Periodization in Antiquity: The Chinese Military Training

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Abstract

According to the imperial moment of China, a dynasty improved the Chinese military training. Chinese Dynasties to prepare the imperial army performed the training planning. The training plan to be used in sports came to be called by Soviet Union researchers of periodization. This article called the training planning of the Chinese imperial army of periodization. The objective of the review was to explain how it was organized the periodization of the military training of imperial China with the method of Qi Jiguang. Qi Jiguang was a famous general during the Ming Dynasty. Qi practiced several innovations in the Chinese military training. He elaborated a new combat formation, the Mandarin Duck, and other formations. Qi wrote some books to guide the imperial troops. Qi used four microcycles to organize military training — prepare armies, martial arts, weapons I (with individual training), and weapons II (with team training). In conclusion, the study of the periodization of Chinese military training was relevant for the coach to know how this content evolved until to be researched and used in sports.

Keywords: Ming dynasty, war, China, military training, Chinese boxing, sports, microcycle, period.

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1. Introduction

Approximately 4.000 before Christ (B.C.), the China began to form near of the Yellow River that is located in the northeast of this nation (Carrizo, 2006; Garrido, 2017). According to the imperial moment of China, a dynasty governed this nation and improved the Chinese military training (Hang, 2022). For example, in the Shang Dynasty (1st dynasty, was of 1500 to 1050 B.C.) and in the Zhou Dynasty (2nd dynasty, 1050 to 400 B.C.) the Chinese soldiers practiced improving the physical preparation and the combat techniques of various types of training – game similar with the football, martial arts, archery, strength training, horse race, and other military tasks (Martín, 2022). In these two dynasties, the chariot with archery soldiers was the main weapon of war (Acevedo et al., 2010).

In 221 to 206 B. C. occurred the Quin Dynasty (3rd dynasty), and the emperor finished of building the Great Wall of China, this construction was designed to protect the Chinese from enemy attacks (Hang, 2022; Trevisan, 1995).

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The Han Dynasty (4th dynasty, 206 B.C. to 220 after of Christ, A.C.) created books and monographs on martial arts (sword, knife, archery, kung fu, and others) to guide the military of this monarchy (Apolloni and Aguiar, 2022). After this dynasty, occurred in China the Sui Dynasty (5th dynasty, 581 to 619 A. C.), the moment that martial arts were very practiced by soldiers and civilians, and began to occur the first martial arts championships to promote this practice in China (Acevedo et al., 2010). Therefore, in each dynasty, the Chinese military training improved.

In the Tang Dynasty (6th dynasty, 619 to 907 A.C.) the Chinese discovered the gunpowder in the 9th century and created the first firearm in the 10th century (Teigens, 2020). However, in the Song Dynasty (7th dynasty, 960 to 1279 A.C.), although the Chinese had firearms, they were defeated in war by the Mongols and were occupied by that nation and the Mongols founded the Yuan Dynasty (1279 to 1368 A.C.) to rule the China, and at that time the martial arts or any military activity of the Chinese people was prohibited (Acevedo et al., 2010; Jiménez, 2014). Mongol dominance in China with the Yuan Dynasty was until 1368 A.C., but a peasant revolt led by Buddhist monks put the Ming Dynasty (8th dynasty, 1368 to 1644 A.C.) to rule the China (Mamigonian, 2008). Another factor that was important for the expulsion of the Mongols, were the firearms of the Ming Dynasty (Laichen, 2021).

The Ming Dynasty was a moment that the China developed a new military system, the emperor encouraged the training with various weapons (swords, spears, and others) and firearms (cannon, handguns, and others) (Lorge, 2005; Papelitzky, 2017), the soldiers were trained with a new technique to improve spear throwing (López, 2012), all Chinese military were required to practice martial arts (Kit, 2007), the war researchers wrote several books with pictures to guide the soldiers (Wetzler, 2016), and other contents were improved for China to have a better imperial army (Laichen, 2021). Finished the Ming Dynasty, occurred in China the last monarchy of that nation, the Qing Dynasty (9th dynasty, 1644 to 1912 A.C.) (Bulhões, 2015). In the Qing Dynasty the emperor continued to improve military training – protection of the cities (castles, walls, teaching martial arts to the people, and others), war tactics, war books to guide the soldiers, and others (Hang, 2022; López, 2012). Therefore, in the Qing Dynasty, the Chinese military training was perfected.

