



National Library  
of Canada

Bibliothèque nationale  
du Canada

Canadian Theses Service

Service des thèses canadiennes

Ottawa, Canada  
K1A 0N4

## NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print, especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

## AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, tests publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

THE UNIVERSITY OF ALBERTA

A COMPARATIVE ANALYSIS OF ANCIENT  
GREEK AND CHINESE SPORT

BY  
HAI REN

A THESIS  
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN  
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF PHYSICAL EDUCATION  
AND SPORT STUDIES

EDMONTON, ALBERTA

FALL 1988

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-45479-2

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: HAI REN

TITLE OF THESIS: A COMPARATIVE ANALYSIS  
OF ANCIENT GREEK AND CHINESE SPORT

DEGREE: DOCTOR OF PHILOSOPHY

YEAR THIS DEGREE GRANTED: 1988

Permission is hereby granted to THE UNIVERSITY OF  
ALBERTA LIBRARY to reproduce single copies of this thesis and  
to lend or sell such copies for private, scholarly or  
scientific research purpose only.

The author reserves other publication rights, and  
neither the thesis nor extensive extracts from it may be  
printed or otherwise reproduced without the author's written  
permission.

*Ren Hai*

.....  
(Student's signature)

*Beijing Institute of Physical Education*

.....  
(Student's permanent address)

*Beijing, China*  
.....

Date: *May 3, 1988*

THE UNIVERSITY OF ALBERTA  
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled A COMPARATIVE ANALYSIS OF ANCIENT GREEK AND CHINESE SPORT submitted by HAI REN in partial fulfilment of the requirements for the degree of Doctor of Philosophy in the Department of Physical Education and Sport Studies.

*Gerald Resimant*  
.....  
Supervisor

*R. H. [unclear]*  
.....

*Arthur K. Davis*  
.....

*H. A. [unclear]*  
.....

*Brian T. [unclear]*  
.....

*[unclear]*  
.....  
External Examiner

Date: *May 3, 1988*  
.....

## ABSTRACT

This study examines the significance of sport in two major ancient civilizations by using an historical and cross-cultural analysis. The comparison is made at two levels: sports themselves and the social contexts in which sports existed.

There were evident differences between ancient Greek and ancient Chinese sport in the following aspects:

a. In an organizational dimension, ancient Greek sports were more centralized and more standardized in their forms; ancient Chinese sports were mainly decentralized and less standardization.

b. With respect to the nature of sport, ancient Greek sports were strongly competitive; ancient Chinese sports were more non-competitive.

c. In terms of a focus on physical exercises, the ancient Greeks paid much more attention to the external muscular development, while the ancient Chinese regarded the internal body functions as more important.

d. With regard to the pattern of physical movements, ancient Chinese sport demonstrated a strong bionic character, while its Greek counterpart did not do so.

The differences between sports in the two ancient civilizations were the result of the interaction of various social factors. It was the difference between these major social factors of the two ancient civilizations that formed the final reasons for the contrasts between their sports.

## ACKNOWLEDGEMENTS

I would like to express my gratitude to the members of the advisory committee who were of great assistance throughout the preparation of this dissertation. Dr. G. Redmond, my advisor, was a constant source of encouragement, counsel and positive guidance. I gratefully acknowledge my debt to his labors. Dr. A. K. Davis generously provided hours of his time for discussion and guidance which were great value in this study. Dr. R. G. Glassford, Dr. H. A. Scott and Dr. B. L. Evans made invaluable suggestions and gave unstintingly of their time. I owe them a great debt. Special thanks are due to Dr. B. Pendleton who kindly agreed to act as the external examiner and provided expert advices.

I would also like to extend my appreciation to my friends D. Zakus and Wang Jinghua for their kindest help.

Finally, to my wife, Yuan Yu whose great assistance and understanding over the years, I dedicated this dissertation.

## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION .....	1
PART I: DESCRIPTION OF SPORT IN ANCIENT GREECE AND ANCIENT CHINA	
II. ANCIENT GREEK SPORT .....	19
III. ANCIENT CHINESE SPORT .....	68
IV. SUMMARY OF PART I .....	118
PART II: COMPARATIVE ANALYSES OF THE SOCIAL CONTEXT OF SPORT IN ANCIENT GREECE AND ANCIENT CHINA	
V. ORGANIZATIONAL DIFFERENCES OF SPORTS IN ANCIENT GREECE AND ANCIENT CHINA .....	127
VI. COMPETITION VERSUS NON-COMPETITION IN THE TWO ANCIENT CIVILIZATIONS .....	183
VII. INTERNAL FOCUS VERSUS EXTERNAL ATTENTION .....	219
VIII. BIONICS .....	249
IX. SUMMARY .....	268
Bibliography .....	307

# LIST OF TABLES

TABLE	DESCRIPTION	PAGE
I	THE REGIMEN ACTIVITIES AND THEIR EFFECTS	277
II	COLONIZATION OF GREECE IN THE 8TH- 7TH CENTURIES B.C.	278
III	THE CHRONOLOGICAL LIST OF THE OLYMPIC EVENTS	279
IV	THE SOCIAL RANKS IN ANCIENT CHINA	280
V	FIVE ELEMENTS AND THE RESPONDING CATEGORIES	281
VI	RELATIONSHIP OF FIVE ELEMENTS AND THE NETWORK OF <i>QI</i>	282
VII	RELATIONSHIPS OF SPORT AND SOCIAL FACTORS	283

# LIST OF FIGURES

FIGURE		PAGE
1.	GREEK SWIMMING	284
2.	GREEK DIVING	285
	VICTORY CROWNING IN A BOAT RACE	286
	BOAT RACE	286
3.	"FIELD HOCKEY"	287
6.	GREEK BALL PLAY	288
7.	A GIRL RUNNER	289
8.	DAO YIN MOVEMENTS	290
9.	CHINESE CHARIOTEERING	291
10.	INSTRUMENTS OF WUSHU	292
11.	INSTRUMENTS OF WUSHU	293
12.	THE CUJU WITH GOALS IN MILITARY TRAINING	294
13.	THE CUJU WITH GOALS IN THE HAN PALACE	294
14.	CHINESE SWIMMING AND BOATING	295
15.	JIAO-DI GAMES	295
16.	CHINESE WRESTLING	296
17.	THE MINERAL RESOURCES OF MODERN GREECE	297
18.	GREEK SETTLEMENTS TO 700 B.C.	298
19.	GREEK SETTLEMENTS TO 600 B.C.	298
20.	GREEK SETTLEMENTS TO 400 B.C.	298
21.	DISTRIBUTION OF POPULATION IN THE HAN CHINA	299
22.	THE CONSTITUTION OF SOLON	300
23.	THE CONSTITUTION OF CLEISTHENES	301

24.	THE SPARTAN CONSTITUTION	302
25.	THE STRUCTURE OF THE HIPPOCRATIC MEDICINE THEORY	303
26.	INTERRELATIONSHIP OF FIVE ELEMENTS	304
27.	THE NETWORK OF <i>QI</i>	305
28.	INTERRELATIONSHIP OF THE FACTORS WITHIN SPORT	306

## CHAPTER I

### INTRODUCTION

With the rapid development of human civilization today's world has already become a "global village" in which people from different places have come to be connected closely through numerous relationships of both a direct and indirect nature. Air transportation has placed all countries in the world within 24 hours of each other. The daily life of people is gradually becoming internationalized so that the residents of this "global village" are not only sharing the achievements made by their neighbors in scientific technology and the arts, and not only being linked for economic and political reasons, but they are also facing many of the same problems which will not be solved without cooperation. It is more urgent at present than at any previous time for people across the world to understand one another. As Bereday said over twenty years ago, "for every nation, knowing about other nations is now not only a matter of curiosity but of necessity".<sup>1</sup> This necessity is not only displayed in the political, economic or diplomatic affairs, but also in our social life.

Since sport is one of the best mirrors reflecting the social life through which can be observed "the dominant values of a society",<sup>2</sup> or the "norms, sanctions, patterned

interactions, social positions, roles, physical, social and psychological characteristics",<sup>3</sup> it has attracted more attention from many scholars in social-cultural areas during the past decades. Sport has become international in its scope and has penetrated the daily lives of people in its influence. Scholars soon found that it was not enough to study the issues of sport in their own countries, it was necessary to look at those of other countries in order "to know thyself, compare thyself to others".<sup>4</sup> Comparative physical education and sport appeared as a new area of study based, in part, on this philosophy. It is defined as: "a comparative analysis of dominant characteristics and developments in physical education and sport in two or more societies, cultures, or areas for purposes of investigating their similarities and differences".<sup>5</sup>

Being one of the oldest social phenomena, sport has existed since ancient times and its manifold heritages have shaped the contemporary sports in each country in many ways. It is impossible to comprehend the sports of other nations completely without examining their historical development.

Thus comparative physical education and sport is intimately interwoven with another area of study, namely, the history of sport. "Comparative physical education and sport may be said to be a subdiscipline of physical education in the same way that the history of sport may be considered a subdiscipline of physical education. In fact, these two subdisciplines have much in common."<sup>6</sup>

It is reasonable to infer that these two subdisciplines complement each other, and provide us with the possibility of analyzing sport issues through both the continuum of time and the continuum of space. Since the history of sport is a relatively new field and comparative physical education and sport is still in its "embryonic stage of development,"<sup>7</sup> comparative scholars have mainly focused on the present time, while the historians of sport have concentrated upon the historical issues in those countries which have more similarities in their social aspects. Historical comparative studies of nations with totally different cultural background have remained a barren area. This has resulted many puzzles, misunderstandings, and even biases. Some research should be conducted in this area by using systematic analysis and based on solid facts in order to provide a deeper international understanding of the nature and place of sport in cultures.

Motivated by the above reason, this study is intended to make a comparative analysis of the sports of Greece and China during ancient times. The reasons for choosing these two areas are as follows.

Traditionally the cultures of human beings are viewed as two basic categories, namely the western and the eastern spheres. The former originated in what is now known as Europe and the latter in Asia. This classification is also applied to civilizations, religions, architecture and so on. The more people share the same cultural background, the easier it is for them to obtain insights into each other's culture; for

example, there is no serious problem for Chinese and Japanese to know each other. But the situation is different for people who belong to markedly different cultures. The difference in their cultural background means that they face more difficulties in forming correct impressions of each other. This gap of cultural background is not easily filled. The reasons for this not only relate to the linguistic obstacle, the variety of political and economic systems and the diversity of customs, but also to the lack of knowledge of the historical roots of that culture. In terms of sport we can find the same situation. For instance, to many Easterners aerobic dance (which is one of the current sports in the western countries) seems totally strange; while the Westerners often feel Yoga and Qigong, the popular eastern physical exercises, to be an unbelievable mystery. For the purpose of comparing ancient sports in these two main cultures, there are no better samples to be selected than Greece and China.

Greece is widely accepted as the place of the origin of the western civilization and the birthplace of western culture. Without the basis laid by Grecian culture and the Roman Empire there might not be modern Europe as we know it today.<sup>8</sup> "We see in Greece the development of the world's first democracy and the foundation for western tradition."<sup>9</sup> Indeed the great creative spirit of the ancient Greeks has made tremendous contributions to the western world in many important aspects such as philosophy, politics, economy,

arts, medicine, mathematics and so on. The names of Homer, Solon, Pericles, Herodotus, Myron, Socrates, Plato and Aristotle, have been recited from generation to generation. In terms of physical education and sport, the ancient Greeks contributed a great deal, at least as much as they did in the other areas. Their Olympic Festival, which had continued for over a thousand years, inspired several modern sport festivals during the nineteenth century and finally led to the establishment of the modern Olympic movement which now involves most of the countries in the world.<sup>10</sup> The sport events in which they participated are included in many festivals in today's stadiums; their philosophic ideas about sport still have a strong influence on physical educators at the present time. It is apparent that the ancient Greeks bequeathed an important legacy to modern sport. In a sense, Greek sport is the origin of western sport.

China, as a place of the origins of eastern culture, experienced a history of more than five thousand years and enjoyed a similar brilliant ancient civilization. Along a major river in eastern Asia, the Yellow River, a high ancient culture was formed based on the intelligence and diligence of the Chinese people. For a long time China was one of the most advanced countries in the world. Like the Greeks, the Chinese people created great achievements in many fields and left an abundant heritage for later generations; their cultural influence spread to many countries. But in contrast to the Greeks', the Chinese culture was deeply rooted in many

eastern countries. Sport emerged and developed in company with developments in warfare, religion, education and social production and finally there was formed special physical exercises which have obvious eastern characteristics, which have left a profound influence in many eastern nations.

Since Greece and China are the typical nations which could be viewed as representatives of western and eastern cultures in the ancient times, a comparison of these two, in a sense, also implies the comparison of the two main cultural circles. The more typical, the more universal, and so this study may help physical educators in western or eastern worlds to know each other better.

Although cross-cultural and historical studies have not attracted too much attention of sport historians, many studies have already been done on the sports of the two ancient civilizations respectively, through the efforts of scholars in western countries and in China. These have provided a cross-cultural study with an appropriate basis and abundant sources.

Sport, especially athletics and equestrian activities, had drawn the attention of several ancient Greek writers. In Homer's *Iliad* and *Odyssey* we can obtain its original forms in Mycenaean period and in Homer's own times (c. 10-8 century B.C.). With the rapid development of Greek civilization after 7th century B.C. literature about sport more frequently appeared in the works of many ancient writers such as Pindar, Herodotus, Thucydides, Hippocrates and so on. Hippocrates'

works were more valuable for they gave certain theoretical explanations for Greek sport. Other ancient writers in the pan-Hellenic period also left many important records on the subject, especially the works of Xenophon, Plato, and Aristotle.

Another ancient source which cannot be neglected is the work of those writers in Roman times. Due to the fact that the period in which they wrote was not far in time from the Greeks' and their investigations were based on personal experiences on the subject, their statements have been useful to the modern sport historians. The works of Strabo, Pausanias, Plutarch, Lucian and Philostratus are specially useful. Fortunately most of these literary sources have been translated into English and are available to this study.

Research on ancient Greek sport has made significant progress in the modern times. Since the first systematic description of ancient Greek sport was undertaken by John Krouse in 1840,<sup>11</sup> it has subsequently attracted the attention of other sport historians. The revival of the Olympic Games in 1896 gave a tremendous impulse to the study of this area. Besides the scholars in Germany and France, E. N. Gardiner and H. A. Harris of England contributed substantially to the field.<sup>12</sup> Among the major works on ancient Greek sport *The Olympic Games*, a collective work done by several distinguished Greek specialists, deserves special attention for it gives an explicit picture on the subject.<sup>13</sup> Owing to the efforts of R.S. Robinson (1955)<sup>14</sup> and

S.C. Miller<sup>15</sup> (1979) important primary sources have been concentrated and made more convenient for researchers. Although several problems are still in debate, such as the relationship between Greek sport and that of the Minoans, Mycenaeans, and Phoenicians;<sup>16</sup> the origin of Olympic games;<sup>17</sup> the meaning of many local games;<sup>18</sup> the exact ways in which sport events were conducted etc.,<sup>19</sup> the main characteristics of Greek sport are quite evident.

The earliest literary records related to ancient Chinese sport can be traced to *Shi Jing* (Book of Songs) of the Zhou Dynasty, the first collection of poetry in China. In general, ancient Chinese writers did not pay as much attention as their Greek counterparts to sport activities. As consequence ancient sources of sport-related Chinese literature were more scattered than sources which emanated from the Greeks. Basically, records of ancient Chinese sport are in following categories of works:

1. Confucian works: Confucianism was a major philosophical school and since the middle of the Han Dynasty it became the dominant ideology. Although physical activities were not a favored subject, they remain in some Confucians works such as *Lun Yu* (Analects of Confucius).

2. Taoist works: the principle of Taoism played a great role in Chinese traditional sports and these Taoist works are always the most important reference for studying Chinese sport, especially the works such as *Lao Zi*, *Zhuang Zi* and the

Neo-Taoist works such as *Lu Shi Chun Qiu* (Lu's Miscellany) and *Huai Nan Zi*.

3. Medical works: the first medical works, *Nei Jing* (Internal Medicine), written during the Warring States period to the early Han Dynasty provided the theoretical base for physical exercises.

4. Historian's works: some records can also be found in historical works, especially *Shi Ji* (Historical Records) of Sima Qian and *Han Shu* (History of the Western Han Dynasty) of Pan Gu.

As an academic pursuit, sport history in China was conducted much later than in Greek sport. Guo Xifeng was a pioneer in this area with his publication: *The History of Chinese Sport* in 1919.<sup>20</sup> In this book he eventually went so far as to try and compare Chinese sport with sports in western countries. He pointed out the differences in breathing and in leg movements between Chinese sport and those of western societies. His comparison was incomplete but it was a start. Since then this important field has not received much attention. During the 1950's and 1960's several historically important materials on sport were collected and published.<sup>21</sup> In recent years this field has rapidly developed partly because sport history was offered as a course subject in physical education institutes and departments at the university level, and partly because traditional physical exercises now obtained the interest of more people. As a result, more scholars have entered this

field. Consequently, the history of Chinese sport has appeared in its basic shape. With this as a basis, further comparative research can now be done.

Unlike other research, "comparative research can generate new research problems and new perspectives on sets of relationships within domestic settings that we come to take for granted."<sup>22</sup> As a matter of fact, when we try to observe the ancient sports of the two civilizations simultaneously, several questions appear, such as: Why did a similar international festival such as the Olympic Games not take place in ancient China, a centralized country, instead of in the decentralized Greek world? Why did Greek sport have such a strong competitive nature while Chinese sport was more apt to be less or non-competitive? Why did the Greeks emphasize body-building, while the Chinese paid more attention to the internal body? Why did many physical exercises in China come from the imitation of animals, which was not the case in Greece? All these questions may never arise if we were to confine our field of vision to only one of the two civilizations. The questions generated by comparison can only be answered by comparison.

#### **Purpose of the study**

1. To identify the different characteristics of sports in the two ancient civilizations, Greece and China.
2. To analyze the reasons for these different characteristics by observing several aspects of the social lives of the two ancient civilizations, e.g. physical

surroundings, politics, economy, religion, philosophy, medical theory, warfare.

### Limitation

Due to the lack of ability in Greek language of the researcher, the Greek sources used in the study are mainly from English translations, which limits both the scope of sources and the determination of the validity of the translation, although the researcher has paid great attention to the authority of English translations.

### Delimitation

#### 1. *The time periods for comparison:*

Greece: the fifth century B.C. will be mainly focused on since this period of time was the "golden age" of ancient Greece and all aspects of Greek world were at their zenith. It was also the period in which Greek sport had fully developed and the period from which the modern sport probably obtained most of its heritage.

China: the main focus will be on the time period around Han Dynasty (about 206 B.C.-220 A.D.). Within this period the main forms and characteristics of ancient Chinese sport were formed.

#### 2. *The scope of the study*

This study will be restricted in the following aspects while comparing the sports in the two civilizations:

1. Organizational aspect: the focus will be mainly on the issues of centralization and standardization of sport.

ii. Nature of sport: an examination will be conducted on the competitive and non-competitive aspects of sport.

iii. Focus of the physical training.

iv. Forms of physical movements in sport or physical exercises.

### 3. *Definition of sport*

This study is intended to define sport as a broad cultural form consisting of various types of physical activities relating to health, physical recreation and competition, such as physical play, games, athletics, exercises, dances and so on. This definition is generated mainly based on two considerations:

i. To our knowledge the term, sport did not exist in ancient period under examination, and the content which should be included in the term of "sport" is different from period to period. In ancient times the physical activities which could be put under the term of "sport" were not completely separated from other activities such as warfare, religious rite, dance, recreation. Consequently, sport in ancient times had much broader meaning which cannot be contained by the definition of sport which is in predominant use at the present time.

ii. Sport also varies from nation to nation according to its concrete social context. The concept of sport tends to have different connotations in different societies. For instance, Greek athletics was unknown in ancient China, while

Chinese *Dao Yin* was absent in ancient Greek world. A common method for solving this problem of cultural specificity is to raise the concept of sport to a higher level of abstraction.<sup>23</sup>

### Methodology

Appropriate methodology is always a vital factor to studies in the social sciences as it is in the case of the natural sciences. In historical research historians are always consciously or unconsciously guided by certain theory in each step of their research procedure. No matter what theoretical model is being utilized there is only one final criterion, the validity of historical facts, which result from the research. The power of historical materialism is that it insistently requires that the explanation of any historical phenomenon must be carried out by looking at the social-economic environment in which the historical phenomenon occurred; by analyzing the interrelationship between the economic basis and superstructure of the society. It combines theory and method into one. This study will use historical materialism as the general tool to guide each step of the research process.

The principle of historical materialism was expressed in Marx's *Contribution to the Critique of Political Economy*:

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and

to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.... The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure. In studying such transformations it is always necessary to distinguish between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, artistic or philosophic in short, ideological forms in which men become conscious of this conflict and fight it out. Just as one does not judge an individual by what he thinks about himself, so one cannot judge such a period of transformation by its consciousness, but, on the contrary, this consciousness must be explained from the contradictions of material life, from the conflict existing between the social forces of production and the relations of production.<sup>24</sup>

Based on this theory, the sporting phenomenon, as part of social superstructure, must be studied by analyzing its relationship with the particular economic basis. It is the economic structure of a society which forms the fundamental reasons for any social phenomenon, including sport. This study will pay close attention to this vital aspect.

Moreover, the emphasis on the economic aspect in historical materialism is by no means to imply that the effects of superstructure should be ignored, as it has often been incorrectly described as "the economic determinism." By contrast, historical materialism fully recognizes the great "reaction" of the superstructure. As Engels pointed out:

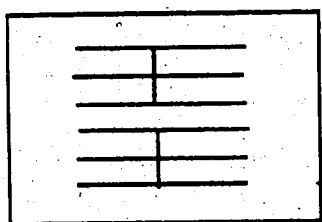
According to the materialist conception of history, the ultimately determining element in history is the production and reproduction of real life. More than this neither Marx nor I have ever asserted. Hence if somebody twists this into saying that the economic element is the only determining one, he transforms that proposition into a meaningless abstract, senseless phrase.<sup>25</sup>

This study will also try to analyze the sport phenomenon through various aspects of the superstructure while making the comparison of the two ancient civilizations.

The model summarized by Bereday will be employed as the basic procedure in this study.<sup>26</sup> It generally includes the following four stages: 1. Description, 2. Interpretation, 3. Juxtaposition and 4. Comparison. Bereday proposed an explicit and logical way to conduct a comparative research. But one short-coming of his model is that it is not involved in actual comparison until the third stage, which may cause unnecessary deviation in the first two stages and the overlap of the interpretation and comparison stages. To avoid them this study makes some changes within the model as follows:

#### 1. *Description and comparison*

Sport data only



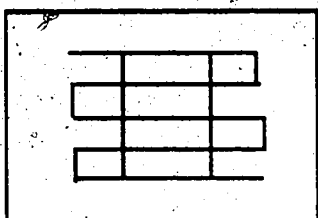
Greece  
Sport activities

China

At the end of this stage several differences in the sports of the two ancient civilizations should be established.

#### 2. *Comparative Interpretation*

Comparison of Social backgrounds



Greece

Historical  
Economical  
Political  
Philosophical  
Social  
....

China

In this stage the main social contexts of sport in the two civilizations are compared, and an interpretation for the differences identified in stage 1 is given based on the comparison.

Therefore this study will conduct a comparison on two levels, at the level of sport and the level of the social contexts.

#### Chapter organization

Chapter 1 Introduction

*Part I: Description of sport in ancient Greece and ancient China*

Chapter 2 Ancient Greek sport

Chapter 3 Ancient Chinese sport

Chapter 4 Summary of Part I

*Part II: Comparative analyses of the social context of sport in ancient Greece and ancient China*

Chapter 5 Organizational differences of sports in ancient Greece and ancient China

Chapter 6 Competition versus non-competition in the two ancient civilizations

Chapter 7 Internal focus versus external attention

Chapter 8 Bionics

Chapter 9 Summary

## FOOTNOTES - - CHAPTER I

<sup>1</sup>G. Z. F. Bereday, *Comparative Method in Education* (New York: Holt, Rinehart and Winston, 1964), p. 6.

<sup>2</sup>W. M. Leonard II, *A Sociological Perspective of Sport* (Illinois State University, 1980), p. 65.

<sup>3</sup>J. W. Loy, B. D. McPherson, and G. Keyon, *Sport and Social Systems* (Addison-Wesley, 1978), p. 29.

<sup>4</sup>B. L. Bennett, M. L. Howell, and U. Simri, *Comparative Physical Education and Sport*, 2nd ed, (Philadelphia: Lea & Febiger, 1983), p. 8.

<sup>5</sup>Ibid., p. 3.

<sup>6</sup>Ibid., p. 5.

<sup>7</sup>Ibid., p. 8.

<sup>8</sup>F. Engels, *Anti-Duhring*, 3rd ed. (Moscow: Foreign Languages, 1962), p. 249.

<sup>9</sup>M. Howell, in *History of Physical Education and Sport*, ed. E. A. Zeigler (Englewood Cliffs, N.J.: Prentice-Hall, 1979), p. 30.

<sup>10</sup>G. Redmond, "Toward Modern Revival of the Olympic Games: the Various 'Pseudo-Olympics' of the Nineteenth Century", in *The Olympic Games in Transition*, eds. J. O Segrave and D. Chu (Human Kinetics, 1988), pp. 71-87.

<sup>11</sup>T. F. Scanlon, *Greek and Roman Athletics A Bibliography* (Chicago: Rress, 1984), p. 16.

<sup>12</sup>E. N. Gardiner systematically described the ancient Greek sport in his several writings, especially *Greek Athletic Sport and Festivals* (London: MacMillan, 1910) and *Athletics of the Ancient World* (Oxford: Clarendon, Press, 1930); H. A. Harris has contributed great deal to the historical research of Greek sport, especially his two books *Greek Athletes and Athletics* (London: Hutchinson, 1964) and *Sport in Greece and Rome* (London: Thames & Hudson, 1972) are very valuable on this subject.

<sup>13</sup>Iris Douskou ed. *The Olympic Games* (Ekdotike Athenon S. A, 1976).

<sup>14</sup>Richard Sargent Robinson, *Sources for the History of Greek Athletics* (Cincinnati, 1955).

<sup>15</sup>S. C. Miller, *ARETE Ancient Writers, Papyri, and Inscriptions on the History and Ideals of Greek Athletics and Games* (Chicago: Ares, 1979).

<sup>16</sup>T. S. Scanlon, *Greek and Roman Athletics A Bibliography* (Chicago: Ares, 1984), p. 18.

<sup>17</sup>*Ibid.*, p. 20.

<sup>18</sup>*Ibid.*, p. 22.

<sup>19</sup>*Ibid.*, pp. 23-25.

<sup>20</sup>Guo Xifeng, *The History of Chinese Sport* (reprint ed. Taiwan: Commerce Press, 1966).

<sup>21</sup>During 1950's and 1960's a series of collection of China's sport history were published by the People's Sport Publishing House in Beijing.

<sup>22</sup>A. D. Grimshaw, "Comparative Sociology: In What Ways Different From Other Sociologies?" in *Comparative Social Research: Methodological Problems and Strategies*, eds. M. Armer and A. D. Grimshaw, (New York: John Wiley & Sons, 1973), p. 21.

<sup>23</sup>M. Armer, "Methodological Problems and Possibilities in Comparative Research," in *Comparative Social Research: Methodological Problems and Strategies*, eds. M. Armer and A. D. Grimshaw, p. 53.

<sup>24</sup>K. Marx, *A Contribution to the Critique of Political Economy*, cited in *The fundamentals of Marxist-Leninist Philosophy*, ed. F.V. Konstantinov (Moscow: Progress, 1982), p. 201.

<sup>25</sup>F. Engels to Z. Bloch September 21, 1890 in *Marx and Engels Selected Works*, vol. 2 (Moscow: Progress, 1977).

<sup>26</sup>Bereday, *Comparative Method of Education*, pp. 7-28.

## CHAPTER II

### ANCIENT GREEK SPORT

Greek sport tradition can be traced back to the Minoan period (c. 2300-c. 1400 B.C.) when there existed various physical activities such as tumbling, bull-leaping, boxing, and wrestling.<sup>1</sup> During the Mycenaean time (c. 1400-c.1100 B.C) some Minoan physical activities such as tumbling and bull leaping declined, but boxing and wrestling became popular sports. In addition, foot race and chariot racing made their appearance during this period.<sup>2</sup> Although this early sport tradition seemed to decline once with the collapse of the Mycenaean civilization resulted from the so-called "Dorian Invasion" (c. 1100-800 B.C.), it rapidly reappeared accompanied by the development of Greek city-state civilization during the Archaic period (c.800-500 B.C) and reached its peak during the fifth and fourth century B.C.. The following physical activities formed an important part of Greek city-state civilization.

#### I. Aquatics

##### 1. Swimming

Despite the fact that Greece was a marine area and aquatic activities such as swimming, diving and boating were a necessary feature of Greek daily life, evidence about these activities which treated them as sport, is very scanty. It is

known that most Greeks knew how to swim during the Homeric epoch. There are several statements revealing that the Mycenaean Greeks were familiar with swimming and the hero Odysseus was a skilled swimmer himself. As a very useful technique, swimming had great value in warfare. This was naturally noticed by the ancient Greek historians and writers.

Herodotus stated that the disparity in casualties at the battle of Salamis was partly due to the fact that "most of the Greeks could swim and those who lost their ships, provided they were not killed in the actual fighting, swam over to Salamis. Most of the enemy, on the other hand, being unable to swim, were drowned."<sup>3</sup> Thucydides states that during the Peloponnesian war, when the Athenians were besieging the Spartans on a small island in the bay of Pylos, the Spartans obtained their provisions by Helot divers swimming under water from the harbor, dragging behind them, by a cord, skins containing poppyseed mixed with honey and pounded linseed.<sup>4</sup>

Swimming was also related to athletics. At the site of Olympia there was a swimming bath (24m x 16m x 1.60m) to the south-west of the palaestra. It was probably built in the fifth century B.C..<sup>5</sup> Swimming was even used as a means of athletic training. For example, Tisander, a celebrated boxer of Naxos, used swimming as a favorite exercise to keep himself fit.<sup>6</sup>

In terms of swimming style, a vase painting (c. 500 B.C.) signed by Andocides, indicates that the swimmer used a form similar to the modern front crawl or side-stroke. However the leg action seems to be an action in which both legs are used together, similar to the butterfly stroke, as compared to the alternative kicking technique used by contemporary swimmers in our modern manner; or they were simply just dragged behind motionlessly (See Figure 1).

## 2. Diving

Diving was an important means of earning a living, especially for the residents on many Greek islands. Sponges were an important commodity in the Greek world and many Greeks in the Aegean islands earned their living by diving to obtain them. Their diving skills allowed them to go to such a depth that their eardrums were often injured.<sup>7</sup> It was also recorded that in one of the battles described in the *Iliad*, Patroclus threw a stone at the face of Hector's driver, Cebriones, which caused his fatal fall from the chariot. Patroclus jeered at him:

Ha! Quite an acrobat, I see, judging by that graceful dive! The man who takes so neat a header from a chariot on land could dive for oysters from a ship at sea in any weather and fetch up plenty for a feast. I did not know that the Trojans had such divers.<sup>8</sup>

Clearly, the Greeks knew the skill of diving for several centuries. Additional evidence was found in a vase painting which depicted a Greek diving from a rock (See Figure 2).

As well as the commercial value of diving some records indicated its military utility. Pausanias tells us that:

Scyllis of Scione, who, tradition says, dived into the very deepest parts of every sea. He also taught his daughter Hydna to dive. When the fleet of Xerxes was attacked by a violent storm off Mount Pelion, father and daughter completed its destruction by dragging away under the sea the anchors and any other security the triremes had.<sup>9</sup>

In the Peloponnesian War the Syracusans tried to safeguard their fleet in a harbor by driving stakes into the sea-bed in front of their old dockyards. But the Athenians paid divers to go down and saw them through.<sup>10</sup>

Modern historians wonder why the two physical activities did not take any form of sport or recreation,<sup>11</sup> and have tried to find out the reasons. Gardiner suggests that it was perhaps because swimming and diving were so universal, so natural to the Greeks, that we never learned of any instruction in these exercises. Perhaps it is for the same reason that competitions in swimming were rare: the only competition we learned of was held at Hermione.<sup>12</sup> It also seems quite strange to us that Greeks took great precaution when they swam, which may be seen from a statement given later by a Greek physician Antyllus (A.D. 2nd century ).

If you must bathe, grease yourself with olive oil and warm yourself by brisk rubbing, and then plunge suddenly into the water.<sup>13</sup>

### 3. Boat races

The other aquatic sports such as rowing and sailing, did not receive as much attention in Greek literature as did swimming and diving. Likely because ships played important roles in their economic and military spheres, rowing races were found to exist among the ancient Greeks. We know that

the Phaeacians in Homer's *Odyssey* declared, indirectly, that ships were among their sports, as the Phaeacian King said "Though our boxing and wrestling are not beyond criticism, we can run fast and we are first rate seamen."<sup>14</sup> Although Dio Chrysostom described the origin of the Isthmian games and said that their first celebration included a ship race, won by the Argo, the statement has been doubted by modern historians because "late Greek writers tried to give a spurious antiquity to boat races, as to many other things."<sup>15</sup> The earliest certain testimony for boat-races was from the 5th century B.C..<sup>16</sup> Boat races were also part of the Panathenaic Festivals, which took place near the harbor of Piraeus and the tomb of Themistocles.<sup>17</sup>

Thucydides also made a statement about a boat race held within the Athenian fleet during the Peloponnesian war: "first sailing out in column, and then racing each other as far as Aegina."<sup>18</sup> Herodotus reported that during the Persian wars a rowing match was held at the time of a Xerxes' review of his fleet and army at Abydos. It was reported that the race was won by the Phoenicians of Sidon.<sup>19</sup>

A sculptured tablet depicting a victory won in the boat races held at Athens and dated from the later Hellenistic period or the Roman age, may provide some clue about the boat race in classical times. There were two reliefs on it. The top one illustrates a wreath crowning the winner similar in many aspects of such a crowing at an athletic festival (See Figure 3). On the bottom relief can be seen seated a crew of

eight, all apparently naked like athletes in other contests (See figure 4).

## II. Ball Games

Greek ball games can be traced to a very early age. Ball games were mentioned in the *Odyssey* and told of Nausicaa, the daughter of Alcinous, king of Phaeacia, playing a ball with her maids.

When mistress and maids had all enjoyed their food, they threw off their headgear and began playing with a ball.... The princess passed the ball to one of her maids, she missed her and dropped it instead into the deep and eddying current.<sup>20</sup>

On another occasion ball-playing appeared as an after-dinner entertainment given by Alcinous for Odysseus.

After this Alcinous commanded Halios and Laodamas to dance by themselves, since no one could compete with them. Polybius, a skilled craftsman, had made them a beautiful purple ball, which they took in their hands, and one of them, bending right back, would throw it up towards the shadowy clouds, and the other, leaping up from the ground, would catch it deftly in his turn before his feet touched earth again. After showing their skill at this high play, they began tossing the ball quickly to and fro as they moved in their dance on the bountiful earth, while the other youths stood at the ringside beating time, till the air was filled with sound.<sup>21</sup>

Surprisingly, from Homer to the time of Alexander the Great, literature has little to tell us about ball games.<sup>22</sup> It was in the pan-Hellenic period that *Sphairisterion*, the place specially dedicated to the complex of athletic buildings, appeared at Delos and Delphi,<sup>23</sup> and ball games flourished.

Large size balls were probably the inflated bladders of animals, as Galen mentions that there was a traditional song of Greek children about an exhortation to the ball to grow

bigger. The small balls were stuffed with hair or feathers and sometimes larger balls were made in the same manner.

How the ball games were played we do not know. Clear evidence is lacking. From most sources, it is evident that Greek ball games mainly took the form of throwing and catching or variations of them. The reasons for a lacking of kicking type actions within the Greek ball games Harris attributed to the Greek habit of bare feet. It also may be due to the uneven terrain on which throwing and catching would be much easier than kicking. Pollux, an ancient Roman writer (c. A.D. 180), records some forms of children's ball play, which may give us some information about this aspect.

The names of children's ball-games were *episkyros*, *phaininda*, *aporrhaxis*, *ourania*.

*Episkyros* was also called *Ephebike* and commonball. It was usually played with opposing teams of equal number. In the middle a line was drawn with a chip of stone which they called a *skyros*. They set the ball on this line, and each team drew another line behind the opposition. The team which got the ball first threw it over the opposition whose job it was to grab the ball while it was still moving and throw it back the other way. This would continue until one team had pushed the other over the back line.

*Phaininda* got its name either from its inventor, *Phainindos*, or from the word for feinting, since the player fakes a throw to one player, but actually throws to another, and thus deceives the player who expected the ball. This resembles the game with the small ball which is called *harpaston* from the word for snatching away. One might call *phaininda* the game with the soft ball.

*Aporrhaxis* has the form of bouncing the ball vigorously on the ground, and dribbling it again and again with the hand. The number of bounces is counted.

*Ourania* is played with one player bending backward and throwing the ball up into the sky. The others compete in snatching the ball before it falls back to the ground. When they dribbled a ball against a wall, they counted the number of bounces. The loser was called

the donkey and had to do whatever he was told. The winner was called the king and gave the orders.<sup>25</sup>

In 1922 a relief base was discovered which was built into the Themistoclean wall and dated from the fifth century B.C.. It gives us a vivid picture about *Episkyros* and *Ourania*. It also depicts a rare form of ball play in ancient times the *Keretizein*, which was similar to modern field hockey. The picture shows two players holding sticks with hooked ends which were used to play a small ball. Other players from both sides were shown watching and cheering (See Figure 5).

What is surprising to modern historians is "the lack of a serious spirit of contention" in the Greek ball games. As Harris pointed out, in ball games winning and losing seem to have been of minor importance and "victory" and "defeat" did not identify with ball games until the Christian era.<sup>26</sup>

Obviously, ball games mainly functioned as a means of physical recreation. Games were played in the gymnasium or palaestra as an enjoyable alternative to compensate for the rigid athletic training. The recreational nature of ball games made them available to persons of high social rank, too. For example, Alexander the Great had to give up athletics, although he had been a good runner, because his opponents allowed him to win. So he took up non-competitive ball play and built a court, *Sphairisterion*, in which to play.<sup>27</sup> And later some Roman emperors such as Caligula became ball-players as well.<sup>28</sup> Since they were primarily played for amusement, ball games could easily be integrated

into other recreational forms, such as acrobatics (See Figure 6), or dancing. As Harris pointed out, sections in Homer told of dances which were sometimes performed by acrobats and at other times they turned to ball-playing.<sup>29</sup> Ball-playing also could be used in the theater. For example, Sophocles (c. 496-406 B.C.) played the part of Nausicaa in a tragedy. In the scene she played ball with her companions.<sup>30</sup>

While most forms of ball play were recreational in nature, a serious team competition of ball games was played by Spartan youths, as witnessed by Solon in the *Anacharsis* of Lucian, which was written in the second century A.D..<sup>31</sup> But this ball game depicted in Lucian's work is more likely that of Lucian's own day and not that of earlier times.<sup>32</sup>

The lack of competition as mentioned above and the limited popularity of ball games in classical Greece also might be due to the fact that Greek ball games did not originate in Greek culture but were adopted from the Lydians in Asia Minor; or due to the fact that the major treatise on this topic, written by Timocrates, has not been preserved.<sup>33</sup>

### III. Dance

In ancient Greece, dances were closely related to religious ceremonies and entertainment. As Lucian observed, "I forbear to say that not a single ancient mystery cult can be found that is without dancing."<sup>34</sup> Mass dance always played a great part in various festivals. In Greek drama, several types of dance were developed:

*Emmeleia*: a grave, serious type of dance, typically used for tragic themes; it embodied a code of symbolic gestures through which the dancers could tell the entire story of a dramatic work without speaking.

*Kordax*: the characteristic dance of comedy, has been described as obscene and ignoble; it involved suggestive rotations of the body, kicking one's buttocks, slapping one's chest and thighs, and similar movements.

*Sikinnis*: the dance typical of the Greek ~~Satyr~~ plays during the 6th century B.C.. It was lively, vigorous, and disrespectful with much horseplay, and acrobatic movement; often it involved satirical reenactment of mythological themes.<sup>35</sup>

With the development of the civilization, dance started to become an essential element in Greek culture. Lucian, a Greek satirist, remarked that the Greeks valued dancing to such an extent that:

The most noble and greatest personages in every city are the dancers, and so little are they ashamed of it, that they applaud themselves more upon their dexterity in that species of talent, than on their nobility, their posts of honor, and the dignities of forefathers.<sup>36</sup>

So dance was accepted practice for statesmen, generals, philosophers, and other outstanding Greeks of the Periclean Age. Solo dances were performed before audiences of many thousands, on important public occasions, or on return from a military campaign or victory. Sophocles, the Athenian poet, while still young, was chosen to play the lyre and lead the victory dance after the battle of Salamis. Epaminondas of

Thebes, one of the most distinguished of Greek generals and statesmen, played a musical instrument, sang and danced, and did so before audiences in his adult years. Aeschylus and Aristophanes danced in various performances of their own plays, and the Dithyramb, one of the principal dances of the Dionysian festival, was often led by celebrated poets and statesmen.<sup>37</sup>

Plato in *The Laws* stressed the importance of dance in education and regarded dance as a way to know whether or not a person had been correctly educated.<sup>38</sup> Socrates and Aristotle also emphasized the role of dance in shaping the whole man, mentally and physically.<sup>39</sup> However, what is more interesting to us is that dance was also an important means of military training. We have records today of some 18 named *Pyrrhic* dances- solo, duet, and ensemble- which were mimetic warfare dances, by which the soldier attained the mind- body coordinations, the muscular strength and the discipline, which made him supreme on the field of battle.<sup>40</sup> They were *Pyrrhic* dances which developed into a martial display. The dances fell into several categories:

*Podism*: quick, shifting movements of the feet, to train the warrior for hand-to-hand combat.

*Xiphism*: mock battle, in which groups of youths would practice the arts of warfare in dancelike form.

*Homos*: high leaps and vaults, to prepare them for leaping over high logs or boulders, or for scaling walls and fortresses.

*Tetracomos*: stately group formation, in which soldiers would advance on the enemy in mass, or protect themselves through interlocked shields.<sup>41</sup>

In Sparta, at the *gymnopaedia*, boys even mimed boxing and wrestling in dance forms.<sup>42</sup>

The Greeks learned to dance at an early age. Dancing was taught as an aid to military education in Athens and Sparta, in the palaestra and gymnasium, with most of the instruction apparently in the hands of private teachers. The military element closely related dances to athletics. They practiced a variety of physical disciplines; they were extremely athletic and their movements were full and vigorous. Lucian stated:

I should call it the most excellent and best balanced of gymnastic exercises, since besides making the body soft, supple and light, and teaching it to be adroit in shifting, it also contributes no little strength.<sup>43</sup>

Vase paintings show free running, skipping, and jumping, always in natural, easy poses, with little artificiality or acrobatics for their own sake. Dances were also performed regularly at the Panathenaic Festivals, and were carried on regularly as part of the continuing training of soldiers.<sup>44</sup> So under the heading of gymnastics of *The Laws* Plato included dancing.<sup>45</sup>

#### IV. Athletics

Athletics as a cultural tradition may find its remote root in the Minoan period. However it was in the Mycenaean age that Greek athletics became a significant social phenomenon, mainly reflected in Homer's *Iliad* and *Odyssey*.

In Homer's epics, athletics appeared mainly on two occasions. One was the games held by Achilles in honoring his dead friend Patroclus which included chariot races, wrestling, boxing, running, armed combat, archery, javelin-throwing. The other occasion was the Phaeacian Games held by the king Alcinous with the purpose of showing that "at boxing, wrestling, jumping, and running there is no one who could beat us."<sup>46</sup> It is obvious that in Homeric society athletic competitions had become an integral part of the aristocratic warrior's daily life. In the *Iliad*, all the leaders of the army, even Agamemnon himself, compete. The Phaeacians believed that the most important thing for a citizen, more significant even than trade and wealth, was the athletic ability which would take a man out of the realm of the everyday and elevated him to the sphere of high ideals. "You are no athlete", says Euryalos to Odysseus, and the latter regards it as a great insult, and is quick to demonstrate that the opposite is true.<sup>47</sup> In the mighty Homeric world there is no place for heroes who are not athletes.

However, in Homeric time athletics were still in their early stage, and waiting for further development, which may be identified from the following aspects:

1. They were informal and spontaneous. There was no organized training; there were no organized competitions.<sup>48</sup>
- The Patroclus funeral games in the *Iliad* and Alcinous' entertainment games in the *Odyssey* tell us the athletic games

had no fixed site, regulated time schedule or formal rules, and no experienced umpire either.

2. They were aristocratic in nature. It was the kings and their families who excelled in all games, and who alone entered competitions.<sup>49</sup> It would appear that athletics, as a sport form, were monopolized by a small portion of Greek free citizens.

3. The norms of athletics had not been set up. For example, some athletic events such as the pentathlon were unknown, and the same was true of some known athletic customs such as the anointing of the body before a contest, competing nude, and organized training.

A great stride in the development of athletics was made in the early sixth century B.C. and seemed to be more closely combined with the Greek religious tradition, when the big four pan-Hellenic festivals were firmly set up, and many local festivals flourished. Greek athletics reached their zenith in the 6th, 5th and 4th centuries B.C.. They spread all over the Greek world without exception and formed a main part of many festivals. As Harris stated, "By the sixth century B.C. four of the many Greek athletic meetings had become pre-eminent in importance."<sup>50</sup> All competitions in the festivals were well organized. The aristocratic nature of athletics declined. Athletics became the duty of each Greek free citizens. The participants in the big games came from all over the Greek world.

In addition, athletics formed a basic part in Greek education, being taught by specialized trainers and practised in the palaestra and gymnasium. Athletics, at this time, penetrated many Greek cultural aspects, and drew much attention from painters, sculptors, play writers, poets and philosophers.

Although we do not know the detail about the events and scholars are still debating many issues relating to how these events were conducted, the general picture is basically clear.

#### 1. Foot-races

Running was a basic human motor activity with important roles in early economic life, such as for hunting and in the military. It was also one of the oldest and important parts in Greek athletics. In terms of the manner of running, there are some debates. One of them is whether or not the runners shout while running. Cicero had a statement about it.

A brave and intelligent man does not even grunt, except perhaps when he is calling on all his resources for an effort, as when runners in the stadium shout at the top of their voices. Athletes do the same in training; boxers when striking an opponent grunt as they deliver the blow, not because they are in pain or their courage is failing, but because making the noise concentrates all their powers and the blow lands with greater violence.<sup>51</sup>

Galen, when comparing ball playing and the events of the athletic programs, also pointed out that running has been known to cause the rupture of a blood vessel; so too has loud shouting.<sup>52</sup>

Another concern is how the athletes returned in the races which were of more than one stade in distance.

There were five types of races in Greek athletics and four races for Greek maidens.

#### 1) The stade-race

The stade, a single length of the track, was the oldest event, according to Philostratus it was initiated when the Elisians were making the appointed sacrifice and the offering was laid upon the altar but fire was not for the moment applied to it. Runners were lined up a stade away from the altar and a priest, torch in hand, took his stand in front of it as umpire; the one who ran to the altar first lighted the fire, and departed as an Olympic victor.<sup>53</sup> It was the only event during the first 13 Olympiads. From the 37th Olympic Games on (632 B.C.), a boy's event was added. This was the sprint event, and produced the swiftest athlete. The winner had the highest prestige, and the Festival was titled by his name.

#### 2) The diaulos

This was also a sprint, covering two lengths of the track about 400 yards, which varied from 355 - 385 meters according to the length of the stadium. Its origin could also be found in religious ceremony, "Runners ran a stade away from the altar as though to invite the Greeks, and back to the same place as though to announce that 'Hellas would be glad to come'."<sup>54</sup> As an Olympic event it was first recorded in the 14th Olympic Games (724 B.C.).

### 3) Hippios

This was a middle - distance race held in the ancient stadia. It was included in the program of festivals at the Isthmia, Nemea, Athens, Epidauros, Argos, Plataea, and elsewhere and Panathenaic games,<sup>55</sup> but it was never introduced into the program of the Olympic Games. It covered 4 stades and was apparently the same distance as that of the horse races, which perhaps explains its name (*hippos* means horse).

### 4) The dolichos

This was a long- distance race, held after the stade-race and the *diaulos*. The first reference we have to it is during the 15th Olympic Games (720 B.C.), when the first winner was the Spartan Akanthos. The length of the *dolichos* varies in the sources, and probably also varied at the different games and at different periods, ranging from 7 to 24 stades. At Olympia it was 20 stades. According to the ancients, the *dolichos* was inspired by the performances of the *dromokerykes* or *hemerodromoi*, who were professional messengers who carried messages and instructions over various distances, particularly during times of war. Most of them were Arcadians, famous for their speed and endurance.<sup>56</sup>

### 5) The race in armour (Hoplite race)

This race was definitely derived from war, although there were two different specific stories about it.<sup>57</sup> The distance was normally two stades, i.e. the length of the *diaulos*. It was introduced into the Olympic Games from the

65th Olympiad onwards (520 B.C.). Pausanias informs us that

at the early festivals the race in full armour was instituted. The statue of Damareteus at the festivals later in the sixth century B.C. was not only carrying the shield "but also wearing a helmet on his head and greaves on his legs."<sup>58</sup>

About the middle of the 5th century, possibly in 478 B.C., the greaves were abandoned, as was the helmet after the 4th century, but the shield was retained as long as the event was held. The variety of helmet shapes and of the emblems painted on the shields demonstrate that the athletes used their own personal armour, not only in training but also in most of the games. Pausanias states, however, at Olympia 25 bronze shields were kept in the temple of Zeus, to be given to the runner. The race in armour was a very spectacular event, and was a favorite subject among vase-painters.<sup>59</sup>

#### 6) The Heraea

The games consist of four races for maidens. They have been traced back to ancient times and related to several legends. The races were categorized into three groups. The first to run were the youngest, then came the adolescents, and the last race was for the oldest of the maidens. The races were also held in the Olympic stadium, but the course was shortened for girls by about one-sixth of its length. The winners were also crowned with olive and a portion of the cow sacrificed to Hera. Statues also might be set up for them.<sup>60</sup> Pausanias also described the dress for the girls' foot race: their hair hanging down, a tunic which reached to a little

above the knee, and they bare the right shoulder as far as the breast (See Figure 7). The Heraia was not the only women's races in antiquity; there were others, all of them connected with religious ceremonial (at Sparta, for example, and at Cyrene). But these at Olympia were the most celebrated.<sup>61</sup>

## 2. Wrestling

Wrestling was the oldest and most popular sport of ancient Greece. According to Philostratus it was devised for use in war, like the pankration.<sup>62</sup> The description of the wrestling match between Odysseus and Aias in Homer's *Iliad* provides us with a vivid picture of early wrestling.<sup>63</sup> The very name "Palaestra", which means wrestling school in the Greek language, indicated its importance in Greece life.<sup>64</sup> Wrestling was valued highly, and as well as being a separate event in the program, it also formed part of the pentathlon at the Olympic games.

There were two forms of wrestling:

1) "Upright" wrestling: This was the form used in athletic festivals. The wrestler had to throw his opponent to the ground. In his study about this form of wrestling Gardiner concludes that the match was conducted on the bases of the following rules:

i. If a wrestler was thrown on his knee, hip, back or shoulder it was a fair fall.

ii. If both wrestlers fell together, nothing was counted.

iii. Three falls or the best of five bouts were necessary to secure victory.

iv. No holds were allowed below the waist.

v. Tripping with the feet was allowed.<sup>65</sup>

In terms of holds, Rudolph has a different view. He suggests that holds on any part of the body were allowed, although the Greek wrestlers appear to have concentrated more on the upper part of the body. He added that wrestlers were not allowed to deliver painful blows, to throttle their opponents or twist their limbs in order to force them into submission.<sup>66</sup>

In Homeric times wrestlers and boxers seemed to wear their shorts in contests,<sup>67</sup> which was also sometimes shown on black-figure vases. However, all clothing appeared to have been discarded during the fifth century.<sup>68</sup> Before the contests, wrestlers anointed themselves with olive oil and dusted themselves with fine powder. If a somewhat confused passage in Lucian's *Anacharsis* is to be believed, they powdered one another in order to be easy to grasp.<sup>69</sup>

2) "Rolling" or "ground" wrestling: a fall was not enough; the contest continued until one of the two competitors was compelled to admit defeat and withdraw.<sup>70</sup> Actually this form was a part of the pankration.

