese armed forces. The Admiral of the Fleet Tōgō Heihachirō, who led Japan’s forces to victory in the Russo-Japanese War, was an avid reader of Sun Tzu.

v. Ho Chi Minh translated the work for his Vietnamese officers to study. His general Vo Nguyen Giap, the strategist behind victories over French and American forces in Vietnam, was likewise an avid student and practitioner of Sun Tzu’s ideas.

vi. In most Departments of Armies in the Unites States, Japan, North Korea and Vietnam for instance, The Art of War is mentioned as clear example of works to be maintained at each facility, and staff duty officers are obliged to prepare short papers for presentation to other officers on their readings.

vii. Similarly, Sun Tzu’s Art of War book is listed on the Marine Corps Professional Reading Program for both developed and the developing countries’ maritime adventures and sea defense studies.

viii. During the Gulf War in the 1990s, both Generals Norman Schwarzkopf Jr. and Colin Powell employed principles from Sun Tzu related to deception, speed, and striking one’s enemy’s weak points in military defense strategies.

ix. Daoist rhetoric in the art of war’s epitomic warfare strategizing is illustrative of a “peaceful and passive, favoring silence over speech”. This form of communication is parsimonious. Parsimonious behavior, which is highly emphasized in The Art of War, underscores the need to conform to avoidance of confrontation and being spiritual in nature. This phenomenally shapes the basic principles in Daoism.

x. Certain strategic concepts, such as terrain classification, are attributed to Sun Tzu.

xi. The only historical battle won, the “Battle of Boju” was attributed to Sun Tzu.

Key lessons drawn from Sun Tzu’s book ‘The Art of War’ towards environmental civilization and acculturation

The Art of the War remains a good intellectual material for referencing of current and future generations and the usefulness of its content has significantly played good roles in shaping the society towards ‘discipline and positive change’.

Morally, the present and future generations ought to ascribe to discipline first in order to change or motivate others in the right direction in academia, business transactions and management of financial issues, media practice, scientific and technological reportage, religious practice et cetera. Among the current generations also, humans need to recognize and esteem the core values of “responsible citizenry”, continue to enforce the good principles philosophized by Sun Tzu which are perceived as core life improvement values and meant to transform our societies marking the humans and technological approaches involved as “change agents”. This ideology is well projected particularly where Sun Tzu epitomized that “if the general’s soldiers understood their commands but did not obey, it was the fault of the officers”. This idea could be interpreted in several ways, and applied in our modern civilization and culture whereby, we try to relate this scenario to “lack of enforcement of tangible disciplinary laws, socioeconomic and scientific innovations, development policies, business initiatives, sound religious and cultural values for total transformation of our communities and nations at large”.

Annotatively, discipline when neglected at all levels of social structures, may significantly lead to ‘disobedience and chaos’. Implicitly like among the soldiers in military practice, this indiscipline could be blamed on lack of strong commitment on the parts of past and current institutional or world leaders to
vigorously adopt, enforce societal, institutional rules, and regulations effectively without fear, favor and nepotism, contributing to deviance on the parts of citizens. Thus, every educated person in China and beyond will require civic education and military intelligence for both self and national defense in their respective daily lifestyles in a paradigm shift in order to connect radiantly with the attainment of the Sustainable Development Goals (SDGs).

**Recommendations based on the key lessons of Sun Tzu which can be linked to the case of some current Ghanaian Educational Reforms Strategies:**

i. Educational institutions ought to maintain libraries within their respective headquarters and communities where distance learning programs are hosted for continuing civics education. In this regard the core values in The Art of War must be learnt by all vigilante groups especially in occupational set ups involving intelligence in industry, business, health care delivery and national securities orientation capacity building programs.

ii. There is the need for the Republic of China Scholarship Secretariat to expand the scope of its award packages to more qualified people who express interest in studying Chinese culture as a unique opportunity offered to international (Ghanaian) students to major in the discipline at the Masters and Doctorate Levels studies because it is very relevant in total professional development of individuals, business and international relations partnerships. It enables international students to develop higher moral discipline and good management skills, good business relations to partner with China to do serious businesses after school.

