

A Renewal of Systems Theory: Using Modern Dynamical Systems as a Qualitative Method for Understanding Relational Power in Late Bronze Age Greece

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October 27, 2015

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Table of Contents

Abstract

Introduction | Page 1

Early Mycenaean Chapter | Page 12

Late Mycenaean Chapter | Page 32

Concluding Thoughts | Page 53

Bibliography | Page 59

Aegean Bronze Age Approximate Chronology | Mainland Greece¹

Middle Bronze Age or Middle Helladic Period	MH III	1800 – 1700 BC
Late Bronze Age or Late Helladic Period	LH I	1700 – 1600 BC
	LH II	1600 – 1400 BC
	LH III	1400 – 1100 BC

¹ Courtesy of Eric H. Cline and Sofia Voutsaki, (taken from Cline 2008, xxx).

Abstract

Methods of cultivating relational power greatly shifted between the Late Middle Helladic and the Late Helladic periods. These changes in society manifested in the rise of palaces and the disappearance of smaller societal leaders called Local Elites. Despite these major changes, however, the mechanism of feasting remains consistently used as a method of gaining authority in communities. System Theory has been proposed as a tool of thinking how systems change over time; however, an issue with using this model is that it accounts for change from a macro level, looking at overarching parameters that permeate through periods of change. Further, it looks at system changes from a top down view, which overlooks smaller, discrete changes. The purpose of this thesis is to examine the divide that occurs between these periods in Bronze Age Greece, using the modern study of dynamical systems and bifurcation theory as a qualitative analogy for how changes happen in discrete time frames, based on the circumstances and parameters of the immediate environment.



Introduction | An Approach to Understanding Power

Introduction to Changing Power

“No matter how we define it, power now tends to be viewed not as a discrete and quantifiable substance that some people have and others do not but as a shifting relationship among an assortment of individuals that is not imposed exclusively by certain ones who have it over those who don’t.”² This quote by Foias is a suitable starting point when examining how power and authority were consolidated and asserted in the Late Bronze Age. The methods of determining legitimate authority revolved around constantly shifting mechanisms that adapted as society changed.

Change is, therefore, the constant driving force and the state of normalcy in a societal system. Moving parameters shift within societies to the point of instability, breaking what once was seemingly stable. As a society progresses, the factors behind a civilization, including social, economic, legal, military, political, and religious parameters drastically influence the system as a whole, gradually pushing it into new states of pseudo stability. While it may seem that a system

² Foias 2013, 31

of administration ultimately achieves a state of stability, with everything functioning in perpetual harmony, the truth is far more complicated in reality and practice.

Change in a society is constant and consistent, rather than stable. The systems put into place for people, legal systems, agriculture, and militaries cannot achieve stability but instead provide opportunity for growth through gradually or drastically changing variables. As more people are incorporated into a system, there are more needs to be met and ultimately more possibilities for the future. Thus, a society can grow gradually or rapidly over time. Power and authority, the relationship between rulers and those over whom they exert authority, is the lifeblood of a system, capable of affecting decisions to a body of people and ensuring success or failure.

The Problem

Traditionally, scholars examine societies as if they are stable entities. This assumption is an issue, as the only consistent aspect of history is that every year, month, and day something will happen that can and very well may radically alter what was once seemingly stable. Because change is a constant factor in a system, the problem is then identifying what allows a system to seem stable and what are the parameters that gradually adapt over time to the point where a system must evolve.

Between the Middle and Late Helladic periods, society and culture in the southern Greek mainland radically shifted.³ Numerous scholars have given many explanations of these changes, but it remains a topic of wide debate amongst Bronze Age archaeologists.⁴ At the core of the changes between these two periods is the redefinition of a society from smaller villages into a

³ Voutsaki 2008, 603-607.

⁴ Galaty and Parkinson 2007, Dickinson 1994, Cline 2010, French 2002, Voutsaki and Killen 2001.

larger society focused around central administration in a palace over large areas of land and increasing numbers of people.⁵ However, despite these dramatic changes, there are mechanisms of authority that remain consistent factor in both systems. For the purpose of my argument, I will focus on one of the most important traditions in the ancient world, feasting, which permeates through the changes in society between the Middle and Late Bronze Age. The challenge is to study how a society internally changed in the Middle and Late Helladic period on the Greek mainland and how these internal changes manifested in a drastic societal shift, resulting in the institution of palatial control.