Every palaestra had separate areas: the dry and wet rings for the two kinds of wrestling. Upright wrestling took place in the former, while ground wrestling was normally held in the latter.<sup>71</sup>

The Greeks called boxing, wrestling and the pankration "the heavy events". They had no classes for different weights, but only for different age-groups. It is in these contests where sheer muscular strength counted so much. No doubt small men wrestled and boxed with one another in palaestra and gymnasium, but in open competition only the biggest had any chance of success.<sup>72</sup> In terms of the importance of these events Gardiner challenged the view that runners had privilege by pointing out that the characteristic of the 6th century B.C. was strength. The typical athlete of the period was the strong man. The great boxers and wrestlers, men whose names became proverbial, Milo of Croton, Glaucus of Carystus, Theagenes of Thasos, all belonged to the era marked by the close of the 6th century B.C. and beginning of the 5th century B.C.. The runners were less famous; the popular idea that the footrace was honored beyond all other events seems fallacious. As Philostratus said the object of the old gymnasts was to produce strength.<sup>73</sup>

Wrestling's popularity may also be due to the nature of the event. It was less painful than boxing or the pankration; and it required less space than running or the field events. Wrestling called for a combination of skill, agility and strength. So palaestras spread into all Greek cities from the sixth century B.C. to the end of the Roman imperial epoch.<sup>74</sup> It was also participated in by various people, according to Plato, Socrates and the young Alcibiades often engaged in wrestling bouts at a palaestra.<sup>75</sup>

### 3. Boxing

According to Philostratus boxing was an invention of the Lacedaemonians. They had no helmet and they did not think fighting with protective equipments appropriate to their country's standards. Therefore, they practiced boxing to harden their faces in order to adapt themselves to the circumstances of real fighting.<sup>76</sup>

The ancient Greek boxing contest differed from its modern counterpart in four aspects:

1) There was no regular ring, and the bouts were fought on an open piece of ground in the stadium.<sup>77</sup>

2) No time limit was placed on the duration of the contest, or rounds until one acknowledged his defeat.<sup>78</sup> One could show it either by raising his index finger or extending two fingers towards his opponent.<sup>79</sup>

3) The classification of the boxers by weights was unknown.<sup>80</sup>

4) Fighting with thongs. The boxers bound their hands with long leather thongs, called *Himantes*, which ran down the forearm as a support, leaving the boxer's fingers free.<sup>81</sup> Every change in the form of the *Himantes* brought with it important changes in the technique of the sport. Some researchers even divide Greek boxing into periods according to the type of *Himantes* worn by the boxers. At the time when the thongs were soft, boxing required agility, adroitness, flexibility and a good technique. With the introduction of the "sharp thongs", however, the blows became harder, and the

boxers paid more attention to defence, with the result that the contest became heavier and slower, and rested more on brute force than on skill.<sup>82</sup>

Boxing was an event with tremendous challenge. Many of the boxers left the stadium with various injuries, such as broken teeth, a squashed nose, or a cauliflower ear. These injuries were so common that they almost became their trademark.<sup>83</sup> A boxer had to possess courage and fearlessness, as well as strength and good physical conditioning. Boxing seemed to be valued highly at the Olympic Games. According to Pausanias, the first athlete to have his statue dedicated at Olympia was Praxidamas of Aegina, victorious in boxing at the 59th Festival (544 B.C).<sup>84</sup>

In their training which was usually held at the palaestra, the boxers wore ear-protectors called *amphotides* *oerpotides*. These consisted of two circular pieces of thick leather that covered the ears and were fastened with thin straps over the head and under the jaw. Occasionally they were made of metal. It was not permitted to wear them at the games.<sup>85</sup> In addition boxers wore padded gloves, instead of *Himantes*, "in order to practice in an adequate way the striking and eluding of blows."<sup>86</sup> There was no actual fighting during their training, instead the boxers practiced with the punch-ball, and by shadow-boxing.

#### 4. Pankration

The pankration was a mixture of wrestling and boxing and was described as such by Plato: "a contest combining

imperfect wrestling with imperfect boxing." Some scholars prefer to call it "specialized form of wrestling in which hitting with fist was allowed, or unarmed combat."<sup>87</sup> The Pankration had great military use as Philostratus suggested that it was used by Athenians and Spartans at Marathon and Thermopylae respectively.<sup>88</sup>

There were two forms of pankrations:

1) *Kato* pankration: the contest continued after the opponents fell to the ground. This was the form used in the pan-Hellenic games.

2) *Ano*, or *orthostanden* pankration: the opponents had to remain in a standing position. This form was used in training or in preliminary contests.<sup>89</sup>

Philostratus considers it the best and most manly event at Olympia, and also an excellent exercise in training warriors. The object of the contests was, as in boxing, to force the opponent to acknowledge defeat. It was conducted under strict rules enforced by trainers or officials with the rod. Only biting and gouging were forbidden at most festivals. These two behaviors, however, were permitted by the Spartans in training. We may therefore deduce that the Spartan pankration was different from that of the Eleans and the rest of the Greeks.<sup>90</sup> As Franz Mezo described:

In the pankration the competitors fought with every part of their body, with their hands, feet, elbows, their knees, their necks and their heads;... they were allowed to trip their opponents lay hold of their feet, nose and ears, dislocate their fingers and arms and apply strangle - holds. If one man succeeded in throwing the other he was entitled to sit on him and beat him about the head, faces and ears; he could also kick him

and even trample on him. It goes without saying that the contestants in this brutal contest sometimes received the most fearful wounds and that not infrequently men were killed.<sup>91</sup>

The pankration for the Spartan epheboi was probably the most brutal of all. Pausanias tells us that "in fighting they use their hands, kick with their feet, bite, and gouge out the eyes of their opponents."<sup>92</sup> Obviously it was the toughest and most gruelling athletic event. However, it was always a favorite event among the Greeks, especially to the spectators; for them it was the supreme test of strength and skill in combination.<sup>93</sup> The lists of prize money shows that it became the most popular event in the program.<sup>94</sup>

Philostratus also mentioned: "Of all the sports the pankratiun is prized the highest.... It is the favorite with all except with the officials at Elis."<sup>95</sup>

## 5. Pentathlon

The pentathlon was a grouped event consisting of five contests as its name implies: long jump, discus throwing, javelin throwing, stadion, and wrestling. Of them the first three belonged solely to the pentathlon, while running and wrestling were also separate events in their own right. Thus the pentathlon was a combination of the both heavy and light exercises: for wrestling and discus throwing were heavy exercises, while javelin -throwing, jumping and running were light ones.<sup>96</sup> It was introduced into the program of the Olympic Games as early as the 18th Olympiad in 708 B.C. A boy's pentathlon was held only during the 38th Olympic Games in 628 B.C..

It is probable that the pentathlon began not as a separate competition but as a sort of athletic championship, as a means of deciding who was the best all-round athlete among the victors at a meeting.<sup>97</sup> Plato believed it was an opportunity for second rate athletes who could not win in any individual event.<sup>98</sup> It was, however, the best event in Aristotle's view, "The pentathletes are the most beautiful; they are naturally adapted both for exertion of the body and swiftness of foot." He continued to compare it with other athletics and concluded "He who excels in everything is fit for the pentathlon."<sup>99</sup> As a matter of fact, the ancient Greeks did see it as a major event, since competitors in it had to possess a combination of all the qualities of physical and psychological endowments that an athlete needed.<sup>100</sup> As Bacchylides (507-428 B.C.) wrote:

Famous among mortals are those who crown their yellow hair with the biennial wreath from those glorious contests at Nemea. To Automedes who won this time the god has given the crown. For he was conspicuous among the pentathletes as the radiant moon in the night of her fulness outshines the bright stars. So he appeared among the numberless throng of Greeks as a marvelous form, casting the circular discus, and as he hurled from his hand high into the air the branch of the dark-leaved elder tree, he evoked the cheers of the folk, or as he flashed through the final wrestling.<sup>101</sup>

The main problems faced by modern historians on the subject are the sequence of the events and how the winner was decided.

#### 1) Jumping

Only long-jumping was performed in athletics, perhaps because Greece was a land of no fences, and was furrowed by

many streams and ditches, and so the ability to jump for distance had great practical values.<sup>102</sup>

There were two factors making the ancient Greek jump different from ours today. First the jumpers used jumping weights, called *halteres*. They were roughly semi-circular in shape (like telephone hand-pieces), made from stone in the early ages, and metal later, about 12 to 19 centimeters long and 4 to 9 pounds in weight. Jumping weights had two functions: to help the jumper to get more momentum. Aristotle points out that a jumper would jump further using his jumping weights.<sup>103</sup> Weights also helped a jumper to keep his balance in order to make a good clean landing in the pit, because if imprint of the jumper's feet was imperfect his jump was not measured.<sup>104</sup>

The pentathletes did not use weights simply for the jumping events, but also as a means of physical exercises "for shoulders and hands, the round ones for the fingers as well. They should be used by light athletes as well as heavy in all exercises, except during those for relaxing."<sup>105</sup> This usage of the weights was called weight-training (*Haterobolia*) and scenes of weight-training from the gymnasia are frequent in vase-paintings.<sup>106</sup>

The second factor which made ancient jumping differ from today is that the jumping was accompanied by the flute player. Pausanias attributed this to the religious tradition, "the Pythian flute-song is played while the competitors in the pentathlon are jumping; for the flute-song is sacred to

Apollo, and Apollo won Olympic victories."<sup>107</sup> However modern historians considered the function of flute player was to help a jumper to achieve rhythm in his movement.<sup>108</sup> Philostratus tells us that jumping was the most difficult event in all athletics.<sup>109</sup>

As with all other ancient athletic events, jumping, has left many questions for us. For example, whether the athletes had a run-up before the jump or not, although in vase-paintings they usually are depicted with a run up.

The two extraordinary records: 52 feet by Chionis of Sparta at the 29th Olympic Games and 55 feet by Phayllus of Croton in Delphi, have caused historians to consider whether the type of jump used by the ancient pentathletes might be a double or a triple jump.<sup>110</sup>

## 2) Discus

Discus throwing has a long history in Greece and was one of the sports events of the Homeric warrior-nobles. It is not clear why the Greeks were interested in such an event which seems not to have any direct connection with practical utility and which was criticized in Lucian's works.<sup>111</sup> But in the view of pure physical exercise this event did call for some essential factors of physical fitness, such as rhythm, precision and power, which were particularly well-liked by the Greeks; consequently it formed part of the pentathlon.<sup>112</sup>

Greek discus, in general, were 1.4 centimeters thick, 21 centimeters in diameter and 2 kilograms in weight. However,

their variety could range from 1.353 kg to 4.758 kg.<sup>113</sup> At Olympia they were kept in the treasure-house of the Sicyonian hung up in bags with bands around them.<sup>114</sup>

Many vase-paintings and particularly, the statue of the Diskobolos made by Myron, inform us that the ancient Greek technique in discus - throwing was basically the same as ours today. But we do not know if there was a run-up or turn before the actual throw was conducted.

### 3) Javelin

No doubt, the javelin was closely linked with war. Unlike the spear, the javelin was never developed as a principal means of warfare, it was an important missile weapon in the Greek army. The spear and the javelin bridge the gap between short range weapons which remain in the hands of the warriors throughout the battle, and long-range weapons, shot or thrown from a distance.

In warfare two qualities are required for long-range weapons: accuracy and distance. The javelin differed from the other long-range weapons in that it was propelled entirely by the direct force of the thrower; no artificial means were used to concentrate the energy involved, as in the sling or bow.<sup>115</sup> Power and strength were more essential than accuracy. Therefore, although in military training and in the gymnasium they practiced throwing at a mark for accuracy, in their athletics the javelin throwing of the pentathletes was a contest simply in achieving distance.

The javelin used by athletes was a wooden pole, about six feet, with one end pointed, both shorter and lighter than the military javelin.<sup>116</sup> It is doubtful whether it had the iron or bronze point with which the military javelin was provided.

The basic difference between the ancient and the modern javelin-throwing is the use of the throwing thong, a leather strap that formed a loop, called *amentum*, and which the ancient athletes attached at the center of gravity of the javelin. The javelin used in war and in hunting also had thongs, but they were permanently attached, while in the case of the athletic javelin, each athlete tied the thong where it helped him the most, depending on his ability and the length of his fingers.<sup>117</sup>

When cavalry re-emerged as an important force on the battle field in the late of the fifth century B.C. javelin throwing from horse back began to be practised and became an event in some local festivals such as the Panathenaic games.

## 6. Athletic exercises

There were some "athletic exercises", as Karagiorga-Stathakopoulou called them,<sup>118</sup> being used for athletic training.

Arm exercises: these provided more specific training for particular events or helped athletes to develop their general physical well-being.

*cheironomia* (shadow-boxing): Athletes practised the boxing movements by themselves without an opponent.

*sklammachia* (shadow-fighting): Athletes practised the arm fighting without opponents.

*pltylizeln*: regular swinging of the arms as with oars, but only imitating the movement of rowing without using the oars.

*halterobolia* (weight-training): Use of jumping weights to develop the arm muscles by various bends and stretches, like dumb-bell exercises today.

Leg exercises:

*anatrochasmos*: running backwards.

*peritrochasmos*: running in a circle.

*ekplethrizein*: running a plethron, about 31m, forwards and backwards alternately, reducing the length on each occasion until the distance was reduced to zero (similar to a shuttle run today).

Many jumping exercises, such as *aphalmos*, which consisted of scissor jumps.

There were also certain athletic exercises specifically for boxers and athletes of pankration:

*koryx* (punching bag) the boxers practised different combinations of punches.

*akrocheiria*: two opponents wrestled, holding each other only by the hands.

*pyx atremizein*: a test of endurance which involved standing motionless with the arms stretched out either in front or above.

weight-lifting or throwing the weight: usually stones were the objects of throwing.<sup>119</sup>

## 7. Derivation of athletics

There were also some activities which may be treated as derivations from athletics.

1) Vaulting-jump. Vase paintings depict Greek cavalymen using their lances to help them to mount their horses. An absence of saddle stirrups makes this a utilitarian act, but this form of "pole-jumping" was never introduced as a competitive form of activity in the games of Greece.<sup>120</sup> It seems to have been the subject of athletic activity, as one vase-painting shows an athlete practising mounting by means of a lance while the trainer looks on.<sup>121</sup> Since one form of javelin-throwing was performed on horseback, it may be reasonable to speculate that the spear used to mount the horse was then used to throw at a target. However, there is no literary evidence for the pole jump.<sup>122</sup>

## 2) Torch races

Torch races were ritual performances, as Philostratus indicated that their object was to bring the new pure fire as quickly as possible to the altar. There were torch races in many Greek city-states. At Athens they were conducted on horseback, on foot, and by individuals and teams which represented the different tribes.

Although not serious athletics, the training for the torch races provided a large number of youths with excellent exercise.<sup>123</sup> They usually were relay races. The Greek youths

handed on a lighted torch and a team had to keep it alight to the end of the race in order to win.<sup>124</sup> Torch race on horseback was first mentioned in Plato's *Republic*, where we learn of the new idea that the riders carry torches and hand them on in relay as they race on their horses.<sup>125</sup>

### 3) Hoop-bowling

This was not only played by children but by adults, too.<sup>126</sup> It was also a means of dance described by Xenophon in his *Symposium*.<sup>127</sup> In addition it might have been a means used as an ancient Greek medical cure, as Harris suggests. The statement of Antyllus maintains that it relaxes tight muscles and makes stiff parts supple, strengthens the sinews, tones up enervated bodies and calms excited minds.<sup>128</sup>

### 4) Armed fighting

The event goes back to a period when individual confrontations and single-combat between warriors - usually between the leaders of the sides engaged - was the normal pattern of military tactics on the field of battle. Events like these were known in the Geometric period. Plutarch asserts that armed combat was practised at an early date at Olympia, and this claim is indirectly confirmed by what we know of the worship of Pelops at Olympia, and the nature of the Olympic Games during the early stages of their history.<sup>129</sup>

Another example was the gladiatorial duel in Patroclus' funeral games, between Diomedes and Ajax. But Homer probably

found the story among his traditional material because in his own day the event had long been obsolete.<sup>130</sup>

It should be pointed out that the mode of operation of the Phalanx of hoplites left little room for individual confrontation. Naturally everyone who served as a hoplite always practised the use of weapons; but this practice was never valued as a sport in itself, with the educational importance attached to athletic games. Armed combat as an event must, like archery, have been connected with the changes in military tactics and the nature of the upbringing of the young that occurred after the beginning of the 4th century B.C.. Professional teachers of armed combat at this period held a prominent position in the *gymnasia* and began to be highly paid for teaching.<sup>131</sup>

### 5) Archery

It was one event in Patroclus' funeral games. The target was a pigeon tied to the mast of a ship. The prize for the man hitting the pigeon was ten double-headed axes; for the man hitting the string tying it to the mast, the prize was a single axe. The order of shooting was determined by lot. Teucer shot first, but he only struck the cord, so the bird flew up into the sky. Meriones snatched the bow hastily from Teucer's hands and struck the pigeon in flight.<sup>132</sup>

But this event did not survive into classical times, and vanished along with some other aristocratic traditions of the Homeric society. The bow, moreover, was not greatly valued by the Greeks as a weapon. Military units of archers, along with

the other, light-armed troops, might on occasion be effective in action, but they always remained auxiliary forces, consisting of professional mercenaries, usually from Crete or Skythis. It was only from the 4th century B.C. onwards that the bow gained in importance, as did a more extensive long-range weapons. Archery then became part of the training program for the epheboi. Games were also organized in this connection on Kea, in Sestos, and in the Pamboiotian festival at Koroneia, which were a military display in character. The bow was always useful in hunting, of course, and as an exercise, archery had beneficial effects on physical development. Plato recommended that children of both sexes should practice archery, with both hands, from the age of six. He also proposed that competitions should be organized between mounted archers, but it is not known whether they ever actually took place in Athens or elsewhere.<sup>133</sup>

#### V. Physical exercises for keeping fit

In the view of Hippocratic physicians, physical exercises could be grouped into two categories: "the natural", such as the activities of sight, hearing, voice, thought etc., and "the violent" or "artificial" such as walking, running, wrestling etc. which were quite similar to athletics. The line between the two is not quite clear, and most "violent" exercises are a mixture of the two. For example, "walking is a natural exercise, much more so than the other exercises, but there is something violent about it".<sup>134</sup>

However, it was the second category that was mainly used in their medical practice. For example, for the person with undigested meals.

Exercises should be above the average, double-track running should be gradually increased, while the last running should be on the circular track; after the running should come wrestling with the body oiled. After the exercises there should be short walks, after dinner mere strolls, but in the early morning longer walks.<sup>135</sup>

While for the patient whose stools are watery:

Exercises to be sharp runs on the round track, massage, but only a little, not much. No wrestling proper; but hand-wrestling, arm exercises, punch-ball and wrestling in the dust are suitable when not in excess walk are to be taken after exercise that are adequate considering the fatigue.

For healthy men, the routine of keeping fit was adjusted according to different seasons:

(In winter) Exercises should be many and of all kinds; running on the double track increased gradually, wrestling after being oiled, begun with light exercises and gradually made long; sharp walks after exercises, short walks in the sun after dinner; many walks in the early morning, quiet to begin with, increasing until they are violent, and then gently finishing.... During this season, take also plenty of all sorts of exercises. For there is no risk of excess, unless fatigue - pains follow.<sup>136</sup>

(In summer) Practice on the circular track and in the double stade should be infrequent and short, walking should be in the shade, and wrestling on dust, so as to avoid overheating as much as possible. For wrestling in the dust is preferable to circular running, as this dries the body by emptying it of its moisture. After dinner walking should be restricted to a short stroll, but in the morning walk should be taken.<sup>137</sup>

(In spring and autumn) After some preliminary exercise in a cloak, have massage and practise wrestling with the body oiled, increasing the vigor gradually. Walks should be taken in the sun.<sup>138</sup>

From the above-quotations of Hippocrates some essential principles and methods of physical training which are rarely

found in other sources can be easily identified. In terms of the training process there was a strong seasonal characteristic; their training rhythm in a year was quite clear, the maximum was in winter, for "no risk of excess", while the minimum was in the summer in order to "avoid overheating"; the change of the seasons was paid much attention. (Interestingly enough, this rhythm of training is coincided with that of modern athletic training at the present time.) The seasonal characteristic was also demonstrated by the fact that some exercises were conducted in different ways in different seasons.

With respect to training methods, alternate training was used, for various exercises were conducted alternately, based on their powers. In the matter of training principles, obviously, the training session was managed according to the order from gentle to violent and finishing with gentle activities, so "warm up" and "cool down", the important principles of modern sport, were being skillfully used in the Greek world more than two thousand years ago.

Clearly, athletics were also the main means for Greeks to keep fit. Table 1 shows the activities used as medical treatments.

## VI. Equestrian Events

In contrast to the practical value of athletics in military life, equestrian sports did not have this advantage. It seems strange that equestrian events could be a spectacle

in many festivals, because many factors were against their becoming widespread in popularity.

From the beginning of their recorded history the Greeks made use of horses, which were regarded primarily as an instrument of war. But the warriors in the *Iliad* never ride a horse. They are carried to battle in chariots drawn by two horses. Sometimes they hurl a javelin from the carriage, but generally they dismount for the fight, while the charioteer holds the carriage in readiness for the hero to re-embark and be carried swiftly away to safety.<sup>139</sup> Cavalry was not a very important part of ancient warfare, for the Greeks had neither saddles nor stirrups. The modern bridle was also unknown to them. For agricultural work the Greeks preferred the strong ox, and for local travel, the mule or donkey. The reasons for this may be, first, the poor surface of roads which was more suitable to mules or asses instead of horses. Secondly, no horse collar had been invented at the time, and the horse was, therefore, inferior to the ox in farming.<sup>140</sup>

Despite all these limitations, equestrian events had a significant place in the social and political scene in ancient Greece. In early times, when military service was obligatory for every citizen, a man who could afford to do so was expected to bring his horse to serve with him. Thus both in Greece and Rome the word for cavalry came to be applied to a class defined by qualifications of wealth, who had responsibilities and rights beyond these of poorer citizens. In this way the horse early acquired a certain position or

status which it has never entirely lost.<sup>141</sup> Due to the unsuitable environmental conditions for breeding horses, to have a horse meant the expenditure of a lot of money, time and trouble, which only wealthy men could bear. Consequently equestrian activities were a symbol of the rich. From the earliest times owners were allowed to employ substitutes to drive for them in race meetings and they hired charioteers and riders to compete for them. They, themselves, did not normally take part in races.

Therefore, in contrast to athletic events in which the honor and glory went to the competitors themselves, in equestrian events the victory and the glory went to the horse owners, who received the crown. The first evidence we have of the practice is an inscription recording a victory of a member of the celebrated Athenian family of the Alcmaeonidae at the Panathenaic Games in the middle of the sixth century B.C..<sup>142</sup> The charioteer was named, and the only prize awarded to the charioteer, or rider, was a woolen band, which the owner tied round his forehead; winning horses were also crowned in this fashion. Thus children, women and even cities were occasionally declared Olympic victors, as long as they were rich.<sup>143</sup> So the list of Olympic winners of these events known to us included some of the famous figures of the ancient world, in the early days Kings of Sparta and Cyrene and tyrants of the great cities of Greece and Sicily, Myron and Cleisthenes of Sicyon, Gelon of Gela, Hiero of Syracuse, and Theron and Empedocles of Aragas. Others were members of

the wealthiest and most powerful families at Athens, such as Alcmaeon, Miltiades, Callias and Alcibiades, who in 416 B.C. ran seven teams in the quadriga race at Olympia and took the first, second and fourth places. Another prominent Athenian victor was Cimon, the father of Miltiades, he won at three successive Olympic Games with the same team of four mares who were buried near their owner's grave.<sup>144</sup> The feat of Cimon in the Sixth century B.C. of winning at three Olympic Games with the same team had been achieved in the same century by Euagoras of Sparta, who also accorded his mares an ostentatious tomb.<sup>145</sup>

The following horse races were held at Olympia:

The *Keles*: a race for fully grown horses with a rider, which covered six circuits of the race-course. This was a race which was run from 648 B.C. onwards.

The *Kalpe* (trot), or race for mares (496- 444 B.C.): This was a curious event, and it is not known how many circuits of the race-course were involved. All that we do know about it is that on the last lap the rider dismounted and still holding the reins, ran alongside his mare to the finish. This event was first included at Olympia in the 71th Olympiad (496 B.C.) and was dropped in the 84th (444 B.C.).

Race for foals (256 B.C, onwards).<sup>146</sup>

Harris discovered that in the great age of Greece there was less excitement among spectators about equestrian events than about athletics. This was, perhaps, due to class consciousness, a feeling among the masses that the horse

events were the preserve of the wealthy, whereas in athletics all men started equal.<sup>147</sup>

### Summary

Although the Greeks involved themselves in various physical activities, athletics were, no doubt, the dominant ones. No other forms of physical culture could challenge their prevailing position.

The leading position of athletics in ancient Greek sport not only made them the important part of various festivals, especially, the big four, but they were also a main part of the program in Greek education and they were an important subject of Greek arts and philosophy. In addition, they strongly influenced other forms of physical culture, directly or indirectly. It seems reasonable to argue that all other sport activities, in varied degree, were impacted by athletics. For example, some traditional norms generated from athletics such as anointing, nudity, crowning the winners with a wreath, were all adopted by other sporting activities. The athletic instruments such as jumping weights were used in popular exercise; and athletics were also utilized in medical treatment. The gymnasium and palaestra areas mainly designed for athletics, also supplied practising grounds for other sports. Further, athletics had a profound influence on dance as well. On the other hand Greek athletics also absorbed some elements of other sports; for example, rowing movement and swimming were used as a means of athletic training. It may be reasonable to state that the prevailing position of

athletics, to a certain extent, hindered the development of other sport activities. Archery, for example, was limited by the javelin.

Thus in ancient Greece, athletics was the core of all sport.

## FOOTNOTES - - CHAPTER II

<sup>1</sup>J. Sakellarakis, "Athletics in Crete and Mycenae," in *The Olympic Games*, ed. Iris Douskou, pp. 14-20. D. Palmer and M. L. Howell "Archaeological Evidence of Sport and Games in Ancient Crete," in *A History of Sport and Physical Education to 1900*, ed. E. F. Zeigler, pp. 67-8.

<sup>2</sup>J. Sakellarakis, "Athletics in Crete and Mycenae," in *The Olympic Games*, ed. Douskou, pp. 14-20.

<sup>3</sup>Herodotus 8. 89.

<sup>4</sup>Thucydides 4. 26.

<sup>5</sup>L. Drees, *Olympia, Gods, Artists and Athletes* (N.Y. and Wash.: Praeger, 1968), p. 49.

<sup>6</sup>E. Norman Gardiner, *Athletics of the Ancient World* (Oxford: Clarendon, 1930), p. 54.

<sup>7</sup>*Ibid.*, p. 113.

<sup>8</sup>Homer *Iliad*. 16. 736-803.

<sup>9</sup>Pausanias 10. 19.

<sup>10</sup>Thucydides 7. 25.

<sup>11</sup>Harris, *Sport in Greece and Rome*, p. 115; Karagiorga-Stathakopoulou, "Other Sport and Games," in *The Olympic Games*, ed. Douskou, p. 260.

<sup>12</sup>Gardiner, *Athletics of the Ancient World*, pp. 93, 95.

<sup>13</sup>Harris, *Sport in Greece and Rome*, p. 116.

<sup>14</sup>Homer *Odyssey* 8. 31-104

<sup>15</sup>Harris, *Sport in Greece and Rome*, p. 128.

<sup>16</sup>Karagiorga-Stathakopoulou, "Other Sport and Games," in *The Olympic Games*, ed. Douskou, p. 260.

<sup>17</sup>Gardiner, *Athletics of the Ancient World*, p. 95.

<sup>18</sup>Thucydides 6. 32.

<sup>19</sup>Herodotus 7. 44.

<sup>20</sup>Homer *Odyssey* 6.

- 21 Ibid., p. 8.
- 22 Harris, *Sport in Greece and Rome*, p. 82.
- 23 Ibid., p. 84.
- 24 Ibid., p. 79.
- 25 Cited in Stephen C. Miller, *ARETE* (Chicago: Ares, 1979), p. 70.
- 26 Harris, *Sport in Greece and Rome*, p. 80.
- 27 Peter C. McIntosh, "The Sociology of the History of Greek Athletics," in *Handbook of Social Science of Sport*, eds. G. R. F. Luschen and G. H. Sage (Champaign, Illinois: 1981), p. 33.
- 28 Harris, *Sport in Greece and Rome*, p. 85.
- 29 Ibid., p. 87.
- 30 Karagiorga-Stathakopoulou, "Other sports and Games," in *The Olympic Games*, ed. Douskou, p. 258.
- 31 R. S. Robinson, *Sources for the History of Greek Athletics*, rev.ed. (Chicago: Ares, 1955), p. 78.
- 32 Harris, *Sport in Greece and Rome*, p. 101.
- 33 Uriel Simri, "The Ball Games of Antiquity," in *A History of Sport and Physical Education to 1900*, ed. E. F. Zeigler (Champaign, Illinois: Stipes, 1979), p. 94.
- 34 Lucian *The Dance* 5. 15.
- 35 Richard Kraus and Sarah Chapman, *History of the Dance in Art and Education*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1981), p. 4.
- 36 Ethel L. Urlin, *Dancing, Ancient and Modern* (N.Y.: D. Appleton & Co., 1914), pp. 29-30.
- 37 Kraus and Chapman, *History of the Dance in Art and Education*, pp. 40-1.
- 38 *The Laws* 2. 654d.
- 39 Mary Clarke and Clement Crisp, *The History of Dance* (London: Orbis Pub., 1980), p. 31.
- 40 Shawn, cited in *History of the Dance in Art and Education*, by Kraus and Chapman, p. 40.

<sup>41</sup>Kraus and Chapman, *History of the Dance in Art and Education*, p. 40.

<sup>42</sup>Clarke and Crisp, *The History of Dance*, p. 30.

<sup>43</sup>Lucian, *The Dance*. 5. 15.

<sup>44</sup>Kraus and Chapman, *History of the Dance in Art and Education*, p. 40.

<sup>45</sup>*The Laws* 7. 795d-e.

<sup>46</sup>Homer *Odyssey* 8.

<sup>47</sup>Sakellarakis, "Athletics in the Geometric Period," in *The Olympic Games*, ed. Douskou, p. 32.

<sup>48</sup>Gardiner, *Athletics of the Ancient World*, p. 27.

<sup>49</sup>Gardiner, *Greek Athletic Sport and Festivals*, p. 14.

<sup>50</sup>Harris, *Greek Athletes and Athletics*, pp. 35-6.

<sup>51</sup>*Tusculan Disputations* 2. 23. 56, cited in *Sport in Greece and Rome*, by Harris p. 71.

<sup>52</sup>Harris, *Sport in Greece and Rome*, p. 94.

<sup>53</sup>Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*; ed. Robinson, p. 214.

<sup>54</sup>*Ibid.*

<sup>55</sup>Harris, *Greek Athletes and Athletics*, p. 65.

<sup>56</sup>*Ibid.*, p. 65; Palaelogos, "Running," in *The Olympic Games*, ed. Douskou, p. 168.

<sup>57</sup>Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 214.

<sup>58</sup>Pausanias 6. 10. 4.

<sup>59</sup>Palaelogos, "Running," in *The Olympic Games*, ed. Douskou, p. 171.

<sup>60</sup>Pausanias 5. 16. 3

<sup>61</sup>Palaelogos, "Runnig," in *The Olympic Games*, ed. Douskou, p. 171.

<sup>62</sup>Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 215.

- 63Homer *Iliad* 23.
- 64Gardiner, *Athletics of the Ancient World*, p. 182.
- 65E. N. Gardiner, "Wrestling I," *Journal of Hellenic Studies* 25 (1905):30-1.
- 66Drees, *Olympia, Gods, Artists and Athletes*, p. 80.
- 67Homer *Iliad* 23..
- 68Thucydides 1. 6.
- 69Harris *Greek Athletes and Athletics*, p. 3.
- 70Palaeologos, "Wrestling," in *The Olympic Games*, ed. Douskou, p. 204.
- 71Ibid.,
- 72Harris, *Greek Athletes and Athletics*, p. 97.
- 73Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 43; Gardiner, *Athletics of the Ancient World*, p. 54.
- 74Harris, *Greek Athletes and Athletics*, p. 102.
- 75Ibid..
- 76Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 215.
- 77Drees, *Olympia, Gods, Artists and Athletes*, p. 82.
- 78Gardiner, *Athletics of the Ancient World*, p. 204.
- 79Drees, *Olympia, Gods, Artists and Athletes*, p. 82.
- 80Gardiner, *Athletics of the Ancient World*; Harris, *Greek Athletes and Athletics*; Drees, *Olympia, Gods, Artists and Athletes*.
- 81Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 215.
- 82Palaeologos, "Boxing," in *The Olympic Games*, ed. Douskou, pp. 220-1.
- 83Harris, *Greek Athletics and Athletes*, p. 99.
- 84Pausanias 6.18. 7.

<sup>85</sup>Palaeologos, "Boxing," in *The Olympic Games*, ed. Douskou, p. 222.

<sup>86</sup>*The Laws* 8. 830b.

<sup>87</sup>Harris, *Greek Athletes and Athletics*, p. 106.

<sup>88</sup>Philostratus "On Gymnastics" in *Sources for the History of Greek Athletics*, ed. Robinson, p. 216.

<sup>89</sup>Palaeologos, "The Pankration," in *The Olympic Games*, ed. Douskou, p. 229.

<sup>90</sup>*Ibid.*

<sup>91</sup>Mezo, cited in *Olympia, Gods, Artists and Athletes*, by Drees, pp. 100-1.

<sup>92</sup>Pausanias 3. 14.

<sup>93</sup>Harris, *Greek Athletes and Athletics*, p. 100.

<sup>94</sup>Harris, *Sport in Greece and Rome*, p. 26.

<sup>95</sup>Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 216.

<sup>96</sup>*Ibid.*, p. 213.

<sup>97</sup>Gardiner, *Athletics of the Ancient World*, p. 176.

<sup>98</sup>Plato *The Lovers*, 135e-136c.

<sup>99</sup>Aristotle *Rhetoric*, cited in *ARETE*, ed. Miller, p. 32.

<sup>100</sup>Palaeologos, "The Pentathlon," in *The Olympic Games*, ed. Douskou, p. 214.

<sup>101</sup>Ode 8. in *Sources for the History of Greek Athletics*, ed. Robinson, 104.

<sup>102</sup>Gardiner, *Athletics of the Ancient World*, p. 144; Harris, *Greek Athletes and Athletics*, p. 80.

<sup>103</sup>Aristotle *Problemata*, 5. 8., 881. a39-6b.

<sup>104</sup>Philostratus "On Gymnastics," in *Sources for the History of Greek Athletics*, ed. Robinson, p. 75.

<sup>105</sup>*Ibid.*, p. 231.

<sup>106</sup>Palaeologos, "Jumping," in *The Olympic Games*, ed. Douskou, p. 181.

- 107 Pausanias 5. 7.
- 108 Harris, *Greek Athletes and Athletics*, p. 81;  
Palaeologos, "Jumping," in *The Olympic Games*, ed. Douskou,  
p. 181.
- 109 Philostratus "On Gymnastics," in *Sources for the  
History of Greek Athletics*, ed. Robinson, p. 230.
- 110 Palaeologos, "Jumping" in *The Olympic Games*, ed.  
Douskou, p. 183; Gardiner, *The Athletics of the Ancient  
World*, p. 145.
- 111 Lucian *Anach.* 32, cited in *Greek Athletes and  
Athletics*, by Harris, p. 85.
- 112 Palaeologos, "The Discus," in *The Olympic Games*, ed.  
Douskou, p. 188.
- 113 Drees, *Olympia, Gods, Artists and Athletes*, p. 72.
- 114 H. Schobel, *The Ancient Olympic Games* (London: Studio  
Vista, 1966), p. 87.
- 115 Rivka Gonen, *Weapons of the Ancient World* (London:  
Cassell, 1975), pp. 35, 28.
- 116 Drees, *Olympia, Gods, Artists and Athletes*, p. 75.
- 117 Palaeologos, "The Javelin," in *The Olympic Games*, ed.  
Douskou, p. 196.
- 118 Karagiorga-Stathakopoulou, "Other Sport and Games,"  
in *The Olympic Games*, ed. Douskou, p. 252.
- 119 Ibid., p. 252.
- 120 Harris, *Greek Athletes and Athletics*, p. 80.
- 121 Gardiner, *Athletics of the Ancient World*, p. 85.
- 122 Ibid., p. 144.
- 123 Ibid., p. 143.
- 124 Harris, *Sport in Greece and Rome*, p. 33.
- 125 *Republic* 1. 328.
- 126 Harris, *Sport in Greece and Rome*, p. 131.
- 127 Xenophon *Symposium* 2. 7, cited in *Sport in Greece and  
Rome*, by Harris p. 137.

- 128 Harris, *Sport in Greece and Rome*, p. 138.
- 129 Karagiorga-Stathakopoulou, "Other Sport and Games," in *The Olympic Games*, ed. Douskou, p. 245.
- 130 Harris, *Greek Athletes and Athletics*, p. 52.
- 131 Karagiorga-Stathakopoulou, "Other Sport and Games," in *The Olympic Games*, ed. Douskou, p. 245.
- 132 Homer *Iliad* 23.
- 133 Karagiorga-Stathakopoulou, "Other Sport and Games," in *The Olympic Games*, ed. Douskou, p. 242.
- 134 Hippocrates *Regimen* 2. 62.
- 135 Ibid., 3, 80.
- 136 Ibid., 3. 68.
- 137 Ibid.
- 138 Ibid.
- 139 Harris, *Sport in Greece and Rome*, p. 154.
- 140 Ibid., p. 152.
- 141 Ibid., p. 153.
- 142 Ibid., p. 177.
- 143 palaeologos, "Equestrian Events," in *The Olympic Games*, ed. Douskou, p. 236.
- 144 Harris, *Sport in Greece and Rome*, p. 173.
- 145 Pausanias 6. 10; Herodotus 6. 103.
- 146 palaeologos, "Equestrian Events," in *The Olympic Games*, ed. Douskou, p. 241.
- 147 Harris, *Sport in Greece and Rome*, p. 183.

## CHAPTER III

### ANCIENT CHINESE SPORT

Sport traditions in China can be traced back as early as the legendary ages and there are many tales related to it. For example, one of them tells us how a man named "Kua Fu" ran after the sun and finally died of thirst. Another is about a hero, Hou Yi, who shot nine suns down when people suffered from unbearable heat generated by the suns. During China's long history sports experienced constant changes, but they have never disappeared. Owing to the great effort of sport historians, especially in the past three decades, and the new archaeological discoveries, our knowledge in the area has been rapidly increased. This chapter attempts to give a general picture of sport mainly in the Han and pre-Han period, that is, before the third century A.D..

Ancient Chinese sports display a great diversity in comparison with ancient Greek sport, with athletics as its core. They may be generally grouped into four categories according to their purposes:

#### I. Physical Exercises for keeping fit

Although all physical exercises in ancient China had certain functions in keeping fit, it was a unique form of physical activities, called *Dao Yin* that has played an

essential role in this aspect, with significant influence on Chinese life.

*Dao Yin*: was a physical exercise with the literal meaning: "Keeping the vital energy going in harmony and make the body lithe". More specifically it was a kind of synthesized physical exercise for the purpose of improving the human body both physically and mentally, through certain specific requirements such as keeping a proper body position, a particular way of breathing, relaxation both physically and mentally, and concentration and guidance of mind.

*Dao Yin* as an important means of medical treatment and an effective tool for keeping fit was integrated into Chinese culture, with profound impacts on various Chinese sporting activities.

The origin of *Dao Yin*, like many other physical exercises, was not clear. At the beginning of Tao Tang Shi (the legendary times date to about 4000 years ago) the *Yin* force exceeded and accumulated. Water channels were blocked and were not able to go their previous way. Therefore, people were depressed and their bodies were stiff and unstretched. So a dance was designed to stretch the body and drive the *Yin* force out.<sup>1</sup> Another ancient work states that the same reason caused people to be emotionally distressed with legs swollen. In order to cure their swollen joints a dance was made and taught which was called the Great Dance.<sup>2</sup> Although some sport historians suggest that this dance might be the origin

of *Dao Yin*,<sup>3</sup> reliable literary evidence first appeared in the Warring States era:

To pant, to puff, to hail, to sip, to spit out the old breath and draw in the new, practicing bear-hangings and bird-stretchings, longevity his only concern - such is the life favored by the scholar who practices *Dao Yin*, the man who nourishes his body, who hopes to live to be as old as Pen - Zu.<sup>4</sup>

*Nei Jing* (Internal Medicine), the earliest medical works in China, also mentioned the term:

The central area was flat and moist, therefore it produced various kinds of products, people there eat a variety of food but did not work too much, consequently they suffered the diseases... which could be treated by *Dao Yin* and massage. Therefore *Dao Yin* and massage came from this area.<sup>5</sup>

Clearly in early times *Dao Yin* was a kind of combination of body movements following animal movements and several particular breathing methods. A stone inscribed "On Breathing" dating from the same time period further described its breathing aspect:

This calls for a round of deep breathing. Draw a deep breath, move it downward and let it stay there. Then exhale and move the breath upward as a sprout growing but in a direction just diametrical from the inhaling route until its dead end. The heavenly essence thus goes up and the earthly essence comes down. One survives thus and dies the other way round.<sup>6</sup>

Liu An, a prince in the Han Dynasty also states:

As to such motions as breathing and blowing, inhaling and exhaling, spitting out the old, drawing in the new breath, imitating in gymnastic the steps of the bear, the fluttering and expanding of the wings of birds, the ablutions of the duck, the stooping of the gibbon, the glare of the owl, the concentrated stare of the tiger, these motions are the means used by man to cultivate the bodily form.<sup>7</sup>

However, how the exercise was performed and what it looked like remained unclear until 1973, when a painting on

silk, "*Dao Yin* Movements," was discovered from the No.3 Tomb in Changsha, Hunan Province. This painting (50cm x100cm) was dated by archaeologists to the early Han Dynasty according to the painting's contents and the burial time of the master of the tomb (168 B.C.). This is important evidence for the study of *Dao Yin* and it corrects some errors in historical literature (See Figure 8).

From the 44 figures of the painting three categories could be identified:

1. Movements for treating diseases. There are eight figures having certain names of diseases beside them, such as deafness, eye disease, worry, fever, paralysis, indigestion, knee pain, chest pain, neck disease and so on.

2. Movements imitated from animals such as the bear, bird, sparrow hawk, crane, dragon, cat, ape, monkey, wolf and tortoise.

3. Movements with instruments. There are five figures with instruments such as plate, stick, ball and bag.<sup>8</sup>

It should be noted that some of the first and third categories are also associated with some animal names. More than half of the movements are imitated from animals. It is also worth noting that half of the figures are female. The clothing styles display great diversity: some have a hat, some wear a long dress, some are naked in their upper bodies and some only wear shorts with bared feet. Both sexes of the figures and the variety of their dressing styles indicated

that the exercises were practised by various social groups, even by the working classes.

During the late Han, *Dao Yin* seemed to go to a more routine form. Hua Tou, a famous physician (c. 141-208) adopted some 40 *Dao Yin* movements into five groups which imitated the movements of bear, bird, ape, deer and tiger, namely, *Wuqinxī* (Five-Animal Play). One of his disciples, Wu Pu, benefited a great deal from the exercise so that he was still full of energy when he was over 90.<sup>9</sup> Unfortunately, this initial form of *Wuqinxī* (Five-Animal Play) became lost. One of the *Dao Yin* routines with the same name was designed at a later period.

It is apparent the exercise was not only characterized by its emphasis on breathing and its imitation of animals, but also by its emphasis on the correspondence of mental and physical efforts, which draw a clear line between the Chinese way and the Greek way of keeping fit.

## II. Physical exercises for military purpose

Sport history tells us that warfare and sport in any early civilization always stimulated and interacted with each other. Without exception, warfare in ancient China played a significant role in the history of Chinese sport. Especially after the Warring States era, when only seven states survived after annexing many small ones. Military conflicts among these states became more serious and frequent. Naturally warfare was regarded as a matter of life or death by all ranks of the society from lords and kings down to ordinary

people, and it attracted great attention from all schools such as the Militarist, Legalist, Confucians, Mohist, Taoist and so on. The well-known military work, *Sun Zi*, was a product of the time. The military sphere was central in ancient China, and was one important original source from which many sporting forms came.

#### Archery:

Being an effective form involving a missile weapon, archery maintained an active role in China from ancient times to the dawn of the modern ages. Archery seems to have already existed during the legendary ages.

Coming to the times of Yao (c.2357- 2256 B.C.), ten suns once appeared together, scorching the crops, killing trees and plants, so that the people had nothing to eat....Yao then ordered Yi to shoot the suns down.<sup>10</sup>

As to its origin there is no generally accepted statement in ancient literature. One source says that it was the Yellow Emperor who ordered his two subjects to make bows and arrows.<sup>11</sup> Two other sources believed that archery was designed by the inspiration of watching a natural phenomenon in which a bird was killed by a rebounding branch of "Tuo" tree when the bird took off from it.<sup>12</sup>

Archaeological discoveries indicate that stone arrows existed in the Old Stone Ages,<sup>13</sup> and since then arrows made from bone, red copper and bronze have been excavated in the cities of Xia (c.2100-1600 B.C.) and Shang (c.1600-1100 B.C.).

During the Western Zhou era (c.1100-771 B.C.) archery became a basic military skill, as *Xiang She Yue Xu* stated "Shooting is the most important skill for the strength and

defence of one's nation."<sup>14</sup> Since there was not a professional army in that time, archery was usually practiced in field hunting which was regularly organized in winter and fall. Formerly, the son of Heaven chose the feudal lords, the dignitaries who were Great officers, and the officers, from their skill in archery. Archery was specially the business of males.<sup>15</sup>

In addition to martial shooting another type of shooting, Ritual- shooting, regulated by certain complex and restricted rules based on a person's social rank, reached its peak during the Zhou period. There were four types of Ritual- shooting:

1) *Great Shooting*: In ceremonies of worshipping ancestors and divinities it was used by the son of Heaven of Zhou to select kings to participate in the ceremonies. When the son of Heaven was about to sacrifice, the rule was that he should celebrate archery at the pool, "Ze" which name suggested the idea of selecting the officers (by their shooting). After the archery at the pool came that in the archery hall. Those who hit the mark were permitted to take part in the sacrifice; and those who failed were not permitted to do so.<sup>16</sup>

Moreover, accuracy of shooting was not the only criterion. There were also some other terms to be considered:

Those of them whose bodily carriage was in conformity with the rules, and whose shooting was in agreement with the music, and who hit the mark most frequently, were allowed to take part at the sacrifices.<sup>17</sup>

2) *Guest Shooting*: It was used on the occasions that kings paid respects to the son of Heaven. Its rite was basically the same as the Great shooting.

3) *Recreation Shooting*: It was held on the occasions when the son of Heaven feasted with his higher officers.

4) *District-drinking shooting*: When there were festivals in the district the people drank wine and had a shooting contest. There were two sorts of such meetings. One was held every three years for students' graduation. Another was twice a year for the head of the district to lead people in practice shooting. Obviously, archery was highly valued.

When his ruler wishes an officer to take a place at an archery (meeting), and he is unable to do so, he should decline on the ground of being ill.<sup>18</sup>

Archery was listed in educational institutions for the young aristocrats. There were so-called six arts in the schools for children: propriety, music, archery, charioteering, writing and arithmetic.<sup>19</sup>

There were five ways of shooting. "The governor holds a meeting of people in spring and autumn respectively. A shooting contest takes place in the provincial school."<sup>20</sup> Ritual-shootings were not only held for the purpose of worship, but also for recreational amusement and military training. More important, they were regarded as a means of cultivating virtue and a tool for intensifying the patriarchal social order. So all processes of ritual shooting were managed mainly for this purpose.

Truly enough, they were a form of competition; the winners were awarded a banner by *Si Chang*, an officer in charge of the rite.<sup>21</sup> But they were hardly regarded as fair play because the targets, bows and arrows were different according to shooter's social status. The targets were made of tiger skin for the son of Heaven; of bear skin for kings; and of leopard skin for other high officers. The ritual-shootings were also combined with music and dancing, but the music used was also different according to their social ranks.

In the case of the son of Heaven, the playing of the *Zauju*; in the case of the feudal lords, that of *Lishau*; in the case of the dignitaries, the Great officers, that of the *Zhalpin*; the in the case of officers, that of the *Zhaifan*.

The *Zauju* is expressive of joy that every office is (rightly) filled; the *Lishau* is expressive of the joy at audiences of the court; the *Zhalpin* is expressive of the joy in observing the laws (which have been learned); and the *Zhaifan* is expressive of the joy in being free from all failures in duty. Therefore the son of Heaven regulated his shooting by keeping in his mind the right feeling of all officers; a feudal prince, by keeping in his mind the times of his appearing before the son of Heaven; a dignitary, being a Great officer, by keeping in his mind the observing of the laws (which he had learned); and by keeping in his mind that he must not fail in the duties of his office.

In this way, when they clearly understood the meaning of those regulating measures, and were thus able to avoid all failure in their services, they were successful in their undertakings, and their character and conduct were established. When their characters were established, no such evils as oppression and disorder occurred; and when their undertakings were successful, the states were tranquil and happy.<sup>22</sup>

The purpose was to confirm the social order, as *Li Ji* (Book of Rites) states:

The ceremony of the Banquet served to illustrate the relation between ruler and subject; that of the District-drinking, to illustrate the distinction between seniors and juniors.<sup>23</sup>

And "archery served to show the completeness of (the archer's) virtue." Its sporting elements were subordinated to the moral teaching, as Confucius maintained:

In archery the point lies not in piercing the hide, For the reason that strength varies from man to man. This was the way of antiquity.<sup>24</sup>

The Master said, 'There is no contention between gentlemen. The nearest to it is, perhaps, archery. In archery they bow and make way for another as they go up and on coming down they drink together. Even the way they contend is gentlemanly.'<sup>25</sup>

The Confucian scholars went very far along this direction:

(Once), when Confucius was conducting an archery meeting in a vegetable garden at Kio-hsiang, the onlookers surrounded it like a wall. When the proceedings reached the point when a Master of the Horse should be appointed, he directed Zi Lu to take his bow and arrows, and go out to introduce those who wished to shoot, and to say, 'The general of a defeated army, the Great officer of a ruler-less state, and any one who (has schemed to be) the successor and heir of another, will not be allowed to enter, but the rest may all enter.' On this, one half went away, and the other half entered.

After this, (wishing to send the cup round among all the company), he further directed Kung-wang Khiu and Hsu Tien to raise the horns of liquor, and make proclamation. Then Kung-wang Khiu raised his horn, and said, 'Are the young and strong (here) observant of Their filial and fraternal duties? Are the old and men of eighty (here) such as love propriety, not following licentious customs, and resolved to maintain their characters to death? (If so), they may occupy the position of guests.' On this, one half (of those who had entered) went away, and the other half remained.

Hsu Tien next raised his horn, and proclaimed, 'Are you fond of learning without being tired? Are you fond of the rules of propriety, and unswerving in your adherence to them? Do those of you who are eighty, ninety, or one hundred, expound the way (of virtue) without confusion or error? If so, you can occupy the position of visitors.' Thereupon hardly any remained.<sup>26</sup>

Archery experienced significant changes during the Spring Autumn (770-476 B.C.) and Warring States (475-221 B.C.). It accompanied the social reformation, particularly the reformation in warfare. With the decline of privilege of previous aristocrats the ritual shooting declined; and the military value of archery was further realized due to frequent and large scale warfare among the states.

In order to make more people practice it, Mo Zi, a philosopher, suggested that those who could shoot and ride a chariot would be awarded and praised, while those who were not able to do so would be punished and despised.<sup>27</sup>

The State of Wei, the first state pursuing the social reformation in the late Spring and Autumn, even went so far as to issue an Act to encourage archery training. Han Fei described it as follows:

If there was a case that could not be easily decided, let the both sides to shoot. One who hit the target would win the case, while the misser would lose. So people all practiced shooting day and night. Due to their ability in shooting, the State of Wei had a great victory over the State of Qin.<sup>28</sup>

The State of Han was famous for its skills in making bows of good quality. There were four types of bows. One of them was the powerful crossbow.<sup>29</sup>

Higher criteria were also proposed in order to judge shooting skill. "To miss once in a hundred shots is sufficient to prevent a person from being classed as an expert shot."<sup>30</sup>

The improvement of archery was attributed to the skillful artisans of the times. One source said that the Duke

Jing Guen in the State of Qi had a craftsman who spent three years to make his bow with various materials from remote areas. The new teaching and training methods gradually appeared in this period as well.

The method of shooting is to keep the body steady like to be tied to a wood; the head is tilted; the left foot perpendicular to the right; the left hand catches [the bow] like holding a branch of tree; the right hand [holds the string] likes to hold a baby; lift the bow and aim at the enemy; when the right hand releases the string the left hand is not aware of it.<sup>31</sup>

In a famous work, *Zhuang Zi*, it was mentioned:

Lie Yukou was demonstrating his archery to Po-hun Wu-ren. He drew the bow to the full and placed a bowl of water on his left forearm. After he released the arrow, he fitted a second arrow to the string, released it, and the fitted the third, while the first was still in flight. The whole time he was like a statue.<sup>32</sup>

Lie Zi describes a story about an unique method in teaching shooting:

Ji Chang learned shooting from Fei Wei. Fei Wei told him "You should learn not to blink your eyes before you learn to shoot. Ji Chang came back home and laid under his wife's loom to watch the moving shuttle. After doing this for two years he could not blink even his eyelash was stuck by a needle. He spoke about this to Fei Wei; the latter said "Not yet, you have to learn how to see. When you see the small like the big and the faint as the obvious come back to me." Ji Chang hung a louse with a string on the window, standing to its south and watching it. Ten days later it seemed to become bigger, after three years the louse looked like a wheel. Looking around he found other things all like mountains. So he picked up a bow to shoot and hit at the heart of the louse without breaking the string. He told Fei Wei about it, Fei Wei delightedly said "You have got it."<sup>33</sup>

The substitution of cavalry for chariot-fighting resulted in the appearance of archery from horse-back.

The Han Dynasty paid so much attention to archery that it was felt necessary to appoint an official position in

charge of archery training. Moreover the teaching and training were apparently systematized, so that several works were written on this subject. Pan Gu records that there were eight types of them.<sup>34</sup> Many military men were known for their skilled shooting.

#### Equestrian sports:

##### 1) *Charioteering*:

It was once an illustrious event before the Warring States period. The reason is obvious; at that time the main form of warfare was chariot fighting. As the *Shi Jing* (Book of Songs) described the war between the Shang and Zhou:

The wilderness of Muh spread out extensive;  
Bright shone the chariots of sandal;  
The teams of bays, black-maned and white-bellied,  
galloped along;  
The grand-master Shang -foo  
Was like an eagle on wing  
Assisting King Woo,  
Who at one onset smote the great Shang.  
That morning encounter was followed by a clear bright  
[day].<sup>35</sup>

The number of chariots in a state was also the symbol of the military force of the state. The uneven territory and the primitive design of the chariot made charioteering a very skillful art. In the Zhou time it, like archery, was listed in educational programs; students were required to drive skillfully in five different ways. In the Spring and Autumn, according to Han Fei Zi, the nobles were still anxious to learn the skill.<sup>36</sup> And chariot races existed. According to Sima Qian, there was a chariot race held among the nobles for gambling.<sup>37</sup> However, after the Warring States cavalry and infantry gradually replaced the rigid form of chariot

fighting and consequently charioteering declined (See Figure 9).

