DARK AGE PHASES AS PERIODS OF ECOLOGICAL CRISIS: AN ANALYSIS OF THE INTERPLAY BETWEEN ECONOMY, NATURE, AND CULTURE IN EAST ASIA

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CHAPTER I

INTRODUCTION: A SOCIETY-NATURE NEXUS IN GLOBAL HISTORY

Historically, ecological relations have been conditioned by the structures and processes that have come to characterize human societies for millennia. Over thousands of years of social development humans have, despite their inventiveness and ingenuity, been reliant on nature in order to meet economic and cultural needs. Noting that social structure and processes are embedded within physical environments, and that historically social systems have been reliant on nature, this study recognizes the interconnections present between human and non-human systems. These linkages constitute a number of interconnected processes that historically have shaped ecological relations.

Economically this has meant that the expansion and decline of national and regional economies has been tied to nature. The process of capital accumulation with its ebbs and flows is a story of resource procurement, extraction, and the manufacturing processes that transformed raw materials for consumption. Over world history, economic growth and descent has been determined by surplus. Capital accumulation is defined by the surpluses generated by societies as a result of trade, and developments that facilitate production. Likewise, the immediate physical environments human communities were able to exploit and transform also had much to say about the state of economic conditions within social systems (Chew 2001a).

In addition to impacting the economy of human communities, the reproduction of physical elements of culture have come to be influenced by local environments that provide the materials necessary to manufacture items employed in a variety of practices such as rituals. For too long examinations of economic and cultural processes have ignored the physical environments that directly come to impact human communities. To study social life it becomes important to take note of the various complex processes that human societies depended on and are embedded within a physical environment. Culture as defined by the myriad of artistic endeavors, beliefs, technological developments, and social practices, that characterize societies, influences the relationship human beings have with nature. Since time immemorial, culture has provided a blueprint that served to guide human action within physical spaces.

Human societies have been, and are still today, dependent on nature and part of an interconnected sphere of social and physical processes that impact the spaces that human beings inhabit. In contemporary societies the myriad of economic, environmental, cultural, and political connections are increasingly becoming clearer. Today, as Eric Wolf (1997, p. 3) notes, it has "become a commonplace [thing] to say we all inhabit one world." However, the interconnections, linkages, and interrelationships we observe today are seldom examined historically, and consequently a long-term perspective highlighting the enduring pattern of ecological relations is largely absent. Recognizing the activities and patterns that characterize the relationship between human communities and nature, this study focuses on the global economy with a history of over five thousand years (see Frank and Gills 1996). The world system, characterized by a totality of interconnected processes, becomes an important source of insight into the different economic and

cultural relationships groups have had historically with each other and their environment. Social structure, intertwined with nature, and culture, becomes important in this examination of the interplay between human and non-human systems.

Studies examining long-term economic and cultural changes within the world system should consider the link between societal practices and environmental degradation. For example, periods of economic ascent and decline can be understood in the context of ecological relations. Attempts in the past to understand economic and cultural transformations have, for the most part, disregarded the environment as a component of economic growth and contraction, as well as cultural diffusion. Through an exploration of the link between cultural practices and environmental degradation one begins to see how the process of capital accumulation impacts the environment. In pointing out the characteristics of the "nature-society nexus" we can address questions linked to the economic and cultural activities of human communities (Bunker and Ciccantell 1999, p. 107). These inquiries become important since through them the implications of social organization, cultural practices, and economic activities, on nature becomes implicit. Ecological relations can be explored historically, and through human history the materialistic tendencies of human communities is reflected in economy and culture.

Economic expansion can be tied to the dynamics of the accumulation process. As a component of the accumulation process, resource extraction is an important element in the economic expansion of civilizations, empires, and nation-states. Resource extraction is not only tied to economic growth, but it can also be understood in regard to the reproduction of the material basis of social life (Chew 1997b). A sole exploration of

economic transformations, void of ecological relations, limits our understanding of the dynamics present in the ascent and decline of regions. Regional trading systems have long participated in trade and cultural exchanges anchored in the extraction of natural resources. Historical explorations of the global economy that do not incorporate ecological relations are incomplete. In creating a holistic examination one should consider that economic expansion, in the world system, has been tied to extractive activities.

In a similar fashion, over thousands of years of human history we see that cultural life can be linked to the immediate or regional natural environments of human communities. The physical objects necessary for cultural practices are directly linked to, in many cases, surrounding environments. Material culture in both ancient civilizations and contemporary nation-states is reproduced through the extraction of natural resources. Environmental degradation then has the potential of disrupting the cultural life of groups, as previously used materials become scarce or are no longer available. Environmental and economic disruptions can lead to adaptation, but they can also lead to the transformation and abandonment of certain cultural practices. The abandonment of specific cultural practices can lead to the emergence of new practices, for example rituals that perhaps signal a human community's changing relationship with the environment.

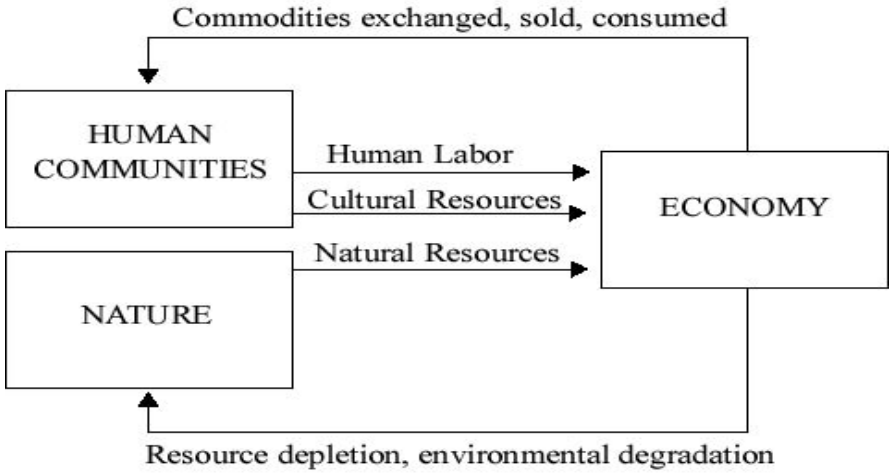
Through analyzing the claims made by world system theorists, one can see the importance of anthropocentric or humanistic practices and the patterns that exist within the global economy. The variety of economic and cultural activities human beings engage in are not only dependent on natural resources, but come to alter the natural landscape. The role nature plays in economic, cultural, and social reproduction

highlights the tendencies of human communities to be reliant on the natural world. Utilization rather than conservation has historically characterized the relationships human beings have had with the natural environments they inhabit. These continuous behavioral patterns exhibited throughout history can be examined through an approach that encompasses the greater network of social and ecological interactions that take place between social and ecological systems.

Statement of the Problem

Over world history, the interconnections between society and nature are apparent in a myriad of processes that extend well beyond just economic activities, and which include the cultural practices of groups (see figure 1). However, a survey of the literature within the sub-field of world-systems reveals that historical examinations have tended to focus on the anthropogenic factors that describe the dynamics and logic of accumulation processes through the course of global history (Chew 1999).

Figure 1: An Economy, Nature, and Culture Nexus



Although this has served to bring clarity to the history of economic relations, it has failed to account for the underlying material basis that determines the economic trajectory of human communities and impacts the cultural life of groups. The global economy, with a history of at least five thousand years, has undergone periods of economic and cultural transformation that can be tied to the ecological relations among geographical regions, empires, civilizations, and states (Frank and Gills 1996). In fact, work has been done that suggests that continuous ecological degradation has led to the demise of human communities over time (Chew 2001a).

This demise has been linked to periods of economic depression, suggesting that our relationship with the environment impacts socio-economic life. Periods of economic and cultural decline have been labeled "Dark Ages" by historians and archeologists (see Chew 2000, 2001a). Specifically, Dark Ages are defined as long-term periods of profound social, economic, and cultural decline, that destabilize regions through economic downturns, deurbanization, wars, political fragmentation, and population outflow (Chew 2001a). An examination of the historical and archeological literature shows that studies have only addressed two Dark Age periods (Chew 2001a, 2001b). The first period spans approximately six hundred years, and roughly begins in 1200 B.C., and ends in 600 B.C., the second period covers four hundred years, and extends from A.D. 500 to A.D. 900. However, of interest is that both these periods have been linked to disruptions in Europe, and despite claims of their impact beyond the European continent, within world-system research, no previous studies have given great attention to similar disruptions in other regions of the world, such as East Asia. Far from a disruption with global reach, it can be argued that the European Dark Ages did little to disrupt the

economic and cultural life of human communities in the East. Drawing from historical sources, this study recognizes that long-term disruptions have also occurred in Asia and can be studied and identified as "Dark Ages."

Disruptive periods or Dark Ages, in regions outside of Europe, have received minimal coverage in the context of world system analysis. Arguments by Wallerstein (1989, 1991) and Samir Amin (1991), among others, that the capitalist world-system only incorporates a historical period of at least five hundred years, has perhaps minimized the examination of marginal regions, ancient historical periods, and economic transformations before European hegemony (Chase-Dunn and Boswell 1998). The attempt to disprove the notion of discontinuity in economic history and extend the history of the global economy makes the identification and examination of Dark Age periods invaluable. Additionally, through analysis of various historical epochs the examination of long-term change can be expanded to better understand the presence of a society-nature nexus (Chew 1997a, 2001a, 2001b). The analytical contribution of world-system research to our understanding of economic processes is one stage in the further development of a perspective that champions, according to Wallerstein (1974), an interdisciplinary approach to the study of economic interconnections. By expanding the analysis of the global economy, this study argues that, beyond the accumulation processes that have connected peoples, connections exist between nature and culture that form an interactive sphere of social and ecological relations (see figure 1). This research also calls attention to a region of the world that deserves greater attention in analyses of the world-system.

Specifically, this examination concerns itself with an East Asian historical period that stretches from the third century B.C., up until the re-emergence of the Chinese economy in the early part of the tenth century A.D. Through examining historical periods of global or regional economic transformation one can see how disruptions take place that impact various areas of social life. Societal change in many respects can be tied to economic periods of ascent and decline, but can include other dimensions. Previous work by Perlin (1991), Pointing (1991) and Chew (2001a) linking economic collapse with environmental degradation points out that ecological relations are important to examinations of societal transformation. However, an aspect that requires further exploration is the link between periods of environmental/economic collapse and long-term ecological cycles. This analysis will identify economic and cultural interconnections in East Asia prior to the onset of an East Asian Dark Age (202 B.C. – A.D. 220), during the East Asian Dark Age (A.D. 220 – A.D. 618), and after the East Asian Dark Age (A.D. 618 – A.D. 907). This approach will also allow for a detailed exploration of regional economic practices and their impact on ecological relations, while also giving coverage to culture, and in particular ritual.

Specification of the Research Problem

This work, although well aware of the economic and cultural relationships between various regions, will focus on East Asia and will pay close attention to China as she held a hegemonic position in the regional economy for part of this period. In tracing the economic emergence of China this study will analyze the impact the Dark Age period had on the economic and cultural interconnections in East Asia. It is of interest that as

the post-Dark Age period ends China's importance in the global economy was just beginning to take shape. If we look back to the Sung and Yuan dynasties (A.D. 960 – A.D. 1368) we see that China, at this point in global history, was the most extensive, populous, technologically advanced region in the world (Abu-Lughod 1989). Moreover, Chinese technological innovations during the Sung and Yuan period influenced economic development, regional cultural practices, and assisted the process of resource extraction (Fitzgerald and Seligman 1938; Hartwell 1967; Chin-sheng 1974; Dreyer 1982; Fairbank et al. 1988, 1998; Abu-Lughod 1989; Cotterell 1994).

Considering the minimal coverage given to economy, nature, and culture in our understanding of world-historical processes, this study poses several questions relevant to the study of social change. In general, how do human communities respond to material limitations? Specifically, how are economic and cultural activities impacted by periods of environmental distress? A related question that will be examined is how economic and cultural practices come to impact the natural environment. By extending the work of Chew (2001a), I not only explore the interplay between economy and nature, but also include culture to more fully explore the society-nature nexus.

Significance of the Study

From early civilizations to contemporary societies one can see a pattern of consumption that is tied to economic and cultural tendencies. In looking at the consumptive habits of early civilizations, one begins to see a link between social practices and ecological degradation. Given the lack of research on world historical transformations and their link to ecological relations, it becomes important to address this

missing component in our examinations of social systems (Chew 1997a). This examination focuses on this omitted dimension by identifying periods of environmental degradation and their link to historically specific economic and cultural practices. The past humanocentric attempts at world system analysis need to be expanded upon through an introduction of ecocentric approaches (Chew 1997a).

By examining the consumptive habits of human beings, and noting the link between environmental degradation and human practices, one begins to see that a pattern emerges. For example, scholars observing the rise and fall of early civilizations, such as Mesopotamia and Minoa, observe a pattern of exchange and consumption followed by environmental degradation, and in some cases disaster (Perlin 1991; Chew 2001a). It is my contention that throughout global history one observes a repetition of this pattern as environmental degradation precedes economic collapse in various regions, including East Asia. The rise and fall of early civilizations highlight the destructive relationship human beings have had, and continue to have, with their natural environment. In general, the rise and fall of civilizations follow a pattern of population growth, socio-economic expansion, followed by contraction (Chew 2001a). As a consequence of the depletion of resources in one area, the pattern is transferred elsewhere. For example, deforestation came early in Crete, during the second millenium Bronze Age, and once Crete's forests were depleted, the pattern of degradation moved onto southern Greece (Perlin 1991; Chew 2001a). The movement of resource extraction enabled those in Crete to maintain their socio-economic lifestyle.

In order to meet the demands of production, urbanization, and cultural practices, human communities developed dependent relationships based on the need for resources.

For instance, the exploitation of local forests in Mesopotamia to meet socio-economic needs, eventually brought about the importation of wood from what is now southwest Turkey (Perlin 1991). In looking at the depletion of forests from the time of Mesopotamia to that of contemporary nation-states, we see that a pattern of deforestation persists (Hughes 1975; Chew 2001a). Exchanges between ancient cities involved wood, and as evident in Crete, the accumulation of wealth was directly influenced by the availability of wood for production and trade (Perlin 1991). Population and agricultural expansion in ancient times, like contemporary, has also had an immense impact on the forest. Population growth and urbanization in the Late Bronze Age brought about the clearing of large tracts of trees for housing and agricultural development (Chew 2001a). The depletion of resources stemming from these practices brought about environmental degradation in other areas (see Allen 1992).

Historically, ecological relations are illustrated in the exploitative and destructive relationship human beings have had with their natural environment. An important observation made while surveying history, and specifically the work of Western historians and world-system analysts, is that little has been said about similar patterns existing outside of the immediate trading world of Europe. That East Asia during these same periods exhibits similar patterns needs to be addressed and incorporated into a holistic analysis of the global economy. As far back as the trading world of the seventh century B.C. there has been proof of trade between Europe and Asia (Chew 2001a). This trade not only involved wood products, precious metals, and cash crops, but also included cultural exchanges that affected ecological conditions. In this regard this study makes several contributions to the existing literature on world-historical processes by not only

confirming arguments of a "systemwide structural level for at least the last five thousand years, " but also by making clear the interplay between economy, nature, and culture over the course of world system history (Chew 2001b, p. 12).

Although much is gained in the observation of ecological relations in Europe and the Near East, much more can be revealed by examining whether similar dynamics and patterns were present in East Asia. Tracing these patterns and identifying periods of ecological crisis in the regional trading world of East Asia becomes important as this study provides support for the thesis that perhaps it is not "economy in command" but "ecology in command" (Chew 2001a, p. 10). An important contribution this research makes is that the pursuit of capital can be influenced by environmental limitations. Economic contractions as well as expansions have been linked to the availability of natural resources. Through analyzing historical periods of economic crisis, such as Dark Ages, one can observe the environmental consequences of economic expansion.

Examinations of contemporary societies suggest that the destructive pattern of consumption continues (see Marchak 1995). By looking at historical patterns of our relationship with the environment, the important role natural resources play in the global economy can be seen. The economic and social practices we now engage in have a history that goes far into ancient times. In addressing this issue and how it ties into the culture of consumption, the relationship between the economy, environment, and culture becomes clearer. The incorporation of the environment into the analysis of world system theory has attracted attention and has led to calls by many to extend the reach of this perspective so that consumption and production are linked to the environment (Kristiansen 1998; Chew 1997a; Roberts and Grimes 1999). By incorporating ecological

relations into world system analysis we gain a more holistic understanding of the economic ascent and decline of regions.

This project provides an in-depth examination of relationships within East Asia from 202 B.C. to A.D. 907. The findings will add to the work already conducted by world system analysts such as Frank (1998) and Chew (2001a) who endeavor to understand interconnections between human communities. Although I build upon the work started by Sing Chew (2001a), this study addresses a region, period in time, historical epoch, and cultural dimension not fully explored within world system research. Moreover, this study expands upon previous examinations of the world-system by introducing culture into the analysis of regional transformations. This study engages contemporary debates in world-system analysis, and is largely significant because of the theoretical issues it addresses.

Summary

As part of a growing effort to provide holism in global historiography, this work analyzes a region, and period in time, not fully examined in world-system research. Additionally, a component of this inclusive approach not only involves the extension of historical analysis, but also an examination of the interplay between economy, nature, and culture. The recognition of connectivity in human history as well as the linkages between human communities and nature guides this research as we move towards a more comprehensive understanding of process and change over the long term. For the sake of clarity, I have specified the research problem by placing it within recent trends in world-system research. However, the implications of this study extend well beyond any sub-fields, and can be tied directly to arguments made in mainstream sociology. The specific

focus of the research is to highlight the interconnections that characterize ecological relations, and more broadly the interconnected processes that characterize interactions within social systems.

By understanding the "bundles of relationships" behind concepts such as "economy," "culture," and "ecology" we can better understand the connections that exist between society and nature, and a myriad of social processes (Wolf 1997, p. 3). This study, in the tradition of world-system research, will call attention to the linkages present in economic history, and extend the breadth of previous studies through an analysis of ecological and cultural relations in East Asia. It is the goal of this research to continue the discourse on historical structures and processes in order to understand how the process of capital accumulation, along with cultural patterns, is inextricably linked to nature.

The study delineates the processes linked to economic growth, cultural reproduction and diffusion, while describing their link to historical periods of environmental degradation. The chapter that follows presents the theoretical discourse that guides this research, while making clear the contribution the research makes to the sub-field of world-systems analysis and mainstream sociology. In taking a historical view of humanocentric processes and their outcomes, in Chapter III, I explain how history, as an analytical tool, is important to this study. Noting, in great detail, the number of historical sources that are available to studies that examine East Asia I provide an accounting of specific annals, texts, and documents that can inform analyses of China, Japan, and Korea. In doing so, I make clear the wealth of information that analysts can

draw from to historically examine this region, while pointing out the importance of historical sources, narratives, and literature to the current study.

The historical annals, memoirs, biographies, diplomatic letters, and court records that survive facilitate the analysis of a society-nature nexus in East Asia. It is the analysis of these historical documents which reveals that, like Europe, Asia also has undergone periods of instability and disruption that can be identified as "Dark Ages." The usage of the adjective "dark" to describe a disruptive epoch in European history can be extended, as historical sources describe similarly disruptive periods in the history of East Asia. Subsequent chapters in the dissertation delineate the processes at work that led to an East Asian Dark Age in the third century A.D.

Prior to the accounting of this disruptive period, Chapter IV describes and explains the interconnections and activities that connected peoples in East Asia and points westward. It also begins the discussion of the linkages that are present between economy, nature, and culture, while establishing the history of connections and interrelationships in the region. Chapter IV begins the exploration of the practices that led to an East Asian Dark Age by focusing on the material basis that underlines economic and cultural activities. This discussion is followed up in Chapter V where the factors specifically linked to the presence of an East Asian Dark Age are addressed. In particular, attention is given in Chapter V to the consequences of this disruptive period to economic and cultural exchanges, and the environment.

Chapter VI focuses on the post-Dark Age period in East Asia. Discussion is given to the re-emergence of the Chinese economy, the intensification of economic and cultural exchanges, and the enduring pattern of ecological relations in the region. Final

remarks and observations are then made in Chapter VII, as I discuss the implications of the research to the discipline, and more precisely the importance of an ecological approach to the study of social structures and processes.

CHAPTER II

LITERATURE REVIEW

World-Systems Theory as Macrohistorical Sociology

History is an important source of insight in an examination of the economic condition of regions, civilizations, and nation-states within a global economy. The current discourse between globalists, world-systems theorists, and macrohistorians highlights the importance of historical analysis in bringing about an accurate picture of regional relationships. Interpreting history can in many respects be problematic as historians and others often come to questionable conclusions (Frank and Gills 1996; Frank 1998). The introduction of the world-systems perspective by Immanuel Wallerstein raises various questions about how social scientists go about interpreting history; one of these questions deals with the absence of non-European voices. According to Andre Frank (1998), Wallerstein's world-systems perspective reflects this Eurocentric tradition as evident in his argument that the modern world-system began after European hegemony. Placing theory within its historical roots helps aid the process of examination as one explores why groups are marginalized in research. By suggesting that the modern era began in Western Europe after 1500, Wallerstein and others leave themselves open to criticism. History doesn't begin with Europe, yet world-system theorists have tended to marginalize the period before 1500.

The Theoretical Heritage of the World System Perspective

In order to better understand Wallerstein's assertion that the modern world-system began in Western Europe, we must go back in history to examine the roots of the world-systems perspective. In his introduction to the world-system perspective, Thomas Shannon (1996) makes clear the connection this perspective has with the concerns of early social theorists. The theoretical ideas of various European social thinkers have been influential in the development of new theoretical frameworks. In drawing on the ideas of Karl Marx, for example, world-system analysts highlight the importance of socioeconomic systems in affecting the structure and direction of societies (Seidman 1998). Thomas Shannon (1996) notes that, "world-system theorists share with Marx the notion that the nature and functioning of capitalism are the fundamental factors in understanding contemporary societies" (p. 11). An important part of Wallerstein's perspective can be attributed to Marx, as the functioning of socioeconomic systems becomes important to the study of human societies (Thompson 1983; Ritzer 1992). The class divisions Marx discussed in writings such as *The Economic and Philosophic Manuscripts of 1844* (1977) and *A Contribution to the Critique of Political Economy* (1970) are a source of inspiration when developing a theory that suggests that nation-states, like workers, are hierarchically positioned (Wallerstein 1984; Chase-Dunn 1989; Frank 1996). An examination of the political and economic global positions of countries reveals that unequal relationships exist between core and peripheral nation-states. The exploitative nature of capitalism is highlighted by Marx (1963, 1964, 1970) and is re-introduced again in the world-system perspective. Beyond Marx, world-systems theory echoes the concerns of early social theorists, such as Max Weber (1958, 1964, 1978) and

Emile Durkheim (1964), who maintained that "a fundamentally new kind of society had emerged in Western Europe in the centuries after [the 16th century]" (Shannon 1996, p. 1). Furthermore, the world-system perspective draws heavily from developmental models that preceded Wallerstein's formulation.

Modernization Theory

An examination of theoretical developments that brought about the world-system perspective suggests that sociology as a discipline was experiencing a revival of sorts as a number of sociologists during the 1960s sought to revitalize Marxist arguments (Kaye 1979). Before the emergence of the world-system perspective, two schools of thought preceded it in trying to explain the socioeconomic conditions of our world, modernization and dependency perspectives. The modernization perspective emerged out of a post-World War II period that encouraged the study of Third World development (Almond 1987). This perspective can trace its roots to the early 19th century, where the Industrial and French Revolution were bringing about societal changes. These societal changes helped bring about the development of evolutionary theory as social scientists sought to explain the direction of change in human societies (So 1990). Through Auguste Comte's (1974) law of three stages, we see that classical evolutionary theory proposed that societies pass through stages in succession. Classical evolutionary theory assumes that societal change is unidirectional and that societies move in a slow evolutionary manner (see Comte 1964). By utilizing evolutionary theory as part of their framework, modernization theorists were able to explain the progression societies undergo.

Besides adopting an evolutionary perspective, modernization theory also incorporated functionalist theory to explain the interdependence of social institutions, the

transformation of culture, and the internal nature of change (So 1990). In drawing upon the work of Talcott Parsons (1949, 1951) modernization theorists were able to identify the structural differences between traditional and modern societies (Ashley and Orenstein 1995). The works of James Coleman (1965) and Neil Smelser (1964) both stress the process of differentiation and make clear that separation and specialization of roles, along with distributive equality, are indicative of modernity. An examination of the claims made by modernization theorists indicates the influences of both evolutionary and functionalist theories. Noting the impact of the former, several ideas contained within modernization theory can be identified that are directly linked to evolutionary theory. Analysts employing this approach, for example, argue that modernization is a phased, homogenizing, irreversible, and lengthy process. All of the aforementioned processes are discussed by evolutionary theorists, and resurface as part of the theoretical assumptions of modernization theory. Additionally, the distinctions made by both evolutionary and modernization perspectives, in regards to primitive and advanced societies, should be noted (see Rostow 1964; Levy 1967). They tend to suggest that the West, Western Europe and the United States, are the ideal models for development. Consequently the argument can be made that modernization is an Americanization or Western Europeanization process that others should emulate (So 1990).

The influence of Parson's work is also made evident in research carried out by modernization theorists. Implicit in the formulation of the perspective is the argument that modernization is systematic and appears in clusters as changes in one area bring about changes in another (Parsons 1951). The organic analogy employed by functionalist theory to describe society makes clear that social order, equilibrium, and harmony

requires that any transformations in society lead to corresponding changes. One of the several assumptions modernization theory incorporates from Parsonian ideas is that modernity is the result of changes in behavior (Levy 1967; Hermassi 1978). As a systematic process, modernity is specifically characterized by industrialization, urbanization, secularization, and differentiation, all of which are characteristic of modern societies. Beyond simple identification of characteristics, the underlying theme modernization theory borrows from functionalism is that social systems are not static, but are always adjusting and changing. These adjustments and change transform society as traditional values and structures are replaced with a set of modern values (Levy 1967).

Analysts examining the origins of modernization theory argue that its orientation is a Western one (see So 1990; Chew and Denemark 1996). Modernization theorists are guilty of interpreting the problems of "Third World" countries with a universal generality that doesn't allow for consideration of specific problems. Examining the claims made by modernization theorists, analysts today argue that they simplify their discussion of the less developed world by arguing that countries find themselves in peripheral positions due to internal factors (see Bradshaw and Wallace; Bata and Bergesen 2002). The solution, according to this perspective, is to move away from traditionalism and modernize social structures, cultural values, and political institutions (Levy 1967; Tipps 1976). An important criticism of modernization theory is the absence of history in its analysis, and its emphasis on endogenetic factors of social change. Centuries of exploitation, colonization, and intervention have provided significant obstacles to underdeveloped countries as they seek to move out of peripheral positions. The exclusion of important historical factors in the relationships between peripheral and core

countries, and the external factors that influence development, is something that remains missing from this perspective.

Dependency Theory

The response to theories of "developmentalism" and modernization, that stress social change as an endogenous process, led to the emergence of the dependency perspective (Wallerstein 1987). Emerging in the early 1960s, the dependency approach sought to move beyond theory and into praxis. The perspective has its intellectual roots not only in neo-Marxist principles, but also in the developmental strategy and ideas of the United Nations' Economic Commission for Latin America (ECLA). Dependency theory emerges out of a need to provide a "Third World" perspective missing in previous frameworks. The failures of Western approaches, specifically the modernization school, encouraged the development of a new approach that would address the problems in the periphery.

Recognizing the hierarchical economic structure that was part of global capitalism, Latin American *dependistas* introduced key concepts and views that would later be reformulated within the framework of world-systems analysis. In fact, "the most direct link with world-system theory is the dependency approach" (Shannon 1996, p. 15). While world-systems theory rejected the central assumptions of developmentalism, neo-Marxists approaches and, in particular, dependency theory were embraced. In reaction to modernization theories, dependency analysts drew heavily on the work of neo-Marxists to explain relations in the global economy. The main concern of dependency theory was the economic development of peripheral countries. By addressing the limited progress of modernization in the periphery, social theorists were able to examine the causes of

underdevelopment and poverty that faced less developed nations (Prebisch 1950; Frank 1967, 1969).

Examining the dependency relationships that exist between core and peripheral countries, Samir Amin's (1976) theory of development is a good example of the concerns and issues raised by dependency analysts. Addressing the outcomes of uneven relations that persist, and the developmental route undertaken by developing countries, Amin (1976) argues that in order to understand dependency relationships the presence of peripheral capitalism should be examined. Capitalism in the periphery is defined by the exportation of cheap goods, the exploitation of its natural resources and workers, the lack of meaningful foreign investment, and the specific history of different countries. A central theme of dependency studies is that by taking advantage of cheap goods and labor, core countries continue to exploit peripheral nation-states. Andre Frank (1998) argues that trade and investment from core countries has not brought about development, but continues to encourage the "development of underdevelopment" (1966, pp. 17-31). According to Blomstrom and Hetnne (1984, pp. 71-76) dependency analysts share a number of basic assumptions, arguing that dependency can only be understood by examining the historical patterns of less developed countries, the external forces that shape development, and the economic conditions that allow for economic surplus to move from the periphery to the core. In addition, a central argument made is that development and underdevelopment are linked to the process of capital accumulation. So that, in order to have significant development in the periphery it becomes essential to address the conditions that characterize unequal relations between the core and periphery.

World-Systems Theory

The emergence of the world-system perspective can be tied to the criticisms made by dependency analysts of the modernization school. By rejecting many of the premises held by modernization theorists, the dependency approach initiated a discourse that triggered the examination of economic organization. Immanuel Wallerstein (1974), by taking note of changes in the world-economy, was able to introduce a perspective that not only addressed economic change, but examined transformations historically. In the late 1970s, social theorists found that changes in the global economy could not be explained within the framework of the modernization and dependency approaches. By examining the economic growth of East Asia, the crisis between socialist states, and the stagnation of the U.S. economy in the late 1970s, Wallerstein and others sought to develop a perspective that would better address these changes within a socio-historical process (Wallerstein 1974; So 1990; Frank and Gills 1996).

Wallerstein drew heavily from neo-Marxist literature and the French Annales school to develop his perspective (Thompson 1983; So 1990; Shannon 1996). Like dependency theorists, Wallerstein saw strengths in the arguments being made by neo-Marxists (Kaye 1979; So 1990). It is the continuing movement away from modernization theory that is clearly visible in Wallerstein's development of the world-system perspective. Moreover, Wallerstein draws from many of the concepts and ideas found within dependency theory.

Another source of influence on Wallerstein's world-system perspective is the use of history in his examination of global relationships. The work of Fernand Braudel, and his Annales School, made clear that if a new perspective were to emerge it must

incorporate history as a significant part of its analysis (see Wallerstein 1978, 1979, 1982, 1986). Braudel (1972, 1981, 1982, 1984) and adherents of his historical analysis emphasize the importance of incorporating history in their examination of global questions. Wallerstein became concerned with historical questions and sought to address these inquiries through his own perspective. It's increasingly clear, among scholars, that the utilization of history within world-system theory provides a foundation for addressing contemporary economic problems.

Christopher Chase-Dunn states that, the basic assumption made by world-system theorists is that "a set of nested and overlapping interaction networks" exist that extend beyond the boundaries of individual societies (1995, p. 86). This is an important premise in that it allows us to understand that micro level structures operate within the umbrella of a larger global system. In comparing the other development schools to the world-system perspective, one significant difference is the central role historical analysis plays within the perspective. Unlike the modernization approach, the world-system perspective addresses the link between states within a history of long-term interconnections.

In Wallerstein's (1974, 1996) analysis our contemporary capitalist world-system emerged in sixteenth century Europe. However, this assertion, as I will later explain, has been one of contention. Within the subfield of world-system, many analysts, including Frank (1996, 1998), disagree with Wallerstein (1974) about the historical origins of our contemporary system of economic organization. The discourse over world-system history highlights disagreements that exist between Wallerstein and those in the California school, in regard to the uniqueness of the capitalist world-system (Goldstone 2000). Despite the arguments, there is agreement about the components and dynamics of

the system that provide us a macrohistorical framework for the study of long-term social change.

World-system analysts emphasize the importance of understanding established economic and political relationships within the global economic system. In order to understand these relationships it becomes important to address the various components that provide structure to the "whole system" (Chase-Dunn 1996, p 86). A major component of the world-system perspective is the argument that the global division of labor is divided into three economic zones of production: core, peripheral, and semi-peripheral (Wallerstein 1974). According to Wallerstein (1974, pp. 37-38), a "central structural feature throughout the capitalist world-economy" is the presence of a core-periphery division of labor. Those states that dominate economic and political spheres of influence within the world-system are in the core, and those with the least influence are in the periphery. Core states are characterized by their technological sophistication, advanced methods of production, and higher wages. For example, countries like the United States, Japan, and Great Britain currently hold core positions. Peripheral states are at the opposite end of the spectrum. These states are characterized by their low technological sophistication, labor intensive production methods, and low wages. In looking at the current economic and political positions of countries in parts of Eastern Europe and Africa, these states could be considered part of the periphery. Wallerstein labels the semi-periphery as those countries that exhibit a mixture of both core and peripheral characteristics. Countries like South Korea, Mexico, and Brazil all meet these criteria as they engage in core and peripheral activities.

The interstate system is another critical component of the world-system. A historical examination of the political organization within the global economy suggests that no one state has completely dominated other states. In his discussion of the structural components of the world system, Christopher Chase-Dunn comes to define the interstate system as "a system of unequally powerful sovereign national states that compete for resources" (1996, p. 86). This is a key point as we see through history that states, through their competition, continuously move along a core/periphery continuum. In the history of the world-system no one state has ever had absolute power over the others. Strong states have emerged and fallen as positions within the world-system are not fixed, but change over time (Gilpin 1981, 1987; Chase-Dunn and Hall 1997).

Social classes are also important in our understanding of relationships within the global economy. In a manner consistent with Marx's conceptualization of class, world-system theorists define social classes by their relationship to the means of production. Those who control production and those that don't are representative of the world-system. The division of these two groups can be seen not only within, but also across nation-states. By utilizing the work of Marx, Wallerstein was able to expand the concept of social class to a global scale and further prove that in a capitalist world-system, workers are linked globally. Status groups, like social classes, are also part of the world-system, and as pointed out by Wallerstein (1974), cultural identification does affect the relationships nation-states have with each other. An important point to make is that like social classes, status groups are connected on a global scale.

The history of the world-system, as proposed by Wallerstein (1974), indicates that the components previously mentioned have remained unchanged. Although the structure

remains the same over time, changes do occur within the system. Transformations within the system continuously impact nation-states, and individuals, as they bring about social change. Analyses of change within the world-system allow for more complete observations of system dynamics that examine and look for trends over time and identify cycles that are shaped by repetitive patterns (Goldstein 1988). Additionally, world-system scholars have made clear attempts to explain why the structural position of states fluctuates within the structure of the system (Goldstone 1985; Chase-Dunn and Hall 1997).

Economic cycles, in particular, have received attention in world-system research with the goal of not only uncovering patterns over the long-term, but possible predicting the length of recurring fluctuations in the global economy. Wallerstein (1974) makes the argument that there are two kinds of economic cycles that can be seen throughout history. Kondratieff cycles are characterized by periods of economic expansion and stagnation that can last from forty to sixty years (Wallerstein 1974; Chase-Dunn 1996; Chew 2001a). Periods of economic growth are labeled phase A, while periods of economic contraction are labeled phase B. Unlike phase B periods, phase A periods come about as sectors of respective economies expand and encourage new innovations that fill voids in the marketplace (Bergesen 1982). Wallerstein (1974, 1984) argues that Kondratieff cycles are an essential part of the capitalist world-system. Wallerstein (1974) points out that Kondratieff cycles, or K-waves, occur within long-term economic periods labeled logistics. These economic fluctuations are defined as long-term periods of generally increasing or decreasing economic growth. The idea of cycles is an essential component

of economic historical analysis, and as evident in Wallerstein's perspective, is a valuable part of understanding social change in a global context.

Through identifying repetitive patterns in history we are able to see the cyclical nature of change within the world-system. Hegemonic cycles have been identified in the work of Wallerstein (1974), and demonstrate that no one state has historically dominated the world system for a long period of time. According to Chase-Dunn and Grimes, full hegemony is present "when certain core states…access disproportionate amounts of political, military, and economic power for prolonged periods" (1995, p. 412). As Wallerstein has observed, full hegemony in the world-system doesn't occur often, and when it does it is relatively short-lived (Hopkins and Wallerstein 1996). The world-system has seen various nation-states rise to hegemonic positions only to be replaced by new emerging powers (Gills 1996). This pattern makes clear that positions within the system aren't static, but can change through the course of time.

Just as hegemonic core powers rise and fall within the world-system, nation-states also move along a core-periphery hierarchy. Through the course of history we see that nation-states are not guaranteed core status, but must remain competitive to stay in those positions (Gills 1996). The ascent and decline of states is an inherent dynamic that is part of the normal functioning of the world-system. Since all states operate within an interstate system characterized by competition, each attempts to gain or increase their economic and military advantage over others. World-system theorists argue that external factors do affect a country's movement from the periphery to the core. For example, the rebuilding of Japan by the U.S. after the Second World War did help it move quickly back into the core. Geopolitical factors should be considered when addressing the

movement of countries along the core/periphery continuum. Not only are external factors involved in this movement, but internal factors also play a major role. Internal economic strategies and reforms impact a country's ability to take advantage of favorable external factors. The ascent and decline of nation-states is tied to the competition within the interstate system. Through examining the dynamics within and outside of social systems we see that the conditions of empires, kingdoms, and countries is linked to both exogenous and endogenous factors (Ekholm 1972).

As previously mentioned, Wallerstein (1974) makes the argument that the modern world-system emerged during the sixteenth century. He specifically calls this century the "long sixteenth century," claiming that a shift from feudalism to capitalism was underway from 1450 to 1620. During this time period Europe was expanding its global reach as explorations to the Americas brought back wealth. Along with increased exploration of the globe through maritime activities, extensive trade links were also established with regions such as Asia, and the Americas, during this period (Abu-Lughod 1989; Gills and Frank 1996; Frank 1998). In Wallerstein's analysis this trade further expanded the world-system as new regions were incorporated, and became part of its core/periphery division of labor. With Europe at the center of the capitalist world-system, its geographical expansion into the Americas and other regions, the incorporation of new regions into the global division of labor, and the development of the interstate system, the modern world-system was created (Thompson 1983). Although the world-system was expanding geographically during this time period, not all regions were part of the world-system. As explained by Wallerstein (1974), Asia, Africa, and North America were left out of the initial creation of the modern world-system.

Wallerstein (1974) argues that regions that weren't incorporated into the modern world-system inhabited systems of their own. These regions, which Wallerstein excluded from his original formulation of the modern world-system, have only in recent history been incorporated into our contemporary system. Why were regions like Asia, Africa and North America left out of the emergence of a modern world-system? According to Wallerstein (1974), these regions weren't engaged in capitalist activities at the time Europe made the transition from feudalism to capitalism, and consequently inhabited world-systems outside of the capitalist world economy. Capitalism, as argued by Wallerstein, then becomes a determining factor in who is incorporated into the modern world-system. The process of capital accumulation, according to Wallerstein (1974), is unique to our modern world-system and isn't comparable to previous historical systems. However, the same process of accumulation has been identified by Frank and Gills (1996), and linked to periods well before the economic emergence of Europe in the sixteenth century. In fact, ancient trading systems in the Near East as far back as the third millennium B.C. exhibit the same processes and patterns, that Wallerstein (1974) argues, distinguish the modern world-system (Frank 1998; Chew 2001a). The omission and marginalization of regions outside of Europe can be directly linked to the argument that the process of capital accumulation represented a fundamental change form previous economic activities and forms of organization.

The Process of Capital Accumulation within a Longer Historical Context

Discussions on world accumulation within world system research have suggested the continuity of the process of capital accumulation over the long term (Frank 1993;

Frank and Gills 1992). The work of Kajsa Ekholm and Jonathan Friedman (1996), and David Wilkinson (1987), suggest that our contemporary world system can be traced back to a period in history that extends far beyond Wallerstein's original position. This becomes significant to this study as I argue that China held a hegemonic position and has historically been a major player within the world system. By tracing back the world system to as far back as Mesopotamia, in agreement with other analysts, this study assumes that the current system "has a history of at least 5,000 years" (Frank and Gills 1996, p. 3). Unlike Wallerstein (1974), Amin (1976), and others who suggest that the modern world-system began in Europe, Frank (1998), Chew (2001a), and Abu-Lughod (1989), argue that Europe's dominant position within the global economy is recent and part of a long economic history that has seen various other regions and states ascend and decline.

Differences between world-systems and world system history perspectives can also be seen in the amount of regions and history that is included in these approaches (see Frank and Gills 1996). Proponents of the world system history perspective argue that by starting the history of the modern world-system in sixteenth century Europe, you exclude the history of regions that are important in the analysis of global economic history. The approach of Frank and Gills seeks to address the Eurocentrism present in Wallerstein's perspective by offering "a wider world-historic humanocentric alternative" (Frank and Gills 1996, p. 11). Economic historical analysis of the globe indicates humanity's common history. Not only should we look at the experience of certain geographical regions, but also explore the connections that existed and continue to exist between all

regions. Diversity within the world-system can be captured through more holistic global economic research. To this end, Frank and Gills (1996) point out that:

> world history can and should also make efforts to connect and relate the diversity of histories and times to each other. It may be empirically possible, and in that case historically important, to uncover all sorts of historical connections among peoples and places, not only over time but especially at the same time (p. 13).

An important clarification should be made about the use of "world-system/s" vs. "world system." In using a hyphen between world and system Wallerstein seeks to emphasize the existence of systems outside that of what he labels the modern capitalist world-system (see Thompson 1983; Ikeda 1996). Frank and Gills point out that "world-systems are in a world of their own, which need not be even nearly worldwide" (1996, p. 3). By using world system without a hyphen Frank and Gills want to make clear that the system in existence now has been in operation for 5,000 years and has touched not only Europe, but also the world.

In keeping with the basic premise of the world system history approach, Frank has sought to bring to light the economic position of regions before European hegemony. In his book *ReOrient*, Frank highlights the dominant presence of Asia within the history of the world economy, and goes further to argue that China was the center of the global economy from 1400 to 1800 (Frank 1998). Through historical analysis, as argued by Frank (1998), we can expand the theoretical development of world-system theory and confirm or disprove central arguments made in macrohistorical research.

The increasing attention paid to previously ignored historical periods has produced valuable insights into the history, origins, structure, and dynamics of the world-system. However, a comprehensive analysis of global history is far from complete, and certain regions and historical periods remain understudied. Additionally, the theoretical

development of the world-system perspective continues and is linked to the growing recognition that the economic and cultural life of human communities is intertwined with, and part, of ecological relations. Recent trends in world-system research regarding the inclusion of nature can be linked to broader critiques of mainstream sociology. Broadly, the argument is posed that social life is imbedded within physical environments and consequently influenced by nature. It is then essential that social scientists acknowledge the connections that exist between human and non-human systems in order to better understand society. In the following sections I discuss the lack of attention given to culture and nature within world-system research, and make some observations about the absence of the latter within sociology. Finally, the efforts of mainstream sociologists to include nature in social analysis are explored, as well as recent trends within the subfield of world-systems to move away from humanocentric examinations.

The Absence of Culture in Analyses of the World-System

World-system scholars continue to examine the linkages between human communities across geographical regions and time. Much of their work makes clear that contacts involving separate ancient or pre-modern cultures were far from rare, and in fact could be traced back several millennia to the ancient worlds of Mesopotamia and Harrapa (Frank and Gills 1996; Frank 1998; Chew 2001a). A central concern of world system research has been to examine economic linkages via trade to establish the interconnections between geographic regions. In attempting to identify regional and global economic interactions between civilizations, city-states, empires, and nation-states, what is often not fully explored is how these same economic exchanges or linkages can

facilitate cultural diffusion. A related argument that informs this research is that during periods of economic decline or stagnation economic linkages can be disrupted to the point that regional interactions become less intense (Frank 1998). A slow down in regional trade not only impacts the economic life of individuals, but can also affect the cultural life of a society. During periods of intense societal disruption this can come to alter and transform the cultural practices of groups.