Systems Theory and Processual Archaeology

While questions may be repeatedly asked over time, the approaches to answering them adapt. Such is the case with archaeological approaches to understanding the Late Bronze Age. There have been numerous methods of approaching archaeology, and in the 20th century processual archaeology was introduced as a way to better study the past by incorporating anthropology into classical archaeology. Archaeology could then be looked at from an anthropological lens, asking questions not just about the physical aspects of a society, but also questions about humans, society, and the reasons for change.

A particularly important supporter of processual archaeology in the Aegean is Colin Renfrew, who proposed a systems theory approach to the studying of civilizations.⁶ Renfrew suggested that a civilization is made up of components of a larger system. However, critics of this form of archaeology, such as Michael Shanks, claimed that processual theory and Renfrew's systems theory overlooked critical aspects of societies.

⁵ Voutsaki 2001, 1-14; Cherry and Davis 2001, 153; Wright 2004a, 121ff.

⁶ Renfrew 2011.

Proposed Problems with Systems Theory

Numerous scholars have criticized both systems theory and processual archaeology. Michael Shanks and Chris Tilley propose that the problem with systems theory is that it makes a society as a whole out to be greater than just the sum of its parts. Further, systems theory analyzes the ‘whole’ as that of an organic unit whose natural state is equilibrium or stability. “Stability rather than change is the norm presupposed in systems theory and systems only change, in effect, in order to remain stable.”⁷

Shanks and Tilley are correct in thinking that traditional views of change towards stability as being ‘good’ and other maladaptive change as ‘bad’ is problematic, but there are useful methods of systems theory for understanding the overlap in parameters that cause change. Using systems thinking is especially useful when one adapts it to view, not only the parameters of systems as always changing and adapting, but also viewing the system itself as an always-changing entity. The Late Bronze Age palatial system incorporated numerous mechanisms that relied on each other both centralized in the palace and decentralized away from the palace.⁸ Craftsmen depended on farmers for food, and farmers depended on craftsmen for tools. As one avenue changed, it directly or indirectly influenced another component. However, the important questions to ask are why these changes occur and what are the internal perturbations that initiate them. As Shanks and Tilley state, the change in these mechanisms is the consistent state, so it is imperative to investigate what is causing these changes. A possibly better approach to understanding this problem is to use the mathematical study of dynamical systems and more specifically bifurcation theory and competition models as an analogy to represent the way

⁷ Shanks and Tilley 1987, 52.

⁸ Galaty and Parkinson 2007, 3-7.

societal systems changed in the Late Bronze Age. In doing so, we will examine not only the changes that occur and the parameters of those changes, but also the driving forces that cause the parameters to change and ultimately shift the entire system. Thus, it is a three-pronged approach, focusing on initial parameters that influence mechanisms, which affect a larger change. This will be discussed more when suggested parameters are introduced.

Dynamical Systems, Bifurcation Thinking, and Competition Models

In mathematical models for the competition of two species any of three outcomes may happen: the two species may coexist with each other or either of the two species will exert dominion over the other. Consider the populations of rabbits and deer living in the same meadow. Under a specific set of environmental conditions, the two populations may be capable of living on the same set of resources, both with appreciable population sizes. From year to year, however, environmental factors may change, resulting in increased stresses on each population to obtain the necessary resources to survive. When this happens, the species will be put into direct competition with one another, and if the environmental stress is too great, under a certain set of parameters, one species may be driven to extinction in the area or forced to leave. These environmental factors are not necessarily external, such as weather, vegetation, or predation, but may also come from internal factors such as disease, age and gender distribution in a population, or loss of genetic diversity. While these internal factors may often arise from external stress, once they have come into play, they affect the population independently of external stresses. This competition model can apply to my argument for how relational power changes between the Middle and Late Bronze Age.