## 2) Horse riding:

Prior to the Spring and Autumn period horses were only used for charioteering.<sup>38</sup> It was King Wu Ling of the State of Zhao (307 B.C.) who first introduced cavalry from the northern "barbarian" tribes and he wore the "barbarian" trousers for riding astride. From then on with the cavalry increasing its roles in the warfare horse riding became an important event in military training.

In Han China, since the main threat was the Xiongnu tribes who had powerful cavalry, the Han Court used various measures to develop horse breeding for military purposes. Cavalry had become an essential force in the Han army at the time of the Emperor Wu (141-87 B.C.). In 119 B.C. the campaign involved 100,000 cavalry, as well as 140,000 privately led horses. In 111 B.C. there were 180,000 cavalry present in the Emperor Wu's victory parade. The wars between the Han and Xiongnu lasted several decades (127 B.C.-90 B.C.) Both sides put nearly one million troops into the field with cavalry as the major force.<sup>39</sup>

But strangely we have little evidence indicating that horse riding was used in sporting form, except for field hunting. Nevertheless it did form a part of the *Jiao Di* (a mixture of various games).

### Running, Jumping and Throwing:

Running, jumping and throwing, the important portion of ancient Greek athletics, seemed only to be conducted within the Chinese army, through which to select and train soldiers, and was rarely participated in outside military camps in ancient China. Owing to the increasing role of infantry in battle, capability for running, jumping and throwing became a great concern since the Warring States period. As Wu Qi, a very famous general of that time, suggested that the lord who attempts to strengthen his country must manage his people and organize those with courage and strength as a military unit; those with faith and a willingness to attack as a unit. Those who were good at high jumping, long jumping and fast walking should also be trained as a unit.<sup>40</sup>

Mo Zi also recorded that in early times He Lu of the State of Wu (early sixth century B.C.) trained soldiers for seven years, required them to run for three hundred *li* (one *li* was about 350 meters) with armours and weapons before getting rest.<sup>41</sup> Such endurance training seemed to be paid off in the battle with the State of Chu (506 B.C.). The Wu army attacked the capital of Chu with a long-distance raid. Sometimes the soldiers were selected according to their ability in the three physical activities. As Xun Zi said:

In the State of Wei the soldiers are selected by certain criteria which is to let them wear armours and helmet, carry a crossbow which required strength of 12 *dan* to draw, a quiver with 50 arrows in it, a spear, a sword and food for three days, to quickly walk or run a hundred *li*, from morning to noontime. Those who qualified in the test were exempted from taxation and corvee.<sup>42</sup>

Obviously, such a test required both endurance and speed.

**Jumping:** according to *Zuo Zhan* in the battle between the States of Lu and Wu, the general of the Lu army tried to raid the Wu troop at night, so he selected three hundred soldiers by a jumping test: putting a jumping mark in the front of his residence, and those who could jump over it three times would be qualified. The State of Qin, which conquered all other states and first unified China in 221 B.C., had numerous fighters good at running, jumping and throwing. Stone-throwing and jumping were also used as a means of recreation and training in the Qin army. During the battle between the States of Qin and Chu, Wang Jian, the general of the Qin, took a strategy of avoiding a fight for a long time before he defeated the Chu army. And one day "Wang Jian sent his subject to ask if the soldiers were playing, and he was told that they were playing stone-throwing and long-jumping."<sup>43</sup>

In the Han Dynasty there was a lack of literary evidence about these physical activities, but from a record in *Han Shu* (History of the Western Han Dynasty) we know that these exercises were still conducted in the army:

Yan Shou was selected as one of the palace guards. His ability in stone throwing and long jumping was incomparable to others.<sup>44</sup> Once he even jumped over a kiosk of the palace guards.

Zhan Yan said that Yan Shou could throw a stone weight of 12 *jin* to two hundred steps.<sup>45</sup>

### Wushu (Martial arts)

It is likely that no other form of Chinese traditional physical exercises is known to the rest of the world better than *Wushu* (martial arts). The popular name of *Wushu* in the western world is "Gong Fu" or "Gung Fu".

"*Wushu*" literally means "method of fighting" in Chinese. It has tremendously complicated content and many functions in Chinese life. With thousands of years of development, *Wushu* has taken deep root in China and has become an inseparable part of Chinese culture, though it has blended with many unrealistic superstitious ideas, which covered it with a kind of mysterious eastern flavor.

What is *Wushu*? is the question still under debate by physical educators in China. According to *The Chinese Encyclopedia*, Volume on Physical Education and Sport, *Wushu* is defined as:

A Chinese traditional sport consisting of various body movements such as kicking, hitting, tumbling, catching, falling, chopping, striking thrusting and so on. These movements, following certain laws, are connected and form various attacking and defending skills, routines and single drills, with or without instruments.<sup>46</sup>

*Wushu* in China displays a tremendous diversity, no one knows exactly how many schools and subschools of it have existed. In general *Wushu* can be divided into two categories, with or without instruments (weapons).

The instruments used in *Wushu* are impressive with their variety, which consists of four groups of instruments: the short, long, double and soft instruments. For example there

were sabers, spades, pestles, staffs, spears, two-head spears, hooks, short iron rod with four edges, sticks, swords, halberds, long lances, pike, hammers, axes, harrows, forks, jointed iron chains, darts, daggers and so on (See Figures 10 and 11).

The performance without instruments is mainly Chinese boxing, which not only used bare hands but also legs. Boxing in north China emphasized leg movements such as the jump, and kick, for people in that area usually have strong body builds and grew to a bigger size, while the southern Chinese are often good at arm movements because of their shortness and agility. Boxing is treated as the basis of *Wushu*. Only after mastering boxing can one be allowed to practice with instruments.

There are several characteristics of *Wushu*:

1) Routine exercises. No matter how complex the skill they always followed a certain designed routine which usually includes the start--a process of several sections--and the end, performed constantly and smoothly.

2) Its theory heavily relies on the traditional philosophic ideas such as *Yin* and *Yang*, and *Qi* (vital energy). No *Wushu* master trained himself without doing certain forms of *Dao Yin*. The two schools of Chinese boxing, the internal and the external, all paid great attention to internal body training, especially the former. One skill in *Wushu* is to hit certain points of "network of vital energy."

3) Like *Dao Yin*, many movements in *Wushu* are named after animals.

Apparently, the high development of *Wushu* must be attributed to warfare. The frequent and intensive warfare in ancient China, especially since Spring and Autumn and Warring States times, and significant social change and military reformation stimulated and promoted the formation of *Wushu* as systematic exercises. Moreover, since that period the battlefield was no longer monopolized by aristocratic warriors. Vast numbers of ordinary people, especially farmers, became the backbone of the army. Fighting skills became an urgent social demand, practiced by a large population and encouraged by the ruling class. According to *Qi Yu* the Duke of Huan in the State of Qi required the officials to recommend the talented in martial arts as they were found. Guan Zi also ordered the local

In the area under your responsibility if there is someone who is good at martial arts and strength must be reported, otherwise, a penalty will be issued under the title of "covering the talented." 47

So Xun Zi noted that the people in the State of Qi respected fighting skill. 48

Since the previous simple mode of chariot-fighting gave way to calvary and infantry, the complexity of the new mode of warfare also stimulated methods of fighting skills. In addition, extended utilization of iron and the advanced technique of manufacture provided more suitable and efficient weapons. All these factors contributed to the great

development of *Wushu*, especially the skill of sword play and fighting with bare hands. Remarkable skills appeared. For example: Cao Mo, a general in Lu army, was so good at sword fighting that "when he swings a sword of three *chi* long (about 70 cm), a unit of troops cannot resist!"<sup>49</sup>

A kind of master swordsman appeared too:

... (they) all have tousled heads and bristling beards, wear slouching caps tied with plain, coarse tassels, and robes that are cut short behind; they glare fiercely and have difficulty getting out their words.<sup>50</sup>

What is more worth noting is the appearance of a certain theory of *Wushu*. *Wu Yue Chun Qiu* (History of the States of Wu and Yue) described a dialogue between the king of the State of Yue and a maiden, a master of the sword:

Maiden: I was born in the depth of the forest and grew up in the remote wild. I learned various things which are unknown to the lords, especially the skill of sword. I recited them all the time. I had learnt it from no one but one day it came to me.

King: What is the way of using the sword?

Maiden: The way looks faint and easy, but its meaning subtle and deep. The way has the opening and the closeness as well as *Yin* and *Yang*. When one fights with a sword, she should fill inside with spirit, but show calm outside just like a peaceful lady. However, if someone tries to attack he would find a terrible tiger. Such a swordsman could deal with one hundred and one hundred could match ten thousands.<sup>51</sup>

Zhuang Zi also had some words about the skill with the sword:

The wielder of the sword makes a display of emptiness, draws one out with hopes of advantage, is behind-time in setting out, but before-hand in arriving.<sup>52</sup>

The Han Dynasty was another important period for *Wushu* development. The sword skill became even more popular, from

the emperors to officers, no one failed to bring his sword with him. The members of royal family were anxious to learn the skill. According to one source, Liu Bang, the first emperor in the Han, had killed a snake with his sword when he led his troop walking in the Mang Yang Mountains at a night.<sup>53</sup>

Pan Gu tells us that the prince of Huai Nan king learned sword skill and thought that nobody could match him. Hearing that Lai Bai, a gentleman in the palace, was good at the skill, the prince insisted on fighting with him and was defeated.<sup>54</sup>

In addition, many civil officers and intellectuals were also known for their sword performances. Sima Qian, the most famous historian in Han, when he was in area of the former State of Zhao "became known by teaching sword skill."<sup>55</sup> Dong Fangshuo "learnt the sword skill at age fifteen".<sup>56</sup> Sima Xiangru, a well known writer, "liked reading and playing sword when he was young."<sup>57</sup>

According to Sima Qian a certain routine form of *Wushu* had been formed in the early Han. During a famous historical event, a Banquet at the Gate of Hong, there was a plot to assassinate Liu Bang at the feast. So Xiang Zhuang, a general in the Chu army said "there is no entertainment in the army, please allow me to dance with my sword." Another general, Xiang Bai, knowing that his purpose was to strike Liu Bang in his dancing, jumped out, too, carrying his sword to dance with him in order to protect Liu Bang.<sup>58</sup> This indicated that

before the Han times there had been not only a kind of routine of sword playing for single swordsman, but also some routine for dual players.

Cao Pei, the Emperor in the Three Kingdoms era (A. D. 220-265) said "When I was young I learnt the skill of sword from many trainers. Of all the types, the best is that in the capital."<sup>59</sup> So we know that in the Han times there were various schools of sword skill. One source tells us that there were 38 works about sword skills in the Han era; but they were all lost later.<sup>60</sup> Various stone reliefs also show sword fighting.

Fighting with bare hands also developed. Up to the Han times there had not been the term of *Quan* (the skill of boxing), but there were several other terms close to it such as "*Ka*", "*Bian*", or "*Shou Bo*" (meaning "hand fighting"). Some western scholars thought it "was more like the Greek pankration."<sup>61</sup> Actually it was not, for players of pankration, usually, held each other to wrestle, while Chinese hand fighting mainly involved only hitting and kicking, no holding.

Several works were done on fighting without instruments. Pan Gu records that there were six on "hand fighting" under the heading of military skills. This literature also indicated that there were 199 works of 13 schools about training hands and feet, practicing instruments and tricks.<sup>62</sup>

*Wushu* also functioned as a sort of entertainment:

In ancient times King Wen of Zhao was fond of swords. Expert swordsmen flocked to his gate, and over

three thousand of them were supported as guests in his household, day and night engaging in bouts in his presence, till the dead and wounded numbered more than a hundred men a year. Yet the king's delight never seemed to wane and things went on in this way for three years, while the state sank into decline and the other feudal lords conspired against it.<sup>63</sup>

The Emperor Xiao Ai of the Han had high taste he did not like entertainment and feminine beauty but occasionally watched the hand fighting, archery and some martial play.<sup>64</sup>

Based on the framework set up in the Han Dynasty *Wushu* developed into a vastly complicated system, showing a great diversity.


Nevertheless, warfare in ancient China as in any other part of the world was collective military behavior. The real fighting skills in the army must be simple and effective in order to meet the demand of thousands of soldiers as a fighting unit. Warfare always depended on the simultaneous harmonious actions of thousands of soldiers instead of on any individual masters of *Wushu*. There would be no room in strict battle array for the *Wushu* masters to jump back and forth.

Why did the Chinese develop such a unique and complex *Wushu* system while the Greeks did not? The fact is that *Wushu* was not the real fighting skill of the Chinese army though the army was greatly influenced by *Wushu*. Therefore, its development and its content were not necessarily confined by the demands of warfare. Many weapons which had been unused in the army long ago were still cherished by *Wushu* masters. The tendency of separating *Wushu* from the real fighting skills in the army provided a broad prospect for its development, and made it possible to constantly absorb some elements from *Dao*

*Yin*, acrobatics and dances; and finally developed its unique and complex performing routines. *Wushu*, like *Dao Yin*, had many movements imitated from animals. It was a multi-functional sport for keeping fit, for entertainment, as well as for certain martial purposes. In general, in Han times *Wushu* had possessed its basic characteristics from which a spectacular system gradually developed later. Even after the cold arms have been replaced by firearms, *Wushu* continues to survive up to the present.

#### Cuju (ball kicking):

As in many other early civilizations, balls can be traced back to primitive society in China. There are many stone balls excavated in the sites of a village occupied about four to five thousand years ago.

The first literal evidence that connected ball with foot appeared in the record of a religious ceremony around the 16th-11th century B. C., as a character, , which was believed to be a form of dance used to pray for rain.<sup>65</sup> But there were no more statements left to indicate how the dance was performed. So we do not know if this dance was the initial form of ancient ball-kicking or not. "*Cuju*" first appeared in historical literature in the Sima Qian's *Shi Ji* (Historical Records) in the Han period.<sup>66</sup> "*Cu*" in the Chinese language, means "kicking", and "*Ju*" the ball, so *Cuju* means "kicking ball". According to Liu Xiang, an writer in Han period, there are two statements about the origins of *Cuju*.<sup>67</sup> One indicates that it is the Yellow Emperor who

invented the game for military training, but most modern historians have doubted its truth. Another view states that *Cuju* emerged in the Warring-States period (475 B.C.-221 B.C.), because in that period warfare became an important means of solving the serious political conflicts among the various states. *Cuju* was utilized for the training of soldiers. Modern scholars think that this statement is more reliable. It should be noticed that even in the Warring State times *Cuju* was not only a military manoeuvre, but also a kind of recreation. *Shi Ji* (Historical Records) and *Zhan Guo Ce* (History of the Warring States) record that the city of Linzi was very rich and not one of its citizens did not like to play musical instruments, cock-fighting, dog-hounding, chess and *Cuju*.<sup>68</sup> The ancient ball was made by filling a leather pouch with fur.

In the Han Dynasty the military value of *Cuju*, which was inherited from the Warring-State period, was further recognized. During the early Han Dynasty the conflict with the Xiongnu, a nomadic tribe at the northern border of China, brought about great tension. Xiongnu were good at horse-riding, and their army possessed tremendous mobility. To deal with such an enemy the soldiers of the Han army had to be trained with more flexible tools. Therefore, in addition to the emphasis on horse-riding and archery, *Cuju* was particularly used as means of military training. Liu Xiang indicated that *Cuju*, a military affair, was used to train soldiers and to identify those who were talented. It was a

military training taken in a form of game-play. Another ancient historian, Pan Gu (32 -92 A.D.) recorded that Huo Qubing, a famous general of the Han army, led his soldiers in the northern border. The soldiers felt depressed for lack of food. Huo Qubing let them construct a field to play *Cuju*.<sup>69</sup> So it is not surprising for us to find that the Han historians put *Cuju* into the category of a kind of military operation.<sup>70</sup>

Since warfare is serious conflict and a violent competition, the *Cuju* played in the army naturally had strong competitive characteristics and took the form of a team sport which was rare in ancient sporting phenomena. *Cuju* players attacked and defended in a manner similar to fighting on the battlefield. Interestingly enough, as in modern soccer, there were goals on both end lines of the field. But instead of one, there were six goals on each side. The games of *Cuju* were also controlled by a referee or referees. As Li You (A.D.50-130), a poet in the later Han described in his "*Ju Cheng Ming*":

A round ball and a square wall,  
Just like the *Yin* and *Yang*.  
Moon shaped goals are opposite each other,  
Each side has six in equal number.  
To select the captains and appoint the umpire(s),  
Based on the regulation unchangeable.  
Don't regard relatives and friends,  
Keep away from partiality.  
Maintain mind in fairness and peace,  
Don't complain the other's faults,  
Such is the matter of *Cuju*.  
If all this is necessary for *Cuju*,  
How much more for the business of life.<sup>71</sup>

Although we might never know the exact detail about how these games were played, and how many players on each side, the general form of the *Cuju* still can be reconstructed according to the ancient records of various sources (See figures 12 and 13).

#### • Aquatics:

There are many lakes and rivers in China, especially in southern part. Chinese ancestors preferred to settle along these areas in order to get water, fish and for easy transport, therefore, they often suffered from flood damage, as *Shang Shu* (Book of History) states:

See! the floods assail the heavens.

The emperor said, Oh! chief of the four mountains, destructive in their overflow are the waters of the inundation. In their vast extent they embrace the mountains and overtop the hills, threatening the heavens with their floods, so that the inferior people groan and murmur.<sup>72</sup>

So the struggle between man and water began then, which stimulated aquatic activities. Swimming and rowing became a part of living after the age of hunting and fishing.

The inscription on bones or tortoise shells of the Shang Dynasty (c. 16th-11th century B.C) had a pictographic character about swimming.<sup>73</sup> *I Jing* (Book of Changes) tells us in the early ages calabash was popularly used as the means of floating aid.<sup>74</sup> A poem in *Shi Jing* (Book of Songs) seems to suggest that swimming was used for shallow water in the Zhou Dynasty:

Where the water was deep,  
I crossed it by a raft or a boat.  
Where it was shallow,

I dived or swam across it.<sup>75</sup>

It is worth noting that the poem was written in the feminine form, suggesting that during this time women were already swimming.<sup>76</sup>

During the Warring States era, swimming skill seemed to have made great progress according to *Zhuang Zi*:

Confucius was seeing the sights at Lu-liang waterfall. The water dropped two hundred feet streaming foam for forty *li*, so swift that no fish and turtles and crocodiles could swim in it, but he saw a man swimming there. Taking him for someone in trouble who wanted to die, he sent a disciple along the bank to rescue. But after swimming a couple of hundred paces the man came out of the water and strolled along singing under the bank with his hair hanging down his back.<sup>77</sup>

Since the Spring and Autumn period swimming was more frequently used for military purposes, which stimulated its development.

Guan Zi (c.730-c.645 B.C.) the chancellor of the State of Qi, built a large water pool and ordered soldiers to learn swimming in it. Those who were capable in swimming were rewarded, while those who were incapable were fined heavily. So the Qi army defeated the Yue army in a naval battle later.<sup>78</sup> The military work, *Liu Tao* (Six Military Strategies), states that "the marvellous skill is to cross over the deep water and rivers." A carving on a bronze kettle dating to the Warring states shows the roles of swimming and rowing in warfare (See Figure 14). It suggests that the style of swimming was much similar to the front crawl. The literature in Han times seemed to support the argument:

"swimmers kick with their feet and stroke with their hands."<sup>79</sup>

As to boating, there is even more evidence available. Sima Qian tells us as early as Xia "Yu dealt with flood for 13 years. He did not enter his home even if it was on his way. When he was on land he took a cart, while in water, he took the boat."<sup>80</sup>

It appeared to be a favorite recreational activity in the Zhou times as described in poems in *Shi Jing* (Book of Songs).

It floats about, that boat of cypress wood; Yea, it floats about the current.<sup>81</sup>

It floats about, that boat of cypress woods, There is the middle of the Ho.<sup>82</sup>

The two youths got into their boats,  
Whose shadows floated about [on the water].  
I think longingly of them,  
And my heart is tossed about in uncertainty.  
The two youths got into their boats,  
Which floated away [on the stream].  
I think longingly of them;  
Did they not come to harm?<sup>83</sup>

It floats about, -the willow boats,  
Now sinking, now rising again.<sup>84</sup>

It floats about, the boat of willow wood,  
fastened by the band of the rope.<sup>85</sup>

Its recreational value was also recognized by the Han Emperor. The Emperor Zhao enjoyed it very much and he ordered the palace maidens to row and sing at night.<sup>86</sup>

Boats were used for military purposes from a very early period, too. According to *Zhu Shu Ji Nian* (Chronological Records on Bamboo Slips), as early as the Xia Dynasty (c. 2100 B.C.-1600 B.C.) there was a big battle at Wei, when the

Xia army overthrew their enemy's boats. This seems to relate with another record in *Lun Yu* (Analects of Confucius): "Ao (a person in the Xia times) could push a boat over dry land."<sup>87</sup>

When the King Wu of the Zhou attacked the Shang he summoned his troops at Mengjing, and ordered his subjects to "gather your men to row with you. Those who were late would be punished to death."<sup>88</sup>

(During the Warring States several types of ship were utilized in the army for certain military tactics.<sup>89</sup>

Up to the Han period the naval force, called *Lou Chuan*, became a part of the army system, especially in the southern areas where the naval force formed the main part of the troops. In addition, the aquatic activities also connected with certain mass festivals and formed a part of celebrations which will be discussed later.

### III. Physical exercises for recreation

Many sporting forms in military activities also had important recreational functions, and many of them gradually lost their original military nature. There were, however, some sports participated in entirely for recreational purposes.

#### 1. Jiao Di Games

*Jiao Di* Games in the Han were a synthesis of entertainment, including various performances relating to music, dancing, acrobatics, sports and magic. According to Ying Zhao "Those who *Jiao*, contest in skill; those who *Di*, butt each other."<sup>90</sup> It was a kind of physical contest which

seems to have originated from a warfare between the Chiyou tribes and the Yellow Emperor's tribes in legendary ages.

According to Ren Fang (460 -508):

At the early age of the Yellow Emperor there were 72 brothers of *Chiyou* tribe, with bronze head and iron forehead, eating iron stone, being killed by the Yellow Emperor in the wildness of Zhu Lu. A saying in the time of the Qin and Han goes that the *Chiyou* had horns on their head and their hair on the temple like sword. In the fight with the Yellow Emperor their butting was so powerful that no body could resist them. So up to today there is a kind of game named "*Chiyou* game" in county of Ji; people butt each other with horns tied on their head.<sup>91</sup>

It was after the Spring and Autumn that *Jiao Di* gradually lost its original military value and was transformed into a kind of amusement. As Pan Gu states:

After the Spring and Autumn [period]... something was added to the rites in military reviews, and they became games and amusements and were used for boasting and showing off; the Qin [Dynasty] changed their name to *Jiao Di*.<sup>92</sup>

The Qin Dynasty named this amusement *Jiao Di* because it was in pairs that they opposed and contested with each other in strength. They also competed in other skills and talents, in archery and in driving. Another ancient source suggested an amusement consisting of contests in miscellaneous skills, such as when the people of the Yu River in Pa district play fishes and dragons, stretching themselves out.<sup>93</sup> The Emperor of Qin was very fond of the game. In 208 B.C., according to Sima Qian, the Second Emperor was at the Ganquan (Palace), and was just then holding a spectacle of *Jiao Di* Games and the theatricals.<sup>94</sup> These games are also recorded by Pan Gu.<sup>95</sup>

During the Han Dynasty the prosperous social life allowed this unique cultural pattern to grow rapidly. The flourishing international exchanges in trade, culture and education brought many foreign performances into China and new ideas and activities further extended the games' contents and made them more attractive to audiences. Since the middle of the Han *Jiao Di* Games became popular and favoured by various kinds of people, especially the upper classes (See Figure 15). They were held on various occasions such as holidays, special celebrations, and was also used to entertain foreign guests for the purpose of demonstrating the cultural superiority of the Han. During the middle of the Han they reached a great scale. Pan Gu records: "In the third year [108 B.C.], in the spring, *Jiao Di* Games were held and [people] from all [places] within three hundred *li* [came] to look at them."<sup>96</sup>

Among the diversity of the performances in *Jiao Di* Games, the following events are obviously related to sport.

#### 1). Wrestling:

According to *Shi Ji* (Historical Records) about 5,000 years ago the *Chiyau* Tribes trained their soldiers in wrestling. Before the Warring States wrestling had been used mainly for soldier training. In the Zhou Dynasty the son of Heaven ordered his leaders and commanders to give instruction on military operation, and to exercise (the soldiers) in archery, charioteering and wrestling in the first month of the winter.<sup>97</sup> Wrestling was popular among the nobles.

After the Warring States era, especially after the Qin Dynasty wrestling lost much of its military value and became a form of show for entertainment. The styles of wrestling were varied and had various names. A bronze plaque, carved with wrestling designs in bold relief dating to the Warring States period, presented a wrestling routine like the modern Chinese national wrestling style. A lacquer painting appears to resemble modern Japanese sumo (See Figure 16).

## 2) Strength performances:

### *Carrying Ding* (weight lifting):

*Ding* was a heavy ancient cooking vessel with two loop handles and three or four legs. To carry or lift it was a demonstration of one's strength. In the Warring States period a strong king of the State of Qin was fond of the games, and so Wu Huo, a man of great strength, often played weight-lifting with the king. Later it became a event in *Jiao Di* Games and named after him.<sup>98</sup>

### *Turning Stones*:

One player moved several large stones by pushing.<sup>99</sup>

### *Swing the large wheel*:

It originated from warfare, too, as according to *Zuo Zhuan* Di Hao, a general of the State of Lu held the wheel of a chariot covered with armour, while his other hand held a spear and led a team of soldiers in a charge. Later this became an exercise to demonstrate one's strength.

## 3) Acrobatics:

### *Performances of sword and small ball*:

When carrying a sword became a custom, the skill of playing with it in an acrobatic way appeared. Lie Zi records the remarkable skill of Lan Zi of the State of Song in the Warring States era:

The man's trick was to fasten to his legs a pair of stilts twice as long as himself, and run backwards and forwards juggling seven swords which he threw up in rotation, keeping five in the air at the same time. Lord Yuan was astounded and at once gave him a present of gold and silk.<sup>100</sup>

A similar way to play with small balls can also be found in various historical literatures. *Zhuang Zi* stated that a small ball was used by a man to train the precision of his skill in catching cicadas:

I have a way, said the hunchback, For the first five or six months I practice balancing two balls on top of each other on the end of the pole and, if they don't fall off, I know I will lose very few cicadas. Then I balance three balls and if they don't fall off, I know I'll lose only one cicada in ten. Then I balance five balls and, if they don't fall off, I know it will be as easy as grabbing them with my hand.<sup>101</sup>

There were many other physical performances such as horse riding, stick climbing, hand standing on several tables in the *Jiao Di* Games.

Dance was another important performance in games, it will be dealt with later.

Although *Jiao Di* Games gradually declined after the Han period they had a profound influence on certain sports such as *Wushu*, wrestling, dance and gymnastics.

## 2. Tou Hu (Throwing arrows into a wine bottle):

*Tou Hu* was a game played at festive entertainments. Two persons might play it, or any number. It was a contest at

pitching darts into the mouth of a wine bottle, placed at a short distance from the players. It was a game developed from the ritual-shooting. Since the Spring and Autumn period an intellectual social stratum appeared, due to the society becoming more complex, and the civil officials were separated from military officials. Shooting was no longer necessary for this intellectual group. As a recreational form during a feast the game of arrow throwing was substituted for the previous arrow shooting, and wine bottles were substituted as the target. In other words, *Tou Hu* was a symbolic form of archery. Since it was mainly played among the upper classes a complicated system of rules and rites was designed.<sup>102</sup>

Although it is a small game, yet lessons for the practice of virtue and for the judging of character might be learned from it. It is stated in *Li Ji* (Book of Rites) that "In *lu*, the young people (taking part in the game) were admonished in these words, 'Do not be rude; do not be haughty; do not stand away; do not talk about irrelevant matters.'"<sup>103</sup> All the basic rules of the social order were displayed during the ceremony: filial piety, respect for elders, respect for rank, a spirit of deference, a desire for purity and feelings of reverence.

The games were quite popular in Han times. Although the Confucian scholars were attached to the restrictive rituals of the game sanctioned in the classic works, another form of playing for pure amusement by professionals appeared as a

kind of "show business," and the form was much enjoyed by the Emperor Wu.<sup>104</sup>

### 3. Chess:

The appearance of chess seems to be always related to warfare. When warfare developed to a certain point of complex strategy, chess, as a reflection and an abstract form of warfare was designed. In this view, the large scope and complexity of warfare in ancient China provided a suitable soil for chess, in which two types of popular chess appeared.

#### 1) *Weiqi*:

A game played with black and white pieces on a board of hundred crosses was formed during the first half of the Spring and Autumn period, reflecting the military system in Western Zhou (c. 1100 - 771 B.C.) and the Spring and Autumn (771-476 B.C.). Although during the Qin it once declined, it rebounded again during the Han and the Three Kingdoms era (220-265).<sup>105</sup>

#### 2) *Xiangqi*:

A game played with 16 pieces on each side, representing the different types of army. Its origin is still under debate, although its initial form most likely appeared in the Warring States era, for there are certain similarities to the army system then. The Works of Geng Xing (A.D. 513-581) mentioned its rules.<sup>106</sup>

### 4. Dances for health and recreation:

As in many other early civilizations, dance was also one of oldest physical activities in China. Dance, according to

the ancient sources was a means of expressing internal feelings beyond words:

The feelings move inwardly, and are embodied in words; when words are insufficient for them recourse is had to sighs and exclamations. When sighs and exclamations are insufficient for them recourse is had to the prolonged utterances of song. When those prolonged utterances of song are insufficient for them, unconsciously the hands begin to move and feet to dance.<sup>107</sup>

One of the earliest literary records, *Shang Shu* (Book of History), states that people in the primitive society were dancing by imitating animal movements accompanied by the rhythm of beating a stone drum.<sup>108</sup>

Dance had many functions in early Chinese life, as a means of recreation, part of religious rites, for military training and keeping fit. Therefore, it was taught as an important course in schools during the Zhou period.

During the Han period the ritual dances became less important than in previous times, while various secular dances for recreational purpose rapidly developed. By this time dance was a social fashion involving all social classes from emperors to ordinary persons. For instance, Liu Bang, the first emperor of Han at the banquet held in his hometown "arose and danced."<sup>109</sup> A more conspicuous change was the flourishing of various types of dance for show, which could be mainly categorized into four groups:

1) *Dances with long sleeves*: In this category the long sleeves were the main tools for dancing, such as in the Long sleeve dance, Double dance, Scarf dance and Seven plate dance.

2) *Dance with weapons*: such as Sword dance, Stick dance, Shield dance, Axe dance and Knife dance.

3) *Dance with musical instruments*

4) "*Great Music of Harmony*": It was a big demonstration in which the dancers sang while they were dancing.

The Han Court paid great attention to dance and music and set up an institution, "*Yue Fu*" (the Department of Music) with 82 employers who were the outstanding artists from all parts of the country.<sup>110</sup>

The interaction of dance and other sport forms such as *Wushu* and *Jiao Di* Games was obvious. They related to one another and complemented each other at the same time.

#### 5. Swing:

Originally the game came from the mountain tribe in the north, and was played for training agility. It was introduced into central China when the Duke Huan of the State of Qi conquered them during the Spring and Autumn period. During the Han it was brought into the emperor's palace and played by maidens of the palace, thus becoming one of the typical sports for women in ancient China. In the Warring States another type of swing, the rotated one, appeared too.<sup>111</sup>

#### 6. Ji Rang (hitting a wooden pack):

"*Rang*", a wooden pack, wide in the front and narrow at the end, was similar to a shoe in shape. In play, a player tried to throw his *Rang* to hit his opponent's *Rang* which was about 30-40 steps from him.<sup>112</sup>

### 7. Gou Qiang (tug-of-war):

Its origin was related to warfare. During the Warring States period, Gong Shuban, a well known ancient engineer, designed a long rope made of the skin of bamboo to help Chu warships at the naval battle between the Chu and Yue.<sup>113</sup> Gradually it developed into a recreational game and was played initially in the south area of China. Two groups of people competed in the tug-of-war, accompanied by beating drums.

In the Han times a traditional custom was to play the game in January.<sup>114</sup>

### IV. Physical exercises related to seasonal mass festivals

Agriculture was the chief occupation of the ancient Chinese people. The men looked after the growing of cereals while the women were responsible for the care of silkworms and the weaving of silk. Life was ordered by a seasonal rhythm, which shaped the patterns of their production and social activities. So the old Chinese festivals had the obvious nature of an agrarian society which was seasonal and rural, with the heaviest of crops and the longevity of people as their main concern.

As any other old country in the world, the origins of the traditional Chinese festivals were always integrated into many legends. They were used as an unrealistic means of solving the conflicts between unknown natural forces and human beings. As Granet states, in general, they are festivals of union in which people become aware of the bonds

which unite them and, at the same time, of their oneness with their natural environment.<sup>115</sup> To crown all, they also serve to guarantee, along with the prosperity of men and things, the regular working of Nature.

However, the practical value in secular life should not be neglected. The same is true of the festivals with certain physical activities. Since all traditional festivals are a part of the folklore, a solid cultural pattern shared by the great majority of the population, the physical activities connected with the festivals must have wide and profound influences on ancient Chinese life. The following seasonal festivals often related to certain physical activities.

**The Lantern Festival** (the 15th day of the 1st lunar month): It is supposed to date from the Han Dynasty beginning as a ceremonial worship of *Tai Yi*, who was a heaven god and seemed originally to have been simply one of the names of God. The cult of God as *Tai Yi* was enthusiastically espoused by the Emperor Wu of the Han in the second century B.C.. Thus the festival fittingly brought the New Year holidays to a solemn close. The lantern displays make it one of prettiest and most picturesque festivals.<sup>116</sup> Among the various activities of the celebration, some had the apparent nature of physical recreation:

**Dragon Lamp Play** (or Dragon Dance): It was started during the Han and continued up to the present, and was participated in by more than ten persons with a large decorated form of a dragon, who made it move rapidly and turn

in different directions smoothly. This fascinating spectacle was, as a matter of fact, really very demanding in a physical way so that the players had to be changed often.

**Lion Play:** This was a folk performance played by two players, who dressed and acted like a lion. Some studies suggest that it was formed by combining two dances which were introduced from the area outside of the west border in the Han period. It required a high physical fitness among the players.

**Walking on Stilts:** The players walked on stilts, dressed in various known figures to act out some simple stories. This performance already existed in Han times (See "Acrobatics").

#### **Cold Food Festival and Qingming (pure brightness)**

**Festival:** The 105th day of the Winter Solstice is the Cold Food Festival and the next day, the *Qingming* Festival. The origin of Cold Food festival is celebrated as a memorial feast in honor of Jie Zi-tuai, a faithful hero in the Spring and Autumn period. He accompanied the Duke Wen of the Jin on a journey. Misfortune befell the travellers. Food supplies failed, whereupon he cut off a piece of his own flesh to feed his starving lord. The latter, desirous of rewarding his faithful servant who had fled to the mountains, commanded the underbrush fired to chase him out of hiding. "Thus" said the lord, "modesty shall have no excuse to escape just gratitude." But rather than stain his disinterestedness, Jie Zi-tuai preferred to burn alive. His Majesty deeply grieved

and ordered: "Let none forget his noble example, and let the people honor his memory each year at this season by lighting no fires in their homes for the three days, and eating cold food as a sign of remembrance".<sup>117</sup>

Later these festivals became festivals of worshipping the ancestors. Around the two festivals there were some physical exercises:

#### Kite Flying:

Although it was the Tang Dynasty (618-907) when kite flying became a popular recreational activity, and it was played especially around this time of the year. Its origin could be traced back to two thousand years ago during the Warring States. According to *Han Fei Zi*, Mo Zi once constructed a wood kite, which took him three years to complete and fly for one day.<sup>118</sup> Another source records that Gong Shu Zi made a bird of wood and bamboo, which could fly more than three days.<sup>119</sup>

**Excursion:** The beautiful picture of spring attracted city dwellers to take a pleasure trip to the wild fields outside cities in groups, which have been conducted traditionally during the two festivals. As *Lun Yu* (Analects of Confucius) records about a pupil of Confucius:

In late spring, after the spring clothes have been newly made, I should like, together with five or six adults and six or seven boys, to go bathing in the River Yi and enjoy the breeze on the Rain Altar, and then to go home chanting poetry.<sup>120</sup>

In addition, *Cuju* as a mass physical exercise was popularly played around that time too.

**The Dragon Boat Festival:** This Festival is on the 5th day of the 5th lunar month. There are several statements about the origin of the festival. The most popular one is that the holiday commemorates a high-minded statesman and poet, called Qu Yuan (340-278 B. C.), a minister of the State of Chu in the Warring States era. He urged reform on a prince who turned a deaf ear to his good counsel, when all other means of persuasion had been tried in vain. Qu Yuan composed the famous poem, *Li Sao*, detailing his anxieties, and jumped into the Miluo River on that day clasping a great rock in his arms. Some fishermen, who witnessed the act, hastily rowed out to save him. They could not even recover his body. From then on the dragon boat races have been held on that day to commemorate his death. This custom now still remains among the southern area of the Yang Tze River.

The reason for decorating their boats to look like dragons was to threaten the dragon, and to keep it from playing tricks. *Huai Nan Zi* states that there was a custom in the Chu area with the inhabitants drawing their bodies like dragon when they went into the water.<sup>121</sup>

**The Double Ninth Festival.** (the 9th day of the 9th lunar month): The custom of climbing mountains has been connected with this festival since the Eastern Han (A.D. 23-220) and continues up to now.

The origin of the festival was told as follows. In the Han Dynasty there was a man, named Huan Jing, who was studying with Fai Chang-fang. One day Fai told him that there

would be a terrible disaster on the ninth of September, and the only way to avoid it was to hasten with all his family to the shelter of the mountains and drink chrysanthemum wine.

Huan Jing did as his teacher said. Returning home at the end of the day, he found all his dogs and poultry had died violent deaths. Since then mountain climbing on the date has been a custom.<sup>122</sup>

## FOOTNOTES - - CHAPTER III

<sup>1</sup>*Lu Shi Chun Qiu* (Lu's Miscellany) 5: 5 [Qu Yue].

<sup>2</sup>*Lu Shi-Qian Ji* 9 [Yin Kang Shi].

<sup>3</sup>Gu Shiqian and Yang Wenqing, *The History of Chinese Sport* (Beijing Institute of Physical Education, 1980), p. 33.

<sup>4</sup>*Zhuang Zi* 6. 15, trans. Burton Watson (New York: Columbia University Press, 1968), pp. 167-8; Peng-Zu, a person in the Shang Dynasty, it was said that he lived eight hundred years, so becoming a symbol of longevity (Ma Jiren 1983: 18).

<sup>5</sup>*Nei Jing* (Internal Medicine), Suwen 4: 12.

<sup>6</sup>Guo Moruo, *Slavery Times*, cited in *China's Sport in Ancient Time* (Press Commission of the Chinese Olympic Committee and Enterprise International of Hong Kong, 1984), p. 9.

<sup>7</sup>*Huai Nan Zi* 7 [Jing Shen Xun], trans., E. Morgan (New York: Paragon, 1969), p. 67.

<sup>8</sup>Wu Zhichao, "The Origin of Ancient Dao Yin," *Reference Material of Physical Education*, 2 (1980): 51-58.

<sup>9</sup>Chen Shou, *San Gou Zhi* (History of the Three Kingdoms), 29.

<sup>10</sup>*Huai Nan Zi* 8 [Ben Jing Xun].

<sup>11</sup>*Shi Ben*, cited in *The History of Chinese Sport*, by Gu Shiquan and Yang Wenqing, p. 24.

<sup>12</sup>Ying Zhao, *Feng Su Tong Yi* 2 and Jiao Zhou, *Gu Shi Kao*, cited in *The History of Chinese Sport*, by Gu Shiquan and Yang Wenqing, p. 21.

<sup>13</sup>In 1963 some bows and stone arrows were discovered in an excavation of the site of the Old Stone Ages in the Shan Xi Province; see *The Military History of China*, 4 vols. eds. Gou Ruhuai et al. (Beijing: Army Press, 1983) 1: 5.

<sup>14</sup>Xiang She. Yue Xu, cited in *The History of Chinese Sport*, by Guo Xifeng, p. 68.

<sup>15</sup>*Li Ji* (Book of Rites) 43 [She I], trans. J. Legge, (New York: University Books, 1967) 2: 448.

<sup>16</sup>*Ibid.*

- 17 Ibid.
- 18 Ibid., 1: 101.
- 19 Men Xianchen et al., *A Source Book of the History of Ancient Chinese Education* (Beijing: People's Education, 1961), p. 19.
- 20 Zhou Li (Rites of the Zhou Dynasty), Di Guan.
- 21 Guo Xifeng, *The History of Chinese Sport* (reprint ed. Taiwan: Zhong Hua Press, 1966), p. 74.
- 22 Li Ji 43 [She I]. trans. J. Legge, 2:446-48.
- 23 Ibid., p. 446.
- 24 Lun Yu (Analects of Confucius) 3, trans. D. Lau, (Hong Kong: The Chinese University Press, 1983), p. 23.
- 25 Ibid., p. 20.
- 26 Li Ji 43 [She I]. trans. J. Legge, 2: 449- 450.
- 27 Mo Zi, 2: 8 [Shang Xian].
- 28 Han Fei Zi, 9: 7 [Nei Chu].
- 29 Zhan Guo Ce (History of the Warring States), 26.
- 30 Xun Zi, 1 [Quan Xie].
- 31 Wu Yue Chun Qiu, (History of the States Wu and Yue) 9: 7.
- 32 Zhuang Zi, 7: 21 [Tian Zi Fang].
- 33 Lie Zi, 5.
- 34 Han Shu (History of the Western Han Dynasty) 30: 10.
- 35 Shi Jing (Book of Songs), Da Ya-Daming, trans. J. Legge (Hong Kong: University Press, 1960), p. 432.
- 36 Han Fei Zi 7: 27.
- 37 Shi Ji, 65: 5.
- 38 Lin Sitong, *Five Thousand Years of Chinese Sport* (Xian Institute of Physical Education, 1984), p. 26.
- 39 Guo Ruhuai, et al., *The Military History of China*, 2: 28.

- 40 *Wu Zi* 1 [Tu Guo].
- 41 *Mo Zi*, 5: 18 [Fei Gong].
- 42 *Xun Zi*, 10: 15 [Yi Bing].
- 43 *Shi Ji*, 73: 13.
- 44 *Han Shu*, 70: 40.
- 45 Guo Xifeng, *The History of Chinese Sport*, p. 125.
- 46 *The Chinese Encyclopedia*, Volume on Physical Education and Sport, 1982 ed. s.v. "Wushu" by Zhang Wenguang.
- 47 *Guan Zi*, 3: 20 [Xiao Kuang].
- 48 *Xun Zi*, 5: 9 [Wang Zhi].
- 49 *Zhan Guo Ce*, 10.
- 50 Cited in *Chinese Civilization and Society a Source Book*, ed. P. B. Ebrey (New York: The Free Press, 1981), p. 19.
- 51 *Wu Yue Chun Qiu*, 9: 6-7.
- 52 Cited in *Chinese Civilization and Society a Source Book*, ed. Ebrey, p. 19.
- 53 *Han Shu*, 1A: 1a.
- 54 *Ibid.* 44: 14.
- 55 *Ibid.* 62: 32.
- 56 *Ibid.* 65: 35.
- 57 *Ibid.* 57: 27.
- 58 *Shi Ji* 7: 7.
- 59 *Dian Lun - Zi Xu*, cited in *A Concise History of Ancient Chinese Sport*, ed. Li Jifang et al., (Beijing: People's Sport, 1984), p. 104.
- 60 *Han Shu*, 30: 10.
- 61 Gardiner, *Athletics in Ancient World*, p. 15.
- 62 *The Chinese Encyclopedia*, Volume on Physical Education and Sport, p. 418.

<sup>63</sup>Cited in *Chinese Civilization and Society a Source Book*, ed. Ebrey, p. 18

<sup>64</sup>*Han Shu*, 11: 11.

<sup>65</sup>Tang Hao and Zhen Shurong, "Ball Kicking in Ancient China," in *Reference Materials of the History of Chinese Sport* 7-8 (Beijing: People's Sport, 1959), p. 20.

<sup>66</sup>*Shi Ji*, 69: 9.

<sup>67</sup>Liu Xiang, *Bie Lu*.

<sup>68</sup>*Zhan Guo Ce*, 8.

<sup>69</sup>*Han Shu*, 55: 25.

<sup>70</sup>*Ibid.*, 30: 10.

<sup>71</sup>Cited in *A Concise History of Ancient Chinese Sport*, eds. Li Jifang et al., p. 97.

<sup>72</sup>*Shang Shu* (Book of History), Yao Dian, trans. J. Legge (Hong Kong: University Press, 1960), p. 24.

<sup>73</sup>Yu Baotian, "Swimming in Ancient Chinese Works and Arts," *Literature and History of Sport* 3 (1985): 36-37.

<sup>74</sup>Gu Shiquan and Yang Wenqing, *The History of Chinese Sport*, p. 68.

<sup>75</sup>*Shi Jing* (Book of Songs), Bei Feng. Gu Feng, trans. J. Legge (Hong Kong University Press, 1960), p. 57.

<sup>76</sup>Yang Wenqing, "*Shi Jing* (Book of Songs) and Sport," *Literature and History of Sport* 2 (1985): 20-24.

<sup>77</sup>*Zhuang Zi*, 7: 19 [Da Sheng].

<sup>78</sup>*Guan Zi*, 23: 80 [Qing Zhong Jia].

<sup>79</sup>*Huai Nan Zi*, 17 [Shuo Lin Xun].

<sup>80</sup>*Shi Ji*, 29: 7.

<sup>81</sup>*Shi Jing*, Bei Feng. Bo Zhou, trans. Legge, p. 38.

<sup>82</sup>*Ibid.*, Yung Feng. Bo Zhou, p. 73.

<sup>83</sup>*Ibid.*, Bei Feng. Er Zi. Cheng Zhou, p. 71.

<sup>84</sup>*Ibid.*, Xiao Ya. Qin Zhe, p. 280.

<sup>85</sup>*Ibid.*, Cai Shu, p. 404.

<sup>86</sup>Ren Fang, *Shi Yi Ji* cited in *The History of Chinese Sport*, by Gu Shiquan and Yang Wenqing, p. 115.

<sup>87</sup>*Lun Yu* 14, trans. D. Lau, p. 133.

<sup>88</sup>*Shi Ji*, 4: 4.

<sup>89</sup>*Yue Jue Shu*, 6.

<sup>90</sup>Ying Zhao, *Feng Su Tong Yi*.

<sup>91</sup>Ren Fang, *Shi Yi Ji*.

<sup>92</sup>*Han Shu* 23: 5b.

<sup>93</sup>Wen Ying, cited in *the History of the Former Han Dynasty*, trans. and ed. H. H. Dubs, 3 vols. (The American Council of Learned Societies, 1944) 2: 129.

<sup>94</sup>*Shi Ji*, 87: 36.

<sup>95</sup>*Han Shu*, 6: 27b.

<sup>96</sup>*Ibid.*

<sup>97</sup>*Li Ji*, 8: 8 [Yue Ling], tran. J. Legge, 1: 300.

<sup>98</sup>*Shi Ji*, 5: 5.

<sup>99</sup>Li Jifang et al., *A Concise History of Chinese Sport*, p. 91.

<sup>100</sup>*Lie Zi*, 8, trans. A. C. Graham (London: John Murray, 1960), p. 169.

<sup>101</sup>*Zhuang Zi*, 7: 19 [Da Sheng]. trans. B. Watson, pp. 199-200.

<sup>102</sup>*Li Ji* 37 [Tou Hu]. trans. J. Legge, 2: 397-401.

<sup>103</sup>*Ibid.* 2: 400.

<sup>104</sup>*Xi Jing Za Ji*, cited in *A Concise History of Ancient Chinese Sport*, by Li Jifang et al., p. 107.

<sup>105</sup>Li Jifang et al., *A Concise History of Ancient Chinese Sport*, pp. 63-64.

<sup>106</sup>*Ibid.*, p. 64.

<sup>107</sup>"The Great Preface of *Shi Jing*," in *Shi Jing* (Book of Songs), trans. Legge, p. 34.

89. 108 *Shang Shu*, Book of Tang 5 [Yi Ji], trans. Legge, p. 18.
- 109 *Han Shu*, 18: 1b.
- 110 Peng Song, *The History of Chinese Dance*, (Beijing: Culture and Arts, 1984), pp. 1-86.
- 111 *Bulletin of Archaeology*, 1975, No. 2, cited in *The History of Chinese Sport*, by Gu Shiquan and Yang Wenqing, p. 93.
- 112 Lin Sitong, *Five Thousand Years of Chinese Sport*, p. 8.
- 113 *Mo Zi*, 13: 49 [Lu Wen].
- 114 Zong Ling, *Jing Chu Sui Shi Ji* (Historical Notes of Jing Chu).
- 115 Marcel Granet, *Festivals and Songs of Ancient China* (London: George Routledge & Sons, 1932), p. 180.
- 116 J. Bredon and I. Mitrophanom, *The Moon Year* (Shanghai: Kelly & Walsh, 1927), pp. 133- 4.
- 117 *Ibid.*, p. 217.
- 118 *Han Fei Zi*, 11: 32 [Wai Chu Shou].
- 119 *Mo Zi*, 13: 49 [Lu Wen].
- 120 *Lun Yu*, 11: 26 [Xian Jing], trans. D. Lau, p. 105.
- 121 *Huai Nan Zi* 1 [Yuan Dao Xun].
- 122 Zong Ling, *Jing Chu Sui Shi Ji*.

## CHAPTER IV

### SUMMARY OF PART I

Observing the phenomenon of sport in the two ancient civilizations simultaneously, we cannot miss the differences which appear so obviously in the comparison.

1. From an organizational point of view, ancient Greek sport was apt to be centralized and standardized, while ancient Chinese sport was likely to be decentralized and diversified.

The centralization of ancient Greek sport was typically embodied in the large pan-Hellenic festivals: the Olympic, Isthmian, Nemean and Pythian Games, in which Greeks participated from all parts of the Mediterranean world. These large sport meetings (from a sport historian's point of view) were held at fixed times and places. They followed fixed routines and became most important affairs in the whole Greek world, which consisted of numerous independent city-states.

The national sport meetings provided good opportunities for sport communication. In order to participate in them athletes had to be familiar with the same rules. It was these big festivals that spread athletic ideals, events, rules, and programs everywhere in the Greek world, and which shaped the development of Greek sport. The significance of the panhellenic games was more than simply providing physical

models for the Greeks in different city-states. They also, to a certain extent, indicated Greek value judgments by the great honors and substantial benefits awarded to the winners, which also oriented Greek sport in a more athletic direction. As a result ancient Greek sport activities, although varied in many spheres among many city-states, were basically the same. That is, they all modeled themselves on the programs held at the pan-Hellenic games. Hence the relative standardization of Greek sport was a result of its centralization.

There was no a similar national sport meeting in ancient China. Although some festivals in China were national in nature, they were only celebrated locally, and did not involve long distance travel as the Greek games did. As a matter of fact, ancient Chinese sports, unlike the athletics-oriented Greek sport, displayed great diversity. They were usually local in nature, and different from one area to another. There was no any particular form of sport in a dominate position, like athletics to the ancient Greeks.

The diversity of Chinese sport was indicated not only by its various types, but also by the diversity of many subschools within the same sport. For example, in *Wushu* (martial arts) and *Dao Yin*, the two popular ones, there were many subschools in each type of activity.

Obviously the well-organized national sport meetings of ancient Greece had crucial roles in the centralization and standardization of sport. But the problem is why the ancient

Greeks had national sport meetings, while the ancient Chinese did not, especially when we are aware of the fact that the ancient Greek world consisted of many small independent city-states, while Han China was a uniform country, governed by a centralized authority. So the question may be asked in this way: Why did national games take place in the politically decentralized Greek world instead of in the politically centralized China?

2. In terms of its nature, all sport has both competitive and non-competitive elements, such as entertainment, fun and relaxation. Greek sport was tremendously competitive while Chinese sport tended to be less- or non-competitive.

i. In Greek sport only those events with a strongly competitive nature, the so called "agon" (contest and conflict), were popularly practiced. The athletic-oriented sport was usually taken in the form of a serious physical contest, so it was competition-oriented.

ii. Emphasis on the outcome of sport contests. The result of games, the winning and losing, was treated in very different ways in ancient Greece. To the winners glorious honors were given. The winner's (and his father's) name as well as that of his city-state were announced; his statue was set up at public expense; a special ceremony attended his heroic home-coming. As Pindar and Xenophanes described it:

The victor has sweet fair weather for the rest of his life on account of the contests [he has won].

[The victor] would be more honorable for his fellow citizens to look on, and he would get a highly visible front seat at the games.<sup>2</sup>

In addition, a substantial material benefit was awarded.

[The winner would get his provisions from the public storehouse, and a gift from his city that he could put in a treasury.<sup>3</sup>

Solon, for example, offered 400 drachmas for the Olympic winners and various prizes for other panhellenic games.

To the losers came disgrace and contempt, as Pindar has indicated with reference to the victor of a boy's wrestling match at Delphi:

You fell from above on four bodies [i.e. in the four heats] with evil intention; for them no pleasant return- as there was for you- was awarded by the judges at the Pythian games, nor did a sweet smile from their mother bring them pleasure when they returned home; but down back alleys out of sight of their enemies they crouch, stung by their misfortune.<sup>4</sup>

Among the diverse forms of Chinese sport a tendency may be identified, to focus on less competitive or non-competitive values such as recreation and keeping fit. Therefore those sports with an obvious element of amusement often developed into a spectacular display, such as the *Jiao Di* games, dance and mass festivals. Even martial arts were often a part of the entertainment.

