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國際學碩士學位論文

**Application of Sun Tzu's Five Factors into
Porter's Business Strategy: Implications for
International Business**

포터의 경영전략에 대한 손자의 5 요소의
적용연구: 국제경영에 대한 시사점

2014 年 8 月

서울大學校 國際大學院

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국제경영에 대한 시사점

A thesis presented

by

Yihua Li

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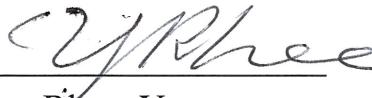
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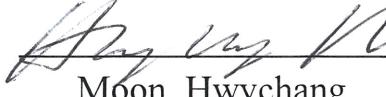
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Abstract

Application of Sun Tzu's Five Factors into Porter's Business Strategy: Implications for International Business

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Today's business world has turned to be a battlefield. Considering the business world as a battlefield, the Art of War written by a Chinese philosopher named Sun Tzu can be accepted as one of the most important references. Despite numerous studies have been done on the application of Sun Tzu's work into business, the current literature have limitations. First, most of existing studies generalized Sun Tzu's military principles and discussed how they can be applied into business. Second, the analysis is either missing or overlapping lacking frameworks. In this regard in order to examine Sun Tzu's work with comprehensive analytical tools we make a reference to Michael Porter, the guru in business management, who has developed many business frameworks and theories for the past 30 years. The paper applies Sun Tzu's Five Constant Factors that best summarize Sun Tzu's work, namely the moral law (道), heaven(天), earth (地), commander (將), and method and discipline(法) to Porter's business strategy. Similarities and differences between the two would also be identified. The paper concludes with important implications for international business.

Key words: Sun Tzu, five factors, Porter, Creating Shared Value (CSV), five forces, value chain

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1. Introduction

Over the past few decades, there has been continuous debate on the linkage between business and war in academia. Scholars supported that war principles can be applied to business practice and help firms to achieve business success. These scholars conceive that the business world has turned to be a battlefield and insist firms only with strategies that reflect the natural characteristics of war can survive in today's fierce competitive environment. The Chinese saying "the marketplace is a battlefield" is a manifestation of this demonstration. In contrast, some other scholars have questioned the generalizability of war principles into current business. They argued there is fundamental difference between war and business. War activities are to destroy value, while business activities are to create values, therefore it is hard and dangerous to apply war principles into business.

Considering the business world as a battlefield, the Art of War, written by a Chinese philosopher named Sun Tzu, can be accepted as one of the most important references (Izzet, Mehmet & Yunus, 2012). The book, consisting of 13 chapters, deals with complete philosophy on how to decisively win in a war. It has been regarded as the most reputable book of military strategy (Chen, 1994; Low & Tan, 1995). The Art

of War has an influence on both Eastern and Western military thinking. Mao Tse-tung has drawn inspiration from the work in developing Guerrilla warfare. It is alleged that even Napoleon used the Art of War in his battles against the armies of Europe (Rarick, 2009). Sun Tzu's Art of War is still the required textbook in major military schools (Wu, Chou & Wu, 2004).

Although the book was originally written for warfare, today it has transcended military field and is widely applied to other fields particularly business field. Both practicing managers and management scholars have long embraced the Art of War (McCormick, 2001). It's been widely accepted that the principles of the Art of War can be applied to modern business management (Dalton, 2008; Douglas & Strutton, 2009). The principles Sun Tzu advocated continue to be very valuable in business operations at present (Wu et al., 2004). Philip Kotler, the leading authority on international marketing management once said, "Kmart, AT&T, Xerox and GM would have saved themselves billions of dollars if their past CEOs had read Sun Tzu's Art of War."

So far numerous scholars have rigorously conducted research on the Art of war and business strategy. Despite numerous studies have been done, the current literature has limitations. First, most of existing studies generalized Sun Tzu's war principles and then discussed how they can be applied into business to help firms to achieve

success. However, such application is general and the principles the scholars generalized are subjective. Second, few studies are done on the linkage with theoretical business frameworks. Furthermore some of the scholars have tried to apply Sun Tzu's Five Constant Factors that best summarize Sun Tzu's work, namely the moral law (道), heaven(天), earth (地), commander (將), method and discipline(法) into business. However there are two limitations in these studies. First, the studies are not comprehensive enough. Second, the studies lack frameworks, so the analysis is either missing or overlapping. In this regard, in order to examine Sun Tzu's work with comprehensive analytical tools, we make a reference to Michael Porter, the guru in business management, who has developed many business frameworks and theories including five force model, generic strategy, value chain, diamond model, the strategy of Creating Shared Value (CSV) for the past 30 years. Although Sun Tzu and Porter have differences in terms of time (about 2,500 years), place (East versus West) and the field (military field versus business), it would be very interesting to link the two revered figures in war and business management.

The paper aims at linking Sun Tzu's five factors to Porter's business frameworks and theories and draw implications for international business. This paper proceeds as follows, first it critically reviews previous studies on applying Sun Tzu's principles into business then narrow down the scope by focusing on studies on

applying Sun Tzu's five factors into business. This is followed by a comparison between Sun Tzu and Porter by matching each of the five factors into Porter's frameworks and theories. Similarities and differences between Sun Tzu and Porter would also be examined. In the conclusion part important implications are derived for international business.

2. Literature Review

2.1 Application of Sun Tzu's Art of War into Business

Some scholars have questioned the generalizability of the Art of War to current business. McCormick (2001) addressed two issues regarding the application of Sun Tzu's war principles into business. First, he deemed that war is value-destroying activities while business is value-creating activities. Second, in war the army can utilize any means, including the deception strategy which can be shown in Sun Tzu's one of the most famous sayings, "All warfare is based on deception". In contrast, in business, firms should not use deception to cheat other competitors or customers and should follow the ethical norms.