For the purpose of my argument I will not be using bifurcation theory in a strictly quantitative manner. This is because as the complexity of a mathematical model increases, in

order to accommodate all variables in the system I am trying to model, a person's ability to extract meaningful information from that model rapidly deteriorates. What this means is that every new variable that you add to a mathematical system corresponds to another degree of freedom. In a graph, this would mean another dimension. Obviously, this becomes impractical once we reach 4 independent variables, because we cannot visualize concepts in 4th dimensional space. While there are ways of getting around this limitation, the mathematical models that can be produced become so complex that it may be difficult to produce a model that accurately describes all phenomena I am trying to capture. Additionally, there are limitations beyond just our ability to understand a model, but as a system becomes complex, what is known as chaotic behavior may appear in a system. The most important feature of this chaotic behavior is that if we are modeling a system with experimental data, unless we know that data precisely, our model will rapidly fail to make accurate predictions. This issue arises in weather forecasting due to our inability to measure temperature and other parameters with infinite precision and would naturally be an issue in archaeology as well, where there are numerous gaps in our experimental data. Therefore, for the sake of clarity I will be using analogies derived from bifurcation theory, and for the remainder of this thesis, I will refer instead to the concept as bifurcation thinking and not the application of theory.

The result of this competition model is dependent on the parameters that are changing and the circumstances behind the perturbation of these parameters. As parameters are then adjusted in a dynamical system, such as the example of the two competing species, what is known as a bifurcation point may be encountered. At such a point, the qualitative behavior of the dynamical system may dramatically change and what was previously stable may become unstable. Thus, while changes of a system's parameters may be gradual, the change in the system

itself may not be. This method of thinking that new institutions appear after certain thresholds (bifurcation points) are reached is shared with systems theorists.⁹ However, bifurcation thinking differs, as it is not necessary that a new institution must grow out of some component of a previously existing institution, as stated by Flannery. Instead, the new system could be independent of the previous system, but it is still affected by environmental circumstances and parameters that influenced and perturbed the previous system. Further, the system change can be a dramatic jump from a previous stability point and not a gradual outgrowth. It is important to note that from here forward, when the word stable is used, it is referring to a system that seems stable until the next bifurcation point is encountered. There cannot be an entirely stable system, because, as discussed above, parameters are constantly changing and resulting in new systems. The bifurcation model is represented in Figure 0.1.¹⁰

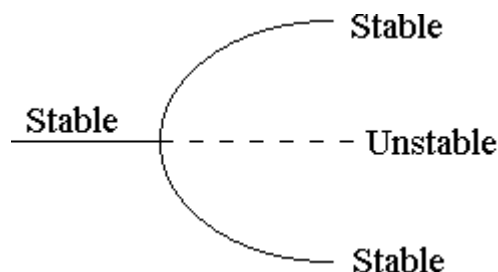


Figure 0.1. Bifurcation Thinking Diagram

The pitchfork bifurcation diagram above requires some explanation. Moving from left to right, the parameter (which varies widely in meaning from system to system) is changing until the bifurcation occurs where the three different paths appear. The middle path is labeled unstable and is represented as a dotted line. The only possibilities are for the system to then move to a different point of stability, where the system will again start moving to a new point. In the

⁹ Flannery 1972, 423.

¹⁰ Strogatz 1994.

application of bifurcation thinking, it is important to focus on discrete snapshots of history and not to apply long-term patterns. This will be discussed further as I introduce my argument.

Such an analogy of bifurcation thinking can be applied to the changes in society between the Middle Helladic and the Late Helladic. Between these periods, there is an apparent change with how authority is constituted. However, the change in the mechanism of power and authority was not an isolated incident. There were other parameters shifting that resulted in changing mechanisms that then in turn changed the system. In the case of the Middle and Late Helladic periods, specific parameters that affected change included the increase in overall population and widespread wealth on the Greek Mainland.¹¹ Feasting was an especially important mechanism that leaders used to influence others, along with funerary practices. Together, with these parameters changing and the mechanisms evolving with the change, different types of leaders emerged.¹² It is important to remember, nevertheless, that while society adapted to these changes, the system itself would always be changing and moving to a new bifurcation point. Further, the methods of relational power during the Middle Helladic differ from the Late Helladic, as the circumstances of both environments are distinct. Therefore, when approaching each model, it is important to remember that while certain mechanisms are used to cultivate power, such as feasting, the circumstances around each method are distinct in each period due to the changing parameters at that time. This will become clearer as I discuss the methods of creating power in relationships in both the Middle and Late Helladic periods.