However, there was a definite competitive element, especially in the following sport forms:

1) *Wushu* (martial arts):

Due to their close relationship with military affairs, martial arts had a strongly competitive nature, and all their routines were designed for the purpose of attacking and

defence. However, they were not regarded as competitive sports mainly for three reasons:

- i. The diversity of instruments and routines made them lack the necessary standardization required for competition.
- ii. As a sort of fighting skill, martial arts might cause serious injuries to the contestants and would be difficult to become a competitive sport unless certain strict rules were set up and protective equipments were available.
- iii. There were many schools and subschools in martial arts. For the purpose of keeping their reputation and attraction for their disciples, martial arts masters were very reluctant to compete with each other, especially with those unknown to them. So martial arts basically could be regarded as an individual non-competitive sport.

## 2) *Cuju* (Ball kicking):

In this category the only kind which qualified as a form of competitive sport was the form of football played in the Han army. It was also a team competitive sport, conducted by certain rules and governed by referee or referees. As mentioned before, its competitive character was mainly due to military training. Therefore once it went beyond the army camps, its competitive value was rapidly dropped and transformed into a recreational form with many diversities.

## 3) Archery:

Since the participants in archery contests were not offered equal terms to conduct their performances, the contests lost their real competitive meaning. As a matter of

fact the focus was on the complex process of the contests as a means of identifying and reinforcing the hierarchical social order, instead of on the contests themselves.

Apparently, in ancient Chinese sport, the process of the games was being emphasized rather than their outcome, i.e. winning or losing.

Ancient Chinese sport placed the cultivation of virtues at a top priority. For example, in archery and *Tou Hu* participants should demonstrate their moral virtue as well, so that the loser and winner both could be respected as long as they displayed their goodness. The outcome of the games, in general, was not as important as in ancient Greek athletics. So competitive elements in ancient Chinese sport games were mainly used as a means to increase the attractiveness of the games, thereby giving them more entertaining or recreational value.

Some may argue that the strongly competitive nature of ancient Greek sport was due to its close relationship with warfare, for warfare is a serious conflict and a violent physical competition. As we have noticed, many Chinese sports were also closely related to warfare and some of them also possessed a competitive nature. But what is interesting to us is that once those sport spread beyond the barrier of the military training, in China their competitive value rapidly decreased, whereas in Greece the competitive element prevailed over all spheres of the social life.

3. In terms of the focus of physical exercises, the Greeks emphasized more the external muscular development of the body, while the Chinese paid more attention to their internal body.

Physiologically the aim of physical exercises is to keep the body in good condition. Interestingly, here we find that two different ways were used in the two cultures to reach the same goal. In ancient Greece, athletics was not only a means for military training and education, but also the basic tool used by Hippocratic physicians for keeping fit and for medical treatment. These activities were active and vigorous, hence suitable for an ideal muscular development which was highly valued. But they seemed to pay little attention to the internal body.

The physical exercises for keeping fit in ancient China were mainly *Dao Yin*, which also penetrated into almost all other Chinese traditional exercises. In contrast to the focus of the Greek athletics, *Dao Yin* emphasized the harmony of body movement, consciousness and the vital energy. Consciousness means the mode of thinking, and the vital energy mainly related to an abdominal type of deep breathing. The main purpose of this exercise was to cultivate the vital energy and make it circulate smoothly in the body (this will be discussed in detail in Chapter 7), so muscular development was not the chief aim.

4. In terms of the forms of the physical movements of sport, Chinese sport had an obvious bionics nature, imitating

various forms of animals, while there was almost no similar development in ancient Greece.

It is worth noting that the ancient Chinese seemed to pay much attention to animals' habits and obtained much inspiration from them. The physical activities which simply follow animals, or which were inspired by observing animal movements, formed an important portion of Chinese sport, especially in *Dao Yin* and *Wushu*. Thus bionics appeared to be a characteristic of Chinese sport tradition, and this aspect has never been lost even up to the present times. In ancient Greek sport we find almost nothing of this aspect, with the exception of the name of a dance called "crane dance" which left little trace in the historical literature.

The differences are quite clear. However, the reasons for these differences cannot be found by merely comparing the sports themselves in the two civilizations. We have to widen our visual field to trace the answer from the different social backgrounds in which sport existed.

## FOOTNOTES - - CHAPTER IV

<sup>1</sup>Pindar *The Odes* Olympian 1. 4.

<sup>2</sup>Xenophanes Frag. 2, cited in *Sources for the History of Greek Athletics*, ed. Robinson, p. 91.

<sup>3</sup>Ibid.

<sup>4</sup>Pindar *The Odes* Pythian 8. 5.

## CHAPTER V

### ORGANIZATIONAL DIFFERENCES OF SPORTS IN ANCIENT GREECE AND ANCIENT CHINA

As mentioned in the last section, Greek festivals, especially the pan-Hellenic ones, played significant roles in the centralization and standardization of Greek sport. But why did a national sport festival take place in such a decentralized world of numerous politically independent city-states? What were the motivations encouraging those Greeks so anxious to go to Olympia from remote areas, spending a lot of time on the journey and sitting on an uncomfortable hill slope, baked by summer sun, and pushing through the crowds to see the stadium and the hippodrome, where the games were being held? Why did they neglect their urgent business to fritter their time away in such an amusing matter, as Anacharsis asked Solon more than two thousand years ago?<sup>1</sup> What were the functions of the games?

Many scholars emphasize the importance of the religious aspect, and claim that religion was the basic reason for the Olympic games.<sup>2</sup> No doubt, religion played an important role in Olympic and other pan-Hellenic festivals. But the fact is that Olympia reached its peak in the fifth century B.C., the era when the Greek polytheism began to decline, and the era during which ancient science began to emerge. In the fifth

century B.C. philosophers such as Thales, Heraclitus, Democritus, tried to trace the material reasons for the universe; the physician, Hippocrates considered diseases through the links between the human body and the natural world. The sophist, Protagoras said the famous words, "Man is the measure of all things." So it may be reasonable to question the power of Greek religion in that period of time.

In terms of the social function of the Olympic games, many scholars in both the ancient and modern world have realized the importance of the athletic festivals as a unifying force in the Greek world such as Isocrates, Lysias, Philostratus, Gardiner, Bowra, Jaeger, Drees, Pourest, Thompson.<sup>3</sup> But why was unity so important, only because of the threat of the Persian empire? What are the bases which made the unity possible, because the Greeks had the same language, religious beliefs and traditional customs as many scholars have stated?

Wright argued that historians laid full stress on the services that Olympia rendered in emphasizing the sense of national unity and goodwill, but exaggeration is very possible there.<sup>4</sup> In his opinion, the chief benefit of all these gatherings was the stimulus that was afforded to local and national patriotism. But why patriotism?

Due to the increasing influence of sport sociology which has developed rapidly in recent years, some scholars have begun to consider ancient Olympia through a multi-dimensional viewpoint, by looking at its economic, political, and social

significance. For instance, Olivova has a brief statement on these main social aspects in her *Sports and Games in the Ancient World*.<sup>5</sup>

In general, the relationship between ancient Olympic festivals and their social context is still not clear. To understand and explain historical events, especially those with the significant meanings as pan-Hellenic games, we have to observe the major spheres of ancient Greek society. Since human society is a constantly changing it should be noted that during the entire longevity of the ancient Olympic Games from 776 B.C. to 393 A.D. the social background of the festival experienced a series of great changes. The Olympic Games as a integral part of society were also in a changing process in order to fit the changed environment and to meet new social demands. Therefore, the reasons for their existence and the functions which they possessed were different from time to time, although their events seemed to have considerable stability.

This section looks at the social conditions in which Greek festivals developed from local festivals into significant meetings of the whole Greek world, with their peak in the middle of the fifth century B.C.. Then an analysis follows of why there was no similar process in ancient China by comparing these conditions.

### I. Economic background

The economy of a society is always closely linked with its physical environment. Climate, landforms, natural

resources and geographic location, in general, play a certain role in shaping the economic patterns of a nation. This was especially true, in ancient times when people's ability to conquer nature was weaker, and they had to rely heavily on the kindness of nature in their lives. Their economic life, to a very large extent, was determined by the physical environment. Knowledge of their land and climate, therefore, is quite important to apprehend the characteristics of ancient Greece.

The most obvious natural feature of the land is a series of high mountain ranges (the Pindus). This mountainous backbone of the Greek mainland is composed predominantly of limestone which gives rise to extensive areas of Karst scenery.<sup>6</sup> The ancient Greek settlements were established in the valleys between sea and mountains. Some parts of the land were suitable for farming such as the plains in Thessaly around Larissa and to the east of Pharsalus; the Spercheus valley east of the Malian Bay; in Phocis, south of Elatea; in Boeotia, north of Thebes; in Attica, near Eleusis; west of Athens, between the Hymettus and the eastern coastal mountains, and around Marathon; in Argolis around Argos; in Laconia south of Sparta; and almost the whole western coast of Elis. These areas produced mainly corn, wine and oil. Yet the arable land did not occupy a fifth of Greece at the end of the last century.<sup>7</sup> In general a very large part consists only of rocky ground which is hardly covered by the thin layer of humus.

The climate in Greece is Mediterranean one. In winter a low-pressure system is situated over much of the country and a series of depressions moving eastward brings rain, while the reverse situation is true in summer when a high-pressure system dominates, bringing hot, sunny weather with very little rain.<sup>8</sup> Thus, of all the annual rainfall the winter gets 78% while the three summer-months June, July and August together only receive 7%. The persistent drought is accompanied by intense heat.<sup>9</sup> In addition there are hardly any rivers which could be used for the purpose of irrigation with exceptions of the Achelous on the border of Acarnania and Aetolia, and the Alpheus and the Pamisus in Messenia. Obviously, the unfertile land is poor in agricultural production.

However, beneath the ground there is treasure of various kinds. There was no district without loam for the manufacture of earthen ware; marble is found in great quantities; gold is found at the northern coast of the Aegean sea, in Thrace and Macedonia; silver is principally found in the Laurion in the south of Attica; iron ore is widespread in Greece (See Figure 17).<sup>10</sup>

Apparently, the physical world in which the Greeks settled, to some extent, confined agricultural development but allowed a great potential for craft manufacture. However, this requires comparative concentration of labor, necessary even in ancient times. In classical Greece, including Athens, there is little evidence of using animal or water-power for

any process, and manufacturing seems to have been limited to the simplest application of human energy.<sup>11</sup> Consequently to develop manufacturing demands more food stuff in order to support the concentrated labor. But the unfertile land and the inadequate rainfall hardly meet the demand. So the food need for manufacturing and the lack of agricultural production seem to form a big contradiction in this world. It seems that Greeks would have abandoned the desire for manufacture and just struggled with the poor land and got on with scarce food stuff as many nations did in similar physical surroundings.

However, the geographic location of Greece here played a very important role which helped Greece develop unique economic patterns from the eighth to the fifth century B.C.. Greece is located at the crossroads of Europe, Asia and Africa. Although communication by land was difficult due to many mountains and valleys, the Aegean Sea did supply a natural highway. In Greece no place is more than 50 miles from the sea with exception of the north part. From late March to late October the sea is calm over which regular winds blow. These winds were known to the ancient Greeks as the *Etesians*.<sup>12</sup> Greece has a most broken coastline, the bays penetrate deeply into the land, providing many excellent ports, and islands of various size spread all over the sea. On the west coast there are 116 islands, and in the Aegean Sea 483, sailors find good traffic stations.<sup>13</sup> This convenient water channel allowed Greece to keep cultural

contact with the outside world easily. For example, from the Phoenicians came the alphabet, from the Egyptians came sculpture, and from the whole Levant architecture.<sup>14</sup> These also provided the Greeks with great opportunities to develop their trade and manufacturing.

After the tenth century B.C. a deep and broad social economic change took place in the Greek world, in which the utility of iron played an important part. Up to then bronze had dominated the ancient world. Bronze was always an expensive metal to produce because the constituent elements, copper and tin, were relatively scarce, and were rarely found together. Copper was only found near Chalcis in Euboea and had to be imported from Cyprus.<sup>15</sup> It could not be widely used in agricultural production. Iron, on the other hand, was widely distributed and easily accessible. Iron provided agriculture with more efficient tools so that the arable land could be brought under cultivation, which had two results.

Firstly, the larger surplus product generated by more efficient tools from more arable land stimulated changes in the social classification. As the landed nobility increased their economic and social privileges the kingship disappeared almost everywhere in the Greek world in the course of the eighth century B.C.. The transition from the rule of kings to the rule of "nobles" occurred.<sup>16</sup> Monarchy developed into aristocracy.

Secondly, the population rapidly increased. The picture of sparse population with much barren land in Homeric ages

was gradually transformed. The contradiction between the lack of arable land and the increased population became more tense, and the embezzlement of land by the aristocracy made the situation even worse. Many peasant families were driven off the land, and reduced to exile, beggary or slavery. The hunger for land was not confined to poor farmers in economic difficulties, or to landless people trying to find a better living. There were also the second and third sons of noblemen, who had no claim to the family estate, and were eager to live on a new estate of their own.<sup>17</sup>

Motivated by the pursuit of land and other reasons, a great movement of colonization was launched through the natural highway, the Aegean and Mediterranean Seas, from the middle of the eighth century. In most areas of colonization the first to go out were the Euboeans, closely followed by people from Corinth. Eretria and Chalcis, Corinth and Magara in central Greece, Miletus, Phocaea and Rhodes in Asia Minor were among the foremost places to be affected in this way (See Table 2). Gradually the colonies of Greeks spread all over the Mediterranean Sea (See Figures 18, 19, 20).

Although colonization had been due to the pursuit of land as its main purpose at the very beginning, commerce gradually became more and more involved. Colonization opened a huge area, rich in metals, timber, grain, fish and many other products for the Greeks who needed them badly to support the constantly growing population.

The effects of colonization on the economy of Greece were far-reaching. On the one hand the new colonies and the "barbarian" tribes were supplying the necessary grain and raw materials to Greeks. For example, in Pericles' times two-thirds of the food stuff of Athens probably came from abroad.<sup>18</sup> Until the 4th century B.C. the amount of cereals imported into Attica was four times the home production.<sup>19</sup> On the other hand, the necessity to pay for these imports stimulated manufacturing within Greece, especially the potters and metalworkers. After about 700 B.C. manufactured articles, of which metal weapons, textiles and pottery were the most important, were produced in Greece and exported in mass quantities to all parts of the Mediterranean and Black Seas.

The frequent import and export of goods stimulated commodity production which reorientated the patterns of Greek economy and social life. Since cities now could obtain a supply of staple cereal foodstuffs it became possible to concentrate certain labor in cities to meet the demand of ancient manufacture. The division of labor was further developed with the growth of handicraft. Xenophon wrote:

In large cities because of the great demand for each particular trade a single trade is enough to provide a living. Sometimes even only a fraction of a trade. Thus one man will make shoes for men, another shoes for women, and there are even places where one man makes a living by stitching shoes together, another by cutting them, another by cutting only uppers, another by merely assembling all the pieces. The result is that a person who devotes himself to a very restricted kind of work has got to do it as well as possible.<sup>20</sup>

Division of labor further stimulated commerce. Commodity production also reformed agriculture; as cities were gradually relying on imported food their agriculture switched from subsistence farming to specialized production for export as well as for consumption in cities. The soil in Greece is hardly suitable for corn-growing, but it is extremely good for the olive tree whose fruit, and particularly, oil, were considered indispensable by the Greeks. No olive tree was found on the whole coast of the Black Sea, and the numerous Greek colonies founded there were absolutely dependent on imports.<sup>21</sup>

Next to the olive-tree, the vine was a major product of the soil. Attica, for instance, became a country of vines and olive trees. The intensive production of specialized crops made it possible for small farms to be profitable.

Commodity production and trade led different parts of the Greek world to develop characteristic patterns in conformity with their environment. It became generally known that some areas usually had a surplus of grain; that another one was adjacent to good timber or near mines from which essential metals were being extracted, and that still another city had access to luxury goods such as gold and ivory. For example, grain in Sicily, Italy, and the coast of Black Sea; gold in Lydia, Egypt, Tasos, and Thrace; silver in Thasos, Thrace, and Spain; copper in Cyprus; iron in Cyprus, Cilicia, Etruria, and the southern shore of the Black Sea; ivory in Africa; timber for ship building in Thrace and Macedonia;

dried and salted fish in the coast of Black sea; textiles in Corinth; furniture in Miletus, and so on.<sup>22</sup>

No Greek city- state was self-sufficient, except for a very few, like Sparta. They were all possible markets for certain imports as well as ports for certain exports. Thus with the development of colonization and commodity production, the Greeks in their mother land and their colonies around the Mediterranean and Black Seas gradually formed a big economic circle. The common economic interest shared among them led to a close relationship among them. The adoption of coinage in the seventh century from Lydia provided trade with a great advantage and strengthened the economic relationships of this area. The Greeks in southern Italy first felt the collective feeling and caused their whole area to be given the name of "Greater Greece" (*Magna Graecia*). It was here that the Hellenes received the name they held in Latin and in most languages ever since: *Graeci*, the Greeks.<sup>23</sup>

Common economic interest inevitably led Greeks in many small city-states to more frequent contact. Such frequent contact became a social economic requirement in this politically decentralized world. Different from a self-sufficient society, exchange, the link between production and consumption, played a vital role in the Greek world. It required a certain means to make commodities more easily and efficiently transfer from one hand to another. In a world where there was no television, radio, newspaper or telephone

to spread commodity information; no convenient traffic tool such as train, airplane and automobile, there perhaps would be no other forms more applicable than a mass meeting by which the numerous retail traders could easily obtain various commercial information, even from the remote areas and make deals. Hence it is not coincidental that the indefinite number of festivals in towns of various size would grow, and some of them grew from the status of local to "international" fairs with the development of the commerce and manufacture during the period from the eighth to fifth century. French economic historian Toutain has observed:

With the great fairs, periodical and other, the economic framework began to extend. The most important of these fairs were those connected with certain religious feasts, the national games at Olympia, Delphi, Nemea, and the Isthmus, the Panatheneia in Athens, the Delia at Delos in honor of Apollo.<sup>24</sup>

Weniger describes the scene vividly:

The religious festival and the games had been accompanied since early times by a great fair. Bazaars were set up, which sold anything and everything, whilst the booths and eating places which ringed the altis made Olympia indistinguishable from the public festivals of all ages and all lands. East and West met in Olympia. The devotional requisites to be found in every shrine, votive offerings both large and small and made of bronze or clay, fillets, branches of palm, wreaths, incense and sacrificial vessels were offered for sale in mass. Goldsmiths displayed their precious wares and sculptors, stonemasons and brass founders held stocks of statues and plinths for victors and donators. There were booths selling food, sweetmeats, mementos, clothes, plaids and all the myriad wares which the traders with their knowledge of the market and of current fashions thought they might conceivably dispose of. Moneylenders set up their stalls and performing animals, circus artists and troops of travelling players were always to hand.

Immediately after the prize-giving ceremony and the triumphal procession the masses broke camp and made off....<sup>25</sup>

The fact that festivals became a commercial fair have been noted by both ancient and modern authorities:

Pythagoras (569/568- 494/493 B.C.) noted: "Life is like a festival; just as some come to the festivals to compete, some to ply their trade."<sup>26</sup>

Aristophanes in his *Clouds* states: "But then you'll excel in the games you love well, all blooming, athletic and fair."<sup>27</sup>

Menander, an Athenian playwright in the fourth century B.C., sums up these festivals in five words: "crowd, market, thieves, acrobats, and amusement."<sup>28</sup>

The fact that pan-Hellenic gathering functioned as fairs survived Roman times. Dio Chrysostom describes the scene at the Isthmian festival in his day:

Then round the temple of Poseidon you could see and hear the accursed shouting and abusing one another, and their so-called pupils fighting with each other, many authors giving readings of their works, which no-one listens to, many poets reciting their poems and others expressing approval of them, many conjurors performing their tricks and many fortune-tellers interpreting omens, thousands of lawyers arguing cases, and a host of cheap-jacks selling everything under the sun.<sup>29</sup>

Cicero observed that many travellers who went to the games were not there for any other purpose but the prospect of profitable business.<sup>30</sup> The Romans even described the Olympic festival as the Olympic fair (*Mercatus Olimplaus*).<sup>31</sup>

In addition, Gardiner (1930: 224), Zimmern (1931: 316), Harris (1964: 159), Flaceliere (1965: 221) also noticed the phenomenon.

Pan-Hellenic festivals played an important role in Greek economic life because they provided housing and provisions for an increasing numbers of visitors. Merchants from far afield would pour in during the festival season and large market-fairs were organized.<sup>32</sup> Commercial advertising showed at the festivals in the form of the gifts to gods bought from various city-states. The sacred truce was also associated with the pan-Hellenic festivals. The main four festivals were all held in the trade season: Isthmian in early spring, probably in April,<sup>33</sup> the Nemean and Pythian in summer, Olympia in early fall. The sacred truce provided great advantage to traders in a world with many wars and without any powerful political authority to control the situation. It is not surprising that the sacred truce was prolonged over and over to three months for the Olympic festival. Even now we may imagine the prosperity of trade in an Olympic year, in which two big festivals were held, one in spring, one in early fall, when merchants could safely deal with their business under the gods' protection.

Since Olympic festivals had a significant meaning for the big Greek economic circle, those states whose economic life was mainly self-sufficient, such as Sparta, naturally showed little interest in them. As Xenophon stated:

In other cities, as we know, all seek to make as much money as possible. One man is a farmer, another a ship-owner, another a long-distance trader, while some make a living from different crafts. But in Sparta Lycurgus has forbidden free men to touch anything that has to do with money-making.<sup>34</sup>

Therefore, as Olympia grew into an important international fair Sparta simply ceased to participate almost entirely after 576 B.C.. Although Spartans shared the same religion, the same language and the same traditional customs with other Greeks, their different economic pattern was a major reason to keep them away from Olympic festivals.

However, an economic reason alone cannot fully explain the pan-Hellenic festivals, a complicated social phenomenon, although it provided one basic reason for the festivals. When we look at the festivals, a strong nationalism and patriotism are easily identified. Only free citizens of Greek blood were permitted to take part in competitions. Why did a nation so eager to trade with other peoples have such a narrow mind in terms of race? To explain this contradiction we have to look at the external environment of the Greek world.

## II. External conditions

During the process of colonization and formation of the Greek economic circle, the Greeks faced constant external threats.

In the east early in the seventh century, Phrygian power collapsed and the Lydians, who may have been part of that realm, established under Gyges a kingdom in western Asia Minor, which seriously threatened the Greeks living on the coast. During the years when the Assyrian empire became the strongest power in the Near East, an Assyrian document of the year 711 B.C. records that "an accursed Iamani" (Ionian) who had become master of the Philistine city Ashdod was driven

out. Two years later, after Assyria had taken control of Cyprus, tribute from seven Greek kings on the island came to Sargon II in Babylon. The Hellenistic Babylonian historian Berossus states that under Sennacherib (705-681 B.C.) there was a battle between the Assyrians and the Greeks on the Cilician plain, a fact which presumably should be interpreted as an Assyrian effort to prevent Greek colonization in that region.<sup>35</sup> When the Persian empire emerged in the sixth century the threat became more urgent than ever before, until 449 B.C. when a peace treaty was made, in which the Persian King Artaxerxes agreed to stay away from the Aegean Sea and its coasts.

In the south although Egypt went through a long period of decline, the hostility of the Egyptians to the Greeks meant that Greeks who had strayed away from the original settlement confined themselves to one site, Naucratis.<sup>36</sup>

In the west Carthage, founded by Phoenicians from Tyre, late in the ninth century B.C. (according to tradition) as a seafaring and trading city in North Africa, grew into an aggressive power in the sixth century B.C., and became a formidable enemy of the Greeks in Sicily.

Piracy was another big problem to the Greeks, especially near the great commercial routes. From Cilicia to Caria, in the Black Sea, in the islands of the Aegean and particularly around Crete, from Aetolia to the valley of the Po, from the mouth of the Tiber to the delta of the Rhone, in Corsica, in

Sardinia and in the Lipari Islands, not to mention the African coast, men held themselves ready to raid.<sup>37</sup>

In addition, sometimes, the Greek colonists had to deal with the natives in colonies who did not easily give up their fertile land to the foreigners.

As mentioned before, keeping the big Greek economic circle prosperous was a common interest of the numerous small Greek city-states. They must unite in order to cope with the external threats. Unity was vital to them, for the small size of the city-states made it impossible for any individual city-state to deal with the strong external threats by their own force alone. However, the political independence of the city-states made it difficult for them to have the sufficient authority to unify all Greek city-states by political means, as many eastern nations did. In these circumstances there was perhaps no better means to unify the Greeks spiritually than the Greek religion, for this particular religion was strongly linked with the pan-Hellenism of Greek nationality.

### III. Religious and ideological background

In general the development of religion in human society has experienced mainly three stages. In its primitive stage, religion takes on a form of fetishism, which was associated with totem worship. The second stage is polytheism, in which some particular gods are worshipped by the peoples in that particular area. The highly developed religion is monotheism, such as Christianity, Islamism and Buddhism, worshipped over the world.

During the early time of the ancient Greek world, far from being humanized deities, the early gods of Greece were all either non-human or sub-human; the deity of a tribe was meaningless to the rest of people outside that particular tribe. Obviously this totem worship is closely related to kinship; the actual blood ties can be identified by observing the totems worshipped.

In classical times, humanized polytheistic gods and goddesses became important with the growth of the Greek communities. Local cults appeared; each city-state had its own god as its patron, so that a mixture of gods high and low, divinities old and new, deities above the earth and below it, spirits local and distant, existed in a chaos, which reflected the fact that these early Greeks were not a coherent nation. It is Homer and Hesiod who systemized the Greek gods, by the sacred marriages of Zeus. The Greek gods gradually formed a holy family. It is the creation of the Olympian system that united all these gods into a coherent system, presided over by Zeus, the father of gods and men. In this system Hellenic tribal and sky gods, apparently non-Hellenic nature goddesses and gods, all were connected by certain blood ties. The appearance of the network of Greek gods reflected the formation of Greek nationality and the growth of Greek society. And so the Olympian holy family became the gods of the whole Greek race. Above all, Olympian Zeus was the most pan-Hellenic of all gods. The worship of Olympian religion, therefore, became an important symbol of

the Greeks, regardless of where they were. Although in classical times every state had its own peculiar festivals and cult (many of them native to the soil and going back to those primitive forms of religion that preceded the worship of the Olympian gods.) even among the Olympian gods each state had its own specific patron. Once they were organized as the members of the Olympian holy family, they all were under the head of Zeus, the father of gods and goddesses.

Gardiner is correct to point out that in the Zeus worship

lay the germ of a monotheism that could counteract the disintegrating effect of Greek polytheism. Of all Greek gods he was the most representative, the most national.<sup>38</sup>

Zeus worship, no doubt, spread a strong pan-Hellenism among the Greeks in the vast areas along the shores of Mediterranean and Black Seas; where the consciousness of Greek nationality could be awakened. Because the chief seat of Zeus worship was Olympia, and also because of the close relationship of Zeus worship and the pan-Hellenism of Greek nationality, the rise of Olympia to pan-Hellenic festival, was, in a sense, largely due to the national character of Olympian Zeus.<sup>39</sup> This also may partly explain the superiority of the Olympic games over the other three pan-Hellenic festivals.

The atmosphere of pan-Hellenism over the festivals can be easily identified, especially at some critical times. For example, it was at Olympia that Gorgias appealed to the assembled crowds to forget their differences and unite in a

crusade against Persia, and his example was followed a few years later by Lysias, a great Attic orator, and Isocrates.<sup>40</sup>

In addition, since one characteristic of the Greek religion is anthropomorphism, largely based on the legends about gods and men interbreeding, there was no clear line between gods and human beings in the Greek mind. Hero worship relating to their ancestors was combined with worship of the gods. Therefore many kings, dynasties, noble families and emerging cities anxiously claimed for themselves a lineage of godly origin. Consequently the Greeks would easily be aware of the original blood ties among them by their worship of gods.<sup>41</sup> Racial and national consciousness might be considered as a basis of the pan-Hellenism of Greek nationality.

It is pan-Hellenism behind the Greek religion, instead of the religion itself, that contributed a great deal to the process of the Olympic festival growing into the biggest pan-Hellenic festival. The religious ceremony, and athletic competitions which were a part of the religious ceremony, stimulated and intensified the pan-Hellenism for the purpose of unifying the Greeks spiritually. As Schobel suggests:

Along with the contests and festival delegations from the Greek colonies a pan-Hellenic spirit entered Olympia and at this time, about the beginning of the sixth century B.C. the Olympic Games won their unique position as Greek national festival.<sup>42</sup>

In addition, colonization opened a vast new area to the Greeks, in which they were able to contact various peoples either through the friendly ways of trade or the hostile ways

of warfare. Despite the fact that they despised these peoples and called them "barbarians", the Greek colonists really faced a big problem, the possibility for them to be assimilated by those "barbarians" as they permanently settled among them. For example, as Strabo said, the Greek colonists in Spain separated themselves from the "barbarians" by setting up a wall at the very beginning, but later on they joined together to form a single political entity, which had mixed barbarian and Greek customs, as had often happened.<sup>43</sup>

To maintain their traditional values all colonies, without exception, were established after their mother polis' model in both political and religious aspects, and brought with them the sacred fire which they took from the hearth of the mother polis.<sup>44</sup> However, these measures were not enough; they must constantly re-educate the young generations to their Greek customs, culture and ideological views, and provide youth with opportunities to witness the superiority of Greek civilization in order to stimulate their proud feeling, and maintain pan-Hellenism.

Responding to this social demand, the Olympic and other main festivals also played a role in re-educating and fostering the ideologies. With the process of colonization, many cultural activities were gradually added to the original simple religious ceremony: music, drama, poetry, and oration as well as athletics. As a matter of fact, these festivals were also cultural festivals. The colonists periodically returned to these festivals in great numbers to watch

athletic contests of the excellent Greek athletes, to listen to the orations by well-known philosophers and recitals by famous poets and historians, to participate in the exciting celebration and the religious ceremonies before the great temples of Zeus and Hera. By all these activities they learned, shared and were re-educated. It is not surprising that the Greeks in colonies gradually showed more enthusiasm for the festivals than those in their mother polis.

Now we may interpret why "barbarians" were allowed to watch while only the free citizens of Greek blood were permitted to take part in competitions. Mainly the festivals were intended to display the superiority of Greek free citizens both physically and spiritually. This demonstration was not only necessary for the Greeks to inspire their national pan-Hellenism, but also necessary to make the "barbarians" stay where they were and not challenge the more advanced people.

#### IV. Political aspect

Whenever we look at the ancient Olympic Games, the relative social equality among the athletes and the spectators always leaves a deep impression on us, although the prestige of aristocracy remained during the whole of antiquity. For example, the chariot race was always dominated by nobles. The athletes, regardless of their social rank, as long as they were free Greek citizens, competed equally, and were equally judged by the same rules and same officials. The spectators were sitting on the uncomfortable ground, exposed

to the same heat of the summer sun, without regard to their social and financial status. It is the political equality among the Greek citizens that made the big mass festival possible, for it supplied a huge quantity of spectators, and most of them were Greek citizens. It also put all athletes in an equal position to start their contests; this made the serious competitions possible. It is hard to imagine that such games could take place in a rigidly stratified society. (This will be discussed further in the next chapter.) The political situation of the Greek world was obviously an indispensable precondition of the Olympic Games.

The process of the Olympic Games growing into a pan-Hellenic festival was accompanied by the transformation of noble-dominated athletics to those of the free citizen games. This reflected the social changes of that time. The boom of trade and manufacture stimulated by colonization reformed the economic structure of the Greek world, which inevitably led to a deep political reformation. The supremacy of the landed aristocracy was undermined by the economic revolution. Now manufacture was in the hands of small, independent owners, mostly craftsmen working in small shops and assisted by four or five slaves. Similarly, trade was in the hands of a large number of small, independent merchants and shipowners. Hence a certain part of the population in the Greek cities acquired wealth of a type different from that of land and its products. Wealth was established on a money basis, instead of land, at the end of the seventh century B.C..

The effect of the new economic elements can be measured by the transformation of the Agora of the Greek city, originally the place for political and religious assembly, into a marketplace. With increasing wealth, the new plutocracy of successful craftsmen, traders and small farmers naturally began to claim more political rights. This claim was intensified by a simultaneous change in military activity. Until the end of the eighth century, and even later, the decisive role in warfare rested on the landholding warriors, who alone could afford the horses, chariots and weapons necessary for war. This military monopoly, no doubt, was one of the strongest bases of the privileged position of the aristocrats. However, after the middle of the seventh century it is likely that the metalsmiths, aided by improvements in techniques and the increasing availability of iron, were meeting growing demands for armaments from men now becoming wealthy. In consequence, the decisive role in battle passed from the noble to hoplite soldiers, mainly consisting of free citizens as long as they could equip themselves with a helmet, corselet, greaves, round shield, short sword, and thrusting spear. The noble cavalry declined to act as auxiliary.

With the economic and military reformations as basis, a new democratic movement originated in Ionia, on the eastern shores of the Aegean Sea. From there it spread along the trade routes to the mainland of Greece and also to the Greek colonies in southern Italy and Sicily, promoting change and

fresh vitality in every sphere of social life, and affecting directly or indirectly, important advances in science, medicine, literature, education and so on, with the exception of some city-states such as Sparta and Crete.<sup>45</sup>

This ancient democracy not only made equal athletic competition possible, but also provided the necessary leisure time to free citizens, because this democratic system was based on slave labor, even though the middle citizens still involved themselves in certain types of labor. The leisure of the free citizens was ensured by the surplus wealth deriving from the exploitation of slave-labour. Thus the free citizens could devote part of their leisure to participate in the Olympic and other pan-Hellenic festivals.

So pan-Hellenic festivals were promoted by the ancient democracy; on the other hand, the democratic atmosphere of the festivals further strengthened ancient democracy.

#### V. Military background

The above mentioned factors mainly explained why a national festival became possible, but not why sporting events became the important part of the festivals. The Greek favor of athletics is recognized. The official program in the Olympic Games was almost totally devoted to athletics. The Olympic athletic event was widely copied and existed in many Hellenic festivals. Gymnasia and palaestras spread over the Greek world. Why was athletics so favored by the Greeks that it became an integrated part of their daily routine? Why were the athletic competitions conducted in the festivals so

serious, even cruel, that they often became a bloody fight? Why must the contests be won at any cost? Why should an athlete swear by Zeus to declare that he had trained for ten months? Some scholars attribute the Greek favor for athletics to the pleasing of their Gods, or to the nature of the Greeks themselves. But since athletics was involved in so many aspects of Greek life in classical times, it became a significant social phenomenon which must have deeper reasons. To answer these questions we have to turn to military affairs, a vital aspect of ancient Greece.

When warfare was mainly in the hands of a small number of nobles, athletics, as a means of soldier-training, was required and dominated by a small part of the population, the aristocratic warriors. One example was the Athenian cavalry, which only amounted to 96 or 100 men after the establishment of the Naucrarias in second half of the seventh century B.C..<sup>46</sup> Once the phalanx of hoplites was substituted for the noble cavalry as the backbone of the Greek army, the situation was totally changed. A large part of the population was involved in warfare, for the ratio of the cavalry to the infantry among the Greeks was as one to ten.<sup>47</sup>

Fighting for his city-state became a duty of each citizen. Hoplites were heavily armed infantry men. Their defensive armour consisted of four pieces: helmet, cuirass, greaves and shield; the offensive weapons were sword and double spears.<sup>48</sup> The mere weight of a hoplite's accoutrements, especially in the early stages, would astonish

a modern infantryman, not to mention that even when wearing such a heavy burden the soldiers must go further to train for fighting, according to certain rules, in orderly ranks and not just crowded together "like a mob pouring out of a theater".<sup>49</sup>

Therefore with the appearance of the Hoplite phalanx, physical training was required by all Greek citizens. Since warfare was so vital for survival and the physical condition of the citizen-soldiers was so crucial to warfare, athletics naturally acquired a great social value and became a fad. This tendency was inevitably reflected in Olympic festivals, the educational systems, and became a part of Greek daily life. According to Lucian, the function of athletics in the preparation of a soldier was explained clearly by Solon:

Their bodies become less susceptible and more vigorous through being exercised thoroughly ... Clearly such a man, when he closes with a enemy will trip and throw him more quickly and when he is down, will know how to get up again most easily. If they were women's bodies bleached out in the shade, quivering and streaming with profuse sweat at once and painting beneath the helmet especially if the sun, as at present, blazes with the heat of noon, what use could one make of men like that, who get thirsty, who cannot stand dust, who break ranks the moment they catch sight of blood, who lie down and die before they get within a spear's cast and come to grips with the enemy.<sup>50</sup>

If we look at the chronological list of events of the Olympic Games we can see that the athletic events relating to training the basic abilities of an infantryman dominated a longtime-period to the end of the fifth century; while the cavalry regained its important role since the later stages of the Peloponnesian War and equestrian events were rapidly

added (See Table 3).

It also should be mentioned that athletic competitions were important not only because they could train citizen-soldiers physically, but also because they cultivated the strong competitive spirit which was necessary in warfare as Garlan says:

The athletic contests and dances played a large part in education and in the religious festival. Day in and day out, in effect, the future hoplites raced, jumped and threw the javelin in the gymnasium, wrestled and boxed in the palaestra, dreaming of a victory in the regular competitions organized by the cities and the great sanctuaries, and at the same time acquiring the great qualities of the hoplite.<sup>51</sup>

Based on the above analysis it may be summarized that pan-Hellenic games reached their peak during the 5th century B.C. mainly due to five social conditions:

1. The common economic interest promoted by trade and manufacturing, shared in the large Greek economic circle, provided a fundamental reason for these big mass gatherings.
2. The external threat which increased in the late sixth and early fifth centuries made the Greeks realize the importance of their unity.
3. Pan-Hellenism embodied in the Greek religion supplied an appropriate spiritual means for their unity. Therefore the mass meetings all took the forms of religious festivals.
4. The relatively democratic political system, based on slave-labor, provided free citizens with both leisure time and equal rights, which made the big games possible.
5. The emerging citizen-soldier of the military reformation directly made sports, especially athletics, an

important part of the festivals.

Some previous studies have paid too much attention to the ideological aspects of the Greek world such as religion, culture, and national characteristics, while neglecting the impacts of various major social conditions, especially the economic aspect. As a matter of fact, the economic factor, as mentioned in this study, is a fundamental reason, which initiated a series of changes in all social spheres, thereby promoting the festivals.

On the other hand, pan-Hellenic games played multi-function in the process of the social change. They promoted Greek economic development by providing a big commercial fair and the sacred truce; they supplied good opportunities to re-educate Greek youth to their traditional values; they inspired the pan-Hellenism of Greek nationality, a great unifying force, through religious ceremony and showing the Greek superiority physically and spiritually; they cultivated the citizen-soldiers physically and mentally; they intensified the political democracy by impartial competitions.

#### Social conditions in Han China:

Observing the Chinese social context we do find that some similar conditions that contributed to the pan-Hellenic games. Like Greece, Han China also faced a serious external threat: Xiongnu. Similar to the Greek citizen-soldier system, military service was also the responsibility of all males aged from 23-56 in Han China. Comparing the effect of pan-

Hellenism in the Greek religion, China also had its own uniform ideology, especially since the Emperor Wu (141-87 B.C.) pushed through the measures that have since come to be known as "banning the Hundred Schools and conferring exclusive dominance on the Confucian Teachings."<sup>52</sup>

But turning to the economic-political structure of the society we find an almost entirely different pattern from the Greek. In contrast to the Greek commonwealth, the Chinese economy demonstrated an evident tendency for decentralization. Unlike the democracy of the Greek free citizens, China was characterized by a strict hierarchic system. Let us see how these differences made national sport meetings impossible in the social context of China.

### I. Self-sufficient Economic Patterns

Looking at the economy of ancient China, historians cannot neglect the predominant position of agriculture and its strongly self-sufficient nature. Not only did Chinese farming produce foodstuff, but also almost all necessary needs, with the exception of few items such as salt and iron tools. This was a significant phenomenon of the Chinese farm economy throughout the feudal time of more than two thousand years. There were several reasons contributing to this situation.

#### 1. The favored physical environment

Unlike the unfavorable land in Greece, early Chinese inhabitants were all settled in big river valleys which provided excellent arable soil for grain production. Until

the era of Han China, the population was mainly distributed in the following four areas (See Figure 2f).

1) The middle and lower reaches of the Yellow River.

There is a stretch of yellow loam which has accumulated by the Yellow River, which contains an abundance of mineral elements such as potassium, phosphorus and lime. This was a natural fertilizer, which was exactly suitable to the development of primitive crop-cultivation methods.

2) The valley of the Hai River

The valley of the Hai River was located not far from the Eastern Sea and one of the earliest areas developed. There were several states in that region during the Warring-State period.

3) The Huai River valley

The Huai River valley has excellent physical conditions for crop-cultivation. The warm climate, abundant annual rainfall, natural water channels, and the large plain with fertilizer made it an important economic area since primitive times.

4) The Yang Zi River valley

The Yang Zi River is the longest river in China and endows the valley with a great opportunity to develop agriculture. But compared to the above-mentioned other three areas, with the exception of Cheng Du plain (in today's Si Chuan province), it was still undeveloped up to the Han era.

China is in a monsoon climate zone. Due to the large territory and the complex landform, the climate varies. It

becomes colder moving from the south to the north and the annual rainfall decreases from 1500 cc. in the south-east to 50 cc. in the north-west. Different from the wet winter and dry summer in Greece, the climate in the Yellow River valley, in the central China had an apparent seasonal rhythm, with the main snow fall in winter and ~~the~~ fall in summer.

Although there is a long coast on the Pacific ocean, China was mainly inland country. Here we see the Chinese physical environment provided an appropriate settlement for crop-cultivation and great potential to support a big population.

Hence China differed from Greek dry farming, as Finley suggest that the irrigation farming of great valley civilizations is more productive, more consistent and more conducive to a dense population. It meant that subsistence agriculture became a most important economic branch.<sup>53</sup>

## 2. Predominant position of agriculture

The favorable physical environment caused a shift of the economic pattern from a nomadic one to an agrarian one in the very early ages.

One of the earliest works in China, *Shi Jing* (Book of Songs) describes the situation in the Yellow valley area of the late Zhou time (c. 1100 B.C.-771 B.C.), shows that the main food sources of the people already came from agriculture.

In the sixth month they eat the sparrow-plums and grapes;

In the seventh, they cook the K'wei and pulse;

In the eighth, they knock down the dates;

In the tenth, they reap the rice,  
 And make the spirits for the spring,  
 For the benefit of the bushy eyebrows.  
 In the seventh month, they eat the melons;  
 In the eighth, they cut down the bottle-gourds;  
 In the ninth, they gather the hemp-seed;  
 They gather the sowthistle and make firewood of  
 the Fetid tree;  
 To feed our husbandmen.  
 In the ninth month, they prepare the vegetable  
 gardens for their stacks,  
 And in the tenth they convey the sheaves to them;  
 The millets, both the early sown and the late,  
 With other grain, the hemp, the pulse, and the wheat.  
 'O my husbandmen,  
 Our harvest is all collected.  
 "July" in *Shi Jing* (Book of Songs).<sup>54</sup>

Of the foodstuff mentioned in the poem, grains were the major  
 items. The importance of grain in the peasants' diet was also  
 realized in various poems in the works:

The king's affairs must not be slackly discharged,  
 And [so] we cannot plant our millet and  
 sacrificial millet;  
 How shall our parents be supplied with food?<sup>55</sup>

How beautiful are the wheat and the barley,  
 Whose bright produce we shall receive!<sup>56</sup>

When he was able to feed himself,  
 He fell to planting large beans.  
 The beans grew luxuriantly;  
 His rows of paddy shot up beautifully;  
 His hemp and wheat grew strong and close;  
 His gourds yielded abundantly.<sup>57</sup>

He will seek for thousands of granaries;  
 He will seek for myriads of carts.  
 The millets, the paddy, and the maize  
 Will awake the joy of the husbandmen;<sup>58</sup>

The message of the poem, *July*, also reveals the fact  
 that grain production had not been sufficient for the demand,  
 so that fruits and wild vegetables had to be used as a  
 supplement during summer. However, at any rate the tendency  
 toward a substantial agrarian-oriented economy is obvious.

In a large inland agrarian society, the fact that almost all wealth came from the land made statesmen aware that land-cultivation was the basis of a state. Agriculture was emphasized not only because it was the essential means to obtain necessary living materials, and because of the tradition of crop-cultivation, but also because of its fundamental relation to politics, and especially warfare. Actually the power of a state, to a great extent, relied on its ability to produce grain. Agriculture naturally became a decisive factor in all social and political relations involving the people's living and the fate of the state. Emphasis on agriculture was not only an economic issue but also a fundamental political one. A statement in the *Guan Zi* describes the theory in the most brief and explicit way, and thereby supplying a theoretical basis for the policy:

As people occupied themselves with farming, the more wasteland would be brought under cultivation; as the more wasteland would be brought under cultivation, more grain would be produced. With abundant grain the state would be rich; as the state become rich, its military force would be strong. So it would get victories [at the battlefields]. With victories its territory would be expanded. Therefore the lords in ancient times knew all these factors such as increasing population, strengthening army force, expanding territory and enriching the state depended on grain.<sup>59</sup>

Li Kuai (c. 450-390 B.C.) also states: "Agriculture is the foundation of a state; when agriculture is hurt the state becomes poor."<sup>60</sup>

The Han Dynasty, without exception, paid a great attention to grain production too:

Accumulation of supplies is the very life of the empire. If grain is abundant and wealth excessive, what

cannot be accomplished if attempted? Having it, then in attacking, there will be gains; in defending, there will be determination [strength]; in warfare there will be victories.<sup>61</sup>

Chao Cuo's Memorial (178 B.C.) also pointed out:

Though there be a city wall of stone ten *jen* high,<sup>62</sup> a moat of boiling water a hundred paces wide, and a million soldiers, without grain there can be no defence.

From this it can be seen that grain is the great resource of a ruler and the fundamental task in civil administration.<sup>63</sup>

In 167 B.C. an edict was issued<sup>64</sup>

Agriculture is the foundation of this empire. No thing is more urgent.<sup>64</sup>

The Han emperors also tried to set an example for the people by plowing themselves. In 178 B.C. the Emperor said:

Agriculture is the foundation of the empire. Let a Ceremonial Field be established. We Ourselves will lead in cultivating in the land to provide the grain for the offerings in the ancestral temple.<sup>65</sup>

In 167 B.C. an edict was issued by the Emperor Wen saying:

We Ourselves lead the empire in cultivating the land to provide grain for sacrifice, and the empress devotes herself to mulberry culture to prepare the sacrificial robes. Let the rites and ceremonies for these be formulated.<sup>66</sup>

In 89 B.C. In the third month the Emperor Wu plowed the Ceremonial Field at Chu-ting.<sup>67</sup> In 86 B.C. the Emperor Chao plowed the Ceremonial Field in the Amusement Fields of the intendant of Imperial Palace parks.<sup>68</sup> In A.D. 61 an edict was issued by the Emperor Ming saying: "We ourselves plow the Ceremonial Field to pray for good harvests".<sup>69</sup> In A.D. 69 the Emperor Ming personally plowed the Ceremonial Field. After the ceremony, the Emperor bestowed food on the spectators of the ceremony.<sup>70</sup>

However, the emphasis on agriculture was quite universal in the ancient world, because agriculture was the main source providing human beings with the most important living materials: food and clothes. Under the condition in ancient times the level of social production was still low, the first goal naturally was to get sufficient food. Therefore "agriculture, always the decisive branch of production throughout the ancient world" was a true statement.<sup>71</sup> The ancient Greeks paid great attention to agriculture, too. But in Greece the extension of arable land was not used solely, or even chiefly, for the benefit of corn-growing. Instead, Greeks attempted to develop the growing of trees, and first and foremost the vine and olive. For example, Solon,<sup>72</sup> Peisistratos,<sup>73</sup> and Gelon of Syracuse encouraged the planting of vineyards and orchards, because the profit made from exporting wine and oil was greater than the cost of importing corn.<sup>74</sup> Hence Greek agriculture was market-oriented, while agriculture in ancient China, as mentioned, was subsistence-oriented, that is, mainly focused on grain for local consumption, which provided a foundation towards a self-sufficient economic pattern.

### 3. Combination of small farming, weaving, and domestic animal breeding

"Man as tiller, woman as weaver" was a standard model of the division of labor in China since early times, and the Han people considered the combination of farming and textile production as a means of distinguishing Chinese agrarian

culture from that of the "barbarians".

Chen Kui (A.D. 154), a general at the frontier region in the later Han Dynasty, considered the residents in that region "uncivilized" because

The land is barren. [Its people] make the saddle horse their home and hunting their occupation. Men get but little profit from farming while women lack the wealth of the loom.<sup>75</sup>

Since the Warring-States period (475 B.C.-221 B.C.) with the more effective iron tool, and more advanced farming knowledge and techniques, farmers could produce almost all they needed by planting "five grains" (wheat, two kinds of millet, pulse, and hemp or rice), cultivating the mulberry and hemp and raising the "six domestic animals" (horse, ox, sheep, pig, dog, and fowl) As *Guan zi* stated:

To pay heed to the five grains is what is meant by accumulating [grain] in inexhaustible granaries. To cultivate the mulberry and hemp and raise the six domestic animals, is what is meant by stocking [supplies] in storehouses that can never be deleted....If heed is paid to the five grains, food will be sufficient. If mulberry and hemp are cultivated and the six domestic animals are raised, the people will be prosperous.<sup>76</sup>

Pan Gu (A.D. First century) described the life of rich farmer vividly:

Mulberry trees are planted around the huts [in the fields]. For vegetables there are garden plots; melons, gourds, and fruit are planted along the field edges. When chickens, dogs, and swine do not miss the proper times, and women tend to sericulture and weaving, then those who are fifty years old and older can wear clothing and those who are seventy years old or older can dine on meat....In the spring, people all go to [temporary huts in the fields, while in winter, all return to settlements.... During winter, when the people have returned, women who dwell in the same neighborhood should gather together to spin in the evening. Thus, female labor of one month is equivalent to forty-five

days. The reason they must join together is to economize on the expense of lighting and heating, to equalize the level of skill, and to harmonize practices and customs.<sup>77</sup>

The combination of the three main branches into a family unit strengthened the self-sufficient nature of the small-farming pattern. Almost all necessary needs could be met with the self-sufficient unit - the family. This economic pattern confined the development the division of social labor. Thus in contrast to the Greek world, exchange of products, the link between production and consumption, played an unimportant role in the Chinese economy. Production was mainly oriented to use-value instead of exchange-value. This economic pattern displayed great isolation and decentralization. Marx described the environment of French small farmers during the feudal times, which was quite similar to the situation in China.

The small peasants form a vast mass, the members of which live in similar conditions, but without entering into manifold relations with one another. Their mode of production isolates them from one another, instead of bringing them into mutual intercourse.... Their field of production the small holding, admits of no division of labour in its cultivation, no application of science and therefore no multiplicity of development, no diversity of talents, no wealth of social relationships. Each individual peasant family is almost self-sufficient; it itself directly produces the major part of its consumption and thus acquires its means of life more through exchange with nature than in intercourse with society. The small holding, the peasant and his family; alongside them another small holding, another peasant and another family. A few score of these make up a village, and a few score of villages make up a Department.<sup>78</sup>

Evidently, there was not any economic reason for this highly decentralized economic pattern to require big national

mass gatherings as the Greek economic pattern did.

Moreover, commerce, the most important factor for Greek pan-Hellenic games, was not only limited by the self-sufficient family economic pattern, but also deliberately confined or even undermined by the policies of Chinese government and could not produce enough impetus to promote local festivals into national events as happened in ancient Greece.

## II. The status of commerce and manufacture in the ancient China

China as a large country, with a variety of natural resources and products, had commercial exchange at very early stage which flourished during the Warring-States times.

Even in the years of turmoil from the fifth to the third century B.C., there was a strong possibility of developing a predominantly urban centered economic life rather than a rural-based agrarian economy. Large and prosperous market centers flourished and the urban mentality of profit making and of contractual reciprocity prevailed. Both conditions would be fertile ground for the blossoming of commercialism.<sup>79</sup>

But finally, China did not develop a pattern of emphasis on the city economy of manufacture and commercial trading, mainly because that self-sufficient economic pattern had an intrinsic nature excluding commerce and manufacture, as Marx noted:

In China the substantial economy and saving in time afforded by the association of agriculture with manufacture put up a stubborn resistance to the product of the big industries.<sup>80</sup>

Moreover, the policy of "honoring agriculture and discriminating against commercial trade and manufacture" held

by the Chinese authorities further limited the development of commerce and manufacturing.

During the more than two thousand years of the Chinese feudal society, all central government, without exception, followed the footsteps of the Qin and Han Dynasties, and tried to confine commercial trade with as much effort as to promote agriculture.

This policy may sound ridiculous to modern economists, but the emperors did have their good reasons:

#### 1. Commerce disintegrates the self-sufficient economic pattern

Under the condition of primitive tools and methods of production, ancient agriculture had to rely heavily on the manual work of the great majority of the population. The development of commerce and manufacture inevitably competed with agriculture over the labor force, and thereby reducing the productive force in agriculture. Politicians in ancient times paid great attention to preventing people shifting from the primary occupation- agriculture to pursuing the secondary ones- trade and craft:

If farmers are few, and those who live idly on others are many, then the state will be poor and in a dangerous situation... Where a hundred men farm and one is idle, the state will attain supremacy; where ten men farm and one is idle, the state will be strong; where half farms and half is idle, the state will be peril.<sup>81</sup>

With an increasing number of merchants and craftsmen the state would be poor.<sup>82</sup>

The enlightened king so administers his state as to diminish the number of tradesmen, craftsmen, and idlers, and to lower their names in order to incline their minds

to primary callings and to lessen their interest in secondary occupations.<sup>83</sup>

Moreover, in ancient times the military forces came from farmers so that the defence of the state always related to the protection of their own land. For their own interest, to a great extent, was similar to that of the feudal state, which would greatly motivate the farmer-soldiers. But merchants were quite different, for they had a more independent economic interest of their own. Shang Yang noticed:

Shunning agriculture, they will care little for their homes; caring little for their homes, they will certainly not fight and defend these for the ruler's sake.<sup>84</sup>

In addition, the small independent farmers were also the main sources of corvee labor, which was one of main forms of exploitation in the centralized Han feudal China. There were a lot of public works done in this way such as building palaces, city walls, opening water canals and constructing roads. The corvee varied in terms of its number of laborers and the length of the work time-period. It might require tens of thousand of laborers; it might last several days, months or even years depending on the situation.