The Chinese Dynasties to prepare the imperial army performed the training planning (Marques Junior, 2022). The training plan to be used in sports came to be called by Soviet Union researchers of periodization because of the term period (preparatory, competitive, and transition) used in each periodization (Marques Junior, 2023). This article called the training planning of the Chinese imperial army of periodization. Most writings about the dynasties were concentrated on the Ming and Qing Dynastys (Apolloni and Aguiar, 2022; López, 2012), the article explained



the periodization of the Chinese military training in a dynasty, a Ming Dynasty because this dynasty had a famous general, which was Qi Jiguang.

The objective of the review was to explain how it was organized the periodization of the military training of imperial China with the method of Qi Jiguang.

2. Periodization of the Chinese military training

The Ming Dynasty developed a complex military system to defend the nation against various enemies (Mongols, Japanese, etc.) (Robinson, 2017). The emperor of this dynasty invested in the increase and in the quality of the imperial troops, improved the navy, improved the weapons and the firearms, encouraged the military training with various types of weapons (Filipiak, 2012; Lorge, 2006; Robinson, 2017), stimulated the study of the war by generals and this led the elaboration of several war books to guide the soldiers and the sailors (Filipiak, 2012; Wetzler, 2016) and stimulated the practice of the martial arts as essential for the military training (Kit, 2007; Tao, 2017). During the Ming and Qing Dynasty, the Chinese elaborated several kung fu styles because this fight was very practiced by imperial troops (Theeboom and Knop, 1997).

On January 10, 1528, the boy Qi Jiguang was born in the city of Deng Zhou, in the province of Shandong (Acevedo and Cheung, 2008). Qi Jiguang was from a family with a long military tradition, he was born and lived in the period of the Ming Dynasty. Your father was Qi Jingtung, he was commander of the guard of the city of Deng Zhou (Acevedo and Cheung, 2008). Qi Jiguang from an early received excellent education and military training, when he was an adult, he inherited the military function of your father who died in 1544. Qi Jiguang passed military tests (theoretical and practical) and he had excellent performance in the armed forces (war, work, and others). This led to him becoming a very famous general (Acevedo and Cheung, 2008; Jaquet, 2020). Figure 1 shows this general.



Figure 1. Qi Jiguang (was born in 1528 and died in 1588 at 60 years old, Extracted of Junren, 2023)



Qi Jiguang implemented in the imperial army and in the imperial navy of the Ming Dynasty several military innovations – individual and team military exercises with various types of weapons, military training with troops and horses, use of firearms (cannon, handgun, arquebus and musket are types of rifles, etc.) and of weapons (sword, spear, knife, archery, etc.) during the training of the army and navy, practice of various kung fu styles, and other (Andrade, 2015; Andrade et al., 2014; Papelitzky, 2017, 2019). Qi elaborated a new combat formation, the Mandarin Duck, 12 soldiers had different functions during the combat and each column the soldiers had different weapons. The formation was the following: two soldiers in the 1st column with sword and shield, four soldiers in the 2nd column with spear, and four soldiers in the 4th column with spear (Acevedo and Cheung, 2008). Figure 2 shows this combat formation.

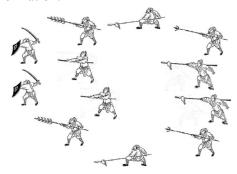


Figure 2. Combat formation of the Mandarin Duck (Extracted of Acevedo and Cheung, 2008)

The Mandarin Duck had a formation with 10 soldiers with equal weapons (sword and shield, spear) of figure 2, but the baton was not used (Jiguang, 2020) – see figure 3.

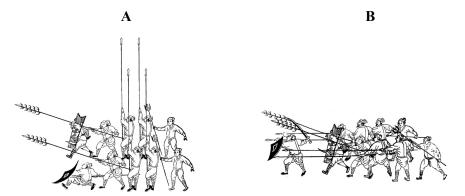


Figure 3. Other formation of the Mandarin Duck, (A) preparation for the combat and (B) during the combat (Extracted of Jiguang, 2020)



The Mandarin Duck could be composed of a firearm and weapons (baston, spear, archery, and sword and shield) with 6 soldiers, figure 4 illustrates this combat formation (Junren, 2023).



Figure 4. Mandarin Duck with firearm and weapons (Extracted of Junren, 2023)

Qi Jiguang elaborated others combat formations for the imperial army with five arquebusiers, with five soldiers with long swords, and others (Zhan, 2015). Figure 5 illustrates these explanations.

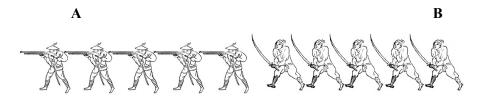


Figure 5. (A) Arquebusiers and (B) soldiers with long swords (Extracted of Zhan, 2015)

In the combat formation of figure 1 to 5 the imperial army had to train regularly. The military trained by Qi did strength training, and of the activities was to fight with weapons or without with a sandbag attached to the lower limb (Acevedo and Cheung, 2008).