Despite these critiques, numerous studies and books have rigorously conducted research on the Art of war and business strategy. But Most of existing literature generalized the Art of War into several principles and discussed how they can be applied to business as shown in Table 1. In these research the principles such as winning without fighting (winning whole), deception, adaptability, avoiding strength and attacking weakness, leadership were most frequently utilized by scholars. For example, McNeilly (2012) derived six strategic principles from Sun Tzu's wisdom and discussed how these principles could be directly utilized in the firm's business

strategies. The prescriptive application consists of winning without fighting-capturing your market without destroying it; avoiding strength, attacking weakness-striking where they least expect it; employing deception and foreknowledge-maximizing the power of market information; using speed and preparation-moving swiftly to overcome your competitors; shaping your opponent-employing strategy to master your opponent; and displaying character-based leadership-providing effective leadership in turbulent times (McNeilly, 2012).

Table 1. Existing studies on applications of the Art of War into business

Existing Literature	Principles
1. McNeilly (2012)	Winning without fighting, avoiding strength, attacking weakness, employing deception and foreknowledge, using speed and preparation, shaping your opponent, character-based leadership
2. Trellis (2004)	Winning without battle, knowledge, strength and weaknesses, preparation, speed, vision and leadership, staffing and delegation, allies
3. Rarick (2009)	Deception, information, flexibility, leadership
4. Wu, Chou & Wu (2004)	Swiftness, adaptability, available means, deception
5. Cantrell (2003)	Winning whole, leading to advantage, deception, energy, strength and weakness, initiative

2.2 Sun Tzu's Five Factors and its Application into Business

At the beginning of the Art of War, Sun Tzu emphasized:

"War is a matter of vital importance to the State. It is a matter of life and death, a road either to safety or to ruin. Hence it is mandatory that it be thoroughly studied."

Sun Tzu, therefore, said one should grasp the whole picture of the situation on the basis of the following five elements: the moral law (道), heaven (天), earth (地), commander (將), and method and discipline (法)."

According to Sun Tzu the general can predict the outcome of a war by measuring these five factors and having in-depth analysis on which ruler possesses moral law, which commander is the more able, which army obtains the advantages of nature and terrain, in which army are regulations and instruction are better carried, which troops are the stronger, which army has the better trained officers and men, and which army administer rewards and punishments in a more enlightened manner.

2.2.1 Moral Law (道)

Sun Tzu put moral law first among five factors, showing that it is the basic and also the most important factor in winning a war. Sun Tzu defined it as the forces that

cause the people to be in complete accord with their ruler, they will follow him regardless of their lives, undismayed by any danger. To achieve moral law, the ruler should take care of the interests of his subjects, exercising benevolent rule and treating them as his own family members (Chen, 1994).

In order to understand moral law completely, it's necessary to compare Sun Tzu with another Western military strategist, Carl von Clausewitz. If Sun Tzu's Art of War is said to lay foundation for Eastern military strategy, then Clausewitz's On War written in Napoleon's time is the foundation of much of Western military strategy. Clausewitz's theories focus on the big battle as the way to win (Michaelson, 2011). He clearly stated his most famous saying that "War is merely the continuation of policy by other means" (Clausewitz, 1993). Accordingly Clausewitz suggested the ruler take significant risks regardless of any cost. Most of people have misunderstanding that Sun Tzu is a warlike military strategist. However Sun Tzu's core military thinking is to win without fighting. Contrary to Clausewitz, Sun Tzu suggested taking minimum risks, maximum gains at the lowest cost. Because taking significant risks regardless of the cost of manpower, financial resources go against moral law. In Sun Tzu's book, chapter 2, waging war, Sun Tzu suggested avoiding lengthy campaign and using enemy's resources as much as possible. Since lengthy campaign causes soldiers to lose motivations to fight physiologically and cause

people to be afflicted by heavy extractions resulting in social disturbance. Obviously, Sun Tzu implies sovereign pursue shared value between sovereign and people (army).

The moral law determines whether one army can defeat another without completely destroying it (Cantrell, 2003). It brings about spiritual unity between the leader and the common soldiers (Cho, 1997). The moral law plays a crucial role in war. In the Battle of Britain during World War II, Britain stood alone against the power of Germany's military forces after the defeat of France by Germany. The British Prime Minister, Churchill delivered speeches that mobilized British people's spirit and gave them hope. He said they should never surrender. The leader Churchill together with the people and army were imbued with the moral law, a common goal to defend their beloved country against the enemy that made them fight regardless of lives and any cost. As a result the battle became a decisive victory for the British and also Germany's first World War II defeat.

The scholars applied moral law into business as presented in Table 2. Moon (2012) connected the factor with business context of Porter's (1990) diamond model. For business context, Porter stated the goal of the corporation should be the same with the stakeholders' investment motivation, so that it can attract sustainable investment. The common goal between employees and corporation, which is the shared value is