With the introductions of palaces, the entire model is shifted to the bifurcation point where the local stability properties change to a new model entirely. Thus, the question is not why did it change, as change is inevitable and continuous, but what parameters and mechanisms

¹¹ Shelmerdine 2001, 113-115.

¹² Wright 2004, 1-10.

allowed the system to remain seemingly stable before, meaning how did elites cultivate relational power amongst communities, and what parameters gradually changed to the point where the system needed to shift.

Bifurcation Thinking adds to Systems Theory

The bifurcation model is a way for correcting certain aspects of systems theory thinking where societies look for equilibrium and maintaining equilibrium. Shanks' and Tilley's criticism of emphases on stability is not a factor with this model, as the entire emphasis is on the constantly changing parameters in a society and the constantly changing system. Systems thinking focuses on changing parameters, but ultimately a stable system. Instead, with bifurcation thinking, both the parameters change and the system itself changes, introducing new environments around each model. Thus, this paper will move forward with this principle at the core of its argument, exploring various parameters and reasons that changed Mycenaean society as a whole.

Chronology

For the purposes of this paper, early Mycenaean society will refer to Middle Helladic III - Late Helladic II and late Mycenaean society will solely refer to Late Helladic III. The reasons for doing this are to fully explore the shift and transition between these two societies, as irreversible changes take place between MH III - LH I. Anything before Middle Helladic III is too far-gone to be a reasonable representation of the transition.

Approach and Proposed Argument

By applying processual archaeological practices of looking at archaeology and anthropology together and with dynamical systems, bifurcation thinking, and competition models, it is possible to better understand the shift in society in the Late Bronze Age. This thesis is a return to systems theory, but in a dynamic way that allows for change.

This thesis will approach the drastic change between the MH III - LH II and the LH III periods as a case study, examining three factors of Mycenaean society: feasting, warfare, and religion. There are many other factors that could be studied,¹³ but for the sake of my argument these three are especially important. Feasting is one of the most important driving forces behind cultivating authority in both early (MH III - LH II) and late (LH III), and is used by both military and religious figures. Therefore, by examining in discrete snapshots of time how feasting was used in the MH III - LH II periods and how it is different in LH III, we can better examine the change in society and ultimately the change in how power was consolidated by rulers. Feasting is a mechanism used by rulers, but the types of rulers during early and late periods are important to mark. Each type of ruler used feasting to cultivate powerful relationships and influence in their communities based on the parameters that were changing around them. In each time period, these parameters were still changing and so the rulers had to use feasting in different ways. This is why it is vital to not view parameters in long-term, continuous changes, but in individual time periods, as the circumstances surrounding the rulers, their mechanisms of power, and the environment in which they lived were always evolving.

My argument is this: In early periods (MH III - LH II) feasting and raiding are connected with limited evidence for religious activity involving feasting; however, in late periods (LH III) feasting and religion are connected with limited evidence for military involvement by the elite.

¹³ Nakassis, Galaty, and Parkinson 2010, 239-247.

However, the elite are involved with religion and also with feasting.¹⁴ Feasting is still a constant factor in both systems for cultivating authority, however, the hunting and raiding component is much reduced. Therefore, I propose that a bifurcation point is encountered when elites could no longer successfully cultivate powerful relationships within communities through holding feasts from hunting and raiding, but were instead outperformed by those who could hold feasts through religious ritual and authority. This comes in conjunction with the institutionalization of the palaces and an overall rise in population and wealth.¹⁵ The following chapters will discuss chronologically the methods of cultivating power within relationships in both early and late periods and how and why these mechanisms change.

Key Assumptions

This paper will function on a few key assumptions. First, it is especially important to state that the use of dynamical systems and bifurcation thinking for this paper is strictly as an analogy to better understand the change in systems. While it is possible to use these mathematical studies for in depth analyses of social change, the application would be more complex than necessary for the sake of my argument. Therefore, I use bifurcation as a method of organizing the progression of how power changed and as a tool to explain how parameters of a system may gradually or drastically adapt to affect an outcome. Second, it is crucial to state that palaces in the LH III period did not function uniformly. Thus, while I will discuss many palaces and use them as evidence for my argument, I do not intend to argue that each palace used the same administrative system.