Qi Jiguang with the objective of guide the imperial troops, wrote a book about military training with the title of New Book on Effective Military Techniques that was published in 1561 with eighteen chapters (Jaquet, 2020; Mroz, 2008). The second edition of the book of Qi was published in 1584 with fourteen chapters. The book of military training written by Qi had content on war tactics, the use of weapons, the teaching of the kung fu, and other content, this book was an of the first with illustrations for better a understanding of the explanations (Apolloni and Aguiar, 2022; Gaffney, 2008). Then, the soldiers and the sailors had theoretical military training (Lopatecki, 2021).

Another book written by Qi Jiguang was the Boxing Canon which was published in 1561 (Henning, 2006; Jaquet, 2020). The author selected 32 hand



actions of various Chinese martial arts for the practice of Chinese boxing that had more efficient attacks for military combat and presented in his book with explanations and illustrations (Berwick, 2009; López, 2012). This book guided the imperial military training. Figure 6 shows this book.

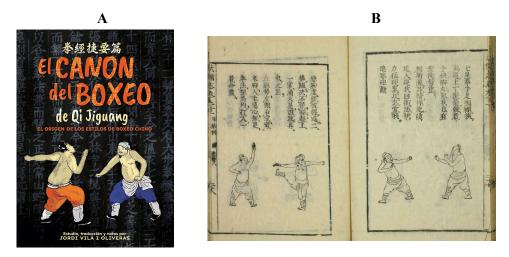


Figure 6. (A) Cover of the book Boxing Canon translated in Spanish and (B) inside of the book (Extracted of Jaquet, 2020)

Figure 7 shows the 32 hand actions indicated by Qi Jiguang for the practice of the Chinese boxing (Voronov, 2007).

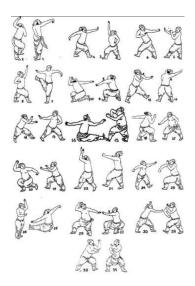


Figure 7. 32 actions of hand-to-hand for the fight (Extracted of Voronov, 2007)



Periodization of the sports training had the microcycle with some days of training (Bompa, 2002). The term microcycle was developed by Lev Pavilovch Matveev in 1962 (Marques Junior, 2023b). The 1st microcycle of the sports training was the tetras of the ancient Greeks in preparation for the Olympic Games. The tetras were also used by the Romans to prepare the gladiators for combat in the coliseum (Marques Junior, 2021). The tetras were four days of training, with different training loads in each day. The microcycle of the sports training has a minimum of 2 days or more (Matveev, 1991). Forteza (2004) informed that it is more usual in sports training the microcycle of 7 days because of the weekly cycle, but the maximum duration of the microcycle is of 20 days. The microcycle of sports training has characteristics, for example, the shock microcycle has a strong training load, the recuperative microcycle has a light training load, and others (Zakharov, 1992).

Qi Jiguang elaborated the microcycle to organize the imperial Chinese military training - remembering, at that time the term microcycle did not exist. The microcycle to prepare armies for combat had 3 to 10 days of duration (Voronov, 2007). This microcycle was used during a war or in military training. After this microcycle during the military training, the Chinese military practiced the microcycle of martial arts by 10 days with exercise of meditation, flexibility, hand-to-hand of Chinese boxing, and high jumps – perhaps, the high jumps were a type of plyometric training (Voronov, 2007).

Perhaps, the other microcycle used by Qi Jiguang was the microcycle with use of weapons individual training – in figure 5 and the microcycle with use of weapons team training – in figure 2 to 4. Although it is a hypothesis, the Chinese military training with weapons in two formations, individual and team (Acevedo and Cheung, 2008; Andrade, 2015;). Then, Qi used two microcycles, the microcycle to prepare armies (duration of 3 to 10 days) and the microcycle of martial arts (10 days), and other hypotheses of microcycles that perhaps occurred, the microcycle with weapons I (with individual training) and the microcycle with weapons II (with team training).

The periodization of sports training has three periods, the preparatory, the competitive, and the transition (Platonov, 2004). Military training has two periods, the military training period, and the war period during the time of Qi Jiguang. Then, an example of a periodization of the Chinese military training was presented in figure 8.