In order to administrate the tax, corvee and military service, one important job of local officials was to register, check and annually interview each household in his area.<sup>85</sup> Therefore the small-farming pattern was the source to provide the state with wealth, labor and military force. It formed the basis of the state, and was considered as

fundamental. Authorities in China all tried to secure the dominant position of farming by confining commerce and craft.

As Jia Yi (194 B.C.-178 B.C.) stated

If the people who practice the secondary arts and lead a parasitic life turn back and go into the fields, then the accumulation of supplies will be sufficient and the people will be happy where they are. Thus wealth can be created and the world can be kept in order.<sup>86</sup>

2. Commerce was a factor that was not easy to control but easy to immoralize traditional ideological value

For a state to be stable it must have a stable economy. Under the conditions of ancient China, agriculture was the most ideal economy to meet the political requirement.

Agrarian production could let the great portion of the population attached to the land repeat a simple reproduction generations after generations on a family basis. Their activities would be confined within a small local areas as Chao Cuo recorded:

They till the land in spring, hoe in summer, harvest in autumn, and store in winter.... Throughout the four seasons they do not have a single day of rest.<sup>87</sup>

Obviously there was no other pattern easier for the feudal government to control than the small independent farmer attached to the land, because:

If their attention is devoted to agriculture, then they will be simple, and being simple, they may be made correct. Being perplexed in will be easy to direct them, being trustworthy, they may be used for defence and warfare. Being single-minded, opportunities of deceit will be few and they will attach importance to their homes. Being single-minded, their careers may be made dependent on rewards and penalty; being single-minded, they may be used abroad.

Indeed, the people will love their rulers and obey

their commandments even to death, if they are engaged in farming, morning and evening.<sup>88</sup>

Chao Cuo also states:

If the people do not engage in farming, they will not become attached to the land. If they do not become attached to the land, then they will leave their native places and regard their families lightly. [Then] the people will be like birds and beasts. Even if there were high city walls, deep moats, strict laws, and severe punishments, it would still be impossible to restrain them.<sup>89</sup>

Commerce seemed inevitably to conflict and to undermine the national economic structure based on agriculture. As Marx stated:

The development of commerce and merchant's capital gives rise everywhere to the tendency towards production of exchange-values, increases its volume, multiplies it, makes it cosmopolitan, and develops money into world-money. Commerce, therefore, has a more or less dissolving influence everywhere on the producing organization it finds at hand and whose different forms are maintained on with a view to use-value.<sup>90</sup>

Hence the development of commercial trade in a self-sufficient society, at first would cause changes and competition, resulting in further chaos, and thereby threatening the safety of the patriarchal society.

The value judgment of merchants obviously differed from that of small independent peasants, which would challenge the ruler of the society and the traditional ethics. It was, of course, a great potential danger to despotic emperors.

As a result, the development of commerce and manufacture conflicted with the society in terms of its economic structure, political control and ideological value. The policy of restraining commerce and manufacture was important to the government. The following measures were conducted by

the Han government:

### 1). Despise merchants by lowering their social status

Liu Bang, the first emperor, ordered (199 B.C.) that

... merchants were not to be permitted to wear brocade, embroidery, flowered silk, crape linen, fine linen, sackcloth, or wool, carry a weapon, or ride a quadriga or a horse.<sup>91</sup>

During the time of the Emperor Hsiao-hui and the Empress Kao, when the empire had just been pacified, the regulations for merchants were again relaxed, but the descendants of the people of the market were still not allowed to become officials.<sup>92</sup>

In the time of the Emperor Jing (142 B.C.)

Those who are enregistered in the market places (as merchants) are not allowed to become palace officers.

In order to benefit the farmers, neither the merchants who are listed in the market registers nor their household members should be permitted to register title to land. Anyone daring to violate this ordinance should have his land and slaves confiscated.<sup>93</sup>

In 7 B.C. (the responsible ministers suggested that) no merchant should be allowed to hold title to land or become an official; violators should be punished according to the law.<sup>94</sup>

The purpose of all these measures was to discriminate against merchants and make the trade shameful.

### 2) Economic measures to confine and undermine the merchants

The Han government not only deliberately discriminated against merchants in social and political spheres, but also used certain economic measures to deprive them of their profit:

### i. Increasing the trading tax

In order to confine the increase of merchants the Han government issued a high tax on them:

The various tradesmen and others who engage in secondary occupations, those who make interest on loans, those who sell and buy, those who manage storages for commodities in towns, and those who in any entrepreneurial role make profits, even though they are not on the market registries, shall each, according to his possessions, make his calculations for a report. The tax rate, in terms of strings of cash, is at the rate of one *suan* on each two thousand cash.<sup>95</sup>

Thus merchants had to pay a much higher tax. They also have to pay heavily for transportation:

Those who have not the privileges of government of offices, and those who are neither local elders, nor cavalymen of the northern frontier regions, [should pay a tax of] one *suan* on each small cart. [The tax for] boats of five *chang* or more is one *suan* on each.<sup>96</sup>

### ii. Accusations of wealthy persons

Those merchants who violated the law of property tax were punished seriously, as Sima Qian records:

One who fails to report his evaluation or makes a false report should be sent to a frontier post for one year garrison duty; meanwhile, his cash property should be confiscated.<sup>97</sup>

Because those who were able to accuse another of violating these regulations should be given half of the confiscated property, the accusations of violations of the property tax law spread throughout the empire.

As a consequence, traders and merchants whose fortunes placed them among the well-to-do and above were, for the most part, ruined.<sup>98</sup>

### iii. Change the monetary system

For the merchants who accumulated great monetary wealth, frequent changes of the currency would reduce their

accumulated wealth. For example in 117 B.C. In the sixth month, an imperial edict said,

Recently [some] high officials [have said that] because the currency is light and there is much illegal [coinage], agriculture has been injured and unimportant [activities, such as manufacturing and merchandizing] are numerous. [We] have also [tried to] close the road [whereby people have been able] to take concurrently [the advantages of more than one class]. [We] have hence changed the currency in order to restrain [such practices.]<sup>99</sup>

iv. Government took over the trade of the most important commodities from the private merchants

As mentioned, the strong self-sufficient nature of the Chinese small farmers could produce almost everything they needed but salt and iron, which they had to buy from merchants. Thus salt and iron were always the most demanded commodities and once provided great fortune to merchants. Since 117 B.C. a monopoly of them by the government reduced the benefit to merchants. Later more items were added to the monopoly trade. As Pan Gu recorded:

[It is decreed] Now salt is the leader of foods and delicious viands. Wine is the senior of the numerous medicines and delight of felicitous gatherings. Iron is the fundamental in farming. Famous mountains and great marshes are depositories of rich natural resources. The credit and loan system [operated] by the Market Control Office is looked to by the people to provide them with low-interest or no-interest loans in times of want. Cash coins that are cast from copper are circulated for the people to use as [transaction] media. These six are not what the common people are able to do in their own homes; they must look into the market to acquire them. Even though the prices demanded are several times more expensive [than they are worth], [the people] have no alternative but to pay them. Wealthy people and rich merchants, therefore, [are able to] exploit the poor and weak. The Ancient Sages knew that this was the case. Hence, they controlled these [six activities]. For each of these [six] controls, there was formulated a series of articles in law of preventive and prohibitory

measures. Those who violated [the regulations] were punished, even including death.<sup>100</sup>

#### v. Government-controlled manufacture

There were two styles of manufacture in the Qin and Han period: private and officially controlled.

In the private sector: besides the family handicraft, there were also some small manufacturing workshops. These private shops ones could not compare with those run by the central government in terms of their scale and variety of products.

The various manufacturing and mining enterprises run by the imperial court with the purpose of supplying goods for the state's needs and for the consumption of the royal family began in the Western Zhou Dynasty (c. 1100 B.C.-771 B.C) and highly developed in the Han. They included various important branches of manufacturing such as mine, melting copper and iron, iron manufacture, salt production, and wine making for the purpose of increasing the state's revenue. There were several official posts designed to direct these big manufactures. For example, the Minister of Agriculture was not only responsible for finance and agriculture, but also for the production, transportation and trade of mining, metallurgy, salt and wine.

Another government agency responsible for supplying the consumption of government and empire court was *Shaofu*, in charge of big workshops. Taking lacquerware for example, there were detailed divisions of labor among the various workmen and different stages of lacquer production. They were

specialized in: 1) the making of the core; 2) application of the base layers of lacquer; 3) application of the top layers of lacquer; 4) attachment of the metal part; 5) painting the surface designs; 6) buffing; 7) final cleaning and inspections.<sup>101</sup>

Although according to economic theory, exchange occurs when division of labor appears, here the quite detailed division of labor did not result in any exchange of product at all because they were not produced for market.

### Summary

The main economic pattern in China was the small farmer's production based on the family unit. This pattern was perfectly suitable to the Chinese social context: its favorable physical environment, the traditional custom of grain-growing, and its economic-political structures, thus was formed the core of the society. It had a strong self-sufficient character due to the combination of small family farming, the family manufacture (mainly weaving) and the family livestock breeding. The daily needs mostly came directly from their own products instead of through exchanging with other social members. In other words, each of them tried his best to meet his own needs by directly exchanging with nature rather than with society.

Consequently, exchange, the link between production and consumption, lost much of its function as the medium between the two. It is clear that in this social context the majority of the population- small farmers- did not rely on trade and

commerce. The biggest potential customer was the feudal ruling class, for it not only needed desperately the various goods for a luxurious life, but also possessed the greatest monetary capacity to purchase commodities. Had this class purchased all its needs from the market, the ancient commercial trade would have been stimulated tremendously. However, the government-controlled system of manufacture in which were concentrated all best artisans capable of making various products provided a more convenient way for it. The members in this class could get almost everything in this way rather than through the normal process of marketing. As a result, in the Han society the biggest customers did not have to bother themselves to go to market, except for some goods which could not be made in the government-controlled workshops. While the vast majority of self-sufficient peasants did not rely on the market, so the commodity economy inevitably shrank.

Moreover, the policy of honoring agriculture and discriminating against trade and artisans for both economic and political concerns made the status of the commodity economy even weaker. Therefore the economic pattern in China prevented manifold social relations among the producers. The mode of production isolated the people from one another. So in the politically highly centralized nation we find a decentralized economy.

Due to the lack of a strong element of commodity production, the decentralized economy and isolation of the

small-former's mode of production, no base was for provided a national mass cohesion. As a result the Chinese festivals, although they were many and appeared in very early times, were characterized by a local nature, and so traditional Chinese sport differed from place to place and demonstrated great diversity.

## FOOTNOTES - - CHAPTER V

<sup>1</sup>Lucian, *Anacharsis*, cited in *Sources for the History of Greek Athletics*, ed. Robinson, p. 66.

<sup>2</sup>Gardiner, *Athletics of the Ancient World*, p. 33; Harris, *Greek Athletes and Athletics*, p. 35; Schobel, *The Ancient Olympic Games*, p. 18; Van Dalen and Bennett, *A World History of Physical Education*, p. 57.

<sup>3</sup>John Mouratidis, "Alexander The Great and His Promotion fo Greek Games in the East," *Canadian Journal of History of Sport* 1 (May, 1982): 63.

<sup>4</sup>F. A. Wright, *Greek Athletics* (London: Janathan, 1925), p. 15.

<sup>5</sup>V. Olivova, *Sports and Games in the Ancient World* (London: Orbvis, 1984), p. 120.

<sup>6</sup>B. Dicks, *The Greeks How They Live and Work* (Newton Abbot: David & Charles, 1972), p. 16.

<sup>7</sup>H. Bolkestein, *Economic Life of Greece's Golden Age* (Leiden Netherlands: E.J.Brill, 1958), p. 4.

<sup>8</sup>Dicks, *The Greeks How They Live and Work*, p. 8.

<sup>9</sup>Bolkestein, *Economic Life of Greece's Golden Age*, p. 5.

<sup>10</sup>R. Hopper, *Trade and Industry in Classical Greece* (London: Thames and Hudson, 1979), p. 164.

<sup>11</sup>Ibid., p. 137.

<sup>12</sup>Dicks, *The Greeks How They Live and Work*, p. 18.

<sup>13</sup>Bolkestein, *Economic Life of Greece's Golden Age*, p. 8.

<sup>14</sup>p. Levi, *Atlas of the Greek World* (Oxford: Phaidon, 1980), p. 21.

<sup>15</sup>Bolkestein, *Economic Life of Greece's Golden Age*, p. 27.

<sup>16</sup>J. V. A. Fine, *The Ancient Greeks A Critical History* (Cambridge: Harvard University Press, 1983), p. 54.

<sup>17</sup>V. Ehrenberg, *From Solon to Socrates* (London: Methuen, 1968), p. 16.

- 18C. E. Robinson, *Apollo History of Greece* (Thomas Y. Crowell, 1965), p. 152.
- 19*Encyclopedia Americana*, 1980 ed. s.v. "Greek City-State Civilization," by Norman G. Brown.
- 20Xenophon, *Cyropaedia* 8. 2. 5-6, cited in *Economic and Social History of Ancient Greece*, 2nd ed. eds. M. N. Austin and P. Vidal-Naquet (London: B. T. Batsford, 1973), p. 172..
- 21Bolkestein, *Economic Life of Greece's Golden Age*, pp. 5, 25.
- 22Fine, *The Ancient Greeks A Critical History*, p. 95.
- 23Ehrenberg, *From Solon to Socrates*, p. 17.
- 24Jules Toutain, *The Economic Life of the Ancient World* (London: Kegan Paul, Trench, Thurbner, 1930), pp. 63-4.
- 25Cited in *Olympia, Gods, Artists and Athletes*, by Drees, p. 38.
- 26DK. 8. 8. cited in *Readings in Ancient Western Philosophy*, eds. George F. McLean and Patrick J. Aspell (New York: Appleton. Century. Crofts, 1970), p. 21.
- 27Cited in *Greek Athletes and Athletics*, by Harris, p. 145.
- 28Cited in *The Greek Commonwealth*, 5th ed. by A. Zimmern, (Oxford, 1931), p. 316.
- 29Dio Chrysostom 8. 9.
- 30Cicero, *Tusculan Disputations*, V3, 9.
- 31Harris, *Greek Athletes and Athletics*, p. 44.
- 32Olivova, *Sports and Games in the Ancient World*, p. 120.
- 33Ibid., p. 117.
- 34Xenophon, *Constitution of the Lacedaemonians* 7, cited in *Economic and Social History of Ancient Greece*, Austin and Vidal-Naquet p. 249.
- 35Fine, *The Ancient Greeks A Critical History*, p. 68.
- 36Ibid., p. 85.
- 37Y. Garlan, *War in the Ancient World* (London: Chatto & Windus, 1975), p. 33.

<sup>38</sup>E. N. Gardiner, *Olympia Its History and Remains* (Oxford, 1925), p. 90.

<sup>39</sup>*Ibid.*, p. 109.

<sup>40</sup>*Ibid.*, p. 44.

<sup>41</sup>Ehrenberg, *From Solon to Socrates*, p. 50; W. H. Hale, *The Horizon Book of Ancient Greece* (New York: American Heritage, 1965), p. 80.

<sup>42</sup>Schobel, *The Ancient Olympic Games*, p. 18.

<sup>43</sup>Strabo 3. 4. 8.

<sup>44</sup>Fine, *The Ancient Greeks A Critical History*, p. 91.

<sup>45</sup>R. F. Willetts, "Social Aspects of Greek Physical Education Landmarks" in *The History of Physical Education* ed. J.G. Dixon, (London: Roulledge & Kegan Paul, 1957), pp. 6-9.

<sup>46</sup>Augustus Boeckh, *Public Economy of Athens* (New York: Arno Press, 1976), p. 43.

<sup>47</sup>*Ibid.*, p. 263.

<sup>48</sup>F. A. Wright, *Greek Athletics* (London: Janathan, 1925), p. 49.

<sup>49</sup>Xenophon, *Hipparchicus* 2. 7, cited in *Military Theory and Practice in the Age of Xenophon*, by J.K. Anderson, (Berkeley: University of California Press, 1957), p. 95.

<sup>50</sup>Cited in *Sources for the History of Greek Athletics*, ed. Robinson, pp. 70-1.

<sup>51</sup>Garlan, *War in the Ancient World*, p. 172.

<sup>52</sup>Ren Jiyu, "Confucianism as a Religion," *Social Sciences in China* 2 (June, 1980): 130.

<sup>53</sup>M. I. Finley, *The Ancient Economy*, 2nd ed. (London: The Hogarth Press, 1985), p. 31.

<sup>54</sup>*Shi Jing* (Book of Songs), Pin Feng. July, trans. Legge pp. 231-2.

<sup>55</sup>*Ibid.*, Odes of Tang. Paou Yu, p. 183.

<sup>56</sup>*Ibid.*, Chen Gong, p. 582.

<sup>57</sup>*Ibid.*, Shen Ming, p. 468-9.

<sup>58</sup>*Ibid.*, Fu Tian, p. 379.

<sup>59</sup>Guan Zi, 15: 48 [Zhi Gou].

<sup>60</sup>Shou Yuan-Fan Zhi, cited in *The History of Chinese Economic Thoughts*, by Hu Jichuang, 3 vos. (Shanghai: Shanghai People, 1962-1963) 1: 266.

<sup>61</sup>Jia Yi, *Memorial* (194 -178 B.C.), cited in *Han Agriculture*, by Cho-yun Hsu (Seattle: University of Washington Press, 1980), p. 158.

<sup>62</sup>A jen is a length of eight Chinese feet, about 2.86 meter.

<sup>63</sup>Cited in *Han Agriculture*, by Cho-yuan Hsu, p. 160.

<sup>64</sup>Ibid., p. 169.

<sup>65</sup>*Han Shu* (History of the Western Han Dynasty), 4: 9b-10a, cited in *Han Agriculture*, by Cho-yuan Hsu, p. 169.

<sup>66</sup>Ibid.

<sup>67</sup>Ibid.

<sup>68</sup>Ibid.. p. 168.

<sup>69</sup>*Hou Han Shu* (History of the Eastern Han Dynasty), 2: 8b, cited in *Han Agriculture*, by Cho-yuan Hsu, p. 168.

<sup>70</sup>Ibid., p. 169.

<sup>71</sup>F. Engels, *The Origin of the Family, Private Property and the State* (New York: International Pub., 1942), p. 135.

<sup>72</sup>Plutarch *Solon* 23.

<sup>73</sup>Dio Chrysostom 25. 3.

<sup>74</sup>Toutain, *The Economic Life of Ancient World*, pp. 33 -34.

<sup>75</sup>*Hou Han Shu*, 51: 8a, cited in *Han Agriculture*, by Cho-yun Hsu, p. 310.

<sup>76</sup>Guan Zi, 1: 1 [Mu Ming].

<sup>77</sup>*Han Shu*, 24: 4a-5b, cited in *Han agriculture*, by Cho-yun Hsu, p. 310.

<sup>78</sup>Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte* (New York: International Pub., 1963), p. 109.

<sup>79</sup>Cho-yun Hsu, *Han agriculture*, p. 3.

<sup>80</sup>K. Marx, *Capital* 3 vols (Chicago: Charles H Keer, 1909), 1: 334.

<sup>81</sup>*Shang Jun Shu* (Book of Lord Shang), trans. J. J. L. Duyvendak (The University of Chicago Press, 1928), pp. 191-2.

<sup>82</sup>*Xun Zi*, 6: 9 [Fu Gou].

<sup>83</sup>*Han Fei Zi*, 19: 49. trans. W. K. Liao, 2 vols (London: Arthur Probsthain, 1959) 1: 296.

<sup>84</sup>*Shang Jun Shu*, trans. Duyvendak, p. 193.

<sup>85</sup>Ma Daying, *The History of Financial Administration in the Han Dynasty* (Beijing: Chinese Economic Press, 1983), p. 53.

<sup>86</sup>Jia Yi's *Memorial*, cited in *Han Agriculture*, by Cho-yun Hsu, p. 159.

<sup>87</sup>Chao Cuo, *Memorial*, cited in *Han Agriculture*, by Cho-yun Hsu, p. 161.

<sup>88</sup>*Shang Jun Shu*, trans. Duyvendak, pp. 192-3.

<sup>89</sup>Chao Cuo, *Memorial*, cited in *Han Agriculture*, by Cho-yun Hsu, p. 161.

<sup>90</sup>Marx, *Capital*, 3: 331-2.

<sup>91</sup>*Han Shu*, 1B: 13a.

<sup>92</sup>*Shi Ji* (Historical Records), 30: 1b.

<sup>93</sup>*Shi Ji*, 30: 24-25.

<sup>94</sup>*Han Shu*, 11: 3b.

<sup>95</sup>*Shi Ji*, 30: 24-5, cited in *Han Agriculture*, by Cho-yun Hsu, p. 192.

<sup>96</sup>*Ibid.*

<sup>97</sup>*Ibid.*

<sup>98</sup>*Shi Ji*, 30: 32-33, cited in *Han Agriculture*, by Cho-yun Hsu, p. 193.

<sup>99</sup>*Han Shu*, 6: 17a.

<sup>100</sup>*Han Shu*, 24B: 25b-26a, cited in *Han Agriculture*, by Cho-yun Hsu, p. 195.

<sup>101</sup>Wang Zhongshu, *Han Civilization*, trans. K. C. Chang and Collaborators (Yale University Press, 1984), p. 86.

## CHAPTER VI

### COMPETITION VERSUS NON-COMPETITION IN THE TWO ANCIENT CIVILIZATIONS

The nature of sport in a given society is always related to the value system of that society, since value is a social judgment of what is important to the individual and group. As Gilling states:

(A value) can be thought of as a conception, culturally held, concerning what is-regarded as desirable with respect to human being and their behavior in relation to each other and with the non-human universe.

How people regard and evaluate the idea of competition has a significant influence on their sport. People's value judgments can be identified in many ways. One of them is to observe their social attitude. As Rokeach states, "all of a person's attitudes can be conceived as being value-expressive."<sup>2</sup> To compare ancient Greek and Chinese value judgments about competition, we should look at the prevalent social attitude toward competition. Here we find that the concept of "competition", was evaluated differently in the two civilizations.

#### 1. The social attitude toward competition

In general the Greeks favored competition, which could be found in various aspects of their life. Throughout the whole of Greek mythology, the disposition towards conflicts and the love of competition were widespread. The stories of

Greek gods were also the stories of various interesting conflicts and frictions among the divinities. The gods and goddesses all indulged in various conflicts, either involving themselves directly, or indirectly by supporting opposing mortals. Some of them entered into competition among themselves. For example, Poseidon and Athena competed for the right of patronage of the city-state, Athens. Heroes, such as the famous Heracles, all participated in remarkable contests with tremendous difficulties; Pelops was offered a cult at Olympia for his victory over Oenomaus, the native king of Pisa, in a chariot race.<sup>3</sup>

In some legends the choice of husband was decided by contest. Atalanta who was a swift runner had declared that she would marry whoever defeated her in a race. She therefore competed with many unfortunate princes and defeated them, until Melanion outraced her.<sup>4</sup> Ikarios gave Penelope to Odysseus after he had beaten the other suitors in a race. Contest even decided succession to the throne. Apart from the case of Pelops, Hyllus, son of Heracles, had a duel combat with Echemus to decide who would have the kingdom.<sup>5</sup>

Perhaps what typically demonstrated the Greek idea on conflict and their attitude towards life was the advice, "Always to strive for the foremost place and outdo his peers", the words given by Peleus to his son Achilles who was about to leave for the Trojan War.<sup>6</sup> This ideal could be realized only in various oppositions. Competitions, no doubt, were the best means for it.

This attitude was demonstrated not only in their mythology, in Homer's epic, in warlike activities, but also in various spheres of the Greek social life. In Greece almost everyone was involved in certain forms of competitions; musicians, poets, sculptors, orators and painters all competed with each other for "excellence". For example, in a competition, Pheidias had calculated the optical distortion that the face of the statue of Athena would suffer when it was erected, and therefore changed the proportions of it, and thereby won the prize of victory.

The inscription on the base of the famous Nike of Paionios dated from the Classical period and indicated the nature of competition: "Paionios of Mende made it, who also made the akrotieria for the temple and won the contest."<sup>7</sup> Plays were also in the category of competition. In festivals at Athens contests of plays was held. Before the festival a list of eligible judges was drawn up and this was reduced to ten by lot. These ten judges had special reserved seats in the theater. At the close of the presentations they voted; but yet another selection by lot was employed to reduce these ten personal votes to the final, decisive five. At the end of the contest came the judge's verdict and the distribution of prizes. There were three prizes in each category of tragedy and comedy: for the poet, the choregos, and the leading actor. Prizes consisted of a plain ivy wreaths,<sup>8</sup> similar to the prize at the Olympic Games. The festivals also included contests in music and lyric poetry, and even on occasion,

"beauty contests", judged on figure and bearing, and held between men as well as women.<sup>9</sup>

That Greeks paid more attention to conflict was also demonstrated by their historians. Both Herodotus and Thucydides focused on the largest conflicts, the Persian War and Peloponnesian War in their immortal works. The prevailing position of competition in Greek social life made "Agon" (contest and conflict) a core of Greek culture. The figure of Agon had taken a concrete form by the beginning of the 6th century B.C. and a statue of him holding jumping-weights in his hands was set up in the sanctuary of Olympia. There was also a representation of him, in relief, on the gold and ivory tablets on which the crowns intended for the Olympic victors were laid. The coins of Peparethos, dated to 500-480 B.C., also had a picture of Agon.<sup>10</sup> So Weber even suggests that the agones were the source of the decisive course of Greek development.<sup>11</sup>

It is worth noting that in early times, Greek philosophers as well as the ancient Chinese philosophers, recognized the dialectical relationship of unity of opposite sides existing in all things of the world. That is, all things have unity-of-opposite aspects. On the one hand the opposite sides struggle with each other, on the other hand they are dependent upon and complement each other. But, interestingly, many Greek thinkers in pre-Socratic times, with the exception of Pythagoras, put great emphasis on the rivalry aspect of this dialectical relationship. The best

known to us is Heraclitus who was later described as a founder of dialectics by Lenin.<sup>12</sup>

One should know that war is general (universal) and jurisdiction is strife, and everything comes about by way of strife and necessity.<sup>13</sup>

War is both king of all and father of all, and it has revealed some as gods, others as men; some it has made slaves, others free.<sup>14</sup>

Opposition brings men together, and out of discord comes the fairest harmony, and all things, have their birth in strife.<sup>15</sup>

The atomist Democritus also held a similar point:

For they (sc. Leucippus and Democritus) say that atoms move by mutual collisions and blows.<sup>16</sup>

The greatest undertakings are carried through by means of concord, including wars between city-states: there is no other way.<sup>17</sup>

Whereas, in ancient China, we find an entirely different value judgment towards competition. All those competitive phenomenon prominent in the ancient Greek world were almost absent from early Chinese social life. The competitive aspect of social life was not favored; instead, tremendous emphasis and honor were put on the harmonious aspect.

In China not only social relationships were expected to be harmoniously connected by a certain kind of kinship, but also the relations between human beings and nature, which was regarded as a whole as well (This will be discussed in detail in the next chapter.).

During the Spring and Autumn (771 B.C.-476 B.C.) and the Warring States period (475 B.C.-221 B.C.), many schools of Chinese philosophies emerged. Of them only the Legalist alone favored competition and conflict. As Han Fei says: "In the

early times people competed with their virtues, then with wisdom, today with force."<sup>18</sup> All other schools stressed peace, harmony and love. For example, the Moist presented a theory of indiscriminate love and non-fighting:

When we inquire into the cause of such benefits, what do we find has produced them? Do they come about from hating others and trying to injure them? Surely not! They come rather from loving others and trying to benefit them.<sup>19</sup>

The most influential philosophies, Taoism and Confucianism, were completely opposite to any idea of competition. Lao Zi, the originator of the Taoist school, suggests that one should hold a weak, soft position, because:

Man at his birth is supple and weak; at his death, firm and strong. (So it is with ) all things. Trees and plants, in their early growth, are soft and brittle; at their death, dry and withered. Thus it is that firmness and strength are the concomitants of death; softness and weakness, the concomitants of life.<sup>20</sup>

So he was strongly against striving:

The violent and strong do not die their natural death. I will make this the basis of my teaching.<sup>21</sup>

It is the way of Heaven not to strive and yet it skillfully overcomes; not to speak and yet it is skillful in (obtaining) a reply.<sup>22</sup>

With all the doing in the way of the sage he does not strive.<sup>23</sup>

The highest excellence is like that of water. The excellence of water appears in its benefiting all things, and in its occupying, without striving (to the contrary).<sup>24</sup>

In contrast to the Greek motto, i.e. "always to strive for the foremost place and outdo his peers." Lao Zi recommended "shrinking from taking precedence of others."<sup>25</sup>

Evidently, Taoism is incompatible with the idea of competition.

What about Confucianism? It is true that Confucianism took a more active attitude toward social life, but it did not favor rivalry either. Confucianism is an ideology with benevolence as its core, and with rites as the basic criteria for the social norms, since its highest goal was to keep the patriarchal social structure in a peaceful state.

Confucianism paid great respect to harmony:

Of the things brought about by the rites, harmony is the most valuable. Of the ways of the Former Kings, this is the most beautiful.<sup>26</sup>

Because conflict, rivalry, and competition would do some damage to the harmony, it was therefore rejected by Confucians.

The gentleman is conscious of his own superiority without being contentious.<sup>27</sup>

There is no contention between gentlemen.<sup>28</sup>

There are three things the gentleman should guard against. In youth when the blood and vital energy are still unsettled he should guard against the attraction of feminine beauty. In the prime of life when the blood and vital energy have become unyielding, he should guard against bellicosity. In the old age when the blood and vital energy have declined, he should guard against acquisitiveness.<sup>29</sup>

The moral virtues held in Confucianism were against competition. They were "respectfulness, tolerance, trustworthiness in word, quickness and generosity."<sup>30</sup>

No doubt, the value judgements of the two ancient civilizations toward competition were incompatible. The nature of their sports reflected the difference in their

value system. Because people are valuing creatures, values are a vital force for agreement or disagreement in any society.<sup>31</sup> It seems reasonable to attribute the strongly competitive nature of Greek sport and the less competitive nature of Chinese sport to the different social values relating to competition. Different value-judgments oriented sports in the two civilizations to different ways of behaving. But why did they have such contrary value judgments toward competition? We have to look at the concept of competition and its relations to the concrete social context.

## 2. The concept of competition

What is competition? There are various definitions of the concept:

The action of endeavoring to gain what another endeavors to gain at the same time.<sup>32</sup>

The striving of two or more for the same object.<sup>33</sup>

The act or proceeding of striving for something that is sought by another at the same time.<sup>34</sup>

A contention of two or more for the same object or for superiority.<sup>35</sup>

A contest between rivals.<sup>36</sup>

A struggle between individuals or groups of individuals for the same common goal or object.<sup>37</sup>

Situation in which two or more individuals struggle for the complete or large share of a particular goal, and in which the success of their performance is relative to each other.<sup>38</sup>

A struggle for supremacy between two or more opposing sides.<sup>39</sup>

Dennis divides its meaning into four basic elements: 1) striving, 2) of two or more, 3) for the same objective, 4)

191

against one another.<sup>40</sup> He emphasizes the last element and treats it as "a very necessary adjunct to the first three defining elements", because the three alone (i.e. "the striving of two or more for the same objective") are just as applicable to co-operative and isolated patterns of behaviors as they are to competitive varieties.

Apparently, any competition, including its forms in sport, is a kind of "opposition" which defines the mutual relationship between the two sides. In a sport competition two or more individuals or teams are striving against one another for the same objective, namely, winning. Without opposition, conflict, rivalry, and contradiction there would be no competitive sport games.

Moreover, competition is not an ordinary opposite situation like many other conflicts such as quarrel, fighting, military action and so on. It is a specified opposition and an institutionalized rivalry governed by certain rules. Since the purpose for people taking part in a competition is to strive for the same object among them, it means that there is some kind of equality shared by the contestants, and each of them has a relatively equal chance to gain the object. Hence striving becomes a necessary way to reach the object, and competition functions as a means of solving the contradiction of the equal rivals. Thus equality is a fundamental precondition to any competition. As Glassford states, a competitive game is the concept that the competitors are equal at the outset but unequal at the end of

the contest. He emphasizes that the quest for equality of opportunity at the commencement is an essential principle of competitive games.<sup>41</sup>

Equality between the contestants is also regarded by Caillois as "obviously essential to the rivalry".<sup>42</sup>

It leaves the champion to his own devices, to evoke the best possible game of which he is capable, and it obliges him to play the game within fixed limits, and according to the rules applied equally to all, so that in return the victor's superiority will be beyond dispute.<sup>43</sup>

Of course absolute equality in sport competition does not seem to be realizable.<sup>44</sup> Even in modern sport we cannot avoid many inequalities such as the fact of having the sun in front or in back; the wind which aids or hinders one or the other side. Nevertheless, a relatively equal condition is always necessary. All rules of games, in a sense, have been made to grant equality to both sides of rivalry. The more equal conditions that contestants have, the more competitive the games usually are. In sport that means that the player relies only upon himself and his utmost efforts.<sup>45</sup> This is why modern sport has so many complicated classifications based on contestants' body weight, sex, age, etc. The sound and complicated rules all can be regarded as the attempt to make the rival opponents more equal.

Therefore, the concept of competition implies opposition and equality. It means opposition on a relatively equal basis. Now let us observe the social context related to the two preconditions of competition in the two ancient societies.

### 3. Social conditions

1) As mentioned in the last chapter, the ancient Greek economy was very much market-oriented; commodity-production played a crucial role in that economy. This economic pattern had an inherent competitive nature. Even though it cannot be compared with modern capitalist commodity production in nature and scale, it inevitably involved the Greeks into one or another competitive situation by the law of commodity production. As Marx states, in commodity-production, competition is three-sided, which takes place among the sellers, among the buyers, and between the buyers and sellers.<sup>46</sup> Taking the example of two sellers in the same market for a competitive product, both seek to sell their product on the most advantageous terms, in order to maximize profits.

According to an economic theory the conditions of perfect competition are:

- large numbers of small independent buyers and sellers;
- homogeneity of product;
- perfect mobility of all resources;
- an informed market; and
- freedom of entry.<sup>47</sup>

Although the ancient Greek market could not fulfill all these demands completely, it did possess certain elements of them.

The fact that commodity production would result in a competition between man and man was noted by Hesiod even when it was still in its embryonic stage: "potters envy potters."

The antagonism among artists in the same art field is also realized by an inscription on a vase dating to the late 6th century B.C., the work of Euthymides, a vase-painter:

"Euphronios could have never painted it like this."

Euphronios was himself a great vase-painter, and a contemporary of Euthymides. This inscription reflects the spirit of rivalry among practitioners of the same art.<sup>48</sup>

Rivalry in the artistic field, however, was not confined to people practicing the same art. Christos Karouzos has demonstrated that during the Archaic and early Classical periods there was conscious and intense rivalry between the poets and the craftsmen.<sup>49</sup> Apparently, this particular economic pattern made ancient Greek life full of conflicts. Opposition among Greeks was obvious and it appeared everywhere.

Moreover, commodity exchange is based on the exchange values of the products possessed. An important rule of the economic pattern is exchange of equal value. This, on one hand, was the result of equality of the buyers or the sellers; on the other hand, it intensified the equal relationship among the Greeks. As Aristotle states:

All things that are exchanged must be somehow comparable....No exchange if there were not equality, nor equality if there were not commensurability.<sup>50</sup>

With the commodity-economic pattern increasing its role in the Greek world and city-states being firmly shaped, Greek sport became more competitive and appeared in a zero-sum form.<sup>51</sup> In Homeric times, prizes of sport games were given

not only to the first place but also to the second and third. And on some occasions the contestants could even share the prize by a tie, as indicated in the *Iliad*. In the Classic times of the fifth and fourth century B.C. it was only the final winner who won all glories and prizes awarded, not any one else. A change of social values was the result of change in the society itself; sport reflected the social change.

Meanwhile, in China, due to its self-sufficient agricultural pattern, commerce did not play as important a role as it did in ancient Greece. As a result, there was a lack of competitive elements in its social-economic life. The scattered small-farm families lived in relative isolation. Lao Zi describes the isolated life style of the small farmers:

There might be a neighboring state within sight, and the voices of the fowls and dogs might be heard all the way from it to us, but the people live to old age, even to death, without intercourse with it.<sup>52</sup>

The self-sufficient farming meant that competition, in its broad sense, was mainly between man and nature, instead of between man and man as in ancient Greece. The traditional Chinese philosophies considered man and nature as one, as Zhuang Zi stated, "Heaven and earth were born at the same time I was, and the ten thousand things are one with me."<sup>53</sup> This view changed the rivalry relation of human beings and nature into a partner relationship. Consequently harmony was highly valued. People's life depended on the harmonious cooperation of all members of a family, and grain-

cultivation depended on appropriate harmonious action with the rhythm of nature.

2) The ancient Greek world was made of many small independent city-states. Their small size and autonomy contributed a great deal to the significant Greek civilization, but on the other hand, they inevitably brought certain oppositions to their inter-city-state relationships. To maintain its political autonomy one city-state had to compete with other city-states. Actually, debates and conflicts never ceased among them, especially as the city-states belonged to all Greek free citizens, and the fate of states directly related to each individual. The attempts to keep their city-state independent and to show their superiority naturally connected patriotism with a competitive spirit. The contests at pan-Hellenic festivals and other occasions were also part of the competitions among the city-states. Hence the city-state's name was always connected with the winner's in announcements at the big games. This was also one reason for many states to give great encouragement to their winners of pan-Hellenic games.

In contrast, Han China was a large unified nation. Although the feudal lord in local areas often displayed a tendency to separate, the central government always tried to reject separation and make the entire territory into a whole, as harmonious as possible. Because the dominant ideology of a society is always that of the ruling class, competition among different local areas was confined. As a result, in terms of

social and economic background, the Greek situation was definitely suitable to develop competitive forms. The Chinese situation was disposed to less or non-competitive forms.

3) The competitive nature of Greek sport and the non-competitive nature of Chinese sport also should be attributed to the differences of their countries' political systems when we turn our attention to equality, the precondition of competition.

It is true that ancient Greek society was far from political equality. Firstly, slaves who contributed to the material basis for Greek civilization were in an entirely unequal position compared with Greek free citizens. In theory they had no rights at all and were only regarded as the property of their master. As Aristotle said, "the slave is a partner in his master's life."<sup>54</sup> Plato regarded slaves as "the animal man with bad temper."<sup>55</sup>

The rights of property with regard to slaves in no way differed from any other cattle; they could be given or taken as pledges. They labored either on their master's account or on their own, in consideration of a certain sum to be paid to the master. Or they were let out on hire either for the mines, or other kinds of labor, and even for other persons' workshops, or as hired servants for wages.<sup>56</sup> A similar payment was also exacted by the masters from their slaves serving in the fleet. The profit derived from the slaves was necessarily very great, for the owner must have replaced his outlay of capital and ensured the usual high rate of interest

exactly in the same manner as if it had been vested in cattle, because the value of slaves was destroyed by age, and at their death the money vested in them was lost.<sup>57</sup> It then became necessary to pursue them, and offer rewards publicly for their recapture.<sup>58</sup> A modern authority estimates that just before the Peloponnesian War there were 125,000 slaves in Attica, of whom 65,000 were in domestic employment and other slaves numbered 50,000 in industry, 10,000 in the mines.<sup>59</sup>

Secondly, the *metics* (resident aliens), although free men, had to suffer from a number of obvious limitations compared with citizens. Besides paying more taxes the *metics* had no political rights; they could not attend the assembly or take part in the council, nor be appointed to any magistracy; they had to find a *prostate* (a patron) who was a free citizen to represent them at court. Although a *metic* was protected by law, his legal personality was inferior to that of the citizen. For example, a man who murdered a *metic* could be punished by exile, but not executed, as he was liable to be for the murder of a citizen. It means that the law did not regard a citizen's and a *metic*'s life as exactly equal in value.<sup>60</sup> *Metics* formed a very considerable proportion of the total Athenian population during the fifth century: there were about 20,000 of them, or about half the total number of citizens.

Moreover, sex discrimination was also a popular social phenomenon then. As Aristotle states: "The rule of the free

man over the slave is one kind of rule; that of the male over the female another."<sup>61</sup> Of course, the discrimination was of a different kind:

The slave is entirely without the faculty of deliberation; the female indeed possesses it, but in a form which remains inconclusive.<sup>62</sup>

These inequalities were embodied in Greek sport, too. A law of Solon says, "A slave must not exercise in the gymnasium nor anoint himself with oil in the palaestras."<sup>63</sup> Aristotle records that the slaves in Crete were excluded from gymnastic exercises and the possession of arms.<sup>64</sup> Moreover, women were barred from Olympia and most other games. When women did compete, it was separately, as at the Heraean games which followed the far more important Olympic festival. Similarly, Greek sports were closed to "barbarians."<sup>65</sup>

But an undeniable fact was that all the free citizens had an extraordinary equality, which provided vitality to competition in Greek sport. As Finley and Pleket indicate:

Every competitor had the same formal rights, under the same rules, and could claim the prize if he won; only his own skill and strength mattered. In a world of built in inequalities, that was a significant rarity.<sup>66</sup>

Historical evidence tell us that ancient Greeks paid great attention to equality in their sports. All Greek citizens were eligible to take part in any competition regardless of their economic differences; men were separated from boys on the basis of size and physical maturity rather than chronological age. A boy who had matured earlier competed among the men and not among the ephebes, against whom he might have had an unfair advantage. The finest example of the

concern for fair competition is probably in the matter of oiling and dusting. All Greek athletes rubbed themselves with olive oil before the contest. Wrestlers were then sprinkled with a fine powder, to make the struggle something other than a slippery mismatch. To insure that neither wrestler had the advantage of an undusted patch of skin, they sprinkled each other.<sup>67</sup>

At the Olympic games there were nine officials who supervised the fairness of the competitions. Many vase-paintings depict the umpires or trainers holding wooden foxes or whips to punish the rule-breakers. Herodotus tells a story that the Elisians, the organizers of Olympic Games, even tried to consult with the Egyptians on how to make the Games fairer.<sup>68</sup> The equality of Greek free citizens in sport competitions was, to a great extent, due to their political structure. So it was not by accident that the popularity of Greek sport went side by side with the process of democratization based on slave-labor.

Greek constitutions may be roughly classified into:

- a) Aristocracies: the rule of the large landowners; b)
- Oligarchies: plutocracies in which the wealthy landowners shared political privileges with the wealthy businessmen; c)
- Democracies: the diffusion of political privileges to the poorer classes in the citizen body; and d) Tyrannies:

personal dictatorship. Most Greek constitutions were a complicated mixture of aristocratic, oligarchic and democratic features, depending on the local situations. The

fundamental political institutions of the city-state, the assembly, the council, the magistracy, were extremely flexible. The general rule was that in democracies the sovereign authority was the assembly.

In Athens, with the military reformation, democratization was initiated by Solon's reforms. Solon made important economic reforms such as cancelling the debts of enslaved peasants; illegalities enslavement for debt; legal setting of a maximum for expenditure on funerals; forbidding the export of home grain; requiring fathers to teach sons a trade; and encouraging foreign artisans to settle. He also tried to balance the power between the aristocracy and the growing middle class by the following measures:

- i. Power of *Areopagus* was left intact: its function was 'guarding laws'.

- ii. Citizens of the lowest class were admitted to *Ecclesia* (Assembly).

- iii. The Council of 400 was appointed to manage *Ecclesia*.

- iv. A Code of Law was promulgated, and popular courts were set up to try cases.<sup>69</sup> (See Figure 22).

During the Tyrant period, which mostly occurred in many Greek city-states such as Corinth, Sicyon, Megara, Athens and so on in the 7th and 6th centuries B.C., the democratic process was further promoted. Tyrants seized power by force with the support of the underprivileged classes. They divided the estates of their aristocratic opponents among landless

peasants. The tyrants fostered foreign trade by establishing new colonies and by building a network of commercial alliances; they encouraged domestic industry by instituting large programs of public works; and they broke the aristocratic monopoly on higher culture by expanding the festivals and centers, which gave the entire citizen body access to gymnastics and the arts.<sup>70</sup>

It was at the end of the sixth century and the beginning of the fifth century B.C. that the democratization was basically completed. It was marked by Cleisthenes' Reforms in 508-7 B.C.:

- i. To break up the clan-system, four old tribes were replaced by ten *phyle* each composed of three groups (*trittys*) coming in equal number from the three regions (city, country and coast) and forming a new base for election, taxation, etc.

- ii. The Council of 500 (fifty from each *phyle*), took care of the management of the city-state for one council period (36 days), one individual member presided for one day.

- iii. *Areopagus* declined from its powerful position and retained only a vague supervision role.

- iv. Annual *ostracism* could occur at the discretion of the Assembly, resulting in a ten-year banishment of any man receiving over 6,000 hostile votes. Originally this was a precaution against tyranny (See Figure 23).

Soon after Cleisthenes, ten generals were appointed (*strategi*) were to command contingents of ten tribes. When in

487 B.C. the choice of archons became partially dependent on lot, generals assumed wide powers over finance, food-supply and foreign affairs. The President of the Board became virtual Prime Minister of Athens.<sup>71</sup> And the kinship relations were almost completely destroyed. The democratization of the Greek free citizen achieved its peak during Pericles' time, and he was proud to declare in his famous funeral oration that "everyone is equal before the law."<sup>72</sup>

Sparta went another way after the Second Messenian War. Realizing the risk of a revolt by the Helots, it abandoned the previous social order, and accepted a strict system of military discipline. However, its constitution made by Lycurgus also showed an important equality among the Spartan free citizens. Their political system consisted of:

- i. Dual kingship, resulting from the early amalgamation of two tribal groups, and hereditary in the Agiadae and Eurypontidae families. Royal power was confined in peace time to priestly functions. The membership of *Gerosia* (Council of Elders) had supreme command in war.

- ii. The *Gerosia* (Council of Elders) was chosen for life from noble families. It originally held supreme judicial and legislative power, authorized to override the vote of *Apella* (Assembly of the army).

- iii. *Apella* was not allowed to debate the *Gerosia's* proposals, but merely to vote (normally by acclamation).

- iv. Five *Ephors*

a. Five *Ephors* were an old office originally of small importance, which under the Lycurgan Reform received wide powers of civil justice and Presidency of the *Apella*.

b. *Ephors* were chosen annually from all citizens by vote of *Apella*.

c. By 560 B.C. *ephors* assume virtual control of state, overruling the *Gerosia*, even supervising the King's conduct of campaigns and enforcing discipline within the Lycurgan System.<sup>73</sup> (See Figure 24).

In addition, the economic polarization was not yet as obvious in the "Golden Age". As Demosthenes wrote

Formerly the republic had abundant wealth, but no individual raised himself above the multitude. If any one of us could now see the houses of Themistocles, Aristides, Miltiades, Cimon, or the famous men of those days, he would perceive that they were not more magnificent than the houses of ordinary persons; while the buildings of the state are of such number and magnitude that they cannot be surpassed.<sup>74</sup>

Thus, economic factors reinforced political equality among the Greek citizens.

This political equality among the free citizens provided the indispensable condition to various contests in all aspects of Greek social life, including sport. Greek athletes could conduct their competition on an equal basis, struggling for victory entirely on their own physical prowess and skill, regardless of their wealth and other social differences. Equality, the vital factor in competitive sport, could easily be damaged by further social distinction. Familiar to historians was the case of Alexander the Great who once was a

good athlete, but who had to give up athletic contests because his opponent deliberately tried to let him win.

One reason why the ancient Greeks excluded all other social groups except pure free Greeks, was, consciously or unconsciously, the desire to create an ideal combat situation of equality. The well-known habit of ancient Greek athletics, nudity, has been discussed in many ways, but its role towards equality seems to have been neglected. In a class society, the most evident symbol to mark one's social-economic status is one's clothing, which often indicates one's social rank and occupation. However, by the practice of nudity all such outer indicators of distinctive status were removed away except the man's natural state- his physical body. This would make the competitors less distinctive in the eyes of umpire, spectators, and the athletes themselves.

The political structure of ancient China, on the other hand, seemed to be incompatible with fair competition. China was a centralized feudal monarchy. As we have analyzed, it was economically characterized as a self-sufficient agrarian society. The only efficient way to govern such a vast country was through kinds of centralized feudal autocracy. The highly decentralized economy and the highly centralized politics formed a fundamental contradiction of Chinese Feudal society. In trying to solve the contradiction as well as to secure the landowner class' exploitation of the peasants, a large and complicated hierarchical system of feudal administration was built up during the Qin era, and completed in the Han, which

lasted for two thousand years. According to the system, people were divided into many ranks and sub-ranks depending on their social-economic status (See Table 4).

The emperor was in an unchallenged position. When the king of the State of Qin first unified the whole territory he was named as "Sovereign Emperor", and it was declared that "His mandates were called *Zhi* (decrees), and his ordinances be called *Zhao* (edicts)." <sup>75</sup> The supremacy of the emperor was not merely embodied in his unique life style which no one else was allowed to follow. A more important fact was that he alone was the highest decision maker, being an emperor as well as the highest priest in the whole country, the son of Heaven. Thus he combined secular authority and religious power into one.

The emperor was assisted by a *Chengxiang* (Grand Counsellor), who acted as prime minister. The emperor was also assisted by a *Taiwei* (Grand Commandant) and a *Yushidafu* (Grand Grandee Secretary). These three high officials, known as *Sangong* (Three Dukes). Of the three, the *Chengxiang* (Grand Counsellor) had the most absolute power, and he often governed in place of the sovereign.

The political functions of the Three Dukes were very general, the administrative powers of each of the Ministers were well defined. For example, *Fengchang* (Grand Rector) was responsible for the rites, astrology, medicine and the schools; *Dianke* (Grand Master of Ceremonies) was in charge of everything relating to the feudal princes and the barbarians;

justice and the prison service were the responsibility of *Tingwei* (Constable of the Court). Finance was shared between two ministers: *Zhiliangshi* (Grand Director of Agriculture), who looked after taxes in kind and public finance, and *Shaofu* (Privy Treasurer), who was responsible for the taxes that fed the private finances of the imperial house. In fact the *Shaofu* had supreme control over all the palace staff, the imperial workshops, the palace library and archives, and the eunuchs, etc. Two other ministers commanded the guards: *Weiwei* (Constable of the Guards), who was responsible for the palace police; and *Langzhongling*, who was in charge of the emperor's bodyguard and *Lang* (Gentlemen of the court). *Taipu* (Grand Coachman) administered the stud-farms and arsenals and the duties of the palace horses and carriages. Lastly, *Zongzheng* (Director of the imperial Clan), chosen from the members of the ruling family of the Liu (the last name of the Han emperors), saw to the maintenance of the princes of the blood.<sup>76</sup>

These high officials headed an administrative system of considerable extent. Each ministry comprised several distinct duties, which were themselves divided into offices.

Besides this cumbersome centralized administration, the emperor had *Shangshu* (Private secretariat), run by *Shaofu*. Its duty was to keep the emperor informed, to draft his decisions and see them carried out. Since the middle of the Han it gradually took over the lead the other great offices of the state.

The Qin Dynasty divided the empire into thirty-six *Jun* (commandery), each comprising of several *Xian* (sub-prefecture). Each commandery was governed by a civil administrator and a military governor. The activities of the civil administrator were supervised by an inspector sent by the emperor. At the head of each sub-prefecture was an official known as "*Ling*" in sub-prefectures of over ten thousand households, and "*Zhang*" in those of fewer. These territorial divisions, established during the Qin in the middle fourth century B.C., were revived by the Han.<sup>77</sup> The governors of the commanderies and the sub-prefects represented the emperor and had full religious, civil, legal, financial and military powers. They governed the people, kept an eye on agriculture, judged lawsuits, raised taxes, despatching to the capital the part representing *Gong* (tribute), performed the ceremonies of the official religion at the appointed times, raised and commanded troops and superintended the school in the chief town.

Although there were some changes in terms of the titles of the officials and the distribution of power, the Han emperors inherited the basic political structure of the Qin Dynasty. The society was as rigidly stratified as in previous times. The officials were grouped into more than twenty ranks according to their payment, which ranged from 10 thousand *shl* of grain to less than 100 *shl*.<sup>78</sup>

Consequently, in such an autocratic society inequality was obvious and universal, which not only embodied the great

difference between the main social classes, the landowners and the peasants, but also existed among those who belonged to the same class. Moreover, for the purpose of consolidating the feudal hierarchy, especially the superiority of the emperor, social inequality was deliberately reinforced in many ways. The difference could be identified in what they wore.

The son of Heaven wore his upper robe with the dragons figured on it; princes, the lower robe with the axes embroidered on it; Great officers, their lower robe with the symbol of distinction; and other officers, the dark-colored upper robe, and the lower one red.<sup>79</sup>

Also in the residencies:

The hall of the son of Heaven was ascended by 9 steps; that of a prince, by 7; that of a Great officer, by 5; and that of an ordinary officer, by 3; The son of Heaven and the princes had (also) the towered gateway.<sup>80</sup>

Inequality prevailed in religious ceremony, too:

The son of Heaven had 7 shrines in his ancestral temple; the prince of a state, 5; Great officers, 3; and other officers, 1.<sup>81</sup>

The son of an inferior member of the harem cannot offer the sacrifice (to his grandfather or father); if (for some reason) he has to do so, he must report it to the honored son (the head of the family).<sup>82</sup>

Some special terms were used for referring to different social status:

The partner of the son of Heaven is called "the queen"; of a feudal prince, "the helpmate"; of a Great officer, "the attendant"; of an (inferior) officer, "the serving woman"; and of a common man, "the mate."<sup>83</sup>

The death of the son of Heaven is expressed by *pang* (has fallen); of a feudal prince, by *hung* (has crashed); of a Great officer, by *zu* (has ended); of an (ordinary) officer, by *pulu* (is now unsalaried); and of a common man, by *sze* (has deceased).<sup>84</sup>

All autocratic government inevitably depended upon social inequality, because only when a society is divided into many superior and inferior layers can an autocracy exercise its power. However, if our examination of the inequality of the ancient Chinese feudal society was to stop at the bureaucratic nature of its political institutions, we would not obtain a deep insight into it. Another important factor relating to social inequality and anti-competition was the virtue of the patriarchal clan system.