¹⁴ Lupack 2010, 263-273.

¹⁵ Shelmerdine 2001, 113-115.

Chapter 1

How Power was Acquired and Maintained in the Early Mycenaean Period | Raiding and Feasting

Introduction to the Early Mycenaean Period: MH III - LH II

Society in the early Mycenaean period greatly differed from the later palatial systems. In the LH III period, when palace administration is the predominant figure of authority, kingly figures with religious authority dominate. However, a few centuries prior, a completely different system endured. This early system thrives on powerful, warlike leaders¹⁶ and seems to be devoid of religious authority in their leaders, due to either their limited roles in reality or the lack of archaeological evidence. Nevertheless, these two systems both utilize feasting as methods of showcasing power, but in very different ways. The purpose of this chapter is to examine how feasting is represented in the early Mycenaean period, and why Local Elites were able to gain authority through it. In the following chapter and conclusion, we will examine how this early system dramatically changes, both through the institution of palaces and the rise of religious leaders, yet the mechanisms for power with feasting remain consistent.

In the MH III - LH II periods, we can see a system of influential leaders who use their reputation as hunters and to influence their community.¹⁷ These figures attained power through their positions as leaders of hunting parties and through the attainment of prestige items gained

¹⁶ Voutsaki 2010, 106-108.

¹⁷ Wright 2008, 239.

through raiding.¹⁸ These figures flourished in this early social system, where village communities were smaller in population, thus making it easier for hunters to provide feasts for the people. As established in the introduction, feasting is a pervasive method of consolidating power in a community. I argue that the parameters and social structures of early villages in Greece allowed for the necessary conditions for Local Elites to flourish, but parameters also gradually or drastically changed so that the system that Local Elites thrived in could no longer last. Further, in this chapter I will also examine funerary practices in the MH III - LH II periods, because by looking at how both burials and feasting practices change, we can better understand what circumstances led to the elimination of Local Elites as authority figures in society.¹⁹

For the purpose of this chapter, I will examine how power was consolidated in the early Mycenaean Period and the parameters that changed enough so that Local Elites could no longer cultivate authority in their previous ways. Additionally, it is imperative to examine the role of religion in this system, as it takes a large role in later palatial administration.

Approach to Evidence for Understanding the Early Mycenaean Period: MH III - LH II

In order to bolster my arguments, this chapter will focus on examining the available archaeological evidence for how power was demonstrated by Local Elites through feasting and funerary practices. Specifically, I will discuss pottery, architecture, artwork, burial types and burial goods to evaluate how leaders cultivate authority and how society was gradually and dramatically changing.

¹⁸ Wright 2008, 239.

¹⁹ Mee 2010, 282-288.

Introduction to Local Elites Leadership

Because Local Elites will be frequently mentioned, they deserve a proper introduction and explanation. While not always referred to as Local Elites by every scholar, historians argue about the roles of elites or leaders in the late MH period.²⁰ Wright suggests that these figures are not elites, but instead are aggrandizing leaders of unstable and fluid factions stretching across different communities.²¹ However, other scholars, such as Voutsaki, argue for the importance of kinship relations in these social structures, focusing on family communities. Other scholars, such as Dickinson, argue that there simply is not enough analysis done to fully call these Local Elites chiefs or even an elite class.²² For the purpose of this argument, I take the position that these Local Elites were indeed leaders of kinship groups, but that the evidence that they fluidly move and offer their services to competing communities, as argued by Wright, shows that they were more influential leaders (based on reputation) than established elites within settlements and villages.

Introduction to the Tradition of Feasting

Feasting is arguably the most important parameter when discussing the drastic change between the MH to the LH periods, so it is useful to provide a thorough discussion of its traditional roles and purposes.

Feasting was a vital method of consolidating power and establishing authority in communities in the Bronze Age. By definition, it is the bringing together of people in the biological act of eating through social bonding.²³ In fact, feasting has been a widespread activity

²⁰ Wright 2008, 239; Voutsaki 2010, 106-108.

²¹ Wright 2001, 2004b.

²² Dickinson 1994, 40.