Table 2. Existing studies on applications of Five Factors into business

Existing Literature	Moral Law (道)	Heaven (天)	Earth (地)	Commander (將)	Method and discipline (法)
Moon (2012)	Business Context (Rivalry)	Related & supporting sectors	Related & supporting sectors	Factor conditions (advanced factor)	Business Context (Rivalry)
Chan & Chen (1998)	Unison of objectives and practices	Systematic risk in the finance literature	Location of business activities, physical environment	Manager (consistent, trustworthy, kind and yet strict)	Division of responsibilities
Chen (1994)	Common corporate goal	Political situations, economic cycles, investment climate, social and cultural factors	Location of the company's operations, access to markets, supplies of industrial and raw materials	CEO (identifying trends and opportunities, Mutual trust, benevolence, boldness, compassion)	Balance between the managers and subordinates
Wong et al. (1998)	Consensus, good citizenship	Global environment	Stakeholder relations, industry structure	Manager (wisdom, trustworthiness, benevolence, courage, and firmness)	Policies, training, reward and punishment policy
Cho (1997)	Synergistic power	<u>External Environment</u> Economic, social, political, technological, cultural, and ecological aspects	<u>Internal Strength</u> Administrative tools for implementing strategy		
Cheng (2003)	Vision, culture	Opportunities , threats	Strengths, weakness	Management, discipline	Logistic, cost control

critical for firms' success (Moon, 2012). This kind of common goal corresponds with Sun Tzu's moral law. The moral law can be explained as the unison of objectives and practices of the management and the workers in business (Chan & Chen, 1998). Chen (1994) considered moral law as the common corporate goal shared by companies and all employees. Wong, Mather & Lee (1998) further extended Chan & Chen (1998), Chen's (1994) concept to a larger scope by incorporating both internal consensus and external consensus. Internal consensus not only refers to the consensus among managers but also consensus between the employees and managers, while external consensus refers to good citizenship that the company's goal should accompany with the societal benefit, rather than pursue the profit at the expense of the social benefit. Cho (1997) perceived that moral law can produce synergistic power when applying to business. Cheng (2003) regarded moral law as the vision and culture of firms. According to Lee, Chng & Wee (1994), following the moral law generates organizational harmony, mobilizes the employee's morale and commitment, and ultimately builds organizational coherence.

2.2.2 Heaven (天)

Heaven signifies night and day, cold and heat, times, and seasons. This variable refers to all the interaction of natural forces (Griffith, 1963), rather than being constrained to the climate or weather conditions. According to Sun Tzu, the heaven is an uncontrollable variable so the army should have a clear understanding of it.

In ancient times without advanced technology, understanding of the heaven is of critical importance in war. During the confrontation of the Three Kingdoms in China, Cao Cao(the King of Wei) who dominated the northern warlord, failed in the Battle of Red Cliff(赤壁之戰) because he failed to know the climate of Yangtze River Valley where they waged war. He predicted there would be northern wind, so that the enemy would not dare to use fire attack. But it turned out to be southeastern wind, even more disastrous, dense fog. The enemy used fire attack resulting in Cao Cao's failure. His wrong judgment about the climate reflects he didn't know the heaven that Sun Tzu emphasized.

As seen in Table 2, in business, Moon (2012) explained heaven as economic and business climate, including business cycles, investment conditions, which are summarized as related and supporting industries of the diamond model. These variables such as economic and business environment (heaven) seem uncontrollable to the firms, but firms can benefit from it by making the best use of them. Chan &

Chen (1998) considered heaven as systematic risk in the finance literature confronted by each business activity. According to Wong et al. (1998), heaven refers to the global environment including international agreements, economic alliances, and restrictions so that managers have to predict accurately in order to capitalize on opportunities and minimize threats. Chen (1994) explained heaven as political situations, economic cycles, invest climate, social and cultural factors. Cho (1997) combined heaven with earth and stated the two factors refer to economic, social, political, cultural aspects for firms. Cheng (2003) saw heaven as opportunities as well as threats to the firms.

2.2.3 Earth (地)

Earth comprises distances, great and small; danger and security; open ground and narrow passes; the chances of life and death. The factor is also an uncontrollable variable as heaven. Sun Tzu pays great emphasis on utilizing earth. His analysis of earth is not limited to chapter 1. A deeper investigation into Sun Tzu's principles reveals the breadth and comprehensiveness of his concept of external environment (Cho, 1997). Sun Tzu devotes the whole Chapter 10, Terrain to illustrate how to utilize terrain in the war. In the chapter, Sun Tzu stated six types of terrain,

accessible ground (通形), entangling ground (挂形), temporizing ground (支形), narrow passes (隘形), precipitous heights (險形), and positions at a great distance from the enemy (遠形) and the variety of strategies under such circumstances (see Table 3).

Table 3. Sun Tzu's six types of terrain and strategy

Six types of terrain	Strategy
Accessible ground (通形)	One should be the first to occupy the higher and sunny positions that are convenient to your supply routes so as to gain advantage in battle.
Entangling ground (挂形)	If the enemy is unprepared, he can be easily defeated; if the enemy is prepared, one will be in disadvantageous; if one engages in war, because the army can be caught in a situation where they are unable to return.
Temporizing ground (支形)	One should not go to war even the enemy entices one's army using by any baits
Narrow passes (隘形)	Be the first force to occupy the strategic points and wait for the enemy.
Precipitous heights (險形)	Be the first to occupy the sunny heights and wait for the arrival of the enemy.
positions at a great distance from the enemy (遠形)	It is not easy to provoke a battle, and fighting will confer little advantage to either side.

In war, lack of understanding earth can lead to failure. Another important reason of Cao Cao's failure in the Battle of Red Cliff(赤壁之戰) is that Cao Cao's generals and soldiers consist of mostly cavalry and infantry, and most of them are from the north of China, so few had any experience in naval warfare. Obviously, Cao Cao's army were not familiar with the naval environment they waged war. From this we can see Cao Cao didn't have a good understanding of the earth.

As seen in Table 2, in business, according to Moon (2012), earth is in accordance with related and industries of diamond model. It includes access to raw materials and labor, access to capital and consumer market, technology and R&D centers, and infrastructural services. Earth means the choice on the locations of business activities and the physical environment to conduct business (Chan & Chen, 1998). Chen's (1994) earth is limited to the infrastructure at the location of the company's operations and access to domestic and international markets as well as supplies of industrial and raw materials. Wong et al. (1998) extended Chen's (1994) scope into two other aspects. One is the company's relations with its stakeholders and the other is the structure of the industry where the company conducts business. Cho (1997) combined earth with heaven and stated they mean economic, social, political, cultural aspects for firms. Cheng (2003) regarded earth as strength, weakness of firms.