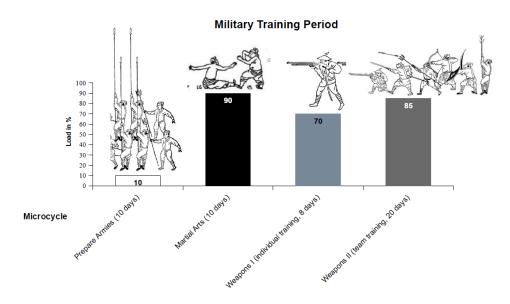


Figure 8. Load in percentage is a hypothetical value of each type of microcycle

Qi Jiguang was so important to Chinese military training evolution that he is considered the father of the People's Republic of China army (Acevedo and Cheung, 2008).

Conclusions

Qi Jiguang was a general who used theoretical and practical knowledge to develop imperial China's army and navy. Jiguang's family gave good study to Qi and this resulted in the production of books for the military training. These books written by Qi Jiguang were relevant to the organization of Chinese military training. Jiguang used the periodization during the military training for the Chinese armed forces to achieve greater performance in the war. The microcycles used by Qi to structure the periodization during the military training were four – microcycle to prepare armies, microcycle of martial arts, microcycle with weapons I (with individual training), and microcycle with weapons II (with team training). The periodization of Qi had two periods, the military training period, and the war period. Therefore, these contents were very similar of the periodization used in the sport. Reminding the reader, that these periodization terms (microcycle and period) were not used by Qi Jiguang when he planned the military training.

The periodization of the military training originated the periodization of the sports training. The 1st people to use the periodization in sports were the Greeks how preparation for the ancient Olympic Games with the tetras. After the Greeks,



the sports training researchers of the Soviet Russia (1917 to 1922) and of the Soviet Union (1922 to 1991) developed several types of periodization from 1917 to 1985. In 1965, the countries of the Western world got to know the periodization through of Matvee's conception – he was a Russian sports scientist at the time of the Soviet Union and of capitalist Russia, he died in 2006. Then, the sports researchers of the Western world began to study the periodization of sports training. These studies led the creation of the 1st periodization of the western world in 1987 – the microstructure periodization of Seirul-lo Vargas of Spain. Therefore, the study on the periodization of military training was important for this content to be developed and used in the sport.

In conclusion, the study of the periodization of Chinese military training was relevant for the coach to know how this content evolved until to be researched and used in sports.

References

- 1. Acevedo, W., Cheung, M. (2008). El general Qi Jiguang. *RAMA* 3(3):26-37.
- 2. Acevedo, W., Gutiérrez, C., Cheung, M. (2010). *Breve historia del kung-fu*. Madrid: Nowtilus.
- 3. Andrade, T. (2015). The arquebus volley technique in China, c. 1560: evidence from the writing of Qi Jiguang. *Journal of Chinese Military History* 4(-):115-141.
- 4. Andrade, T., Kang, H., Cooper, K. (2014). A Korean military revolutons? *Journal of World History* 25(1):51-84.
- 5. Apolloni, R., Aguiar, J. (2022). *Punhos, espadas e livros*. Campina Grande: EDUFCG.
- 6. Berwick, S. (2009). La espada recta Qingping. *RAMA* 4(2):54-73.
- 7. Bompa, T. (2002). *Periodização: teoria e metodologia do treinamento*. 4ª ed. São Paulo: Phorte.
- 8. Bulhões, T. (2015). Revolução Chinesa. Em. Silva, F., Medeiros, S., Vianna, A. (Orgs.). *Enciclopédia de guerras e revoluções 1919 a 1945* (pp. 215-218). Vol. 2. Rio de Janeiro: Elsevier.
- 9. Carrizo, T. (2006). China: historia y sistema tributario. *Boletín del Centro Naval* -(813):65-81.
- 10. Filipiak, K. (2012). The effects of civil officials hondling military affairs in Ming times. *Ming Studies* 66(-):1-15.
- 11. Forteeza, A. (2004). *Treinar para ganhar: a versão cubana do treinamento desportivo*. São Paulo: Phorte.
- 12. Gaffney, D. (2008). Chenjiagou: la historia de la aldea del Taiji. *RAMA* 3(3):84-95.
- 13. Garrido, N. (2017). *Arte en la Dinastía Ming y su recepción actual en España*. (Trabajo Fin de Grado). Historia del Arte, Universidad de Jaén.