iii. Although Sun Tzu's Art of War is listed on the Marine Corps Professional Reading Program. Other novelty studies including civil, aerospace and environmental engineering programs also require curriculum inclusion at the basic or intermediate and advanced levels, especially in educational, research and Technical Universities in order to instill knowledge in intelligentsia and should promote the use of Sun Tzu's book for training programs in its institutional departmental libraries. The Confucius Institutes could build synergies and extend its benevolent Libraries/Scholarship to promote collaborative exchange and distance learning programs especially in the era of COVID-19 intransigencies.

iv. The Ghana Tertiary Educational Commission (GTEC) should explore the services of the Confucius Institutes for initiation of capacity building programs at the Foreign Languages Departments of Ghanaian Tertiary Institutions offering Chinese. GTEC should mount a vigorous quality assurance partnership for procurement and supply of these Chinese philosophical learning materials to Ghanaian Public Universities, particularly the University of Ghana, Kwame Nkrumah University of Science and Technology, University of Education, Winneba, the University of Professional Studies, University for Development Studies, University of Cape Coast, the Aketen Appiah-Menka University of Skills Training and Entrepreneurial Development among others in Ghana.

At the key national institutions of applied science and technology disciplines, defense, business and entrepreneurship development, in order to fully succeed, there is urgent need to choose and train good leaders and continue to appraise their professional skills using aspects of "The art of War" which highlight discipline, honesty, positive attitudes such as molding a leader to be "serene and inscrutable", comprehending " capable of conceiving unfathomable plans, advocate diplomacy and cultivate strong positive relationships with other categories of working class. In line with accomplishment of this noble objective, we intimate that GTEC should take up the responsibility, plan, source financial clearance from the Government of Ghana through the Ghana Tertiary Educational Trust Fund(GETFUND), International NGOs or Multilateral Organizations towards Human Capital Training (HCT) to provide comprehensive state-of-the-art capacity building to workers of Ghanaian Tertiary Educational Institutions (GTEIs) on innovative and transformational leadership skill development in order to be more effective in quality assurance service delivery whilst aligning the strategic operational plans and objectives towards the optimization of national Sustainable Development Goals (SDGs) on effective implementation of improved educational modules.

**CONCLUSION**

Despite that some controversies arise owing that United States and other Western countries have been criticized for not truly understanding Sun Tzu's work and not appreciating "The Art of War" within the wider context of Chinese society, the contributions of Sun Tzu stand tall because most of his theories reflected the key features of Chinese Philosophy and is benefitting nations and several institutions of discipline across the world. Educationally, he expounded his ideologies on political administration, military defense, business and environmental planning which relied on strategies that conform to Taoism, spiritual existence and intuitive tactfulness. His military strategies respected core values of Daoist Rhetoric which
emphasized spirituality and moral discipline and are thus, still relevant in socio-cultural influence of world educational views for present and future generations that are confronted with many real-life challenges in the natural environment.

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**Declaration**

The authors have no competing interest for this publication.

**Authors’ Contributions**

Benjamin mainly wrote the article while Elisha reviewed the references and infused the links on the recommendations with some comparative aspects of recent Ghanaian Educational Reforms Strategies. Anita and Joan critiqued the article drafts for salient improvement and analyzed the links between the basic features of Western Philosophers and the Chinese Philosophers from an educational perspective. All authors edited the article.

**REFERENCES**

1. http://www.dictionary.com/browse/philosophy-17/05/2017
34. Sydney, W. C. (朱文章), Cheng-Yu, L. (李承禹). Just another Masterpiece: The Differences between Sun Tzu’s The Art of War and Sun Bin's the Art of War.
47. UN SDGs: http://www.un.org/sustainabledevelopment/news/c