Historical examinations of trade exchanges between regions have pointed out that the process of capital accumulation is not a new phenomenon, but part of an ongoing feature of our global economy. Trade exchanges can be traced as early as the third millenium B.C. in Mesopotamia, and demonstrate the link between economic growth and resource extraction (Chew 1997a). However, what is absent from these same historical explorations is culture. Analytically, culture as a concept serves to highlight the number of activities that connect people. If we examine concepts, such as culture and world-system and place them within the field of interaction where they're observed we find that "bundles of relationships" characterize these concepts (Wolf 1997, p. 3). Culture can be used to broadly refer to the myriad of behavioral patterns, artistic endeavors, beliefs, institutions, technological developments, and products that are socially transmitted within social spaces, such as regional systems, domains of interaction, or a world-system. Despite the calls of world-system analysts to study the numerous interactions that form the basis of social life, certain dimensions are given priority, while others are understudied. Numerous historical explorations of the global economy have neglected to incorporate cultural relations as part of examinations of the world system. Previous research examining trade exchanges in ancient civilizations makes evident the importance

of including discussions of cultural practices. Economic activities in both ancient and contemporary times are tied to the socio-cultural life of human communities. Consequently, explorations of the global economy should take this cultural dimension into account.

Given the economic focus of research in world-system analysis it is not surprising that to this date culture remains largely unexplored. World-system analysts have expressed little interest in the study of culture (Ashley 1984; Wallertstein 1990; Bergesen and Jones 1991). When culture is addressed it tends to be marginalized in the research. The few studies by Kiser and Drass (1987), Bergesen (1990, 1992), and Sherman (1999) that have specifically discussed the role of culture have again treated this dimension as a tool that legitimizes the economic position of hegemonic entities. As Bergesen (1992) observes "world system processes…also have a cultural side," yet culture largely remains unexplored (p. 201). Chew (2001a), makes an important point in calling attention to the historical presence of a culture-nature nexus. However, a more comprehensive examination of cultural diffusion and transformation, globally and in East Asia, as a result of environmentally degradative practices remains to be studied. If we are to broaden the scope of research to include a variety of dimensions, such as the environment, then it's also a worthy endeavor to further explore the role of culture as part of world system history. The absence of culture within world-system studies, despite the interest by Ashley (1984), Featherstone (1990), and Wallerstein (1990), has left gaps in our research of world-system dynamics.

Attempting to focus their explorations of the global economy, analysts within the sub-field of world systems examine the linkages between human communities across

geographical regions and time. Much of their work makes clear that contacts involving ancient or pre-modern cultures were far from rare, and in fact could be traced back several millennia to the ancient worlds of Mesopotamia and Harrapa (Frank 1998; Chew 2001a). A central concern of world system theory has been to examine economic linkages via trade to establish the interconnections between geographic regions. In attempting to identify regional and global economic interactions between civilizations, city-states, empires, and nation-states, what is often not fully explored is how these same economic exchanges or linkages can facilitate cultural diffusion. A related argument that informs this research is that during periods of economic decline or stagnation, economic linkages can be disrupted to the point that regional interactions become less intense (Frank 1998). A slow down in regional trade not only impacts the economic life of individuals, but can also affect the cultural life of a society. During periods of intense societal disruption, for example a period of major economic decline, such as situation can alter and transform the cultural practices of groups (Knottnerus 2002; Knottnerus and Berry 2002).

In order to understand how cultural interactions are disrupted by large-scale social disruptions this study borrows ideas from Knottnerus' (1997) structural ritualization framework. An important element of this approach lies in its emphasis on the maintenance, diffusion, and transformation of ritual practices. In attempting to understand the centrality of cultural practices, and in particular rituals, one can argue that regional systems, such as those present in ancient tributary systems, provide excellent windows to examine the resilience, strength, diffusion, and adoption of rituals. The process whereby rituals emerge, are altered, or replaced with new ritualized practices is a

concern of the theoretical framework, and allows for observations of culture through a focus on ritual. Drawing from the theory, a ritual is defined as a "socially standardized and repetitive symbolic activity" (Guan and Knottnerus 1999, p. 51). Rituals can involve, and are often defined by, religious or sacred behaviors. However, this study, and the theory of structural ritualization, utilizes a much broader conceptualization that recognizes the importance of customary secular activities within human communities. Rituals can be characterized as regularized social practices that take place in both religious and secular social environments. The presence of standardized behaviors in everyday social interactions is emphasized in the conceptualization of ritualization. Knottnerus argues that the concept of ritualization can be used to "explain how social structure is reproduced and transformed" (1997, p. 259). Activities that can be identified as routine within social systems can be used as an indicator of larger structural changes, when these same activities are disrupted or change. In this regard the transformation of rituals can be indicative of changing conditions within and outside of social structures.

A comparative approach to the examination of ritualized practices within social structures must be conscious of those activities that have emerged as standardized practices. The theory of structural ritualization recognizes the existence of socially standardized practices and defines them as those activities that are habitual or regularly engaged in. Central to the ritualization framework is the concept of ritualized symbolic practices "as an action repertoire that is schema-driven" (Knottnerus 1997, p. 260). The ritualization framework emphasizes that habitual or customary activities can be transmitted. Diffusion of ritual practices involves more than just a transfer of specific actions, but can involve the transmission of symbolic frameworks or cognitive

representations of structures (Knottnerus 1997). Symbolic frameworks influence what ultimately emerges as ritualized social practices within different organizational settings.

In understanding how disruptive events impact established behavioral patterns it is important to understand the social environment individuals and groups interact in. To clarify what is meant by social environment the theory of structural ritualization introduces the concept of "domain of interaction." According to Knottnerus a "domain of interaction" is a "bounded social arena that contains two or more actors…[within] a delimited sphere or region of social activity" (1997, p. 261). Social arenas can come to influence the behavior of actors as changing circumstances alter the symbolic practices that take place in a variety of social environments. It is important to note that domains of interaction can be examined at various structural levels. Although the structural ritualization approach has yet to be utilized at a regional or global level of analysis, it provides a framework whereby one can explore micro/macro linkages beyond the level of societies. In this regard we can utilize the concept of domain of interaction to literally mean a geographic space.

The argument can be made that the centrality of ritualized symbolic practices can be affected by the availability of resources. The activities that constitute ritual practices require the use of specific materials. These materials can be both human and nonhuman, but regardless of their type they're essential as they allow for the practice of specific rituals (Knottnerus 1997; Guan and Knottnerus 1999; Knottnerus 2002; Knottnerus and Berry 2002). The concept of deritualization, in this regard, becomes important to this research. Deritualization is defined as a "disruption of ritualized symbolic practices" within a domain of interaction (Knottnerus 2002, p. 90). Disruptions, regardless of their

type or precipitating factors, can impact regularized social practices (Knottnerus 2002). In this context, periods of ecological stress or Dark Ages can be conceptualized as disruptive periods in time when certain nonhuman material resources become scarce or unavailable, and therefore impact cultural practices. Disruption of any kind can have implications for social systems, and it is in this vein that conditions of Dark Age periods that include economic downturns, deurbanization, environmental degradation, and populations losses can impact the economic and cultural life of human communities. Further drawing from the work of Knottnerus (Forthcoming), periods of intense societal disruption can come to alter and transform the cultural practices of groups.

Given the significance of culture to social life, and its connection to the materialistic tendencies of societies, it becomes essential to include this dimension in historical examinations of the world-system. Although the exploration of cultural connections between regions is largely unexplored in the subfield, the principles that guide world-system research can be employed to study not only economic linkages, but also connections between economy, nature, and culture. If we are to live up to the interdisciplinary vision and holistic approach advanced by Wallerstein (1974), then the interconnection and interrelationships that are part of social life should be examined.

An Ecological Critique of Sociology

Holism in the social sciences, including sociology, has meant recognition in the value of holistic analyses of all aspects of social life. However, in the pursuit of social inclusion, sociology has, for some time, turned its back on nature. The natural world is conspicuously left out in a discipline that historically has made little reference to the

embeddedness of social systems within larger ecological systems (Murphy 2001). On this basis the uniqueness of humans is highlighted only to further enforce the disconnection human communities perceive between themselves and the natural environment.

Sociology's early fixation with the social has ignored the dialectical relationship between the processes of nature and societal systems (Bookchin 1987). The beginnings of sociology can be tied to its discovery of the "social." Despite the common sense meanings the term social evokes, the social is a historical category that is linked to evolving forms of human organization (Bergesen 1995). The founding fathers of the discipline, Comte, Durkheim, Marx, and Weber recognized the importance of the social as they observed social change in Europe. Industrialization, urbanization, and the development of capitalism made less visible the connection between human beings, other species, and nature. Historically, as people moved away from farms and villages to settle in urban environments, they could no longer see their connection to the land. According to Albert Bergesen (1995), the separation of city dwellers with direct contact to the earth has set the stage for people not to be conscious of the physical or natural foundation of social relations. To borrow Marx's concept of alienation, we now suffer from a disconnection with our ecological self.

Historically, human self-identity or self-conception has been linked to the religious and theoretical explanations humans have given to the social and physical environments they inhabit. The ideas, symbols, or sources humans draw on to clarify nature, events, our relationship with the environment and other human beings have much to say about the linkages we make with between other living things and ourselves. These

explanations often make distinctions between human and non-human spheres of experience or interaction. According to Bergesen (1995, p. 112), "for the past 500 years the idea that we are human beings, separate from both the heavens above and animals below, has been the locus of our morality and the sense of our self identity." A human disconnection between the sacred and other living beings has not only over time shaped our identity, but our relationship with nature.

Ecological relations between human beings and nature have meant, in contemporary societies, a complete subordination of the natural environment. It is perhaps the realization of this exploitative relationship that causes moral concern and contemplation about our connection with non-human species. As old worldviews are "de-ligitimated" in favor of new ones, the human consciousness grapples with the rift between old and new ways (Bergesen 1995, p. 116). With shifts in worldviews come evaluations of the world prior to a new guiding orientation or philosophy. History, Bergesen argues (1995), informs us that periodically a worldview emerges that displaces the old and ushers in a new social reality. However, in the process of defining a new social reality, a disconnection also emerges. According to Bergesen (1995) three historically ordered modes of alienation can be identified: religious alienation, human alienation, and eco-alienation. Each subsequent mode of alienation signals a departure from old worldviews, and in a distorted sense marks human progress.

In a critique of Karl Marx and Adam Smith, Bergesen (1995) notes the anthropocentric tradition of theoretical explanations of economic development. Human progress in the Marxist model of social change is a movement away from our similarity to non-human species. It involves human-centered ideas and interests that guide our

activities and perceptions of reality. Students of social change quickly note that for Marx theory was a method for changing the world. Marx (1886 [1969], pp. 14-15) clearly states this in "Theses on Feuerbach" noting that "philosophers have only interpreted the world, the point is to change it." Active participation in the world also extended to ideas about our relationship with nature. An exploration of Marxian economics reveals an anthropocentric approach, as non-human species are simply treated as material inputs for the production of commodities that are then exchanged, sold, or consumed. Any value these material inputs have is only seen in terms of the human labor required to transform these raw materials into finished products (Bergesen 1995). Eco-alienation then emerges as a result of human activities to dominate and conquer nature, and overcome nature's control. If, in the view of Marx, "humanity's full potential" is achieved through a subordination of nature, then progress comes at the expense of our natural environment. Disregard of environmental costs to human advancement becomes a feature of the relationship between human beings and nature.

The estrangement or disconnection from nature has had implications not only for our relationship with the natural environment, but for the way we study and conceptualize society. The study of social systems was bounded by the idea of society as autonomous from nature. Sociology's realm became the independent zone of existence human beings purportedly inhabit (Murphy 2001). The illusion that humans operate in systems outside of the boundaries of nature, and are therefore immune from natural constraints, is further supported by popular exemptionalist arguments that separate the social from the non-social. Sociology is historically guilty of presenting a theoretically myopic view of social

relations (Murphy 2001). In seeking to emphasize the importance of the social, and establishing its relevance, sociology has tended to disregard nature.

A greater emphasis on the influence of social forces over human affairs has come to shape our view as social scientists of the natural world. According to Fox (1991), "sociology has been suspicious of anything claiming to be grounded in nature, and its positioning has been in direct opposition to any claims that the natural has influence over human relations" (1991, pp. 23-24). Sociologists have become suspicious to the degree of exaggerating, and reifying, the social (Fox 1991). A social reductionism has plagued sociology, despite the discipline's early questions about human relations to the natural environment. This is most exemplified in the work of Max Weber who believed that culture was grounded in nature (Murphy 2001). However we've seen a more Durkheimian orientation take hold in sociology, rather than a more inclusive Weberian perspective that recognizes the interactive sphere of relations between humans and non-humans.

The anthropocentrism present in the work of Marx and Durkheim, can be further examined in the explanations given to social reality by social constructionists. Classical arguments within sociology extend themselves to more contemporary frameworks, and reflect the anthropocentric path sociology has traveled on for some time. Reality has been explained in terms that highlight the human experience and its variety. Although recognition of the reality experienced by various social groups is a noteworthy endeavor, it leaves us with an incomplete picture that says nothing about the relationship between humans and their natural environment. Nature is absent in the social constructionist argument of reality. According to Whitty (1977, p. 37), "truth and objectivity are seen as

nothing but human products and man rather than Nature is seen as the ultimate author of 'knowledge' and 'reality." In their seminal book, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Berger and Luckmann (1967, p. 1) argue the point implicit in their title that "reality is socially constructed and that the sociology of knowledge must analyse the processes in which this occurs…[we] define 'reality' as a quality appertaining to phenomena that we recognize as having a being independent of our own volition (we cannot 'wish them away')." To summarize their argument, the events that we identify as beyond being "wished away" are socially constructed (Murphy 2001, p. 27). For Berger and Luckmann (1967, p. 183) reality is the subjective world that humans are "biologically predestined to construct and to inhabit," it's a social world of self and others. For human beings, this subjective world, the learned world, becomes the governing and absolute reality. Nature emerges in this argument only in its absence, as the assumption is made that men are freed from the constraints of environmental forces (Murphy 2001).

Exercises in abstraction have minimized the importance of nature in human affairs. Denying nature has meant, in many instances, a dismissal of nature's response to human activities. In making distinctions between human and non-human species, and touting the uniqueness of human beings, we've further removed ourselves from nature. The connections we share with other animals is ignored in favor of emphasizing what makes us unique (Benton 1991). A view of human nature as distinct from that of other animals, in Bookchin's (1987, p. 51) analysis, is what guides sociology, and makes the discipline "the analysis of man's ascent from animality." Sociology emphasizes this ascent by imparting a "unique autonomy to cultural development and social evolution,"

an autonomous sphere that carves out its own reality in spite of nature's presence (Murphy 2001, p. 28).

Historically human beings have experienced different modes of alienation. Albert Bergesen (1995) identifies three historical modes: religious-alienation, human self-estrangement, and eco-alienation. These modes of alienation single a departure or rift from previous worldviews, but also suggest a shift in ideas about reality. The linkages between human and non-humans are in an abstract sense blurred and unrecognizable, but still present. Although constructionists base their argument on the premise of a discontinuity between humans and other animals, man's relationship to the environment is clearly visible. Even if this association is, at times, disregarded or addressed "in terms of unidirectional causality from the social to the natural," the relationship continues to endure and is inescapable (Murphy 2001, p. 29). The social constructionists in their retreat from nature paint a picture of humans acting upon nature, and say nothing about how nature reacts to human action.

Mainstream sociology has in recent years taken note of research that has increasingly called for a re-evaluation of the importance of nature in social analysis (Bookchin 1987; Devall and Session 1985; Beck 1992; Dunlap and Catton 1994; Chew 1997, 2001). However, most of these studies are rarely discussed in general sociological theory, and their discussion remains confined within sub-fields of the discipline (Murphy 2001). Sociology, as a science devoted to the examination of connections or linkages, is at present too narrow in its focus (Bergesen 1995). The discipline emphasizes relations between humans, but yet, to its theoretical detriment, ignores the ties between social and ecological systems. According to Bergesen (1995. P. 114), "to halt the boundaries of

moral community and structural relations of hierarchy/domination at the edge of one species (humans) is to miss, and worse to mask, social relations between species, and between all living things." Theoretical development is hampered by the lack of inclusion in approaches that ignore nature. It is in the attempt to truly make sociology a holistic science that a multidimensional approach, that recognizes the linkages between all living things, should be undertaken (Alexander 1988).

A broadening of social theory can lead to new directions of research as well as a rethinking of contemporary studies. Although one finds that within environmental sociology, social ecology, ecological Marxism, and, increasingly, world-system studies a variety of "green" issues are addressed, the theoretical orientation is still human-centered. For example, equality is discussed in terms of equity for humans, but the discourse hasn't theoretically been extended to all living things (see Bergesen and Parisi 1999). In a number of sub-fields within sociology "studies [are surfacing about] what society does to nature, or how different classes, races, ethnicities, genders and whole zones of the world-system are exposed to hazardous wastes, acid rain, or have 'their' natural resources exploited for the benefit of other zones," but much remains to be explored (Bergesen 1995, p. 115). Even in research that has been conducted, the linkages between human activities and natural processes are not fully explored.

Sociology in the past has ignored the interactions between the world of nature and social systems. However, as Alexander (1988, p. 93) observes, "the new movement [to include nature] in sociology will have a chance to develop a truly multidimensional theory." An approach that is more inclusive will only serve to strengthen examinations of the interactions that take place in our eco-system. Sociology can extend its analysis,

and join deep ecologists, in arguing that "a social order limited to structural relations within but one species (humans) is not scientifically wide enough" (Bergesen 1995, p. 114). Within the discipline, in particular environmental sociology, scholars have discussed the interactive processes between humans and nature (Cable and Cable 1995). It is these discussions that have increased the attention paid to the natural environment, and has led some sociologists to develop, explore, and incorporate ideas outside of the discipline.

Recognizing the Importance of Nature to World-System Analysis

Early in the development of the perspective, world-systems theory has focused its attention to the study of long-term social change (Chew 1997a). Societal transformations have been explored from Marx to Wallerstein through materialist positions that focus on processes linked to the accumulation of capital (Frank 1969, 1978; Amin 1974; Wallerstein 1974; Kaplan 1978; Chase-Dunn 1982, 1989, 1996; So and Chiu 1995; Hopkins and Wallerstein 1996; Chase-Dunn and Boswell 1998). Although this has led to the identification of various structural relationships, trends, and cycles "within the context of connections between humans, classes, status groups, regions, and states in the global economy," what largely remained missing and unexplored is the interplay between political-economic systems and nature (Chew 1997a, p. 381; also see Chew 2001a). Robert and Grimes observe that "like much of social science, world-system theory has implicitly taken what Dunlap and Catton (1994) called the 'human exemptionalist' approach- that humans are exempt from the ecological laws affecting other species" (1999, p. 63). World-system analysts in the past have overwhelmingly focused on human

processes of accumulation, while ignoring the fact that societal reproduction and expansion is conditioned by natural environments. In this regard Sing Chew states, "to be minimally materialist, the basis of societal reproduction must be viewed also through our relations with nature" (1997b, p. 223). Explorations of early human communities and civilizations underscore the point that social reproduction has been, and continues to be, dependent on our natural environment.

According to Chew (1997a), the exploitation of nature as a process parallels the exploitation of human labor. In world-system studies, however, much less attention has been paid to the former process of exploitation over the long term in comparison to the latter. This neglect has left a gap in our understanding of the dynamic interrelationship between the natural environment and the economic, political, and social processes of the world system. For analytical purposes our knowledge of long-term change and relationships within the world-system has focused on two main areas: "the dynamics of the accumulation process circumscribed by the division of labor and punctuated by long economic cycles" of stagnation and expansion, and "the competitive rivalry between core states for global market share and hegemony" (Chew 1999, p. 87). Historically, the development of human communities, civilizations, empires, and nation-states has been dependent on nature. However, the overall focus of world-system analysis has only recently begun to move beyond an analysis of anthropogenic factors (Chew 1997a, 1997b, 1999, 2000, 2001a, 2002). World-system's deep materialism, as noted by Chew (2000), has clear environmental implications that can be of value if we consider that "production and consumption directly affect the biosphere and cannot be understood

without understanding the structure of the world economy" (Roberts and Grimes 1999, p. 64).

The argument now being made by world-system analysts is that ultimately the interplay of economic processes and nature determines the trajectory of transformation of the world system (Chew 1997b). It is suggested that "ecological limits become also the limits of socioeconomic processes of empires, civilizations, and nation-states, and the interplay between ecological limits and the dynamics of social systems defines the historical tendencies and expansionary trajectories of the human enterprise" (Chew 1997b, p. 223-224). From Asia to Europe, communities, empires, and civilizations have through history exhibited economic rhythms and trends that one can link to the availability of resources. World system analysis has in the past ignored the link between economic phases and the environment. Scholars today conducting world-system research are heavily engaged in broadening and developing concepts that allow for a "deep greening" of the world system perspective (Chew 1997a, p. 381). The introduction of nature into world-system analysis marks an important juncture in the development of arguments originally introduced by Wallerstein.

Toward an Eco-Sociology: Concluding Remarks and Observations

Theoretical development in the social sciences, and sociology in particular, can be facilitated by a growing recognition of human relations to nature. It is in fact this awareness that has propelled some world system analysts to rethink and re-evaluate the approach they take when examining economic exchanges. World system analysis is a project geared toward providing holism to social analysis. As part of this project,

Wallerstein (1974) calls for an interdisciplinary approach that can assist the examination of the totality of linkages within a global sphere of interaction. In the pursuit of inclusive research, world system analysts sought to extend mainstream sociology's interest in "social associationalism" and study the whole of collective life (Bergesen 1995, p. 113). Through the study of a global sphere of interaction, it has been the goal of world system research not only to identify the structure of this system, but also examine the relations that take place within it.

In the development of holistic science, world system theory shares with mainstream sociology the goal of mapping out and examining the relations between human beings. Whether the unit of analysis is a society or a world system, sociology is "the science of association" (Bergesen 1995, p. 114). However, the relationships studied are human relations and consequently sociological inquiry fails to capture the totality of interactions. In the same manner that the conceptualization of a world system brings attention to the variety of social relations between humans within a global sphere, analysts can extend this concept to highlight relationships between all living things. Although at times not explicitly expressed, there is an acknowledgment within world system analysis of a society-nature nexus. In world-systems analysis, the process of capital accumulation is considered the motor force of global history. World transformations as a consequence of a set of socioeconomic processes have been occurring over the *longue duree* (Frank 1991, 1993; Chew 1997a; Chase Dunn and Hall 1996; Modelski and Thompson 1996). According to Andre Gunder Frank (1993) world history for at least five thousand years has been underscored by the ceaseless accumulation of capital and punctuated by long cycles of economic growth and

stagnation. However, for Immanuel Wallerstein (1974, 1992), its ceaseless nature began with the formation of the modern world-system during the "long sixteenth century" (1450 –1620) in response to the crisis of feudalism (see Shannon 1996). Regardless of whether this process has been an underlying characteristic over the last several millennia or only the last five hundred years, one of the manifestations of the process of capital accumulation is the appearance of environmental degradation (Chew 1997a).

Drawing from Marxism, scholars examining trade exchanges note the materialistic tendencies of accumulation processes. Historically, the process of capital accumulation has been dependent on the extraction and movement of raw material to production centers. Even if nature is treated as a mere input in the economic processes of nation-states, there is recognition of the importance of natural resources to the historical development of societies. Nature does matter to social systems, and consequently should be of importance to sociology, as human communities, societies, and nation-states are dependent on their physical environment for survival.

The insights of world system theory can inform environmental studies and further the development of new approaches to the study of social life. Although world system studies in the past have largely ignored nature, the concepts and basic tenants of the perspective can be employed to address issues of importance to environmental research. World system theory's "defining globalism, materialist perspective, historicism, and structuralism" can add to studies already conducted within environmental sociology (Roberts and Grimes 1999, p. 61). Wallerstein's (1987) call for interdisciplinary research can further the goal of holism in sociological inquiry. Without neglecting the focus of sociology, and becoming experts in biology, geography, or physics, social scientists can

borrow and incorporate ideas and methodologies from other disciplines to broaden their research.

Mainstream sociology, borrowing from the ideas and concepts of deep ecology, can be transformed to be more attuned to ecological relations (Roberts and Grimes 1999; Bergesen 1995). Beyond any discussion of specific sub-fields, sociology can extend its research agenda to examinations of relations between all species inhabiting earth. A review of the mainstream sociological literature reveals that scholars, let only laypeople, remain in denial and unaware of degradative impacts human activities have had on the environment. Sociology can no longer dismiss the human connection to other species and the consequences of human activities on the environment.

The development of social thought is linked to the expansion of spheres we consider to be social. Historically this has meant the examination of a wider array of associations and larger networks. Examinations of urban centers, are followed by analyses of relationships within nation-states, then relations in a world-system, and now a recognition of ecological relations within a biosphere (Bergesen and Parisi 1999). Although world-system research can be characterized by the human exemptionalist paradigm that guided early research, scholars within the subfield have begun to recognize the need to expand world system research by addressing issues explored in environmental studies (Bergesen and Parisi 1999; Timmons and Grimes 1999). In this regard Bergesen and Parisi (1999) remark "world-system theory and environmental studies are a natural fit..[it's] surprising, therefore, that they aren't more interconnected, as they share a common global holism" (p. 43). According to Bergesen and Parisi (1999), "while there are local environmental issues in virtually every region of the world, the overarching

assumption is of the global character of the ecosystem" (p. 43). If one surveys the environmental sociology literature themes such as environmental justice, vulnerability to risk, environmental movements, and conflict emerge (see Bullard 1990; Aronoff and Gunter 1992; Edwards and Ladd 2000). These same themes can be addressed within the framework of world-systems theory.

A new sociological paradigm was called for by Catton and Dunlap (1978, 1979), one that would replace the human exemptionalist model, and emphasize the dialectical relationship between society and nature (Buttel 1978, 1986, Catton and Dunlap 1978, Freudenburg and Gramling1989, Goldman and Schurman 2000). According to Gille (2002, p. 2) one could argue, through simple-minded logic, "that if sociologists agree that society is embedded in nature and that the economy is embedded in society, then they should also agree that the economy is embedded in nature." Yet we find that the relationship between nature and economy have not been fully explored. The holism advocated by world-system analysts lends a political-economy perspective to environmental issues, while emphasizing the global and historical context of ecological relations. For example, an exploration of environmental justice and risk within a world system framework can address two interconnected concerns: the industrial pollution in the neighborhoods of workers and the poor, and, on a world scale, the relocation of polluting plants, and consequently the exportation of risk, from North to the South (Bergesen and Parisi 1999). Peoples on the edges, or periphery are linked to the needs, power, and material advantages of those who constitute the center, or core, of the global economy.

The structuralism found within world-systems can also add to the holism and globalism increasingly called for in environmental studies. In explaining the organization of a global economic system, analysts within the field argue that nations occupy structural positions in a global stratification system. Local communities can be impacted by external economic forces that exist outside of the boundaries of nation-states. For example, the exportation of hazardous production processes and waste from core to peripheral areas is framed as part of a larger environmental equity problem. The emergence of an international waste trade, for example, is dependent on this indifference as environmental concern takes a back seat to economic development (Shin and Strohm 1993). Undesirable industries in this global economic context will increasingly find a place within the Third World as part of the transnational treadmill of production (Geisler 1977; Gould Weinberg, and Schnaiber 1995). There are costs to economic growth and development, and by shifting these costs to marginal communities and nation-states we unsuccessfully attempt to disconnect ourselves from degradative and hazardous practices.

In further addressing how world-system theory can inform issues of relevance to environmental sociology three issues central to the perspective can be discussed as they have environmental implications (Roberts and Grimes 1999). First, world-system has identified key secular trends such as commodification, proletarianization, and globalization, which all directly impact nature. According to Roberts and Grimes (1999, p. 70), what Wallerstein (1989) calls the "commodification of everything," has also meant the commodification of nature. The identification of causes and effects of cycles of crisis can aid our exploration of periods of environmental degradation. Economic cycles such as Kondratieff's long waves or Bergesen's A and B phase cycles can help us

understand the link between environmental effects and economic periods. Historical analysis has already made clear that economic growth has been tied to the overutilization of resources, while during depressive phases we see that exploitation also contracts (see Chew 2001a). Political economy, and world-system in particular, makes us aware of the importance of identifying key sets of actors, such as states, capital, and labor (civil society), if we are to understand how these prime movers in the global system contribute to environmental outcomes (Roberts and Grimes 1999).

Summary

Macrohistorical analyses from Marx (1967, 1970) to Wallerstein (1974) have called attention to the structural components and dynamics that characterize social systems. Likewise, the endogenous and exogenous factors that are linked to the latter figure prominently in observations about social change. From Marx (1920), who emphasized the material causes of change, the sociological study of social transformations, and neo-Marxist perspectives, such as world-system theory, focus attention to the economic forces and materialistic tendencies that influence social systems. Contributing further to macrohistorical studies, Max Weber (1905) noted that in addition to the productive forces emphasized by Marx (1920), social organization is also impacted by ideational factors. Ideational aspects of culture in interaction with material components tell us much about the dynamics and components of social spheres of interaction. The world-system, as a global interaction network, is both dependent on the material resources that characterize the system's deep materialism and the consumptive habits that guide ecological relations and are a part of the cultural life of human communities.

The survey of theories and theoretical frameworks that influenced world-system analysis make clear the various factors, causes, patterns, and directions, studies of social change observe. In the study of societal transformations and development, modernization, dependency, and world-system perspectives have all continued the discussion of early theorists who sought to understand the characteristics that define social systems and the processes that impact societies. This analysis can be placed within the contemporary debates of world-system analysis. As part of the ongoing development of the perspective, this study engages the current discourse by addressing the absence of both culture and nature in previous studies. Noting that world-system's materialism has clear environmental implications, this study joins the chorus of calls to incorporate nature into analyses of the world-system. Additionally, the marginalization of ideational factors is noted, as I argue that the role of culture, as part of world-system history, should be examined if we are to fully understand world-system dynamics.

Global ecological degradation is now being recognized as a determinant in the historical trajectory of the world system (see Chew 1997a, 2001a). However, this represents a recent trend within sociology and as such the historical presence of ecological relations and their impact on economy and culture is largely understudied. In the following chapter, I directly engage in the contemporary discourse and outline the specific research questions that are addressed in this study. The methodological approach employed is also discussed, as well as the historical sources that inform the research.

CHAPTER III

RESEARCH QUESTIONS AND METHODS

Toward A Horizontal Integrative Analysis

Historiographical research as part of world-systems analysis can be traced back to the early development of the theory. The adoption of history into the perspective is in fact linked to earlier Braudelian arguments calling for a synthesis between history and social scientific inquiry (Kaye 1979). Wallerstein (1987), drawing from Braudel's emphasis on the *longue duree* or long-term, argues that the methodology of the world-system perspective "is to pursue analysis within systemic frameworks, [in] long enough…time and large enough in space to contain governing 'logics'…there is neither historian nor social scientist, but only a historical social scientist who [analyzes]…particular systems and the particular sequences through which these systems have gone" (p. 315) (see also Goldstone 1997). Following in this tradition, this study, in order to asses the interplay between economy, nature, and culture in East Asia before, during, and after the disruptive or "Dark Age" period, employs a macrohistorical approach to analyze regional relationships in ancient East Asia. Although the scope of this examination can be global, the specific focus of this study will be on East Asia, which encompasses China, Japan, and the Korean peninsula. As part of the research, a

comparative analysis of human communities within East Asia will highlight the major cultural and economic centers of consumption and production, and those areas that supplied natural resource products in the region. Trade in natural resources will be examined as I investigate the impact of natural resource extraction and consumption on economic and cultural transformations.

The study design is largely grounded in the historical-comparative approaches taken by scholars in the field of world system theory. Specifically, I utilize what Andre Gunder Frank (1998) calls a "horizontal integrative approach" to the study of history. Like Fernand Braudel and Immanuel Wallerstein, Frank's methodology is one focused on the socio-economic interconnections between geographical regions, and not on history as a chronology of events or peoples. A horizontal integrative approach seeks to bring to light the long-term interconnections that have existed between peoples. The tendency for discontinuous presentations of world history clearly suggest that more than "equal time" needs to be given to non-European regions (Frank and Gills 1992, p. 15). Examining the approach taken by most Western economic historians, reveals that the rest of the globe seems to get lost in the analysis of economic history, and when other regions besides Europe are addressed it's usually distorted (Frank 1998). Frank's (1998) horizontal integrative approach attempts to address the biases in historical analysis by suggesting that historical examinations should address the linkages that are present during specific points in time.

World System Research and Historical Analysis

In attempting to identify cycles of hegemony and outline the economic ascent and decline of civilizations, empires, and nation-states, contemporary researchers have turned their attention to a variety of historical documents. Through an exploration of historical texts world-system analysts have addressed a variety of sociological questions pertinent to analyses of global economic development and its continuity over time. The literary record allows us to uncover historical connections between peoples and places that can inform comparative research. Diverse political and economic events can be correlated and connected to inform and arrange an "analysis of a world system history" (Frank and Gills 1992, p. 16). Debates over world system history benefit from the analysis of historical documents that provide evidence for theoretical arguments, and moreover aid in the development of theory.

In his book *ReOrient*, Andre Gunder Frank (1998) proposes that history should be examined through a horizontal integrative methodology. This methodological approach is defined by its emphasis on simultaneity and continuity. Specifically, Frank (1998) argues that this methodology calls for the study of regional and global connections during specific points in time. In lieu of conventional vertical history, a horizontal integrative historical approach seeks to find continuities and interconnections that make clear the linkages that historically connect human communities. Frank argues that macrohistorical approaches need to incorporate "as much of the world as possible," in order to avoid the marginalization and exclusion of certain regions (1998, p. 345). In fact, it is the historical deficiencies present in Wallerstein's central arguments that Frank (1998) attributes to conventional vertical methodology. In utilizing a horizontal integrative approach, Frank

and Gills (1996) have not only raised criticisms about the eurocentrism found in historical research, but have gone further to challenge the basic assertions Wallerstein (1974) makes about the origins, history, and geographical scope of the world-system. As a result of employing this methodological approach the argument is now presented that the world system stretches back 5,000 years, that the center-periphery structure can be applied to historical periods that predate the sixteenth century, that hegemony is visible before the sixteenth century, that economic cycles can be identified that are larger in historical scope, and that the process of capital accumulation is not unique to the modern world-system (see Frank and Gills 1996).

Historical examinations of trade exchanges between regions, for example, have pointed out that the process of capital accumulation is not a new phenomenon, but part of an ongoing feature of the global economy. Trade exchanges can be traced as early as five thousand years in Mesopotamia, and demonstrate the link between economic growth and resource extraction (Chew 1997b). Numerous historical explorations of the global economy have failed to incorporate ecological relations as part of their examinations of the world system. Previous research examining trade exchanges in ancient civilizations, has made clear the importance of including discussions of natural resource utilization. Economic activities in both ancient and contemporary times are tied to the utilization of resources. Consequently, explorations of the global economy should take this dimension into account.

In extending the historical roots of our contemporary world system we are able to demonstrate that for the past five thousand years economic activity within the world system has been reliant upon the availability of natural resources. Discussions on world

accumulation within world system research have suggested the continuity of the process of capital accumulation over the long term (Frank 1993; Frank and Gills 1992). Empire civilizations and nation-states, in order to meet economic and materialistic tendencies, have participated in trade exchanges. These trade exchanges have had a significant impact on the natural environments of both core and peripheral regions in the global economy. The use of raw materials for manufacturing and agriculture, coupled with land clearing for agriculture, housing, and animal husbandry, as well as deforestation have all had effects that extend well beyond their origins.

Organized international trade before European hegemony can be currently traced back to the Bronze Age (Childe 1957). According to Gordon Childe (1957), centers of urbanization and accumulation can be identified as early as 3000 B.C., and point to the existence of trade linkages between Mesopotamia and Harappa. Through the discovery of supply centers we can examine in detail the flow of raw materials and finished products within regional trading systems. Further studies have confirmed Childe's arguments, as more systematic analysis has outlined an established structure of production, trade relations, and exchanges occurring well before the onset of European hegemony (Kohl 1978; Allen 1992). By identifying core centers of accumulation in China, South Asia, and the city-states of Southeast Asia we can begin to identify the presence of a regional trading system. In fact, data exists in support of a much larger system if we examine the work of historians and archaeologists. For example, we find evidence of the importation of wood from India to Mesopotamia as early as 2000 B.C. (Tibbetts 1956).

Trade, migrations, and conquests have historically tied regions economically (Frank and Gills 1996). The economic connections that existed during Chinese hegemony, for example, point to a global system in operation before the rise of the Ming and Qing dynasties (A.D. 1400 – A.D. 1800). Historical evidence exists that points to the existence of economic connections as far back as eight thousand years (Frank and Gills 1996). Throughout history the growth and expansion of the world system has relied on the accumulation of capital. Trade, throughout the ancient world and contemporary times, has served as a vehicle in the generation of economic surplus. The importance of surplus capital for further growth is evident in Ming and Qing China (1400 A.D. –1800 A.D.) (Brook 1998). Through utilizing surplus capital from trade with Europe, China was able to expand its economy. Evidence of population growth and increased productivity highlights the importance of trade linkages. Economic connections before the rise of Western Europe provide us with a picture of a world economically interconnected before European hegemony.

The attempt at "total history," according to Charles Tilly (1984), can be laden with difficulties, but is not at all a project we should find surprising. Sociologists have, from the inception of the discipline, made attempts to explain the various dimensions of social life through one encompassing vision. Global historiography as a tool in sociological research becomes important in the attempt to discover a holistic human history. However, an anthropocentric coverage of various regions of the world is not enough (Chew 1997a). Global history is incomplete if we make no reference to our relationship with nature. Clive Pointing (1991) in a *Green History of the World* calls our attention to the linkages that exist between ecosystems and how these interconnections

are impacted by production processes. In his survey of world history Pointing (1991) makes clear that the exploitation of nature as a consequence of the accumulation process has occurred for at least five thousand years. Over the entire historical period of human existence on the planet, chronicled by Pointing (1991), one sees the demands human societies place on the environment. Recently, Sing Chew (2001a) has presented an abbreviated accounting of environmental history through the lens of world systems theory. Earlier, Chew (1997a) called for a "deep greening" of world-systems analysis. According to Bergesen and Parisi the challenge is to "theorize how ecosystemic functioning affects world-system functioning" (1999, p. 47).

The expansionary trajectory of human societies has long been a major concern of world-system research (Wallerstein 1974; Frank 1979; Wolf 1982). Scholars have attempted to identify cycles of contraction and expansion, hegemonic ascent and decline, as well as trends in the global economy (Freeman 1984; Goldstein 1988; Bosworth 1995; Frank 1998; Chew 2001a). Historical analysis has become important in this endeavor and illustrates how concerns over the construction of theory, methodology, and general models, are all part of a discussion of how we as sociologists come to utilize history (Abrams 1982; Tilly 1984; Calhoun 1990). For example, in exploring the work of Fernand Braudel and the French Annales school, we see the importance of historical analysis in exploring "the interdependence among structures" (Tilly 1984, p. 65). Identifying the link between structures, and how structural changes are impacted by global linkages, is important as we identify the presence of global patterns and cycles. In shifting the center of concern in historical thought from the histories of periods to problem-oriented history, we see that Braudel was able to address capitalism and

questions regarding economic shifts. We find that contemporary sociologists, such as Jack Goldstone (1985), Janet Abu-Lughod (1989), and George Modelski (1993) ask similar questions that are informed by historical research. The shortfalls of Braudel's work, as pointed out by Tilly (1984), doesn't outweigh the importance of the methodological message contained in his voluminous work: if we are going to examine large-scale processes, such as industrial growth, we should analyze "its many elements, to take those elements one by one, and to trace their multiple connections" (Tilly 1984, pp. 72-73).

Andre Frank's *Reorient*, indicates the need to combat Eurocentrism through global historiography. World history should represent the experience and development of various groups (Frank and Gills 1996). Through a re-examination of world history we come to understand the links and relations regions and countries have had and continue to have. The incorporation of countries into a Western capitalist world system is a fallacy when history continuously shows the economic and cultural relationships peoples have had since the dawn of human civilization. The approach necessary in this investigation is a horizontal integrative approach that examines regions horizontally through time (Frank 1998). An accurate Eurocentric-free approach would allow us to look deep into history and determine links between past and contemporary economic history.

Frank's horizontal integrative approach attempts to address the biases in historical analysis by suggesting that historical examinations should give coverage to understudied regions. Additionally, the focus on specific regions can be more complete if we give greater attention to specific points in time. By utilizing this approach I will examine an East-Asian relationship that has through history changed and is continuing to change. It

becomes clear when exploring the history of the global economy that Asia has historically been an important entity within the world system. I will utilize an integrative approach to the study of history to construct a historical picture of China's historical position within the regional economy of East Asia. The works of historians, archaeologists, and economists will be an important component of this study, as I make the case that the economic importance of East Asia can be traced back historically. A horizontal integrative approach will be used in this study to examine the relationship between China and its regional neighbors.

Research Questions and Methodology

Specifically, I examine a historical period that covers over 400 years before the onset of the Dark Age (202 B.C. – A.D. 220), around 400 years during the Dark Age (A.D. 220 – A.D. 618), and about 300 years after the Dark Age (A.D. 618 – A.D. 907). By focusing on historical periods this study directs attention to the relationships between human communities in East Asia. I will examine East Asian relationships that have changed through history. This investigation will utilize both primary and secondary sources in order to observe how disruptive periods impact economic and cultural practices in East Asia during a time period that spans over 1000 years (202 B.C. – 907 A.D.). In particular, this study will address several research questions that can be informed by a historical analysis of regional relationships in East Asia.

This study seeks to examine the interconnections that exist between economic organization, cultural practices, and the natural environments human beings inhabit. In order to understand the connections between economy, nature, and culture, I ask specific

research questions and subquestions that can largely be addressed through historical analysis. The specific questions guiding my investigation are as follows:

What economic and cultural interconnections were present prior to, during, and after the Dark Age period in East Asia?

An important component of this study is to examine the interconnections present between human communities in East Asia during the proposed historical period (202 B.C. – A.D. 907). This question not only directly addresses debates in the field of world system theory in regard to the history of economic exchanges outside of the European trading world, but also introduces culture as an important component of intra-regional relationships.

During the period under investigation can we identify a core-periphery hierarchy in East Asia? Do we see the presence of economic and cultural centers? Do these centers change overtime?

Drawing from earlier historical research by Abu-Lughod (1989), Chase-Dunn (1989), Frank (1998), and Chew (2001a), one notes the interlinking between economic centers and marginal or peripheral regions. This study seeks to identify economic as well as cultural centers in order to illustrate the presence of a center-periphery structure in East Asia. By introducing culture as a dimension of core/periphery relations this study argues that the structural position of human communities, city-states, or civilizations, in relation to one another, can also be understood as the interplay between economy, nature, and culture. Over the historical period of investigation, it is the contention of the author that center/periphery relations come to change as human communities are presented with new environmental realities. In this regard a related question is:

What impact did economic and cultural activities in East Asia have on the natural environment? Do we see evidence of environmental degradation?

Historically we find that societal systems have been dependent on nature for growth, reproduction, and consumption (see Perlin 1991; Pointing 1991; Chew 2001a). In the same manner that we can address economic growth or capital accumulation as being linked to the degradative practices of human communities, this research calls to attention the role culture plays in ecological relations. Environmental degradation has historically not only been the outcome of economic priorities, but also cultural lifestyles.

Were trade and cultural interconnections and practices in East Asia at any time during the period under investigation disrupted or altered? Were these disruptions linked to environmental degradation? Do disruptions lead to the adoption of new economic and cultural practices? If so, does a period of environmental renewal lead to the re-establishment of pre-existing economic and cultural practices and linkages?

The argument posed in this study is that during periods of excessive environmental degradation ecological crises can come to alter or disrupt existing economic and cultural practices and connections. Previous research has highlighted that intensive resource-utilization is an important component in the economic development and growth of cities, civilizations, and empires (see Perlin 1991; Pointing 1991). However, as previously noted, within the world system literature the relationship between economic growth and decline, and environment has received minimal attention. This study argues that the interplay between economy and nature can be demonstrated by a historical exploration of periods of expansion and decline in the trading world of East

Asia. During economic phases of expansion one observes an intense extraction of resources and consumption. The argument is made that "pulsations" of economic growth and stagnation can be linked to the extraction of natural resources (Chew 2001a, p. 9). One can further add that these same phases can be connected to the cultural practices of human communities. This study argues that following a long period of environmental degradation, caused by a prior phase of economic expansion, a period of environmental restoration follows. From an anthropocentric view this phase of environmental renewal is considered a disaster, since it brings socio-economic growth to a stop as a result of excessive environmental extraction. This period of environmental renewal can lead to an economic and cultural re-organization within a regional system. This can then provide the opportunity for the creation of new center/periphery relations and the emergence of new cultural practices. Once the period of environmental disruption is over, it then becomes of interest to see whether economic and cultural patterns and practices prior to the disruption resurface.