²³ Wright 2004, 13-59.

from thousands of years ago to present day. The act of feasting itself, however, is not as powerful as the idea and ideology that comes with it. The tradition of publicly consuming food and drink has continued through almost every civilization and even permeated into modern society.

Religions still have feast days, modern vernacular phrases and quotes about feasting are used in today's language, and many modern day events incorporate large meals together. These practices are all reminiscent of the ancient tradition of consuming food as a community and using the act as a method of bonding relationships, perpetuating an established system, and implementing hierarchy or gradation into a community.

Feasting is vital to the Mycenaean economic and social system. The mechanisms of the act require division of labor for provisions and governance or direction from the benefactor of the feast. Decisions have to be made and resources have to be collected. The process, preparation, and execution could be elaborate, and the potentially exclusive nature of feasting could provide motivation to rise in status in early Mycenaean communities.²⁴

It is difficult to identify exact reasons for feasting, as there seems to be varying settings, purposes, and time periods for feasting. Feasting could be public or private, it could be local or at a sanctuary, it could be to celebrate a birth or to mark a death. What is clear, however, is that feasting was an accessible avenue for highly visible expression and could be utilized for numerous social purposes. While the mechanisms change, the social purposes behind feasting remain consistent into later time periods, which makes it a valuable insight into understanding what parameters shifted to create the Mycenaean palatial society.

In "Fabulous Feasts: A Prolegomenon to the Importance of Feasting," Brian Hayden lists nine potential social practices that feasting creates. Feasts

1. mobilize labor;

²⁴ Wright 2004, 1-10.

2. create cooperative relationships within groups or, conversely, exclude other groups;
3. create cooperative alliances between social groups (including political support between households);
4. invest surpluses and generates profits;
5. attract desirable mates, labor, allies, or wealth exchanges by advertising the success of the group;
6. create political power (control over resources and labor) through the creation of a network of reciprocal debts;
7. extract surplus produce from the general populace for elite use;
8. solicit favors; and
9. compensate for transgressions.²⁵

The numerous purposes of feasting are suggested based on the varying observations that researchers have made regarding how the tradition functions in varying societies. For the purpose of my argument, I will apply this list of purposes to Mycenaean feasting. If feasting was involved in numerous activities, it could play the role of any of the nine benefits listed by Hayden. Each of these reasons plays roles in not only early Mycenaean society, but also later palatial systems, from both a central administration level and from a wider regional level. As stated in the introduction, if one cog is out of place, then the entire system is affected. Yet, while feasting has remained a critical activity throughout time, the methods of society implementing this tradition drastically change from the Middle to the Late Helladic.

The role of feasting clearly evolves in a changing society in the Argolid during the Middle and Late Bronze Age and it reveals a drastic shift and divide between the Middle Helladic to the Late Helladic societies. However, discussing how feasting has evolved is only useful when examining how the agents behind feasting change. In this earlier period, starting in

²⁵ Hayden 2001, 29-30.

the MH III period, Local Elites are the agents of authority who use their abilities and reputations to develop relational power through mechanisms including feasting.²⁶

Discussion of Parameters and Archaeological Evidence for Change

Feasting and its Role for Leaders

General Introduction

The Middle Helladic period developed smoothly as agriculture and animal husbandry supported smaller community populations. The variables of population increases were sustainable with the established systems, and as such small towns were prosperous. However, according to the archaeological record, at the transition between MH III and LH I, the rulers of Mycenae began amassing great and unprecedented wealth, as indicated by progressively richer burials.²⁷ The origin of this increase in wealth is unknown and it is curious that the increase is gradual, as this indicates that it was not due to a successful raid, which would show a more dramatic spike in prosperity. Because of this gradual increase, trade could be a reasonable explanation for this increased revenue.²⁸ Thus, changes of the parameter of wealth had been shifting within Mycenae, allowing for a serious change in the society.

Another critical parameter, population, can be seen through different factors, such as increases in the number of settlements or even burial densities. Wealth can be translated into population increases through the creation of houses, the influx of trade goods, and numerous other visible displays of riches. Populations were small throughout most of the MH period, with populations of approximately 100 people in villages, or roughly 20 families.²⁹ A recent survey at

²⁶ Voutsaki 1997, 38.

²⁷ Wright 2008, 239.

²⁸ Mee and Spawforth 2001, 179.