- 14. Hang, S. (2022). A comprehensive survey of Chinese history: event, culture and figure. *International Journal of Research Publication and Reviews* 3(1):509-512.
- 15. Henning, S. (2006). La nueva ola china de estudiosos de las artes marciales. *RAMA* 3(8):9-21.
- 16. Jaquet, D. (2020). Qi Jiguang. *Martial Arts Studies* 9(-):86-92.
- 17. Jiguang, Q. (2020). The Mandarin Duck formation. *Chinese Martial Arts, History.* https://gwongzaukungfu.com/en/qi-jiguang-the-mandarin-duck-formation/
- 18. Jiménez, J. (2014). Los intentos de los franciscanos para establecerse en China, siglos XIII-XVII. *Sémata* 26(-):425-446.
- 19. Junren, Y. (2023). Qi Jiguang, un général sous la dynastie Ming. *Vision Times, Chine Ancienne*. https://www.visiontimes.fr/chine-ancienne/histoire/qi-jiguang-general-sous-dynastie-ming-invente-cryptographie-indechiffrable-pour-non-sinophones
- 20. Kit, W. (2007). Kung-fu Shaolín. Badalona: Paidotribo.
- 21. Laichen, S. (2021). Transferencias de tecnología militar desde la China Ming y la emergencia del norte de Indochina (c. 1390-1527). *RUHM* 10(21): 306-335.
- 22. Lopatecki, A. (2021). Volley fire in Europe in the mid-16th century. *Commentarii* 2(30):3-18.
- 23. López, A. (2012). Introducción a la historia de los deportes en la China antigua. *Materiales para la Historia del Deporte* 10(-):105-116.
- 24. Lorge, P. (2005). War, politics and society in early modern China, 900-1795. New York: Routledge. pp. 111-112, 127-128.
- 25. Mamigonian, A. (2008). As bases naturais e sociais da civilização chinesa. Em. Mamigonian, A., Bastos, J. (Orgs.). *Geografia econômica* (pp. 41-66). Florianópolis: UFSC.
- 26. Marques Junior, N. (2021). Periodização da antiguidade: o treino dos gladiadores. *Revista Edu-fisica.com: Ciencias Aplicadas al Deporte* 13(28):139-146.
- 27. Marques Junior, N. (2022). Periodização para o esporte contemporâneo. *Revista de Investigación Cuerpo, Cultura y Movimiento* 12(2):1-22.
- 28. Marques Junior, N. (2023). Carga de treino do microciclo da periodização esportiva. *Revista de Investigación Cuerpo, Cultura y Movimiento* 13(1):1-32.
- 29. Marques Junior, N. (2023b). Lev Pavilovch Matveev: a contribuição da carga de treino para a periodização esportiva. *Revista Olimpia* 20(3):154-170.
- 30. Martín, P. (2022). Introducción de la actividad físico-deportiva occidental en China. 1840-1924. *Materiales para la Historia del Deporte* (23):40-51.
- 31. Mroz, D. (2008). Technique in exile: the changing perception of taijiquan, from Ming dynasty military exercise to twentieth-century actor training protocol. *Studies in Theatre and Performance* 28(2):127-145.



- 32. Matveev, L. (1991). *Fundamentos do treino desportivo*. 2ª ed. Lisboa: Horizonte.
- 33. Papelitky, E. (2017). Naval warfare of the Ming Dynasty. In. O'Sullivan, R., Marini, C., Binnberg, J. (Eds.). *Archaeological approaches to breaking boundaries: interaction, integration, and division* (pp. 129-136). London: Oxford.
- 34. Papelitky, E. (2019). Weapons used aboard Ming Chinese ships. *China and Asia* 1(2):192-224.
- 35. Platonov, V. (2004). *Teoria geral do treinamento desportivo olímpico*. Porto Alegre: Artmed.
- 36. Robinson, D. (2017). Why military institutions matter for Ming history. *Journal of Chinese History* 1(-):297-327.
- 37. Tao, S. (2017). The influence of Ming Dynasty martial art on the development of today's society. *Advances in Social Science, Education and Humanities Research* 86(-):104-107.
- 38. Teigens, V. (2020). *Armas de fogo: do início ao controle de armas.* s.l.: Cambridge Stanford Books.
- 39. Theeboom, M., Knop, P. (1997). An analysis of the development of wushu. *International Review for the Sociology of Sport* 32(3):267-282.
- 40. Trevisan, S. (1995). El ejército de terracota del emperador Qin Shihuang. *Revista Museo* -(6):65-69.
- 41. Voronov, I. (2007). Method of hand-to-hand combat training by Chinese general Qi Jiguang (XVI century). *Journal of Martial Arts Anthropology* 7(-):44-48.
- 42. Wetzler, S. (2016). Your kung fu is very good, master fiore! Asian and Europe fight books in comparison. *Acta Periodica Duellatorum* 4(2):47-67.
- 43. Zakharov, A. (1992). *Ciência do treinamento desportivo*. Rio de Janeiro: Grupo Palestra Sport.
- 44. Zhan, M. (2015). *Great Ming military*. https://greatmingmilitary.blogspot.com/ 2015/11/mandarin-duck-formation-p5.html