The questions listed above will be investigated through the use of both primary and secondary sources. Primary sources include accounts given directly by people during this time period. These accounts can be found in the form of journals, manuscripts, literature, ship manifests, and annals. As indicated by the historical record that survives, economic and cultural exchanges between communities in China, Japan, and the Korean peninsula during our period of investigation were well established, and suggest a network of exchange much older in history than the time I give coverage to (Tibbetts 1956; Wang 1958; Lamberg-Karlovsky and Sabloff 1975; Hall 1985). This exchange network involved trade in a number of products that included luxury items such as silk, ceramics,

and tea (Tibbetts 1956). For example, in preliminary research examining the ceramics trade I observe a vibrant trading network where not only pottery was exchanged, but cultural practices such as burial rituals were also transmitted (Miller 1969).

Along with historical interpretations, archaeological assessments can inform the presence of trade and cultural exchanges between groups (see Laufer 1962; Paine and Soper 1975; Silver 1985; Kohl 1989; Woolf 1990; Sherratt and Sherratt 1991; Kristiansen 1998). Archeological evidence is of value to this study, and clearly contributes to analyses of world-systems history. For example, utilizing the archeological record Higham (1996) has documented the trading world of Asia as early as the fifth millenium B.C. Archeological research points to the economic and cultural interconnections within the region as indicated, for instance, by the discovery of Chinese ceramics dated to the period before the Later Han or Eastern Han dynasty (25 A.D. – 202 A.D.) in both the Korean peninsula and Japan (Paine and Soper 1975; Laufer 1962). It is my intent to use historical and archeological accounts to establish a picture of regional exchanges between human communities in East Asia. For example, tomb site excavations by archaeologists point out that mortuary pottery in China, Japan, and Korea was, during the pre-Dark Age period, more similar than different. Japanese and Korean pottery found in burial sites resembled the tou type vessels found in Chinese tombs (Laufer 1962). As early as 1200 B.C. we see that similar style pottery is present throughout burial sites in East Asia. In looking at the similarities in the pottery styles, and the common furnishing of tombs throughout East Asia, one can surmise that trade and cultural exchanges were well established.

I also find that documents written during the period under investigation informs this examination of trade and cultural practices. Daily records, court documents, and journals, used by historians, further confirm the interconnections between peoples in East Asia (Teggart 1939; Hodgson 1974; McNeill 1983; Beckwith 1987; Chaudhuri 1990). For example, in a chapter in the *Annals of the Later Han Dynasty* a detailed description is given of the various wares traded and placed in graves (Laufer 1962). Of interest here is that the same economic and cultural exchanges described in the *Annals of the Later Han Dynasty* are supported by archaeological excavations (Laufer 1962). By carefully mapping out economic and cultural exchanges prior to the Dark Age period, I position myself to uncover any changes in the regional relationships within East Asia after the seventh century A.D.

For the sake of specificity, in the following sections I present, in great detail, the historical documents employed in the research. Additionally, it is my intent to identify an exhaustive list of sources in order to encourage the development of future studies that give attention to ancient East Asia. I first discuss Chinese historiography, and then turn attention to Korean and Japanese historiographical research. Noting the importance of literature during the period under study, especially as recognized by Sinologists, I conclude by making some observations about the use of novels and poems in historical studies.

Chinese Historiography from the Han to the Tang Dynasty (202 B.C. – A.D. 907)

Historical accounts of China can be found in a number of annals that have been compiled by Chinese historians and court scribes as early as the Former Han dynasty in

the 2nd Century B.C (Dubs 1955; see Wilkinson 2000). The first universal history of China was the *Shiji* or *Shih Chi, Records of the Grand Scribe*, written by Sima Tan (d. ca. 110 B.C.) and his son Sima Qian (145-86 B.C.), who were both court astrologers (*taishi*) during the Former Han dynasty. During the period the office of court astrologer was very important. Court astrologers were responsible for the interpretation and prediction of the course of government. Beyond their evaluations of actions taken by Han rulers, and consul of the ruling elite, they were also charged with the duty of predicting sun eclipses, earthquakes, and drought by observing the heavens for patterns in the stars. These early astrologers were also China's earliest historians who like court scribes after them took great care in reporting events they observed, compiling the biographies of rulers, collecting diplomatic letters and personal memoirs, and recording their observations. According to Beasley and Pulleybank (1961, p. 3), the "first chronicles [or histories were developed] out of the records of diviners and ritualists." It is then of no surprise that contained within various annals are mention of not only the political and economic life of the time, but references and description of various cultural and ritual practices.

Comparing earlier texts such as the *Spring and Autumn Annals*, which cover the period from 770 B.C.-450 B.C., to later historical works, such as the *Shiji* and *Hanshu*, is not only as a matter of geographical coverage, but the scope, rich content, and organization, set the dynastic histories apart from prior written accounts (see Gu and Zhao 1938; Gu 1974; Watson 1974; Qian 1993). The *Shiji* would come to influence subsequent historical texts, as works, such as the *Hanshu*, that would later be written, adopted a similar form. In regards to organization, Watson (1974, p. 2) observes that the *Shiji* is divided into five sections:

> *Chi* or annals, devoted to the ruling dynasties of antiquity or, in the case of the Han, to the lives of individual rulers; piao or chronological tables; shu or treatises, historical essays on subjects of special importance such as religion, economics, ritual, etc.; shih-chia or 'hereditary houses,' accounts of important feudal states or families; and lieh-chuan, biographies of eminent statesmen, generals, philosophers, literary figures, or men who for some other reason seemed to the historian to merit a place in the history of the period. The work ends with an account of the historian himself and his aims, and a table of contents containing brief summaries of each chapter.

The recording of China's past has been facilitated by the biographies, chronicles, and memoirs that survive of not only elite members of Chinese society, but subjects who held various social positions and roles in China's deep past. These are not only contained in the various annals of China's Imperial Age but can also be found as part of the *Ershiwu Shi* or the *25 Chinese Dynastic Histories*. The *25 Dynastic Histories* prove to be an excellent source of historical data as they provide first hand accounts, written by the people of respective dynastic periods. Cataloging and translating these dynastic histories into English has been a multi-disciplinary undertaking that has led to the creation of catalogues that list the various translations of the *Dynastic Histories* (see Frankel 1957).

The works that comprise the *Dynastic Histories* that cover the period under examination are vast. Of the *25 Dynastic Histories* 17 give coverage to the historical period examined in this study (see appendix 1). It is important to note that contained within these *Dynastic Histories* are lesser works that include the biographies of individuals, court records, geographies, economic histories, travel itineraries, and books on customs and rituals. The official *Dynastic Histories* alone provides researchers with thousands of pages of texts that give significant coverage to the economic, cultural, political, and social life of the times. In addition, the space devoted to the subject of rituals in the *Dynastic* or *Standard Histories* is vast, and appears in the majority of texts

dedicated to each of the dynasties of China's Imperial Age. In fact, at least 18 of the 25 *Dynastic Histories* contains a chapter devoted to ritual and half of the two hundred chapters in the Tang Encyclopedia entitled *T'ung-tien* or *Comprehensive Institutions* devotes attention to the subject.

The translations of the *Dynastic Histories* allow for an in-depth examination of economic and ritual practices as described in first hand-accounts. Along with the translation of various biographies and documents, one also finds that various excerpts from the *Dynastic Histories* appear in the works of Western historians (see Frankel 1957). Corroborating observations through the use of Chinese official historiography has proved invaluable to further compiling historical examinations that accurately reflect the times they give coverage to (Bielenstein 1980).

A unique aspect of the *Chinese Dynastic Histories* is their continuity as they give coverage to one successive dynasty after another. The beginnings of China's historical and literary tradition can be traced back to the Former Han period in the 2nd Century B.C. (Beasley and Pulleybank 1961). However, further back in history archeologists observe a writing system in existence well before the emergence of the Han dynasty in 202 B.C (Hucker 1978). These early writing are traced to the Zhou dynasty which emerged in 1122 B.C. after the Shang civilization. Already in the pre-imperial period (2000 B.C.) "the practice of quoting historical precedents as a means of persuasion in philosophical discussions [had already emerged] and this no doubt gave an impetus to the collection of anecdotes associated with historical personages and events" (Beasley and Pulleybank 1961, pp. 3-4).

The Chinese, like the Greeks and Romans, did write accounts of foreign lands throughout the Imperial Age. These accounts survive within the *Dynastic Histories* in books such as the *Hanshu* and *The Great Tang Dynasty: Record of the Western Regions*. Moreover, beyond descriptions of regional neighbors within biographies, annals, and official Chinese histories, are references to regions westward. For example, there is a well-cited passage in the *Hanshu* that historians argue provides evidence of early maritime exchanges between China and India. Within the *Hanshu* mention is made of a mission sent by Han Wu Ti (141-87 B.C.) to open trade with points further west. As part of the early historical record of China, I also find an early economic history. In what comprises *Hanshu 24* one reads essays describing the economic life of the early imperial period. Specifically, the discourse stretches from the pre-Han period up until the end of the Han dynasty.

The abundance of historical writings prior to the post-Dark Age period is made clear in "a seventh century Chinese catalogue of…817 historical works (Lu 1994, p. 1; see also Wei et al. 1973). Cataloguing early works, Chinese historians classified and organized these histories into thirteen categories that include: "(1) 67 official histories (*cheng-shih*); (2) 34 ancient histories (*ku-shih*); (3) 72 miscellaneous histories (*tsa-shih*); (4) 27 histories of hegemonies (*pa-shih*); (5) 44 daily records of emperors' activities (*ch'i-chu chu*); (6) 25 records of past events; (7) 27 books on official titles and government offices (*chiu-shih p'ien*); (8) 59 books on ritual (*i-chu p'ien*); (9) 35 books on laws and penalties (*hsing-fa p'ien*); (10) 217 miscellaneous biographies (*tsa-chuan*); (11) 139 geographies (*ti-li-chih chi*); (12) 41 geneologies (*tieh-his p'ien*); and (13) 30 bibliographies (*pu-lu p'ien*)" (Lu 1994, p. 1). As part of the broader collection that are

the *Chinese Dynastic Histories*, these works speak to the wealth of historical data available to studies that give coverage to China's imperial period. Despite questions one may have in regards to the classifications or organization given to these works by early Chinese historians, the catalogue reminds us of the extent and intricacy of Chinese historiography.

The scope of Chinese historical texts extend well beyond an accounting of people, events, and places in China, by giving coverage to the peoples of the Korean peninsula and the Japanese islands. Within individual dynastic histories, as far back as the early Han dynasty, an accounting of Japan and Korea is presented. This study draws from these accounts and presents a number of descriptive excerpts from Chinese official history. The continuity of historical texts that stretch from ancient to contemporary Chinese times provides a wealth of information that allows for research that seeks to analyze history to uncover trends. Through employing the first hand accounts presented in the *Dynastic Histories* this study demonstrates the value of Chinese historiography for analyses of both regional and global history.

Korean and Japanese Historiography

Early Korean and Japanese historiography is directly influenced and modeled after the Chinese historiographical tradition that emerges during the former Han dynasty (206 B.C.-A.D. 24). The Sino-oriented training of Korean and Japanese scholars surfaces in the compilation and writing of the first historical texts in Korea and Japan. Along with sharing a similar format or organizational style, the Chinese influence on early Korean and Japanese historical texts is clearly seen in the presence of Chinese characters within

these works. The Chinese writing system was adopted on both the Korean peninsula and Japanese islands, and provided Korean and Japanese scholars with the ability to record their history for the first time. For example, in a manner that resembles the first Chinese official history, the *Samguk Sagi*, which gives coverage to the period from 57 B.C.- A.D. 935, mirrors the writing traditions employed by early Chinese historians whose work influenced how standard histories were compiled in East Asia (see Kim and Yi 1977). Specifically, the *Samguk Sagi* can be said to be significantly influenced by the work of China's Ssu-ma Ch'ien in the *Shiji* or *Records of the Grand Scribe*. The influence of early Chinese historians comes clearly across in the partition of the *Samguk Sagi* into annals of specific kingdoms, biographies, monographs, and tables. In addition, the title of the history itself is simply a Korean translation of China's *Shiji*. Collectively, the document includes fifty volumes dedicated to the history of Korea; twenty-eight are devoted to accounts linked to the Kingdoms of Koguryo, Paekche, and Silla, three volumes to informational tables, ten volumes to the life of important figures, and nine volumes to monographs that cover subjects such as rituals, the arts, . religion, and the environment. Although the Chinese influence is apparent in the document, its subject matter is distinctly Korean.

It's critical to note that as the only available history written by Koreans of the Three Kingdoms period (57 B.C.- A. D. 668), the *Samguk Sagi* is an important document for the study of ancient Korea and East Asia (Jamieson 1969). However, until recently only partial English translations of the *Samguk Sagi* existed, and the incorporation of this work into this study will largely be dependent on the observations of secondary sources.

Nonetheless mention of the *Samguk Sagi* is important to this study since in the foreseeable future its complete translation will further shed light on historical studies of the region. Given the fact that it is the only extant historical work on the early Korean kingdoms it is a significant document.

In examining the origins of both Korean and Japanese literature one notes that it is inextricably connected to China. Determining the boundaries and history of Korean and Japanese literature is an exercise in discovering the history of cultural interconnections between the peoples of China, Korea, and Japan. Historically, scholars note that this interconnection influenced the development of writing systems in both Korea and Japan (Ebersole 1989; Kim 1996). In fact, what makes this cultural history important "is the historical fact that *hanmun*--literally [tranlates into] 'letters of Han,' that is, Chinese characters-was the written language of practically all literate Koreans from about the beginning of Korea's recorded history to the end of the nineteenth century. For this reason most of the written literature in Korea from the earliest times through the nineteenth century was written in *hanmun* even though *hangul*, the Korean alphabet, had been available since the mid-1400s" (Kim 1996, p. 3). Historians generally agree that by the 3rd century A.D. the use of Chinese characters was widespread throughout the Korean peninsula.

Like, their Korean counterparts Japanese historians would write their first native histories in classical Chinese and draw from the Chinese *Dynastic Histories* in organizing Japan's historical texts. The oldest historical works existing in Japan are the *Kojiki* or *Records of Ancient Matters* (A. D. 712), the *Nihon Shoki* (A.D. 720), and the *Man'yoshu* or *Ten Thousand Leaves* (ca. late eight century A.D.). Collectively, as the earliest written

texts, these works give coverage to a historical period that spans over a thousand years of Japanese history from 660 B.C.- A.D. 770. The *Kojiki* is a three volume set with the first volume dedicated to Japanese mythology, the second to the dynasties of emperors Jinmu through Oujin (660 B.C.- A.D. 395), and the third marks the reigns of emperors Nintoku through Suiko (395 A.D.- A.D. 628) (Philippi 1969; Chamberlain 1973). The books were arranged by Hieda no Are and Oo no Yasumaro in 712 A.D. for the emperor Tenmu. Eight years later, in 720, Oo no Yasumaro and Toneri Shinnou finished a thirty volume work called *Nihon Shoki*. In addition to providing a chronology of Japanese emperors, the *Nihon Shoki* exclusively gives coverage to the period preceding 686 A.D. The *Man'yoshu*, which can be dated to the eight century A.D., continues the work of the earlier histories by providing a historical accounting of later periods through poetry (see Honda 1967). As a whole, due to their "temporal proximity," these three texts are meant to be read as a group and not in isolation from one another (Ebersole 1989, p. 10). They are part of a collective historiographic project that gives attention to myths, rituals, economy, literature, art, politics, and the social arrangements of ancient Japan (Perez 1998). All three texts, and in particular the *Man'yoshu*, dedicate significant space to the presentation of poetic works. The Man'yoshu is not only recognized for its presentation of history, but is considered a model of Japanese poetry and specifically contains over four thousand poems written by the entire spectrum of Japanese society from emperors to peasants.

The Fictional Narrative and Historiocity

In addition to the historical documents compiled by Chinese historians one can corroborate historical observations through the descriptions provided by the poetry and literature of the time. While poetry and literature is not presented in this research as a comprehensive record of history, it does contain a wealth of data social scientists, including sociologists, can mine to corroborate observations and conclusions made by historians, archeologists, anthropologists, and those provided by first-hand accounts. The descriptions contained in novels and poems present not only the world according to their authors, but it also presents us with the ideals, valuations, and goals of the time (Yeueh 1988). Historically, poems and novels present reflections of society as it was (Yeueh 1988). They provide valuable descriptions of daily life, but also a historical period's attitudes and philosophies. Fiction does provide valuable information since it is impacted by the social context of its era (Yeueh 1988). In this regard fiction can reveal a picture of an era, and provide attention to elements of life that perhaps are incomplete in official recorded histories. Fiction can supplement the work of Chinese historians as it lies outside the influence of Chinese rulers. Indeed many of the historical periods given coverage to in this study allowed for free expression of thought. Taking into account the social interpretations of novelists and poets can facilitate historical examinations.

Sinologists argue that writers and poets turned to history to ground their observations of their times (Yeueh 1988; Lu 1994). Frequently one finds contained within the literature of the dynastic period references to historical figures, events, kingdoms, and dynasties. History in the *Dynastic Histories* is at times presented through prose. For example, in the *Shjii* or *Records of the Grand Scribe*, several poems are

presented as descriptions of the times (see Qian 1961; Ch'ien 1994, 2002). In addition, commentary in regard to a number of affairs, that include politics and economics, survive in the *Shiji*. It was not uncommon to have members of the Chinese court cite historical events, stories, figures, and periods when advising Emperors or officials on political and economic matters.

In Chinese literature one observes that historical facts are at times intertwined and infused with fiction (Hsun 1973; Dewoskin 1977; Han 1991). Recognizing the introduction of history into fiction, it becomes important to note that Chinese historians have in their organization of ancient Chinese texts taken great pains to distinguish between factual and fictional accounts. Unlike the Greeks, who according to Fordsyke (1956, p.160), "rejected fiction in principle but in practice accepted much fiction as historical fact," Chinese historians early in their writing, collection, and organization of texts actively sought to make distinctions between historical and fictional narratives (see Plaks 1977). However, fictional narratives are valuable as they provide glimpses of the social periods that produce them (Plaks 1977; Yeueh 1988). For example, in examining the contents of the poems in the Japanese *Man'yoshu*, beyond topics of love and legends, one finds poems that make observations and provide descriptions about everyday life, nature, historical sites, rituals, and travels. While it is important to recognize that fiction is not history, if we consider the social context in which a work comes into existence we may well, as Sinologists argue, find some truth in what many would consider to be made up or imagined (Dewoskin 1977).

Although the principal purpose of this study is not to produce a bibliography of primary and secondary sources of East Asian history, it is a welcome outcome that an

extensive list of works has been generated that can inform this and other historical studies. However, it should be noted, that many other sources covering periods not examined here could be added to provide an even more comprehensive collection of East Asian historical references. Despite the wealth of information available, studies employing East Asian historical texts are few, and more scholarship would benefit from their use.

Summary

The historicity of ancient human communities in East Asia is facilitated by the artifacts, epigraphic sources, and excavated texts that leave behind a rich and diverse accounting of civilizations, kingdoms, and dynastic periods in the region. Studies of the Near East and Europe reveal that, from time immemorial, human communities have participated in elaborate systems of exchange. Previous examinations of world-system history make explicit the importance of archaeological data and historical texts to analyses of ancient societies. The macrohistorical sociologist has at his or her disposal the accumulated store of historical knowledge. This study draws from the archeological record and textual sources to build a picture of the past during three periods. Having outlined the research questions, the methodological approach, and sources employed, I now, in the chapters that follow, proceed to examine East Asian relations prior to, during, and after the Dark Age.

CHAPTER IV

HISTORICAL CONTACTS BETWEEN THE PEOPLES OF CHINA, JAPAN, AND KOREA: THE PRE-DARK AGE PERIOD (202 B.C. – A.D. 220)

The archaeological record reveals the presence of human communities from the Korean peninsula throughout Manchuria, the Gulf of Bohai in East Asia, the Yangtze river, and the islands of Japan as early as the Paleolithic period in 3000 B.C. (Imamura 1996). Beyond evidence of the dispersal of human communities across East Asia, there is evidence to substantiate the claim that contacts between these communities predate the Dark Age (Tibbetts 1956; Colless 1969). In particular, one can surmise that due to geographic proximity the peoples of present-day China and Korea have an early history of economic and cultural exchanges. In fact, historians, argue that around 1200 B.C. in Northwest Korea a state was founded under Chinese rule. During China's Shang dynasty, Chinese settled at Lolang near modern day Pyongyang. Early in the prehistory of East Asia, one observes contacts between Yemaek, Mongol, Manchu, Han, and other northern tribes in the Korean Peninsula (De Bary and Lee 1997). In addition Chinese records indicate the habitation of local tribes such as the Puyo, the Okcho, the Yemaek and the I-Lou in Korea (De Bary and Lee 1997). The Chinese presence was further solidified on the Korean peninsula in 109 B.C. with an invasion that established four commandeered centers of Chinese administration at Nangnang (McCune 1956). These centers of Chinese political administration and power endured through the pre-

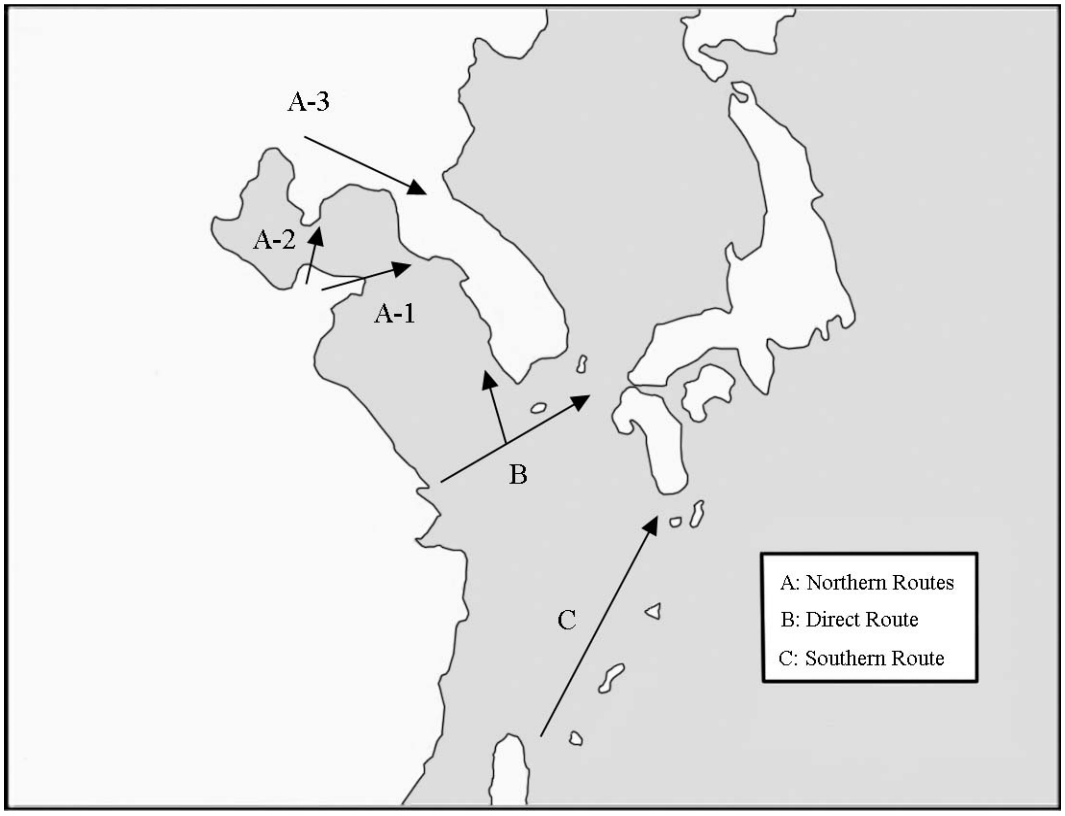
Dark Age period, and helped bring about the consolidation of many local tribes. For example, to the West of the border between China and Korea where the Yalu River rests a group part of the Puyo tribe united to form the Korean kingdom of Koguryo in the first century A.D. (MacDonald 1996).

Economic and cultural contacts, along with invasions and tribal warfare characterize the types of historical encounters among peoples in present-day Korea and the Chinese mainland. East Asia's prehistory indicates to scholars that early human communities did trade with one another and were well aware of the presence of other human settlements (Imamura 1996). The dispersal of tribes originating in the Chinese mainland is indicative of this movement, and has led many historians to argue that the Yemaek and Han tribes recorded in early China are the descendents of peoples on the Korean peninsula (De Bary and Lee 1997).

In tracing the development of the Bronze culture in East Asia archeologists again note the interconnections between human settlements throughout the region. The archeological record, along with historical documents, indicates that trade routes were an important component contributing to the influence of China. In archeological research of the region, five major trade routes have been identified prior to the pre-Dark Age period: (1) the north route from Siberia; (2) the Korean route via its peninsula and across the Tsushima or Korean Strait; (3) the Jiangsu and Zhejiang route across the East China Sea to Kyushu; (4) the Taiwan and Fujian route via Ryukyu Islands to Kyushu; (5) and the south sea route from the South Pacific via South China Sea islands to Manchuria (Tongko 1971; Matsumura 1991; Takakura 1991; Imamura 1996). These major trade routes physically illustrate the ability of human communities early in East Asian pre-history to

engage in cultural and economic exchanges (see figure 2). Furthermore, the presence of minor routes, or subroutes, through the Korean peninsula also further provided the linkages that connected the Asian mainland to the Japanese islands (Imamura 1996). The traffic of people and goods through the use of major trade routes, and subroutes, indicates that the majority of economic and cultural exchanges between human communities in present-day China, Korea, and Japan were via the Korean peninsula.

Figure 2: East Asian Routes in the Fifth Century B.C.



Historical documents, along with evidence from archeological sites, provide significant evidence of the ability of ancient peoples prior to the pre-Dark Age period to

transport themselves and goods to and from the Japanese islands. Specifically, archeological research, and readings of historical texts, reveals the usage of canoes in the ancient lower Yangtze basin and Japan (Huadong 1987). The argument is made by archeologists that by the Eastern Zhou period (770 B.C.-256 B.C) shipbuilding becomes sophisticated enough, and major improvements to vessel construction and design were evident, that contact between human communities via sea routes was possible (Huadong 1987). In analyzing the ability of ancient peoples to travel from the Chinese mainland to the Japanese islands one can note successful attempts, in recent history, to cross the Sea of Japan by raft, canoe, or simple wooden boats (Zhimin 1990). One such sailing trip took only twenty hours from Shanghai to Tangjin city in Japan, confirming that sea currents could have also aided the voyage of ancient peoples (Haoyi 1984). Sea currents can propel boats from the East China Sea to Japan. According to analysts, the Tsushima current which flows through the Taiwanese Strait, past the Ryukyu Islands, and across the Korean Strait, is known to have been employed by ancient peoples (Zhimin 1990). Chinese annals suggest that this was also the major route for trade and exchanging ambassadors (Tsunoda 1951). Adding to the evidence of ancient voyages are references to Japan in ancient Chinese texts and documents since the Qin dynasty. The terms, such as *Penglai*, *Fangzhang* and *Yingzhou*, employed to characterize Japan in Chinese writings, coupled with the legendary story of Xu Fu crossing the sea, can be argued to have some historical truth or foundation (Zhimin 1990). The archaeological record is yielding additional evidence of a long history of trade and cultural exchanges via the sea (Zhimin 1990). In a very telling remark about the possibility of seafaring, Confucius said, “if my way of thinking is unacceptable to people in China, I will sail across the sea”

(cited in Zhimin 1990, p. 383). Confucius may have not seen the shores of Japan, but countless others did, and signal the strong connection between peoples in this region of the world.

Although different explanations have surfaced regarding the flow of goods and people in East Asia, from an archeological perspective the South China Sea was a major route for cultural and economic exchanges (Zhimin 1990). This interaction is observed in the similarities exhibited in *jue* (jade jewelry) and lacquerware, agricultural cultivation, construction, and crops along the East China Sea route (Zhimin 1990). The cultural and economic linkages between China and Japan become evident in the presence of *ge*-shaped large earthenware pots, *yinwen* pottery, circularly-arranged tribal houses and mound-shaped graves in Japan (Zhimin 1990). Scholars note the similarity between items found in Japan and those in the lower Yangtze basin.

Further back in history to the New Stone Age, some 7,000 years ago, excavation at the Hemudu site in eastern China revealed the presence of wooden oars and clay boat models (Zhimin 1984). During the same period, similar sites in the Zhoushan Islands off the coast of Zhejiang Province also reveal the ability of ancient communities to travel via waterways (Senchuan 1983). One can infer from these sites the existence of seafaring well before the pre-Dark Age period. In addition, existing documents do confirm voyages between China and Japan in the Han-Wei period (A.D. 200) (Tongko 1971). Arguments have been made that connections between China and Japan existed as early as the Bronze Age, and may have begun as early as 7,000 years ago (Meiyuan 1971). According to Tongko (1984. pp. 439-440) analysts "believe Chinese and Japanese ties began much earlier than the Han-Wei period suggested previously." The archeological

record also suggests that developments in agriculture, particularly rice cultivation, were diffused into Japan by sea-route (Tongko 1982). The route from the lower Yangtze basin via the East China Sea to Korea and Japan, was the preferred course of travel in the Late Shengwen period, during the tenth century B.C., and became more popular during the Yayoi period in the fifth century A.D. (Zhimin 1984). Agricultural exchanges were not solely confined to seed or crops, but archeologists argue that the origins of the Japanese stone ax, ploughshares, hoes, and crescent-shaped harvesting knives can be traced to the Yangtze basin (Zhimin 1988).

Exchanges in early communities also extended to knowledge about construction techniques. In the Shengwen and Misheng periods balustrade-style construction was common in the Yangtze basin and Japan (Zhimin 1990). Balustrade-style construction is an ancient style of construction that has historically been popular in the lower Yangtze basin. To this date one can still see the influence of this style of construction in the Chinese southern province of Yunnan (Zhimin 1990). By the Han-Wei period, this type of construction had disappeared on the lower Yangtze River. This indicates that exchanges between Japan and China were well underway before the Han-Wei period (Zhimin 1984).

Archaeological evidence suggests that interactions between human communities in East Asia continued and intensified throughout the Bronze Age, and into the Iron Age. The Korean Peninsula was ushered into the Iron Age around the 3rd Century B.C. The emergence of the Iron Age culture was linked with the use and distribution of knife-shaped currency by one of the seven Chinese warring states, Yeon or Yon (323 B.C.-222 B.C.) (Hucker 1978). According to analysts, around the 1st century B.C. Iron culture

became a permanent fixture and was prevalent (Yoon 1984, 1986, 1989; De Bary and Lee 1997). As East Asia was ushered into the Iron Age via China, it is not surprising to discover that Chinese iron objects were sought out and came to dominate. However, soon the skills to produce iron objects was transmitted into the Korean Peninsula, and objects distinctly Korean were manufactured. The importation of Chinese Iron technology facilitated this local production, and was supported by the widespread use of iron tools. Societal change on the Chinese mainland and Korean peninsula was also fueled by the introduction of iron. The transition into Iron culture accelerated the process of social stratification, as possession of new iron tools and weapons initially heightened the position of groups within the society (De Bary and Lee 1997).

The transition into Iron culture didn't mark an abandonment on the use of Bronze objects. In fact, Bronze objects were in use, but became more symbolic, ritualistic and nonfunctional (Yoon 1989). According to archeologists, early Iron Age culture in East Asia included pit-houses, wooden-coffin tombs, and jar-coffins (Yoon and Kyung-Hwan 1982; Yoon 1984, 1986, 1989). Although distinctions are made in regards to the introduction of stone, bronze, and iron objects, it's important to note that the introduction of new technology doesn't completely make old tools obsolete or previously produced goods undesirable. For example, bronze objects continued to be produced, in particular plain-course pottery ware, along side stone tools, while iron was being introduced. During the early Iron Age, Bronze Age objects were still in use, but there were changes in the shapes and design of objects. For example, black burnished pottery with clay stripes, and pottery with feet emerged during this period, and can be distinguished from earlier Bronze Age pieces (Yoon 1984). Evidence from archeological sites, reveals that

goods were being exchanged as a result of travel to regions previously thought improbable. Artifacts found on the Korean peninsula and Japanese islands include both imports and local products. The possibilities presented are that any particular artifact may have been imported from outside, made locally from imported raw and finished materials, or made locally from immediate resources. In regard to the use of iron, during the time period, it appears more feasible to import wrought iron from China for several reasons: first, the large iron industry of China was positioned to turn out less expensive raw material; second, Chinese iron, considering its widespread use, was, one can infer, better; third, Chinese raw material was accessible (Wagner 1987, 1993, 2001). Local blacksmiths would have been better able to fulfil local requests for specific objects, but otherwise weapons and tools produced by Chinese blacksmiths were imported across the region (Wagner 1987, 1993, 2001).

Early iron use in China can be traced back to the Shang period (1766 B.C.-1122 B.C.). Specifically meteoritic iron was utilized, and was occasionally used later periods (Gettens, Clarke, and Chase 1971; Li 1976; Yuan and Zhang 1977; Hua 1982). The diffusion of iron throughout East Asia can be tied to the smelting of ore in China's southern provinces. In this regard, Huang Zhanyue (1976) provides evidence, along with persuasive arguments, that the smelting of iron in China began in the south. Wagner (1993) reviews Huang Zhanyue's evidence and, coupled with other archeological data, has suggested that the first use of iron in China was specifically located in the southern state of Wu in southern Jiangsu, and parts of surrounding provinces. According to Wagner (1993), iron artifacts can be dated to as early as the fifth century B.C., and

specific pieces that have not been dated may yet prove that the use of iron can be traced to earlier periods (also see Zou 1984).

Considerable debate exists with regards to the dating of iron use on the Korean peninsula (Wagner 1993). The dates that have been offered encompass the eighth to the third century B.C. (Taylor 1989). Assessments of the archeological evidence from Chinese, South Korean, and North Korean scholars differ. However, this lack of consensus has no implications for this study. For the purposes of this project it suffices to say that well before the pre-Dark Age cultural exchanges were well underway. Conservative estimates place the emergence of Iron culture by the 4th century B.C. According to Yu-ho Tho (1960), Chinese influences on the Korean Iron culture were notably strong, especially in the area around the Tuman River Basin. Corroborating this evidence, Wagner (1993) argues that iron technology spread from the Wu settlements to the state of Chu, centered in contemporary Hubei province. The earliest reliably dated iron artifacts in China are from the early third century B.C. (Jingzhou Regional Museum 1984; Wagner 1987).

In China and the Korean peninsula iron was widespread by the early Han period. Across the Chinese mainland, during the pre-dark age, iron was the preferred metal (Wagner 1993). Archeological evidence dated to this period, such as a mass grave of soldiers found in Hebei province, attest to the extensive use of iron in the production of a variety of implements (Liu 1975; Li 1975, 1976). At the Yan site, soldiers were buried with their weapons, and consequently leave us with a sample of weapons of the time (Trousdale 1977; Wagner 1993). Almost all of the weapons found at the site are made of iron (Wagner 1993). Military weapons and implements were made of steel, but some

implements are bronze. Wagner (1993) reports, uncovering nineteen crossbow-bolts with iron shafts and bronze tips, and fifty-one edged weapons of iron, compared to only three made of bronze. The latter are identified as symbolic objects that can easily be considered symbols of rank, and not intended for use in serious fighting (Wagner 1993). Despite the popularity of iron, one finds that bronze objects throughout East Asia continued to be used during the period as important symbolic items.

The process of identifying and mapping out economic and cultural exchanges between human communities in East Asia, well before the 3rd century B.C., is also facilitated by the mass graves discovered in Hebei province (Liu 1975). Tomb sites in Eastern China reveal important evidence concerning the production and use of iron in China, but they also further lend evidence to the argument that iron was introduced to Korea via China. There is a long history of exchanges between the Chinese state of Yen and peoples on the Korean peninsula as early as the 6th Century B.C. (Hucker 1978; Wagner 1993). In fact, the geographic proximity of the state of Yan would make it Korea's immediate connection to China. Not surprisingly, in the state of Yan archeologists have found Iron Age techniques known in other parts of China (Wagner 1993). Scholars argue that Chinese technological influence on the Korean peninsula was dominant, and this is reflected in the importation of iron technology, and imported pieces from China (Wagner 1993). Iron artifacts excavated in South Korea indicate the presence of Chinese wrought iron, steel, and cast iron from the third century B.C. to the third century A.D. (Yoon 1984). The availability of cheap iron from China, in the early Han period (202 B.C.-A.D. 9), and possibly earlier, had a specific effect on the Korean

peninsula. The imported technology came to shape local iron production, and the types of goods that were produced bore a strong similarity to Chinese items.

Chinese involvement on the Korean peninsula from the Zhou to the early Han dynastic period (1122 B.C.-A.D. 9) undoubtedly came to affect the political, cultural, and economic life of its inhabitants. China's influence was intensified as successive Chinese kingdoms emerged and sought to expand their political control. During the early Han dynasty four commandeering centers were established within the present-day geographical territory of Chosun or Korea. Of these commandeering centers Lolang formed the core of Chinese colonial administration during the Han period on the Korean peninsula (Eckert, Lee, Lew, Robinson, and Wagner 1990). Lolang not only served an important political role, but also proved to be an important economic point whereby Chinese goods could be distributed to points across Korea, and eventually Japan. As the Chinese administration center on the peninsula, Lolang "was in essence a Chinese city where the governor, officials, merchants, and Chinese colonists lived. Their way of life in general can be surmised from the investigation of remains unearthed at T'osong-ni, the site of Lolang administrative center near modern Pyongyang. The variety of burial objects found in their wooden and brickwork tombs attest to the lavish life style of these Chinese officials, merchants, and colonial overlords in Lolang's capital" (Eckert et al. 1990, p. 14).

A Chinese presence on the Korean peninsula had a considerable affect on the social, political, economic, and cultural life of local populations. Political administration by China of portions of the Korean peninsula influenced not only those populations under direct Chinese rule, but communities further south and east who were exposed and drawn

to Chinese culture. The commandeering centers on the Korean peninsula brought China closer and "ultimately [created] a new China-oriented elite class" (Eckert et al. 1990, p. 14). Within areas outside of Chinese control the absorption of Chinese culture by local populations led to increased economic and cultural exchanges. As the most economically and culturally advanced society in East Asia, China attracted "neighboring states, which coveted the highly advanced Chinese culture" (Eckert et al. p. 14).

Although portions of the Korean peninsula were not under direct Chinese political control, the Chinese influence "is apparent from the fact that for the most part the leaders of the…states in the southern half of the peninsula willingly accepted the grants of office and rank, official seals, and ceremonial attire that constituted…tokens of their submission to Lolang's [and China's] authority" (Eckert et al. 1990, p. 14). The availability of natural and human resources on the Korean peninsula made the area economically attractive to the Chinese who "were able to command the labor services of the native population they governed, for [enterprises such as] the large-scale cutting of timber. It is known, too, that iron ore deposits in the southeast corner of the peninsula were supplied to Lolang" (Eckert et al. 1990, p. 14).

Analysts generally agree that the earliest iron artifacts found in Japan are from the Yayoi period (Kubota 1986; Li 1992; Wagner 1993). Of importance to this study is that these early objects were Chinese imports, but by the later half of theYayoi period iron objects were being produced in Japan (see Kubota 1986). It appears that finished objects were not only imported, but also raw material from China found its way to both Korea and Japan. According to Wagner (1993), iron objects unearthed in Japan bear a strong resemblance to those linked to the Chinese iron industry of the first century A.D. (Li

1992). Li (1992) argues that Chinese imports could have easily found their way to Japan. This is confirmed by the presence of several early iron axeheads found in Kyushu, Japan (Hashiguchi 1992). These early axeheads are similar to those found in China and are argued to be imports (Hashiguchi 1992). Of further interest is that alongside iron axeheads, wrought iron artifacts were also found. The latter are argued to be local and Japanese imitations of the more valued Chinese cast iron axeheads (Li 1992).

Although Japan is geographically disconnected from the Asian mainland by the sea, its islands were once connected extensions of the mainland when Ice Age sea levels fell (Imamura 1996). Historically land bridges at one point served to link the Chinese mainland to Japan. Early in East Asian prehistory, initial habitation, cultural growth, and production were closely tied to the Asian mainland. Once the land bridge disappeared, the sea not only separated them, but also provided a method of transportation. According to Wagner (1993, p. 35), the sea makes "it logical that Japan was continuously influenced by mainland cultures since [East Asian prehistory]."

The transition from fishing and hunting to agriculture historically coincides not only with the importation of rice cultivation, but also metal tools which allowed for large scale forest exploitation and rice paddy development, a situation that further stimulated development of agricultural production (Wagner 1993). China has historically been the center of agricultural development in East Asia. Its influence stretches back in time with much of Chinese agricultural developments imported by Korea and Japan. The discovery of rice pollen, carbonized rice, and pottery, with markings of rice plants, indicate that rice cultivation may have begun

in Korea and Japan around 1000 B.C (Imamura 1996). In China, the Yangtze basin is the origin of rice cultivation as indicated by the highest density of rice sites (Wagner 1993). Archaeological evidence suggests it was where rice cultivation originated and greatly influenced not only communities in East Asia, but also other areas in Asia (Imamura 1996). Besides rice cultivation, *jue*, lacquer ware and balustrade style construction was diffused from China to Korea and Japan (Zhimin 1990; Imamura 1996). Technology, goods, and culture in Korea and Japan all bare clear Chinese traits.

Jue and lacquer wares are two important artifacts when discussing linkages between Chinese and Japanese cultures based on cultural remains (Zhimin 1990; Wagner 1993). Stone *jue* jewelry found in Japan suggests a Chinese origin not earlier than the late Zhou dynasty (256 B.C.) (Zhimin 1984). The popularity of Chinese stone *jue* across East Asia is evident during the pre-Dark Age period. However, archaeological data provide evidence that *jue* production stretches back as early as the China's Pre-Shengwen (12^{th} Century B.C.) (Zhimin 1984). According to archeologists, jade *jue* originally emerges in the middle and lower Yangtze basin (Zhimin 1984). The strong resemblance between *jue* found in China, Korea, and Japan, suggests that throughout the pre-Dark Age, and even earlier, Chinese *jue* flowed across East Asia. In addition, lacquer ware also streamed into Korea and Japan from China. Like *jue*, lacquer ware found in Korea and Japan bares a strong Chinese resemblance (Zhimin 1984). The origins of Japanese and Korean pieces is argued to be tied to the Chinese mainland, specifically the Yangtze basin.

In the fourth century B.C. the Japanese islands were inhabited by small human communities who were using stone tools and largely led a hunter-gatherer lifestyle (Hall 1970). However, by the third century B.C., on the island of Kyushu, a culture with knowledge of bronze, iron, and rice cultivation emerges (Imamura 1996). From 200 B.C. onward the Yayoi-Japanese had reached the Kanto plain, which in subsequent centuries would become the city of Tokyo (Smitha 2003). Through early contacts with the Asian mainland the Yayoi became skilled in pottery techniques, and adopted technology such as the potter's wheel (Smitha 2003). China and Korea became a source of finished goods for the Japanese islands as coins, bronze mirrors, bracelets and beads, iron and bronze knives and swords were imported (Hall 1970; Smitha 2003). Improvements of agricultural techniques via Korea fueled the growth of the Yayoi-Japanese, which eventually led to a northward migration to the island of Honshu by 100 B.C (Smitha 2003).

The exodus northward within Japan could be linked to additional population movements from the Asian mainland into the Japanese islands (Groot 1951). Migration from the Asian continent increased on the island of Kyushu and islands in the Tsushima Strait beginning around 200 B.C. (Imamura 1996). For the next 250 years, population from the mainland and within Japan gradually spreads eastward to the Kanto Plain and locations north (Imamura 1996). According to the archeological record it is uncertain whether the new immigrants, in particular those from the mainland, totally displaced the indigenous peoples of the Japanese islands or were gradually assimilated into the native Jomon culture (Imamura 1996). Of interest here however, is that no evidence of a Japanese language, social structure

or religion can be found which precedes the pre-Dark Age period. The sudden emergence of the Yayoi culture after 200 B.C. had a profound impact on Japan. The culture on the Japanese islands was transformed and substituted with a very advanced culture that resembled China's Qin and Han culture. The period prior to the pre-Dark Age changed into one that heavily borrowed from China. For example, the three major symbols that represent the Japanese Kingdom during the pre-Dark Age, the bronze mirror, the sword, and the royal seal stone, are exactly the same as the symbols used by the Chinese Qin dynasty.