²⁹ Wright 2008, 241.

Pylos has estimated that from the MH through the early LH periods, there was an inhabited area from 5.5 to 7 hectares. As wealth increased at the end of the MH III period at certain sites like Mycenae, so did the number of settlement sites in the surrounding area. Estimates of population numbers could be ventured through the study of burials, as well as the increase in settlement area, however, because it is based on estimations, these measures cannot be fully trusted.

Nevertheless, increases in site numbers during the MH III period indicate increases in population and wider distribution of settlements throughout the mainland.³⁰ Further, a recent survey of the valley of Nemea offers more insight into the spread of settlements. Cherry and Davis note that there is a surprisingly low population at the Corinth coastal region during the MH and early LH periods, but in LH II - III population dramatically rises.³¹ Wealth presumably would have been increasing in the hands of the rulers of settlements. However, there is a more apparent change in society with the addition of newfound physical wealth at sites such as Mycenae.³²

Farmland for agriculture and domesticated livestock could be expressions of wealth for previous generations, as staple goods have always been valuable possessions, but the Late Helladic brought with it a new form of power. New and moveable wealth, such as gold and prestige items like tripods, were new methods of showing importance. This newfound wealth by the elite could be expressed in tangible ways and those who controlled the prestige items were able to compete with other potential leaders. Further, the acquisition of wealth and burial with wealth are critical methods of this competition for power.³³ However, this will be discussed more in following sections.

³⁰ Wright 2008, 241-242.

³¹ Cherry and Davis 2001.

³² Mee and Spawforth 2001, 179; Bintliff 2012, 173.

³³ Voutsaki 2010, 97.

Feasting represented many facets of society: family, community, and cultural identity. As a social practice, it also allowed for obvious gradation amongst people, and this can be clearly seen by examining evidence in pottery and metalwork centered on feasting and burial practices.

Evidence in Pottery, Metalwork, and Burials

We can see the apparent importance of feasting from the development and use of pottery in Middle and Late Bronze Age Greece. As pottery is prolific in almost every archaeological site, it deserves special mention and discussion. Regarding food, pottery could be used for preparing, serving, or consuming food and drink. For religious purposes, it could be used for rituals, offerings, and for pouring libations. Other pottery is used for storage, while other pottery is used for various purposes such as lamps, braziers, crucibles, or potter's wheels.³⁴

The archaeological record shows evidence for drinking ritual with the abundance of vessels found at early settlement sites. Other vessels are found in mortuary contexts, such as drinking cups found in the Shaft Graves at Mycenae.

The act of burying the dead with drinking cups could have been a way to ensure that the deceased would enter the afterlife with their ritual cup³⁵, but it also could have been a way to compete with other leaders by burying kinsmen with valuable items.³⁶ Not every item in burial deposits is prestigious or grand and the presence of wealth in a grave does not always indicate the status of the deceased person. However, for the sake of my argument, I take Voutsaki's position that the consumption of valuables and exotic goods in tombs creates status asymmetries that manipulate relations within a community.³⁷

³⁴ Dickinson 1994, 101

³⁵ Wright 2004, 17

³⁶ Voutsaki 1997.

³⁷ Voutsaki 2010, 93



Figure 1.1 Gold lion's head rhyton from Grave

Circle A at Mycenae. LH I. Ht.

During this time period, at the end of the MH period, there was a great influx of wealth to Mycenae.³⁸ This wealth could be translated into ostentatious displays of wealth in a community by using increasingly grand drinking vessels during feasts. The first examples of elaborate liquid vessels to discuss are the rhyton (Fig. 1.1, 1.2), found at Mycenae in Grave Circle A (which will be discussed in the following section). A rhyton is no longer thought to be a drinking vessel, but it is still believed to have held liquid for the purpose of ritual. Rhyta have holes in the bottom of it, in which liquids could be poured into the top and out through the bottom.

³⁸ Wright 2008, 238-242.