Prior to the Qin and Han, Chinese society experienced a deep social change. It was transformed from a slave-owning society with collective slave-labor, into a feudal society in which the small-farmer family was the productive unit. How to deal with the new class contradiction and how to handle the decentralized economy and centralized politics became urgent problems faced by the ruling class of the Qin court. But the rulers of Qin disregarded social changes and still entirely relied on the strict cruel and violent control, which resulted in a peasant rebellion on a massive scale. The dynasty survived only 15 years. The Han Dynasty learned a great lesson from the previous dynasty, and was aware that rigid political power alone could not safeguard the reign, although it was the basis of the state. The virtue of patriarchal clan kinship must be used to complement the weakness of the power of the political hierarchy; to disguise the real nature of class exploiting; and to blur class contradictions, because ancient China was a country where the

feudal patriarchal system prevailed. A vivid figure of speech to show the relation between the political power and kinship was given in *Da Dai Li Ji* (Book of Rites edited by Dai De).

It goes as follows:

The state is just like a chariot, the ruling class is the charioteer; the ruled is the house. There are two indispensable tools in charioteering, halter and whip. The kinship virtue is like the halter, while political power is the whip. A good charioteer could control the horse quite well without using his whip. Similarly, a good ruler could handle his subjects well without using too much legal penalty.<sup>85</sup>

Actually the idea of patriarchal kinship is to make political control ethical by covering the political relations between the rulers and the ruled with ties of blood relation. It referred to the governors as "the people's parents", requiring the rulers to treat the ruled like a strict father as well as a kind mother. The former could guarantee the political decree to be fully carried out, while the latter could mitigate the tension between the two. Its core was benevolence. Confucius took filial piety and fraternity as the foundation of benevolence, and affection for parents and respect for elders as the criterion for benevolence in order to safeguard the hierarchical social order.

It is rare for a man whose character is such that he is good as a son and obedient as a young man to have the inclination to transgress against his superiors.<sup>86</sup>

The kinship virtue became an indispensable means of reinforcing the feudal hierarchical reign. However, although it puts emphasis on blood relationship among people, such as husband and wife, father and son, younger and older, it by no means suggests that each one should have equal rights,

because it used complex rites to regulate people's behaviors. These rites identified the unequal status among them with various sophisticated codes based on the "three cardinal guides": ruler guides subject; father guides son; and husband guides wife, - which first appeared in the works of Xun Zi (313 -238 B.C.) and Han Fei Zi (280-233 B.C.).<sup>87</sup> One should constantly check his behavior with these rites as Confucius suggests:

Do not look unless it is in accordance with the rites; do not listen unless it is in accordance with the rites; do not speak unless it is in accordance with the rites; do not move unless it is in accordance with the rites.<sup>88</sup>

Thus the kinship virtue moralized the social inequality by emphasizing the combination of the internal moral benevolence and the external standard of behavior- rites.

### Summary

The competitive nature of ancient Greek sport and the less or non-competitive nature of Chinese sport reflected and was determined by the different social value judgments towards competition which were embodied in their respective social attitudes in both societies.

The different value judgments were generated from different social backgrounds. In ancient Greece the economic pattern of commodity-production and the autonomy of small independent city-states endowed Greek social life with its strong competitive nature, and the relative equality among Greek free citizens made serious competition possible.

There was a lack of competitive factors in ancient Chinese social life due to their self-sufficient economic pattern based on agriculture, and so competition played an unimportant role in the society. Moreover, the hierarchical and social structure left little room for competitors to strive on an equal basis. The idea of competition was also contradictory to the virtue of the kinship system which played a leading role in the society. So Chinese sport emphasized non-competitive values such as virtue-cultivation, recreational enjoyment, or self-improvement.

Centralization and decentralization of the two sports systems in both nations discussed in the last chapter also had certain relationships with the subject of this section. Because any competition would require standardization, e.g., rules, the pan-Hellenic games promoted and standardized Greek sport to a great extent. Athletes in the entire Greek world could easily compete with one other by following similar rules. In contrast the diversity of Chinese sport resulted in a lack of necessary standardization, which made sport competition more difficult.

## FOOTNOTES - - CHAPTER VI

<sup>1</sup>John Gilling, "National and Regional Cultural Values in the United States", *Social Forces*, 34 (December, 1955): 107-113.

<sup>2</sup>M. Rokeach, *The Nature of Human Values* (New York: Free Press, 1973), p. 15.

<sup>3</sup>Rorbert Graves, *The Greek Myths*, 2 vols. (New York: Penguin Books, 1985), 2:35.

<sup>4</sup>Ibid., 1: 266.

<sup>5</sup>Ibid., 2: 208.

<sup>6</sup>Homer, *Iliad* 11. 784.

<sup>7</sup>Andronicos, "The Role of Athletics in the Education of Young," in *The Olympic Games*, ed. Douskou, p. 42.

<sup>8</sup>Robert Flaceliere, *Daily Life in Greece at the Time of Pericles*, trans. Peter Green (London: Weidenfeld and Nicolson, 1965), p. 209.

<sup>9</sup>Ibid., p.197.

<sup>10</sup>N. Yalouris, "The Importance and Prestige of the Games," in *The Olympic Games*, ed. Douskou, p. 80; the figure is in Gardiner's *Athletics of the Ancient World*, Figure 35.

<sup>11</sup>Max Weber, *The City* (New York: Collier Books, 1962), p. 244.

<sup>12</sup>Li Zhen, "Heraclitus" in *The Famous Western Philosophers*, 8 vols. (Jinan: Shandang People's Press, 1984), 1: 129.

<sup>13</sup>Cited in *Readings in Ancient Philosophy*, eds. Mclean and Aspell, p. 34.

<sup>14</sup>Ibid.

<sup>15</sup>The Fragment 8, cited in *Source Book in Ancient Philosophy*, rev.ed. Charles M. Bakewell, (New York: Gordian Press, 1973), p. 31.

<sup>16</sup>Alesancer, Met., 36, 21 cited in *Readings in Ancient Philosophy*, eds. Mclean and Aspell, p. 64.

<sup>17</sup>Fr. 250, cited in *Readings in Ancient Philosophy*, eds. Mclean and Aspell, p. 71.

<sup>18</sup>*Han Fei Zi* 19: 49.[Wudu].

<sup>19</sup>*Mo Zi* 4 [Jan Ai].

<sup>20</sup>*Lao Zi*, 76.

<sup>21</sup>*Ibid.*, 42.

<sup>22</sup>*Ibid.*, 73.

<sup>23</sup>*Ibid.*, 81.

<sup>24</sup>*Ibid.*, 8.

<sup>25</sup>*Ibid.*, 67.

<sup>26</sup>*Lun Yu* (Analects of Confucius) 1: 12, trans. D. Lau, pp. 5-6.

<sup>27</sup>*Ibid.*, 15: 22, trans. D. Lau, p. 155.

<sup>28</sup>*Ibid.*, 3: 7, trans. D. Lau, p. 21.

<sup>29</sup>*Ibid.*, 16: 7, trans. D. Lau, p. 165.

<sup>30</sup>*Ibid.*, 17: 6, trans. D. Lau, p. 173.

<sup>31</sup>Francis E. Merrill, *Society and Culture*, 2nd. ed. (Englewood Cliffs, N.J.:Pentice-Hall, 1961), p. 547.

<sup>32</sup>*The Shorter Oxford English Dictionary*, s.v. "Competition".

<sup>33</sup>*Ibid.*

<sup>34</sup>*New Standard Dictionary of English Language*, s.v. "Competition".

<sup>35</sup>*Ibid.*

<sup>36</sup>*Webster's Ninth New Collegiate Dictionary*, rev. 1984 ed., s.v. "Competition".

<sup>37</sup>R.Church, "Applications of Behavior Theory to Social Psychology," in *Social Facilitation and Imitative Behavior*, eds. R. A. Samuels, et al. (Boston: Allyn and Bacon, 1967).

<sup>38</sup>Richard R. Alderman, *Psychological Behavior in Sport* (Toronto: W.B.Saunders, 1974), p. 74.

<sup>39</sup>John W. Loy, Barry D. Mcpherson and Gerald Kenyon, *Sport and Social Systems* (London: Addison-Wesley, 1978), p. 8.

<sup>40</sup>Kenneth G. Dennis, *Competition in the History Economic Thought*, (New York: Arno Press, 1977), pp. 9-12.

<sup>41</sup>Robert Gerald Glassford, "Application of A Theory of Games to the Transitional Eskimo culture" (Ph.D. dissertation, University of Illinois, 1970), p. 9.

<sup>42</sup>Roger Caillois, *Man, Play, and Games*, trans. Meyer Barah (New York: Free Press of Glencoe, 1961), p. 14.

<sup>43</sup>Ibid., p. 15.

<sup>44</sup>Ibid.

<sup>45</sup>Ibid., p. 44.

<sup>46</sup>K. Marx, "Wage Labor and Capital," in *K. Marx and F. Engels Selected Works*, (Moscow, 1951) 1: 78-9.

<sup>47</sup>*The Encyclopedia Americana*, 1980 ed., s.v. "Competition" by William N. Kinnard.

<sup>48</sup>Andronicos, "The Role of Athletics in the Education of the Young," in *The Olympic Games*, ed. Douskou, p. 42.

<sup>49</sup>Ibid.

<sup>50</sup>*Nicomachean Ethics* V.8. 1132 b 31-1133 b 28. cited in *Economic and Social History of Ancient Greece*, eds. Austin and Vidal-Naquet, pp. 226-227.

<sup>51</sup>Competition wherein one competitor wins and the other loses. When success is evaluated only in terms of winning the sport competition is of an all-or-none variety, i.e. Zero-sum outcome.

<sup>52</sup>*Lao Zi*, 80.

<sup>53</sup>*Zhuang Zi*, 1: 2 [Qi Wu].

<sup>54</sup>*Politics* 1. 1260 a 4-1260 b 20, cited in *Economic and Social History of Ancient Greece*, eds. Austin and Vidal-Naquet, p. 182.

<sup>55</sup>*The Laws* 6. 776 c-777 d.

<sup>56</sup>Boeckh, *The Public Economy of Athens*, p. 72.

<sup>57</sup>Thucydides 7. 13, 27.

<sup>58</sup>Plato Protag. init. Xenoph. Mem. Socr. ii. 10, 32 )  
cited in *Public Economy of Athens*, by Boeckh p. 72

<sup>59</sup>A. W. Gomme, *History of Greece* Vol. 1. in *History of European Civilization* (Eyre), pp. 203, 132.

<sup>60</sup>Austin and Vidal-Naquet, *Economic and Social History of Ancient Greece*, p. 100; Flaceliere, *Daily Life in Greece*, pp. 41-42.

<sup>61</sup>*Politics*, 1. 1260 a 4-1260 b 20, cited in *Economic and Social History of Ancient Greece*, eds. Austin and Vidal-Naquet, p. 181.

<sup>62</sup>*Ibid.*, p. 182.

<sup>63</sup>Aeschines, *Against Timarchus*, 138-9, cited in *Economic and Social History of Ancient Greece*, eds. Austin and Vidal-Naquet p. 242.

<sup>64</sup>*Politics* 2, 1264 a 17-22, cited in *Economic and Social History of Ancient Greece*, eds. Austin and Vidal-Naquet p. 241.

<sup>65</sup>Allen. G. Guttmann, *From Ritual to Record* (New York: Columbia University Press, 1978), p. 28.

<sup>66</sup>M. I. Finley and H. W. Pletet, *The Olympic Games: the First Thousand Years* (London: Chatto & Windus, 1976), p. 58.

<sup>67</sup>Guttmann, *From Ritual to Record*, p. 28.

<sup>68</sup>Herodotus 2. 160.

<sup>69</sup>C. E. Robinson, *Apollo History of Greece*, p. 442.

<sup>70</sup>*Encyclopedia Americana*, 1980 ed., s.v. "Greek City-State Civilization" by Norman O. Brown.

<sup>71</sup>C. E. Robinson, *Apollo History of Greece*, p. 443.

<sup>72</sup>Thucydides 2. 37.

<sup>73</sup>C. E. Robinson, *Apollo History of Greece*, pp. 440-1.

<sup>74</sup>Demosthenes *Against Aristocrates*. 23. 206-7.

<sup>75</sup>Derk Bodde *China's First Unifier* (Hongkong University Press. 1967), pp. 77-8.

<sup>76</sup>M. P. Serstevens, *Han dynasty*, trans. J. Seligman, (New York: Rizzoli, 1982), pp. 21-22.

<sup>77</sup>*Ibid.*, p. 13.

78 One *shi* is roughly equal to 20 litres of hulled grain.

79 *Li Ji*, 7: 10 [ *Li Qi* ], trans. J. Legge, p. 400.

80 *Ibid.*

81 *Ibid.*, pp. 397-8.

82 *Ibid.*, pp. 117.

83 *Ibid.*, pp. 112-3.

84 *Ibid.*, p. 117.

85 *Da Dai Li Ji* - Shen De, cited in *The Historical Development of Chinese Philosophy*, ed. Ren Jiyu, vol. 2 (Beijing: People, 1983), p. 185.

86 *Lun Yu*, 1: 2, trans. D. Lau, p. 3.

87 Ren Jiyu "Confucianism as a Religion," *Social Sciences in China* 2, (June 1980): 131.

88 *Lun Yu*, 12: 1, trans. D. Lau, p. 109.

## CHAPTER VII

### INTERNAL FOCUS VERSUS EXTERNAL ATTENTION

Why did ancient Greek sport mainly focus upon muscular development, while its Chinese counterpart paid more attention to internal functions of the bodies? The question is not easy to answer from any single aspect for it was deeply rooted in the two different cultures.

It seems to be reasonable to develop a logical analysis mainly based on the following concerns:

1) All physical exercises are based on certain theories, especially those for the purpose of keeping fit, which are usually guided by ancient philosophical and medical knowledge, and which function as a practical means of realizing the theory. So the focus of physical exercise naturally related to the philosophical and medical theories of the two civilizations. Our examination will start with these theories.

2) The focus of physical exercise is also related to how the human body is evaluated, and particularly to which aspect of the human body is emphasized. In other words, the aesthetic values of the human body also have an important effect upon the focus of physical exercises.

This section will deal mainly with these two basic assumptions.

## I. The theoretical background of physical exercises in the two civilizations.

Unlike their modern counterpart, the medical theories of the two ancient civilizations were never exclusively curative. From very early times the preservation of health seemed to be regarded as a more important task, and physicians in both nations devoted a great deal of their thought to problems of health. Keeping fit became a main concern. But interestingly, although having many similarities, the two nations basically went different ways.

### 1. The Greek aspect

Like other early civilizations Greek medicine was related to the emergence of rational thought, the natural philosophy, which tried to perceive the universe by pure reason. The natural philosophers were the first to surmise that natural events were not miracles, but were explicable under systems of immutable laws. Inquiring into the works of nature, some of them explained the world by monistic theories; others by pluralism.<sup>1</sup>

This rational and realistic approach led them to trace the primary material which forms the whole world. This inquiry was initiated by Thales of Miletus (c. 640-562 B.C.), who propounded a primary principle that water was the cause of all things, for he saw that

... the nutriment of all things is moist, and that heat itself is generated from the moist and kept alive by it...the seeds of all things have a moist nature, and that water is the origin of the nature of moist things.<sup>2</sup>

Anaximenes of Miletus declared that air was the primordial principle.

Infinite air was the principle from which the things that are becoming, and that are, and that shall be, and gods and things divine, all come into being, and the rest from its products. The form of air is of this kind: whenever it is most equable it is invisible to sight, but is revealed by the cold and the hot and the damp and by movement...<sup>3</sup>

Empedocles (c.490-430 B.C.) in his poem, *On Nature*, proposed that four roots - fire, air, earth, and water - constructed the universe.

Hear, first, the four roots of things: bright Zeus, and life-bearing Hera, and Aidoneus, and Nestis who causes a mortal spring of moisture to flow with her tears.<sup>4</sup>

However, what concerns us more is not their attempt to trace back the origin of the world to certain basic materials such as water or fire, but their ideas of interpreting the world through interrelations of four basic elements: moist, dry, cold and hot.

Anaximander (ca.610- 546 B.C.) explains the universe as a way of interaction of moist and dry:

The sea is what is left of the first moisture; for when the region about the earth was moist, the upper part of the moisture was evaporated by the sun, and from it came the winds and the revolutions of the sun and moon, since these made their revolutions by reason of the vapors and exhalations, and revolved in those regions where they found an abundance of them. What is left of this moisture in the hollow places is the sea; so it diminishes in quantity, being evaporated gradually by the sun, and finally it will be completely dried up.<sup>5</sup>

Living creatures came into being from moisture evaporated by the sun. Man was originally similar to another creature that is, to a fish.<sup>6</sup>

The four primary elements were not static in the view of Heraclitus of Ephesus (c.535-475 B.C) either: "Cold things grow hot, hot things grow cold, the wet dries, the parched is moistened."<sup>7</sup>

These early philosophies provided ancient Greek medicine with two necessary conditions. First, they gradually led medicine to get rid of religious shackles. The natural philosophy dealt a heavy blow to the previous magic-religious medicine, dominated by priests from the families tracing their ancestry to Asclepius, the god of medicine. Secondly, they supplied a theoretical foundation for medicine. The concepts used by these natural philosophers were adopted by the Greek physicians. Consequently, in the sixth and fifth century several medical schools arose: at Croton, in Sicily, in Cyrene, in Asia Minor, and also in the Archipelagos -at Rhodes, especially, at Cnidus and Cos.<sup>8</sup> The Hippocratic medicine gradually took its form in the Golden ages.

#### The main characteristics of Hippocratic medicine.

Before the Hippocratic medical theory emerged, there were some philosophers who were interested in medicine and who had considered health as harmonious states of various elements of the human body. Among them Alcmaeon of Croton (c.500 B.C), pupil of Pythagoras, had more influence on the following generation. In his view

Health is a condition maintained by equality among the powers, the moist, the dry, the cold, the hot, the bitter, the sweet and the rest, but an autocracy among these produces diseases. For autocracy is destructive of one or other member of a pair.... But health is an harmonious blending of the various qualities.<sup>9</sup>

However, it is Hippocrates (c.460- 380 B.C), the great physician of Cos, who gathered up the threads of the fabric of ancient medicine and "first raised medicine to independence".<sup>10</sup> In his *The Nature of Man* Hippocrates described his medical theory which is named as a humoral pathology by medicine.

The body of man has in itself blood, phlegm, yellow bile and black bile; these make up the nature of his body, and through these he feels pain or enjoys health. Now he enjoys the most perfect health when these elements are duly proportioned to one another in respect of compounding, power and bulk, and when they are perfectly mingled. Pain is felt when one of these elements is in defect or excess, or is isolated in the body without being compounded with all the others. For when an element is isolated and stands by itself, not only must the place which it left become diseased, but the place where it stands in a flood must, because of the excess, cause pain and distress. In fact when more of an element flows out of the body than is necessary to get rid of superfluity, the emptying causes pain. If, on the other hand, it be to an inward part that the retakes place the emptying, the shifting and the separation from other elements. the man certainly must, according to what has been said, suffer from a double pain, one in the place left, and another in the place flooded.<sup>11</sup>

Figure 25 shows the medical theory.

Apparently, health is a harmonious blend, or equal balancing, of all these four elements, and disease results from any disturbance of such a harmony. The principles of therapy are based on cure by opposites. For example, diseases which are caused by excess must be cured by reduction, diminution, or evacuation. Diseased states resulting from exertion are cured by rest; those caused by inactivity are curable by activity, work, or exercise.

Perhaps because all the humors come from eating and drinking, and also because digestion was strongly influenced

by people's living habits, diet and regimen became the main concern of the medical theory. Hippocratic physicians declared that the origin of the art of medicine was in the art of dietetics and regimen.<sup>12</sup> The gradual discovery of food to suit all conditions of men finally resulted in the birth of medicine, and these physicians suggested that the remedies actually used were changes in refinements of regimen. They further required that a physician must know what man was in relation to food and drink.<sup>13</sup> Great stress was laid on careful formulation of foods, and on accurate measurements of the effects of various foods upon constitutions of various kinds and in various degrees of health. Therefore, a long list of foods, including meat, bread, pancakes, wine, water, vegetables etc., is discussed in Hippocrates' *Regimen* II, and the nutritive and curative value of each of the foodstuffs is given. Medicine for Hippocrates is mainly a matter of diet and regimen. This basic idea which Hippocratic physicians so strongly emphasized became the conjunctive point, connecting the Greek ancient medicine and physical exercises.

Since food must be digested well and physical exercise is an indispensable means for digestion, the Hippocratic physicians naturally turned to physical exercises. In his *Regimen* I Hippocrates put it this way:

Eating alone will not keep a man well; he must also take exercise. For food and exercise, which possessing opposite qualities, yet work together to produce health. For it is the nature of exercise to use up material, but of food and drink to make good deficiencies.<sup>14</sup>

Balance between the food taking and exercises formed a fundamental principle. He declared:

The discovery that I have made is how to diagnose what is the overpowering element in the body, whether exercises overpower food or food overpowers exercises; how to cure each excess, and to insure good health so as to prevent the approach of disease.... For it is from the overpowering of one or the other that diseases arise, while from their being evenly balanced comes good health.<sup>15</sup>

Then he concluded that for the great majority of men the exercises were absolutely necessary.<sup>16</sup>

The necessity of exercise was more specifically explained by the interrelations of the four basic elements: the moist, cold, dry, and hot. When foodstuff enters body, according to the theory, it mainly remains moist and cold, which would cause some hurt to health when the two elements had accumulated. Because:

(The moist) tends to gather, not at the fleshless, but at the fleshy parts of the body.<sup>17</sup>

The coldness prevents digestion, and the moistness makes the bowels loose.<sup>18</sup>

In the view of the Hippocratic physicians the unhealthy condition was a result of accumulated moist. "Older people should have a drier kind of diet for bodies at this age are moist and soft and cold."<sup>19</sup> "Flesh of untrained people is moist, too."<sup>20</sup> The Greeks seemed to prefer the element of dryness in their view of the physical condition of human body.

A dry (desiccated) soul is the wisest and best.<sup>21</sup>

To souls, it is death to become water; to water, it is death to become earth.<sup>22</sup>

A man, when he gets drunk, is led stumbling along by an immature boy, not knowing where he is going, having his soul wet.<sup>23</sup>

To make the body dry definitely needed certain kinds of devices which could warm up the body.

For when the blood has been attracted and heated, the things in the body set up a rapid circulation, and the body generally is cleansed by the breath, while the collected moisture, becoming warm, is thinned and forced outward from the flesh to the skin, and is called "hot sweat."<sup>24</sup>

To warm up the body perhaps there was no other device better than physical activities, and therefore physical exercises functioned as a means of heating the body to purge the moist, as Hippocrates suggested:

Accustomed exercise should be practiced, so that collected humor may grow warm, become thin, and purge itself away, while the body generally may become neither moist nor yet unexercised.<sup>25</sup>

For this purpose even the activities of sight, hearing, voice and thought were regarded as having certain effects on health because:

The soul, applying itself to what it can see, is moved and warmed. As it warms it dries, the moisture has been emptied out. Through hearing, when noise strikes the soul, the latter is shaken and exercised, and as it is exercised it is warmed and dried. By all the thoughts that come to a man the soul is warmed and dried; consuming the moisture it is exercised, it empties the flesh and it makes a man thin. Exercises of the voice, whether speech, reading or singing, all these move the soul. And as it moves it grows warm and dry, and consumes the moisture.<sup>26</sup>

Apparently, the exercises which were effective for muscular development, such as athletics, also were the ideal ones for warming up the body and purging the accumulated moisture away. They were naturally used by the Hippocratic physicians.

Thus ancient Greek medical theory not only made physical exercises necessary as a means to balance the intake of food, but also made vigorous physical exercises necessary for the purpose of warming up the body. This supplied a theoretical basis for their physical exercises of muscular development.

## 2. The Chinese aspect

While the medical theory in ancient China had a similar close relationship with physical exercises, its main ideas were quite different from those of the Greeks.

The key word of Chinese medical theory was "*Qi*". What was *Qi*? Instead of the humors in Greek medicine, the literal meaning of *Qi* in Chinese language is "air", but its application in Chinese philosophy and medicine has a much broader and abstract meaning. To date its nature is still in debate, and there are various translations of the term in English literature, such as "vital energy," "vital fluid", "vital force", "breath", etc.

All important theories of Chinese philosophic and medical ideas e.g. *Yin* and *Yang*, *Wuxing* (the five elements), and *Jinglou* (the network of *Qi* in medical theory), were based on this essential concept, *Qi*.

### 1). The theory of *Qi*

The theory of *Qi* basically came from Taoism which has some elements of primitive materialism and dialectics. According to the doctrine of Taoism, everything in the universe interacted and was interconnected. Moreover, one

thing could be transmitted into another. The media for transformation is *Tao*.

The word, *Tao*, one of the most important terms in Chinese philosophy, has a primary meaning of "road" or "way". However, to Lao Zi the assumption was made that for the universe to have come into being, there must exist an all-embracing first principle, which is called *Tao*.<sup>27</sup>

*Han Fei Zi* in its chapter on " Explaining Lao Zi" states:

*Tao* is the way of everything, the form of every principle. Principles are the lines that complete things. *Tao* is the cause of the completion of everything. Hence the saying: "It is *Tao* that rules everything."

... Inasmuch as everything has its unique principle and *Tao* disciplines the principles of all things, everything has to go through the process of transformation. Inasmuch as everything has to go through the process of transformation, it has no fixed frame.<sup>28</sup>

*Lao Zi* implies a basic idea that *Tao* is the basic element, so-called invariable, forming all things in the universe.

*Tao* produced Oneness, Oneness produced duality. Duality evolved into trinity, and trinity evolved into the ten thousand (i.e. infinite number of) things. The ten thousand things support the *Yin* and embrace the *Yang*. It is on the blending of the breaths (of the *Yin* and the *Yang*) that their harmony depends.<sup>29</sup>

*Zhuang Zi* (c.369-c.328 B.C.), a most important figure in the Taoist school, made the term of *Tao* more explicit by pointing out that *Tao* is *Qi* and *Qi* was the primary element forming all things of the world.

Heaven and earth were born at the same time I was, and the ten thousand things are one with me.<sup>30</sup>

So it is said, You have only comprehend the one *Qi*; that is the world. The Sage never ceases to value oneness.<sup>31</sup>

Man and heaven are one.<sup>32</sup>

The human body was explained by the *Qi* theory, too.

Man's life is a coming-together of *Qi*, if it comes together, there is life; if it scatters there is death.<sup>33</sup>

Medical theory adopted the philosophic concept of *Qi*.

*Nei Jing* (Internal Medicine), the first medical work of ancient China, and the other works, regard *Qi* as the material forming the human body,

*Qi*, the fundamental root of life.<sup>34</sup>

Life of human being entirely depends on *Qi*.<sup>35</sup>

Man is born by the *Qi* of Heaven and Earth.<sup>36</sup>

Man is produced by combining the *Qi* of Heaven and Earth.<sup>37</sup>

*Qi* is also a fundamental factor for the physical functions of human being.

Man receives the five *Qi* as food from Heaven and the five flavors as food from Earth. The five *Qi* enter the nostrils and are stored by the heart and the lungs and then they are allowed in order to let five colors, brightness and light as well as let the sounds manifestations of talent and ability. The five flavors enter the mouth and are stored by the stomach. The flavors which are stored nourish the five *Qi*, and when these influences are well - blended they produce saliva. Together all these influences help to perfect the mind, which then begins to function spontaneously.<sup>38</sup>

The significance of *Qi* theory is, first, to connect the human body to its external environment. Human life depended on a constant exchange between the internal body and external environment through *Qi*. Different from the humors in Greek medicine, *Qi* is referred to as some kind of material element

similar to air, which was the major source from which one takes vital energy.

Between the heaven and the earth, in the nine territories, the nine apertures, the five viscera, and the twelve sections [of the body], there is a heavenly *Qi* prevailing.<sup>39</sup>

Therefore breathing had a profound position in Chinese traditional exercises. Some Taoists went even as far as to avoid eating solid foods and thought when one could live entirely dependent on "eating *Qi*" by breathing, one could realize the goal of immortality.

Secondly, with the *Qi* theory, human beings must adapt themselves to the rhythm of nature and the law of the natural world, which provided Chinese philosophy and medicine with the important principle of "following Nature".

## 2) Yin and Yang theory

In addition to considering *Qi* as forming the material of the world, the ancient Chinese philosophy further and distinguished *Qi* into two basic categories. Knowing the dialectic interrelationship of unity of the two opposing forces expressed the idea in the *Yin* and *Yang* theory. *Yin* means the negative, female cosmic principle or force, while *Yang* is the positive or male principle. The concept of *Yin* and *Yang* appeared first in the late Western Zhou (c. 1100 B.C.-771 B.C.) in which an earthquake was explained as the disorder of *Yin* and *Yang*.<sup>40</sup> Lao Zi also mentioned the idea.<sup>41</sup>

But it was *I Chuan* (Book of Changes), written in the late Warring States Period that first developed the idea of

*Yin* and *Yang* to the most abstract philosophic concept and set up a complete philosophic system with these two concepts.<sup>42</sup> In *I Zhuan* (Book of Changes) all things in the universe possess the nature of *Yin* and *Yang*, which is not only embodied in natural phenomenon such as heaven, earth, thunder, wind, water, fire, mountain, lake, but also in human society, such as lord and subjects, father and son, husband and wife, even the numbers of even and odd in mathematics, softness and hardness in personality, virtues in morality and behaviors. All are certain forms of *Yin* and *Yang*. Therefore, all changes in the universe would be attributed to the changes of the dialectic relation of the two opposite forces, *Yin* and *Yang*.

The general principle of the theory is that things are in order when *Yin* and *Yang* are balanced with each other and harmoniously related to each other. This idea was also adopted by the medical works:

The principle of *Yin* and *Yang* is the basic principle of the entire universe. It is the principle of everything in creation. It brings about the transformation to parenthood; it is the root and source of life and death; and it is also found within the temples of the gods.<sup>43</sup>

According to *Nei Jing* (Internal Medicine), the human body is a unity, which is filled with various dialectic relationships of two opposite sides. All parts of the human body are divided and related by *Yin* and *Yang* at various levels:

Thus mankind should correspond to this system: the *Yin* and *Yang* of man are (arranged in the order) that on the outside there is *Yang*, and inside there is *Yin*. *Yin*

and *Yang* of the human body (are arranged) that *Yang* is in back and *Yin* is within the front part. *Yin* and *Yang* of the (five) viscera and the (bowels are arranged) that the viscera are *Yin* and the hollow organs are *Yang*. All of the five viscera, liver, heart, spleen, lungs and kidneys, are *Yin*; and all of the five hollow organs, gall-bladder, stomach, lower intestines, bladder, and the three burning spaces, are all *Yang*.<sup>44</sup>

The affinity of *Yin* and *Yang* to each other has a decisive influence upon man's health. According to the medical theory, health is a perfect harmony and balance between the two primogenital elements. If *Yin* is stronger then *Yang* is apt to be defective; if *Yang* is stronger then *Yin* is apt to be sick. So, *Nei Jing* states: "One whose *Yin* and *Yang* are balanced is healthy."<sup>45</sup>

However, to balance the *Yin* and *Yang* is not an easy task. This is because of the complexity of the human body itself, in which *Yin* and *Yang*, the two opposite forces are never in a static situation. They conflict with each other, while at the same time they rely on each other. Sometimes *Yang* becomes dominant and sometimes *Yin* grows stronger. Moreover, the external environment, nature, made the situation more complicated for nature is in a constant change. As *Guan Zi* states:

In spring the *Qi* of *Yang* begins to rise so all things are born. In summer the *Qi* of *Yang* completes its ascendancy so all things reach maturity. In autumn the *Qi* of *Yin* begins to descend so all things are gathered in. In winter the *Qi* of *Yin* completes its descent so all things are stored away.<sup>46</sup>

Since man is a part of nature, changes of *Yin* and *Yang* in environment inevitably have a tremendous impact on the human body.

Those who do not conform with the *Qi* of Spring will not bring to life the region of the lesser *Yang*. The atmosphere of their liver will change their constitution.

Those who do not conform with the *Qi* of Summer will not develop their greater *Yang*. The atmosphere of their heart will become empty.

Those who do not conform with the *Qi* of Fall will not harvest their greater *Yin*. The atmosphere of their lungs will be blocked from the lower burning space.

Those who do not conform with the *Qi* of Winter will not store their lesser *Yin*. The atmosphere of their testes (kidneys) will be isolated and decreased.

Thus the interaction of the four seasons and the interaction of *Yin* and *Yang* [the two principles in nature] is the foundation of everything in creation. Hence the sages conceived and developed their *Yin* in Spring and Summer, and developed their *Yin* in Fall and Winter in order to follow the rule of rules; and thus [the sages], together with everything in creation, maintained themselves at the gate of life and development.

The *Yin* and *Yang* theory interprets the world from the dialectic change of a pair of opposite sides in a unit.

However, the world is made up of various kinds of things. How and by what particular ways do the different things interact? What are the specific links through which they conflict with each other and at the same time depend on one other? These questions would be difficult to explain only by the *Yin* and *Yang* theory. Even though the *Yin* and *Yang* theory provided ancient Chinese medicine with an important principle, it does not give the more concrete ways in which internal organs of the human body are interacting, or show how man and his environment are interacting. Hence the five elements theory complemented this lack.

### 3). Wuxing (The five element theory)

The idea of five elements first appeared in *Shang Shu* (Book of History).

Heaven gave him (Great Yu) its Nine Categories. And the various virtues and their relations were regulated....The first category is the Five Agents; namely, Water, Fire, Wood, Metal, and Earth. The nature of Water is to moisten and descend; of Fire, to burn and ascend; of Wood, to be crooked and straight; of Metal, to yield and to be modified; of Earth, to provide for sowing and reaping. That which moistens and descends produces saltiness; that which burns and ascends produces bitterness; that which is crooked and straight produces sourness; that which yields and is modified produces acidity; that which provides for sowing and reaping produces sweetness.<sup>48</sup>

Although Zhou Yan (305 B.C.- 240 B.C.) was recognized as the early philosopher to combine the *Yin Yang* theory and the Five elements theory, he left nothing but a brief account of his life and thought in the *Shi Ji* (Historical Records). It was Dong Zhong-shu (c. 179 B.C.-104 B.C.) who further developed the five elements theory, but his theory deviated from its original material way and went into a kind of religious theology:

Heaven has Five Agents (i.e. Elements): the first is Wood; the second, Fire; the third, Earth; the fourth, Metal; and the fifth, Water. Wood is the beginning of the cycle of the Five Agents, Water is its end, and Earth is its center. Such is their natural sequence. Wood produces Fire, Fire produces Earth, Earth produces Metal. Metal produces Water, and Water produces Wood.... Wood received from Water, Fire from Wood, Earth from Fire, Metal from Earth, and Water from Metal. Those that give are fathers and those that receive are sons. It is the Way of Heaven that the son always serves his father. Therefore when Wood is produced, Fire should nourish it and after Metal perishes, Water should store it. Fire enjoys Wood and nourishes it with *Yang*, but Water overcomes Metal and buries it with *Yin*. Earth serves Heaven with the utmost loyalty.<sup>49</sup>

Figure 26 shows the relations among the Five Agents. Based on the dialectic relations among the five elements *Nei Jing*

(Internal Medicine) formed a system to connect all these factors as Table 5 shows.

Apparently, to try to categorize all the factors into five elements would lack scientific sense in today's view. But the significance of the theory was that it interconnected all systems of the human body in a specific way. Under the guide of the five elements, a unique network of *Qi* in the human body was formed, which played a profound role in the Chinese traditional exercises.

#### 4). Jingluo (The Network of *Qi*)

The network of *Qi* is the channel through which *Qi* flows and circulates. It interconnects all parts of the human body: the limbs and trunk; the internal organs and the external skin, based on the theories of *Yin* and *Yang* as well as the five elements. Notice that this network is different from blood arteries, though sometimes they overlap with each other. Modern science has found some evidence for its existence. The network of 12 veins corresponds to *Yin* and *Yang* as well as to the five elements (See Table 6 and figure 27).

The network of *Qi* was important to Chinese medicine and had a vital role in health. Briefly speaking, when the *Qi* circulates smoothly along the network one is in a perfect healthy status, because the network is the supposed carrier of the two cosmic forces of *Yin* and *Yang*. Only when the flux of *Qi* is uninterrupted can the complicated relationship of the dual power of *Yin* and *Yang* with the various parts of the

body function smoothly. When there is stagnation in certain parts of the network, pains and diseases would occur.

The well-known treatment of Chinese acupuncture is based on the theory of reopening the blocked section by stimulating certain points on the network. Chinese traditional exercises, such as *Dao Yin*, have the same idea in their aims: to cultivate the *Qi* by constantly taking fresh *Qi* outside and certain physical movements to make it circulate smoothly in the network in order to keep *Yin* and *Yang* in balance.

To achieve this goal not only were the methods of breathing emphasized, but also a restrictive mental condition was required, as Lao Zi states:

Can you keep the spirit and embrace the One without departing from them?

Can you concentrate your *Qi* and the highest degree of weakness like an infant?

Can you clean and purify your profound insight so it will be spotless?<sup>50</sup>

Any emotional feelings would have some effect on the balance of *Yin* and *Yang* and the flow of *Qi*. As a result:

Great anger destroys the *Yin* of man's nature, and great joy disorders the *Yang*. Great anger brings dumbness; great fear leads to madness; sorrow and grief cause rage; sickness gathers strength; when likes and dislikes come in profusion, then follow adversities in their train.<sup>51</sup>

The ideal psychological mode was one of calm, being relaxed and comfortable. Only in this mode could one consciously guide the *Qi* along the network, to attack the blocked section which caused pain and diseases, and store it at a certain part of the body. Therefore, the mental training was an inseparable part of the physical exercise.

Some schools such as Taoism and Confucianism overemphasized the psychological mood and totally abandoned any obvious physical movements. As Zhuang Zi wrote:

Let there be no seeing, no hearing; enfold the spirit in quietude and the body will right itself. Be still, be pure, do not labour your body, do not churn up your essence, and then you can live a long life. When the eye does not see, the ear does not hear, and the mind does not know, then your spirit will protect the body, and the body will enjoy long life.<sup>52</sup>

To Chinese physicians the physical movements were as essential as breathing and the appropriate mental mood. As Hua Tuo, a famous physician in the Han era, expressed:

The body needs labour which is not exhaustive. By physical movement food is digested; veins are kept open so that no disease would occur. Just like the hinge of a door which is never decayed. Therefore, ancient Sages practice *Dao Yin*, stretching like bears and turning like birds, bending and extending the wrist and moving all joints in order to live a long time.<sup>53</sup>

It also indicates that what the Chinese physicians recommended was a kind of gentle and non-vigorous exercise. *Nei Jing* (Internal Medicine) had a similar idea in describing the Sages' life-style, "Their bodies toiled and yet did not become weary."<sup>54</sup> Based on the medical theory, the purpose of physical movement was to help the breathing to obtain more fresh *Qi* from outside, to make the psychological mood better and to assist the circulation of *Qi* in its networks.

Therefore the unity of breathing, mental mood and physical movement were combined into one, and formed a basic feature of the Chinese physical exercises in terms of keeping fit.

This is depicted in *Huai Nan Zi*:

The body is life's tenement, the *Qi* is life's fullness, the soul is life's regulator. The three suffer

by the aberration of any one from its function....It is essential that strict attention be paid to the proper exercise of each of these three factors body, Qi, soul.<sup>55</sup>

However, vigorous exercises like Greek athletics would make the breath harsh instead of the slow and deep pattern as it should be; it would lead to strong emotional feelings instead of calmness and relaxation. As a result, it would be impossible to keep the three in a state of harmony. Hence this style of exercise would be incompatible with the Chinese theory of keeping fit. So Chinese traditional exercises were mainly apt to be gentle and smooth in order to keep a harmonious relationship with breathing movements and an appropriate mental mood.

## II. Aims of physical exercises

The purpose of physical exercise always guides its direction of development and shapes its forms and contents.

In ancient Greece, health was highly valued in the sixth and still more in the fifth century B.C.. The philosophers considered health as one of the highest benefits. In an old scolion it is mentioned that "for mortal man, the highest good is to be healthy."<sup>56</sup> In Plato's dialogue it is maintained that the best thing is health, and second is beauty, and third is wealth.<sup>57</sup> And the poet, Ariphron praised health in a paean:

Health, eldest of Gods, with thee may I dwell for the rest of my life and find thee a gracious housemate. If there be any joy in wealth, or in children, or in that kingly rule that maketh men like to Gods, or in the desires we hunt with the secret nets of Aphrodite, or if there be any other delight or diversion sent of Heaven unto man, 'tis with thy aid, blessed Health, that they

all do thrive and shine in the converse of the Graces;  
and without thee no man alive is happy.<sup>58</sup>

Since "without health nothing is of any use, not money, nor anything else",<sup>59</sup> keeping fit was anxiously required by the Greek citizens and became a social demand.

In ancient Greece, health did not merely refer to a physical status of keeping disease away, it always related to the beauty of a well-developed and muscular human body. This idea had already appeared in the early sixth century, as Solon suggested that one should pray for "sound body, health, freedom from trouble, fine children and good looks."<sup>60</sup>

After the defeat of the Persians the ancient Greek world achieved the peak of its "Golden age". With the development of civilization Greek free citizens enjoyed a much better standard of living and more leisure time, which were ensured by increased slave labor. The ideal man, to the free citizens, was the harmonious being whose balance in soul and body was noble, beautiful, and perfect. Disease was considered a great curse because it removes man from the condition of perfection and makes him inferior.

The muscular and beautiful body was morally evaluated. As Fairs states:

The perfectly proportioned body was the beautiful body and for the Greeks the beautiful body was the good body. This fusion of aesthetics and ethics in the fifth century mentality is found in the aesthetic ethical ideal of *kalos kagathos*- beauty- and goodness- a concept which "was used to denote the sum total of all ideal perfection of mind and body."<sup>61</sup>

The pursuit of physical excellence became a social ideal. As Socrates stated:

It is disgraceful, too, for a person to grow old in self-neglect; before he knows what he would become by rendering himself well-formed and vigorous in body; but this a man who neglects himself can not know; for such advantages are not wont to come spontaneously.<sup>62</sup>

The achievement of a beautiful body needs the type of physical exercise which was effective for producing muscular development. Athletics, being comprised of vigorous physical activities, fully met the social demand. As Aristophanes observed:

You will be as bright and fresh as a flower, spending your time in the gymnasium... You will always have a powerful chest, a good complexion, broad shoulders, a short tongue, massive buttocks and a little rod....<sup>63</sup>

As a result Greek sports paid great attention to the external body development.

The muscular beauty of the human body was never valued so highly by the two dominant Chinese philosophies: Confucianism and Taoism. As mentioned in Chapter 6, Confucianism paid great attention to the virtues of patriarchal kinship. Muscular development was despised, as Confucius said "A good horse is praised for its virtue, not for its strength."<sup>64</sup> According to *Lu Shi Chun Qiu* (Lu's Miscellany) Confucius had great physical strength being able to lift a thick stick of city-gate. But he "was not willing to be known as being good at strength."<sup>65</sup>

In the Confucian view the external appearance was not superior:

The stuff is no different from the refinement; refinement is no different from the stuff. The pelt of a

tiger or a leopard, shorn of hair, is not different from that of a dog or a sheep.<sup>66</sup>

Confucians also held that the outside look of person was determined by his moral virtues:

What belongs by his nature to the superior man are benevolence, righteousness, and knowledge. These are rooted in his heart; their growth and manifestation are mild harmony appearing in the countenance.<sup>67</sup>

If within the breast all be correct, the pupil is bright. If within the breast all be not correct, the pupil is dull.<sup>68</sup>

So body beauty could be achieved through the cultivation of virtue.

Taoism pursues the complete freedom of human spirit; the physical look was entirely out of its concern. *Zhuang Zi* gives us a vivid example.

A man who was a lame hunchback with no lips talked to Duke Ling of Wei and Duke Ling was so pleased with him that when he looked at normal men he thought their necks looked too lean and skinny.... Therefore, if virtue is preeminent, the body will be forgotten.<sup>69</sup>

Therefore the physical development of the body seems to be always secondary to mental health.

Moreover, virtue cultivation and mental health, in turn, according to the Chinese philosophic view, would play a fundamental role in physical health, thereby achieving the final goal of longevity. It is worth noting that the Greek physical exercises did not seem to pay much attention to longevity. Instead they appeared to have a more realistic view in this aspect. As Solon said to Croesus, the king of Lydia:

Take seventy years as the span of man's life; those seventy years contains 25,200 days; without counting intercalary months.<sup>70</sup>

Ancient Chinese exercise for keeping fit was much concerned with longevity, and since very early times longevity was valued highly. The idea of the wish to have a long life appeared in very early stages of Chinese thought. *Shang Shu* (Book of History) which mainly records the Xia, Shang and Western Zhou Dynasties (from c. 2100-771 B.C.), states:

Of the five happinesses: The first is long life; the second is riches; the third is soundness of body and serenity of mind; the fourth is love of virtue; the fifth is an end crowning the life.

As to the six extremities again, the first is misfortune, shortening the life; the second is sickness; the third is sorrow; the fourth is poverty; the fifth is wickedness; and the sixth is weakness.<sup>71</sup>

Similar ideas are also expressed in *Shi Jing* (Book of Songs):

There raise the cup of rhinoceros horn,  
And wish him long life - that he may live for ever.<sup>72</sup>

To supply our representatives of the dead, and our  
guests;  
To obtain long life, extending over myriads of years.<sup>73</sup>

And the gems at his girdle emitting their tinkling.  
May long life and an endless name be his?<sup>74</sup>

Like the moon advancing to the full,  
Like the sun ascending the heavens,  
Like the age of the southern hills,  
Never waning, never falling.  
Like the luxuriance of the fire and the cypress;  
May such be their succeeding line!<sup>75</sup>

Their filial descendant receives blessing;  
They will reward him with great happiness,  
With myriads of years, life without end.<sup>76</sup>

There were several schools of physical exercises for fitness. Although they differed from one another in terms of the purpose and method, longevity, without exception, was a

main concern with all of them. Muscular development and physical excellence, according to the Chinese theory (with *Qi* as its core as mentioned) had nothing to do with longevity.

Confucianism suggests it is necessary to achieve the goal by the cultivation of virtue, for "the benevolent are long lived."<sup>77</sup> Taoism held the view that through regulating one's breath and cherishing one's spirit to pass to another state of being, one could become immortal. Obviously, these two philosophies did not favor the vigorous exercises of muscular development.

To the Medical school long life meant keeping vital energy, *Qi*, smoothly and constantly circulating in the network of the body. In doing so the gentle movements were favored.

#### Summary:

The ancient Greek focus on the external muscular development, and the ancient Chinese on the internal body development, in terms of their exercises of keeping fit, had a close relationship with their medical theories. The Greek humoral pathology, with diet as its main concern, made vigorous physical exercises a necessary means to balance the intake of food. Chinese medicine with *Qi* as its core, made breathing and mental condition more important. So Chinese physical exercises were oriented in the direction of internal body function and took more gentle forms in order to keep a harmonious relationship with breathing and mental mode.

In addition, physical excellence was an important aim of ancient Greek exercises and the muscular beauty of the human body was very much appreciated. This aesthetic value further contributed to the orientation of muscular development of Greek physical exercises. By contrast, the beauty of virtues and longevity emphasized by various Chinese philosophies led the Chinese exercises to develop in a way different from their Greek counterpart.

## FOOTNOTES - - CHAPTER VII

<sup>1</sup>Aristotle, *On The Parts of Animals* 1. 640. b5, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 11.

<sup>2</sup>Aristotle, *Metaph.* 1, 3, 983 b6, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 12.

<sup>3</sup>DK A7, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 18.

<sup>4</sup>*Ibid.*, p.49. These divine names respectively signify Fire, Air, Earth, Water.

<sup>5</sup>DK. 12a 2, Cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 16.

<sup>6</sup>DK. A 11, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 17.

<sup>7</sup>DK. 126, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 34.

<sup>8</sup>H. E. Sigerist, *The Great Doctors A Biographical History of Medicine*, trans. Eden & Cedar Pail (New York: W.W. Norton, 1933), p. 29.

<sup>9</sup>W. H. S. Jones, *Philosophy and Medicine in Ancient Greece* (New York: Arno Press, 1978), p. 4.

<sup>10</sup>Max Neuburger, *History of Medicine*, trans. E. Playfair (Oxford University Press, 1910), p. 181.

<sup>11</sup>Hippocrates *Nature of Man* 5.

<sup>12</sup>Hippocrates 4. 12.

<sup>13</sup>*Ibid.*, 20.

<sup>14</sup>*Ibid.*, 1. 2.

<sup>15</sup>*Ibid.*, 3. 67-69.

<sup>16</sup>*Ibid.*, 68.

<sup>17</sup>*Ibid.*, 2. 66.

<sup>18</sup>*Ibid.*, 3. 89.

<sup>19</sup>*Ibid.*, 2.

- 20 *Regimen* 2. 66.
- 21 Heraclitus, Fr. 118, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 37.
- 22 Heraclitus, Fr. 36, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 37.
- 23 Heraclitus, Fr. 117, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 37.
- 24 *Regimen* 2. 66.
- 25 *Ibid.*
- 26 *Ibid.*, 61.
- 27 Feng Yu-lan, *A History of Chinese Philosophy* (Princeton University Press, 1952), p. 177.
- 28 *Han Fei Zi*, 6. 20, trans. W. K. Liao, (London: Arthur Probsthain, 1959) 1: 191-192.
- 29 *Lao Zi*, 42.
- 30 *Zhuang Zi*, 1: 2 [Qi Wu Lun].
- 31 *Ibid.*, 7: 4 [Zhi Bai You].
- 32 *Ibid.*, 7: 2 [Shan Mu].
- 33 *Ibid.*, 7: 4 [Zhi Bai You].
- 34 *Nan Jing* Ba Nan, cited in *The Fundamentals of Chinese Medicine*, eds. Ying Huihe and Zhang Bona, (Shanghai: Shanghai Science and Technology, 1984), p. 55.
- 35 Zhang Jinye, *Lai Jing*- Nie Sheng Fa, cited in *The Fundamentals of Chinese Medicine*, eds. Ying Huihe and Zhang Bona, p. 55..
- 36 *Nei Jing* (Internal Medicine), Suwen 8: 25 [Bao Min Qian Xin Lun].
- 37 *Ibid.*
- 38 *Nei Jing*, Suwen 3: 9 [Liy Jie Zang Xiang Lun].
- 39 *Ibid.*, Suwen 3 [Shen Qi Tun Tian].
- 40 *Gou Yu*- 6 [Zhou Yu].
- 41 *Lao Zi*, 42.

- 42Ren Jiyu, *The Historical Development of Chinese Philosophy*, 7 vols. (Beijing: People's Press, 1983) 1: 610.
- 43*Nei Jing*, Suwen 2: 5, trans. W. Vaith (Berkeley: University of California Press, 1972) p. 115.
- 44Ibid.,
- 45Ibid., Lingshu 2: 9 [Zhongshi].
- 46Guan Zi, 20: 64 [Xingshijie].
- 47*Nei Jing*-Suwen 1: 1.
- 48Shang Shu, Huang Fan [The Great Plan].
- 49The Meaning of the Five Agents, cited in *Source Book of Chinese Philosophy*, trans. C. Wing-tsit, p. 279.
- 50Lao Zi, 10.
- 51Hui Nan Zi 1 [Yuan Tao Xun].
- 52Zhuang Zi 4: 4 [Zai You], trans. B. Watson, p. 119.
- 53Hou Han Shu 112B: 72b [Hua Tuo Zhan].
- 54*Nei Jing*, Suwen 1: 1.
- 55Hui Nan Zi 1 [Yuan Tao Xun].
- 56Attic Scolion 7, cited in *Medicine and Human Welfare*, by H. E. Sigerist (Yale University Press, 1941), p. 55.
- 57*The Laws*, 2. 661a.
- 58Lyra Graeca, 3. 400-402, cited in *Medicine and Human Welfare*, by Sigerist, p. 56.
- 59Hippocrates, 6. p. 604.
- 60Herodotus, 1. 38.
- 61Jack Fair, "When was the Golden Age of the Body?" *Canadian Journal of Sport and Physical Education* 1 (1970): 15.
- 62Xenophon, *Memorabilia* 3. 12, cited in *Sources for the History of Greek Athletics*, Robinson, p. 124.
- 63Nub. 1002-1019, cited in *A History of Education in Antiquity*, by H. I. Marrou, p. 74.

<sup>64</sup>*Lun Yu* (Analects of Confucius) 14. 33, trans. D. Lau p. 143.

<sup>65</sup>*Lu Shi Chun Qiu*, 15: 1.

<sup>66</sup>*Ibid.*, 12: 8, trans. D. Lau p. 111-2.

<sup>67</sup>*Men Zi* (Mencius), 13A [Jinxingshang], trans. J. Legge (Hong Kong University Press, 1960), p. 448.

<sup>68</sup>*Ibid.*, 7A [Liloushang], p. 306.

<sup>69</sup>*Zhuang Zi* pp. 74-6.

<sup>70</sup>Herodotus, 32-33.

<sup>71</sup>*The Shang Shu*, Huang Fan, trans. Legge p. 343.

<sup>72</sup>*Shi Jing* (Book of Songs) "July" trans. Legge p. 233.