Along with the procurement of and manufacture of bronze and iron tools in the Japanese Yayoi period, another fundamental development in Japan during the pre-Dark Age is the active exchange between Japan and the Asian mainland. A feature that distinguishes the Yayoi period from what is archeologically seen during the earlier Jomon period is the presence of imported Chinese objects on the Japanese islands such as mirrors and coins (Okamura 1984). Archeological evidence indicates that early in the Japanese Yayoi period (400 B.C.-200 A.D.) cultural influences and new technologies were brought from the Asian mainland into Japan (Imamura 1996). The economic and cultural exchanges taking place between China, Japan, and Korea were facilitated by trade, diplomatic relations, and migration that took place in the region. In regards to the latter, the archeological record reveals the establishment of Korean settlements on the Japanese islands, and the presence of Han Chinese colonists on the Korean peninsula in the pre-Dark Age period (McCune 1961).

The settlements established as a result of Chinese colonial expansion on the Korean peninsula and the Korean migration into Japan further connected peoples in the region, and expanded trade (see figure 3). For example, forty-five archeological sites in Japan from northern Kyushu to the Chugoku, Shikoku and Kinki districts have revealed pottery traced to the Asian mainland (Goto 1987). The pottery at these forty-five sites is linked to both the importation of wares as a result of trade and the movement of groups throughout the region during the pre-Dark Age period. Careful observation and analysis of archeological sites makes the intercourse between peoples in East Asia clearer as even in areas once thought isolated from communities in the south archeologists have uncovered imported wares (Imamura 1996). The movement of people across the whole of East Asia appears to have made the procurement of imported objects possible. Even if trade wasn't the sole motivation for migration, migrants played an important role in the transportation and introduction of goods, as well as the diffusion of culture in East Asia. The history of migration in East Asia also led to the formation of kingdoms both on the mainland and in the Japanese islands. For example, along the Han River basin, it is argued that immigrants from China settled at the time of Kojoson's downfall 5,000 years ago on the Korean peninsula (Wiens 1954; Gardiner 1969; Hsu 1980). These were chiefly the people of Puyo and Koguryo. The kingdom of Paekche was established with the immigrants as its center. Paekche, which first began as the small nation of Mahan, gradually gained power. In the mid-3rd century during the pre-Dark Age period, Paekche would emerge and solidify its strength in the greater part of the Han River basin. Archeological

evidence reveals that the flow of migration during the pre-Dark Age period flowed not only east, but also west (Imamura 1996). This indicates that the traffic of goods and people flowed in not only from the mainland to Japan, but from Japan to the Asian mainland which corroborates evidence in historical writings of the time of contacts between human communities in the region.

Scholars investigating Japanese-Korean historical relations have cited evidence such as the names of places and shrines, common myths and tales, and archaeological evidence to point out that Korean immigrants with close ties to the three Korean kingdoms of Koguryo, Paekche, and Silla played decisive roles in a pre-Dark Age period that would prove to be a formative period in Japanese history (Goto 1987). Korean migrants not only came to influence Japan materially and culturally, but also politically. In fact, these historians believe that one of the early Japanese emperors, Ojin, was a Korean chief and a member of the Puyo ruling house of Paekche.

This study suggests, that along with archeological indication of exchanges between communities in East Asia, written accounts also corroborate that active exchanges took place during the pre-Dark Age and much earlier periods. For example, in the *Shiji* or *Records of the Grand Historian*, the early Chinese historian Sima Qian (145 B.C.-90 B.C.) presents the remarks of Xu Fu who led a mission to the Japanese islands in the early third century B.C. The purpose of the voyage is linked to Xu Fu's role as a Taoist alchemist who in the *Records of the Grand Historian* says "there live immortals on the Three Spirit-Islands in the sea. I

should like to lead a group of purified young boys and girls and seek out the elixir of life there" (cited in Fogel 1996, p. 14).

The first written accounts of Japan and travel from the mainland to the Japanese islands are found in the early historical chronicles of China. Specifically, these accounts are found in the *Shiji* or *Records of the Grand Historian* which contains entries written as early as 219 B.C., the *History of the Kingdom of Wei*, which appears in the third century A.D., and in the *History of the Later Han Dynasty*, compiled around A.D. 445. These historical annals address the presence of over a hundred human communities on the Japanese islands and reveal that several envoys were sent from Japan to the Han court in what is today the present-day city of Xian and to Han governors in Korea. Historical documents indicate that the first official Japanese envoy arrived in the Han capital in A.D. 57 (Tsunoda 1951). It can also be observed that unofficial exchanges occurred in periods prior to the emergence of the Han dynasty. In the *History of the Later Han Dynasty* this is corroborated in a description and accounting of Japan that reads as follows:

> The Wa [Japanese] dwell on the mountains islands southeast of Korea in the middle of the ocean, forming more than one hundred communities. From the time of the overthrow of the Chao-hsien [northern Korea] by [China's] Emperor Wu (140 B.C.-87 B.C.), nearly thirty of these communities have held intercourse with the Han [dynasty] court by envoys or scribes (cited in Tsunoda 1951, pp. 2-3).

The account of interactions stretch back in time to the early pre-Dark Age period, and make clear that exchanges were well underway before the onset of the Dark Age. The references to Korea and Japan in early Chinese texts corroborate what archeologists know to be a period of interaction between the peoples of East Asia.

In the *Wei zhi* or *Wei Records*, which was compiled in the third century A.D., a description of Japanese society exists. The presence of this description in the *Wei Records* confirms that prior to the Dark Age period there was contact between China and Japan. Besides corroborating the exchanges archeologists observe, the *Wei Records* provide a glimpse into Japanese society as told by the accounts of officials and scholars linked to the Chinese court. According to their descriptions, Japan developed a society that in many respects resembled other kingdoms and communities they came into contact with. In their observations they note that like China, there existed in Japan features that mirrored other communities in the region. The report describes Japan divided into numerous states and, like China, its peoples were divided into a number of social classes. In observing class distinctions in Japan during this period, the Chinese observers point out that wealthy Japanese men had multiple wives, and possessed slaves. Of importance to this study, the *Wei Zhi* also notes the presence of a new class of warriors that utilized horses and military technology imported from China and Korea.

Describing the culture of Japan, our Chinese observers were impressed with what they described as an absence of crime. According to the *Wei Zhi*, Japan was free from crimes, such as theft, observed in China. The primary institution responsible for social control and adherence to social norms was the family. Members within a family unit were described as accountable for one another (Smitha 2003). Violations of law or custom by one member of a family brought punishment against the entire group (Smitha 2003). In cases that were considered

more severe and went beyond just minor infractions, the entire household of the offender and his relatives were executed (Smitha 2003).

Early Trade in East Asia

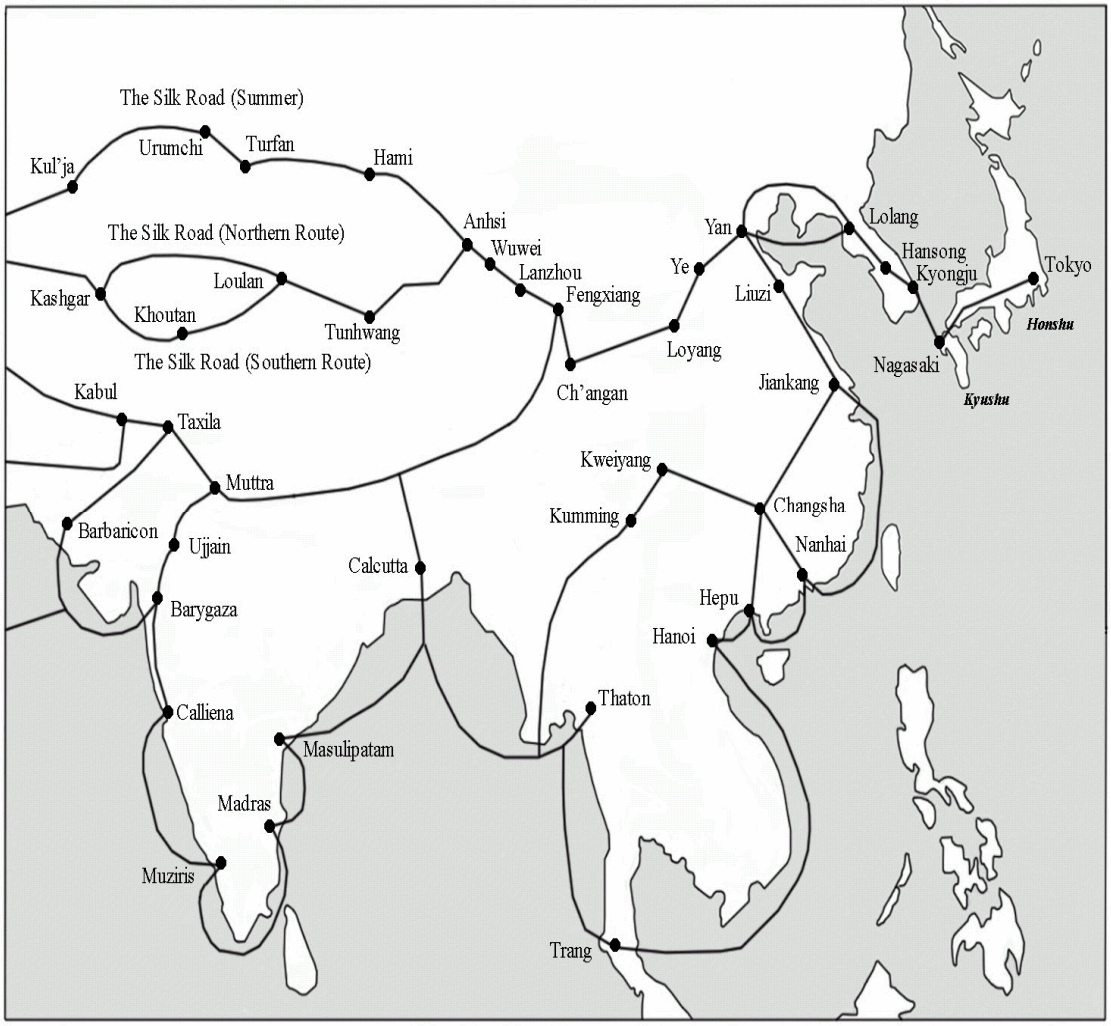
Development of an elaborate road system in Japan led to further economic growth and exchanges during the pre-Dark Age period. The movement of people and goods within the Japanese islands was facilitated, and was further supported by a fleet of ships employed to import products from the Asian mainland (Smitha 2003). Road systems coupled with ships that could move Chinese goods up and down Japan's coast increased trade between the Japanese island, the Asian mainland, and Korean peninsula (Hall 1970; Smitha 2003). This increase in trade led to greater cultural exchanges. The relationship between Korea and Japan intensified, with literate and Korean artisans in great demand in Japan (Smitha 2003). Koreans were in such demand that those who came to Japan during the pre-Dark Age were given noble rank (Hall 1970; Smitha 2003). According to Hane (1991, p. 13), "in the Yayoi period, with the population numbering perhaps about 600,000, there were two population centers [in Japan]. One was near the present city of Nara in the Yamato Plain and the other was in northern Kyushu." These population centers were connected to the mainland through an elaborate system of trade (see figure 3).

Addressing the historical importance of China to East Asia and Japan, Takezoe Shin'ichiro, a Japanese scholar writing during the Japanese Meiji period (1868-1912) writes "no one nation opened its doors earlier, has more territory or greater population, gave rise to more sagely men and heroic figures, or produced

cultural relics earlier than the people of continental China. Men of letters have extensively recited all the many sorts of things that we Japanese have copied from them in the past" (cited in Fogel 1996, p. 69). The historical interconnections between communities in East Asia has not only shaped economic relations, but in the past led to a diffusion of culture.

Figure 3: Trade Connections in the Pre-Dark Age:

East Asia and Westward Regions

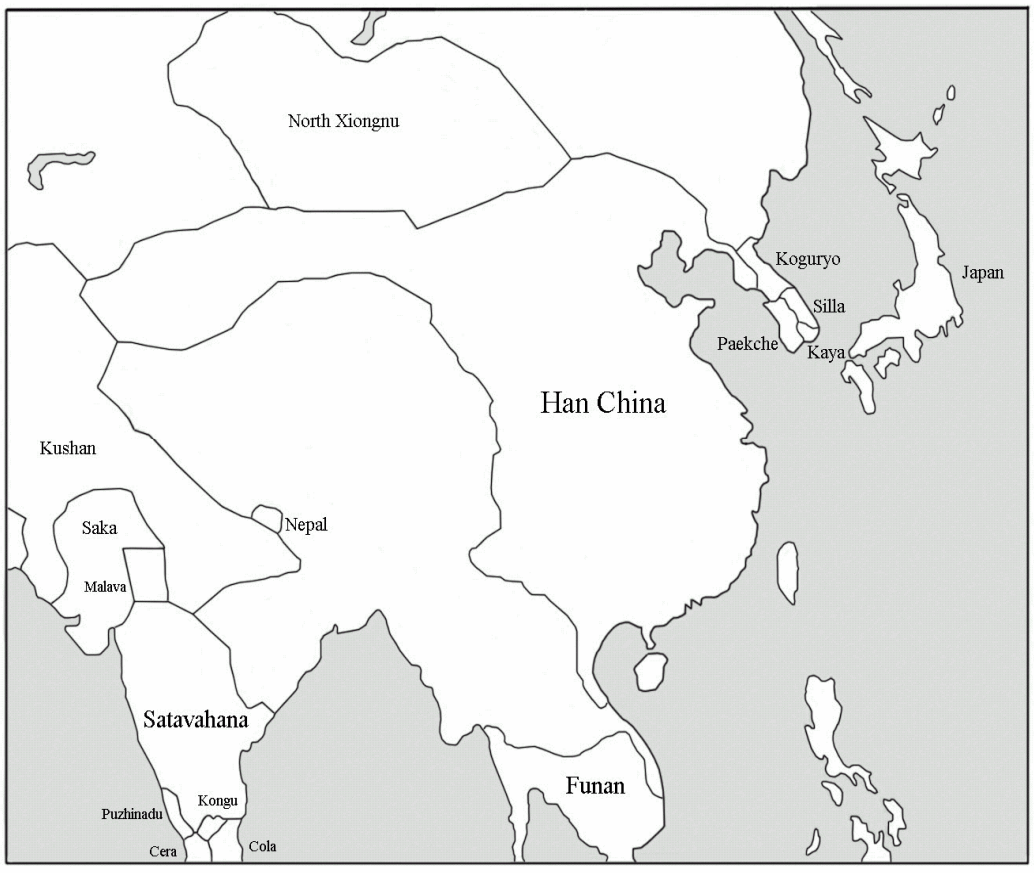


The Chinese *Record of the Three Kingdoms* or *Sanguozhi* makes reference to an area formerly known as Chinhan, the forerunner of the Silla Kingdom, and comments that "the soil was very fertile and that grain was grown; the silkworm also was cultivated, and silk and linen cloth woven…irrigation and the plough were introduced at an early and…metal-working crafts [were] important [and]…iron and gold were smelted" (Barinka and Forman 1962, p. 13). One can surmise that Silla's participation in the regional economy of East Asia was facilitated by its ability to export smelted gold and by its location as an intermediary between Japan and China. Historically, Korea has played a middleman role in the economy of East Asia (Hane 1991). Silla not only exported Chinese goods to communities across the Korean peninsula, but also further east to Japan (Hane 1991).

Despite the political divisions that characterize much of Korean history, the peninsula has in the past remained stable enough to facilitate exchanges between the Asian mainland and Japan. In the third century A.D. Korea was divided into three kingdoms: Koguryo in the northern half, Paekche in the southwest, and Silla in the southeast (see figure 4) (Hane 1991). This is a division that took place during the second half of the first century B.C. and lasted well into the second half of the seventh century A.D (Hane 1991). Koguryo and Paekche were strongly influenced by China and had adopted Confucianism and Chinese institutions and practices by the pre-Dark Age period (Hane 1991). Paekche, as a result of its geographic location, had strong ties with South China and would in subsequent periods develop a military alliance with Japan. According to historians and archeologists, early in the period prior to the pre-Dark Age

the southeastern region of the Korean peninsula had developed close contacts with Japan, but with the establishment of the kingdom of Silla, in 57 B.C., relationships became strained (Hane 1991; De Bary and Lee 1997). Japan has also historically maintained a relationship with a small number of states located on in the southern tip of the peninsula who were not part of the kingdoms of Silla, Paekche or Koguryo, but instead formed a Kaya League of independent tribes (De Bary and Lee 1997). Although the role and the degree of influence of Japan on the Kaya League is disputed, historically one can say with certainty that Japan did have a presence on the peninsula which facilitated its interactions with Korean and Chinese kingdoms (see Farris 1998).

Figure 4: East Asia and Westward Regions: Second Century A.D.



The diffusion of Chinese culture into Korea and Japan was conveniently facilitated by the geographic proximity of the Korean peninsula to the Japanese islands. In addition to benefiting from cultural and technological developments in China, Japan has historically benefited from Korean innovations of Chinese culture. Additionally, Japan's connection to the Chinese mainland via Korea allowed for greater participation in indirect exchanges with communities westward. The importance of the Korean peninsula to the development of a regional economy in East Asia was in part due to the connection it provided to China and Japan. In many respects Korean interactions with Japan fueled the intensification of direct relations between China and Japan during the pre-Dark Age period.

Expansion, Growth, and Cultural Diffusion during the Han Period (202 B.C. – A.D. 220)

The Chinese Han period is recognized by historians as an important point in the history of China (Eberhard 1960). It's importance still resonates today as marked by the name that has been given to the members of the ethnic majority in the country. The Han dynasty is notable for its geographical expansion and military ingenuity. The Chinese Empire during the Han dynasty expanded westward as far as the rim of the Tarim Basin in modern Xinjiang-Uyghur Autonomous Region (see figure 4). This expansionary period made it possible to secure trade routes across Central Asia to Antioch, Baghdad, and Alexandria. These trade routes are often called the "silk route" because the route was used to export Chinese silk to the Roman Empire (see figure 3).

Chinese armies, during the time period, flexed their military might as they invaded and annexed parts of northern Vietnam and northern Korea toward the end of the second century B.C. The Han sought to control peripheral areas in order to further secure the flow of finished goods and raw materials. Security and stability was a strategic part of growth in the region, and in this regard the Chinese actively dealt with a non-Chinese local elite to develop and foster mutually beneficial relations. The spread of the Chinese "tributary system" can be linked to this period. Non-Chinese states were allowed to remain autonomous in exchange for symbolic acceptance of Han authority in the region. Tributary ties were strengthened throughout this period by intermarriages at the ruling level and periodic exchanges of gifts and goods. In the trading world of East Asia tribute to China was a component of trade exchanges during the pre-Dark Age period. Tribute to China on the part of foreigners acted "as a sort of entrance fee to elicit permission to trade, which, at the same time…[declared] the peaceful intentions and deference of the tribute payers" (Dalton 1975, p. 105). According to Fairbank and Teng (1941, p. 134), several important points can be made about China's tributary system:

> (1) that the tributary system was a natural outgrowth of the cultural preeminence of…[China], (2) that it came to be used by the rulers of China for political ends of self-defense, (3) that in practice it had a very fundamental and important commercial basis [that is, foreign trade was facilitated by the system], and (4) that it served as the medium for Chinese international relations and diplomacy. It was, in short, a scheme of things entire, and deserves attention as one historical solution to problems of world-organization.

As the basis of organization for foreign trade, the tributary system brought non-Chinese regions into a network of trade to the east that recognized China as its focal point. It also

served to emphasize the importance and position of China in East Asia's hierarchy, as foreign envoys who sought to gain access to Chinese goods were asked to follow specific formalities to remind them of their position in relation to China. Describing this arrangement, Fairbank and Teng (1941, pp. 137-140) recognize that, in the process of observing Chinese customs, foreigners came to be included as part of a sinocentric order:

> From this it followed . . . that those barbarians who wished to 'come and be transformed' (lai-hua) and so participate in the benefits of (Chinese) civilization, must recognize the supreme position of the Emperor; for the Son of Heaven represented all mankind, both Chinese and barbarian, in his ritual sacrifices before the forces of nature. Adherence to the Chinese way of life automatically entailed the recognition of the Emperor's mandate to rule all men. This supremacy of the Emperor as mediator between Heaven and Earth was most obviously acknowledged in the performance of the kowtow, the three kneelings and nine prostrations to which European envoys later objected. It was also acknowledged by the bringing of a tribute of local produce, by the formal bestowal [by the Emperor] of a seal, comparable to the investiture of a vassal in medieval Europe, and in other ways. Thus the tributary system, as the sum total of these formalities, was the mechanism by which barbarous non-Chinese regions were given their place in the all-embracing Chinese political, and therefore ethical, scheme of things… On China's part the permission to trade [symbolized by the Chinese Court's acceptance of the tribute offering] was intended to be a mark of imperial bounty and a means of keeping the barbarians in the proper state of submissiveness.

In the pre-Dark Age period participation in the regional economy of East Asia meant that outsiders would in a formal manner recognize the authority and customs of China. The distinction to be made between China and non-Chinese, especially communities westward, was cultural. In the eyes of the Han Chinese, their "superiority over the barbarians [or outsiders] had a cultural rather than a mere political basis; it rested less upon force than upon the Chinese way of life embodied in such things as the Confucian code of conduct and the use of the Chinese written language; the sign of the barbarian was not race or origin so much as non-adherence to this way of life" (Fairbank

and Teng 1941, pp. 137-138). Paying tribute was a re-affirmation of the cultural hegemony China enjoyed during the period. In historical writings of the times tribute missions are addressed and highlighted as a component of the interactions between the Chinese court and foreigners. For example, in the *Hou Hanshu* or *History of the Later Han Dynasty* one entry corroborates archeological findings of early contacts between peoples on Chinese mainland, "one hundred communities have held intercourse with the Han [dynasty] court by envoys or scribes" (cited in Tsunoda 1951, p. 5). A passage contained in the same work describing the Han Empire and its Emperor further notes:

> …His majesty and awe spread far and wide, so that distant regions, bearing treasures, came to pay him court. In my humble view, Emperor Wu [141 B.C.-87 B.C.]…[embodies] the sacred Way…bringing together his countless subjects in harmony and peace He added new provinces to the number of thirty or forty, opened up new territories till he had almost doubled the size of the empire…Because of him, the ancestral temple of the founder is filled with rare objects from faraway regions (cited in Tsunoda 1951, p. 23).

During the former Han period, the Chinese Empire did undergo a territorial and economic expansion. It also underwent a population boom that was propelled by the prosperous times and at the close of Han times meant a population that stood at over 40 million people (Hucker 1978; Smil 1994). The tribute described in the above passage in the *Hanshu*, is especially important because it is under the former Han that tribute as a pattern of international relations would first emerge. This pattern would in subsequent periods be characteristic of the relations the Chinese Empire would have with foreigners. Regardless of the cultural value and implications of the tribute system, it was of material importance. In willingly subjecting themselves to the custom of tribute, foreigners certainly recognized the material value of a relationship with China. Likewise, the Chinese economy

benefited from increased contacts and the control of trade the tributary system provided.

At the center of the Empire was Changan where administration of China took place and wealth flowed from regions within and outside of the Asian mainland. The Han capital of Changan served not only as an important administrative role, but was an important economic center in the regional economy of East Asia during the pre-Dark Age period. Chinese poets of the time note its splendor and economic life:

> In the northern quarter were the highest grade houses, stoutly built by the very best craftsmen, 'with the timbers adorned like the silk of robes, with the earth [walls] colored in red and purple,' and stands of weapons from the imperial armoury. For the nine markets there were official guards…
> Those who sold goods made a double profit, those who sought goods did not [go away] empty-handed. Actually merchants and peddlers of all degrees, (especially) the men and women hawkers, sold inferior goods mixed with those of high quality, deceiving stupid rustics, and making fools of small-town folk." The merchant families were dressed as luxuriously as the scions of the imperial house (cited in Hughes 1960, p. 40).

In the *Hanshu* one finds the accounts of Han merchants describing the prosperity of the times, and their observations of centers such as Changan. In a poem written by a merchant one reads:

> Those in the market-places and on streets
> All-under-heaven…
> All for profits come;
> Those rubbing shoulders in crowds
> All for profits go. (Qian and Gu 1950, p. 424; see *Hanshu 24*).

The opportunity to reap the riches of abundance was made clear to merchants who traded the raw materials and finished products of the times in large population centers. These centers not only came to attract people within the mainland, but also led to increasing relationships between Chinese merchants and their foreign counterparts.

The Tea Trade during the Pre-Dark Age

The extent of trade linkages during the pre-Dark Age is documented by items with Chinese origins as far away as Europe. At this time, however, China didn't directly trade with Europe, but Chinese items made their way to the European continent. Since trade between China and points west in India and Persia is known to have existed, the argument is made that indirect trade was established to Europe through the hands of Indian and Persian middlemen (Evans 1992). The Han Chinese knew little about Europeans to the west, but as the volume of trade grew, Emperor Wu Di decided in 138 B.C. to send an emissary on a mission to inquire about direct trade prospects with the "western barbarian lands" (cited in Evans 1992, p. 27). Upon his return the emissary gave this report to the Emperor, "When I was in Daxia [Bactria, a city founded by the Greeks] I saw bamboo canes and cloth from China. When I asked how such articles came there people replied, their merchants bought them in Yuandu [Shen-du, or India]" (Bai 1982 pp. 141-142). According to Evans, "merchant ships regularly sailed from China's Guangdong and Guangxi provinces to India's Coromandel Coast and to other southeast Asian ports; from there goods were carried to the Middle East and Southern Europe" (1992, p. 27).

Long-distance trade played an important role in the economic and cultural exchanges that took place between the major centers of civilization in East Asia and points westward. During antiquity some of these trade routes had been in use by human communities for centuries, but by the beginning of the first century A.D. scholars argue that merchants, diplomats, and travelers could theoretically cross the ancient world from as far as Britain and Spain in the west to China and Japan in the east (see figure 3). The

principal purpose of the trade routes was to transport raw materials, foodstuffs, and luxury goods from areas with surpluses to cities where they were in short supply or in demand. In the regional economy of East Asia, prior to the Dark Age, China enjoyed a monopoly on luxury goods such as silk, tea, ceramics, and various finished products. The extent of China's monopoly in the trade of luxury items was felt as far west as the Mediterranean world where Chinese silk was imported via trade routes in Western Asia. Chinese goods were transported over vast distances either by pack animals overland or by seagoing ships along the Silk and Spice Routes in the west and to the east by land to the Korean peninsula and ships to the Japanese islands.

During the pre-Dark Age period cities emerged along these trade routes and grew rich providing services to merchants, travelers, and diplomats (see figure 3). In many respects it can be argued that these cities acted as the first international marketplaces bringing foreigners into major economic centers such as Changan. The emergence of a network of cities reliant on the east-west trade is evident in the pre-Dark Age period. Some cities beyond core centers of capital accumulation, such as Changan, like Kashgar and Bukhara to the west of the Taklamakan Desert, prospered primarily as a result of their location, and became important in their own right as supply points for merchant caravans. From China, points west and east along the trade routes also became cultural and artistic centers, where peoples from different regions could come into contact. The trade routes were the trade and cultural highways of the ancient world. People moving from one place to another to conduct business exchanged and presented new inventions, philosophies, cultural practices, social customs, as well as goods and raw materials. In

the pre-Dark Age period these meetings between peoples became an important source of cultural diffusion.

At the center of this trade network was China who not only extended its grip on East Asia by establishing military and trade posts on the Korean peninsula, but also expanded its empire westward, making contacts with the western regions of Central Asia possible. The emergence of Chinese commandeering centers in Korea proved to be invaluable in encouraging economic and cultural contacts between the Han Empire and communities on the Korean peninsula and the Japanese islands. In addition, the Chinese conquest of Ferghana and neighboring areas to the west in 101 B.C., allowed the Han Chinese to seize control of the trade routes running north and south of the Taklamakan Desert (Lattimore 1940). In exchange for its silk and gold, Chinese merchants acquired a variety of agricultural products from the west that included spices, grapes, pomegranates, sesame, broad beans, and alfalfa (Lattimore 1940). The volume of trade between China and areas outside of its direct control increased during this period and was facilitated by the expansion of cities connected to the East Asian trading system (see figure 3).

The vast network of strategically located trading posts has historically characterized the regional economy of East Asia. These networks enabled the exchange, distribution, and storage of goods during the pre-Dark Age period. In the *Shiji* and *Hanshu* descriptions of large markets and vibrant trade exist that corroborate archeological analyses of exchanges not only within the Asian mainland, but points to the east and west. From the Han capital of Changan, routes crossed the Taklamakan Desert via Lanchow and Wuwei to the north and into the Silk Road (see figure 3). To the east trade routes led east across Loyang and into the Korean peninsula, which was also

connected to the southern part of Chinese mainland by a network of cities that led to Annam. The port of Hepu on the Gulf of Tonkin was a great center of seaborne trade. According to archeologists, as the oldest departure point of China's ancient maritime trade, Hepu was a prosperous point and important in East Asia's ancient trading system (see People's Daily 2002). Goods unloaded in Hepu were sent along a network of routes throughout the Han Empire to points north. Many of these overland routes connected to major waterways, from which merchandise was distributed. In addition, the network of cities extending from major waterways such as the Yellow River, and its tributaries, facilitated trade to the east and west.

The excavation of ruins from the port of Hepu, dating from the former Han dynasty (206 B.C. – A.D. 24), reveal city walls and a moat around the ancient city (see People's Daily 2002). In addition, archeologists have discovered tombs close to the city ruins and numerous pottery pieces from the Han dynasty (206 B.C.-A.D.220) (see People's Daily 2002). The analysis of this site according to archeologists suggest that "the gentle slope between the moat and the city walls means such works were not meant for defense, but served as a symbol and for trading convenience" (People's Daily 2002, p. 1). In fact, historical records indicate that Hepu was known as not only an important trading center, but due in part due to its location on the Gulf of Tonkin, was also recognized for its production of pearls during the Han period (see figure 3) (see People's Daily 2002). In further support of the argument that maritime trade was conducted in the Han period, a large number of tombs and cultural relics have been discovered that confirm trade exchanges with communities outside of China (see People's Daily 2002). Funerary objects excavated at the Hepu site included imported jewelry that stylistically is

distinct from what is recognized as Han pieces. Additionally, the presence of luxury items in tombs at Hepu indicates the prosperity that many enjoyed during the pre-Dark Age period.

Beyond the analyses of early maritime trade in China, archeologists generally agree about the presence of East Asian trading links during the early Han period. For example, one of the oldest meteorological tools ever found in Japan at the Harunotsuji ruins in Ashibecho, Nagasaki Prefecture is said to be linked to foreign trade (Imamura 1996). Specifically, of the items uncovered, a weight scale, that was used to measure gold, is argued to illustrate the economic sophistication of the late Japanese Yayoi period (300 B.C.-A.D. 300). The remains uncovered in the Harunotsuji site indicates that well into the pre-Dark Age period trading linkages between the Asian mainland and Japan were in existence. It is of further interest that written records corroborate archaeological assessments. In fact, the *Wei Zhi*, the late third century Chinese chronicle, identifies, as the capital of the Japanese Iki kingdom, the same site found in Nagasaki. This find proves to be a valuable source of information as it indicates that the Iki kingdom was a participant, and, it could be argued, a major trading center in the East Asian regional economy. The bronze weight scale tells of the exchanges taking place in East Asia, as its composition is similar of bronze smelted in northern China (Imamura 1996). According to archeologists, "judging from its weight, it appears to have been used to measure the value of expensive commodities such as gold dust, glass, medicines and spices" (cited in Shimbun 2002, p. 1).

Regional relations in the form of cultural, trading, and diplomatic exchanges between communities in East Asia and points westward are clearly visible early in the

history of the region. For example, the importation of raw materials and manufacture items, the introduction of technologies, the diffusion of Chinese culture, and diplomatic intercourse all came to characterize the pre-Dark Age period in East Asia. In regard to the latter in the early Han Chinese period (202 B.C.-9 A.D.) historical records indicate that more than 100 polities of Japan and Korea sent envoys to the Han colonial ruling headquarters of Lolang Province in Northern Korea, and the Han capital of Changan (see Tsunoda 1951; Ch'ien 1994, 2002). Beyond seeking to establish diplomatic discourse, economic and cultural interests served to expand the connections between human communities in the pre-Dark Age.

The Silk Trade during the Pre-Dark Age

> "The whole history of China is interwoven with threads of silk, and it is these delicate fibers which formed China's earliest and strongest links with the outside world" (Burling and Hart 1953, p. 307).

Towards the close of the Han dynasty in 220 A.D. a Greek merchant, who was called by the Chinese Ch'in Lun, reached China and was brought to what would in subsequent periods become one of China's many ancient capitals, Nanjing (Fitzgerald and Seligman 1938). The presence of Ch'in Lun confirms arguments made by historians and archeologists that exchanges or contact between China and the West can be historically linked to the Han period and in fact can be traced to earlier historical periods (see Chew 2001a). For example, descriptions of foreigners from western regions abound in the *Chinese Dynastic Histories*. Of interest is that many of the accounts of the West emerge in early Chinese writings despite archaeological evidence of direct contacts

between China and regions as far as Rome. The basis of the description of Ta Ts'in or Rome, for example, in the *Dynastic Histories*, is a clear instance of this. Descriptions and mention of Rome were not the result of direct Chinese dealings with the Roman Empire, but accounts were drawn primarily from interactions with foreign merchants hailing from places like Greece. The interactions between China and human communities in Greece, for example, provided Chinese rulers with invaluable knowledge about human communities, empires, states, and kingdoms further west (Fitzgerald and Seligman 1938). Observations from non-Chinese about the West survive in Chinese historical documents and indicate that early in the Han period there was a Chinese awareness of kingdoms outside of China's immediate political influence. The following account is provided here as proof that the Chinese knew far more about the West than some European historians have given them credit for:

> To reach Ta Ts'in [Roman Syria] one travels west from An Hsi [Parthia] 3,400 li [a unit of distance] to Ah Man [Hamadan], and thence west 3,600 li to Ssu [Ctesiphon, ancient city of Central Iraq], here one crosses the river [Tigris] and proceeds south-west 960 li to Yu Lo [Hira], which is the most westerly point in An Hsi. From here cross the Great Sea [Persian Gulf, Indian Ocean and Red Sea] and one reaches Ta Ts'in…Most of the country lies west of the sea [the Mediterranean]…This is reached from T'iao Chih [Mesopotamia] by a journey of 10,000 li by sea. It is 40,000 li from Ch'ang An. The voyage from T'iao Chih to Ta Ts'in depends on the wind, taking either three months or two years. Ta Ts'in is well cultivated, having villages and towns as many as the stars in the sky. The Great Sea [Mediterranean] is to the west. Beyond this sea is the royal city of Ch'ih San [Rome, city of Ceasar]. The climate of these countries is like that of China (*Hou Hanshu 88*).

The collection of written records contained in the *Dynastic Histories* makes further references to the west and cities that have historically been part of the Roman Empire. It is of interest that not only do these documents make clear the contact between China and

the west, but also that Chinese scholars make comparisons between China and lands westward:

> The people of Ta Ts'in have historians and interpreters for foreign languages as the Han have. The walls of their cities are built of stone. They cut their hair short, wear embroidered garments, and ride in very small chariots. They have money of gold and silver. Their rulers only govern for a short time and are chosen from among the most worthy men. When things go badly they are changed. The people of Ta Ts'in are big men, like the inhabitants of the middle part of China [Henan and Shandong]. This is why they are called Ta Ts'in. They dress differently from the Chinese. Their country produces gold and silver, all kinds of precious goods, amber, glass and giant eggs [ostrich eggs]. From China by way of An Hsi they obtain silk which they re-spin into fine gauze. The conjurers of Ta Ts'in are the best in the world. They can eat fire and play with many balls. The Ta Ts'in are honest. Prices are fixed, and grain is always cheap. The granaries and public treasury are always full. The people of An Hsi prevent them communicating with us by land, also the roads are infested with lions so that one must travel in caravan and with military escort. The Ta Ts'in first sent envoys to us [in A.D. 166]. Since then their merchants have come frequently to Jih Nan [Tongking] (*Hou Hanshu 88*).

Far from being isolated or confined to its immediate region, China by the end of the Han period was knowledgeable about the west. The western world was far from being the land of myth and fantasy which China, for her part, remained to many Europeans (Fitzgerald and Seligman 1938). The Roman Empire and peoples to the west were known to the Chinese, and increasingly became part of China's indirect trade through most of the pre-Dark Age period. According to Fitzgerald and Seligman (1938, p. 196), "from archaeological discoveries in present-day Turkestan it is now known that the trade in silk was very extensive, and for the Chinese wholly profitable." Although no direct trade linkages appear to have existed as far west as Rome, China did benefit from indirect trade as goods flowed to India and Persia to be sold to points even further west by middlemen. Middlemen or intermediaries, such as the Parthians, also benefited from indirect trade as they took in great profits from their Roman customers (Fitzgerald and

Seligman 1938). Silk became such a major sought out luxury good during the pre-Dark Age in points westward, including Rome and East Asia that it is argued that it was largely paid for by the export of bullion (Fitzgerald and Seligman 1938; Chew 2001a). In fact, it's argued that "the export of bullion to buy silk, was one of the causes of the economic distress in the later centuries of the Roman Empire" (Fitzgerald and Seligman 1938, p. 196). Given China's agricultural, manufacturing, and creative prowess it has historically been the case that the only commodities foreigners could trade were precious metals. In later centuries trade in silk and other luxury goods, such as ceramics and tea, would lead to the enormous accumulation of silver and gold, all of which could be traced back to the pre-Dark Age period.

The continued rise of silk exports to the West compelled the Han to send an envoy to the Roman Empire in the first century A.D. to ultimately destroy Parthia's, modern Iran's, control of the silk trade to points westward (Bai 1982). Moreover, earlier during the Han period one discovers from the annals of the Han dynasty and from the historical records of Sima Qian, or Ssu-ma Chi'en, that the Han Emperor Wu, who ruled China from 141 B.C.-87 B.C., favored the development of an open passage westward for Chinese exportation of silk to the West (Qian 1993; Ch'ien 2002). Rome itself wanted to reach China to establish direct trading ties, and in 166 A.D. the ambassador of the Roman Empire Marcus Aurelius Antonius arrived in China and returned to Rome with silk (Evans 1992). According to Evan (1992, p. 27) "detailed Roman roadmaps show with unexpected precision the route to China, dispelling any doubts as to where China was." At the height of Roman Imperial expansion Rome sustained, and in many regards relied on, the maintenance of an extensive network of trade. Rome's rise as a power was

dependent on "trading connections with northern Europe, the Mediterranean, Africa, and the Far East" (Chew 2001a, p. 73). Evan (1992, p. 27) notes that "annual caravans of silk continued to go west to [Rome from the East to] return laden with ivory, glass, linen, wool, carpets, glazed tiles, grape vines for wine, gold, and horses."

Throughout East Asia and points westward, silk emerged as a valued commodity early in the pre-Dark Age period. According to Burling and Hart (1957, pp. 307-308), "silk was exported to other countries which were eager to obtain this fine fabric…it was worth its weight in gold, a fact which appears to have done little to discourage the purchasers." Although Korea, and then Japan through the Korean peninsula around the third century A.D., acquired the knowledge from China to produce silk, the weaving skills of Chinese artisans, and China's established trade, made Chinese silk goods, such as tapestries and embroideries, sought out items.

Accumulation, Exchange, and Nature

As the center of capital accumulation in East Asia, China heavily employed its natural resources to meet the demands that ensued as a result of increased trade, domestic consumption, and urbanization. Nature during the pre-Dark Age period was under constant assault as China attempted to sustain various practices. Maintaining consumption and accumulation meant the continuance of Chinese political, economic, and cultural hegemony over portions of East Asia. Continued influence in East Asia, in many respects, also meant a further degradation of local physical environments. The popularity of Chinese products, such as pottery and iron implements, directly impacted natural environments. According to Teng

(1927), early deforestation in China during the pre-Dark Age period was linked to agricultural production, irrigation, and the production of commodities for trade and local consumption. Chew (2001a, p. 109) argues that "a Chinese society conditioned by accumulation…[eventually] generated the conditions of ecological crisis." The pressure placed on the natural environment of the Chinese mainland is the "outcome of…[societal] need and priorities" (Chew 2001a, p. 109). Historically, one observes that periods of economic ascent are characterized by an over utilization and exploitation of natural resources. The pre-Dark Age period created the conditions for an ecological crisis as ecosystems were disrupted by human activities.

In addition to the degradative impacts of economic activities on the natural environment, increases in population further exacerbated the pressure on China's natural resources. The need for arable land, fuel for cooking, and raw materials for construction, all directly impacted local environments. For example, according to Chew (2001a, p. 109), "population increase over Chinese history does show an intensification of land use that resulted in rapid deforestation, which in the long run became permanent." With a growing population on the Chinese mainland, during the pre-Dark Age period, more and more resources were needed to house, feed, and accommodate consumptive habits. In fact, China's population growth in the early Imperial Age only fluctuated as a result of wars, famines, and changing territorial boundaries. For most of the period under study, which extends from the Han to the Tang dynasty, China's population stayed between forty and sixty million (Smil 1994). The resources employed to construct temples, tombs, palaces,

and support the luxuries and pleasures of regional populations and aristocrats all exacted a toll on nature. This degradative impact on nature left a distressed environment that permanently altered the landscape of the Asian mainland. In subsequent centuries this would lead to the disappearance of forests across East Asia.

The construction of both hydraulic and nonhydraulic public works reached new levels during the pre-Dark Age period. An intensification of various types of construction undoubtedly exacted a toll on the environment. If one considers that hydraulic works include the building of productive installations (such as canals, aqueducts, reservoirs, and dikes for the purpose of irrigation), protective installations (such as drainage canals and dikes for flood control), aqueducts providing drinking water, and navigation canals, the impact alone from these types of construction on the environment was in ancient times as it is today significant, and when nonhydraulic public works are considered the range of construction activities widens (Wittfogel 1957). Nonhydraulic works include works of defense, such as walls and other defensive structures, works that facilitate communication, such as highways, and buildings that serve the public and personal needs of various members of society (Wittfogel 1957). The building of certain edifices not only met public and private needs, but also served secular and religious needs. Political administration, economic exchanges, and ritual practices were linked to the construction of palaces, markets, tombs, and temples. Prosperity during the pre-Dark Age not only intensified construction, but led to wider works such as road systems and larger more elaborate palaces.

Specifically the construction of both hydraulic and nonhydraulic works meant the clearing of forests and trees. In *The Basic Annals of the Han Dynasty* one reads accounts of government officials that cleared vast tracts of land for roads. Ssu-ma Chi'en (147 B.C.) in the *Shiji* writes, "month…after month, they cut trees along the speedway." According to translators of *The Basic Annals of the Han Dynasty* it's strongly likely that the logs cut around the speedway were employed in the creation of a dam (Chi'en 1994). An examination of the scope of construction that took place during the period is found in Wittfogel's analysis of labor in ancient China. In this regard, Wittfogel (1957, p. 39) observes that "the highways of imperial China required an enormous labor force for their construction and a very sizeable one for their maintenance. A Han inscription notes that the construction of a certain highway in the years A.D. 63-66 occupied 766,800 [men]." The men employed to construct the road system became important to the increase of trade linkages during the period. From the Qin (221-207 B.C.) to the Han (202 B.C.-A.D. 220) dynasties, in a period of over four hundred years, the Chinese constructed, and managed, an extensive road system that totaled about 40,000 kilometers (Needham, Wang, and Lu 1971). The length attest to the elaborate nature of interconnections between Chinese cities during the pre-Dark Age period (see figure 3). This network of roads also connected China to communities westward and extended far east into the Korean peninsula. The feasibility of overland trade through a road system also facilitated overseas trade to Japan and communities in Southeast Asia, since ports were now linked to major markets on the Asian mainland. Throughout China and commandeering posts in

Korea, Chinese roads were built by clearing large stretches of land and "tamping rubble and gravel with metal rammers" to create an elastic surface on the ground (Smil 1994, p. 136). Wooden carts drawn by oxen, and wheelbarrows, facilitated the transportation of a wide variety of goods (Smil 1994). Roads not only made trade easier, but, along with goods, people could now easily move. The movement of people was facilitated by the use of two-wheeled wooden carts and "sedan chairs" that were able to transport larger numbers of people and goods (Smil 1994, p. 136).