2.2.4 Commander (將)

In describing an ideal leader, Sun Tzu lists five virtues of wisdom, trustworthiness, benevolence, courage, and firmness. In terms of wisdom of the leader, Sun Tzu described it as understanding the broader political mission of war, seeing danger inherent in advantages, but advantage in dangers, having foreknowledge of the enemy and the battleground situation (Vlado et al, 2012). Trustworthiness refers primarily to loyalty to the superior while benevolence is directed downward toward the subordinates (Vlado et al, 2012). Benevolence is the most important virtue of the Confucian Dao of government. Courage refers to the boldness of making decisions, willing to take any necessary risks. Firmness refers to high standards of discipline. Besides, Sun Tzu also listed five fatal flaws of that general should avoid,

“If reckless, he can be killed; if cowardly, he can be captured; if quick-tempered, he can easily be provoked; if sensitive to honor, he can easily be insulted; if overly compassionate to the people, he can easily be harassed.”

Furthermore Sun Tzu stated the six failures due to the commander's mistakes, they are flight(走兵), insubordination(馳兵), collapse(陷兵), ruin(崩兵), disorganization (亂兵), and rout(北兵) as shown in Table 4.

Table 4. Six types of Failure due to commander's mistakes

Type of Failure	Characteristics
Flight(走兵)	Other conditions being equal, general directs 1 to attack 10
Insubordination(馳兵)	Soldiers are strong, but commanders are weak
Collapse(陷兵)	Commanders are strong, but soldiers are weak
Ruin(崩兵)	Higher commanders are insubordinate, and generals do not know their positions
Disorganization(亂兵)	Commander is weak and without authority. His order is not clear.
Rout(北兵)	Commander is unable to comprehend the enemy, uses small force to attack the large force, weak force to strong force, and neglects to place picked soldiers in the front rank.

In business, previous studies all possess similar points (see Table 2). For instance, Moon (2012) connected commander with human resource of the advanced factor conditions of diamond model. In fact Porter emphasizes the importance of advanced factor conditions more than basic factor condition. It is similar with Sun Tzu's emphasis on the capability of commander in winning a war. Chan & Chen

(1998) considered commander as the manager. They argue a good manager should be consistent, trustworthy, kind and yet strict. Chen (1994) regarded commander as CEO who is able to identify trends and opportunities, establish mutual trust, benevolence, boldness, and compassion. A good manager should possess the qualities of wisdom, trustworthiness, benevolence, courage, and firmness (Wong et al., 1998). Cho (1997) saw commander as structure and process for implementing strategy. Cheng (2003) connected commander with management and discipline of firms.

2.2.5 Method and discipline (法)

Method and discipline includes the marshaling of the army in its proper subdivisions, the graduations of rank among the officers, and the control of military expenditure. Chen & Chan (1998) argued that the method and discipline refers to the organizational effectiveness of military units, management of personnel, the responsibilities of the officers and soldiers, and the control of military supplies. It includes the organizational structure, methods and discipline of internal operation (e.g., signals procedures, designation of military ranks, allocation of responsibility,

management supply routes), and provision of items used by the army (Wee, Lee & Hidajat, 1991).

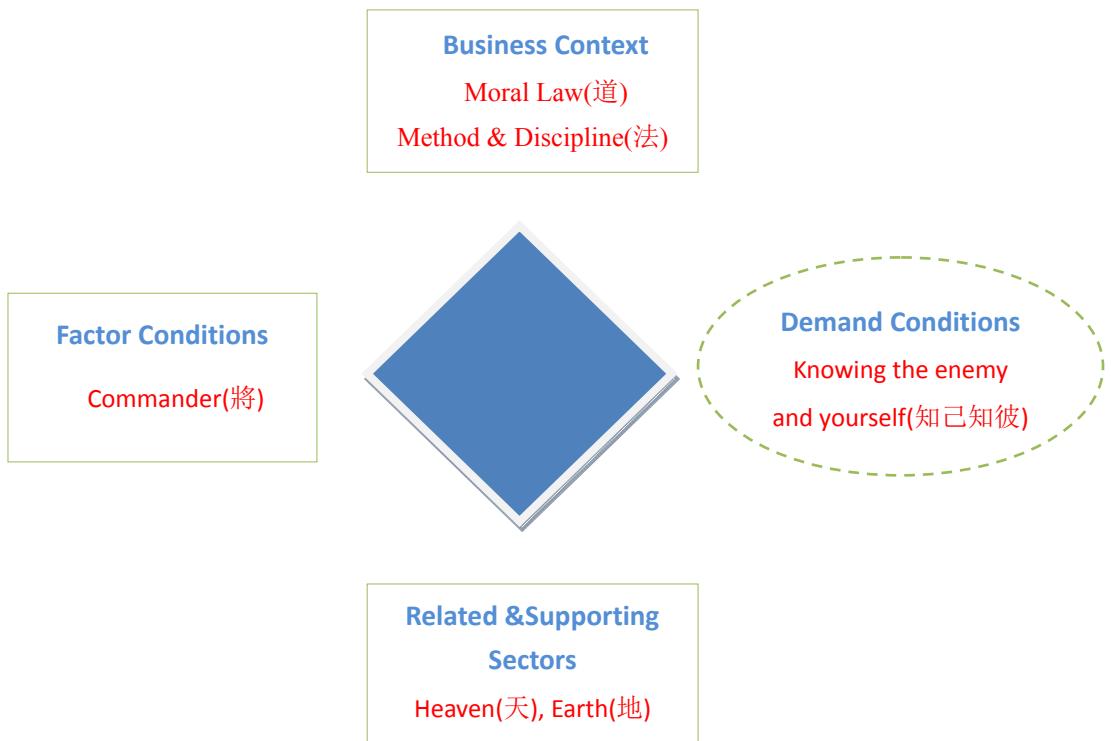
As seen in Table 2, in business, Moon (2012) linked method and discipline to the structure under the business context of diamond model. There is no universally appropriate management system for all firms to follow. Hence, firms tend to be successful, if the management system is well suited to the business practice and structure favored by the national environment. Chen & Chen (1998) supported method and discipline is similar with the organization of firms. A good organization must be efficient with a clear division of responsibilities among the people in firms. Chen (1994) conceived method and discipline emphasize the balance between the managers and subordinates. Wong et al. (1998) claimed method and discipline refers to rules, policies, supplies, equipment, training, reward and punishment policy and they particularly emphasized the coordination of each function and organizational flexibility to foreign cultures for doing international business. Cho (1997) regarded method and discipline as structure and process for implementing strategy. Cheng (2003) argued the factor means logistic and cost control for firms.