<sup>73</sup>*Ibid.*, "Xin Nan Shan" p. 375.

<sup>74</sup>*Ibid.*, "Zhong Nan" p. 198.

<sup>75</sup>*Ibid.*, "Tian Bao" pp. 255-6.

<sup>76</sup>*Ibid.*, "Chu Ci" p. 370.

<sup>77</sup>*Lun Yu* 6: 23, trans. D. Lau, p. 53.

## CHAPTER VIII

### BIONICS

It seems to be a popular fact for people in early ages to learn something from wildlife surrounding them all over the world. For example, primitive people stripped animals of their fur to make their clothing, and imitated the sound and movements of various beasts in hunting. This learning existed not only in people's economic life but also in certain cultural activities. For instance, there is much evidence indicating that the origin of dancing could be traced back to the imitation of animals. In primitive times it might be unconscious for the people to learn, and to imitate animals. For they were still in an undeveloped stage, more like animals themselves than human beings, and they had to learn the experience of animals in order to survive. This primitive imitation of wildlife existed in the early ages of both China and Greece. As Democritus stated:

In the weightiest matters we must go to school to the animals, and learn spinning and weaving from the spider, building from the swallow, singing from the birds, from the swan and the nightingale, imitating their art.

But the fact worth noting is that when ancient civilizations developed in both China and Greece, this imitation of animals met different fates in the two nations. This can be seen by examining physical exercises in the two ancient cultures.

In Chinese sport the imitation developed into a conscious learning, and spread in many forms of the traditional physical exercises, such as *Dao Yin* and *Wushu*. It would be a long list if we wrote down all the names of animals mentioned in Chinese sports. This feature of ancient Chinese sport has been noticed by modern sport historians, as Wu Zhichao and Shen Shou state, "keeping fit in the way of imitating animals' movements is a specific character of the physical exercise in ancient China."<sup>2</sup> Chinese sport has never lost this tradition during its long historical evolution of more than two thousand years, and it became an inseparable part of Chinese culture.

But in ancient Greek sport we find hardly anything of this kind. What made the difference? Several factors seem to have affected this aspect when their social contexts are compared.

First, China was a society in which agriculture was dominant. The great majority of its population were attached to the land by their strong self-sufficient pattern of production. The rural farming life style of most Chinese, which so closely linked man and nature, provided man with excellent opportunities to observe wildlife. It was also due to the favorable physical environment in which various species of animal could survive easily.

The great attention given to non-human creatures can be traced back to early ages in China. In the first poetry collection, *Shi Jing* (Book of Songs), there are 105 species

of animals mentioned. Of these, 35 are birds, 30 are beasts, 25 are insects and 15 are sea-animals.<sup>3</sup>

The close relationship between man and wildlife is also reflected in early medicine, too. In *Shan Hai Jing*, a work written in the pre-Qin times (before 221 B.C.) 62 species of animals and 43 plants are recorded edible for medicinal purposes. It is also true that agriculture was the decisive trade in ancient Greece, which was discussed by Hesiod in his *Works and Days*. However, with the rapid development of commodity production since the seventh century B.C., which resulted from various factors such as colonization, and the development of commercial trade and manufacture, the ancient Greeks developed more complicated and frequent social interrelationships. Even their agriculture became market-oriented, as mentioned in the Chapter 5. Consequently the focus of free citizens was mainly on social life. They lived in cities or surrounding areas of cities, as the term "Polis" (city-states) suggests. This seems to keep them relatively distant from the wild animals in the land. In addition, unlike the pattern of inland civilization of China, the Greeks' was a sea civilization. The sea was so vital to the Greeks that their attention to nature became more sea-oriented, which also has certain effects on the topic under question.

Secondly, as mentioned before, Chinese sport was non-competitive in nature and apt to be recreational and for self-enjoyment. The focus of their exercises was the

internal bodily functions, and imitating animals' movements would perfectly contribute to this orientation. The humor, the mood of relaxation, the physical benefits of health and the convenience of practice related to performance of animal behaviors, had quite a practical value to them.

Greek sports were oriented towards competition. They had to pay much more attention to physical strength and endurance because these two were decisive factors in physical contests. Knowledge of exercise physiology tells us that muscular strength and endurance can be significantly improved with properly planned weight resistance exercise programs.<sup>4</sup> Greek physical exercises mainly took the form of building muscular strength and endurance by using various resistances. The discus, javelin throwing, wrestling and pankration could be regarded as means to overcome certain resistance. Related to the point was the popular use of the jumping weights and punching bag. Moreover, the muscular beauty which was highly valued by ancient Greeks also required similar physical exercises to build up the body in perfect proportion. Obviously these goals could not be realized by merely imitating animals' movements.

Thirdly, the Chinese sport was tremendously diverse in terms of its movements; to name them in an explicit way would lead to difficult and clumsy general phrases. But describing them by the behaviors of an animal with which all people were familiar, was indeed an effective way. It could not only give a vivid picture of how the movements were performed, but also

give a certain mood to the given movements. For example, "Bear jolting and bird stretching" represent the imitation of the stretch of the bear and the twist of the bird. At the same time it indicated the stability in doing the former and the mobility in the latter.

Greek sport was quite narrow in terms of its events. All athletic events and their related exercises did not involve complicated movements, and the terms such as discus, javelin, etc., already described the event quite clearly and every Greek knew exactly what they meant.

Although the above-mentioned reasons may partially explain this difference in terms of the bionic nature of ancient sport, they have not provided full insights into the question. Whether or not a sport possessed bionic characteristics was not merely a question of the sport itself, it was also a philosophic question involving the location of human beings in the natural world, how people evaluated themselves in comparison with rest of nature, and the relationship between human beings and non-human creatures. It is the philosophic difference of the two ancient cultures that formed the essential factor to the question under discussion.

It is true that both ancient Greek and Chinese philosophies regarded human beings as a part of nature, who were formed by certain basic materials such as earth, fire (Empedocles) or atom (Democritus) in Greece; and *Tao* or *Qi* (Lao Zi and Zhuang Zi) in China. These theories provided both

of them with an appropriate basis to observe and learn from other creatures outside human society. But as mentioned in Chapter 6, the Chinese philosophies emphasized the harmonious aspect of the dialectical relationship between man and nature. And an important principle was to adapt man himself to the natural law. This view provided them with a foundation for a new direction of imitating wildlife.

Of the main Chinese philosophic schools it is the doctrine of Taoism that provided ancient Chinese physical exercises with a fundamental basis for the direction of imitating wildlife. Taoism encouraged people to despise social life and to return to nature. Therefore more opportunities were provided to observe nature, including animal behaviors, which provided the potential for human beings to learn something from them. The most important aspect is (as mentioned in the previous chapter) that Taoism was built up on the basic concept *Qi*. It views everything in the world as some kind of form of *Qi*. *Qi* exists in all things. In the Taoist opinion there is nothing without *Qi*. *Qi* not only is in heaven, earth, the sun, and the moon, but also in insects, blighted grains, tiles and bricks, even in the wastes.<sup>5</sup> According to this theory *Qi* is the only media through which all things are connected together:

It links the universe together and makes the sky luminous. It is most substantial and full of sap; most tenuous and fine: so delicate is it that it penetrates every pore and crevice.

It gives height to the mountain and depth to the abyss. It fashioned beasts to walk and birds to fly.<sup>6</sup>

Because all things are made of *Qi* any change in the world is a kind of change of *Qi*.

Consequently, human beings were regarded with any superiority in the whole universe. *Zhuang Zi* expresses the idea by an analogy in which the sea god said to the boastful river god:

I compare my own bodily form with (the greatness of) heaven and earth, and (remember that) I have received my breath from the *Yin* and *Yang*. Between heaven and earth I am but as a small stone or a small tree on great hill. So long as I see myself to be thus small, how should I make much of myself? I estimate all within the four seas, compared with the space between heaven and the earth, to be not so large as that occupied by a pile of stones in a large marsh! I estimate our Middle States, compared with the space between the four seas, to be smaller than a single little grain of rice in a great granary! When we would set forth the number of things (in existence), we speak of them as myriads; and man is only one of them.

Similarly, a human being was but one of the things in the world. They who live on the nine territories are like a grain in a large grain barn.

Moreover man is also in a constant change cycle linked with other living creatures. In a story in *Zhuang Zi*, Zili comes to visit his friend Zilai who was very sick and was going to die. Zili said to his friend: "How wonderful Nature is! Will He make you the liver of a rat, or the arm of an insect?"<sup>8</sup> *Zhuang Zi* even tried to describe the biological cycle:

The seeds of things have mysterious workings. In the water they become Break Vine, on the edges of the water they become Frog's Robe. If they sprout on the slopes they become Hill Slippers. If Hill Slippers get rich soil, they turn into Crow's Feet. The roots of Crow's Feet turn into maggots and their leaves turn into butterflies. Before long the butterflies are transformed

and turn into insects that live under the stove; they look like snakes and their name is Chu-to. After a thousand days, the Chu-to insects become birds called Dried Leftover Bones. The saliva of the Dried Leftover Bones becomes Ssu-mi bugs and the Ssu-mi bugs become Vinegar Eaters. I-lo bugs are born from Vinegar Eaters, and Huang-shuang bugs from Chiu-yu bugs. Chiu-yu bugs are born from Mou-jui bugs and Mou-jui bugs are born from Rot Grubs and Rot Grubs are born from Sheep's Groom. Sheep's Groom couples with bamboo that has not sprouted for a long while and produces Green Peace plants. Green Peace plants produce leopards and leopards produce horses and horses produce men. Men in time return again to the mysterious workings.<sup>9</sup>

Although this biological link described by Zhuang Zi seems quite strange to us, the philosophic idea is evident: the location of human beings in the universe is equal to those of non-human beings, including various animals. They are all part of nature. As the work states elsewhere:

The ten thousand things all come from the same seed, and with their different forms they give place to one another. Beginning and end are part of a single ring and no one can comprehend its principle. This is called Heaven the Equalizer, which is the same as the Heavenly Equality.<sup>10</sup>

In the Taoist view there is nothing greater than nature. Nature is perfect and the beginning and the end of all lives. There is no discrimination among all the living forms because they are all in a temporary form of *Qi* and in a constant changing process, and interchanged through biological links.

This idea of naturalism set up a basis for man to observe animals' behaviors with great enthusiasm and without hesitation to learn from them anything useful. A well-known case in *Zhuang Zi* reflects the idea.

Formerly, I, Zhuang Zhou, dreamt that I was a butterfly, a butterfly flying about, feeling that it was enjoying itself. I did not know that it was Zhou. Suddenly I awoke, and was myself again, the veritable

Zhou. I did not know whether it had formerly been Zhou dreaming that he was a butterfly, or it was now a butterfly dreaming that it was Zhou. But between Zhou and a butterfly there must be difference. This is a case of what is called the Transformation of Things.

The Greek view about the location of human beings in the natural world was quite different from Taoism and displayed a strong humanism. It is true that the early Greek natural philosophies regarded the unity of man and nature by suggesting all things are formed with certain basic elements such as water or fire, etc.. However, many Greek philosophers emphasized on the conflict aspect of the dialectical nature of unity, as mentioned already in the Chapter 6. Perhaps this was because the unfavorable physical surroundings made conflict between man and nature so serious and apparent. In his struggle with nature, man treated nature as an opponent more than a partner. Man had to be more active than the rest of nature in order to survive. This basic point seemed, to a certain degree, to keep Greeks apart from nature and put them in a conflict position with the rest of the natural world.

In classical times, especially after the Persian War, the Greek world entered its so-called Golden Age. The victory over a mighty enemy, the flourishing of the economy and the solidification of political democracy tremendously enforced the confidence of the Greeks. This was embodied in their philosophic views about man; in their political speeches and in all forms of their arts. The superiority of man was greatly praised.

"Man is a universe in little ( Microcosm)"<sup>12</sup> stated Democritus (c.494- 404 B.C). This philosophic idea supplied an entirely new starting point for Greek humanism. It differed from previous natural philosophy in which man was not treated differently in comparison with the rest of nature. Now human beings, the unique creatures of the world, were highlighted and became the focus of all theories and arts. Consequently those disciplines closely relating to Man grew rapidly, such as education, politics, medicine, and psychology, etc.. The superiority of man could be identified everywhere.

The statesman Pericles maintained that:

Men come first, the rest is the fruit of their labour.<sup>13</sup>

The artist Sophocles in his play, *Antigone*, exclaims:

Numberless are the world's wonders, but none more wonderful than man.<sup>14</sup>

The philosopher Socrates had a similar view:

What soul is more apt than man's to make provision against hunger and thirst, cold and heat, to relieve sickness and promote health, to acquire knowledge by toil, and to remember accurately all that is heard, seen, or learned? For is it not obvious to you that, in comparison with the other animals, men live like gods, by nature peerless both in body and in soul?<sup>15</sup>

The superiority of man reached its peak in the Sophists:

Of all things the measure is Man, of the things that are, that they are, and of the things that are not, that they are not.<sup>16</sup>

To imitate the behavior of inferior animals seemed to be incompatible to the humanism of Greek philosophy.

The difference of sports in the two ancient cultures in terms of imitating wildlife also related to the goals of the naturalism of Taoism and the humanism of Greek philosophy.

The highest goal of Taoism is to return back to nature. All things of nature are highly valued and paid great respect. According to Taoism the best way for people is to live a lifestyle that is completely harmonious with nature.

There is the great Mass (of nature); I find the support of my body on it; my life is spent its toil on it; my old age seeks ease on it; at death I find rest in it.<sup>17</sup>

In the Taoist ideal world all living creatures are living in a mixture of harmony:

In the age of perfect virtue men walked along with slow and grave steps, and with their looks steadily directed forwards. At that time, on the hills there were no foot-paths, nor excavated passages; on the lakes there were no boats nor dams; all creatures lived in companies; and the place of their settlement were made close to one another. Birds and beasts multiplied to flocks and herds; the grass and trees grew luxuriant and long. In this condition the birds and beasts might be led about without feeling the constraint; the nest of the magpie might be climbed to, and peeped into. Yes, in the age of perfect virtue, men lived in common with birds and beasts, and were on terms of equality with all creatures, as forming one family; how could they know among themselves the distinctions of superior men and small men? Equally without knowledge, they did not leave (the path of) their natural virtue; equally free from desires, they were in the state of pure simplicity. In that state of pure simplicity, the nature of the people was what it ought to be.<sup>18</sup>

The ideal status of a human being is the pure natural one. Any artificial modification was regarded as a violation of nature. It requires man to integrate into nature, encourages men to return to the wild natural world, living by the natural laws and with the natural rhythm by abandoning

the luxurious social life. Nature in Taoism was the greatest force dominant in all things in the universe. It makes all things happen and develop according to certain laws, while it did this in an unconscious and spontaneous way. As *Zhuang Zi* states:

O my Master! my Master! He gives to all things their blended qualities, and does not count it any righteousness; His favours reach to all generations, and He does not count it any benevolence; He is more ancient than the highest antiquity, and does not count Himself old; He overspreads heaven and supports the earth; He carves and fashions all bodily forms, and does not consider it any act of skill. This is He in whom I find my enjoyment.<sup>19</sup>

Nature was limitless and complete freedom. The Taoist tried to prove the superiority of naturalness to artificiality by a metaphor:

Horses' hoofs are made for treading frost and snow, their coats for keeping out wind and cold. To munch grass, drink from the stream, lift up their feet and gallop- this is the true nature of horses. Though they might possess great terraces and fine halls, they would have no use for them.<sup>20</sup>

*Zhuang Zi* persuaded people not to violate the natural way with artificial efforts:

Oxen and horses have four feet; that is what I call their Heavenly (constitution). When horses' heads are haltered, and the noses of oxen are pierced, that is what I call (the doing of) Man. Hence it is said, "Do not by the Human (doing) extinguish the Heavenly (constitution); do not for your (Human) purpose extinguish the appointment (of Heaven);"<sup>21</sup>

Therefore the best way is to follow nature. As *Lao Zi* said, "Men follow the way of earth, earth follows the way of heaven, heaven follows the way of *Tao*, and *Tao* follows the way of nature."<sup>22</sup>

Wild animals are part of nature and live in a pure natural way without any artificial changes by will:

Horses, when living in the open country, eat the grass, and drink water; when pleased, they intertwine their necks and rub one another; when enraged, they turn back to back and kick one another; this is all that they know to do.<sup>23</sup>

Animals integrated themselves into the natural world well, it gave Taoists great inspiration and clues to achieve their highest goal- returning to nature. The pure natural status of the wildlife and the harmonious relationship between wild animals and the physical environment inevitably attracted the attention of Taoists. So there are many metaphors about wildlife being used to explain the philosophic ideas in their works.

However, early Taoism initiated by Lao Zi and Zhuang Zi did not introduce the imitation of animals' movements into Chinese sport, simply because of their passive attitude towards social life and overemphasis on quietness.

Vacancy, stillness, placidity, tastelessness, quietude, silence, and non-action are the root of all things.

*Wuwei* (not to interfere with the natural course of action) was accompanied by the feeling of satisfaction. Where there is that feeling of satisfaction, anxieties and troubles find no place; and the years of life are many.<sup>24</sup>

Physical movement was contradictory with the idea of *Wuwei* of early Taoism. This lack was complemented by Neo-Taoism which developed in the Qin and the early Han Dynasties. Neo-Taoism re-examined the concept of "*Wuwei*" and took a more positive attitude, which led a break-through in this direction. This

was mainly expressed in two philosophic works, *Lu Shi Chun Qiu* (Lu's Miscellany) and *Huai Nan Zi*, where the more active attitude was adopted.

Moving water is not putrid and the door axe is not decayed because of their movement. The same is true to the human body and the *Qi*.<sup>25</sup>

Although they held the primary role of the mind, they did not deny the physical functions of the body movements:

The human body has its 160 sections, 9 viscera and 11 internal organs. When muscle and skin combine tightly, blood vessels are not blocked, muscles and bones are strengthened, mental mode is peaceful, the *Qi* is circulating and the diseases cannot occur.<sup>26</sup>

*Huai Nan Zi* also criticizes the passiveness of early Taoism.

Some may maintain that the person who acts in the spirit of *Wuwei* is one who is in serenity, without speaking, and in meditation, without acting: he will not come when called on nor be driven by force. And this demeanor is, it is assumed, the phenomenal appearance of one getting the Cosmic Spirit. Such an interpretation of *Wuwei* I cannot admit.<sup>27</sup>

In Neo Taoism the principle of "following the heaven and earth" should be actively used instead of in its passive manner as in previous times.

The configuration of the earth causes water to flow eastward; nevertheless man must open channels for it in order to lead the water to run in streams (not lie over the land). Cereals sprout in spring; but it is necessary to add human labour, in order to induce it to grow and mature. If everything were left to nature, then birth and growth were waited for without human labour, then there would be no accruing merits to Kun and Yu, and the knowledge of Hou Chi could not be put to use. What is meant, therefore, in my view, by *Wuwei*, is that no selfish idea or personal will can enter and interfere with natural justice: no personal lust or desire may twist and wrench the true course of action. Reason and right must guide in action, in order to exercise power according to the intrinsic properties of things. This is a natural exercise of force, and, by so doing, there will be no room for any subtle art or craftiness.<sup>28</sup>

Neo-Taoism took a more positive attitude for the principle of "learning from nature". It was no longer satisfactory to merely passively follow nature, it tried to achieve goals in a more active way. This idea responded to keeping fit as well, by confirming the necessity of physical movements. And the imitation of animals' movement reflected the new interpretation for the principle of "learning from nature".

The energetic wild animals, such as bears, deer and birds were fulfilled with life. They were healthy and had great freedom. All their behaviors were spontaneous and inherent in nature without any artificial aspect. So their physical movements were purely natural. And because of the pure naturalness of their movements, animals lived harmoniously with nature, and therefore animals' behavior gave Neo-Taoists great inspiration to look for the ideal type of physical movements which would correspond to the principle of Taoism. Consequently, physical exercises consisting of the imitating of wild animals rapidly developed since the early Han period. Because the bionic character of traditional Chinese sport was based on the principle of Taoism, it is not surprising to see that most early evidence about this character was mainly found in the area with deep roots in Taoist culture, such as: the *Dao Yin* Movement on silk painting in the Han tomb of Ma Wang Duai, and Hua Tou's Five Animal Play.

The thought of "following nature" and "*Wuwei*" could not be found in any Greek philosophy. The idea of returning to

nature by discarding secular life also seemed to be entirely strange to the Greeks, as mentioned in the previous chapters. Although Greek society was politically unequal, the free male citizens enjoyed equal rights, especially at Athens during the Pericles' period. Each citizen played an active role in the military, in politics, the economy, culture and all aspects of social life. The social condition provided Greeks with great opportunities for individual development. Success depended mainly upon one's own efforts. As Pericles stated:

When it is a question of putting one person before another in positions of public responsibility, what counts is not membership of a particular class, but the actual ability which the man possesses.<sup>29</sup>

So all Greek citizens indulged in various social affairs and competed with one another in order to realize their goals, because real life gave them a chance to reach them.

Abandoning social life, secular property and fame, and isolating themselves from the rest of the society to return to wild nature, were highly contradictory to their ideas. So the fundamental reason of following nature for the bionics of ancient Chinese sport was entirely absent in the ancient Greek world.

### Summary

The bionic character in Chinese traditional sport resulted from many factors such as the lifestyle of the majority of the population; the non-competitive and self-enjoyment nature of its sport; the diversity of physical exercises, and fundamentally from the naturalism of Taoism. The reasons for the absence of this character in ancient

Greek sport were not only because of the differences in terms of the above-mentioned aspects, but also because of the strong humanism of Greek philosophy which did not provide an appropriate basis for this development.

## FOOTNOTES - -CHAPTER VIII

<sup>1</sup>Democritus *The Fragments* 154a, cited in *Source Book In Ancient Philosophy*, ed. C. M. Bakewell (New York: Gordian Press, 1973), p. 62

<sup>2</sup>Wu Zhichao and Shen Shou, "The Origin of Ancient Dao Yin," *Reference Materials of Physical Education*, 2 (1980): 53

<sup>3</sup>Zhen Shenli, "The 'Animal's World' in *Shi Jing* (Book of Songs)," *People's Daily* June 5, 1986.

<sup>4</sup>Edward L. Fox and Donald K. Mathews, *The Physiological Basis of Physical Education and Athletics*, 3rd ed. (Philadelphia: Saunders, 1981), p. 138.

<sup>5</sup>*Zhuang Zi* 7: 22 [Zhuangzi to You].

<sup>6</sup>*Huai Nan Zi*, 1 [Yuan Tao Xun].

<sup>7</sup>*Zhuang Zi* 6: 17 [Qiu Shui].

<sup>8</sup>*Ibid.*, 3: 4 [Da Zong Shi].

<sup>9</sup>*Ibid.*, 6: 18 [Zhi Yue], trans. B. Watson, (New York: Columbia University Press, 1968), pp. 195-6.

<sup>10</sup>*Ibid.*, 9: 27 [Yu Yan].

<sup>11</sup>*Ibid.*, 1: 2 [Qi Wu Lun].

<sup>12</sup>Democritus, Fr. 34, cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 66.

<sup>13</sup>Pericles' funeral oration, in Thucydides, 1. 143.

<sup>14</sup>*Antigone*, Ode I, trans. Dudley Fitts & Robert Fitzgerald, (New York, Harcourt, Brace, 1939), p. 25.

<sup>15</sup>Xenophon, *Memorabilia* I, iv, 13-14, trans. E. C. Marchant, p. 61.

<sup>16</sup>Cited in *Readings in Ancient Western Philosophy*, eds. Mclean and Aspell, p. 82.

<sup>17</sup>*Zhuang Zi* 3: 6 [Da Zong Shi].

<sup>18</sup>*Ibid.*, 4: 9 [Ma Ti].

<sup>19</sup>*Ibid.*, 3: 6 [Da Zhong Shi].

<sup>20</sup>*Ibid.*, 4: 9 [Ma Ti].

<sup>21</sup>*Ibid.*, 6: 17 [Qiu Shui].

<sup>22</sup>*Lao Zi*, 25.

<sup>23</sup>*Zhuang Zi*, 4: 9 [Ma Ti].

<sup>24</sup>*Ibid.*, 5: 13 [Tian Dao].

<sup>25</sup>*Lu Shi Chun Qiu*, 3: 2 [Jin Shu].

<sup>26</sup>*Ibid.*, 20: 5 [Da Yu].

<sup>27</sup>*Huai Nan Zi*, 19 [Xou Wu Xun], trans. Morgan, p. 220.

<sup>28</sup>*Ibid.*, p. 224.

<sup>29</sup>Thucydides 2, 37.

## CHAPTER IX

### SUMMARY

1. There were evident differences between ancient Greek and Chinese sport in the following aspects:

a. In an organizational dimension, ancient Greek sports were more centralized, mainly reflected in the pan-Hellenic games, and especially the Olympic Games. Ancient Greek sports were relatively narrow in their events but more standardized in their forms and in the manner of participation. Ancient Chinese sports were mainly decentralized. There was no nation-wide sport gathering and all sport events were local in their nature. They also displayed great diversity, and thus possessed less standardization.

b. With respect to the nature of sport, ancient Greek sports were tremendously competitive and emphasized the outcome and results. Ancient Chinese sports were more non-competitive, and oriented towards enjoyment, physical self-improvement, and recreation.

c. In terms of a focus on physical exercises, the ancient Greeks paid much more attention to the external muscular development, while the ancient Chinese regarded the internal body functions as more important.

d. With regard to the pattern of physical movements, ancient Chinese sport demonstrated a strong bionic character, while its Greek counterpart did not do so.

2. It was the nature of the sport, the competitive nature of ancient Greek sport and the non-competitive nature of ancient Chinese sport, that functioned as a corner stone, through which all the differences analyzed interacted and were logically connected. Figure 28 shows the interrelationship.

a. *The nature of sport (competitive or non-competitive) and the organizational dimension*

A competitive sport, in a sense, is a comparison of opponents in terms of their particular traits such as strength, endurance, skills, and so on. Therefore it always requires a certain standard in order to set up an accepted way to conduct the competition and to settle disputes. A standard is "an established measure, something to strive toward, a model for comparison, a means by which one thing may be compared with another."<sup>1</sup> It plays a significant role in competitive sport. In the absence of standards, it is impossible to conduct any competitive game. Therefore the process by which a sport becomes more competitive is always accompanied by the process of standardization. Ancient Greek sport was such a case. Its competitive nature led sport to become standardized and codified in terms of what, when, how and where to play, although this may seem rough and inconsistent with our modern views.

Standardization also supplied a necessary condition for the administration of nation-wide sport meetings, because it provided norms or reference lines for management. As Terry states:

Standardization provides predetermined patterns and levels for performances which contribute to efficiency and expedite controlling.<sup>2</sup>

So the standardization of Greek sport which was initiated from its competitive nature paved the road for organizing pan-Hellenic games, such as the Olympic Games. With the development of those pan-Hellenic games and their increased influence in the Greek world, the Olympic model further promoted the standardization, and thereby made the competition stronger. These two processes mutually stimulated each other.

The standardization of ancient Greek sport caused by its competitive nature made ancient Greek sport, especially athletics, achieve a great popularity. However, on the other hand, this standardization might confine the possible developments of ancient Greek sport towards non-competitive directions.

In contrast, the non- or less competitive nature of ancient Chinese sport made such standardization unnecessary. Since sports were basically not regarded as a means of comparison, there was no need to set a standard to judge participants' superiority or inferiority. Instead, the purposes of keeping fit or pursuing recreation led to a diversification of physical activities. This diversification

made the managerial controlling of large sport meetings more difficult and resulted in ancient Chinese sport becoming further decentralized. Ancient Chinese sport displayed many dimensions, and also took mental health into account. But due to a lack of standardization no one particular form of ancient Chinese sport achieved popularity as Greek athletics did.

*b. The nature of sport (competitive or non-competitive) and the focus of physical exercises*

Competitive sport is a form of physical conflict in which the contestants' physical prowess plays a predominant role. No matter what physical trait is regarded as the main factor in a particular race, for example, speed in a sprint, endurance in the long-distance run, strength in throwing, agility in wrestling, they are all initiated from strength which was generated by muscular development. So, in one sense, achieving victory in sport competition is also the pursuit of excellence and recognition of one's physical prowess and muscular development. Consequently, the competitive nature of Greek sport tremendously increased the importance of muscular development; and muscular development, in turn, became a pre-condition for competitive sport.

In addition, the benefits and glories of victories in sport competitions encouraged many Greeks to devote themselves to seek some particular ways in order to build up the ideal body type for a given event. Knowledge related to athletic training rapidly increased such as athletic diet,

daily routine, and training methods. This knowledge supplied a more effective means of attaining muscular development.

Moreover, a sport competition in the eyes of the Greeks, at least during the "Golden Age", was also a competition of the body beauty of muscular development. The nude habit in sport competition allowed the combatants' bodies to be seen and evaluated by thousands of eyes. This also had a certain influence on the muscular-orientation of Greek sport. That may be seen from the beautiful statues of athletes made by Myron and Polyclitus in the 5th century B.C..

The non- or less competitive nature of ancient Chinese sport resulted in less attention to the winning or losing of a game. This denied the predominant position of physical prowess for it was no longer an indispensable condition to ancient Chinese sport as it was to Greek athletics. Instead, the non- or less competitive nature oriented the sports towards other directions such as self-enjoyment and improvement, cultivation of virtues, and especially, longevity. All these directions were more concerned with mental mode and internal body functions than with muscular development.

*c. The nature of sport (competitive or non-competitive) and the bionics*

It is the non- or less competitive nature of ancient Chinese sport instead of the competitive ancient Greek sport that made the bionic character possible, simply because:

i. The essence in the imitation of movements of wild animals is physically spontaneous and mentally relaxed. Both the physical and mental modes were in contrast to the competitive nature of ancient Greek sport, but were appropriate to the non-competitive ancient Chinese sport.

ii. Imitation of wild animals could not produce the highly developed physical prowess which was absolutely needed for ancient Greek sport, but such imitation supplied an ideal way for the non-competitive Chinese sport to combine the physical, mental and breathing into one.

iii. Diversity in the imitation of wild animals would inevitably have decreased the standardization that ancient Greek competitive sport needed, and would have made the management of large sport meetings tremendously difficult. But it provided the non-competitive ancient Chinese sport with more alternatives for self-enjoyment.

3. The differences of sports in the two ancient civilizations cannot be fully explained in their own terms because they were the results of interaction of various social factors. Both ancient Greek and Chinese sport were deeply rooted in their concrete social settings and became integral social systems. It was the difference between the major social factors of the two ancient worlds that formed the final reasons for the differences of their sports. Table 7 outlines how the various external factors of both the economic base and superstructure influenced the various aspects of the two ancient sport systems. Obviously, the

differences of sports in the two ancient civilizations were determined or shaped not only by the different patterns of their economic activities and the styles of their material life, but also by the dissimilar features of their political systems and spiritual life, such as philosophies, value judgments, ideologies and so on.

However, although many external factors contributed to these differences of the two ancient sport systems in various ways, the economic element demonstrated its fundamental role. This is not only because economic element had direct impacts on the two ancient sport systems in terms of their nature, organization, focus and pattern, but also because the economic base was the fundamental reason for all changes in other main social aspects relating to sport.

The pattern of commodity production in ancient Greece resulted in a series of deep social changes involving the political democracy of free Greek citizens, military reformation, humanism of philosophy, pan-Hellenism of religion, winning-ethics of value judgement, etc.. All these changes tremendously influenced ancient Greek sport and made it more competitive, organized, and focused on muscular development.

Similarly, the self-sufficient pattern of the ancient Chinese economy formed the basis for the rigid feudal hierarchy and the corresponding cultural developments such as the Taoist naturalism, moral virtue-oriented value system, kinship ethics of Confucianism, relative isolation of life-

style and so on, which led ancient Chinese sport to possess its unique features: the non- or less competitive nature, diversity, focus on internal body functions and imitation of wild animals.

## FOOTNOTES - - CHAPTER IX

<sup>1</sup>John Gailard, *Industrial Standardization- Its Principles and Application* (Y.N.: H. W. Wilson, 1934), p. 33.

<sup>2</sup>G. R. Terry, *Principles of Management*, 3rd ed. (Homewood, Illinois: Richard D. Irwin, 1960), p. 589.

**Table 1. The Regimen Activities And Their Effects**

Type of Activity	Effects
Walking	
after dinner	-dries the belly and body
early-morning	-prevent the stomach becoming fat
after gymnastics	-reduce the body
	-good for hearing
	-relax the bowels
	-render the body pure and thin
	-prevent the flesh melted
Running	
increased gradually	-for big eater, dissolve the flesh
in a cloak	-same as above
naked double course	-dissolve the flesh less, but
	reduce the body more (thin)
in a circle	-dissolves the flesh least, but reduces and contracts the
	flesh and the belly most
Swinging the arms	-contracts the flesh less than running in a circle
Sparring and raising the body	-heat the flesh least
	-stimulate both body and soul
	-empty the body of breath
Wrestling and rubbing	-more to the exterior parts of the body
	-warm the flesh, harden it and made it grow
The punch-ball and arm exercise	-same to above
Holding the breath	-thining the skin
	-expelling the moisture
Massage (Friction)	-produce relaxation and constriction
hard massage	-constricts
soft massage	-relaxes
moderate massage	-increases flesh
Exercise in dust	-in summer, promotes growth more, cooling body
Exercise with body oiled	-in winter, promotes growth more, warm body

Source: Based on the Hippocrates' statements in *Regimen I, II, III*, *Regimen In Health* and *Regimen In Acute Diseases*.

**Table 2. Colonization of Greece  
in the 8th-7th Centuries B.C.**

Mother-State	Aegean, Black Sea, etc.	Adriatic, etc.
1. Asia Minor		
Miletus	Syzicus, 757; Abydos, 675; Sinope, 800; Trapezus, c. 756; Naucratis (Egypt) 640.	
Phocaea		Massalia (Gaul), c. 600?
2. Islands		
Rhodes		Gela, 688, which founds Acragas, 580.
Thera	Cyrene (N. Africa), 630.	
3. Euboea		
Chalcis & Eretria	Methone, Pydna, Torone, Mende, 690, in Chalcidice	Cumae (760?); Catana, 728; Leontini, 728; Zancle, 715; Himera, 648; Rhegium, 730.
4. Peloponnese, etc.		
Megara	Chalcedon, 660 and Byzantium	Sicilian Megara, 728, which founds Selinus, 648.
Corinth	Potidaea, 609.	Corcyra, 735, which founds Epidamnus; Syracuse, 735, which founds Camarina, 599; Anactorium, Leucas, c. 600.
Achaea		Croton, 710; Sybaris, 721 Posidonia (Paestum)
Sparta		Taras (Tarentum), 705.

SOURCE: BASED ON C. E. ROBINSON, *APOLLO HISTORY OF GREECE*,  
pp. 438-9.

**Table 3. The Chronological list of the Olympic Events**

Stade footrace	776 B.C.
Diaulos footrace	724 B.C.
Dolichos footrace	720 B.C.
Pentathlon and Wrestling	708 B.C.
Boxing	688 B.C.
Pankration	648 B.C.
Boys: Stade and Wrestling	632 B.C.
Boys: Pentathlon	628 B.C. (Held once only)
Boys: Boxing	616 B.C.
Hoplite Race	520 B.C.
two-Mule Chariot Race	492 B.C.
Horse Riding and Footrace Combination	488 B.C. (Discontinued in 436 B.C.)
Two-Horse Chariot Race	400 B.C.
Contests for Heralds and Trumpeters	388 B.C.
Four-Colt Chariot Race	376 B.C.
Two-Colt Chariot Race	260 B.C.
Colt Race (Riding)	248 B.C.
Pankration for Boys	200 B.C.

SOURCE: ADAPTED FROM E. F. ZEIGLER, ED. *HISTORY OF PHYSICAL EDUCATION AND SPORT*, p. 35.

Table 4.

## Social Ranks in Ancient China

280

The noble:	Emperor
The Imperial families	Three Dukes: Chengxiang (Grand Counsellor)
Consort Families	Taiwei (Grand Commandant)
The Meritorious officials	Yushidafu (Grand Secretary)
	Ministers:
	Fengchang-----rites
	Shiguan-----recording empiral events, culture, medicine, etc.
	Langzhongling--for emperor's body guard
	Weiwei-----security of empiral palace
	Taipu-----palace horses and carriges
	Tingwei-----justice and the prison service
	Zongzheng----empiral famiy's affairs
	Dianke-----local lords and minority groups
	Zhilineishi---grain and finance
	Zhongwei----capital guard
	Neishi-----governor of capital
	Hujun-----military commanding
Local officials:	
	Jun (commandery): Junshou (governor of commandery)
	Xian (county): Xianling---( governor of county)
	Xiang (destrict): Sanlao--- mbral standards Sefu-----law
	Youjiao---local security
	Li (vallege): Lizheng and Jianmen
	Wu (unit of five families): Wulao
Common people:	
Scholars	
Farmers	
Artisians	
Merchants	

SOURCE: BASED ON ZUO YANDONG, *The HISTORY OF CHINESE POLITICAL SYSTEM*, pp. 126-130.

**Table 5. Five Elements and Responding Categories**

Environment				Five Elements	Human body	
Flavor	Color	Climate	Season		Vicera	
Sour	Green	Wind	Spring	Wood	Liver	Gall Bladder
Bitter	Red	Heat	Summer	Fire	Heart	Small intestine
Sweet	Yellow	Humidity	long Summer	Earth	Spleen	Stomach
Pungent	White	Dryness	Fall	Metal	Lungs	Large intestine
Salt	Black	Cold	Winter	Water	Kidney	Bladder

SOURCE: ADAPTED FROM LI DING, ED. *THE THEORY OF JINGLUO* (NETWORK OF QI)  
p. 10.

Table 6. Relationship of Five Elements and the Network of Qi

Yin Network	Hand Great Yin	Foot lesser Yin	Foot absolute Yin	Hand lesser Yin	Foot great Yin	Hand absolute Yin
	Lungs	Kidney	Liver	Heart	Spleen	Heart cover
Five Elements	Metal	Water	Wood	Fire	Earth	Similar Fire
Yang Network	Hand sun-light	Foot great Yang	Foot lesser Yang	Hand great Yang	Foot sun-light	Hand lesser Yang
	Large intestine	Bladder	Gall bladder	Small intestine	Stomach	"San Jiao"

SOURCE: IBID.

Table 7. Relationships of Sport and Social Factors

	<u>Nature of Sport</u> (Competitive and non-competitive)	<u>Organizational Aspect</u> (Centralization & decentralization)	<u>Focus of physical exercises</u> (Internal & external)	<u>Patterns of physical exercises</u> ( bionics)
<u>Economy</u>				
(Greece)	Competitive nature of commodity production	Commodity production commercial trade: frequent social exchanges		Commodity production city life
(China)	Non-competitive nature of self-sufficient economic pattern	Self-sufficient agricultural pattern: relative isolation		Rural life, close to nature
<u>Politics</u>				
(Greece)	Democracy based on slave labor: relative equality among Greek free citizens	Mobility: leisure free citizens- athletes & spectators; Easy to travel	Opportunities for individual self-expression	
(China)	Feudal autocracy: social inequality	Less mobility: household registration Discrimination against merchants	Emphasis on collective value and self-control	
<u>Philosophy</u>				
(Greece)	Emphasis on the conflict aspect of dialectic unity		Interrelations of the cold, hot, dry and wet	Humanism, priority of human beings
(China)	Emphasis on the harmonious aspect		The Qi, Yin and Yang Five Elements theories	Naturalism of Taoism return to nature
<u>Medicine</u>				
(Greece)	Necessity of vigorous exercises		Humoral pathology: balance of diet & exercises	Humoral pathology: balance of diet & exercises
(China)	Necessity of gentle physical exercises		Balance of Yin and Yang. Emphasis on breathing and mental mode	Balance of Yin and Yang. Emphasis on breathing and mental mode
<u>Aesthetics</u>				
(Greece)	Muscular bodily beauty		Muscular bodily beauty	Muscular bodily beauty
(China)	Moral virtues		Moral virtues	Moral virtues
<u>Ideology</u>				
(Greece)	Winning ethics	Pan-Hellenism of Greek religion	Anthropomorphism of Greek religion	
(China)	Kinship virtues confirm the social inequality and harmony			

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 1: GREEK SWIMMING**

SOURCE: A RED-FIGURE VASE OF C. 500 B.C. SIGNED BY ANDOCIDES  
IN *SPORT IN GREEK AND ROME*, by HARRIS.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 2: GREEK DIVING**

SOURCE: FRESCO FROM THE TOMB OF THE THE DIVER AT POSEIDONIA  
(C. 480 B.C.) PAESTUM MUSEUM IN *THE OLYMPIC GAMES*, ED.  
IRIS DOUSKOU.

The material involved has been removed because of the  
unavailability of copyright permission.

**FIGURE 3: VICTORY CROWNING IN A BOAT RACE**

SOURCE: E. N. GARDINER, "A STELE COMMEMORATING A VICTORY IN A  
BOAT-RACE," *JOURNAL OF HELLENIC STUDIES* 11 (1980-91):  
147.

The material involved has been removed because of the  
unavailability of copyright permission.

**FIGURE 4: BOAT RACE**

SOURCE: *IBID.*, P. 149.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 5: "FIELD HOCKEY"**

SOURCE: RELIEF FROM A STATUE BASE C.490 B.C., ATHENS,  
NATIONAL ARCHAEOLOGICAL MUSEUM, IN *THE OLYMPIC GAMES*,  
ED. IRIS DOUSKOU.

The material involved has been removed because of the unavailability of copyright permission.

— **FIGURE 6: GREEK BALL PLAY**

SOURCE: MARBLE LEKYTHOS WITH RELIEF (MID-4TH CENTURY B.C.)  
ATHENS, NATIONAL ARCHAEOLOGICAL MUSUEM, IN *THE OLYMPIC GAMES*, ED. IRIS DOUSKOU.

7

The material involved has been removed because of the unavailability of copyright permission.



**FIGURE 7: A GIRL RUNNER**

SOURCE: BROWNZE FIGURINE ( LATE 6TH CENTURY B.C.) LONDON,  
BRITISH MUSEUM, IN *SPORT IN GREECE AND ROME*, BY  
HARRIS.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 8: DAO YIN MOVEMENTS**

**SOURCE: HE JIEMING AND ZHANG WEIMING, MA WANG DUI HAN TOMB**

The material involved has been removed because of the unavailability of copyright permission.

FIGURE 9: CHINESE CHARIOTEERING  
(25-220 A.D.)

SOURCE: *HISTORY OF SPORT 2* (1985).

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 10: INSTRUMENTS OF WUSHU**

**SOURCE: WEN-CHUNG WU, SELECTIONS OF HISTORICAL LITERATURES AND ILLUSTRATIONS OF PHYSICAL ACTIVITIES IN CHINESE CULTURE, p. 56.**

The material involved has been removed because of the unavailability of copyright permission.

FIGURE 11: INSTRUMENTS OF WUSHU

SOURCE: IBID. p.67.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 12: THE CUJU WITH GOALS IN MILITARY TRAINING**  
(206 B.C.-24 A.D.)

SOURCE: *THE REFERENCES OF CHINESE SPORT HISTORY*, VOL. 7-8: 50.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 13: THE CUJU WITH GOALS IN THE HAN PALACE**  
(206 B.C.-24 A.D.)

SOURCE: *IBID.*

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 14: CHINESE SWIMMING AND BOATING**

SOURCE: *HISTORY OF SPORT 2* (1985).

The material involved has been removed because of the unavailability of copyright permission.

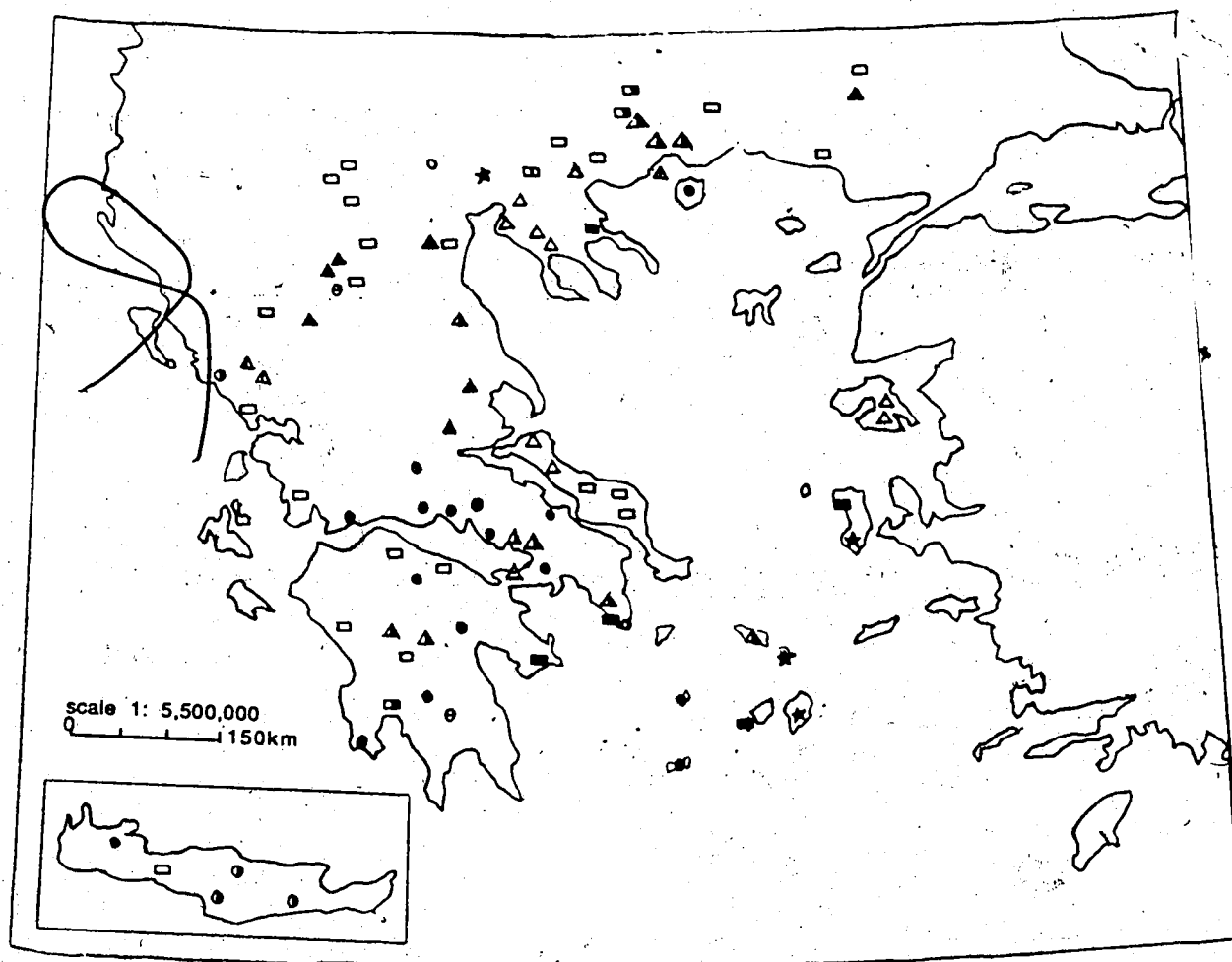
**FIGURE 15: JIAO-DI GAMES**

SOURCE: *CHINA'S SPORTS IN ANCIENT TIME*, p. 33.

The material involved has been removed because of the unavailability of copyright permission.

FIGURE 16: CHINESE WRESTLING  
(475-221 B.C.)

SOURCE: *CHINA'S SPORTS IN ANCIENT TIME*, p. 34.



- |             |               |
|-------------|---------------|
| ▲ chromite  | ● iron ore    |
| △ magnesite | ○ molybdenite |
| △ oil       | ⊖ gold        |
| ▲ marble    | ⊗ bauxite     |
| ■ lead      | ● gypsum      |
| □ lignite   | ★ barite      |
| ▣ antimony  |               |
| ▣ manganese |               |

FIGURE 17: THE MINERAL RESOURCES OF MODERN GREECE

SOURCE: ADAPTED FROM P. LEVI *ATLAS OF THE GREEK WORLD*, p. 20.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 18: GREEK SETTLEMENTS TO 700 B.C.**

SOURCE: J. BOARDMAN, *THE GREEKS OVERSEAS*.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 19: GREEK SETTLEMENTS TO 600 B.C.**

SOURCE: IBID.

The material involved has been removed because of the unavailability of copyright permission.

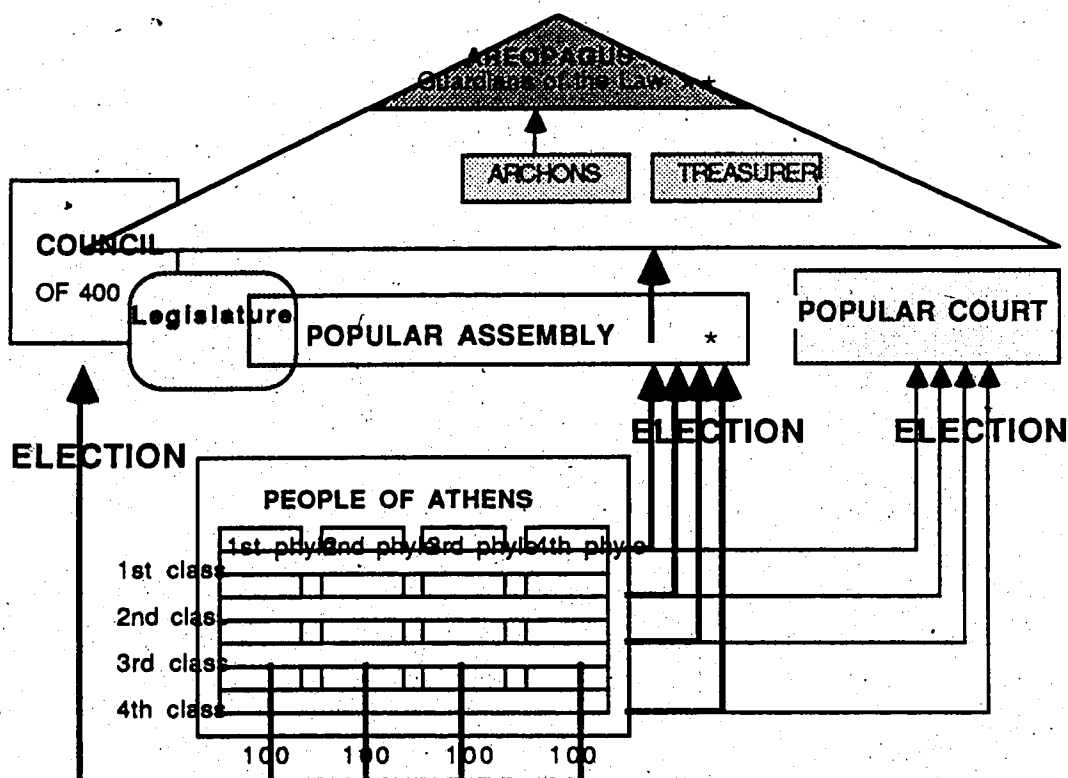
**FIGURE 20: GREEK SETTLEMENTS TO 480 B.C.**

SOURCE: IBID.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 21: DISTRIBUTION OF POPULATION IN THE HAN CHINA  
(A.D. 2)**

**SOURCE: GE JIANXIONG, THE GEOGRAPHY OF POPULATION IN THE  
WESTERN HAN DYNASTY.**



\* Election of officials. Decisions over war and peace, court, legislature

\*\* supervision, blood-guilt and probate court

FIGURE 22: THE CONSTITUTION OF SOLON

SOURCE: ADAPTED FROM H.KINDER AND W.HILGEMANN, *ATLAS OF WORLD HISTORY*, VOL. 1: 52.

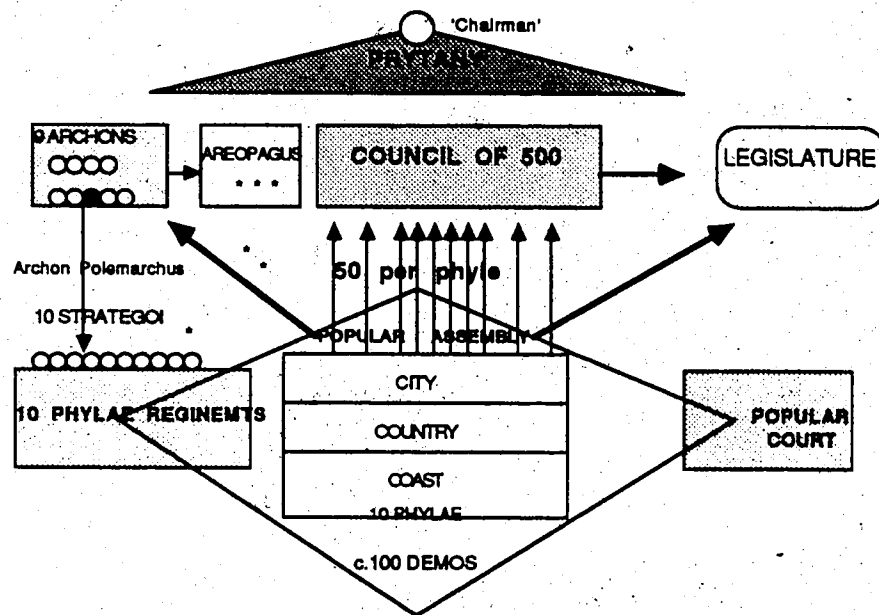


FIGURE 23: THE CONSTITUTION OF CLEISTHENES

SOURCE: <sup>1</sup>IBID.