Clearing land for roads was of importance during the pre-Dark Age period, and one finds that it made interconnections within human communities in East Asia possible. In historical writings and accounts of the time merchants commented on this road construction:

> The territory of the southwestern [peoples was open]. They pierced mountains, and constructed a great highway more than a thousand li in length in order to extend the territory of Pa and Shu. [They] opened communications to the northeast right to Wei-mo and Chao-hsien where at that time there was established the province of Ts'ang-hai (128 B.C.) (Qian and Gu 1950, pp. 242-243; see *Hanshu* 24).

It is worth noting that early in the Han period there is mention of road expansion to Chao-hsien. The reference to Chao-hsien is to peoples that inhabited the Korean peninsula, which confirms archeological data that suggests that exchanges between China and Korea were well underway. In addition, the *Hanshu* further corroborates observations made by historians that a construction boom of buildings such as palaces, mausoleums, shrines, and temples characterized this period.

Further analysis of the material used for construction during the time period reveal "the predominance of wood and earth" (Yang 1969, p. 215). Noting the importance of these materials Yang (1969, p. 215) observes:

> These two materials played such an important role that the standard cliché in Chinese for engaging in major construction is ta-hsing t'u-mu, 'greatly engaged in work of earth and wood.' Even the modern discipline of civil engineering is called t'u-mu kung-ch-eng, literally, 'earth and wood engineering,' although the major materials used by modern engineers are steel and cement.

The importance of wood is addressed directly in *Hanshu 24* and is raised as part of a discussion of economic life. The following entry contained within the *Hanshu* reads:

> An organized society needs to wait for farmers to produce that people may eat; for foresters, hunters, miners, lumberman, fisherman, et cetera to bring out products from the mountains and marshes; for craftsmen to make articles of merchandise, and tradespeople to exchange them…if foresters do not go out to labor, then there will be a shortage of wealth, then resources of mountains and marshes will not be opened up. [They]…are the sources from which people are clothed and fed. If the sources are great, then wealth will be abundant; if they are small, then will articles be scarce (Qian and Gu 1950, p. 421; see *Hanshu 24*).

The reliance on wood during the pre-Dark Age period is not only noted in the *Basic Annals of the Han Dynasty*, but is in fact addressed during the post-Dark Age period by writers. Reflecting on the grandeur of the pre-Dark Age, writers called attention to history by its introduction in poetic works that memorialized important historical periods, events, and figures. Writing during the Tang dynasty (618 A.D.-907 A.D.), the poet Tu Mu describing earlier periods in the history of imperial China states:

> The Six Kingdoms finished,
> The Four Seas united,
> The Szechuan Mountains bare,
> The A-p'ang Palace appeared (cited in Yang 1969, p. 37).

Analysis of these brief, but precise, lines of poetic prose calls attention to the scope of construction in the period prior to the Dark Age. The reference to the bear Szechuan Mountains and then the emergence of a palace is an observation about the large construction projects undertaken during earlier times. Beyond the praise later poets and writers would give to the achievements of earlier dynasties, Tu Mu, perhaps unknowingly, directs attention to the bare mountain that now stood as a result of the extravagant construction of what was one of the largest buildings of the time. His poem underscores the resources that are necessary to construct major structures.

The extravagant use of timber during the pre-Dark Age period reached new highs as more elaborate and larger structures were built. Wood was employed throughout the imperial period, but its use was intensified during times of political stability and economic growth. Addressing the reliance of wood in China's imperial period Yang (1969, p. 37) makes the following observation:

> To procure and transport large timbers was extremely costly and created an enormous burden on the people. In imperial China, the responsibility of providing timber for…construction tended to fall on the southwestern provinces, where the mountainous regions were heavily forested. To obtain large timbers there was a perilous task. The workers had to traverse dangerous mountains and rivers, to experience hardships and hunger, to risk facing snakes and tigers, to be exposed to a poisonous and pestilential climate…artists depicted fifteen scenes of such hardships in a series of paintings entitled *An-yun t'u-shuo,* 'procuring and transporting [of timber], illustrated and explained,' in the hope that rulers might reduce their demand for wood.

However, the insatiable appetite for timber continued throughout the pre-Dark Age period and would resurface during the Tang dynasty. During Han times the search for timber led many to every corner of the Chinese mainland, but the demand would in later periods lead to the importation of wood from outside China.

Growth in construction was triggered not only by the exuberant lifestyles provided by economic prosperity, but by growing populations. The population of China rose from less than 53 million in the first century A.D. to 63 million by the end of the 3rd century (Chu 1926; Feurwerker 1990; Chew 2001). During the pre-Dark Age period the Chinese mainland experiences a surge in its population. Historically, population growth can be linked to expansionary periods in the history of civilizations and empires. In China the pre-Dark Age period is characterized by economic expansion and population growth. From around 221 B.C., up until the end of the Han dynasty in 220 A.D., the Chinese mainland undergoes a long wave of population growth that would later repeat itself (Chew 2001a). Over Chinese history population surges, as indicated in subsequent periods, are linked to periods of economic ascent.

Environmental degradation is also observed by historical accounts of floods during the pre-Dark Age. According to Chu (1926) and Feuerwerker (1990), the number of floods on the Chinese mainland increased from the first century A.D. till around 220 A.D., a signal of the pressure felt by nature during this period of expansion. The increased frequency of floods during the pre-Dark Age period is an outcome of soil erosion and the siltation of rivers that came as a result of land clearing for agriculture, animal husbandry, manufacturing needs, and the use of

timber for construction (Chew 2001a). Along with flooding, a continued depletion of forests in China brought with it accelerated loss of soil and declining soil productivity. Soil degradation in turn comes to impact the volume of production of crops of particular patches of land that have lost their nutrients (Perlin 1991). Inadequate soil nutrients through repeated use of deforested lands eventually "exhausts the soil's ability to 'feed' plants" (Perlin 1991, p. 63). Matters are made worse when nutrient depleted soil continued to be used, but required more water in order to be productive. When land is deemed unproductive, degradation further continues, as forested land is then cleared to use for agricultural production.

Growing populations supported by increases in local agricultural production, and expanding trade linkages, also require housing. During the pre-Dark Age period, East Asia experiences a growing concentration of people in important trade, cultural, and political centers (Griffis and Walworth 1935; Kublin 1972; Hucker 1978). The process of urbanization in East Asia reaches an important phase during this period as trade networks are dependent upon the emergence of urban centers in the Chinese mainland, the Korean peninsula, and Japanese island. A network of cities became important to the expansion of trade in the region, and allowed for the support of growing populations. The elaborate trade networks further fueled growth in cities, as they became synonymous with excess. Migration into important political, economic, and cultural centers was precipitated by the abundance associated with these locales.

Urbanization has historically produced degradative outcomes. The materials required to alone house ordinary people, let alone the wealthy, places

growing pressure on local natural resources. For example, the construction of housing, tombs, palaces, administrative buildings, and markets, requires raw materials, such as stone, wood, and clay that do disrupt natural environments. During times of prosperity and wealth this is intensified as housing structures became larger and palaces for the elite more extravagant. The greater spaces now used for housing further exacted a toll on nature not only in the raw material employed for construction, but in the large amounts of wood and charcoal needed to heat these buildings.

Trade and cultural exchanges were dependent on elaborate transportation networks that could easily move people, finished products, and raw materials between human communities on the Chinese mainland, Korean peninsula, and Japanese islands. Transportation within the Asian mainland not only involved the clearing of forests for roads, but also meant the construction of ships to take advantage of important waterways. Rivers were used to move goods within the mainland, but also historically facilitated administration of China. In particular, the Yangtze proves to be important as it cuts across the Chinese mainland and is navigable for a thousand miles from its mouth (Kublin 1972). In addition to waterways in the mainland exchanges between China, Japan, and Korea benefited from the use of the sea to move goods across the Korean strait and then to the Japanese islands. The Korean peninsula has historically been viewed by the Japanese as an important trade route (see Imamura 1996). Transportation by ship was not only important in connecting Japan to the Asian mainland, but the Japanese have relied on the sea to travel to their various islands. As the shortest

route from Japan to China, the Korean strait proved invaluable in the economic and cultural exchanges that took place during the pre-Dark Age period.

The importance of ships during this period meant that nature was further under assault to meet the demands of expanding trade. Local forests were used for ship construction. With the intensification of trade and cultural exchanges, shipbuilding became a major industry. From the presence of pine and cedar forest in southern China's coastal areas one can argue that these woods were located in an ideal location for construction (Elvin 1993). The proximity of forests to the ocean allowed for utilization of local resources in strategic locations. One can surmise that the development of ports in southern China was linked to shipbuilding and the location of important materials. China's geographic size meant that it could employ its own environmental resources to gain an economic edge over potential competitors in the region. It is in fact the abundance of Chinese locally extracted raw materials that kept its products competitive in the regional market of East Asia. From Sichuan in the west to Fujian on the coast, the Chinese shipbuilding industry during the pre-Dark Age period relied on locally forested areas (Elvin 1993). Historically the most affected forests have been those located in the south, and in particular woods in contemporary Fujian province which faced the East China Sea.

China as a major center of manufacturing in the region not only relied on local resources, but also imported raw materials to supply its various industries. For example, Japan, along with Southeast Asia, supplied China with wood it required for fuel and construction (Elvin 1993). Ancient Japan was certainly less commercialized than China, but it was the open sea that allowed it to participate in an array of cultural and economic

activities. An examination of trade exchanges of the period reveals that Japan exported timber to China as one its major commodities, while the latter primarily supplied the Japanese islands with manufactured goods (Wang 1958; Wheatley 1959; Wolters 1967; Yamamoto 1981; Hall 1985; Totman 1989). The flow of trade in the pre-Dark Age period between the Chinese mainland and Japanese islands is characterized by the raw materials that flowed from Japan to China. Japan's participation in the regional economy was as a supplier of natural resources to the various manufacturing enterprises on the Chinese mainland and Korean peninsula.

Beyond trade exchanges in the region, China as the major political and military entity in Asia exacted tribute from human communities on the Korean peninsula and in Southeast Asia. Tribute came in the form of precious metals, raw materials, and finished goods (Chew 2001). In the *Songshu* reference is made to tribute sent to the Chinese court from Japan. In several entries in the *Hanshu*, references are made to embassies coming to China to present gifts to the Han court (Tsunoda 1951). Later writings in the *Songshu* suggest that the flow of tribute to the mainland from Japan would continue in succeeding dynasties (Tsunoda 1951). Although tribute from kingdoms outside of Chinese direct control were a component of the Chinese economy, of bigger consequence was trade and the infrastructure that allowed for economic and cultural exchanges throughout Asia.

Chinese ports along the coast have historically been an important component of trade in Asia. The pre-Dark Age period witnessed the development of these ports as China's economic growth and trade in the region was dependent on its ability to transport goods and people across East Asia and points south. Economically, it was a good strategy for China to develop its shipping industry and

ports. The ability to export goods and attract foreign traders was connected to the development of coastal areas. Greater attention to the development of coastal cities is evident during this period. Recognizing the importance of these ports to China, has historically meant that the geographic concentration of the Chinese economy to the east.

Cultural Customs, Rituals, and Nature

The attention given to ritual in East Asian historical texts clearly shows its importance. The salience of ritual to the life of peoples during the pre-Dark Age period is made clear in the descriptive excerpts contained within various historical accounts that detail both religious and secular activities. Emerging from the historical record is the necessity of ritual to social life. Symbolic ritualized practices are presented as a system of standards for determining socially acceptable responses and conduct (Bol 1992). As guidelines of behavior, the rites described in the *Dynastic Histories*, for example, served both as "objective models of appropriate behavior and simultaneously stimulate correct emotional responses" (Bol 1992, p. 100). From the *Dynastic Histories* one is made aware that the conceptualization of *Wen* or culture encompasses behaviors and responses, and as such is directly linked to ritual. The presentation of ritual is linked to ideas about proper forms of conduct. In antiquity, and subsequent periods, the description of wen and culture was implicitly tied to social models meant to guide interactions and produce acceptable emotions and responses in social settings.

The symbolic significance of customs and rituals in China became increasingly important as the Chinese came into contact and were more involved

with peoples outside of their borders. As in many cultures, rituals are carriers of important cultural information (Bruce 1923). Culture can be used to maintain societal cohesiveness and identity, in the face of distances that keep communities geographically separated (Watson and Rawski 1998). Specific customs and rituals become significant markers in distinguishing members and non-members of communities. The pre-Dark Age period, which encompasses the Han dynasty, is a period of Chinese geographical expansion. Increases in Chinese territory, along with an intensification of trade linkages, brought Han Chinese into contact with non-Han tribes (Watson and Rawski 1998). According to Rawski (1998, p. 33), cultural rituals and customs, and not ethnicity defined "Chineseness" in the Han period (see Hevia 1995).

Due to China's expanding Empire during the Han period a growing awareness of Chinese identity emerged. It's perhaps the growing number of non-Han Chinese within China's borders that led Chinese elite to emphasize culture over ethnicity as an important marker of societal membership (Rawski 1998). According to Rawski (1998, p. 33), "anyone could become 'Chinese' by adopting Chinese customs and behavior." The adoption of rituals by non-Han Chinese contributed to the development of their Chinese identity. The incorporation of non-Han tribes was facilitated by the adoption of Chinese surnames, rituals, and customs (Rawski 1998). Rituals that were properly performed became an important demonstration of identity.

A central element in the creation of a unified East Asian regional system, dominated by China, was the diffusion of Chinese rituals. The historical and

archeological record reveals that beyond economic connections, culture was an important element in the maintenance of a cohesive East Asia. Although analyses of rituals by Chinese writers of the time are largely absent in the *Dynastic Histories* and in writings from the former Han to the Tang period, what one does find is a specific accounting of rituals during various periods. Historians and writers of the time may not have given extensive discussion to the linkages, for example, between rituals, symbolism, nature, economy, and legitimacy, but they repeatedly did discuss, in a descriptive manner, the importance of conduct. Ritual in the *Dynastic Histories* appears to be a subject of much interest because the "Chinese considered the proper observance of ritual and, in its more mundane form, social etiquette to be the very hallmark of a civilized people" (Wechsler 1985, p. 9). It is, as addressed in the *Dynastic Histories*, an element that distinguished the Chinese from the less civilized barbarians or foreigners they came into contact with. In the sinocentric order of East Asia, Chinese ritual came to be the means by which foreigners where symbolically accepted, and, for example, allowed to participate in the regional economy.

The secular aspects of ritual in Chinese antiquity are predominant in the writings of China's imperial age (see Legge 2003). By the Chinese pre-Dark Age period, the notion that a link existed connecting the human and natural worlds came to guide ritual practices. It also provided a focus on the importance of ritual to society and the individual. According to this belief, it was men, and not the Gods, spirits, or ancestors that was the focus of ritual activity (Wechsler 1985). For example, if we turn our attention to the Analects, Confucius says, "if I am not present at the sacrifice, it is as though there were no sacrifice" (cited in Waley 1938, p. 97). In other words, "whether or

not the spirits are present is not as important as the state of mind of the sacrificer and the personal value he obtains from his ritual performance" (Wechsler 1985, p. 26). Rituals weren't in many cases divinely inspired, but had a secular basis that was explicitly linked to human conduct.

A belief in the interconnectedness between human beings and their natural world served as the guiding principle in the pre-Dark Age period. Ritual was then recognized as a means by which men could influence the cosmos. The view that the universe, the earth, and human beings were all interconnected also held "that actions in one brought a corresponding reaction in the other" (Wechsler 1985, p. 26). The outcome of observing ritual practices was believed to be social order and stability, and a harmony between the universe and earth (Wechsler 1985). Correct human conduct coupled with performance of ritual was, according to popular belief, the tools human beings had at their disposal to influence events. Of importance in this arrangement was the ruler or emperor who was the link between heaven and earth. According to Wechsler (1989, p. 9), "[the ancient Chinese] believed…that a ruler's performance of ritual…could actually influence the cosmos in a manner beneficial to mankind." The emphasis of harmony in the universe was also a focal point on social stability on earth, and it was the emperor who was looked at as the "linchpin" of the human and natural worlds (Wechsler 1989, p. 26).

From writings about ritual or *li* in the *Dynastic Histories*, and specifically in the three classics on ritual, the *Rites of Chou* (*Chou-li*), the *Book of Rites* (*Li-Chi*), and the *Ceremonial and Ritual* (*I-li*), one can argue that the conceptualization of ritual extended well beyond religious conduct to include secular behavior. In tracing the meaning of the classical character of ritual, *li*, one finds that as early as the second millenium B.C. there

is evidence of writings about rituals in the oracle bone of prehistoric China (Bell 1997). Analysis of the classical character for ritual reveals a "sacrificial vessel with what may be two pieces of jade above it" (Wechsler 1989, p. 23). In Han times the character would change in form, but still retained the ancient meaning and was increasingly used to encompass behavior outside of direct religious or sacred practices. In fact, as early as the sixth century B.C. one finds secular behavior discussed as ritual in the writings of Confucius (551-479 B.C.) (Smith and Kwok 1993; Huang 1999; Ivanhoe and Van Norden 2001). Ritual as code of conduct was emphasized in the Han period and became a characteristic cited by Chinese rulers as a distinguishing factor that separated Chinese from non-Chinese. References to foreigners in the *Dynastic Histories* as barbarians were not linked to assessments of ethnicity or race, but were made in terms of what rulers and learned Chinese considered to be a lack of civilized behavior in the groups they came into contact with.

Presented within the *Dynastic Histories* are references to terms and ideas such as *shih*, *li*, and *tao*. If one examines references made to shih or gentlemen, *li* or ritual, and tao or the way, one finds that they're addressed as part of a broader discussion on conduct. Rituals were seen as a component of human behavior that emerged to become a code of conduct for all human beings in the dynastic period. The meaning of *li* extended to behaviors such as honesty, good manners, cultivation, chivalry, etiquette, decorum, decency, social obligation, custom, and tradition (see *Li-chi*). In the pre-Dark Age, and in subsequent periods, *li* was thought as "the embodied expression of what is right" in various situations (Legge 1967, p. 390). Ritual or *li* emerged to be regarded as a central component of Chinese civilization. As *li* ran through religious ceremonies, social

practices, cultural values, beliefs, and norms "it came to be regarded as the very principle upon which Chinese civilization was based" (Wechsler 1989, p. 24).

In the conceptual evolution of *li* one finds that overtime the concept encompasses far more than just religious rites. Although the concept was originally linked to religious practices, from its inception in early writings ritual has always been connected to rules of proper conduct (Cua 2002). If one examines the broadening of the concept historically, the argument can be made that ritual is first linked in meaning to the sacred, but then later is extended to include social habits and customs, and eventually is linked to ideas about right, reason, and morality within society (Cua 2002). Chinese philosophers such as Confucius and Hsun Tzu made the case for the significance of *li*, and its instrumental importance, early in Chinese history. Hsun Tzu in the 3rd century B.C., considering the principal functions and origins of *li*, makes the following remarks:

> What is the origin of li? I answer that men are born with desires. If their desires are not satisfied, they cannot but seek means for satisfaction. If there are no limits or measures to govern their pursuit, contention will inevitably result. From contention comes disorder and from disorder comes poverty. The ancient Kings hated such disorder, and hence they established li (rules of proper conduct) and inculcated yi (sense of rightness) in order to draw distinctions (fen) and boundaries of responsibility for regulating men's pursuit, to educate and nourish (yang) men's desires, to provide opportunity for their satisfaction (ge-jen chih chiu). They saw to it that desires did not overextend the means of satisfaction, and material goods did not fall short of what was desired. Thus, both desires and goods mutually support each other. This is the origin of li. (cited in Cua 2002, p. 472).

Early philosophers make clear that the concept of ritual or *li* included all religious and social usage, manners, and customs as well as laws of the land, that are presented in the Book of *Rites* (*Li-chi*), *Ceremonial Rites of Chou* (*Chou-li*), and *Decorum Ritual* (*I-li*). Through its conceptual evolution *li* came to include not only conduct that is observed, but also the principles that guide etiquette.

Ritual or *li* is also linked to ideas about the presence of an integrated social order. The concept of *li*, is often used in the *Dynastic Histories* not only for describing specific ritual activities, but also in reference to a whole system of social institutions that direct behavior. In ancient China government policy, the organization of the family, and the rules of society, were all founded on *li* (Goldin 1999). According to Li Kou, a Confucian scholar writing in the 11th century A.D., "li is an empty term, a general name for institutions,…[and] what is meant by li is to enact and to regulate" (cited in Bol 1992, p. 185). As a system of activities aimed at providing and satisfying basic needs, among the functions of ritual addressed by early Confucian scholars was the provision of food, clothing, shelter, and utensils necessary for life (Hsueh-Chin et al. 1959; Graham 1989). Culture and ritual also provided clarity in regard to social distinctions and roles (Bol 1992). It was believed that ritual was a necessity if people were to have orderly relations in the family, community, and state (Bol 1992). Implicit in the *Dynastic Histories* is the belief that the practice of ritual provided order within China, but was also important outside of the Middle Kingdom. In the Chinese conceptualization of culture, ritual or *li* provided an important basis for integrated order that all civilized people fell under. Ritual in this regard encompasses Chinese subjects within the Han Empire and refers to a system modeled upon principles of order, harmony, and regulation.

During the pre-Dark Age the economic, cultural, and social life of human communities in East Asia was influenced by ideas about the role of ritual in society. Ritual is conceptualized as a functional term that encompasses socioeconomic life, public institutional activity, and ethics. Various dimensions of social life were perceived as aspects of a single, unifying concept of ritual which was representative of the way men

led their lives within an integrated social order (Bol 1992). According to Kou, "the means whereby the sages ordered society [*t'ien-hsia*], state, and family, and cultivated the person and rectified the mind were none other [than this]: they were unified by ritual" (cited in Bol 1992). Because of such a conceptualization it can be argued that ritual is an inclusive term that is linked to ideas about a coherent system and the presence of a normative order (Bol 1992).

Analysis of historical documents, such as those contained within the *Chinese Dynastic Histories*, reveals various rituals that can be categorized into six broad categories of ritual action. These include rites of passage, which are also referred to as "lifecycle" or transition rites; commemorative rites; rites of exchange and communion; rites of affliction; rites of feasting, fasting, and festivals; and, finally, political rituals. According to Bell (1997, p. 94), these categories of rituals "have long been the dominant examples and primary data for ritual studies." Unquestionably, in the *Chinese Dynastic Histories* the most obvious rituals are linked to tradition and conduct, be it religious or secular, as so much attention is devoted to their description. The list of genres presented in this study is not meant to be a definitive attempt to compile the various rituals present in ancient East Asia. It is important to point out that there are many other distinguishable rituals that could be easily classified into other categories, and there are rituals that could analytically be placed in more than one category. In drawing from the *Dynastic Histories*, rituals are understood collectively, are shared, and are largely considered traditional (Bell 1997). By recognizing some activities as traditional, one notes that some practices or activities can be understood as preserving ways of conduct or action that are historically established.

Historically one finds that a number of human activities were conducted ritually or eventually became a part of rituals. In East Asia a number of practices from social to economic were ritualized to varying degrees and appear "ritual-like." Scholars who have dedicated considerable attention to ritual observe the "ritual-like" features present in a myriad of human activities (Driver 1998). However, it is widely agreed that distinctions can be made, and categories formed, that help differentiate ritual from non-ritual practices (Bell 1992). Early studies of ritual have imposed some order through the creation of categories and taxonomies (see Durkheim 1915; Durkheim and Mauss 1963). Drawing from textual sources, and the archeological record, I suggest that a number of rituals including rites of passage, marriage rites, festivals, purification ceremonies, civil ceremonies, and rituals of exchange can be identified and are a social component of interaction in East Asia.

An examination of first hand accounts recorded by royal scribes in *The Grand Scribe's Records* shows the impact periods of excess consumption can have on nature. In 104 B.C., after the Po-liang palace caught on fire and was destroyed, the Han emperor ordered a new palace built. The original palace was located in the Han capital of Changan and was considered a true monument to the glory of the Han dynasty. A royal scribe records a description of a beautiful building only fit for royalty, and adds that later generations will not have such a magnificent building (Qian 1993; Ch'ien 2002). In order to build this extraordinary palace hundreds of cypress trees were cut from local forests. The abundance of resources during the pre-Dark Age period allowed people of the time to follow customs linked to resource availability. One could argue that cultural customs that called for practices that exhausted and used raw materials on mass were tied

to abundance. This is exactly the case when the emperor orders a new palace built in accordance with local customs. The custom is that in the event a structure, such as a house, is consumed by a fire it should be rebuilt larger than the original (Ch'ien 2002). The logic being that a larger structure subdues the evil in the area. In accordance with this custom the Chien-chang Kung or Established Emblems Palace was built on such a grand scale that it dwarfed the original building it replaced (Qian 1993; Ch'ien 2002). During times of abundance one finds that conservation is seldom a concern, and as Chinese documents of the time reveal, custom and ritual in the pre-Dark Age was facilitated by the availability of material resources.

Chang Heng (A.D. 78-139), a Chinese poet during the Han dynasty provides us with this description of Po-liang palace:

> The Shen Ming [Spirit-Revealing] Tower reared itself aloft and the Ching Kan Tower, in a hundred piled-up storeys, One storey succeeds another, as you go up and up -- you catch sight of the North Star, and are thrilled with delight. Rising free from the world's dust into the upper air, You spy out the long back of the curving rainbow: you study the leaning together of the Hyades. If you go on to the flying balcony and look beyond, you observe straight before you Jade-Light and String-of-Jade. You are about to go on -- but before you have gone halfway you are shaking with fear, filled with apprehension. Without the Tu Lu's [climber's] agility, who can climb high and keep going higher? (cited in Hughes 1960, pp.38-39).

To further understand the importance of ritual, and interconnections that exist between the practice of ritualized practices, economic activities, and environmental degradation, attention can be given to funerary rites in East Asia.

Ceramics Trade, Burial Rituals, and Nature

Historically, rituals in East Asia are in part linked to the observances that mark lifecycle or transition rites, the worship of Heaven and the earth, and the spirits of the

dead. Ancient people in the region as far back as the second millenium B.C. were performing and, as the oracle bone inscription makes clear, recording symbolic ritualized practices (Keightley 1978; Ching and Guisso 1991). Since ancient peoples in East Asia believed that their happiness and prosperity depended greatly upon maintaining the right relationship with the spirits of the dead, they were particularly interested in the forms of behavior that would cultivate a good relationship with the spirits in the afterlife. Relations between the living and the dead were then perceived to be dependent upon proper forms of worship. The emphasis on order that characterized a variety of secular activities during the pre-Dark Age also extended to beliefs about intercourse with the dead. Maintaining connections to the deceased has historically meant the performance of various rites. Through mourning, sacrifice, and offerings individuals both honored the dead and aided their transition into the afterlife. The link between the world of the living and the afterlife is apparent not only in the description of funerary rites that survive in historical manuscripts, but in the objects that are part of the archeological record. During the Han dynasty burial rituals became increasingly complex and hierarchical. Burial mounds formed the shape of hills, a reference to the belief that the dead made their homes on mountains. Symbolism was also more defined with the “five elements” playing an increasingly important role (Bol 1992). The five elements comprised of the four principal directions with the earth at the center representing stability or balance were linked with specific animals, planets, colors, seasons, and physical elements. Symbols of the east included the Green Dragon, the sun, and spring. The east is associated with the Emperor, and the island of Penlai, which was said to be the home of immortals, and positive yang energy. Representative of the south was the phoenix, summer, and fire. It

also symbolized the Empress and negative ying energy. The west is the domain of the white tiger and also represents the moon, and autumn, while the north was associated with the tortoise and snake, winter, and water. The importance of these five elements is depicted in various uncovered tomb sites, and made evident in the many wares found by archeologists. It was the custom to place figures that resembled and symbolized these elements in tomb sites. Chinese burial tradition followed the custom of placing clay replicas of material possessions, animals, and people in the tomb to accompany the deceased and serve them in the next life.

Trade in Chinese ceramics, specifically porcelain, was flourishing prior to the onset of the Dark Age. Economic growth in the region was tied to not only the trade of luxury items such as porcelain and silk, but involved trade in spices, timber, rugs, and metals (Chew 2001a). The scope of the goods being exchanged during this time period points to the economic participation of regions beyond Asia. The demand for Asian products, and specifically Chinese goods, fueled degradative practices in China as production and manufacturing of finished products intensifies. Resources required in order to accommodate demand in Chinese products not only impacted local resources, but had a degradative affect on other parts of the regional trading system.

In identifying China as a center of capital accumulation in the regional trading system of East Asia it also becomes evident that through its trade in goods China also managed to become a cultural center. Throughout East Asia and regions westward, Chinese pottery was a valued commodity. At this point in time the popularity of Chinese ceramics created a market for reproductions manufactured in Korea and Japan (Wilson 1995). Although reproduction of Chinese ceramics occurred, aristocrats throughout Asia

preferred Chinese ceramics. In Japan, for example, glazed ceramics from China were a sought after luxury item from China's highest elite (Wilson 1995). Reproduction of Chinese ceramics in Japan, Seto wares, were purchased by lower ranking aristocrats in Japan (Wilson 1995). The influence of Chinese pottery was evident in Japan, as it was throughout Asia.

Trade routes were well established during this period and underscore the point that the regional economy of East Asia was fueled by the consumption of its products not only within the region, but well beyond it. Historically, economic growth in East Asia was fueled by the demand for its products, specifically those being produced in China. However, the interconnections that characterized the East Asian regional system also meant interactions between peoples on the Korean peninsula and the Japanese islands. The history of exchanges between Korea and Japan, for example, speak to the economic and cultural linkages that connected people in the region. For example, after a period when Neolithic Japan was cut off from the art, customs, and cultural innovations on the mainland, pottery and other objects similar to those of Han China and the Korean Three Kingdoms began to appear in Japan well before the first Century A.D. This period corresponded to the beginning of the Bronze and Iron Ages in Japan--in Japanese chronology the middle and later *Yayoi* periods, or the early and middle period of the barrow culture. During the pre-Dark Age Silla dynasty pottery, dolmens and cyst tombs, and bent *magatama* beads are found in tombs alongside Han Chinese items. The potter's wheel was probably introduced into Japan in the late *Yayoi* period via Korea. From ancient times on, a lively intercourse probably existed between the two sides of the Tsushima Strait.

In examining the economic ascent of regions we see that the accumulation of capital is tied to the extractive activities needed to meet consumption and increase economic growth. Agriculture and the manufacturing of items such as pottery point out the link between the utilization of natural resources and economic and cultural activities. In order to reproduce material culture the natural landscape would come under assault as human communities extracted what was needed from the land in order to meet the social, economic, and cultural demands. In the case of pottery kilns, clay, glaze, and fuel, important components in the manufacturing of pottery, required raw materials such as siliceous rock and wood (Wilson 1995). Along with agricultural cultivation and urbanization needs, we see that the manufacturing of items such as pottery increases during this period. The manufacturing of pottery and the resources required to produce, house, and ship theses wares when coupled with other economic and cultural activities did have a heightened impact on the environment.

Following the decline of the Han dynasty in 220 A.D. we witness a period of political disunity as successive dynasties emerge. This is known as the Six Dynasties period or its alternative name of the Period of the Northern and Southern Dynasties. Despite the political unrest this was a time period of substantial technological, cultural, and economic growth (Valenstein 1975; Medley 1976). What is of interest is that economic growth in China during this period was generally more extended and widespread to the territory south of the Yangtze River (Medley 1976). In identifying specific economic centers prior to the onset of the second Dark Age the area south of the Yangtze River could be considered the core of the regional trading system with Korea and Japan making up China's immediate center-periphery system (Frank 1998). China

dominated trade linkages between Japan and Korea well into the Ming dynasty. In examining the exchanges taking place it is clear that China enjoyed an export surplus with its neighbors that further fueled consumption. The south during this period was also a major cultural center as celadon wares first emerge from the southern provinces (Medley 1976). Major centers of economic and cultural activity were located in Chekiang, Fukien, Kuangtung, and Hunan all provinces south of the Yangtze River (Medley 1976). The celadon wares developed during this period were sought after in Japan and in the area that is now Korea. In fact for some time after celadons were imported from China to Japan they were a source of inspiration for Japanese artisans.

Archaeological evidence shows that besides the utilitarian purpose of many wares, they were also an important part of burial rituals. The Chinese for a long period followed the custom, well known in East Asia, of placing in the tomb of a deceased person models in pottery of furniture, household goods, food, tools, and weapons. Along with models of objects and food, archeological excavation of sites in China, Japan, and Korea reveal that the servants, horses, and pets of individuals were simulated in clayware and were a distinct feature of tomb furnishings. This practice occurs throughout East Asia for well over six centuries, from the time of the Chinese Han dynasty, through the Six Dynasties and during the Tang period. Tomb furniture comprised of figures, models, and vases was widely produced, and sophisticated in the Han period (Medley 1976). In comparing decorative and utilitarian pieces during this period, pottery is far more elaborate and extravagant than in earlier periods. According to Medley this extravagance is tied to a "spendthrift attitude to the social customs of the period; [ostentatiousness] even in death was not only acceptable, but it was meritorious" (1976, p. 58). Economic

growth during this period meant more elaborate tombs, especially in the south where brick decorations depict the affluence of the times.

Historically the practice of tomb furnishing has its origins in the pre-Dark Age period (Medley 1976). As an element of funerary rites, use of replicas replaced human sacrifice and the burial of actual goods in earlier periods. The duplication of various aspects of daily life, people, food, servants, weapons, and tools relied on the skills of artisans who produced figurines using clay and wood. Additionally, given that this practice was widespread, an industry geared toward the mass production of tomb-figures was also in place. Excavation of tomb sites in East Asia reveal that both crudely made pieces and sophisticated figures can be traced to the Han dynastic period (Honey 1945). One can argue that mere copies without artistic detail were part of the mass-produced goods that were traded between peoples in the region. The archeological record substantiates this claim as moulds used in the mass-production of tomb furnishings have been identified, and artifacts that bear the same resemblance found (Honey 1945). The technological expertise to produce enormous quantities of tomb figurines fueled the duplication of popular designs that like their imitations required little technical ingenuity.

The furnishing of the Han graves was at times very elaborate, including such things as models of houses, farm-buildings of various kinds, with grain-towers, mills, wellheads, fish-ponds, pigs in pig-sties, sheep in sheep-folds, dogs and their kennels, ox-carts, watch-towers, cooking-stoves, ladles and domestic vessels of all sorts, “as well as servants to wait upon the deceased, dancers and other entertainers to amuse him, and guardian spirits to protect him” (Honey 1945, p. 40). In subsequent periods the tomb-wares seem to have been less various, food-vessels and figures of servants apparently

decreasing in frequency (De Groot 1912; Hentze 1928). The Han figurines, which are the earliest tomb-figures found, leave us with several unanswered questions and observations (Laufer 1917; Hamada 1927). In particular, archeologists suggest that the glazed examples, at all sites, can be dated to the latter Han dynasty, around the 1st Century A.D., but no explanation is offered for the sudden appearance of such pottery figures, previously unknown, in the tombs of the period.

The precise dating of figures can be difficult, nevertheless the point can be made that well before the Six Dynasties period, as part of the burial ritual, cultural items were placed in tombs. Pottery served a utilitarian purpose, but was also an important part of burial rituals. According to Hobson and Hetherington "it was a custom in China to put into tombs replicas of vessels and objects used in everyday life for the service of the dead in a better land" (1982, p. 4). The practice of placing vessels and objects in tombs was not particular to China, tomb sites found in both Korea and Japan have also been found to contain similar items. These items generally include models of farmyards, granary towers, wellheads, cooking stoves, as well as jars, dishes, and cups (Hobson and Hetherington 1982). One can surmise that in placing these objects with the dead the belief was that even in the afterlife one would still need to eat and drink. The burial of clay cooking stoves, for example, was something common during the Han dynasty that makes clear the idea that even in death one would still need such items to prepare food (Laufer 1962). In fact this practice was so widespread that it was not only practiced by China's imperial court, but it was a custom that extended to all classes within China (Laufer 1962). A similar custom was also evident in Korea and Japan with more expensive wares found at the tomb sites of aristocrats or well to do individuals.

Confirmation that pottery found by archaeologists in tomb sites was in fact mortuary or burial pottery is provided by Chinese historical texts of the time. In a chapter in the *Annals of the Later Han Dynasty* a detailed description is given of the various objects made of pottery that were placed in graves (Laufer 1962). What is of interest here is that the same pottery described in the *Annals of the Later Han Dynasty* was later excavated by archaeologists (Laufer 1962). Pottery found in tomb sites further corroborates descriptions in Chinese literature is the actual pottery itself. Clay replicas of daily life found in tomb sites reveal the non-utilitarian function of these pieces. The importance of these scaled backed models lies in the cultural beliefs of the times, as the fitting of tomb was important for ensuring a successful transition to the afterlife.

Cultural exchanges and contact between the peoples of China, Japan, and Korea can be said to have had an impact on the culture of East Asia. Chinese accounts as far back as 1200 B.C. suggest this as people migrated to areas recently conquered by or beyond the territory of China. Occupation of northwest Korea in 1122 B.C., for example, introduced tou and pien trays used in marriage feasts and for drinking wine in China (Laufer 1962). Introduction of pien and tou vessels to Japan is discussed in the *Annals of the Later Han Dynasty* where some cultural differences between Japan and China are noted. One observation is that, unlike China, in Japan the sexes weren't separated when eating meals and that the Japanese used their hands when eating (Laufer 1962). That discussion of the Japanese eating with their hands appears in the *Annals of the Later Han Dynasty* provides us with a glimpse of the dissemination of Chinese culture to Japan.

Examinations of tomb site excavations shows that mortuary pottery in China, Japan, and Korea was, during this time, more similar than different. Japanese and Korean

pottery found in burial sites resembled the tou type vessels found in Chinese tombs (Laufer 1962). As early as 1200 B.C. we see that similar style pottery is present throughout burial sites in East Asia. In looking at the similarities in the pottery styles, and the common nature of furnishings in tombs throughout East Asia, one can surmise that trade was well established. Providing further support for the presence of trade linkages we see the presence of Chinese wares in early Korean burial sites.

Technological growth during this period expanded the capabilities of artisans throughout China. Development in ceramic skills was predominantly located in China's southern provinces, especially Chekiang (Medley 1976). The skills perfected and resulting in the green glazed ware of China was then followed by Japanese artisans and then later by Europeans. In fact what was later called by Europeans proto-Yueh ware originated during this period (Medley 1976). Korean wares at this time were also influenced by technological developments in China. During Korea's Silla Period we see that in many cases the pottery found in Korea mirrors wares found in China (Honey 1948). Like their Chinese counterparts, uncovered tombs in Japan and Korea also contained elaborate tomb furniture during this period. Tomb ware originating in Chinese kilns has been unearthed in both Korea and Japan, and specifically in tombs of prestigious or wealthier people (Honey 1948; Medley 1976; Wilson 1995). The trade exchanges present during this time point to not only economic exchanges taking place, but to a diffusion of culture as prestige and wealth are displayed through Chinese wares. That attempts at reproducing Chinese ceramics were evident throughout Asia, and even Europe, points to the value and demand of these cultural objects.

In focusing this examination on the regional trading system of East Asia it can be argued that pottery in China during this period was an original production of Chinese culture. The pottery found in Chinese tomb sites confirms this as imitations of actual objects that constitute Chinese culture and civilization show a historical specificity. I also find that many of the objects found in tomb sites during this period were developed either during the Han dynasty or earlier, but most importantly in China. In regards to the technique employed in ceramic production and the form of finished pottery the empirical evidence suggests no foreign influence (Laufer 1962). Chinese pottery during this time is an innovation and a product that is grounded in Chinese originality and ingenuity. In fact, pottery in China prior to the second Dark Age is distinctive and unique to other pottery found in Asia (Laufer 1962). China dominated trade in ceramics and we see the influence of this domination not only in economic terms, but also in cultural terms, as Chinese artisans come to influence their counterparts in Japan and Korea. The resemblance of Korean and Japanese pieces to Chinese wares during this period points to the tastes of the time. In looking at Korean and Japanese wares it appears that both are dependent upon the pottery being produced in China.

Funerary wares of the pre-Dark Age period provide an insight into the nature of daily life. There are replicas of various important elements of daily life including complete farms with granaries, animal pens and domestic dwellings. The placement of symbolic figures was common practice during the period and provides evidence of hierarchical social arrangements within the society. For example, the tombs of aristocrats contained sculptures of warriors and their chariots, foot soldiers, grain stores and horses, all of which attested to the power and status of the deceased. Beyond the figurines and

wares, the tomb sites of elite members of society could also be distinguished by the larger burial mounds. While tomb figurines became increasingly popular during the Han dynasty, vessels for offerings still played a very important role in the funerary ware repertoire. As the number of grave goods increased, the demand for bronze vessels also increased and confirms the consumptive lifestyles of the times. In China, the dead were provided with many of the amenities enjoyed by the living and this meant producing pottery not only for the living, but also the dead.

The excavation of tombs throughout East Asia, and points West, also reveals other products of Chinese industry such as silk fabrics, weapons, and tools. Many of these items found their way throughout the East, and distant lands westward, as a result of trade. However, the possibility remains that Chinese goods also came from frontier raids, or as part of the gifts bestowed by Chinese embassies during the period, which was common. In fact, the Han historians frequently mention such gifts, which at times amounted to a form of bribe paid to keep nomads content and peaceful. Among the Chinese objects found in Korean tombs are items made of lacquer, a uniquely Chinese innovation traced to the pre-Dark Age. Until excavations of Lak Lang, a site located near present day Ping Yang in northern Korea, it was assumed that lacquer was developed later. The existence of Han lacquer on the Korean peninsula during the pre-Dark Age period was also unknown. The artifacts uncovered at Lak Lang, and other archeological sites, yield some important findings about trade and cultural diffusion. They first, corroborate Chinese texts by revealing the trade of Chinese goods across the whole of East Asia. Items with origins in Han China appear in both Korea and Japan. Secondly, Chinese items, such as tomb figurines are found throughout East Asia. The custom of

tomb furnishing originates in China, yet it comes to be practiced in both Korea and Japan, with figurines from China finding their way into Japanese and Korean tombs. The custom of placing symbolic figures with the dead appears to be well established in East Asia during the pre-Dark Age period. An industry emerged in China to meet the demands of dutiful observers of this practice, so that figurines were mass-produced and traded. Third, the technological and artistic sophistication of peoples during the pre-Dark Age is revealed. Establishing the existence of lacquer at sites that are purely Han tells us that at much earlier periods people had the ability to produce sophisticated pieces of art. East Asian art history benefits from these excavations as the development of regional art is better understood. Lastly, because many of the objects recovered are inscribed, it has made their identification easier to determine and dating much more accurate. As will be demonstrated in subsequent chapters, it is possible to use previous discoveries as a standard by which to judge other artifacts, and compare them to objects found in other locations and periods to determine their distribution and change. Not only do physical changes become apparent, but given their use in ritual symbolic practices, the modification, absence, or emergence of new pieces can yield clues about changes in the physical, economic, and cultural environments human beings inhabit.

Summary

Historically, the presence of an East Asian regional system is clearly evident. The archaeological record, and historical texts of the time, provides us with a picture of regional exchanges between the peoples of China, Korea, and Japan that predate the third century B.C. During the pre-dark age, a period that spans roughly four hundred years,

from the former to the latter Han dynastic period (202 B.C.- A.D. 220), I find a vibrant regional system where China was the economic and cultural hegemon. A variety of Chinese goods were not only sought after in East Asia, but as recorded in texts of the time, were part of the indirect trade with westward regions such as Rome. Due to Chinese ingenuity and technical expertise, various finished products were mass-produced and exported to communities across the whole of East Asia.

The center of capital accumulation in the region, China's status in the regional economy was dependent of its ability procure raw materials, develop an infrastructure, and secure the flow of goods to and from the Asian mainland. Evident during the pre-Dark Age period is the exuberant consumption that became part of a period of little scarcity. Historical accounts of the time tell of the abundance of commodities, the magnificence of physical edifices, and the wealth of China (See Qian 1993; Ch'ien 2002). To the West, the taste for Chinese goods was well underway, and, for example, prompted the Han court to dispatch an emissary to Rome in the first century A.D. An observation I make is that the intensification of resource extraction during the period allowed for continued manufacturing and trade. In addition to strong demand of its goods, Chinese wealth was in many respects linked to the ability to secure the economic environment and materials necessary for trade.