2.3 Critical Evaluation

According to the literature survey above, these prominent scholars have addressed and analyzed a number of issues regarding the application of Sun Tzu's work into business. In regard to the application of Sun Tzu's war principles into business, McNeilly (2012), Trellis (2004), Rarick (2009), Wu, Chou & Wu (2004) and Cantrell (2003) have two major limitations. First, they generalized Sun Tzu's work into several principles and discussed how they can be applied into business. Among them, the principles such as winning without fighting (winning whole), deception, adaptability, avoiding strength and attacking weakness, are most frequently utilized by scholars. But such application is general and the principles the scholars choose are subjective. Second, they applied each principle into business practice, few studies are done on the linkage with theoretical business frameworks.

So far studies focusing on the application of Sun Tzu's five constant factors to business management are rather limited. Moon (2012) is the one of countable studies that uses quite comprehensive analytical tools to analyze Sun Tzu's five factors (see Figure 1). He applied Sun Tzu's five factors as well as 'knowing the enemy and yourself' into the four corners of Porter's diamond model, namely factor conditions, demand conditions, related and supporting sector, business context.

Figure 1. The Art of War and Diamond Model



Source: Moon (2012)

(rivalry). The application is successful in two ways, first is the similar role of the models, Sun Tzu's five factors are used to predict the result of war by measuring the five factors before going to war. Similarly, the four corners of Porter's diamond model is not only used to evaluate the competitiveness of nations but also can be used in the industry or firm level. Second is the comprehensiveness of the two models. Sun Tzu emphasized one should thoroughly examine all the five factors,

otherwise it would be very dangerous to go to the war depending on just one favorable factor. In contrast, Porter emphasized a country's competitiveness (industry or firm level) is determined by the four factors of the diamond. The weakness in any factor will constrain the potential improvement and upgrade of other factors, which would finally weaken the overall competitiveness of nation (industry or firms).

Although Moon's (2012) application is successful in its comprehensiveness, it is not without problems. First, according to Sun Tzu heaven and earth are two uncontrollable variables and the army should flexibly adapt to the change of heaven and earth. However, Moon (2012) linked the two uncontrollable variables to the business context (rivalry), which is a controllable factor of Porter's diamond model. Second, Moon (2012) nicely matched Sun Tzu's five factors to three corners of diamond model, factor condition, business context, related and supporting sectors and adding 'knowing the enemy and yourself' to match demand condition of diamond model. It's true that knowing the enemy is the prerequisite in winning a war, because Sun Tzu stressed 'knowing the enemy' in the war throughout the 13 chapters in the Art of War. He said, "Know the enemy and know yourself; in a hundred battles you will never be in peril; but when you are ignorant of the enemy but know yourself, your chances of winning or losing are equal." In contrast in

business the final judgment of a new product or service is in customers but not in competitors. In this respect knowing the enemy can be seen as knowing the needs of customers in business. However, if seen from the overall comparison in Moon's (2012) paper, 'knowing the enemy and yourself' seems not consistent with other five factors. Because Sun Tzu's five factors are the factors that determine the outcome of war, but knowing the enemy and yourself is war principle but could not be seen as a factor.

Chan & Chen (1998), Chen (1994), Wong et al. (1998), Cho (1997) and Cheng (2003) also have limitations. First, the studies are not comprehensive enough. For example, in terms of moral law Chan & Chen (1998) and Chen (1994) only focused on common goal within company but didn't take social context into account. Although Wong et al. (1998) incorporated social responsibility, but they didn't use comprehensive frameworks to analyze it. Furthermore, Cho (1997) mentioned synergistic power, but he didn't explain specifically what the 'synergistic power' is. Second, the analysis is dispersed and lacking business. For instance, in terms of heaven and earth, the analysis is either missing or overlapping. It can be noted that previous studies lack comprehensive analytical tools to analyze Sun Tzu's five factors.

3. Linkage between Five Factors and Porter's Business Strategy

As critically reviewed in the last section, few papers offer a comprehensive analysis on applying Sun Tzu's five factors into business. Therefore in order to give a comprehensive analysis, this section makes a reference to Michael Porter, the guru in business management, and attempts to match Sun Tzu's five factors with Porter's business strategy.

Generally recognized as the father of the modern strategy field, Porter has been identified in a variety of ranking and surveys as the world's most influential thinker on management and competitiveness. He has developed many theories and frameworks including five force model, generic strategy, value chain, diamond model, Creating Shared Value (CSV) strategy for the past 30 years. His studies integrating business and economics are widely applied not only to academia, government, company but also non-profit institutions (Moon, 2012). Porter has colonized the entire fields of business theory (the Economist, 2011). The following part matches each of Sun Tzu's five factors with Porter's business frameworks.