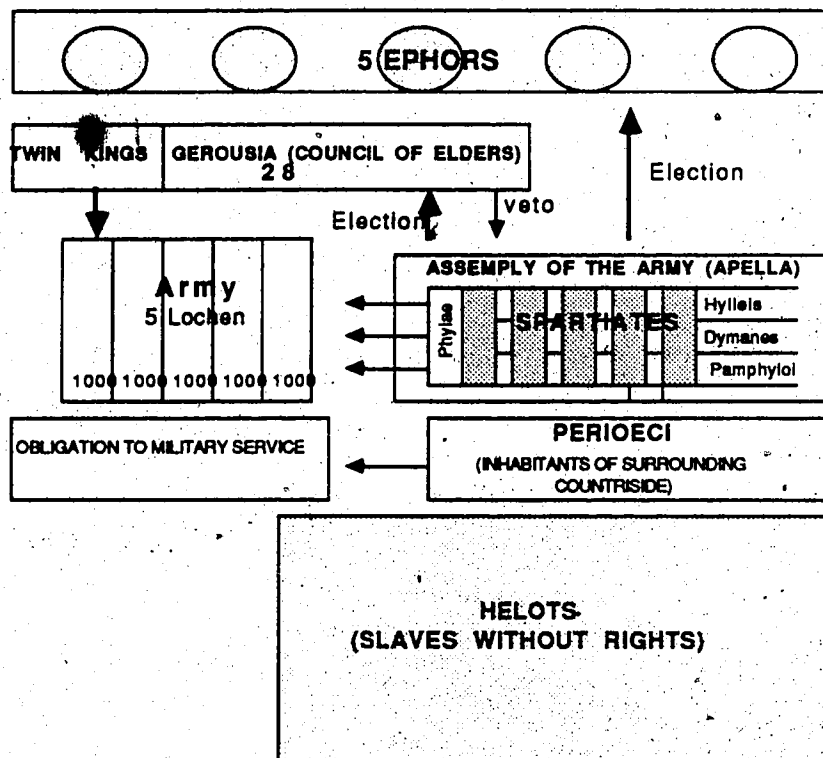


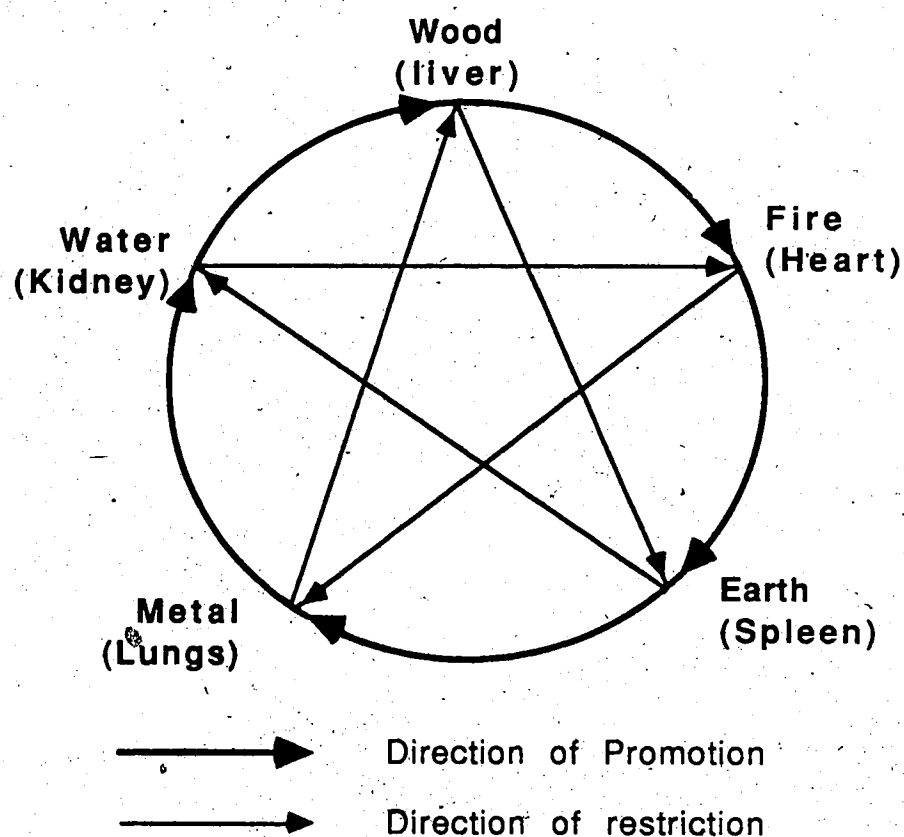
FIGURE 24: THE SPARTAN CONSTITUTION

SOURCE: IBID., p. 54.

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 25: THE STRUCTURE OF THE HIPPOCRATIC  
MEDICINE THEORY**

SOURCE: R. J. BULGER, ED. *HIPPOCRATES REVISITED*, p. 22.



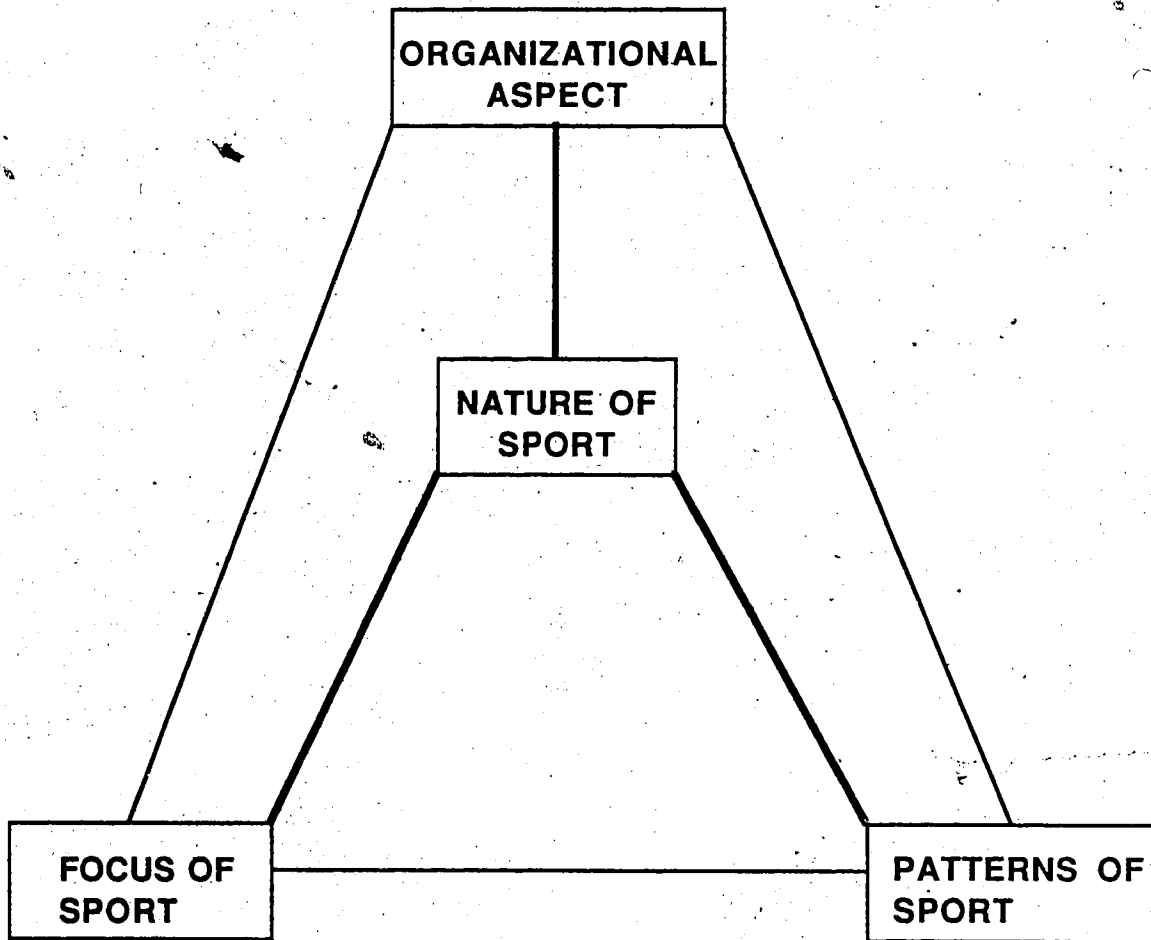
**FIGURE 26: INTERRELATIONSHIP OF FIVE ELEMENTS**

**SOURCE: ADAPTED FROM LI XIANGZHONG, *THE FUNDAMENTAL OF CHINESE MEDICINE*. p. 9.**

The material involved has been removed because of the unavailability of copyright permission.

**FIGURE 27: THE NETWORK OF QI**

SOURCE: LI DING, ED. THE THEORY OF *JINGTUO* (NETWORK OF QI), p. 7.



**FIGURE 28: INTERRELATIONSHIP OF THE FACTORS  
WITHIN SPORT**

## BIBLIOGRAPHY

### Works in English

- Adcock, F. E., *The Greek and Macedonian Art of War*. Berkeley: University of California Press, 1957.
- Alderman, R. R., *Psychological Behavior in Sport*. Toronto: W. B. Saunders, 1974.
- Anderson, J. K., *Military Theory and Practice in the Age of Xenophon*. Berkeley: University of California Press, 1957.
- Andreades, A. M., *A History of Greek Public Finance*. vol. 1, Translated by C. N. Brown. Cambridge, Mass.: Harvard University Press, 1933.
- . "Homeric, British, and Cyrenaic Chariots." *American Journal of Archaeology* 2nd. Series, 76 (1972): 17-22.
- Armer, M. and Grimshaw, A. D. eds. *Comparative Social Research Methodological Problems and Strategies*, New York: John Wiley & Sons, 1973.
- Aristotle. *Politics*. Translated by H. Rackham. Cambridge, Mass., 1955.
- Ashmole, B. "Torch-Racing at Rhamnus." *American Journal of Archaeology* 66 (1962):233 - 234.
- Austin, M. M. & Vidal-Naquet, P., *Economic and Social History of Ancient Greece*. London: B. T. Batsford, 1973.
- Bakewell, C. M., *Source Book in Ancient Philosophy*. rev. ed. New York: Gordian Press, 1973.
- Basic Writings of Mo Tzu, Hsun Tzu and Han Fei Tzu*. Translated by B. Watson, New York: Columbia University Press, 1967.
- Bean, G. E., "Victory in the Pentathlon." *American Journal of Archaeology* 60 (1956): 361-368.
- Bennett, B., Howell, M. L. and Simri, U., *Comparative Physical Education and Sport*, 2nd ed. Philadelphia: Lea & Febiger, 1983.

- Bereday, G. Z. F. *Comparative Method in Education*. New York: Holt, Rinehart and Winston, 1964.
- Biers, W. R. and Geagan, D. J., "A New List of the Visitors in the Caesarea at Isthmia." *Hesperia* 39 (1970): 79-93.
- Bingwood- Arnold, I. C., "Agonistic Festivals in Italy and Sicily." *American Journal of Archaeology* 64 (1960): 245-251.
- \_\_\_\_\_. "Festivals of Ephesus." *American Journal of Archaeology* 69 (1965): 17-22.
- \_\_\_\_\_. "Festivals of Rhodes." *American Journal of Archaeology* 40 (1936): 432-436.
- \_\_\_\_\_. "Local Festivals at Delos." *American Journal of Archaeology* 37, No. 3 (1933): 452-458.
- \_\_\_\_\_. "Local Festivals of Euboea, Chiefly from Inscription Evidence." *American Journal of Archaeology* 33, No. 3 (1929): 385-392.
- Boardman, J., *The Greeks Overseas*. Penquin Books, 1973.
- Bodde, D., *China's First Unifier*, Hong Kong University Press, 1967.
- Boeckh, A., *The Public Economy of Athens*. New York: Arno Press, 1976.
- Bolkestein, H., *Economic Life of Greece's Golden Age*. Leiden, Netherlands: E. J. Brill, 1958.
- Borthwick, E. K., "The Gymnasium of Bromius." *Journal of Hellenic Studies* 84 (1964): 49-53.
- Bredon, J. and Mitrophanom, I., *The Moon Year*. Shanghai: Kelly & Walsh, 1927.
- Broneer, O., "The Isthmian Victory Crown." *American Journal of Archaeology* 66 (1962): 259-263.
- \_\_\_\_\_. "Starting Devices in Greek Stadia." *American Journal of Archaeology* 76 (1972): 205-206.
- Brumbaugh, R. S., "The Knossos Games Board." *American Journal of Archaeology* 2nd. Series, 79 (April, 1975): 135-136.
- Bulger, R. J., ed. *Hippocrates Revisited*. New York: Medcom, 1973.

- Burford, A., *Craftsmen in Greek and Roman Society*. London: Thames & Hudson Ltd., 1972.
- Butler, A. J., *Sport in Classic Times*. London: Benn, and New York: Dutton, 1930, reprinted Los Altos, California: W. Kaufmann, 1975.
- Caillois, R., *Man, Play, and Games*. Translated by Meyer Barah. New York: Free Press of Glencoe, 1961.
- Chan, Wing-tsit, ed. and trans. *A Source Book in Chinese Philosophy*. Princeton, N.J.: Princeton University Press, 1963.
- China's Sport in Ancient Time*. Press Commission of the Chinese Olympic Committee and Enterprise International of Hong Kong, 1984.
- Church, R., "Applications of Behavior Theory to Social Psychology," in *Social Facilitation and Imitative Behavior*. Edited by R. A. Samuels et al. Boston: Allyn and Bacon, 1967.
- Clarke, M. and Crisp, C., *The History of Dance*. London: Orbis, 1980.
- Calhoun, G. M., *The Business Life of Ancient Athens*. New York: Cooper Square Pub., Inc. 1968.
- Corbin, C. B., *A Text Book of Motor Development*. Dubuque, Iowa: W & B, 1973.
- Corsi, P. and Weindling, P., *Information Sources in the History of Science and Medicine*. Cambridge University Press. (Britain) 1983.
- Cumston, C. G., *An Introduction to the History of Medicine*. New York: Alfred A. Knopf, 1926.
- Daniels, R. V. *Studying History: How & Why*. Englewood Cliffs, N.J.: Prentice Hall, 1980.
- Davison, J. A. "Notes on the Panathenaea." *Journal of Hellenic Studies* 78 (1958):23-42.
- Demosthenes, *Against Aristocrates*, Translated by J. H. Vince, (The Loeb Library) London: William Heinemann, 1926.
- Dennis, K. G., *Competition in the History Economic Thought*. New York: Arno Press, 1977.
- Dicks, B., *The Greeks How They Live and Work*. Newton Abbot: David & Charles, 1972.

Dio Chrysostom. Translated by J. W. Cohoon (The Loeb Library)  
William Heinemann, 1932.

Douskou, Iris, ed. *The Olympic Games*. Athens: Ekdotike  
Athenon S. A, 1976.

Drees, L., *Olympia, Gods, Artists and Athletes*. Translated by  
Gerald Ohn, New York: Praeger, 1968. Original German  
edition: Stuttgart: Kohlhammer, 1967.

Ebrey, P. B., ed. *Chinese Civilization and Society a Source  
Book*. New York: The Free Press, 1981.

Ehrenberg, V., *From Solon to Socrates*. London: Methuen, 1968.  
*The Encyclopedia Americana*. 1980 ed.

Engels, F., *The Origin of the Family, Private Property and  
the State*. New York: International Pub. 1942.

\_\_\_\_\_. *Anti-Duhring*. 3rd ed. Moscow: Foreign Languages Pub.  
House, 1962.

Fair, J., "When was the Golden Age of the Body?" *Canadian  
Journal of Sport and Physical Education* 1 (1970): 11-24.

Feng Yu-lan, *A History of Chinese Philosophy*. Princeton  
University Press, 1952.

Fine, J. V. A., *The Ancient Greeks A Critical History*.  
Cambridge: Harvard University Press, 1983.

Finley, M. I. and Pletet, H. W., *The Olympic Games: The First  
Thousand Years*. London: Chatto & Windus. 1976.

\_\_\_\_\_. *The Ancient Economy*, 2nd ed. London: The Hogarth  
Press, 1985.

Flaceliere, Robert., *Daily Life in Greece*. Translated by  
Peter Green, London: weidenfeld & Nicolson, 1965.

Foust, J. B. and deSouza, A. R., *The Economic Landscape*.  
Toronto: Charles E. Merrill, 1978.

Fox, E. L. and Mathews, D. K., *The Physiological Basis of  
Physical Education and Athletics*. 3rd ed. Philadelphia:  
Saunders College, 1981.

Freeman, K. J., *Schools of Hellas*. Edited by M. J. Rendall,  
London: MacMillan, 1932.

Freenhalgh, P. A. L., *Early Greek Warfare*. Cambridge:  
University Press, 1973.

Frost, K. T., "Greek Boxing." *Journal of Hellenic Studies* 26 (1906): 213-225.

Fuks, Alexander., *Social Conflict in Ancient Greece*. Jerusalem: The Magnes Press, 1984.

Gaillard, J., *Industrial standardization- Its Principles and Application*. New York: H. W. Wilson, 1934.

Gardiner, E.N., *Athletics of the Ancient World*. Oxford: Clarendon, Press, 1930, repr. Chicago: Aress, 1979.

\_\_\_\_\_. *Olympia Its History & Remains*. Oxford, 1925.

\_\_\_\_\_. *Greek Athletics Sports and Festivals*. Dubuque, Iowa: Brown Reprint. 1970 reprint of London: MacMillan, 1910.

\_\_\_\_\_. "Panathenaic Amphorae." *Journal of Hellenic Studies* 32 (1912): 179-193.

\_\_\_\_\_. "Notes on the Greek Footrace." *Journal of Hellenic Studies* 23 (1903): 261-169.

\_\_\_\_\_. "Further Notes on the Greek Jump." *Journal of Hellenic Studies* 24 (1904): 179-194.

\_\_\_\_\_. "Phayllus and His Record Jump." *Journal of Hellenic Studies* 24 (1904): 70-80.

\_\_\_\_\_. "Throwing the Diskos." *Journal of Hellenic Studies* 27 (1907): 1-36.

\_\_\_\_\_. "Throwing the Javelin." *Journal of Hellenic Studies* 27 (1907): 249-273.

\_\_\_\_\_. "The Method of Deciding the Pentathlon." *Journal of Hellenic Studies* 23 (1903): 54-70.

\_\_\_\_\_. "Wrestling I." *Journal of Hellenic Studies* 25 (1905): 14-31.

\_\_\_\_\_. "Wrestling II." *Journal of Hellenic Studies* 25 (1905): 263-293.

\_\_\_\_\_. "The Pankration and Wrestling III." *Journal of Hellenic Studies* 26 (1906): 4-22.

Gardner, P., "Boat-races among the Greeks." *Journal of Hellenic Studies* 2 (1881): 90-97.

\_\_\_\_\_. "A Stele Commemorating a Victory in a Boat Race." *Journal of Hellenic Studies* 11 (1890): 146-150.

- Garian, Y., *War in the Ancient World*. London: Chatto & Windus, 1975.
- Garnsey, P., Hopkins, K. & Whittaker, C. R., eds. *Trade in the Ancient Economy*. London: Chatto & Windus, 1983.
- Gillin, J., "National and Regional Cultural Values in the United States," *Social Forces* 34 (December, 1955):107-113.
- Glassford, R. G., "Application of a Theory of Games to the Transitional Eskimo Culture" Ph.D. dissertation, University of Illinois, 1970.
- Gonen, Rivka. *Weapons of the Ancient World*. London: Cassell, 1975.
- Graham, A.J., *Colony and Mother City in Ancient Greece*. Chicago: Aress Pub. Inc., 1971.
- Granet, Marcel. *Festivals and Songs of Ancient China*. London: George Routledge & Sons, 1932.
- Graves, R., *The Greek Myths*. 2 vos. New York: Penguin, 1985.
- Greenhalgh, P. A. L., *Early Greek Warfare Horsemen and Chariots in the Homeric and Archaic Ages*. Cambridge University Press, 1973.
- Guttmann, A. G., *From Ritual to Record*. New York: Columbia University Press, 1978.
- Hale, W. H., ed. *The Horizon Book of Ancient Greece*. New York: American Heritage, 1965.
- Harris, H. A., *Sport in Greece and Rome*. London: Thames & Hudson, 1972.
- \_\_\_\_\_. *Greek Athletes and Athletics*. London: Hutchinson, 1964.
- Harrison, R., "The 'Bull- Cult' in Ancient Crete." *History Today* 28 (1978): 28-35.
- Hart, D. P., "The Ancient Nemean Festival." *Canadian Journal of Sport and Physical Education* 2 (1977): 23-24.
- Harvey, P., *The Oxford Companion to Classical Literature*. 1st ed. Oxford at the Clarendon Press. 1937.
- Hasebrook, J., *Trade and Politics in Ancient Greece*. Translated by L. M. Fraser & D. C. Macgregor, London: G. Bell & Sons 1933.

- Heidel, W. A., *Hippocratic Medicine, Its Spirit and Method*. New York: Columbia University Press 1941.
- Henry, B., *An Approved History of the Olympic Games*. New York: G.D. Putnam's Sons, 1948.
- Herodotus *The Histories*, Translated by A. de Selincourt, revised by A. R. Burn, Penguin Books, 1972.
- Hill, D.K., "Chariots of Early Greece." *Hesperia* 43, No.4 (1974):441-446.
- Hippocrates, *The Theory and Practice of Medicine*. New York: Philosophical library, 1964.
- Hippocrates*. 4 vos. Edited and Translated by W. H. S. Jones and E. T. Withington, London: William Heinemann, 1923-31.
- Holmberg, E., *Delphi and Olympia*. Gottenburg, 1979.
- Homer *The Odyssey*. Translated by E. V. Rieu, Penguin Books, 1946.
- . *The Iliad*. Translated by E. V. Rieu, Penguin Books, 1950.
- Hopper, R. J., *Trade and Industry in Classical Greece*. London: Thames & Hudson, 1979.
- Hsu, Cho-yun, *Han Agriculture*. Seattle: University of Washington Press, 1980.
- Hyde, W. W., *Olympic Victor Monuments and Greek Athletic Art*. Washington, 1921.
- Johnston, A., *The Emergence of Greece*. Oxford: Elsevier-Phaidon, 1976.
- Jones, W. H. S., *Philosophy and Medicine in Ancient Greece*. New York: ARNO Press. 1979.
- Kagan, D., ed. *Sources in Greek Political Thought From Homer to Polybius*. New York: The Free Press, 1965.
- Kaldis-Henderson, N., *A Study of Women in Ancient Elis*. Ph.D. dissertation: U. Minn., 1979.
- Kerenyi, C., *The Gods of the Greeks*. Translated by Norman Cameron, New York: Thames & Hudson 1951.
- Kieran, J. and Daley, A., *The Story of the Olympic Games*. New York: J. B. Lippincott, 1965.

- Kinder, H. and Hilgemann, W., *The Penguin Atlas of World History*. Penguin Books, 1982.
- Kitto, H. D. F., *The Greeks*. Penguin Book 1951.
- Kraus, R. and Chapman, S., *History of the Dance in Art and Education*. 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1981.
- Kyle, D., "A Historical Study of Athletics in Ancient Athens", Ph.D. Dissertation, McMaster, 1982.
- Laemmer, M., "The Nature and Function of the Olympic Truce in Ancient Greece." *History of Physical Education and Sport* 3 (1975/1976): 37-52.
- Leaf, W., "The Homeric Chariot." *Journal of Hellenic Studies* 5 (1884): 185-194.
- Leonard II, W. M., *A Sociological Perspective of Sport*. Illinois State University, 1980.
- Levi, P., *Atlas of the Greek World*. Oxford: Phaidon, 1980.
- Levine, E. B., *Hippocrates*. New York: Twayne, 1971.
- Ling, R., *The Greek World*, Oxford: Elsevier-Phaidon 1976.
- Lloyd, H. A., *The Relevance of History*. London: Heinemann Educational Books. 1972.
- Loy, J. W., McPherson, B. D., & Keyon, G., *Sport and Social Systems*. London: Addison-Wesley, 1978.
- Lucas, J. A., "A History of the Marathon-race 490 B.C. to 1975." *Journal of Sport History* 3 (1976): 120-138.
- Lucian *The Dance*. Translated by A. M. Harmon, (Loeb Classical Library) Cambridge, 1918.
- Lund, G. A., *History of Science, Ancient Science through the Golden Age of Greece*. Cambridge, Mass.: Harvard University Press 1952.
- Luschen, G. R. F. and Sage, G. H., eds. *Handbook of Social Science of Sport*. Champaign, Illinois, 1981.
- Lynn and Gray, P., *History of Ancient Olympic Games*. New York: Ivan Obolensky Inc., 1963.
- Mahaffey, J. P., "On the Authenticity of the Olympic Register." *Journal of Hellenic Studies* 2 (1881): 164-178.

- Marjorie and Quennell, C. H. B., *Everyday Things in Ancient Greece*. Revised by K. Freeman, London: B. T. Batsford, 1957.
- Marrou, H. I., *A History of Education in Antiquity*. New York and London: Sheed & Ward, 1956.
- Marsh, F. B., *Modern Problems in the Ancient World*. University of Texas Press, 1943.
- Marx, Karl., *The Eighteenth Brumaire of Louis Bonaparte*. New York: International, 1963.
- Marx, K., *Capital* 3 vols. Chicago: Charles H Keer, 1909.
- Marx, K and Engles, F., *A Contribution to the Critique of Political Economy*. Moscow: Progress Pub. 1970.
- \_\_\_\_\_. *Karl Marx and Engels Selected Works*, Moscow, 1951.
- Matz, D., "The Development and Professionalism in Greek Athletics." *NASSH Proseedings*, 1978: 4f.
- McLean, G. F. and Aspell, P. J., eds. *Readings in Ancient Western Philosophy*. New York: Appleton. Century. Crofts, 1970.
- Merrill, F.E., *Society and Culture*, 2nd.ed. Englewood Cliffs, N.J.: Pentice-Hall, 1961.
- Michell, H., *The Economics of Ancient Greece*, Cambridge University Press, 1940.
- Miller, S. G., *ARETE ancient writer, papyri, and inscriptions on the history and ideals of Greek athletics and games*. Chicago: Ares, 1979.
- \_\_\_\_\_. "The Greek Inscriptions." *Hesperia* 15, No. 3 (1946): 210-268.
- Miller, S., "Turns and Lanes in the Ancient Stadium." *American Journal of Archaeology* 84 (1980): 159-166.
- Mertitt, B. D., "Greek Inscriptions." *Hesperia* 1 (1963):1-56.
- Mireaux, E., *Daily Life in the Time of Homer*. Translated by Iris. Selis, New York: The Macmillan, 1959.
- Mouratidis, John, "Alexander The Great and His promotion of Greek Games in the East." *Journal of Canadian Sport History* 1 (May, 1982): 63.
- Myers. E., "The Pentathlon." *Journal of Hellenic Studies* 2

- Neuburger, Max., *History of Medicine*. Vol. 1. Translated by E. Playfair, Oxford University Press, 1910.
- Olívova, V., *Sports and Games in the Ancient World*. London: Orbvis, 1984.
- Parke, H.W., *Festivals of the Athenians*. New York: Cornell University Press 1977.
- Pausanias, *Description of Greece*. Translated by W. H. S. Jones. (Loeb Library) Cambridge, Mass., 1918.
- Phillips, E. D., *Greek Medicine*. London: Thams & Hudson, 1973.
- Pihkala, L. and Gardiner, E. N., "The System of the Pentathlon." *Journal of Hellenic Studies* 45 (1925): 132-134.
- Pindar, *The Odes*. Translated by C. M. Bowra, Penguin Books, 1969.
- Pirazzoli-t'Serstevens, Michele., *Han dynasty*. Translated by J. Seligman, New York: Rizzoli, 1982.
- Plato, *The Laws*. Translated by T. Pangle, New York: Basic Books, 1979.
- \_\_\_\_\_. *The Republic*. New York: Basic Books, 1968.
- \_\_\_\_\_. *The Lovers*. Translated by W. R. M. Lamb, (The Loeb Classical Library) London: William Heinemann, 1921.
- Pleket, H. W., "Games, Prizes and Idology. Some Aspects of the History of Sport in the Greco-Roman World." *Stadion* 1 (1975): 49-89.
- Plutarch, *Plutarch's Lives*. Translated by A. Stewart and G. Long, London: G. Bell and Sons. 1914.
- Polanyi, K., Arensberg, C. M., & Phearson, H. W. eds. *Trade and Market in the Early Empires*, Glencoe, 1957.
- Poole, L. and G., *The History of the Ancient Olympic Games*, London: Vision Press, 1965.
- Pritchett, W. K., *Ancient Greek Military Practices*. Part II and III, Berkeley: University of California Press, 1971, 1974.
- Redmond, G. "Toward Modern Revival of the Olympic Games: the Various 'Pseudo- Olympics' of the Nineteenth Century", in *The Olympic Games in Transition*. Edited by J. O. Segrave and D. Chu (Human Kinetics, 1988), pp. 71-87.

- Ren Jiyu "Confucianism as a Religion." *Social Sciences in China* 2 (June 1980): 128-152.
- Rice, E. A., *A Brief History of Physical Education*, New York: Ronald Press, 1969.
- Ridington, W. R., "The Minoan- Mycenaean Background of Greek Athletics." Ph.D. Dissertation, University of Pennsylvania, 1935.
- Ringwood, I. C., "Agonistic Features of Local Greek Festivals Chiefly from Inscriptional Evidence I." Ph.D. Dissertation, Columbia University, 1927.
- Robinson, C. E., *Apollo History of Greece*. Thomas Y. Crowell, 1965.
- Robinson, R. S., *Sources For the History of Greek Athletics*, rev.ed. Chicago: Ares, 1955.
- Rokeach, M., *The Nature of Human Values*. New York: Free Press, 1973.
- Roller, L. E., "Funeral Games for Historical Persons." *Stadion* 7 (1981): 1-18.
- \_\_\_\_\_. "Funeral Games in Greek Literature, Art and Life." Thesis, University of Pennsylvania, 1977.
- Rostovtzeff, M., *Greece*. Translated by J. D. Duff, London: Oxford University, 1963.
- Sabloff, J. A. and Lamberg-Karlovsky, C. C., eds. *Ancient Civilization and Trade*. University of New Mexico Press, 1975.
- Scaborough, J., *Facets of Hellenic Life*. Boston: Houghton Mifflin, 1976.
- Scanlon, T. F., "The Vocabulary of Competition: Agon and Aethlos. Greek Terms for Contest." *Arete* 1 (1983): 147-162.
- Scanlon, T. S., *Greek and Roman Athletics A Bibliography*. Chicago: Ares, 1984.
- Schobel, H., *The Ancient Olympic Games*. London: Studio Vista, 1966.
- Sigerist, H. E., *A History of Medicine*. New York: Oxford University Press, 1961.

- \_\_\_\_\_. *The Great Doctors A Biographical History of Medicine*. Translated by Eden & Cedar Paill, New York: W. W. Norton, 1933.
- \_\_\_\_\_. *Medicine and Human Welfare*. Yale University Press, 1941.
- Simon, E., *Festivals of Attica An Archaeological Commentary*. The University of Wisconsin Press, 1983.
- Singer, C. J., *Greek Biology and Greek Medicine*. New York: Oxford University Press, 1922.
- Smith, W. D., *The Hippocratic Tradition*. London: Cornell University Press, 1979.
- Snodgrass, A., *Archaic Greece, The Age of Experiment*. Toronto: JM Dent & Sons, 1980.
- Sophocles, *Antigone*. Translated by Dudley Fitts & Robert Fitzgerald, New York, Harcourt, Brace, 1939.
- Starr, C. G., *The Economic and Social Growth of Early Greece 800-500 B.C.* New York: Oxford University Press, 1977.
- Sterett, J. R. S., "The Torch Race." *American Journal of Archaeology* 22, No.88 (1901): 406.
- Strabo, *The Geography of Strabo*. Translated by H. L. Jones (The Loeb Library) London: William Heinemann, 1917.
- Swaddling, J., *The Ancient Olympic Games*. London: British Museum, 1980.
- Temkin, O. and Temkin, C. L., eds. *Ancient Medicine*. Baltimore, Maryland: The Johns Hopkins Press, 1967.
- Terry, G. R. *Principles of Management*. 3rd ed. Homewood, Illinois: Richard D. Irwin, 1960.
- Thompson, J. G., "Sport, Athletics, and Gymnastics in Ancient Greece." Ph.D. Dissertation, Pennsylvania State University, 1971.
- Thorpe, J. and Collison, T. F., *History of the Olympics*. Los Angeles: Wetzel, 1932.
- Thucydides *The Peloponnesian War*, Translated by Rex Warner, Penguin Books, 1954.
- Toutain, J., *The Economic Life of the Ancient World*. London: Kegan Paul, Trench, Thrubner, 1930.

- Turner, E. G., "The Charioteer from Antinoe." *Journal of Hellenic Studies* 93 (1973): 192-95.
- Urlin, E. L., *Dancing, Ancient and Modern*. New York: D. Appleton, 1914.
- Van Dalen, D. B. and Bennett, B. L., *A World History of Physical Education*, 2nd ed. Englewood Cliffs, N.J.: Prentice Hall, 1971.
- Weber, Max., *The Agrarian Sociology of Ancient Civilizations*. Translated by R. I. Frank, London: NLB, 1976.
- \_\_\_\_\_. *The City*. New York: Collier Books, 1962.
- Webster's Ninth New Collegiate Dictionary*. Markham, Ontario: Thomas Allen & Son, 1984.
- Willetts, R. F., "Social Aspects of Greek Physical Education Landmarks." in *the History of Physical Education*. Edited by J. G. Dixon, London: Routledge & Kegan Paul, 1957.
- Wright, F. A., *Greek Athletics*. London: Janathan, 1925.
- Xenophon, *Memorabilia*, Translated by E. C. Marchant, London: William Heinemann, 1938.
- Yalouris, N., ed. *The Eternal Olympics. The Art and History of Sports*. New Rochelle, N.Y.: Caratzas Brothers, 1979.
- Young, D. C., *The Olympic Myth of Greek Amateur Athletics*. Chicago: Aress, 1984.
- Young, N., "Did the Greeks and Romans Play Football?" *Research Quarterly* 15 (1944): 310-316.
- Younger, J. G., "Bronze Age Representations of Aegean Bull-leaping." *American Journal of Archaeology* 80 (1976): 125-137.
- Zeigler, E. F., ed. *History of Physical Education and Sport*. Englewood Cliffs, N.J.: Prentice-Hall, 1979.
- \_\_\_\_\_. ed. *A History of Sport and Physical Education to 1900*. Champaign, Illinois: 1979.
- Zielinski, T., *The Religion of Ancient Greece*. Oxford University Press, 1966.
- Zimmern, A., *The Greek Commonwealth*, rev. 5th ed. Oxford, 1931.

## Works in Chinese

SI Bu Bei Yao edition (Taiwan: Zhong Hua Press) has been abbreviated as SBBY.

An Zuozhang, *The History of the Relationship between the Han Dynasty and the Western Border Areas*. Jinan: Qilu Books, 1979.

\_\_\_\_\_, and Xiong Tiejie, *The Historical Manuscripts of the System of Officials During the Qin and Han Dynasty*. 2 vols. Jinan: Qilu Books, 1984-1985.

Cai Shangsi, *Main Points of the History of Chinese Culture*. Changsha: Hunan People, 1980.

Cao Xiliang, *The Methods of Keeping Fit in Chinese Traditional Medicine*. Xian: Shanxi Science and Technology, 1983.

The Central Institute of Educational Science, ed. *The Collection of Essays on the Confucian Educational Thought (1949-1980)*. Beijing: Educational Science, 1981.

Chen Shou, *San Guo Zhi* (History of the Three Kingdoms). SBBY ed.

Chen Tongxie, *A Concise History of Greece and Rome*. Jinan: Shandong Education, 1982.

Chen Zhi, *A Collection of Essays on Economic Materials in the Han Dynasty*. Xian: Shanxi People, 1980.

Cheng Shunying, *Materials of the History of Educational System in the Han Dynasties*. Beijing: Beijing Normal University, 1983.

*Chinese Encyclopedia Volumn on Physical Education and Sport*. Beijing: Chinese Encyclopedia, 1982.

Cui Chunhua, and Liao Dèqing, "An Analysis of the Formation of the Structure of Feudal Economy by Looking the Development of the Landlord Economy during the Warring States Era and The Qin and Han Dynasties." *The Journal of Liaoning University* 2 (1985): 91-96.

Duan Shi, *The Han Paintings*. Beijing: Chinese Classical Arts, 1958.

Fan Wenlan, *A Comprehensive History of China*. 4th ed. 4 vols. Beijing: People, 1964-1965.

- Fang Ke, *The History of Chinese Dialectical Thought (pre Qin Dynasty)*. Beijing: People, 1985.
- Feng Qi, *The Logical Development of Ancient Chinese Philosophy*. Shanghai: Shanghai People, 1983.
- Fu Zhufu and Wang Yuhu, *Historical Materials of Chinese Economy*. Beijing: Chinese Social Science, 1982.
- Fu Zhufu, *An Economic History of Chinese Feudal Society*. Vol. 2, Beijing: People, 1982.
- Gai Shanlin, *The Tomb Paintings in the Han Tomb at He Linggeer*. Huhehaote: Neimenggu People, 1978.
- Ge Jianxiong, *The Geography of Population in the Western Han Dynasty*, Beijing: People, 1986.
- Ge Maochun, ed. *Introduction of the Science of History*. 2nd. ed. Jinan: Shandong Education, 1984.
- Gu Shiquan and Yang Wenqing, *The History of Chinese Sport*. Beijing Institute of Physical Education, 1981.
- Gu Zhun, *Greek City States*. Beijing: Chinese Social Science, 1982.
- Guan Zi. SBBY ed.
- Guo Moruo, ed. *Atlas of Chinese History*. Beijing: Atlas, 1979.
- Guo Ruhuai et al. *The Military History of China*, vol. 1-2. Beijing: Army Press, 1983, 1986.
- Guo Xifeng, *The History of Chinese Sport*. Taiwan: Zhong Hua Press, 1966 reprint.
- Guo Yu. SBBY ed.
- Han Fei Zi. SBBY ed. Translated by W. K. Liao, *The Complete Works of Han Fei Tzu*. 2 vols, London: Arthur Probsthain, 1959.
- He Changqun, *A Study on the Patterns of the Feudal Landownership during the Han and Tang Dynasties*. Shanghai: Shanghai People, 1964.
- He Jiejun and Zhang Weiming, *The Han Tomb at Ma Wang Du*. Beijing: Cultural Relic, 1982.
- He Ziquan, *A Concise History of The Qin and Han Dynasties*, Shanghai: Shanghai People, 1955.

- Hou Han Shu* (History of the Latter Han Dynisty) SBBY ed.
- Hu Jichuang, *The History of Chinese Economic Thoughts*. 3 vos. Shanghai: Shanghai People, 1962-1963.
- Hu Zhongda, "A Re-evaluation of the View of Five Modes of Production." *History Studies* 1 (1986): 33-50.
- Huai Nan Zi. SBBY ed. Translated by E. Morgan, Forward by J. C. Ferguson, *Tao the Great Luminant Essays from Huai Nan Tzu*. New York: Paragon Book, 1969.
- Huang Weiming, "Confucius' Thought of Physical Education." *Literature and History of Sport* 3 (1984): 4-6.
- Ji He, "An Analysis of the Consideration about Physical Exercises in Lu Shi Chun Qiu." *Materials of Sport History*, 7 (1982): 44-46.
- Jiang Minda, Wang Chongxing and Xu dinghai, *The Method of Keeping Fit with Qi Gong*. res. Shanghai: Shanghai Education, 1983.
- Jing Chu Sui Shi Ji* (Historical Notes of Jing Chu). SBBY ed.
- Kuang Wennan, "Zhuang Zi's Thought about Keeping Fit in His Yang Sheng Zhu." *Literature and History of Sport* 1 (1983): 40-41.
- Lao Zi. SBBY ed.
- Li Ding, *The Theory of Jingluo* (Network of Qi). Shanghai: Shanghai Science and Technology, 1984.
- Li Falin, *A Study on the Stone Reliefs of The Eastern Han Era in the Shandong Province*. Jinan: Qilu Books, 1982.
- Li Ji (Book of Rites). SBBY ed. Translated by J. Legge, *The Book of Rites*. 2 vos. New York: University Books, 1967.
- Li Jifang, Zhou Xi Kuan, and Xu Yongchang, *A Concise History of Ancient Chinese Sport*. Beijing: People's Sport, 1984.
- Li Nianwo, *The Essence of Nei Jing (Internal Medicine)*. Beijing: People's Hygiene, 1963.
- Li Xiangzhong, ed. *The Foundation of Chinese Traditional Medicine*. 2nd ed. Beijing: People's Hygiene, 1984.
- Li Yuanfang, "The Economy of Animal Husbandry in Ancient China." *Agricultural Archaeology* 2 (1984): 333-338.
- Li Zehou and Liu Gangji, *The History of Chinese Aesthetics*. vol. 1, Beijing: Chinese Social Science, 1984.

Li Zongtong, *The History of Chinese Historiography*. Beijing: Chinese Friendship, 1984.

Lie Zi. SBBY ed. Translated by A. C. Graham, *The Book of Lieh-tzu*, London: John Murray, 1960.

Lin Housheng and Luo Peiyu, *Three Hundred Questions about Deep Breathing Exercises*. Guangzhou: Guangdong Science and Technology, 1983.

Lin Shuang., *The Basic Principles of Marxist Philosophy*. Chang Chun: Liaoning Pub. House, 1984.

Lin Sitong, *Five Thousand Years of Chinese Sport*. Xian: The Xian Institute of Physical Education, 1984.

Lin Tonghua, *A Collection of Essays of Chinese Aesthetics*. Nanjing: Jiangsu People, 1984.

Liu Bingguo, "A Study of Confucius' Thought of Physical Education." *Literature and History of Sport* 2 (1984): 12-17.

———. "The Route of the Development of the Ancient Track and Field Events," *Literature and History of Sport* 1 (1983): 47-48.

———. "An Analysis of the Six Arts in Confucius' Education." *Literature and History of Sport* 4 (1985): 10-13.

Liu Zehua and Wang Liansheng, "The Formation of the Chinese Feudal Autocratic Monarchy and Its Roles in Economic Development." *Studies of Chinese History* 4 (1981): 31-43.

Liu Zhiyuan, Yu Dezhang, and Liu Wenjie, *The Han Brick Reliefs and Han Society in Sichuan*. Beijing: Cultural Relic, 1983.

Long Bojian, *Introduction of Nei Jing (Internal Medicine)*. Shanghai: Shanghai Science and Technology, 1980.

Lu Shi. SBBY ed.

*Lu Shi Chun Qiu* (Lu's Miscellany). SBBY ed.

Lun Yu (Analects of Confucius). SBBY ed. Translated by D. Lau, *The Analects of Confucius*. Hong Kong: The Chinese University Press, 1983.

Luo Guojie and Song Xiren, *The History of Western Ethic Thoughts*. Beijing: The University of Chinese People, 1985.

Ma Daying, *The History of Financial Administration in the Han Dynasty*. Beijing: Chinese Financial Administration and Economy, 1983.

Ma Jiren, *The Theory of Chinese Deep Breathing Exercises*. Xian: Shanxi Science and Technology, 1983.

\_\_\_\_\_. "The Materials of Deep Breathing Exercises in Ancient China." *Materials of Sport History*. 7 (1982): 35-39.

Ma Keyao, "A Comparative Analysis of the Slave-owning Systems in Rome and Han China." *History Studies* 3 (1981): 31-45.

Ma Xin, "Small Farming Families in the Han Era." *Literature, History and Philosophy* 4 (1986): 14-18.

Ma Youqing, *The Norms of Tai Ji Boxing*. Beijing: Friendship, 1983.

Mao Lirui, Qu Junong and Shao Heting, *The History of Ancient Chinese Education*. 2nd ed. Beijing: People's Education, 1983.

Mer Zi (Mencius). SBBY ed. Translated by James Legge, Hong Kong University Press, 1960.

Meng Xiancheng, Zhang Ruifan, Chen Xuexun and Zhou Zimei, *A Source Book of the History of Ancient Chinese Education*. Beijing: People's Education, 1961.

Mo Zi. SBBY ed.

Museum of Chinese History, ed. *A Concise Atlas of Chinese History*. vol. 3, Tianjing: Tianjing People's Arts, 1979.

Nan Jing. SBBY ed.

The National Committee of Physical Culture of the People's Republic of China, *References of Chinese Sport History*. Beijing: People's Sport, vol.7-8, 1959.

Nei Jing (Internal Medicine). SBBY ed. Translated by L. Veith, *The Yellow Emperor's Classic of Internal Medicine*. Berkeley: University of California Press, 1972.

Ni Yuanyi, ed. *The History of Chinese Medicine*. Beijing: People's Hygiene, 1984.

Pan Gu, *Han Shu* (History of the Western Han Dynasty). SBBY ed. Translated by H. H. Dubs, *The History of the Former*

- Han Dynasty*. 3 vols., Baltimore: Waverley Press, 1938, 1944, 1955.
- Peng Song, *The History of Chinese Dance*. Beijing: Culture and Arts, 1984.
- Qian Jianfu, *An Investigation of the Systems of Taxes and Corvee in the Qin and Han Dynasties*, Wuhan: Hubei People, 1984.
- Ran Xuezheng, *Calendar, Solar Terms and Traditional Holidays*. Chongqing: Chongqing, 1984.
- Ren Jiyu, *The Historical Development of Chinese Philosophy*. vos. 1-2, Beijing: People, 1983.
- \_\_\_\_\_. *The History of Chinese Philosophy*. 4 vols. 3rd ed. Beijing: People, 1979.
- The Research Group of Heritage of Chinese Agriculture of the National Agricultural Academy and Nanjing Institute of Agriculture, *The History of Chinese Agriculture*. Vol.1. Beijing: Science, 1959.
- Ru Xin, Wang Shuren and Yu Lichang, *The Famous Western Philosophers*. vol. 1-2, Jinan: Shandong People's Press, 1984.
- Shang Jun Shu*. SBBY ed. Translated by J. L. Duyvendak, *Book of Lord Shang*. The University of Chicago Press, 1928.
- Shang Shu* (Book of History). SBBY ed. Translated by J. Legge, *The Book of Historical Documents*. Hong Kong: University Press, 1960.
- Shi Jing* (Book of Songs), SBBY ed. Translated by James Legge, (The Chinese Classics) Hong Kong University Press, 1960.
- Shi Weiqin, "Several Questions about the Corvee during the Qin and Han." *Studies of Chinese History* 2 (1986): 17-30.
- Sima Qian, *Shi Ji* (Historical Records). SBBY ed. Translated by B. Watson, *Records of the Grand Historian of China: From the Shih Chi of Ssu-ma Chi'ien*. 2 vols. New York: Columbia University Press, 1961.
- The Society of Chinese Sport History, ed. *A Collection of Essays of Sport History*, by Author, 1985.
- Studies on the Social-economic Structure of Feudal Society in China*. Beijing: Chinese Social Science, 1985.

- Sun Jingchen and Wu Manying, *The Dance Patterns in Chinese History*. Shanghai: Shanghai Art, 1982.
- Tan Min, "Economic Factors of the Family Education in the Feudal Times." *Studies of Chinese History* 2 (1986): 3-16.
- Tang Qiyu, *A History of Chinese Agriculture*. Beijing: Agriculture, 1985.
- Tang Renwu, "Confucius' Physical Exercises and His Ideas about Physical Education." *Literature and History of Sport* 3 (1985): 22-23.
- Tian Changwu, *Research on the Social Structure in Ancient Times*. Tianjing: Tianjing People, 1980.
- Wang Kefen, *A History of Dance in Ancient China*. Beijing: People's Music, 1980.
- Wang Renxing, *A History of Hotel Business in China*. Beijing: Chinese Tourist, 1984.
- Wang Yubo, *The Form of Family Head in History*. Beijing: 1984.
- Wang Zhongshu, *Han civilization*. Translated by K.C. Chang and Collaborators, Yale University Press, 1984.
- Wen Huanran, *A Study on the Climate of the Middle and Lower Vellies of the Yellow River during the Qin and Han*. Beijing: Shangwu, 1959.
- The Writing Group of the Concise History of Economic Thought in China, *The Concise History of Economic Thought in China*. 2nd ed. Shanghai: Shanghai People, 1979.
- The Writing Group of the Theory of Physical Education and Sport, *The Theory of Physical Education and Sport*. Beijing: People's Sport, 1981.
- Wu Hui, *The History of Commerce in Ancient China*. Beijing: Commerce, 1982.
- Wu Rusong and Huo Yinzhong, eds. *Selected Works of Military Tactics in Ancient Times*. Beijing: Military Science, 1985.
- Wu Wen-chung, *Selections of Historical Literatures and Illustrations of Physical Activities in Chinese Culture*. Taiwan: Chinese Books, 1975.
- Wu Yuanliang, *The Fundamental of Scientific Methodology*. Beijing: Chinese Social Science, 1984.

*Wu Yue Chun Qiu* (History of the States of Wu and Yue). SBBY ed.

Wu Yujin, *Ancient Greece and Rome*. Beijing: Chinese Youth, 1962.

Wu Zengde, *Stone Reliefs of the Han Dynasty*. Beijing: Cultural Relic, 1984.

Wu Zhichao, "The Origin of Ancient Dao Yin." *Reference Material of Physical Education* 2 (1980): 51-58.

Wu Zi. SBBY ed.

Xi Yuntai, *A History of Chinese Wushu*. Beijing: People's Sport, 1985.

Xia Nai, *Origin of Chinese Civilization*. Beijing: Cultural Relic, 1985.

Xiao Jingling, "Confucius' Shooting and Charioteering." *Literature and History of Sport* 6 (1984): 11-14.

Xiao Qing, *The History of Currency in Ancient China*. Beijing: People, 1984.

Xie Guozhen, *A General Description of the Social Life in The Han Dynasty*. Xian: Shanxi People, 1985.

Xiong Mingan, *The History of Advanced Education in China*. Chongqing: Chongqing Press, 1983.

Xiong Tieji, *On Neo-Taoism of the Qin and Han Dynasty*. Shanghai: Shanghai People, 1984.

Xu Dixin, ed. *The Concise Dictionary of Political Economy*. Beijing: People, 1983.

Xu Yongchang, *A Bright Pearl of the Cultural Treasure House, Sport in Ancient China*. Beijing: People's Sport, 1980.

Xun Zi. SBBY ed.

Yang Wenqi, *A Concise History of Chinese Food Culture and Food Manufacturing*. Beijing: Chinese Zhanwang, 1983.

Yang Wenging, *World Sport with A Distant Source and A Long Stream*. Beijing: People's Sport, 1983.

———. "Shi Jing (Book of Songs) and Sport." *Literature and History of Sport* 2 (1985): 20-24.

- Yin Huihe and Zhang Bona, *The Fundamental of Chinese Medicine*. Shanghai: Shanghai Science and Technology, 1984.
- Ying Zhao, *Feng Su Tong Yi*. SBBY ed.
- Yu Baotian, "Swimming in Ancient Chinese Works and Arts." *Literature and History of Sport* 3 (1985): 36-37.
- Yu Huamin, "A Consideration about Culture." *Literature, History and Philosophy* 6 (1986): 29-32.
- Yue Jue Shu. SBBY ed.
- Zhan Guo Ce (History of the Warring States). SBBY ed.
- Zhang Chengyi, "Arguments about the Issues in Research of the History of Deep Breathing Exercises." *Literature and History of Sport* 4 (1986): 24-29.
- Zhang Datong and Liu Jingxi, "A Summary of the Chinese Traditional Culture and Thought Symposium." *Literature, History and Philosophy* 5 (1986): 15-20.
- Zhang Dainian, "How to Know the Traditional Culture in A Correct Way?" *Literature, History and Philosophy* 5 (1986): 21-22.
- Zhang Guohua and Rao Xinxian, eds. *Outline of the Thoughts of Law in China*. Lanzhou: Gansu People, 1984.
- Zhang Hongli, "An Observation of the Development of the Original *Wushu* by Analyzing the Primitive Military Dance of the Naxi Nationality." *Literature and History of Sport* 4 (1986): 33-34.
- Zhang Rongming, "The Influence of Ancient Deep Breathing Exercises on Chinese Thoughts and Culture." *Journal of Shanghai Normal University* 3 (1986): 85-95.
- \_\_\_\_\_. "The Taoist, Lao Zi and Ancient Deep Breathing Exercises." *Literature and History of Sport* 3 (1986): 40-45.
- \_\_\_\_\_. "Deep Breathing Exercises in the Records of Remote Times and the Five Emperors' Era." *Literature and History of Sport* 4 (1985): 27-29.
- Zhang Shoujun, "The Idea of Emphasizing Agriculture and Confining Commerce and Manufacturing in Chinese History." *Front of Social Science* 2 (1985): 126-132.

- Zhang Weihua, "Directions of the Development of Chinese Culture." *Literature, History and Philosophy* 5 (1986): 23-27.
- Zhang Yuan, "Mo Zi's Physical Exercises and His Thought of Keeping Fit." *Materials of Sport History*. 7 (1982): 46-47.
- Zhen Shenli, "'The Animal's World' in *Shi Jing* (Book of Songs)." *People's Daily*, June 5, 1986.
- Zhen Zhiya and Fu Weikang, eds. *The History of Chinese Traditional Medicine*. Shanghai: Shanghai Science and Technology, 1984.
- Zheng Shurong, "Referees of Ball Kicking in Ancient China." *Materials of Sport History*. 3: 39-40.
- Zheng Zhenkun, "Zhuang Zi's Idea about Keeping Fit." *Materials of Sport History* 5 (1981): 41-43.
- Zhong Xiangcai, "The Thought of Agricultural Management in Ancient China." *History of Chinese Agriculture* 4 (1985): 1-10.
- Zhou Li (Rites of the Zhou Dynasty). SBBY ed.
- Zhou Yiliang and Wu Yujin, eds. *A Comprehensive History of the World*. vos. 4, Beijing: People, 1973.
- . *Collection of Materials about Comprehensive History of the World*. Beijing: Shangwu, 1962.
- Zhu Minche, Zhao Jun, Liu Chengde, Zhang Wenxuan, Hou Lansheng and Guo Qinna, *Translation and Interpretation of Shi Jing (The Book of Songs)*, Lanzhou: Gansu People, 1984.
- Zhuang Zi. SBBY ed. Translated by B. Watson. *The Complete Works of Chuang Tzu*. New York: Columbia University Press, 1968.
- Zuo Yandong, *The History of Political System in China*. Hangzhou: Zhejiang Classic Books, 1986.