Periods of excessive growth and consumption leave their scars on the physical environment. In the pre-Dark Age period the impact of economic prosperity, cultural practices, and population growth left their mark on the landscape. Clearly evident in East Asia is the transformation of the physical environment by human communities. In China,

Japan, and Korea people shaped the landscape around them to suit both economic and cultural needs.

Addressing the connection between economy and culture, I find that participation in the sinocentric system of East Asia meant that human communities in the region and points westward would be exposed to Chinese *wen* or culture. This is clearly evident in the funerary practices of the time, as seen, for example, in the widespread practice of tomb furnishing, which originates in China. Further pointing to the direct cultural and economic contacts between peoples in the area is the presence of Chinese items in tomb sites in both Korea and Japan.

CHAPTER V

THE IMPACT OF DISRUPTIVE PERIODS ON ECONOMY, NATURE, AND CULTURE: THE EAST ASIAN DARK AGE (A.D. 220 – A.D. 618)

Over world history, analysts recognize the presence of disruptive periods that come to impact the patterns of everyday life. In European history the medieval period is often referred to as the Dark Ages, an interval in time characterized by political disunity, chaos, wars, population loss, and a disruption of exchange networks (Chew 2001a). East Asian history, and in particular Chinese annals, is witness to these periods as political, social, and economic life is disrupted. Centuries after the collapse of the Han dynasty, China fell into political disarray and decline. The chaos and disorder experienced in China bears a strong resemblance to that often referred to by historians as the European Dark Ages. This time period is traditionally seen in Chinese history as a negative break from the progress experienced for centuries from the Qin to the Han dynasties (221 B.C.-220 A.D.). After a successful period of economic and cultural growth in East Asia, problems in the Chinese mainland lead to a decrease in trade exchanges. Internal crisis in China negatively impacted the Korean peninsula and Japan. This isn't surprising given the intense linkages one observes in the pre-Dark Age period.

Political, economic, cultural, and environmental features define Dark Ages. These dimensions are interactive and illustrate the complexity of these periods. In the study of

European Dark Ages certain characteristics surface that are indicative of sociohistorical disruptive phases. Observing disruptions in East Asian history, one finds that similarities exist between elements in the European Dark Ages and characteristics in certain periods of East Asian history. Politically, Dark Ages are characterized by war, disorder, political fragmentation, a breakdown of government, and a dispersal of populations. During this period in Chinese history all these characteristics are present.

Political fragmentation is an important aspect of Dark Ages (see figure 5). The chaos, disorder, and disruptions that characterize these periods in human history are in many respects the result of political strife and struggles over power. During the breakup of Han rule around the year 220 A.D., analysts note that political power in China was transferred to local warlords. These local warlords were not content to share the Han Empire. This resulted in the political disunity of China into three kingdoms: Wei, Shu Han, and Wu. The three kingdoms waged war against each other for a period of four centuries (Hucker 1978).

Figure 5: Era of North –South Division: East Asia in the Fourth Century A.D.

Accounts of the period are found in the works of historians, ritualists, poets, essayists, and writers who leave us with a record of the turbulent period that characterized the Dark Age period. One such writer was Yang Hsien-chih, who lived in present-day Beijing, formerly Peiping, in what was then part of the Wei Kingdom. His observations of the period are contained in the *Loyang Chia-lan Chi* or *Record of Buddhist Temples in Loyang*, written between 547 and 549 A.D. (Shou-Yi 1961). Yang Hsien-chih's personal observations and the collection of accounts by monks contained in his book prove to be an excellent record of the social chaos, war, and political fragmentation that gripped China during the Three Kingdoms period. Despite the primary focus on Buddhist temples, the *Loyang Chia-lan Chi* provides a detailed descriptive account of the rise and fall of the Northern Wei dynasty. In particular, it presents a detailed description of the ancient Wei capital of Loyang after its fall. Contained within Yang Hsien-chih's observations is the account of a Chinese monk, Sung Yun, who recorded his travels in 547 A.D. to the capital of Loyang:

> In the fifth year of the reign of Wu Ting [547 A.D.] while on an official mission, I had the opportunity of revisiting Loyang. The city walls were torn down and the palace buildings dilapidated. The religious edifices were in ruins and the temples and pagodas had been reduced to ashes. Walls and ramparts were covered with wild growths and the narrow lanes of the city were blocked by thorny bushes. Wild beasts were lurking behind deserted steps and mountain birds were nesting on garden trees. Street urchins and cowherds were wandering in the main boulevards and farmers were planting cereals right in front of palace entrances. The whole situation reminded one of the barrenness of the wastes of Shang-Yin and the desertion of the Chou capital after the Hunnish sack! In the cities and suburbs of the imperial capital there had once been over one thousand monasteries. Today there is only solitude and silence. The sound of bells is hardly heard. For fear that posterity would not hear of this, I now leave this record (cited in Shou-Yi 1961, p. 209).

Chinese writers inspired by the above accounts and historical record of the time, have written a number of stories, novels, and poems that describe the turbulence of the times. In the historical novel the *San Kuo Chih Yen-I* or *Romance of the Three Kingdoms* written by Lo-Kuan Chung the events of China's Three Kingdoms period are revisited. Historically inspired, the *Romance of the Three Kingdoms* captures the political fragmentation and disorder of the time. The first sentence in the novel sets the tone as Chung (1959, p. 1) writes "empires wax and wane; states cleave asunder." Describing the emergence of competing kingdoms after the fall of the Han dynasty this poem appears as Chung (1959, p. 388) continues to tell his story:

> The earth is a [checker] board,
> And the sky hangs over all,
> Under it men are contending,
> Some rise, but a many fall.
> For those who succeed 'tis well,
> But for those who go under rough.
> There's a dozing dragon hard by,
> But his sleep isn't deep enough.

Further description of the time and the transition from the Han dynasty to the Three Kingdoms period is provided by this poem:

> The fateful day of Han came…
> Their glory declined
> As the sun sinks at the close of day…
> And the great lords, moved with anger,
> [They] assembled their forces.
> The bowels of the confederate lords were torn with fear,
> and their hearts trembled within them…
> Demons and angels shrieked at the thunder of…horse hoofs…A fire [arouse] to be quenched only in blood…
> The heavens themselves trembled at the…wrath…
> The noise of their shouting rose to the sky, and the earth re-echoed it (Chung 1959, pp.53-54).

Instability during the Dark Age period is also observed in the work of Chinese scholars during the period. One such scholar, Su Ch'o (498 A.D.-546 A.D.), who served as a high minister during the Western Wei dynasty (535 A.D.-557 A.D.), includes the following entry in his biography:

> Disorder [is] rising…the world has been withering and perishing, already for several hundred years. Great disturbances have been more abundant and severe, moreover, for twenty years. The people have not seen Virtue, but troops and rebellions, only these, have been experienced…great troubles [have] not yet [been] smoothed out with military burdens...hunger and dearth in consequence (Schafer et al. 1953; *Chinese Dynastic Histories Translations*, No. 3, p. 19).

The above mention by Ch'o of a disturbance lasting over twenty years is in reference to wars against rivals of the Wei kingdom, and two famines that struck the Western Wei during the period. One can surmise that famines were, if not brought on, exacerbated by wars. Another description of the times is contained in the biography of Yu-wen Hu (513 A.D.-572 A.D.) who grew up during this period of unrest and became the acting regent to the Northern Chou Emperor. Like accounts made by officials in competing or rival Chinese kingdoms Yu-wen Hu also observed the difficulty and turbulence of the period he lived through:

> Common people wailed clamorously…all sentient beings regarded one another with dread…we constantly feared that the foundation of seven hundred [years] would suddenly overturn and sink and that the fate of the masses would all at once be in perilous danger. Above we would then trouble the spirits of our ancestors and below fail in our responsibility to all living beings (Chen et al. 1962; *Chinese Dynastic Histories Translations*, No. 9, pp. 60-61).

Writing and commenting about his times, the Chinese poet Tao Yuan-Ming (365 A.D.-427 A.D.) observes the period and asks:

> What's to be done? That is the way things are,
> So let me drink a single cup and be happy…
> I look up and think of Dong Hu's times of old,
> When the people threw the surplus grain in the fields.

And, eating their fill, they had no more cares in the world
Than to rise in the morning and in the evening sleep (cited in Davis 1983, p. 190).

In several poems Tao Yuan-Ming reflects about the difficulty he and others confront during the turbulence of the Dark Age and like other writers makes comparisons between his time and those experienced by earlier generations. In fact, the reference made to Dung Hu's time is a comparison between the Dark Age period and that of the pre-Dark Age, or to be more precise the former Han period (202 B.C.- 9 A.D.). Considered one of the best examples of the use of prose and history, Yuan-Ming's *Peach-blossom Source* contains references to history that prove to accurately describe his period (Davis 1983). According to Davis (1983, p. 197), because of information and material it addresses, historians and editors "place [the] *Peach-blossom Source* among the wen pieces rather than among the poems…[and] regarded it as a record." In this regard, the following excerpt from the *Peach-blossom Source* is presented as historical text to describe the time:

The Heavenly order [is]…upset
Worthy men fled their age…
Men…went away
The traces of their going were gradually hidden;
The paths they came by became weedy and abandoned…
Uncultivated paths intersect into the distance…
Ritual vessels are still of ancient pattern;
In clothes there are no new fashions (cited in Davis 1983, p. 200).

Tao Yuan-Ming lived during the Six Dynasties period or era of North and South Division (301 A.D.-439 A.D.), which as the name implies, was a period of disunity and political fragmentation. Sinologists argue that the attention given to history by poets served as criticisms of their own time. This argument is confirmed in the following poem by Dark Age poet Tung Chun-shu (cited in Davis 1983, pp. 181-182):

Oh! Alas!
Remote! Distant!
The time comes, how slowly!
But swiftly it goes.
Who bends his will to follow others?…
But [I] am drawing near to my coffin…
If one strives 'to butt the fence',
One merely breaks a horn!
If one does not go out of one's house,
One may perhaps be free from error…
My birth did not fall at the height of the [previous] Dynasties
But fell amid the declining ways

The reference to previous dynasties or kingdoms in Tung Chun-shu's poem is aimed at addressing the difficulty of the historical period he finds himself in. He, like others, writing at the time, lived during a turbulent time known in Chinese dynastic history as the Sixteen Kingdoms period. The hardships people confronted survive in the writings of some of the best writers of the times. Inspired by historical writings and their observation of the times writers and poets compared their era with previous periods.

In the *Chronicle of Fu Chien* we can further corroborate Yuan-Ming and Chun-shu's prose by drawing from Fu Chien's accounts of the period. Fu Chien (307 A.D.-355 A.D.) was a military man and came to be ruler of the Former Ch'in in the turbulent Six Dynasties period. The passages that comprise his chronicles speak of wars, droughts, famine, military defeats and victories. The picture that emerges is one of turbulence as the *Chronicle of Fu Chien* reads:

> In this year…it became dark and obscure…provinces secretly…tighten their preparations for war…we contemplate unifying…the common people. Heaven has begotten the masses of people and has raised up rulers for them for the purpose of eliminating troubles and doing away with anarchy: how can we be fearful of hardship? (Chen et al. 1968; *Chinese Dynastic Translations*, No.10, p. 134).

Fu Chien's assessment is further corroborated in the *Biography of Lu Kuang* (338 A.D.-400 A.D.) who under Fu Chien was commissioned to subdue regions to the west. On the day of Lu Kuang's expedition, Fu Chien remarks:

> The Western barbarians are wild and rude; theirs is not a country governed by propriety and loyalty, nor a Way traversed with rein and halter. Subdue them…display the might of the Middle Kingdom, lead them by the laws of kingly civilization, but be not overly warlike, nor exhaust your arms, nor run to excessive depths of cruelty and rapine (*Chinese Dynastic Translations*, No.7, pp. 3-4).

Lu Kuang, who would later come to rule the Liang state, witnessed the instability of the times in the short period he reigned over present-day portions of Northern China. Up until the waning days of his rule, Lu Kuang was occupied with subduing rebellions and preventing the fragmentation of areas under his control. In his biography describing the secession of territories to the north this entry survives:

> The regime… is tottering. Powerful ministers arrogate authority, punishments and penalties are missing the mark, and the people cannot endure the campaigns. Throughout the province [present-day Gansu] rebels are in every city, and the trend toward disintegration is evident before our eyes (*Chinese Dynastic Translations*, No. 7, p. 68).

The Dark Age period which encompasses the Three Kingdoms era (220 A.D.-280 A.D.), the Jin or Western Jin dynasty (266 A.D.-316 A.D.), the Era of North-South Division (316 A.D.-589 A.D.), and part of the Sui dynasty (581-618) can be correctly characterized as a period of political disunity. This fragmentation not only led to conflict within China, but also spilt over into Korea.

The perpetual military incursions by competing kingdoms in China extended into the Korean peninsula. Not only did Chinese kingdoms fight one another, but also the Korean peninsula was in a state of war, with the ancient kingdom of Koguryo taking the brunt of the attacks from the Wei kingdom. Although historically the peninsula has

always had a Chinese presence, the move toward greater Korean autonomy from China can be traced to the disorder and wars that engulfed the Asian mainland during this period. A series of military campaigns on the Korean peninsula brought the chaos of the mainland to the peninsula. The goal of expansion brought the Chinese Empire to Korea, but only resulted in disastrous wars and ineffective expeditions.

Wars from the mainland also went further east, as evident in the fourth century A.D. with the military presence of the Paekche kingdom in Japan. Korean forces in 370 A.D. gained a footing in Kyushu and began building settlements. This presence would eventually lead to the emergence of the Yamato kingdom, as the territory by the Yodo and Yamato Rivers fell. However, the invasion of Japan by Paekche was at a severe cost. After having amassed a major army fitted that was properly fitted, Prince Homuda relentlessly moved northward. For six years war was waged and exacted a toll on both the invading army and the local population.

In addition to political fragmentation and wars, population loss and dispersal also characterizes the Dark Age period. The population of the Chinese mainland and Korean peninsula was reduced by several millions (Griffis and Walworth 1935). The constant fighting not only resulted in population losses from combat, but war was also responsible for food shortages and emigration. In particular, border areas suffered mass departures as people attempted to flee war torn areas. The boundaries between the three Chinese kingdoms and the Korean kingdom of Koguryo saw population losses, and continued conflict well into the sixth century A.D. (Griffis and Walworth 1935). Additionally, the political borders between Chinese and Korean kingdoms were in constant flux as wars engulfed China and Korea. It is during the Dark Age period on the Korean peninsula that

in the central part of the southern tip of Korea, historical documents reveal a Japanese military presence in the state of Kaya or Mimana (see figure 5). Geographically the size of Kaya was small, but it nevertheless was significant in that, through Kaya, Japan was able for years to have a foothold on the Asian mainland. Corroborating historical texts, the archaeological record also indicates that by the middle of the third century A.D. a prolonged Japanese presence is physically documented in the southern portions of the Korean peninsula. Japanese historians also note that in subsequent periods Kaya or Mimana would become a military outpost during the Yamato period (A.D. 300 - A.D.-710) (Hong 1994). However, due to contentions with the kingdoms of Silla and Paekche, Kaya suffered setbacks in the late fifth century A.D., and was finally absorbed by Silla in A.D. 562.

Although the Chinese dynasties during the Dark Age period were cut of from the Japanese islands for some time, the Korean peninsula continued to have contacts with Japan. The Korean kingdoms had significant contact with Japan during the Kofun period. These kingdoms fought with *Wa* or Japan alone and in varying alliances. Additionally, they fought amongst themselves in varying alliances with each other and with China. The territories claimed by Japan and the Korean three kingdoms were always in flux throughout the Dark Age period. During the early Japanese Kofun period, historians document incursions by the Japanese on the Asian mainland. Specifically this period is characterized as a militaristic period in Japan's history. Evidence uncovered in tomb sites indicates a sophisticated army at the disposal of an aristocratic elite (Blomberg 1994). The presence of horse-riding warriors donning armor, equipped with swords and other weapons, suggests a very effective army for the time. Beyond weapons found at

burial sites, funerary figures in the shape of weapons and shields confirm a fierce Japanese army. This army was able to establish its presence on the Korean peninsula as it occupied its southern region. In the *Kojiki* or *Record of Ancient Matters* the deployment of Japanese troops into the Korean peninsula in the fourth century A.D. is recorded:

> Then, exactly in accordance with these instructions, they put their army in order and marshalled many ships. As they were crossing the sea, all the fish of the sea, the small as well as the large, bore the ships across on their backs. Then a favorable wind began to blow strongly, and the ships moved along with the waves. These waves washed the ships ashore in the land of Siragi [or Silla] and they came to rest halfway across the country. At this time the king of the country, struck with awe, said: 'From now on I will obey the will of the emperor [or empress] and will become your royal stable-groom. Every year I will arrange that many ships in line, without giving their bottoms time to dry, and without letting their oars and rudders dry; together with heaven and earth unceasing I will serve.' In accordance with this, the land of Siragi [or Silla] was designated as the royal stable groom, and the land of Kudara [or Paekche] was designated as the overseas Miyake [or an overseas direct possession of the court] (cited in Philippi 1969, pp. 262-263).

Further incursions into the Korean peninsula by Japan were linked to alliances between the Korean kingdom of Paekche and Yamato Japan. These alliances and the relationship between Japan and Paekche are discussed in the *Rikkokushi* or *Six National Histories*. Specifically, in the *Kojiki* mention is made of tribute missions from Korean kingdoms to Japan:

> Noble of Shima after this was sent to the Land of Toku-Shu [part of which was later incorporated to Kaya or Mimana on the Korean peninsula] whose king said to him: 'In the year before last three men of Kudara [or Paekche] came to my Land, saying that their king, hearing there was a great country to the eastward, had sent them to beseech a passage to it. I answered that though I had heard of that country I did not know the way there, which was across wide seas and high waves, so that even in a huge vessel communication was difficult. They said then that they would return and make ready a vessel.' So Noble-of-Shima sent Nihaya to inquire about the welfare of the king of Kudara. At this the latter was vastly pleased, giving Nihaya five rolls of different-dyed silk, a bow made of horn, arrows, and forty pieces of iron. Then he showed him the precious things in his treasury, saying, 'In this Land is much treasure like this. I desired to send this as

> tribute to your Land, but did not know how to do so. I shall now send envoys to your Land.' Nihaya came back and reported to Noble-of-Shima, who returned home, and later the king of Kudara sent three envoys with tribute and with them came an envoy from Silla…However, when they examined the tribute, there were from Silla many precious things, but from Kudara things few and worthless. So they asked the envoys, 'Why is Kudara's tribute less than Silla's?' They answered, 'In coming here, we missed the way, and arriving at Sapi, the Silla people seized us and threw us into prison, and after three months were minded to slay us. But we looked up to the Sky and cursed them, and fearing the curse, they held back from slaying us, but took away our tribute, making it that of their own Land, and giving us in exchange the poor tribute of Silla, saying, 'Beware of speaking of this, or on your return you shall be slain!' So we were afraid and suffered it, and have come with difficulty to your Land.' The Empress and the heir-apparent accused the Silla envoys of this…and raising troops, they crossed over to the Land of Toku-Shu. When they were about to go against Silla, however, they were advised that their army was too small, and they sent back to request reinforcements. So picked warriors were sent to Toku-Shu, who entered Silla and conquered it. They took several provinces, and proceeding to the west, slaughtered the savage people there and gave their land to Kudara. After that the king and the prince of Kudara came with more troops, four villages made submission, and the king and the prince, meeting Areda Lord at the village of Tsurusugi, thanked and dismissed them with kind-ness. Prince-Chikuma-Naga, however, remained in the Land of Kudara, where he and the king of the Land made a sacred covenant on Mount Phi-ki. Later they ascended Mount Kos'ya, where the king took oath thus: "A seat of grass could be burned with fire; a seat of wood could be carried away by water. So, sitting on a rock, I swear a sacred compact which shall remain undissolved forever. From now on, for a thousand autumns and ten thousand years without end, this Land shall be called your province of the western border, and each spring and autumn we will render tribute." Then he took Prince-Chikuma-Naga to the capital, where he treated him with kindness, sending him home with an escort. For…years after that the king of Kudara did not fail in his tribute (cited in Wheeler 1952, pp. 210-212).

The outcome of this campaign was recognized by the Chinese who, upon request by Japan's rulers for confirmation of royal titles, officially acknowledged Japanese control over certain lands on the Korean peninsula. Mindful of its regional neighbor, it appears that Japan has historically been well aware of China.

Hane (1991, p. 13) points out that "according to the Chinese records [of the time] Japan [also] underwent civil strife." In a disruptive period characterized by external and internal turmoil, Japan saw its fair share of instability. The incursions against other

kingdoms by Japan started during the pre-Dark Age, but one observes that they carried significantly over into the Dark Age period (Hane 1991). In addition to Japanese military expeditions on the Korean peninsula, the period was also characterized by domestic conflict. During the Dark Age period, rival warlords on the Japanese islands waged war on each other. The emergence of powerful independent warlords would do much to fuel the internal power struggles in Japan.

When one discusses the characteristics that depict Dark Age periods, one also historically finds that in addition to military conflicts, natural disasters, famine, and diseases characterize these periods in Europe. Similarly, one finds that Japanese historical records, beyond military campaigns, document descriptions of earthquakes, food shortages, and plagues. For example, the presence of the latter, in the 3rd century A.D., is found in the *Kojiki* or *Records of Ancient Matters*. The severity and response by the Japanese Emperor Su-Jin to the plague that gripped Japan in the early Dark Age is recorded and reads "in the reign of this Heavenly Sovereign [Su-Jin] a great pestilence arose, and the people died as if none were to be left. Then the Heavenly Sovereign grieved and lamented…offerings of cloth [were presented] to all the Deities of the august declivities of the hills and to all the Deities of the rivers, without neglecting any" (Chamberlain 1973, pp. 211-213). Similarly, the historical record reveals that diseases, such as smallpox and other unidentified epidemics, plagued China during the 4th century A.D. (Smil 1994). Diseases have historically impacted societies and have led to population losses.

Trade Linkages are Disrupted

The incessant wars and political fragmentation that characterized the Dark Age period came to disrupt trade between communities in East Asia and regions westward. During periods when travelling conditions were difficult foreign trade through specific trade routes slowed or came to a halt. The instability of trade during the period not only impacted Chinese traders, but foreign merchants many of whom acted as middlemen. There was, for example, a collapse of political authority in northern China early in the fourth century, which impacted middlemen as a result of not being able to enter previous economic centers such as Loyang. One prominent merchant in Samarkand wrote: "And, Sir, it is three years since a Sogdian [Iranian] came from "inside" [China]... And, Sir, if I wrote [and told you] all the details of how China fared [what happened to the China trade], it would be [a story of] debts and woe; you have no wealth from it" (cited in Mitra 2003, p. 1).

The decline of the Han dynasty also saw the deterioration of China's elaborate and extensive road system (Smil 1994). The network of roads that supported overland trade and made possible the distribution of goods that arrived at ports was disrupted. One can surmise that as a result of war, political instability, and decreasing trade, roads became harder to maintain. This would then impede the movement of people and goods, and would only help exacerbate already difficult conditions. The land-borne transportation of goods and people deteriorated to the point, in some regions, that previous connections between communities were disrupted (Smil 1994).

In spite of the disruptive period underway in China, another account describes how trade routes had been open no less than five times (Toutain and Dobie 1930; Smil 1994). Regardless of the disorder that engulfed China, many foreign merchants were prepared to risk their lives to continue to trading in Chinese goods that brought handsome profits. Despite the demand, historically overland trade has been disrupted. However, the disruption does not mean a complete halt to trade, and seldom would all routes to the east and west of China be closed. During the East Asian dark age or disruptive period one can surmise that the volume of trade was sometimes affected and, in the fourth century, there was a steep falling off in the demand for western items, and conversely the availability of Chinese luxury goods. The survival of the overland route even during disruptive periods is indicated by Ammianus Marcellinus, writing about 363 A.D., when he states that beyond the Sogdians and the Sacae "a very long road extends, which is the route taken by the traders who journey from time to time to the land of the Seres" (cited in Mitra 2003, p. 4). Whatever interruptions there were in the fourth century, trade would certainly have picked up in the following century with the return of more settled conditions in northern China under the Wei dynasty.

Early in the fourth century A.D., at a time when tribute embassies were few, it's nonetheless reported that Chinese officials in Annam, what is now northern Vietnam, made outrageous demands upon the foreign merchants who came by sea. These foreigners to China often brought with them valuable goods as bribes to officials to get greater access to Chinese markets. One contemporary explained that in Guangzhou's port there was a "spring of [greed]," as officials in charge of ports sought to take advantage of the interest in the trade of Chinese goods (cited in Jian 1962, p. 192).

Around the turn of the fifth century it was reported that the combination of economic opportunity and the dangerous climate insured that greedy officials were willing to risk being caught in order to line their pockets.

On the Japanese islands, disruptions in trade translated into economic stagnation. As a result of China undergoing an economic depressive period, regional kingdoms throughout East Asia suffered from the curbing of production processes and consumption in China. In the *Kojiki* hard economic times are described at the end of the fourth century A.D. In a section that appears recording the reign of Emperor Nintoku (395 A.D.-427 A.D.) the following description survives:

> Thereupon the Heavenly Sovereign, [Nintoku,] ascending a lofty mountain and looking on the land all round, spoke saying: 'In the whole land there rises no smoke; the land is all poverty-stricken. So I remit the people's taxes' and…therefore the palace became dilapidated, and the rain leaked in everywhere; but no repairs were made (cited in Hearn 1910, p. 164).

Disruptive Periods and Environmental Restoration

A break from previous consumptive activities can be the start of a restorative period for nature. After centuries of environmental exploitation as a result of trade, urbanization, agricultural production, and growing populations encroaching on nature, Dark Ages provide an opportunity for nature to restore, to some degree, "the ecological balance that has been [undone] or disrupted" by the social, economic, and political practices of human communities (Chew 2001a, p. 10). In the span of world history one can observe the degradative impact human beings have on natural environments. It is therefore important to identify and examine periods in human history where as a result of severe environmental degradation, or societal breakdown, the usual intensive exploitation of nature is disrupted.

Ecologically, one can argue that Dark Ages are important as they allow nature to recover from expansionary phases that are characterized by the intense use of natural resources. According to Chew (2002, p. 335), "all expansionary trends that are typical reproductive features of human communities display negative trajectories and tendencies, especially in the core areas of the world system. We find several culture-nature trends and patterns are subdued: fall in population levels, decline or loss in certain material skills, decay in cultural aspects of life, fall in living standards and thus wealth, and loss of trading contacts." Although these periods from an anthropocentric point of view spell disaster for human communities, they become important moments in the life of ecosystems (Chew 2002). After centuries of intense exploitation of nature, an opportunity is created for nature to restore some ecological equilibrium. Historically one observes that disruptive periods as a result of political fragmentation, wars, or severe environmental destruction, can bring about restorative moments that replace previously depleted resources.

Replenishing nature can require centuries and is in fact the case historically if one observes these disruptions in East Asia. The Dark Age period explored here allows for a regeneration of the natural environment over a period of around four hundred years. In observing these periods in Europe and the Near East, Chew (2002) notes that over centuries of human exploitation of nature the environment does require prolonged periods where it can recoup or win back losses as a result of various anthropogenic practices.

The consequences of previous expansionary periods manifest themselves in subsequent periods. For example, extensive farming during an expansionary period impacts the environment and in subsequent years translates into a decline in agricultural

productivity. Because of extensive farming the land loses nutrient rich soils. In fact, in the Dark Age the "relatively rapid decline of cultivated land" can be directly linked to the expansion witnessed during the Han dynasty (Smil 1993, p. 53).

In the Dark Age one also finds accounts in the *Dynastic Histories* of floods, famine, and drought. An analysis of the former, for example, reveals that as a result of massive deforestation during the pre-Dark Age period, floods increased toward the close of the Han dynasty (see Chew 2001). In the *Biography of Yu-wen Hu* (513 A.D.-572 A.D.), who was regent for the Northern Zhou, one reads of the calamities of the period:

> Heaven has wrought destruction and disorder, and the four seas have raise rampaging floods. At the time when T'ai-tsu arose, the Ch'I court functioned peacefully. One in the Land between the Two Rivers' [actually only the Yellow River, but described as the East and West Rivers,] and the other at the 'Three Props' [or Chang'an and the surrounding cities outside of the ancient capital], each fell with divine devices (Chen et al. 1962; *Chinese Dynastic Translations,* No. 9, p. 47).

Analyses of historical periods of environmental degradation clearly show that the occurrence of deforestation is not as recent as some may think. Its history is long, and stretches far back to human pre-history when human beings began to use fire deliberately for heating dwellings and cooking food. In East Asia, as in other regions of the world, cutting down trees and clearing forests was linked to an age-old human quest for shelter, food, and warmth. Describing daily life in a poem found in the *Shijing* or the *Book of Odes*, we find in the *Confucian Classics* an account of ecological relations and more specifically mention of the human activities that impacted and transformed natural landscapes:

> In the third month we plow, and in the fourth
> Good wives and children do as they should do,
> Bringing our food afield…
> In forestlands we hack our firewood

With kindling for the fires to cook our food…
In the tenth month we harvest early wheat…
By daytime in the fields we gather grass…
And then prepare to sow our grain again anew (cited in Smil 1993, p. 52).

Within the *Confucian Classics* is an accounting of daily life as anchored to the fields, forests, rivers, and crops. In certain regions before the emergence of the Han dynasty the cycle described by Confucius in the Eastern Zhou era (770-256 B.C.) was already intense. At the time of the poem's origin, and in subsequent periods of Chinese history the continuity of this pattern is clear. The intensification of field farming which includes irrigation, heavy manuring, terracing, intricate crop rotations, and intercropping, the conversion of grasslands and marshes into fields, and the extensive deforestation in the search for fuelwood and timber all helped transform the landscape. These actions taken together refashioned East Asia's natural environment. Anthropogenic activities in China shaped the landscape to an extent unparalleled in other ancient societies of the time. This meant "virtually complete deforestation not only on the alluvial lowlands but also with an almost incomprehensible thoroughness on hills and mountainsides adjoining all densely populated farming regions; garden-like cultivation extending uninterrupted (save for streams, irrigation canals, buildings, and roads) over the space of mid-size European countries; and the relentless displacement of all natural ecosystems by a mosaic of fields and settlements" (Smil 1993, p. 52). The impact of human activities can historically be so intense that landscapes are changed and ecosystems disturbed. The usage of tress for construction, shelter, and the making of multiple implements led to the assault of many pristine forests. Wood has also historically provided the fuel necessary for a number of production processes, such as the smelting of metals and the use of kilns

for pottery production. In addition, the nuts and fruits of trees were sought out in East Asia as food, medicine, and dyes.

Cleared forests were easily manageable, and, in the short-term, provided nutrient-rich soils for growing crops. Clearing forests requires no sophisticated technology, and therefore one finds that historically large tracts of land were cleared with little effort (Williams 2001). Early foresters with stone or flint axes as tools would require boundless energy to fell trees, and, in fact, the *Chinese Dynastic Histories* tell of large numbers of people being employed to harvest trees in this manner survive. The use of fire or animals to do the same work however, can ease the human burden, especially in cases were the primary goal is to clear forested land (Williams 2001). In East Asia the substitution of metal for stone axes some 4,000 years ago, and then for saws in later periods, would ease the backbreaking task of clearing forests and accelerate the rate of ecological change, but it did not alter the basic process of environmental degradation and land-use transformation by humans (Williams 2001). Historically, change in this ancient process of land transformation is primarily linked to periods that help accelerate degradative activities. Periods characterized by economic prosperity, political stability, and security, provide the conditions necessary for consumption to continue unabated. It is only during periods where consumptive habits are disrupted that the degree of degradative activities becomes less intense. As a result of wars, floods, disease, economic downturns, ecological scarcity, political instability, and fragmentation one finds that in the East Asian Dark Age the previous socio-cultural lifestyle is impacted. Consumptive habits are curbed and as a result of the disruptive period material and cultural lifestyles are downscaled.

The anthropogenic environmental impact of wide variety of human activities does historically serve to raise consciousness of environmental degradation (see Chew 2001a). In the case of China, it is of interest that well before the Dark Age philosophers, such as Laozi and Confucius, called attention to the presence of man within nature, and the link between a good quality of life and harmony in the natural world. In Laozi's *Dao De Jing* or *The Way of Life*, for example ideas that would later be echoed by Thomas Malthus are presented, in poetic prose, in this classic in the 3rd century B.C.:

> The ideal land is small
> its people very few,
> where tools abound
> ten times or yet
> a hundred-fold
> beyond their use
> . . . Where folks grow old
> and folks will die
> and never once
> exchange a call (cited in Smil 1993, p. 3).

The Malthusian argument that people do matter in nature, and can come to negatively impact natural environments and other human beings was, as seen in the stanza above, contemplated by early Chinese philosophers and mystics. It is of interest that ecological awareness and consciousness is discussed in written texts prior to the pre-Dark Age period, yet the exuberance and environmental degradation observed in subsequent periods suggest that the ecological worldview exposed by early Chinese philosophers did not lead these social systems to be organized in a way that would allow them to survive harmoniously with non-human systems. In fact, the opposite appears to occur as a humanocentric worldview comes to guide human systems and their relationship with nature.

Rituals, Nature, and the Dark Age

Numerous historical accounts of the period make clear the presence of a wide variety of rituals that focused their attention on the social and environmental situation of the times. In a period characterized by famine, wars, drought, and social instability, rituals were employed, for example, to petition for rain in times of drought or protection in times of flood, or to ask for protection from pestilence and other dangers. The function and logic of many rituals of the period appears to follow what Frazer (1955) describes as sympathizing magic. According to Bell (1997), the reasoning behind sympathetic magic is quite simple. The understanding by its practitioners is that "like produces like, so, for example, people squirt water on each other, imitate the calls of aquatic birds, or set out pots of water to draw down the rain" (Bell 1997, p. 115). In other cases, people during disruptive periods call on the Gods who they perceive to be in control of conditions such as droughts. For example, it is known that during ancient Greek times people petitioned Zeus, who, according to popular belief, granted rain (Bell 1997). This approach was also followed in China's Dark Age period, where people implored the Gods to alter existing conditions. The desperation to change the quality of life during the Dark Age period grew to the point where ritual practices were modified and at times became aggressive. For example, in the Dark Age period, statues of unresponsive gods would be taken from their cool temples and set out to roast in the sun so that "they would know firsthand the suffering of the people" and be compelled to alter the conditions (Bell 1997, p. 115; see also Cohen 1978).

The Chinese poet Bo Juyi (772 A.D.-846 A.D.) left an account of the interactions between human beings, nature, and the supernatural during the Dark Age period (Bell

1997). These interactions are described in a story about how a drought forced the people to admonish the Black Dragon of the north, the God responsible for rain. In a story that addresses the sentiment that the Gods at times don't fulfill their duties, Bo Juyi writes: "We are asking you for a favor, but you depend on us for your divinity. Creatures are not divine on their own account, it is their worshippers that make them so. If within three days there is a real downpour, we shall give your holy powers credit for it" (cited in Bell 1997, pp. 115-116). The story by the poet continues with this caveat, "if the Black Dragon allows the crops to dry up and the people to starve, then the 'disgrace' will be his" (cited in Bell 1997, p. 116). Additionally, Chinese symbolic ritualized practices are recorded in the *Dynastic Histories*, and in other literature of the time, that describe shamans, secular officials, and even emperors who exposed themselves to the elements as an act of reverence and subservience to the Gods in order to gain their favor. In one ritual, officials exposed their bodies to the heat of the sun "to prove their willingness to assume personal blame" for a drought (Bell 1997, p. 116). By doing so, they sought to engender the Gods' pity and mercy.

The link between *li* or ritual, and periods characterized by social disorder, instability, and resource scarcity is clear in the Chinese conceptualization of culture. As noted by Xun Kuang, a philosopher writing in the third century B.C., rituals are of crucial importance to the cultural life of peoples:

> By following ritual, there is order and success; by not following ritual, there is shiftlessness and chaos, sloth and neglect. When food and drink, clothing, residence, movement and quietude follow ritual, there is harmony and measure; when they do not follow ritual, they are offensive and lowly and beget disease. When appearance, attitude, entrance and exit, and rapid walking follow ritual, there will be elegance; when they do not follow ritual, there will be indolence, depravity and perversion, vulgarity and wildness. Thus people without ritual

> cannot live; affairs without ritual cannot be completed; the state and its families without ritual cannot be at peace (cited in Goldin 1999, p. 66).

Ritual is thought to be connected to the quality of life people live, and the environment people come to socially and physically inhabit. The argument raised by early philosophers, such as Confucius and Mencius, is that following rituals has it rewards (Le Blanc and Blader 1970, 1987). Proper observance of rituals translates into social order, abundance, and harmony, while the absence, or inappropriate observance, of *li* leads to negative outcomes. In a remark about the connection between the practice of ritual and nature, Kuang declares that "obtaining all under Heaven [requires ritual]; when [people] do not follow [ritual], that is how they ruin the altars of soil and grain…[following rituals] brings about success; not following…brings about downfall" (cited in Goldin 1999, pp. 66-67).

From the ideas that survive in written texts of the periods under study, the argument can be made that the emergence of a Dark Age would have signaled to people that rituals weren't properly practiced. Far from absent, rituals in various forms continue to be a part of the daily lives of people during this period. However, the human conduct that constituted or characterized the proper observance of ritual, as known to shamans and philosophers of the period, could be questioned (Cohen 1978). Remarking about the ostentatious lives of rulers of his time, Kuang states:

> When the [kingdom] is imperiled, there is no pleasure for the lord; when the state is at peace, there is no worry for the people. When there is chaos, the state is imperiled; when there is order, the state is at peace. Lords today hasten to pursue pleasure and delay ordering the state; O how is this not a transgression! (cited in Goldin 1999, p. 69).

Although writing in the third century B.C., the pursuit of pleasure described by Kuang, is indicative of the lives people lived during the pre-Dark Age period. In fact, edicts were

issued before the onset of the Dark Age to curb consumption (Medley 1976). Noting the observations of philosophers and Confucian scholars, it should not be surprising, that some concern would surface amongst officials.

Tomb Furnishing

The demand for bronze vessels, which were used extensively in burials during the pre-Dark Age period at times exceeded supply during the Dark Age period with the result that the costs of wares and vessels were becoming too expensive. In order to accommodate the demand less expensive earthenware was used, and preferred, for mass-produced funerary goods during this time. Potters continued to use traditional bronze forms, such as the *hu*, when making these ceramic imitations and the glazing was chosen to mimic the appearance of bronze. This substitution of ceramic for metal food containers and drinking vessels marked the beginning of what would become one of China's most important artistic fields, the production of fine porcelain.

Economic downturns can be understood in terms of their link to environmental crisis. The intensive utilization of resources in one part of a regional trading system can have consequences in other parts. Ecological crisis may not extend to the entire system, but nonetheless economic linkages will be affected by disruptions in one area of the system. An ecological crisis in China would then mean a decline in production that would reduce the supply of goods in other parts of the system, along with a drop in imports due to a declining economy. A lack of demand in the core of the regional trading system would impact other areas as certain goods and products, especially luxury items, are no longer demanded. Supply problems linked to ecological crisis may be the reason

why certain products are no longer present in areas outside of production centers (Chew 2001a). Demand for Chinese ceramics reflects this in that consumer tastes didn't change, but as a result of lower production in China the availability of Chinese wares decreased. That consumer tastes didn't change during this period is reflected by the re-establishment of Chinese pottery exports to Japan and Korea by the eleventh century (Honey 1948; Wilson 1995). Renewed importation of Chinese wares reflects increases in production in Chinese kilns after the tenth century.

In identifying economic and cultural centers in China we see that ecological crisis during the second Dark Age also impacted centers elsewhere. As a result of internal disturbances in China, and the decline of the Japanese urban aristocracy, the production of glazed ceramics in Japan came to a halt (Wilson 1995). At the same time during this period expanded agricultural production in Japan led to a mass consumption of unglazed ceramics (Wilson 1995). We see during this period that both Korean and Japanese pottery begins to take on a style different from that of Chinese wares. Unglazed wares become more prominent and in Korea different shapes and decorations emerge (Honey 1948). Tomb sites in Korea show the shift from glazed to unglazed tomb-wares during this period (Honey 1948). The lack of wares coming from China due to kiln losses did have an impact on regional artisans. Wilson (1995) points out that Japanese artisans drew their inspiration from the wares imported from China. Not only did Chinese wares inspire artisans in Japan, but also many of the skills utilized by Japanese potters were drawn from techniques developed in cultural centers like Chekiang. If one examines burial practices during this period one can see that locally produced items are increasingly replacing Chinese wares (Honey 1948).

Archaeological excavations of tomb sites during this period suggest that societal disruptions were occurring that impacted burial practices. Examinations of Japanese fifth-century grave sites show that tombs were large, as illustrated by giant mounds in the Osaka region (Farris 1985). What is of interest is that these practices are discontinued and replaced with smaller tombs by the sixth-century (Farris 1985). Economic stagnation coupled with environmental limitations within Japan and abroad alters the elaborate burial practices prior to the onset of the second Dark Age. Evidence that smaller tomb mounds appear after 500 A.D. reveals a less exuberant and elaborate lifestyle than that depicted in tomb sites in the fifth-century.

Through examining historical periods of economic collapse we can demonstrate their link to environmentally degradative practices. Ecological crisis brought about by resource extraction contributed to a decrease in the production of ceramics in China. Examinations of deforestation during the second Dark Age show the toll economic activities and growth have on nature (Chew 2001a). Resource extraction, tied to the manufacturing of Chinese ceramics coupled with the clearing of the forest for agriculture, animal husbandry, population growth, and urbanization all had a degradative impact on the environment. Kiln losses can be tied to the ecological crisis, as production decreases and economic stagnation reduces the demand for certain ceramics, especially luxury wares. The manufacturing of luxury items, such as porcelain wares, was reduced to the point that trade in Chinese ceramics diminished. That Japanese imports of Korean Sue wares increased during this period points to the disruption occurring in China (Wilson 1995). However, Chinese wares were still sought after by both Korean and Japanese elite demonstrating the prestige associated with Chinese ceramics.

Environmental stress on China's landscape as a result of economic growth during the pre Dark Age period eventually led to a decrease in manufacturing processes such as the pottery industry after the sixth century. When coupled with other environmentally degradative practices, the manufacturing processes involved in the mass production of Chinese pottery further exacerbate the assault on the landscape. The construction of kilns, the fuel needed to fire up the kilns, and ships required to transport Chinese ceramics all required resources, particularly wood. In looking at iron manufacturing centers during this period we see that in order to meet fuel needs not only was coal substituted for wood, but also these centers were moved to other areas where forests were still present (Hartwell 1967). The interconnections present in the creation of a finished product show that besides human ingenuity resources extraction is required to not only bring about a finished product that can be sold, but it takes resources to get products to consumers as well. Economic decline can also be tied to a mismanagement of local natural resources or an inability to secure resources through the expansion of trade into areas abundant with the materials necessary to maintain consumption and economic growth.

Already at the start of the pre-Dark Age period, around 200 B.C., archeologists note the presence of Chinese goods and wares on the Japanese islands. These cultural exchanges had a significant impact on the customs and rituals that would develop in Japan. This is most clearly seen in archeological excavations of tomb sites as they provided glimpses into the daily lives of people in East Asia. Like the Chinese, people in Japan had developed the custom of burying objects with their dead, and creating mounds to mark these tombs. In Japan these tombs during the pre-Dark Age period bare a clear

resemblance to Chinese tombs traced to the same period. However, what is of interest during the Dark Age period is that tomb styles change in Japan, and are differentiated by their distinct construction style.

In fact, the name Kofun is given to the period in Japan that marks the emergence of these unique tomb mounds on the Japanese islands. Kofun literally means grave mounds, and was the custom of the time to have people buried in these mound graves. Although Kofuns were the name given to large Japanese tomb mounds for powerful members of society, common people also observed the custom of placing the dead in burial mounds albeit smaller ones. Like Chinese tomb sites uncovered, archeologists find that Japanese tombs also contained figurine replicas of men, women, animals, buildings, and food. Unlike Chinese figures, locally made Japanese figures were often left unglazed and were less elaborate. The practice of placing Haniwa or clay figurines on top of tomb mounds also emerges in the early part of the Dark Age period, and by the end of the Dark Age these Haniwa become more elaborate and take the shape of terra cota figures (Brown 1993).