3.1 Moral Law(道) vs. Creating Shared Value (CSV)

Sun Tzu's moral law can be linked to the strategy of Creating Shared Value (CSV) proposed by Porter and Kramer. CSV refers to corporate policies and practices that enhance the competitiveness of a company while simultaneously advancing social and economic conditions in the communities. CSV is integrating societal improvement into economic value creation itself. Obviously the key concept of creating shared value is shared value among the company, employees and society.

In recent years, companies have begun to embrace Creating Shared Value such as Microsoft, Nestle, Google and IBM. For example, Microsoft encountered the shortage of IT workers, which has become a constraint on Microsoft's growth. Microsoft also recognized that community colleges faced challenges due to not standardized IT curricula, outdated technology, and no systematic professional development programs. As a result, Microsoft not only donated money and products but also sent employee volunteers to colleges to assess needs, promote curriculum development. The result is that Microsoft has benefited the community and also itself by maintaining IT workers (Porter & Kramer, 2006).

Porter's CSV strategy is complementary to the previous studies. As analyzed in previous section, existing literature exist limitations. CSV incorporates social

context to Moon (1998), Chan & Chen (1998), Chen (1994), whose concepts are limited to the same goal between corporate and employees within the firms. Besides, Wong et al. (1998) extended the concept to a larger scope by incorporating social responsibility that is CSR (Corporate Social Responsibility). Body Shop's 'anti-animal test stance' and a Korean company, Yuhan-kimberly's environmental protection campaign called 'Keep Korea Green' are the examples of implementing CSR. CSR is good but could not solve the core problems of companies. In this respect Porter's CSV can be supplementary to Wong et al.'s (1998) article. Furthermore Cho (1997) raised that moral law can produce tremendous 'synergistic power'. According to Cho (1997) synergy is an outcome of a proper allocation of resources which usually more than doubles the effectiveness of a strategy, but he didn't illustrate what 'synergistic power' is. Porter & Kramer (2011) argue that the synergy increases when firms approach society issues from a shared value perspective and invent new ways of operating to address them. The equivalent of the concept of moral law that can produce 'synergistic power' is 'Creating Shared Value'. Companies can create shared value in the following three routes (Porter & Kramer, 2011).

- Reconceiving needs, products and markets- Companies can meet social needs

while better serving existing markets, accessing new ones, or lowering costs through innovation.

- Redefining productivity in the value chain - Companies can improve the quality, quantity, cost, and reliability of inputs and distribution while they simultaneously act as a steward for essential natural resources and drive economic and social development.
- Enabling local cluster development - Companies do not operate in isolation from their surroundings. To compete and thrive, for example, they need reliable local suppliers, a functioning infrastructure of roads and telecommunications, access to talent, and an effective and predictable legal system.

To sum up Sun Tzu's moral law is a prerequisite in winning a war. It is explained as the shared purpose or common cause between the ruler and the public people (Wee et al., 1991; Tung, 1994; Chen, 1994; Wong et al., 1998). However Sun Tzu's moral law is limited within the state. In contrast Porter's CSV strategy is the shared value among corporation, employee and the whole society as well. In this

regard Porter's CSV strategy is broader in its range and scope than moral law by incorporating social benefit into account. The difference also reflects the different nature of the war and business. War is zero-sum game while business is win-win game (Moon, 2012). In war, the gain of one side is at the expense of the loss of the other side. On the contrary the relationship of the players in business is win-win and their ultimate goal is to create value.

3.2 Heaven(天), Earth(地) vs. Five forces

Among the five constant factors, Sun Tzu limits the external environment to two factors, heaven and earth. Sun Tzu stressed the importance of knowing heaven and earth by the saying that “Knowing the enemy and oneself, the victory will not be in doubt; knowing the heaven and earth, the victory can be complete”. Accordingly the army should have a clear understanding of the two uncontrollable variables. Previous studies regarding heaven and earth, all scholars stated external environment including social, economic, political and cultural aspects where the companies compete. The limitation is that the analysis is either missing or overlapping, lacking frameworks to explain them.

The two uncontrollable variables heaven and earth correspond with Porter’s five force model. The five force model was first introduced in the Harvard Business Review in 1979 in an article by Porter called “How Competitive Forces Shape Strategy”. For more than 30 years it has been used as a standard tool to analyze and determine industry profitability. Porter’s model sought to relate the average profitability of the participants in an industry to competitive forces (Karagiannopoulos et al., 2005). Porter’s model provides an easy and simple approach for industry analysis (Pearce & Robinson, 2005). The model also provides

an opportunity to take important decisions like whether to enter a particular industry or to leave it.

According to Porter, the overall attractiveness or the ultimate profit potential in an industry is determined by the collective strength of the five basic competitive factors, including rivalry among existing firms, threat of new entrants, threat of substitute products or services, bargaining power of suppliers, and bargaining power of buyers as shown in Figure 2.

Rivalry among existing firms: The more fierce the competition is, the more industry profitability and industry attractiveness decrease. Number of competitors, costs of leaving market, quality and service differentiation also affects intensity of industry competition.