During Dark Age periods, analysts have noted that the activity of keeping written records is not a priority. The argument has been made that the Kofun period marks the beginning of Japanese history since records compiled exist after the period ended. The Kofun period can be considered Japan's protohistoric period. The “history” of the Kofun period depends on outside sources, first Korean records, then both Chinese records and the early Japanese writings from the Nara Period in the early 8th century. There are no Chinese records on Japan from 266 A.D.-413 A.D. (Keally 1969, 1972). The 4th-century Korean records, though, tell of considerable interaction between the Korean kingdoms

and Wa, and of Wa's military intervention on the peninsula. The Chinese records of the 5th century show that the developing Yamato Government was again in contact with China. The late Kofun period was the time when writing from China was first introduced to Japan (Keally 1969, 1972). The Japanese *Kojiki* (712 A.D.), the various *Fudoki* (713 A.D.), and the *Nihon Shoki* (720 A.D.) pick up the story, in hindsight, from the 6th century. The lack of historical accounts of the Japanese islands during the Dark Age period has left some questions about the time period. However, by observing rituals practices, and in particular, burial rituals a number of things can be said that are not available to us in writing. The Kofun mounds tells scholars a few things of importance dealing with questions of cultural diffusion and the emergence of local practices during the Dark Age

From the items contained in Kofun period tomb mounds one can clearly see the cultural exchanges and influences operating between Korea and Japan. The pottery from the Kofun era is clearly derived from the contemporaneous pottery of Korea, which in turn derives from Chinese styles (Perez 1998). Although Japan for some time appears to be cut off from China during the Dark Age period, the Japanese islands remain in contact with the Asian mainland via Korea. Exchanges between Japan and Korea continue to some extent, and provide a route for Chinese goods to continue to enter the Japanese islands. However, the intensity and number of trade linkages and exchanges decrease during this period allowing for local goods and practices to flourish. Given the disruptive period China underwent during the Dark Age period, one can surmise that foreign access to Chinese goods and artisans became difficult. During this era contact with the mainland via Korea would have increasingly been important. The increasing contact

with Korea would have allowed for greater cultural exchanges between Korean Kingdoms and Japan. Physically this manifested itself in the pottery found in excavations of tombs in Japan during this period. According to Wilson (1995), as early as the fourth century A.D. Korean wares were heavily influencing items used in Japanese burial offerings.

To the west, Silla style pottery, for example, crossed the Tsushima Strait and into Japan. From the fourth to the sixth centuries there was probably migration from Korea to Japan; in sixth-century Japanese tombs articles have been found that correspond to those placed in Korean tombs (Pearson, Lee, Koh, and Underhill 1989). These articles probably belonged to Korean immigrants, or may perhaps have been imported from Korea.

The practices that human communities engage in over time have implications for nature. Early Chinese philosophers recognized this, as an excerpt taken from the early writings of Hsun Tzu reads:

> If, in seeking, people have no measures or limits, then there cannot but be contention. Contention makes chaos, and chaos privation. The Former Kings hated such chaos, and established ritual and morality in order to divide them [i.e. people], in order to nourish people's desires and grant what people seek. They brought it about that desires need not be deprived of objects, that objects need not be depleted by desires; the two support each other and grow: this is where rituals arise from (cited in Goldin 1999, p. 68).

Explicit in historical and philosophical writings of the time are ideas about the nexus binding society to nature. Far from absent, ecological relations were considered and became a part of the discourse on ritual. *Li*, it can be argued, is then conceptualized as the nexus of regulations that allow human beings to enjoy nature's resources in a harmonious manner (see Legge 2003). The idea expressed by early Chinese philosophers is that with ritual in place, the overutilization and consumption of resources is tempered,

without ritual there is a tendency toward unreserved desire. Early Chinese and Greek philosophers understood that people have desires, and were they each to go about satisfying them without rules, the consequence could prove disastrous. In nature organisms are better served when they can meet their needs without overusing the environments they depend on. Observing the link between the quality of life of human beings and their relationship with nature, the pioneers of deep ecology, such as Arnie Naess (1999), expressed a need for human society to focus attention to degradative activities (see Devall and Sessions 1986; Hoy 2000). However, this idea isn't something new, Chinese philosophers postulated that human conduct on earth could create instability in nature, and introduced the idea that disorder could be resolved through ritual. With the aid of established rules of conduct, human beings could satisfy their material urges, while not depleting nature to the extent that the environment cannot recover. In a chronicle written in the 4th century B.C., a Chinese philosopher remarks "[through ritual] the roving egoists can fulfill their desires happily, and be sure that they will not be impeded" (cited in Goldin 1999, p. 69). In the wisdom of early Chinese philosophers and ritualists, the obstacles to consumption and fulfillment of desires is in proper human conduct.

Analytically, several points and observations are made about the connection between ritual, society, and periods of societal ascent and decline. It is clear that a link does exist before the preceding pre-Dark Age and the subsequent disruptive period that would take hold for close to four hundred years in East Asia. The Dark Age period is evident not only in the wars, population losses, political fragmentation, but in the decreasing trade and cultural contacts that are physically recognizable. The disruption

impacted the availability of previously sought after Chinese wares, including tomb furnishings. However, this created the opportunity for local pottery industries, and local artisans, to fill the void left by the lack of available Chinese goods. The archaeological record substantiates this point as excavation of Korean and Japanese tomb sites reveal the diminishing presence of Chinese items, and increasing presence of locally produced tomb furnishings (Honey 1948; Wilson 1995).

It is of additional interest that during this period, the connection between societal disruptions and practice of rituals is made. The proper observance of *li* or ritual is linked to order and abundance, while improper practice to disaster and scarcity. Noting the previous period of prosperity, philosophers, ritualists, and officials engaged in ritual practices that sought to change the difficult social and environmental conditions they confronted (see Bell 1997; Goldin 1999). It was the prevailing belief, well before the Dark Age, that the quality of life of people was linked to ritual (Goldin 1999). In many respects early East Asian philosophers were the first deep ecologists, as they contemplated the society-nature nexus.

Summary

Dark Ages are identified as a result of the noticeable changes that set them historically apart from previous periods. Although for the sake of analysis, the East Asian Dark Age is examined specifically from the third century A.D. up until the seventh century A.D., this disruptive period is very much tied to a pre-Dark Age period characterized by intense resource utilization, consumption, abundance, and prosperity. The implication for subsequent periods is an altered and depleted environment. When

coupled with political fragmentation, wars, disease, famine, and drought, an ecologically unstable situation leads to a decrease in trade and cultural contacts. As part of a regional system of trade and cultural exchanges, China, Korea, and Japan felt the demands on nature well beyond their frontiers.

The environmental consequences of economic and cultural practices are clear. When ecological relations take an exploitative direction non-human systems suffer. In the long-term the implications of excessive consumption do lead to disaster for social systems. Although a period characterized by political fragmentation, wars, floods, disease is disastrous for human communities, speaking from an ecocentric point of view, nature is allowed to restore some balance (Chew 2001b).

Disruptive periods in time do create heightened awareness of exploitative relations with nature. The East Asian Dark Age also created an opportunity for human communities to devise new ways of meeting economic and cultural needs. I find that societies are resilient, and when given an opportunity they unleash their creativity. Dark Ages should then also be considered as periods where human ingenuity and inventiveness is pushed. The developments that emerge as a result of human communities coping with difficult circumstances made a lasting impact on the regional trading system of East Asia

Human communities determine their relationship to nature in many ways. This is clearly the case in East Asia. Early in the conceptualization of *li* or ritual, observations were made about the link between human behavior and nature. Harmony and social order was seen as tied to a relationship that honored the Gods by keeping proper balance. In philosophical writings of the time, the argument that proper conduct created balance

does have environmental implications. An important insight was that appropriate observance of ritual can prevent disaster, which includes environmental degradation.

CHAPTER VI

THE ENDURING CHARACTER OF CONSUMPTIVE HABITS: THE POST DARK AGE (A.D. 618 – A.D. 907)

The period after the Dark Age marks a peak in Chinese and East Asian history (Williams 1928; Huang 1989; Meyer 1994). With the emergence of the Tang dynasty in 607 A.D. East Asia renews the deep interconnections once exhibited in the pre-Dark Age. After a historical period that saw wars, political fragmentation, environmental degradation, famine, and drought the post-Dark Age can be described as a return to the prosperous stretch of time that was the pre-Dark Age. A Chinese historian describing the Tang period writes:

> a period of…recovery from many disasters [emerges]… a long epoch of wealth, safety, and low prices, when 'there was no costly thing in the Subcelestial Realm,' when one could '. . . visit Ching or Hsiang in the South, go to T'ai-yuan or Fan-yang in the North, or go to Szu-ch'uan or Liang-fu in the West, and everywhere there were shops and emporiums for supplying merchant travelers. Though they should go as far as several thousand *li*, they need not carry even an inch-long blade.' Mules and horses were available to travelers on these secure roads, and an intricate system of canals devised to provide water transport for tax silks from the mouth of the Yangtze River to the capital was now so improved that it could also be used to bring luxury goods…Fine highways and waterways fostered overseas trade (cited in Schafer 1963, p. 8).

Following a period of instability, historians note a transition into centuries of economic stabilization and growth, along with a re-intensification of cultural contacts (Adshead 1988). Accounts of the times suggest this, as the Tang dynastic period

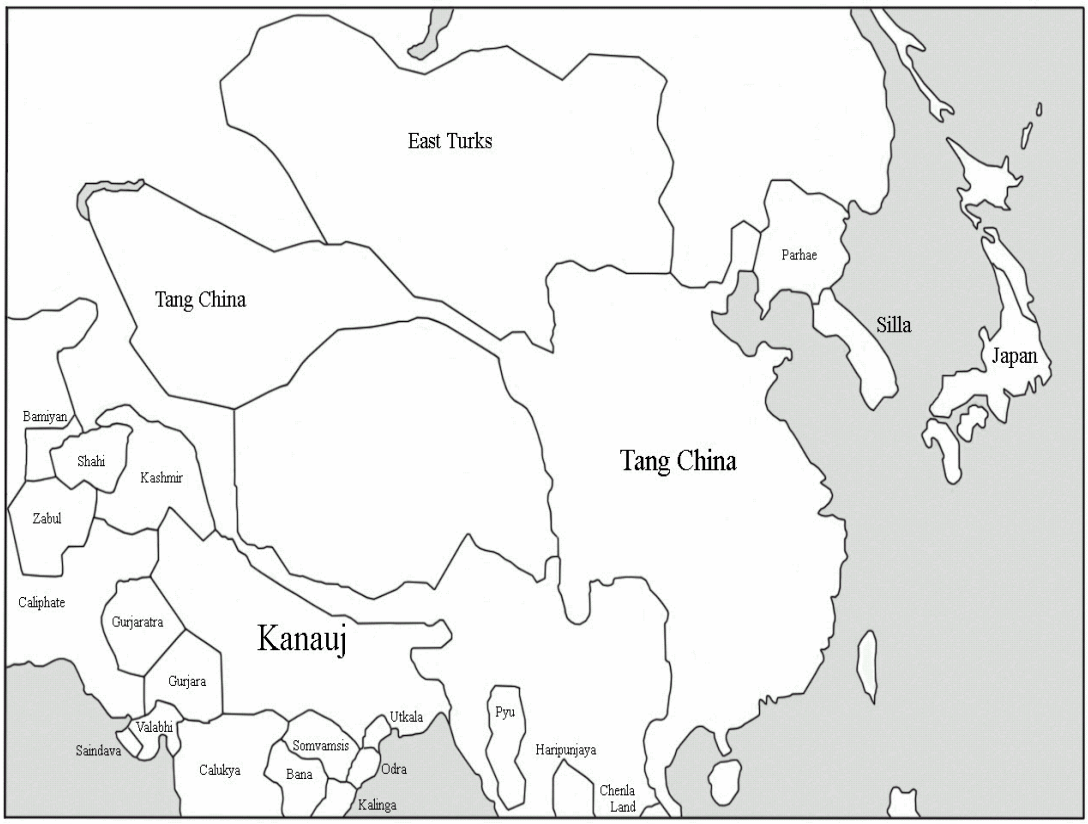
is recognized by historians as a resurgent time in Chinese economic and cultural development. It is argued that this period in Chinese civilization is equal, or even superior, to the Han period. The manner in which the Tang Chinese lived and how they appeared to foreigners who so freely visited their cities speaks to the abundance of the times. In his account of Tang China in 815 A.D., Ibn Wahhab, an Arab traveler, describes the capital city of Changan in the following manner:

> The city was very large, and extensively populous; that it was divided into two great parts by a very long and broad street; that the Emperor, his chief ministers, the soldiery, the supreme Judge, the eunuchs, and all belonging to the Imperial Household, lived in that part of the city which is on the right hand eastward; that the people had no manner of communication with them, and they were not admitted into the places watered by canals from different rivers, whose borders were planted with trees and adorned with magnificent dwellings. The part on the left-hand westward, was inhabited by the people and the merchants, where were also great squares and, markets for all the necessaries of life. At break of day, you see the Officers of the King's Household, with the inferior servants, the purveyors, and the domestics of the grandees of the court, some on foot, others on horseback, who come into that division of the city where there are public markets, and the inhabitations of the merchants, where they buy whatever they want (cited in Mahler 1959, p. 103).

The description by Ibn Wahhab is further corroborated by others who made their way to China compelled by the quality and quantity of Chinese goods. For example, Sulayman, an Arab merchant, visited China between 830 A.D. and 851 A.D. and reported, “the Chinese have gold, silver, pearls, brocades and silk, all in good quantity…they have…horses of another breed; they have asses and two-humped camels in great numbers. They have clay of an excellent quality of which they make porcelain bowls as fine as glass [as clear as glass drinking cups;] the sparkle of water can be seen through it, although it is pottery” (cited in Scott 1967, p. 18). It isn’t surprising to find accounts by Arab merchants since trade between China and points westward through

Tibet, India, Persia, and the Arab peninsula were well established during the post Dark Age period (see figure 5). The intensity and complexity of these trade networks is seen in the vast web of cities from Changan in China to Mecca on the Arabian peninsula that were all part of this trading network. Expansionary trends during this period in China proved beneficial in connecting China to the West and further solidifying the networks already in existence to the East prior to the Dark Age. China's connection to the West also allowed Korea and Japan to participate in an ever-increasing network of exchange (see figure 6).

Figure 6: East Asia and Westward Regions: Eight Century A.D.



In comparing the Dark Age to the post Dark Age several accounts by Tang Chinese survive describing the differences:

> Merchants travelling in the wilderness were never again robbed by bandits. The prisons were usually empty. Horses and cows roamed the open country. Gates were not locked. Repeatedly there were abundant harvests, and the price of grain fell to three or four copper cash per peck. Travelling ... (from the capital to the far south or down the east coast) . . . no one had to carry provisions, but could obtain them on the road. On entering villages ... (in some regions) guests who were passing through would be generously supplied, and sometimes when departing they would be presented with gifts. There has been nothing like this since antiquity (cited in Perry and Smith 1976, pp. 17-18).

The mention of antiquity, one could surmise, is a direct reference to the pre-Dark Age period, which is characterized by its economic prosperity and political order. Re-establishing the abundance, prosperity, and order characteristic of the pre-Dark Age period is acknowledged and welcomed in the accounts of people of the day. In further describing the transition from the turbulence of the Dark Age to the order that characterized the post-Dark Age period this evaluation from Xuanzang Chen's travel itinerary from 629 A.D.-645 A.D. in the *Great Tang Dynasty Record of the Western Regions* (Li [646 A.D.] 1996, pp. 16-17; Bianji 1996) survives:

> He [the Tang Emperor] has founded an imperial heritage…quelling rebellion to restore order, he certainly has surpassed former kings. His great deeds have included all those achieved by previous dynasties. Now the whole empire is in such uniformity.

The abundance and quality of goods during the post-Dark Age period led to an influx of foreigners not only from Korea and Japan, but as far away as India, the Arabian peninsula, and Greece (Scott 1967). According to Scott (1967, p. 13), "the foreign population in Canton [one of China's key ports] alone must have been well over 120,000." After the capital of Changan, Loyang was an important administrative

cultural, and economic center. Historically Loyang was the capital of the Wei kingdom during the Dark Age period, and has been noted for its palaces, markets, and elaborately decorated shrines. Like Changan, Loyang and population centers to the south experienced the abundance of the times, resembling a quality of life one could find in the capital. Although the capital grew to around forty million at the heyday of the Tang dynasty, Loyang, with a population of a million inhabitants, was like Changan and cities to the south of the Yangtze, an extraordinary example of the prosperity of the time (Schafer 1963; Scott 1967; Hucker 1978). Addressing the presence of foreigners in China and describing the city of Loyang, Schafer (1963, pp. 19-20) states:

> Foreigners who visited China, or settled there, tended to congregate in the vigorous commercial cities of the south, like Canton [present-day Guangzhou in Guangdong province] and Yang-*chou* [also Yangzhou, a capital of China in the 6th Century A.D.]. But they also came together in the venerable cities of the north, the centers of political power, the homes of the nobility, where a great bibliophile or a great soldier counted for more than a successful merchant. Of the two great capitals, Lo-yang was the second in rank, and it was the second city of the empire in population, having more than a million inhabitants. It had its holy traditions of a thousand years, was not second in pride even to Ch'ang-an, and was endowed with a spiritual atmosphere somewhat milder and more elegant than its western rival. It was the "Godly Metropolis"… the proudest and most beautiful city of China. It had palaces and parks and throngs of officials. It was noted for its fine fruits and flowers, its patterned damasks and fine silk crepes, and its ceramic wares of all kinds. It had a great market place, the Southern Market, occupying two blocks (*fang*), with a hundred and twenty bazaars, or streets given over to the sale of a single type of ware, and thousands of individual shops and warehouses. For the aliens there on business, there were the usual temples to alien gods, among them three shrines to the Sacred Fire, attesting to the presence of a Persian colony. In 743 an artificial lake, a transshipment pool, was built east of Ch'ang-an, the Western Capital. In that year, the fascinated northerner, accustomed to speaking the proverb "Boats in the south, horses in the north," could see the boats of every part of the empire gathered on this pool, loaded with the tax goods and local tribute destined for the palace: scarlet felt saddle covers from the north, vermilion bitter tangerines from the south, pink silk-fringed druggets from the east, crimson alum from the west. These goods were transferred to lighters, whose crews were specially garbed in bamboo rain hats, sleeved smocks, and straw shoes, in the fashion of the boatmen of the Yangtze. This was the terminus of a continuous waterway from Canton to the greatest city of the age.

Further observations by Schafer (1963, pp. 14-15) indicate that among the cities with a foreign presence, Canton, present-day Guangzhou, was an important port where merchants from as far as the Arabian peninsula took residence:

> But of all the cities of the south, and of all the towns where foreign merchants congregated, none was more prosperous than the great port of Canton [Guangzhou]…Canton was then [during the Dark Age period] a frontier town, on the edge of a tropical wilderness populated by savages and wild beasts, and plagued with unpleasant diseases, but handsomely set among lichees, oranges, bananas, and banyans. During the reigns of the T'ang emperors it became a truly Chinese city, even though a large part of its population of 200,000 was "barbarian" [foreign]. It was a wealthy city,…its triple wall surrounded a crowded mass of thatch-roofed wooden houses, which were repeatedly swept by disastrous fires, until, in 806, an intelligent governor ordered the people to make themselves roofs of tile. In the estuary before this colorful and insubstantial town were ". . . the argosies of the Brahmans, the Persians, and the Malays, their number beyond reckoning, all laden with aromatics, drugs, and rare and precious things, their cargoes heaped like hills." In exchange for their fragrant tropical woods and their almost legendary medicines, these dark outlanders sought bales of silk, boxes of chinaware, and slaves. They enriched the Chinese businessmen who were willing to give up the comforts of the north for the profits of the south.

The territory acquired during this period by the Tang Chinese through military exploits was greater than that of the Han. An increase in trade exchanges also characterizes this period as regions to the west were tied into the trade networks present in East Asia. According to historians, the westward contact encouraged creativity in many fields. For example, Buddhism, which originates in India, became popular during the Tang period. From the Tang onward, Buddhism increasingly becomes an enduring part of cultural life in China. Additionally, block printing was invented during this period, which made written works more available. Not surprising, this period is recognized as the important literary and artistic point in Chinese history.

Beyond the arts, a notable feature of Tang civil life was a government system maintained by Confucian intellectuals. The selection of civil servants through

examinations was further developed during this period (Hucker 1978). A goal of this system was to identify and encourage capable scholars to participate in government administration. Taking into consideration the political power of aristocratic families and warlords, the Tang rulers sought to create a system that would centralize political control. By creating career officials that had no territorial power base, they attempted to connect local control with that of the government in Changan. The system proved to be so successful that it continued until the end of the Qing Empire in 1911. After undergoing various periods of political disunity the Tang rulers realized the need to devise a system that would allow for the control of a huge geographic area.

The concerns of Tang rulers about the administration of China were heightened by the great imperial expansion underway during the period. At the peak of geographic growth in the first half of the 8th century, Chinese control extended into Tibet, Central Asia, Mongolia, Manchuria, and Korea. Foreign and domestic relations were guided by the goal of maintaining the geographical integrity of China. Although the Tang rulers thought it prudent to maintain good relations with neighbors and various ethnic minorities by adopting policies that fostered economic and cultural exchanges, they also used their military along its borders and developed a strong defense system in order to avert any incursions that would compromise their borders. Throughout the sixth and seventh centuries, the Tibetans and Turks emerged as the most powerful of the neighboring tribes and special efforts were made to consolidate relations with them. Relations were consolidated through intermarriages between members of the ruling families of various groups, and by increasing trade exchanges. However, Chinese military might could always be used to control troublesome areas. This in fact was the case as Chinese armies

marched west to squelch repeated raids by Turks on the western border. In the end the Eastern Turks became part of China's tributary system, but only after a Chinese military presence.

Maintaining economic and political control defined China's tributary system. In East Asia this meant that kingdoms on the Korean peninsula and the Japanese islands acknowledged and recognized China's position in the regional economy. The presence of foreigners on the Chinese mainland was contingent on approval of the emperor. Korean, Japanese, and foreigners from westward lands, understanding the importance of trade with China, went to great lengths to pay respect to the Chinese emperor and officials by presenting gifts and symbols of submission that made it clear that China held a predominant position. Addressing the tributary system and the importance of protocol Schafer (1963, p. 27) observes:

> The greatest day of the ambassador's period of sojourn in China was the day of his reception by the emperor. On this occasion, everything was calculated to impress the foreigner with the majestic state and awesome power of the ruler of T'ang. If the ambassador was of sufficiently high rank to attend the great reception for tributary princes held on the day of the winter solstice, he found himself face to face with twelve ranks of guards arrayed before the hall of audience. There were swordsmen, halberdiers, lancers, and archers, each group wearing splendid capes of a distinctive color, and each with its appropriate banner--a pennon of parrot or peacock feathers, or a flag embroidered with the image of a wild ass or a leopard, or another symbol of valor. Even a lesser envoy saw before him the household guards, on duty at all audiences. These were divided into five troops, of which four wore scarlet shirts and caps decorated with the tail feathers of the Manchurian snow pheasant, and the fifth wore tabards of scarlet taffeta, embroidered with the figures of wild horses. All carried staves and wore swords at their belts. Dazzled by this spectacle, the foreign delegation approached, and after suitable prostrations had its gifts displayed in front of the audience hall. The chief envoy then approached the throne, and, following advice given in whispers by the Chinese official who attended him, bowed toward the sovereign and said, 'Your bulwark-vassal so-and-so, of such-and-such a nation, presumes to offer up these oblations from its soil.' The emperor continued to sit in stately silence, but the Officer of Protocol accepted the gifts in his name, and received from the ambassador other presents for distribution among his assistants. In return, the

> tributary king and his ambassador were awarded nominal but resounding titles in the T'ang administration, in accordance with the doctrine that they were vassals of the Son of Heaven…Thus, when [these vassals] sent tokens of tribute to Hsuan Tsung, the monarch handed down a patent of recognition. . . After accepting these honors in the name of his lord, the envoy was shown the way out. Now he could expect a more relaxing reward for his labors.

Contained within annals of the time one finds mention of Korean and Japanese ambassadors making trips to the Chinese court to not only pay tribute, but to ask for military assistance, permission to trade goods, and have students study in the Chinese mainland. The following account from the Chinese Tang court notes:

> The Japanese Nation, though far away beyond the seas, has sent its envoys to our levee. Now since they have traversed the glaucous waves, and have also made us presents of articles from their quarter, it is fitting that these envoys, should [be] assemble[d] (Wen 1957, 17:1a-1b).

The request to gather these envoys suggests that their tributary mission was successful, and as a result the Japanese could ask for a number of favors from the Tang court. Most importantly, many of the tribute missions of the time were linked to the regional economy and requests for greater access to Chinese luxury goods such as silk, ceramic pottery, and tea were common. The practice of tribute is described in various *Dynastic Histories* as late as the Tang dynasty. For example, in historical texts, such as the *Songshi*, the continued presentation of tribute by Japan to China is recorded. Records tell of envoys being sent from Japan with a variety indigenous products, and precious stones and gems such as agate and amber.

Among the tribute presented to the Chinese court, human beings were at times given as gifts. Human tribute was not uncommon, and came to be prized as servants of the court. According to Schafer (1963, p. 50), “since antiquity [it was the custom] to send odd or monstrous objects of every sort to the imperial court, and these might easily

be human beings…men from remote lands, given luster by distance and rarity, were sufficient curiosities in themselves…such were the …bearded Ainus brought by a Japanese mission in 669." The best of gifts were bestowed on the Chinese court as envoys sought the favor of the court in a variety of political and economic affairs.

In addition to China's tributary systems overland, evidence of flourishing sea-borne commerce, unrelated to any overland tribute embassies, is provided by trade in the southern ports. For example, ports in Guangzhou and Jiaozhi, in the vicinity of present-day Hanoi, were long known as places where merchants could become rich (Holcombe 1999). In 817 A.D. Han Yu writes, "foreign ships arriving at their moorings were taxed to drop anchor. When they first arrived, there was the entertaining of the inspectors of the cargo - horn and pearls in profusion, with bribes reaching even to their servants" (cited in Holcombe 1999, p. 280). The descriptions of Chinese merchants, officials, and foreigners coming into Chinese ports all corroborate a high volume of trade during the Tang period and the intensity of exchanges. According to accounts of the period, "the profits from South Sea trade… [is] immeasurable. If…[one] obtains them he will increasingly prosper" (cited in Holcombe 1999, p. 280). The extent of maritime trade during the post-Dark Age is made evident by direct accounts that address the volume of goods traded and give descriptions of items exchanged. Knowledgeable of the profits to be had if trade could be established with China, foreigners throughout Asia and points west sought to establish trade linkages with China. According to Si-yu-chuen, a Tang scribe, "the barbarians [foreigners]…came in crowds into the Middle Kingdom [China], and as by an outbreak from more than a hundred kingdoms, distant at least one thousand leagues, brought with them… presents" (cited in Broomhall [1910] 1966, p. 122).

The Tang Empire was a world center for trade and cultural exchange during the post-Dark Age period. Relations with kingdoms within and outside of East Asia were precipitated by Chinese technological and cultural developments. The stories told by returning foreign envoys from Europe and surrounding Asian kingdoms made it known that China had much to offer in terms of cultural and economic exchanges. Foreign merchants sought to trade with the Tang whose art, finished products, spices, and tea where valued commodities. In fact, it was during this time that tea became the national drink of China (Hucker 1978). More than seventy polities where trading with the Tang (see *Dynastic Histories*; *Songshi*). In order to ensure the continuity of this trade and encourage further trade exchanges, the Tang allowed merchants from Korea, Japan, Europe, and Southeast Asian communities to settle in China (Schafer 1963).

Contact between China and Japan was well established by the early part of the Han dynasty (202 B.C.). This contact would further develop with the emergence of subsequent dynasties, but during the Tang dynasty was stronger than at any other period in the history of East Asia. In the *Shoku Nihongi* or *Chronicle of Japan Continued* one finds mention of trips made by Japanese emissaries during the post-Dark Age period (see Aston 1997). In one such account retelling the stay of an envoy to China in 704 A.D., the importance of Japan's image and social standing in the region comes across:

> When he first arrived in China he encountered a man who approached and asked, 'What country are you from?' Mahito replied, 'I am an envoy from Japan,' and inquired in turn, 'Of what country is this the border?' The man answered, 'This is the border of Yancheng district of the prefecture of Chu in Great Zhou.' Mahito asked further, 'Formerly it was known as Great Tang, and now it has become Great Zhou. Why did the name of the country change?' The man answered, 'In 683 the Emperor died. The Empress Dowager ascended the throne, took the name of Holy Ruler, and called the country Great Zhou.' The dialogue was almost at an end, when the Chinese man said, 'May I just say -- the country of Yamato is in the eastern seas. It is said to be a country of worthy men. There is abundance of

> goods and the people are happy; and propriety is carefully observed. Now when I see your gentlemanly bearing and composure, I know it is true!' With that the conversation ended, and the man left (cited in Sakamoto 1991, pp. 104-105).

Envoys were routinely sent from Japan and Korea along with emissaries from various other Asian kingdoms. In addition to foreign merchants travelling to China, students and monks also flocked into the empire to study (Sakamoto 1991). Chinese students and monks were also sent to Japan and Korea, and became important vehicles in the diffusion of Chinese culture. In addressing these exchanges the presence of the Chinese monk Jianzhen in Japan becomes important. Jianzhen is considered to be one of the most influential of the Buddhist monks who traveled to Japan. His arrival in Japan, in the eight-century A.D., is considered pivotal in the introduction of Lu Buddhism to the Japanese islands. It was thanks to these cultural exchanges that Chinese culture and technology spread to Japan. A number of dimensions of Japanese life such as the system of political administration, the economy, cultural lifestyle, and beliefs were all strongly influenced by the Tang (Fogel 1996). In return, indigenous Japanese culture was introduced into China, and in particular native forms of music and dance, which became popular. Just like the Japanese became familiar with Chinese culture, peoples on the mainland also learned the culture of Japan.

The poetry of Po-Chi-I who lived from 772 A.D. to 846 A.D. provides a vivid description of life in the post-Dark Age period, especially in Tang times. Describing the presence of gold and silver mines he says:

> Silver comes from the nooks in the hills of Ch'u,
> Gold comes from the shores of P'o Stream [in present day Jiangxi province]
> The people of the south no longer till the fields,
> But seek gold…They clear away the gravel and chisel into the rock,
> Hacking and hewing in spring and winter alike.

> Their hands and feet are all chafed and swollen;
> But they care for profit more than care for themselves
> (cited in Waley 1949, pp. 61-62).

The extraction of gold and the discovery of mines are recorded as early as the pre-Dark Age period. In fact, in the early dynastic histories references to the use of gold are made, with an account of the discovery of gold on T'ai-shan in 95 B.C. described in the *History of the Han Dynasty*. Historians and Sinologists aided by archeological evidence argue that the use of gold as currency on the Asian mainland can be traced back as early as the eleventh century B.C. (see Scott 1967). One finds that historically gold and silver had the same value for the Chinese. It wasn't until contact with foreigners that gold came to hold greater value and became a larger component of trade as foreigners sought to gain access to Chinese goods through trading precious metals (Burling and Hart 1953; Frank 1998).

In the post Dark Age period local sources of gold were actively sought and extracted from western provinces such as present day Sichuan and in the south in existing Guangxi and Guangdong provinces, referred to historically as Lingnam. Further south, under Tang rule, Annam, currently the country of Vietnam, was also an indigenous source of gold for China. Noting the extraction of gold during the period one observer writes:

> I have regularly seen men taking gold: they dig into the ground to a depth of more than a ten-foot to reach rock which is greatly disturbed. Here each lump of rock is all blackened and scorched, but beneath such rock is the gold. The larger is like a finger; the smaller resembles hemp seeds and beans; the color is like 'mulberry yellow,' and when you bite it, it is extremely soft—this then is the true gold (cited in Scott 1967, p. 22).

Although indigenous sources of gold were sought and mined, the trade alone of Chinese luxury goods led to an abundance of silver and gold in the post-Dark Age. Observing the use of precious metals during the period a Tang artisan remarks:

> Before the advent of the T'ang, both gold and silver were hardly ever worked as the basic materials of dishes, vases, or even jewelry. Gold was made into some personal ornaments, in costly imitations of styles of ancient bronze prototypes, and for splendid inlays in large bronze vessels (cited in Scott 1967, p. 22).

Increasingly employing gold in the production of eating utensils such as cups, plates, bowls, and chopsticks, artisans not only accommodated the tastes of the time, but also utilized a material that was in the post-Dark Age more accessible than in previous periods.

According to Shou-Yi (1961, p. 235), "with the ascension of Emperor Hsuan Tsung in 712 [A.D.], Tang prosperity was to reach its zenith. Much luxury and leisure were available to members of the upper classes in Chinese society. A natural product of the age was the birth of superior art and literature." The exuberance of the times was not only recorded by court historians and scribes, but also made clear in the works of poets. The prolonged period of prosperity after a turbulent Dark Age period had many asking how long would this prosperous period last. In a poem by Li Ch'iao (A.D. 644 – A.D. 713) this question surfaces:

> Mountains and rivers fill the panorama as tears are wetting my coat.
> Wealth and honor and luxury, how long will they endure?
> Do we see that now bedecking the surface of the river Fun
> Are only autumn's swans flying year after year? (cited in Shou-Yi 1961, p. 235).

Tang China and the Korean Peninsula

As China entered the Tang period, the Korean Peninsula still found itself divided into three separate kingdoms: Koguryo, Paekche, and Silla (see figure 6.1). In a process that would eventually lead to the consolidation of the Korean peninsula under the Silla, China conquered Paekche and Koguryo. However, the Tang were unable to conquer Silla and the Chinese withdrew from the Korean Peninsula. In 675 A.D., Silla united the

peninsula, and, despite the military incursions from China, continued to maintain relations with the Chinese. During this period the continuity in the relationship would reap economic benefit since Silla became an important trading partner for China. Silla from all accounts benefited from the relationship with China both in economic and military terms. As a result of its close relations with China, Silla was able to surpass the kingdoms of Koguryo and Paekche, and eventually incorporated those two kingdoms. Silla during the post-Dark Age emerged to become a wealthy kingdom. Describing the wealth in Silla the official history of China's Tang dynasty describes the capital of Kyongju, historically called by a name that means city of gold, noting "emoluments flow unceasingly into the houses of the highest officials, who possess as many as 3,000 slaves, with corresponding numbers of weapons, cattle, horses and pigs" (cited in Clifford 1994, p. 73). At its peak, Kyongju's population reached close to one million making it an important city in the regional economy of East Asia (Clifford 1994).

Re-establishing and Intensifying Trade Linkages

Of importance to the Tang economy was the international trade between communities on the Chinese mainland, inner Asian countries, Southeast Asian kingdoms, India, Korea, and Japan. Chinese goods have been uncovered in western Asia that can be traced to the Tang period (Toutain and Dobie 1930). During the Tang dynasty trade routes were well established and frequently traveled. Overland trade along the silk route, along with trading routes along the Indian Ocean and South China Sea, provided merchants with more access to foreign and domestic goods. As Schaefer (1963, p. 11) observes, "there were two ways to China: overland by caravan, overseas by argosy. Great

ships plied the Indian Ocean and the China Seas, carrying eager Westerners to the glittering Orient."

Acting as a middleman between China and Japan, Korea benefited from the renewed East Asian trade as it controlled sea trade in the north. Not only did Korean vessels come to provide direct linkages between China and Japan, but also Japanese ships came to dock at Korean ports as merchants made their way overland to China via the Korean peninsula. Historical analysis of the time reveals the economic niche Koreans had carved for themselves:

> In the north, the art and trade of navigation was chiefly in the hands of the Koreans, especially after the destruction of the kingdoms of Paekche and Koguryo by Silla during the [the seventh century]. Then ambassadors, priests, and merchants from the victorious state, and refugees from the vanquished nations too, came in quantity. The Korean vessels usually coasted around the northern edge of the Yellow Sea, and made port on the Shantung Peninsula. This was also the normal route of ships from Japan, setting sail from Hizen…In the eighth century the Japanese were forced to come across the open sea from Nagasaki, avoiding Silla, heading for the mouth of the Huai or of the Yangtze River or even for Hang-chou Bay. But in the ninth century, to avoid these voyages, which had proved exceedingly dangerous, Japanese pilgrims and emissaries preferred to take better navigated Korean ships and come via Shantung to the mouth of the Huai, or even to risk Chinese ships, which made land further south in Chekiang and Fukien, instead of at Yangchou. Though the ships of Silla dominated these waters, merchant vessels of the Manchurian state of P'o-hai, culturally dependent on T'ang, also navigated them, and there were government inns for the accommodation of the ambassadors of P'ohai, as well as those of Silla, at Teng-*chou* in Shantung. But the Koreans were in the majority; indeed, they formed a significant alien group on Chinese soil, living in large wards in the towns of Ch'u-chou and Lien-shui, on the system of canals between the Yangtze and the Yellow rivers, enjoying, like other foreigners, some extraterritorial rights (Schafer 1963, p. 11).

The sea routes controlled by Korean ships to the East were supplemented by an elaborate road system on the Asian mainland. Land routes facilitated trade and cultural exchanges between peoples in East Asia and the west. According to Schafer (1963, p. 13), "the

products of the peoples of Manchuria and Korea came through the forests and plains of liao-yang…and down the coast of the Gulf of P'o-hai."

Foreign merchants, envoys, students, and artists were drawn to China for multiple purposes and consequently fueled the exchanges that took place during the period. During the Tang dynasty Yangzhou, located in Jiangsu province, emerges as a major economic and cultural center. Historically, as the capital of the Sui dynasty (581 A.D.-618 A.D.) it has been strategically positioned close to major waterways. It became an important commercial center during this time, and, like Guangzhou, attracted foreigners from and throughout Asia, and points further west. Noting Yangzhou's importance one Ming dynasty poet wrote "Yang-chou [Yangzhou] was the jewel of China in the eighth century; a man might hope to crown his life by dying there" (cited in Schafer 1963, p. 17). Broomhall (1963, pp. 17-18) provides the following analysis and observations of Yangzhou:

> The city owed its wealth and beauty to its location at the junction of the Yangtze River, which drained all central China, with the Grand Canal (called by the Chinese "River of Transport"), which carried the produce of the whole world to the great cities of the north. Therefore the imperial agent in charge of the national salt monopoly, a very lordly personage, had his headquarters there, and the merchants of Asia congregated there, at the hub of the great network of T'ang waterways, where all goods brought by Chinese and foreign vessels were transshipped to northbound canalboats. The citizens of the city were made rich by its focal position in the distribution of salt (which everyone needed), of tea (which by now had become popular in the north), of precious stones, aromatics, and drugs brought up from Canton, and of costly damasks and tapestries brought down the Yangtze from Szechwan [Sichuan]. Moreover, Yang-chou was a banking center and a gold market, where the financier was as important as the merchant. In short, it was a bustling, bourgeois city, where money flowed easily. Yang-chou was also an industrial town, famous for its beautiful metalwork, especially its bronze mirrors, for its felt hats, in the mode among the young men of Ch'ang-an, for its silk fabrics and embroideries and fine ramie linens, for its refined sugar, made here since the seventh century by a process brought from Magadha [an ancient kingdom of India], for boatbuilding, and for excellent cabinetwork. Yang-chou was a gay city, a city of well-dressed people, a city

> where the best entertainment was always available, a city of parks and gardens, a very Venice, traversed by waterways, where the boats outnumbered the carriages. It was a city of moonlight and lanterns, a city of song and dance, a city of courtesans. 'Yang is first and I is second,' went the epigram, placing the reputed elegance and bright frivolity of Ch'eng-tu [Chengdu] in Szechwan, along with its solid prosperity, in an inferior position. It was inevitable that foreign merchants should establish their shops here.

As a result of the increase in trade during the Tang period, more efficient ways of exchange were sought and gave rise to the use of feiqian or "flying money" by tea traders (Evans 1992). The use of paper money in China can be traced to the Tang period where exchange certificates were first used by tea traders and then became commonly employed by other merchants. A thriving inter-province and inter-Asian tea trade developed. At its height the Tang Empire had developed the tea trade with Korea, Japan, India, Pakistan, Afghanistan, and even Iran and human communities on the Arabian peninsula (Bai 1982). Korea became a large market for Tang tea that was also exported to Japan if not directly from China then through middlemen in Korea (Bai 1982). The popularity of Chinese tea throughout East Asia, further propelled the Chinese economy which not only was heavily involved in the cultivation of tea, but also it's preparation for export to regional neighbors and points westward as far as the Arabian peninsula (Evans 1992).

By the tenth century A.D. paper money was in wide use in China, and became a model for paper currency that would later be used in Europe. The paper notes in China were also known as *bianqian*, which translates into convenient money. In attempting to devise ways to facilitate exchanges the use of certificates proved to be an important development.

The Tang culture, as evident in the economic and cultural contacts between human communities throughout the region, would have a lasting impact on the regional

trading system of East Asia. Cultural diffusion, as a result of increased trade linkages, can be observed. For example, in 675 A.D. the Tang calendar was in widespread in East Asia. Communities in the region also benefited from Chinese innovations in agriculture and printing. It is during this time that tea cultivation is introduced in Korea via China, and would eventually be transmitted into Japan. In considering the importance of overland trade to the economic wellbeing of human communities, one should also pause and recognize its significance to the transmission of culture.

The Assault on Nature Intensifies

Analyses of the extent of environmental degradation throughout China's imperial age suggest that nature was under constant assault by human communities within the Chinese mainland. However, one finds that at certain periods the environment is at greater risk than others. One observes that the prosperity, stability, and renewed intensity of trade linkages meant that the environment was again under assault. Although the Dark Age period provided some time for environmental renewal, it was short lived and did not translate into an absence of environmental stress. Consumption of environmental resources continues during the Dark Age, even if this use is not at the extravagant levels it once was. The continued reliance on natural resources still impacts environments to the degree that not all fully recover after long periods of extensive extraction. However, the Dark Age period did reduce the stress on local environments to the degree that once bare areas of forest could now again be harvested. However, the fragile state that many environments found themselves in led to resource extraction of previously pristine areas, and a greater reliance on the importation of resources outside of the Chinese mainland.

In pursuit of timber all possible sources of wood within the Tang Empire were identified and utilized. The heavy use of timber in earlier times in the North meant that areas in the South were now increasingly relied on. Coastal districts came under assault, and people were sent to fell trees in southern provinces. Imported timber also became important to the maintenance of the consumptive lifestyle of the times. Yang (1969, pp. 218-219), in this regard, makes the following observations:

> In addition to native produce, Chinese builders also made use of imported timber…much fine timber was imported from Japan, notably at the celebrated port of foreign trade Ming-chou, modern Ningpo…Japanese pine wood [was used] to construct the Ts'ui-han T'ang or Hall of Green Chilliness.

One can surmise that as the economy of the Tang period flourished, the demand for timber increased. In fact, consumptive habits were a reflection of the prosperous times and mirrored the exuberance of the pre-Dark Age period. The only change one observes between the pattern of consumption in the pre and post Dark Age periods is that in the latter consumption involved a larger network. The expansion of trade linkages in the post-Dark Age period meant that East Asia, and China, had greater access to raw materials and finished goods from the west. Not only was trade expanded west, but also trade in East Asia was intensified. This translated into a greater demand for wood products that would in later centuries result in a depletion of forests in Japan, Korea, and areas within the Chinese mainland.

The stress placed on Chinese, Korean, and Japanese forests was tied to demand. According to Schafer (1963, p. 133), "the men of T'ang had a fine variety of native woods to provide them with the useful artifacts to which they were accustomed: a native rosewood for axe-hafts; sour jujube, tough and fine-grained, for axles, spoons, and chopsticks; camphorwood from south of the Yangtze to make boats; paulownia from

Szechwan to make the zithers (furnished with jade pegs, and strings of silk from Chekiang) and beautiful harps of medieval China." In addition, woods such as sandalwood were imported and in wide use. Sandalwood in particular was used in the manufacture of both utilitarian and religious objects. Describing the use of sandalwood in Tang times, Schafer (1963, pp. 137-138) writes:

> Sandal was a wood of luxury as well as a wood of religion. When Hsuan Tsung had a fine house built for Rokhshan in Ch'ang-an in 751, he had it furnished with the richest objects, such as gold and silver utensils, and among the furnishings were two couches, ten feet long and six feet wide, appliqued with sandalwood. Even more splendid than these were the high seats presented to the monks of the An-kuo ("Country Stabilizing") temple by the Emperor I Tsung in 871, to be used by lecturers on the sutras. The seats were twenty feet high and framed in sandalwood and aloeswood. Of the same magnificence was the meditation platform at the T'ien-t'ai monastery on Mount Wu-t'ai in the ninth century; it was covered with a sandal paste, so that the breezes blew its fragrance over a considerable distance.

In regards to the use of wood in Tang times one finds that "the wood products of the southernmost part of the empire were much in demand, since more of the original forest remained there than in the north, and that subtropical land was rich in hardwoods" (Schafer 1963, p. 133). These hardwoods were sought after and prized not only in China, but also in Korea, Japan, and areas outside of East Asia.

Among woods used during the period, hardwoods emerged to be considered a luxury. The opulence of the times and it's link to wood is noted by Schafer (1963, p. 134):

> Early in the eighth century unheard-of heights of luxury were achieved in building and furnishing the mansions and palaces of the members of the imperial family and of the great aristocrats...The demand for fine woods was enormous, and stupendous sums were expended to denude whole mountains to obtain them. These extravagant needs not only increased the consumption of native timbers but brought the importation of foreign woods, especially colored and aromatic ones, to new heights. It became fashionable among the aristocratic classes to have

> everyday utilitarian objects made from such exotics, so that the households of the great reeked of tropical fragrance.

In addition to the deforestation of forests for the manufacturing of everyday use objects such as eating utensils and furniture, wood was extracted to supply fuel for the various smelting furnaces that were used in the manufacture of ceramics, and in gold and silver extraction processes. Silver and gold mines required wood for initial extraction, but the smelting and later manufacturing of finished goods such as jewelry requires additional fuel that would place further stress on local forests. Historically, the output of precious metals such as silver was not influenced by the supply of ore, but by fluctuations in the accessibility of wood for fuel. Describing today the environmental consequences of ecological relations in Tang times, Paul Eckert (1998, p. 1) writes:

> In a process that began thousands of years ago and accelerated during the flourishing Tang dynasty (A.D. 618-907), billions of tonnes of soil slip off the denuded hills and into the river annually [in Shanxi province]. It was the Yangtze River, not the Yellow River, that transfixed the nation this year [1998] with floods which took more than 3,000 lives and caused billions of dollars of damage. But the poor provinces which lie on the vast Loess Plateau that straddles the Yellow River's middle and upper reaches have for centuries suffered cycles of flood and famine that offer lessons about the cost of destroying forest cover. Shanxi's position as one of China's poorest provinces - with 50 of its 118 counties designated as poverty-stricken - shows the dark side of a rich historical legacy. 'The Tang dynasty was a glorious era of Chinese history, but it also began serious destruction of the natural environment,' said Zhao Zhizhong, deputy magistrate of Lan county, one of the poorest in the province. Since ancient times, extensive settlement and incessant wars [has meant that]…vast swathes of land were cleared to allow better views from the Great Wall watchtowers.

In attempting to meet consumptive demands and secure the mainland, Tang China deforested the Chinese landscape so much that to this day the impact is felt. Although natural environments have a regenerative capability, this ability is diminished if nature is under constant assault. The prosperity of Tang times meant that local environments were

depleted to the extent that the environment was in subsequent periods incapable of returning to its previous state.

Ritual Tomb Furnishing

Remains uncovered in tomb sites provide ample evidence of the presence of persons from East Asia and distant land westward in China (Scott 1967). Pieces throughout the region and points westward have been uncovered and illustrate the extensive trade networks of the period. Specifically, tomb figures from Tang burial sites offer conclusive proof of peoples from as far as the Arabian peninsula who came to China to trade, to serve prosperous Chinese, to entertain the Tang, and to join the skilled Chinese craftsmen and artists of the period. Since a number of Tang burials can be dated historically, the authenticity of many tomb pieces can be established; sometimes the province, or at least the general area from which a given object comes, can likewise be determined (Scott 1967). The economic and cultural progress during the Tang dynasty established a climate in which both arts and crafts flourished in China. Along with painting and calligraphy, Chinese artisans and craftsmen worked on sculptures, metalworks, and ceramics. In regard to the latter pieces were made for utilitarian purposes, but also many ceramics became a part of burial practices.

Burial figurines, and other ceramic pieces, were often turned out in quantity from molds, and there is much duplication to meet the exigent demands of the times (Scott 1967). This attest to the popularity of ceramic pieces not only in China, but abroad. In fact, the demand for tomb pieces became so great that number of the figures used in burials came to be standardized by law in the eight century A.D. (Honey 1945; Mahler 1959). An imperial order was decreed in 741 A.D. to limit the number of objects that

would be allowed to be placed in tombs (Honey 1945). The goal was to curb wasteful and ostentatious displays, and prevent the financial strain the custom of tomb furnishing placed on families. However, it also appears to have been widely disregarded by many within Chinese society. Addressing this issue Prodan (1961, pp. 64-66) writes:

> It became the mode to use the age-old custom of tomb-furnishing for purposes of social competition. The mechanics of this practice are revealed to us by a chronicler of the times, who tells us that the dead were accompanied to their grave by great throngs and that along the procession's route, in pavilions and tents, the mourners were entertained with food, wine, actors, acrobats, circuses and women. In these temporary structures the furniture which was to adorn the tomb was on view. Of all that panoply of pleasure the earthenware tomb furniture is all that has remained. But the quantities found are enough to reveal how widespread was the custom and how it permeated society from the highest to the lowest. They reveal, too, that a chronicle's account of the financial disasters of some families in their effort to keep up with their neighbors is more than probable. Before the first hundred years of the T'ang dynasty had run out, an imperial edict was promulgated laying down strict specifications for the practice of tomb decoration. It was decreed that a personage above the fourth rank could be accompanied by no more than 40 pieces. The rules also fixed the maximum size of the pieces, and specified that the statuettes and pots which were to accompany princes were to be drawn from the stocks of the 'Imperial Department of Model Makers'…This ruling cannot have been enough to curb extravagance.

The custom for furnishing tombs with all form of figures reached new heights during the Tang period. Despite imperial decrees, the great number often found in single tombs of the post-Dark Age speaks to the popularity and continuity of this practice. Similarly in Japan and Korea, the custom of placing objects in the tombs of the deceased continued.

The monopoly China had over raw silk prior to the third century A.D., along with the replacement of porcelain as a primary export well before the Tang dynasty, established the Asian mainland as a primary exporter of luxury goods, many of which were symbolically present as part of burial practices. The trading world of East Asia during the post-Dark Age was heavily influenced by the advancements made in

technology in China. This inevitably influenced the character of ceramics produced throughout East Asia. A discussion of Chinese wares during this period needs to be put in the context of general advancements occurring during the Tang dynasty. In contrast to the many unglazed, mute colors, and simplified designs of wares being produced in China, Japan, and Korea during the Dark Age, we see that in the proceeding period wares show stronger colors and a variety of designs. As in previous periods we still see the parallels between wares being made in China and those originating in Korea and Japan (Honey 1948). Chinese ceramics were still regarded highly during this time, but we see artisans in both Korea and Japan developing and exploring their own distinct designs. That production fell in China during the Dark Age may have fostered and created a greater appreciation for local wares.

During the United Silla dynasty (A.D. 668- A.D. 935) in Korea, a period that roughly corresponds with China's Tang dynasty, we increasingly see the presence of wares that can be considered distinctly Korean (Honey 1948: Gompertz 1968). We also see in Japan during this period a new type of high temperature work known as ash-glazed wares (Wilson 1995). The introduction of tea into Japan via China in the eight-century also encouraged the emergence of native stoneware during this period (Wilson 1995). Unglazed wares developed during the Dark Age period were still being produced in Japan, and in fact the volume of production in unglazed wares in Japan exceeded that of those that were glazed (Wilson 1995). Although unglazed wares were widely produced in Japan we do see that they varied from their predecessors from early periods as more elaborate styles emerged.

The greatest number of finds in Korea that correspond to the post-Dark Age have come from south-east Korea, from tombs in the vicinity of Kyongju, the former capital of the Silla Kingdom. Among finds in tomb sites are gold plates with various shaped pendants, long bent beads, open-work leaves, bells, ceramic models of various types, scent-bottles, and chop-sticks. In an arrangement similar to tombs in China, the furnishing of Korean burial sites lasted well into the post-Dark Age period. The symbolic nature of tomb figurines, and various other forms of furniture, continued to be linked to beliefs about social order (Clark 2000).

In analyzing pottery, I observe that parallels exist between the period prior to the Dark Age and the period after. It is of interest that Chinese wares, regardless of disturbances within China and the innovations taking place in Korea and Japan, continue to be in demand and maintain their dominance within the pottery hierarchy. The influence of Chinese wares remains present and continues to influence the works of artisans throughout Asia. The value of Chinese wares can be seen if one examines the emergence of the tea ceremony in Japan and the utensils used in the preparation of tea at social gatherings. Through accounts given of these gatherings we see that Chinese utensils were not only in use, but were exhibited prominently as a status symbol (Wilson 1995). In later periods we still see that Japanese tea-ware design centers are actively reproducing Chinese ceramics. It's not until the sixteenth century that distinctly Japanese tea wares are first produced (Wilson 1995). The importance of this discussion of tea-wares lies in its evidence of continued dominance and influence of Chinese wares. Throughout our historical exploration of pottery we see that Chinese wares maintain their position as sought after luxury items.

Despite the aesthetic changes in the items being produced in China, it would seem that Chinese pottery, and in particular tomb-furnishings, was still highly regarded. For example, Tang tomb figures in the late sixth century began to be made of a new sort of pottery, a soft earthenware, of a white, gray, and pinkish color with a surface-wash. The darker gray or red clay material used in the Dark Age period seems, however, to have continued in use during at least the early part of the Tang period. Unfired colors continued to be used on the unglazed figures early in the Tang period, and are part of the mass-produced items geared to satisfy demand for tomb furnishings. Still, many of the better class of figures were lead-glazed, some with a pale yellow or indeterminate color, others with a glaze streaked or marbled or spotted with green and yellowish brown and (more rarely) blue. Both the dated finds cited were of the glazed and colored type.

The significance of the Tang models in custom and rituals is reflected in the quantity, quality of tomb figures, and the material utilized to create several classes of figures. It is noteworthy, however, and an indication of the unrestricted foreign contacts made by China under the Tang that many of the figures depict foreign types. Many of the figures found at tomb sites are believed to have a religious or ritual significance. Analysts surmise that some figures represent specific spirits and otherworldly deities. For example, unearthed in tomb sites are figures meant to represent the God of Death. These figures are suitably menacing depicting an armor of quill-like flames. The most physically impressive are the tall figures variously described as ministers, shamans, priests, or guardians that have Chinese origins, but can be found across the whole of East Asia

Questions emerge and are left unanswered in regard to the popularity and continuity of tomb furnishing after the Tang period. Specifically, whether tomb-figures continued to be made at all under the Sung dynasty (A.D. 960 – A.D. 1127) is still undecided (see Honey 1945). Although analysts note the lack of physical evidence in the archeological record, I would surmise that the practice continued well after the Tang period, and may be proven through further archeological research. There is nothing in the written record to suggest an abandoning of tomb furnishing. Recently, green-glazed red earthenware figures found in a Szechwan tomb dated to the 10th Century A.D. confirm, at the very least, a provincial continuation of the practice. In subsequent periods Tang pottery would be reproduced as indicated in Ming graves.

Evident in tomb sites throughout East Asia is the deliberation, detail, and display that characterized burial rituals. The funeral rituals of high-ranking people were particularly elaborate and painstakingly planned in ancient times. As made clear in the excavation of tomb sites in East Asia, social customs associated with burial and mourning of the dead serve a variety of purposes: disposal of the physical body, public recognition that a life has been lived, paying tribute to the deceased, facilitating the expression of grief and providing support to the bereaved, a rite of passage for both the deceased and the bereaved from one status to another, assisting the deceased in afterlife activities, providing an opportunity to reestablish contact with friends and relatives, and reaffirming or rearranging the surviving social group that may have been disrupted by the death of the deceased (see Ch'ien 1994, 2002). Relating to the transition of the deceased from one state to another, it was the belief of the times that the soul of the deceased must be assisted. Archaeological evidence suggests that this has been the case in both ancient and

modern times. For example, the presence of food, tools, and ornaments in the graves from the Han to the Tang dynastic period suggests a belief in an afterlife. Another archaeological finding that points to a belief in an afterlife is the discovery in some of the earliest graves during the Shang dynastic Period (1766 B.C.-1122 B.C) of skeletons bound by their hands and feet into a fetal position, an orientation presumed to be most appropriate for rebirth (see Bell 1997).

Observations of funeral customs among peoples in East Asia today, coupled with archaeological evidence, leads to the conclusion that burial rites have existed since Paleolithic times (Middleton 1998). Rather than hygienic considerations, about which early humans presumably knew nothing, these burial ceremonies were motivated by beliefs of the supernatural. They were used as a means of placating the spirits of the deceased by facilitating its journey to the spirit world and new existence in that world. Funerary rites also served, as is apparent from the 3rd century B.C. through the 10th century A.D., to honor the dead and to find favor with the gods. As time passed, the rituals and customs became more elaborate. In the case of China they were set down in writing, as in, for example, versions of the *I-Li* and *Chinese Dynastic Histories*. These books provide detailed descriptions of the death systems during certain periods, including instructions for treatment of the deceased in accordance with specific views of the afterlife.

Funerary rites and customs served not only religious purposes; they also became occasions for artistic, engineering, and even scientific achievements. The development of the ceramics industry and the tomb builders of ancient China, Japan, and Korea, benefited economically from the observance of burial rituals. Tombs and their furnishings served as

reminders of the lives and accomplishments of the deceased. The construction and decoration of tombs also provided occasions for cooperative social action that reaffirmed beliefs about the connection between the world of the living and the afterlife. In the Chinese conceptualization of death there was no gap between the space living beings inhabit and the world of the dead. This belief had implications for ecological relations as consumption not only extended to the world of the living, but also meant an industry reliant on natural resources to fulfill the needs of those inhabiting the unseen universe.

Summary

The regional trading system of East Asia reminds us of the multiplicity of interconnections human communities have developed over time. In examining the history of economic activities in the region one can also note cultural exchanges and contact between peoples in East Asia. The networks that connect Chinese, Korean, and Japanese kingdoms is observed in the trade of goods and diffusion of culture in the region. In identifying economic centers we can also identify areas engaged in the reproduction of material culture. Cultural centers, as seen in this examination, can exert their influence within regional trading systems. When examining the trade of luxury items in the regional trading system of East Asia we see that Chinese tomb furnishings and pottery come to be held in high regard. Analysis of burial practices in the region reveals a preference for Chinese ceramics. The reproduction of Chinese wares throughout the regional trading system clearly indicates the value of Chinese wares and their position in the hierarchy of pottery.

During disruptive periods or Dark Ages, where trade exchanges are disturbed, opportunities are created. Although a Dark Age does usher in a period that disrupts the social life human communities enjoyed for centuries, these difficult epochs can also trigger new developments that highlight the ingenuity and ability of people to overcome difficult periods. Societal resiliency during a disruptive point in time is illustrated and observed in the continuity of economic and cultural practices. In the case of the East Asian Dark Age I observe constancy, in that practices such as tomb furnishing endures. For example, in regard to tomb furnishing, the demand for tomb figures and wares doesn't diminish, but because of social and physical obstacles, as a result of the Dark Age, production can no longer accommodate demand as these objects were produced to a lesser degree.

As trade and production of certain products decreases or comes to a halt, human communities are presented with an opportunity to overcome the absence of previously abundant goods and resources. In the case of tomb furnishing, although trade exchanges are disrupted, the reproduction of Chinese wares in Korea meets demand on the peninsula and Japanese islands. In addition to new sources of goods and resources emerging, human communities were more heavily relying on locally produced objects. Korean and Japanese markets met demand through the objects produced by local artisans. Additionally, new styles and designs emerge and technology is improved upon to allow for continued practice of important cultural customs. For example, a new aesthetic emerged as unglazed and lead glazed pottery became popular and used in the practice of tomb furnishing. It is important to note that despite disruptions in the production and trade of pottery, we see that the practice of tomb furnishing continues. Human

communities may now make do with objects of different design or origin, but they nonetheless serve the same function of previous items.

In the study of social change analysts recognize that “nothing is more obvious than the conservative bent of human behavior, the manifest desire to preserve, hold, fix, and keep stable” (Nisbet 1969, p. 271). Historically, persistence and change is observed in the East Asian regional system. There is a dualism present as one observes both permanence and change (Eastman 1988). Early in the development of social thought, Greek philosophers recognized that the world was in a process of constant flux and development. This observation rings true in East Asia as human communities sought to continue with important practices, customs, traditions, and habits, by utilizing what was available and developing new creative ways of fulfilling economic and cultural needs.

CHAPTER VII

DISCUSSION AND CONCLUDING REMARKS

A Nexus of Association

The imprint of human beings on the environment is widespread and highlights the exploitative relationship human communities continue to have with nature. In recent times the transformative impact of human beings on their physical environment has been recognized in the rapid rate of deforestation, the pollution of the oceans, the disappearance of plants and animals, the murky skies, and the plundering of the earth, all of which remain constant (Hughes 1975). Observing this historically, David Lowenthal (2003, p. xv) writes, "men fell trees, clear the land, till the soil, dam rivers. Was nature the same afterward?…Were plants, fish, birds, animals unchanged? Assuredly not…Anyone who yields an ax knows its likely impact." Despite lacking the modern accoutrements of today's world, ancient societies did alter their environments and faced problems linked to their misuse of nature (Hughes 1975). Human communities do determine their relationship to the natural environment. Analyzing ecological relations historically reveals that economic and cultural practices, which are linked to societal attitudes toward nature, knowledge about nature, and the technology employed to extract resources, are part of a web of association and correlation that directs action and impacts nature (Hughes 1975).

Directly addressing ecological relations from a world-system perspective, this research has examined the interplay between society, nature, and culture in East Asia. Analysis of the East Asian regional trading system from the third century B.C. up until the tenth century A.D. has produced several insights of importance to the global historiographical projects of world-system analysis, while making explicit the importance of nature to social research. Specifically, this work addresses several questions.

First, the research sought to uncover the interconnections between human communities in East Asia. In world-system research few studies have examined regional trading systems outside of Europe. Additionally, historical periods that predate Wallerstein's (1974) conceptualization of the modern world-system before the sixteenth century are not fully examined. The findings reveal that human communities in East Asia were part of a system of exchange as early as the third century B.C. Prior to the Dark Age, kingdoms across the whole of the region participated in trade. It is also evident that peoples traveled or migrated from the Asian mainland into the Korean peninsula and as far east as the Japanese islands. Writings of the time do make reference to the tribute missions of kingdoms across the whole of Asia to China as early as the Former or Western Han dynasty (202 B.C. – A.D. 9), and serve as evidence of the linkages between human communities in Asia.

Second, the study also indicates that intra-regional relationships not only involved trade in a variety of material products, but also included cultural exchanges. After establishing the contacts between ancient communities in East Asia during the pre-Dark Age period (202 B.C. – A.D. 220), attention was given to the specific economic and cultural exchanges observed from the third century B.C. up until the post-Dark Age

period in the tenth century A.D. Interactions are evident in the archaeological record as artifacts with foreign origins on the Korean peninsula, Japanese islands, and China survive. Artifacts tell us that foreign objects were imported. Likewise, the study also shows that, along with finished products, raw materials were also exchanged between human communities in the region. Furthermore, I observe similarities in the manufacture of objects such as pottery, which points to economic and cultural contact. Human communities were not isolated, but part of system where objects, technology, and rituals were exchanged and transmitted.

Third, this examination sought to analyze the structure of the regional trading system of East Asia. Specifically, at the onset of the study I ask whether a core-periphery hierarchy can be identified. The research clearly reveals that China, for a significant period of time, was the hegemon and at the center of the regional system. Chinese cities played an important role in the network of exchange in East Asia. Furthermore, Chinese commandeering centers on the Korean peninsula and to the west, extended trade early in the pre-Dark Age period. Economic centers such as Changan, Hepu, Lanzhou, and Wuwei, linked East Asian kingdoms on the Korean peninsula and Japanese islands, but also made it possible to secure trade routes across Central Asia to Antioch, Baghdad, and Alexandria. To the east, the kingdoms of Koguryo, Silla, and Paekche were all part of the regional system, connecting Japan to the mainland. For some time the kingdoms on the Korean peninsula played a middleman role between China and Japan. However, Japanese influence on the southern tip of the peninsula, and specifically in Kaya, would in subsequent centuries translate into more direct trade with China. During the pre-Dark Age period the cities in mainland China formed the core of the regional trading system.

At the periphery was Japan, with Korean kingdoms in more direct access to China forming the semi-periphery. The study reveals that the core-periphery structure changed little from the third century B.C. until the 10th century A.D.. Economic and cultural centers of importance to the region were still located in China. In fact, I observe that despite the political and economic turmoil in China, access to Chinese goods and China remained highly valued. Furthermore, despite a disruptive period, which creates an opportunity for cities outside of China to intensify economic and cultural linkages and fill the void left by China, other cities don't emerge as major centers. Once the Dark Age ends, China once again gains the influence it had prior to the Dark Age.

Fourth, beyond the identification of economic centers, the study identifies important cultural centers in the region. Although manufacturing centers such as Chekiang, Fukien, Kuangtung, and Hunan (all provinces south of the Yangtze River) are without a doubt cultural centers, the research also finds that ports, such as Hepu, and commandeering centers, such as Lolang, facilitated the diffusion of Chinese culture. A cohesive East Asia with China at its center meant that vassal kingdoms on the Korean peninsula and Japanese islands, as part of the sinocentric tributary system, were familiar with Chinese rituals and customs. Specifically, the study finds that adoption and practice of Chinese rituals became widespread as seen in the practice of tomb furnishing. Additionally, proper observance of Chinese ritual allowed vassal kingdoms to gain access to Chinese products and be in the good graces of the Chinese emperor. The latter further facilitated travel within China for students, merchants, envoys, and shamans.

Fifth, the study examined the impact of economic and cultural activities on nature, and more specifically whether environmental degradation could be observed. In East

Asia from the third century B.C. up until the tenth century A.D. the human imprint on nature was made clear. Human practices linked to economic and cultural activities do lead to environmental degradation. After a period of sustained economic growth, and unabated consumption, East Asia undergoes a Dark Age or a disruptive period. The study finds that, in addition to defining Dark Ages as periods characterized by political disunity, chaos, wars, population loss, and a disruption of exchange networks, Dark Ages also include environmental features. Degradative practices compound the political, economic, and cultural features, all of which are interconnected. Overutilization of resources, as a result of societies expanding, can lead to serious ecological crises.

Sixth, at the onset of the research I ask whether cultural centers change over time. In this regard I find that the cultural life of the East Asian regional system is very much linked to China. Although I observe the presence of indigenous practices and locally produced goods, Chinese objects and practices are predominant in East Asia. Even as early as the Late Shengwen period (10^{th} Century B.C.) there is a strong Chinese influence in Korea and Japan, as is evident in tools and objects traceable to the Yangtze basin. As a result of a disruption in exchange networks, what I observe is a re-emergence in the popularity of local goods. During the Dark Age period indigenous or local practices are re-embraced. In comparing the pre and Dark Age periods I observe that during the pre-Dark Age elaborate exchange networks were in existence, goods were mass produced, and art flourished, in particular art that was labor intensive and required the use of special materials for production. Further, Chinese culture in the form of written texts was diffused throughout East Asia. During the Dark Age I find that as a result of political fragmentation, disorder, and warfare, the previously established networks of exchange

are disrupted. This then leads to an increased production in local goods and a greater emphasis on local practices. The local is celebrated, whereas in the pre-Dark Age Chinese items were sought after, and Chinese practices adopted or emulated. In regard to the post-Dark Age I argue that exchange networks are restored and Chinese cultural items are again sought after. However, the appreciation gained for local items and practices endures.

Seventh, the findings indicate that local practices are not dormant or non-existent prior to the Dark Age, but given the popularity of Chinese practices, not as popular. Goods were mass-produced, art flourished (in particular art that was labor intensive and required the use of special materials for production), and further, Chinese culture, was diffused throughout East Asia. As a result of political fragmentation, disorder, and warfare during the Dark Age the previously established networks of exchange were disrupted. To reiterate, this then leads to an increased production in local goods and, it is surmised, a greater emphasis on local practices. The local is celebrated, whereas in the pre-Dark Age Chinese items were sought after and Chinese practices adopted or emulated. By noting a re-emergence of indigenous items, this study identifies a link between a much earlier period, prior to the third century B.C., that is uninfluenced by outsiders and the practices that later resurface during the Dark Age and continue during the post-Dark Age period. The previously desired objects are Chinese, in the pre-Dark Age, and the new items are both Chinese and local items, in the post-Dark Age. As a result of the Dark Age, exchange networks are disrupted providing the opportunity for the development of new local goods and rituals, and a re-surfacing of indigenous objects and practices.

Despite the negative imagery the adjective "dark" connotes, this period created an environment where human creativity and ingenuity emerged in response to changing social and physical conditions. The Dark Age opened the door for creativity and a greater appreciation of local goods and practices that may not have been as popular. The post-Dark Age was not only characterized by a re-emergence of previously imported Chinese goods and practices, and the introduction of new practices and objects from China, but also the continuation of local goods and practices.

Eight, related to the analysis of trade and cultural diffusion, I documented the interplay between economy and culture. The link manifested itself not only in the trade of cultural objects, but in the customs that further connected peoples in the region. For example, participation in the regional trading system of East Asia, and specifically direct trade with China meant that regional neighbors and westward empires, such as Rome, would be granted trading rights only through observance of Chinese ritual. The acceptance and adoption of Chinese ritualized practices further solidified a sinocentric East Asian trading system.

Finally, a point that can be made about Dark Age periods is that although they disrupt the status quo, they also provide an opportunity not only for not local products and indigenous practices to re-emerge, but for new products and practices to develop. Such creativity can have a lasting impact. When conditions change these new practices may endure and influence the character of exchanges. In this regard, this study demonstrates that these disruptive periods produce outcomes that reveal the enduring pattern of rituals and the ability of human communities to cope with and adapt to changing circumstances. In highlighting the positive aspects of these disruptions one can

see how much occurrences create the opportunity for the creation of new items and ritual practices. Throughout East Asia new themes and techniques in pottery surface, as well as technological developments in printing and gunpowder arise. Development in the latter is fueled by the disorder, warfare, and political instability of the disruptive Dark Age period.

Limitations and Suggestions for Further Research

History becomes an important source of insight for an examination of the economic position of regions, civilizations, and nation-states within a global economy. The current discourse between historians and world-systems theorists highlights the importance of historical analysis in bringing about an accurate picture of intra and interregional relationships. Utilizing the methodological tools employed by world-system analysts, I have analyzed the archaeological and historical record to study intra-regional relationships in East Asia from the third century B.C. up until the tenth century A.D.

Interpreting history can, in many respects, be problematic as historians, archeologists and others often come to questionable conclusions (Frank 1998). World-system analysts recognize the limitations of historical research (Frank 1998). However, the value of history to social analysis overshadows any concerns about its importance to sociology. A world-system's approach is a rejection of the artificial boundaries created by nineteenth century scientific inquiry. In Wallerstein's conceptualization, a world-system's framework is an interdisciplinary approach that embraces not only sociology, but also the work of historians, archaeologists, and geographers, to inform the social

research. Broadly, the limitations of this study emerge in the criticisms waged against interdisciplinary approaches, and the usage of history in social analysis. However, the benefits of both appear in historically inspired examinations from Marx to Wallerstein. Specifically, the limitations of this study surface in several areas. First, the interpretations others and I make from historical documents can be criticized. The usage of secondary archaeological and historical sources introduces into the study descriptions of archaeologists and historians who offer their own interpretations and visions of ancient East Asia. By utilizing primary sources of information, such as the *Chinese Dynastic Histories*, I not only supplement the secondary information, but also validate the accounts of contemporary historians. However, it is significant to note, even then I interpret the subjective accounts of ancient historians, ritualists, and court scribes.

Second, because the bulk of primary information about East Asia is derived from Chinese historical documents, the study could be criticized as presenting a sinocentric view of intra-regional relationships in East Asia. In future studies this limitation will be addressed by the translation of Korean historical texts such as the *Samguk Sagi*. However, the majority of information on the region for periods as early as the third century B.C. will still be Chinese documents, since Korean and Japanese histories emerge much later. Third, my usage of Dark Age to describe the disruptive period that occurred in East Asia can be criticized. Although the term Dark Ages is used by historians and anthropologists to specifically denote a time during the middle ages in Europe from the sixth century A.D. up until the 11th century A.D., I argue that Dark Ages have taken place historically in other regions and in far earlier periods. The usage of another term may be appropriate to describe the period in East Asia from the third century B.C. up until the

sixth century A.D., but the continued use of "Dark Ages" is meant to make clear to readers that Europe was not the only region to experience such a disruptive period in time. Fourth, although I highlight the usage of literature and poetry by sinologists in Chapter III, the usage of both in social research can be limiting. Recognizing that poetry and literature is often historically inspired, I use both sparingly to further provide context and secondary evidence. In future studies, poetry and literature could be used more often to highlight broader literary changes that are impacted by major events. Lastly, the scope and vast geographic expanse of the period covered has meant that the particularities of specific human communities are not fully covered. In attempting to capture the larger picture of intra-regional relationships, I leave others, and myself, with the task of further examining the specific human communities discussed.

In an attempt to substantiate historical and archaeological observations and interpretations, world-system analysts have increasingly utilized physical evidence. For example, studies exploring environmental degradation in Europe have recently utilized pollen counts to determine levels of deforestation (Chew 2001a). In the future, pollen data will be available to further develop a picture of ecological relations in East Asia. Currently, work is being done to compile a pollen database from East Asian sites. Although this study does not utilize pollen data, it could be easily incorporated into future research. In addition, the work of dendrochronlogists, paleobotanists, climatologists, and others could be used to substantiate the argument that environmental features should be considered in the conceptualization of Dark Ages (Chu 1926; Teng 1927; Liu 1988, 1995; Xiangjun and Yinshuo 1991; Winkler and Wang 1993; Gorres and Frenzel 1997; Hulme 1999).

Contributions of the Research and Final Thoughts: Toward an Environmentally Conscious Sociology

This study demonstrates that human history can be broadened beyond an anthropocentric discussion of peoples' circumstances, to include an examination of the impact human activities have on the Earth. Tangible remnants of the past remain, such as historical texts and artifacts, which provide vivid historical evidence of mankind's impact on the environment. The human imprint on the earth is clear in East Asia as seen in the constant husbandry of groups, in the degradation of forests, in the erosion of lands, and by the fruitlessness of formerly fertile soil, all signaling the long history of human abuse (Lowenthal 2001). Environmental degradation in ancient East Asia ominously shadows the present and speaks to the humanocentric conduct evident in ecological relations to this day. George Marsh's (1864) classic *Man and Nature*, sketched the history and delineates the perils of human impact on nature:

> [In] parts of Asia Minor, of Northern Africa, of Greece, and even of Alpine Europe, the operation of causes set in action by man has brought the face of the earth to a desolation almost as complete as that of the moon ... The earth is fast becoming an unfit home for its noblest inhabitant, and another era of equal human crime and human improvidence would reduce it to such a condition of impoverished productiveness, of shattered surface, of climatic excess, as to threaten the depravation, barbarism, and perhaps even extinction of the species (cited in Lowenthal 2001, p. 36).

The passionate plea and picture painted by Marsh is unique among previous analyses of ecological relations. Prior to and after Marsh, in the nineteenth century the majority consensus was that the conquest of nature was altogether favorable (Lowenthal 2001). The prevailing wisdom was that human beings shaped a productive landscape, were responsible for the ampleness of resources, and in general supported optimistic prospects

about their hand in the natural world (Lowenthal 2001). Men improved nature, and the abundance of resources that were cleared, unearthed, and cultivated rewarded this improvement. However, the human impact on nature was not harmless and insignificant. Far from being inconsequential, the adverse side effects were in many cases ignored and downplayed (Lowenthal 2001). Historically, for example, depleted lands were simply abandoned (see Perlin 1991; Pointing 1991). Additionally, the deforestation of land was perceived as slight. When the prevailing wisdom is that much is still left, it becomes easy to ignore the degradative outcomes. This then only helps to fuel the human assault on nature.

Although this study suggests that disruptive Dark Age periods provide nature a window in which environmental restoration can take place, confidence in nature's recuperative powers should be tempered with what is historically recorded (Chew 2001b). Exploitation over the long-term in East Asia is not completely redressed over the course of a few hundred years; restoration of the previous balance is deceptive. Over the course of historical periods vast tracts of land have been cleared, planted, "improved," and then worn out and laid to waste (Pointing 1991; Perlin 1991; Chew 2001a). The regenerative capability of nature should be recognized, but not over emphasized (Chew 2001a). Historically periods where nature can adequately heal itself are infrequent and their emergence is in part dependent upon changes in human systems. Once exploited and then abandoned, land in East Asia, such as forests, did not regain their previous plenitude, but remained for ages, if not forever, depleted (Pointing 1991). By the end of the pre-Dark Age period the pressure of population growth, commodity needs, intensive farming, deforestation, engineering, mining, and building were evident throughout East

Asia. A period characterized by prosperity, growth, consumption and materialism, was then followed by a "dark" epoch that ushered in wars, disease, political instability, economic decline, and a curbing of previous consumptive habits. The social and physical circumstances necessary for unimpeded growth were disrupted which created the opportunity, over a four hundred year period, for nature to regain some of what it lost. History shows that men have made and unmade the earth, and in this respect Dark Ages are directly linked to phases of environmental restoration.

Lowenthal (2001, p. 36), discussing environmentally degradation historically, notes that faith in an "ineluctably progressive mastery over the Earth gave way to growing awareness of the unintended and often unpredictable consequences of human impact" during long periods of ecological degradation. Ecological consciousness is heightened during historical periods where resources become scarce or unavailable (Chew 2001a). In fact, one observes that in the history of East Asia environmental movements emerge as a result of growing ecological awareness (Chew 2001a). Historical moments that make clear the human impact on the environment help heighten societal understanding of the links between human and non-human systems.

Despite the physical visibility of human practices on the landscape of nature, social scientists, including historians, have only lately begun to examine the historicity of the natural environment and its link to human history. Analyses, or coverage, of nature was often left to "geographical determinists insisting that human efforts could do little to alter conditions fixed by laws of climate and soils, [and] to resource managers, engineers and foresters, [who] married faith in natural plenitude with the view that rational science must improve on nature, and lauded its control as essential to civilised progress"

(Lowenthal 2001, p. 36). The humanocentric ideas reflected in the concerns of nineteenth century scientists, who mostly dealt with nature, ignored the degradative history and impact of ecological relations. Changes in the environment or the impact of human beings were not the domain of social scientists, but a topic of examination for those in the natural sciences.

Absent from the discourse have been social scientists and in particular sociologists. Sociology and history has remained generally distant from nature and when the environment is given coverage nature is treated as peripheral to accounts and examinations of human affairs. Even Fernand Braudel's classic, *The Mediterranean and the Mediterranean World* (1972), which is cited as an example of early social history, in many respects reflects the anthropocentric focus and organization of mainstream historical texts. Nature and man's relationship with the environment is treated in a prologue to an examination of economic systems and states (Chew 1997a). Although recognizing the relationship of human beings and their physical environment, Braudel's analysis echoed the anthropocentric framework of previous historical texts. However, Braudel's work has inspired within world system research, and more broadly sociology, an interest in the interactions between human and non-human systems, and a reassessment of social history as intertwined with nature. If we are to learn from history and attempt to accurately forecast a myriad of human activities, we must recognize that the sole determinants of history aren't solely human practices but the impact of these activities on nature. The interconnectedness of human and non-human systems makes it difficult to ignore the consequences and direction of human actions within a physical

environment. Human action is bounded within a natural environment that at times has played a role in shaping social activities.

Historically expansive networks connecting distant regions have contributed to the disequillibrium of ecosystems linked to regional trade in Asia. Far from sudden, environmental degradation in the region developed gradually, but it can be argued that at certain periods in history it reached destructive levels (see Pointing 1991). The history of ecological relations in the region covers several millennia and is characterized by the dependency of human beings on nature. For example, early in prehistory, across large expanses of land, food, timber, and stones were consumed and/or traded (Balee 1998). In regard to the latter, historically one observes that human beings have long participated in systems of exchange that resulted in a distribution of raw and finished materials across geographic spaces. In human prehistory foragers and farmers involved themselves in ancient trade (see Headland and Reid 1989). East Asian prehistory reveals that in ancient times human groups utilized silent barter systems to exchange forest products with neighboring communities (Headland and Reid 1989). For many centuries, across the whole of Asia, indigenous forest products have found their way over thousand of miles to as far west as Rome during the pre-Dark Age. Within Asia, these goods traveled over very long distances, from East Asian communities to as far away as the Near East (Scott 1967; Dunn 1975). For example, by participating in the overland trade within East Asia, communities in southeast Asia extracted natural resources such as beeswax, resins, and exotic woods from their forest habitat for exchange with Chinese, Indian, and then much later European merchants.

The interactions involved in trade are, at several points in history, conditioned by varying rates of environmental "generation, alteration, decay, and recovery among forests, soils, flora, and fauna at levels from global (tectonic drift) to molecular (the spread of epidemics)" (Lowenthal 2001, p. 36). Ecological relations are interactive in that human impact may produce certain outcomes, but nature also undergoes its own rhythms (Chew 2001a). A complete history of ecological relations is then a recognition of the interactive processes that lead to the presence of certain environmental conditions in certain physical spaces. New directions in the examination of social history should recognize the historicity of nature and the need for its inclusion. Fusing environmental with human history would lead to more accurate accounts of social processes and conditions over the long-term. The historical projects that have inspired world system analysts employing a Braudelian framework can be broadened to incorporate nature within social history.

Beyond a historical accounting and examination of economic and cultural exchanges, this study specifically examines the society-nature nexus present in ancient regional systems. Noting that human beings leave their imprint on physical environments, and consequently alter them, this project calls attention to the ecological adaptability of human communities by focusing on those functional and structural features of human populations that endure, particularly under conditions of environmental change and stress. In ancient East Asia, as is the case today, evidence of global environmental change and its many local and regional manifestations raises questions about the role human beings play in these changes. Scientists today, addressing a myriad of environmental issues, such as global climate change, the loss of plant and

animal species worldwide, and the depletion of natural resources are presented with the challenge of distinguishing between human-induced changes and, for example, "natural" climatic variability (Hulme 1999). There is a growing demand for a much broader analysis of the causes of contemporary environmental changes, the consequences of these changes to human populations, and the scale and magnitude of the responses different populations are capable of in order to adapt to or mitigate these changes (Clark 1977; Harrison and Gibson 1998; Moran 2000). History reminds us that a marked feature of human populations is their ability to adapt. It also tells us that historically human beings have had a hand in modifying environmental conditions.

Traditionally in the social sciences, in particular sociology, we've seen few examinations that introduce ecological relations into analyses of human activities and processes. However, what this study highlights is that, operating within ecosystems, human beings impact nature and are themselves impacted by the changing environmental circumstances they help create. In focusing on the society-nature nexus in East Asia, the study focuses on human responses to changing social and environmental conditions. The historical analysis reveals the plasticity of responses to changes within physical environments. Human adaptability, which is characterized by behavioral changes, manifests itself historically as human communities negotiate their immediate needs and the lifestyle they've grown accustomed to, within environmental limitations. Economic, social, and cultural adjustments are then made to contend with unavailable resources. Studying interactions between humans and their environment calls attention to the various environmental problems and changing physical conditions faced by human communities within geographic spaces. It also serves to highlight the fact that rather than

operating within a static environment that limits human creativity or possibilities, human beings inhabit a dynamic space that in many respects encourages human innovation, creativity, and ingenuity. Although environmental limitations can be seen as a constraint, they can also be viewed as an opportunity that heightens the possibility of change. For example, a disruption of trade linkages and environmental degradation during the Dark Age period in East Asia was coped with locally through ingenuity and the substitution of foreign products with those produced locally. This would in subsequent periods lead to a greater appreciation of indigenous goods, a trend that would continue into the post-Dark Age period.

This research illustrates that human populations in interacting with each other and their environments attempt to accommodate social, political, economic, and cultural activities to very specific environmental conditions. As a result, the environment should be incorporated more fully into the context of human action and be recognized as a significant factor that can shape economic and cultural practices. Perhaps the most common form of human adjustment in the face of changing environmental conditions is regulatory (Moran 2000). As noted by ecological anthropologists, regulatory adjustments are the most flexible since they involve little commitment on the part of human beings (Moran 2000). Their flexibility and the ability of human communities to respond to environmental changes define regulatory types of adjustments. In other words, a society regulates itself so that economic and cultural practices continue. The argument raised is that social, economic, and cultural adjustments can be undertaken that don't spell the end of long recurring behavioral patterns. New directions or strategies can emerge so that

practices can continue despite environmental constraints. Human practices can be modified and tempered so that they meet the constraints imposed on them.

A nexus of association is observed in the historical examination undertaken in this research. Social spheres are linked, and embedded within, physical environments that have historically influenced the economic and cultural trajectory of human communities (see Pointing 1991). History tells us that living forms blur the "boundaries between body and beyond, self and surrounding…[so that] ant mounds, beehives, birds' nests, human houses, and BMWs are not exceptions to nature's extended organisms; they are the norm [as] we amplify our being by taking from, adding to, and transmuting what's around us" (Lowenthal 2001, p. 36). It is the history of ecological relations that is illustrative of the linkages that connect human beings to nature.

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Appendix: Chinese Dynastic Histories

	Title	Author	Compiled	Period Covered
1	Shiji (Records of the Grand Historian)	Sima Tan (180-110 B.C.) and Sima Qian (145-86 B.C.)	104-87 B.C.	Early Han (Yellow Emperor to 95 B.C.)
2	Qian Hanshu (History of the Former Han)	Ban Gu (A.D. 32-92)	A.D. 59-92	206 B.C.-A.D. 24
3	Hou Hanshu (History of the Later Han)	Fan Ye (A.D. 398-445)	A.D. 445	Han Period (A.D. 25-220)
4	Sanguozhi (Record of the Three Kingdoms)	Chen Shou (A.D. 223-297)	A.D. 285-297	Three Kingdoms Period (A.D. 221-280)
5	Songshu (History of the Song)	Shen Yue (A.D. 441-513)	A.D. 492-493	A.D. 420-479
6	Nan Qishu (History of Southern Qi)	Xiao Zixian (A.D. 489-537)	A.D. 537	A.D. 479-502
7	Nanshi (History of the Southern Dynasties)	Li Yanshou (A.D. 618-676)	A.D. 630-659	A.D. 420-589
8	Beishi (History of the Northern Dynasties)	Li Yanshou (A.D. 618-676)	A.D. 603-659	A.D. 386-618
9	Jinshu (History of the Jin)	Fang Xuanling (A.D. 578-648)	A.D. 646	A.D. 265-419
10	Liangshu (History of the Liang)	Yao Cha (A.D. 533-606) and Yao Silian (d. 637)	A.D. 628-636	A.D. 502-556
11	Chenshu (History of the Chen)	Yao Cha (A.D. 533-606) and Yao Silian (d. 637)	A.D. 622-636	A.D. 557-589
12	Weishu (History of the Wei)	Wei Shou (A.D. 506-572)	A.D. 551-554	A.D. 386-534
13	Bei Qishu (History of the Northern Qi)	Li Delin (A.D. 530-590) and Li Boyao (A.D. 565-648)	A.D. 627-636	A.D. 550-577)
14	Zhoushu (History of the Zhou)	Linghu Defen (A.D. 583-666)	A.D. 629-636	A.D. 557-581
15	Suishu (History of the Sui)	Wei Zheng (A.D. 580-643)	A.D. 629-636	A.D. 581-617
16	Jiu Tangshu (Old History of the Tang)	Liu Xu (A.D. 887-946)	A.D. 940-945	A.D. 618-906
17	Xin Tangshu (New History of the Tang)	Ouyang Xiu (A.D. 1007-10072	A.D. 1043-1060	A.D. 619-906

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