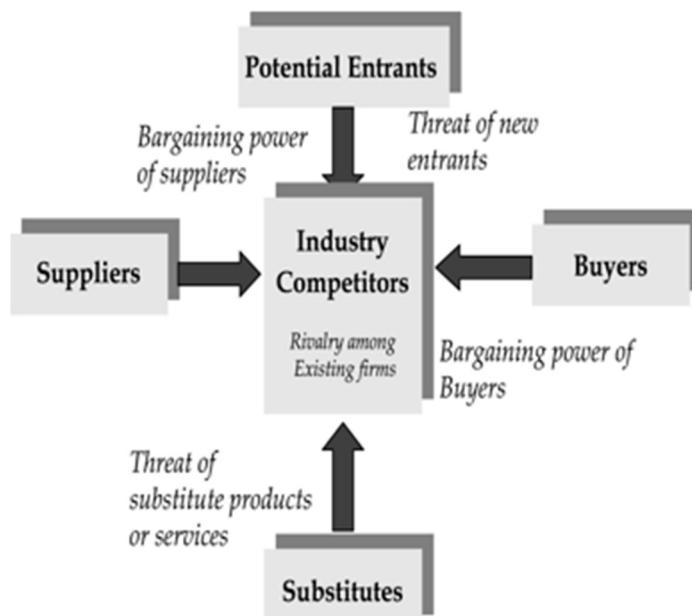
Threat of new entrants: If the barrier to entry is high, the threat of new entrants is low and industry attractiveness decreases. Time and cost of entry, specialist knowledge, economics of scale, technology protection also have impact on the threat of new entrants.

Threat of substitute products or services: If the threat of substitution is high, the industry profitability decreases.

Bargaining power of suppliers: The higher the bargaining power of suppliers, the more industry profitability and industry attractiveness decrease. Number and size of suppliers, uniqueness of service, the ability to substitute and cost of changing determine bargaining power of suppliers.

Bargaining power of buyers: Number and size of customers, differences between competitors, price sensitivity, ability of substitute and cost of changing, effect bargaining power of buyers. Powerful buyers will force down the prices and demand better quality or more services, thereby forcing players to compete each other at the expense of industry profitability (Pringle & Huisman, 2011).

Figure 2. Porter's Five Forces Model



Source: Porter (1980)

Porter's five forces and heaven and earth are similar in two ways. First, they are all uncontrollable variables. Unlike today, in ancient time without high military technology, war depends highly on the geographical factors which are difficult to control. Hence heaven and earth are uncontrollable variables. By contrast Porter's five forces are also uncontrollable.

Second, although they are uncontrollable, they can be made the best use of. For example, a good general can turn disadvantage into advantage by making use of heaven and earth. During the confrontation of the Three Kingdoms, Cao Cao failed in the Battle of Red Cliff(赤壁之戰) due to not knowing about the heaven and earth and Zhu Geling, the counterpart of Cao Cao succeeded because he made the best use of heaven and earth. Zhu Geling used fire attack with the help of the southeastern wind, dense fog and the terrain they waged war. In business since the attractiveness of the industries contributes to the success of a competitive strategy, companies should know the five forces, the competitors, suppliers, customers and substitutes well. Porter points out that a firm is not a prisoner of its industry's structure. Firms, through their strategic choices, are capable of influencing the five forces to their advantage (Moon, 2010; Moon, 2013). For example assume a firm became a strategic alliance of its supplier, as a result the barrier to entry will be high, the threat of new entrants will be low. For the firm, it will become less affected by

its supplier, new entrants, existing competitors and will be mainly affected by other two forces, threat of substitute products or services and bargaining power of buyers.

Obviously, Porter and Sun Tzu both pay emphasis on the external environment the army faces and companies compete in. However, the linkage also has limitations. It was mentioned that previous studies regarding heaven and earth include external environment such as industry structure, supplies of industrial and raw materials, global environment, economic cycles, political situations and cultural context. The industry structure mentioned above is determined by the collective strength of the five forces, so it is related to five forces. Besides, supplies of industrial and raw materials are affected by the bargaining power of suppliers, so it is also connected with five forces. But global environment, economic cycles, political situations and cultural context seemed not included in the five forces.

3.3 Commander (將), Method and discipline(法) vs. Human Resource in the Value Chain

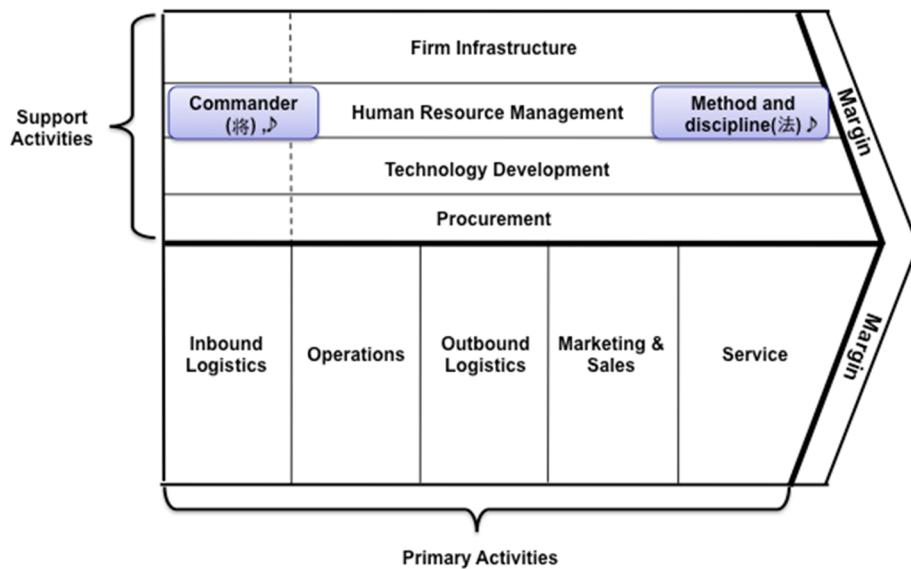
In literature review section, Moon (2012) connected commander with human resource of the advanced factor conditions of Porter's diamond model. Chan & Chen (1998), Chen (1994) and Wong et al. (1998) have emphasized the personalities as well as capabilities a good manager should possess in business. A good manager should have the five qualities that Sun Tzu suggested, wisdom, trustworthiness, benevolence, courage, and firmness. For method and discipline, Chan & Chen (1998), Chen (1994) and Moon (2012) referred it to the firm's organizational structure and management system. Wong et al. (1998) and Wee et al. (1991) referred it to regulation including rules, policies, supplies, equipment, training, reward and punishment policy.

The studies mentioned above have common limitation that they are lacking frameworks to apply commander and method and discipline into business except Moon (2012). Commander and method and discipline are much captured by human resources management of Porter's value chain. Porter first introduced the concept of value chain in his book of Competitive Advantage (Porter, 1985), as a basic tool of examining how the discrete activities contribute to a firm's cost or differentiation

competitive advantage. It is a widely accepted tool for assessing business activities and identifying competitive advantage (McPhee & Wheeler, 2006). The activities are divided into two broad categories, primary and support activities. Primary activities are those involved in the physical creation of the product and its sale and transfer to the buyer as well as after sale assistance. It includes inbound logistics, operations, outbound logistics, marketing and sales and service. Support activities support the primary activities and the entire value chain. It includes firm infrastructure, human resource management, technology development and procurement.

According to Porter human resource management include education and job training, safe working conditions, diversity and discrimination, health care and other benefits, compensation policies, and layoff policies. Previous studies referred commander, method and discipline to capability of managers, rules, policies, supplies, equipment, training, reward and punishment policy. From here, it can be seen that Sun Tzu's commander (將) and method and discipline(法) correspond with Porter's value chain's human resource management (see Figure 3).

Figure 3. Commander(將) Method and discipline(法) and Human Resource in the Value Chain



3.4 Analysis

Based on the above analysis on Sun Tzu's five factors and Porter's business strategy, a summary of the comparisons is presented in Table 5.

Table 5. A Summary Comparison of Sun Tzu's Five Factors and Porter's Business Strategy

	Sun Tzu	Porter
Internal environment	Moral Law (道) Commander (将), Method and discipline(法)	Creating Shared Value (CSV) Human Resource in the Value Chain
External environment	Heaven(天), Earth(地)	Five Force model

The moral law means the shared purpose or common cause between the ruler and the public. It corresponds to Porter's Creating Shared Value (CSV) strategy. CSV strategy is the shared value among corporation, employees and the whole society as well. Compared to CSV, Sun Tzu's moral law is limited within the state. In this respect Porter's CSV strategy is broader in its range and scope than moral law. The difference also reflects the different nature of the war and business. War is

zero-sum game while business is win-win game. In war the gains of one side is the loss of the other side. Accordingly the scope of moral law is limited within a state. In contrast, in business through creating shared value, the firms can benefit not only the firms itself, but also employees and the whole society as well.

Heaven refers to all the interaction of natural forces while earth refers to different terrain the army encounter in war. Sun Tzu's heaven and earth are in accordance with Porter's five force model in two ways. First, Porter and Sun Tzu both pay emphasis on the external environment the army faces and companies compete in. Second, they are all uncontrollable variables but they can be made the best use of. For example, a good commander can turn disadvantage into advantage by making use of heaven and earth. In business according to Porter firms are capable of influencing the five forces to their advantage through their strategic choices.

Lastly, Sun Tzu mentioned the five qualities a good commander should have and five flaws a good commander should avoid. Method and discipline refers to the organizational effectiveness of military units, management of personnel, the responsibilities of the officers and soldiers, and the control of military supplies. Commander and method and discipline are much captured by human resource management in Porter's value chain.

4. Conclusion

This paper applied Sun Tzu's Five Constant Factors, namely moral law, heaven, earth, commander, method and discipline into Michael Porter's business frameworks and identified similarities and differences between the two revered figures. It found that Sun Tzu's five constant factors are much captured by Porter's frameworks. The moral law can be linked to Porter's CSV, heaven and earth can be related to five force model, and commander, method and discipline correspond to human resource of Value Chain.

To sum up, although Sun Tzu and Porter have differences in terms of time (about 2,500 years), place (East versus West) and the field (military field versus business), we find surprising similarities between the two. From the above comparative analysis the following implication can be derived. Sun Tzu's five key factors are all covered by Porter's important business strategy. Firms can develop good business strategy from learning ancient military strategy to achieve success in international business.

For further studies, extensive research on both successful and unsuccessful case studies can be conducted to support the linkage between Sun Tzu's five factors and Porter's strategy.

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국문초록

오늘날 경영은 전쟁과 같다. 경영을 전쟁터로 고려할 경우 중국의 철학가, 손자가 쓴 손자병법은 가장 중요한 참고서가 될 것이다. 손자의 전쟁사상이 군사범위를 떠나 오늘날 경영전략에도 널리 활용되고 있음에도 불구하고 손자의 전쟁사상을 응용하는 기준연구에는 한계가 있는 것이다. 대부분의 기준연구는 손자의 군사원칙을 일반화하여 경영에 응용하였다. 또한 분석틀의 결핍으로 하여 중요한 요소를 빼뜨리거나 겹치는 요소가 존재한다. 따라서 더욱 포괄적인 분석을 위해 본 논문에서는 손자의 사상과 ‘경영의 대가’로 불리우는 마이클 포터의 경영전략을 심층적으로 연결시키자 한다.

본 논문의 주요 연구목적은 손자의 전쟁 5 가지 기본요소인 도(道), 천(天), 지(地), 장(將), 법(法)을 마이클 포터의 분석틀 예를 들어 공유가치의 창출(CSV), 5 요소 모델, 가치사슬 모형에 응용하는 것이다. 그들의 공통점과 차이를 밝힐 것이며 결론부분에서 국제경영에 대한 중요한 시사점을 제시하고자 한다.

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