*Figure 1.2. Ostrich Egg Rhyta from Grave Circle A
at Mycenae. LH I.*

These special vessels could have been a new method of differentiation during drinking rituals. Rather than consuming wine or other drinks from the traditional clay vessels, Local Elites could have returned from raids with new prestige items, such as rhyta, and further displayed their status as leaders. Additionally, as argued by Voutsaki, these Local Elites could then bury their kinsmen or community members with these prestigious items, such as the gold goblet shown in Fig. 1.3, showing their power to others by consuming their wealth in the ground with the deceased and creating relations of indebtedness and dependence by the community.³⁹ Gift-exchange, rather than commerce, was a forceful strategy used to create power and prestige. Voutsaki argues that the giving of gifts creates reciprocal relationships built upon debt. Meaning, that an individual can build up power through the circulation of goods to others who then owe a debt to reciprocate.⁴⁰

³⁹ Voutsaki 2001a.

⁴⁰ Voutsaki 1997, 36-37.



Figure 1.3. Gold goblet from Grave Circle A at Mycenae, called the Cup of Nestor. LH I.

Funerary Practices in Relation to Power and Feasting in Early Mycenaean Society

The progression of funerary practices is an important variable for understanding the shift in society between MH III - LH III. The process of burying the dead changes multiple times during this period, however, similar to feasting, it is a consistent practice that can be used to better understand reasons for changes.

In the MH period, Argos is clearly of central importance with a large community and a series of tumuli;⁴¹ however, an abrupt shift of power happens when a large MH cemetery is constructed at Mycenae, which mixes domestic areas with burial-clusters.⁴² This is the beginning of the shaft grave, which continues on as a popular burial type into the early LH period.⁴³

⁴¹ Voutsaki 2010, 602-604.

⁴² Cavanagh and Mee 1998, 28-29.

⁴³ Bintliff 2012, 171.

Grave Circle A at Mycenae deserves some explanation, as it is a valuable source of archaeological evidence for this time period and an important site for Mycenaean authority.⁴⁴ Since much of the pottery mentioned above and the drinking vessels I reference were found in mortuary contexts, it is pertinent to discuss the progression of funerary practices and its importance for displaying power.

Burial mostly consisted of cist graves in the MH period, cut into the ground or bedrock. In addition to cist graves, in-house burials and earthen mounds called tumuli (common in Northern Greece) were used in the Argolid. Graves were often lined with rocks and covered with slabs to enclose them, but very rarely were objects, especially pottery, placed inside the graves with the deceased.⁴⁵ However, over time, there were new and grander methods of burial that were utilized by competing leaders. At Mycenae, Grave Circle A and Grave Circle B include some of the finest burial goods ever discovered. Grave Circle A has shaft graves that date from 1580-1500 BC, while Grave Circle B has cist graves dating from 1625-1520 BC. In these graves we can also see the continued importance of burial with drinking vessels (Fig. 1.4). In Wright's table, we can clearly see the majority of cup forms found in the shaft graves are goblets, an increasingly popular drinking vessel (Fig. 1.3).⁴⁶ Further, Wright includes additional tables showing the prominence of not just open form goblets and cups, but also the abundance of gold being the main material for these vessels. This further solidifies not only that drinking vessels, used presumably for feasting of some variety, were evidently of continued importance into the LH I period, but also that the deceased were being buried with increasingly valuable wealth. This begs the question of how the deceased attained this wealth, either through debt systems to Local Elites or through acquisition of another variety.

⁴⁴ Cavanagh and Mee 1998, 43-44; Dickinson 1994, 222-224.

⁴⁵ Betancourt 2007, 139

⁴⁶ Wright 2004, 21


Burial	Open Forms									Closed Forms														
	Cup forms							Kantharoi	Jar forms							Jug forms								
	Generalized cup form	Straight-sided matt-pid	Straight-sided "Minoan"	Conical/paneled	Semioglobular matt-pid	Semioglobular "Minoan"	Goblet	Shallow w/o foot matt-pid	Cerinafed with foot	Generalized jar form	Plain jar	Hole-mouth and spouted	LH I jar	"Cycladic" jar	Hydris & stamnos	Amphora	Amphoriskos	Generalized jug form	LH I squat	Spouted jar/jug	"Cycladic" spouted jug	"Minoan" spouted jug	Cut-away spout matt-pid	Askos
																								
Z male weapons		●					●	●												●			●	
H male weapons	●						●	●															●	
I early		●																						
I late male weapons							●				●				●	●		●					●	
A 2, S. side																							●	
A 2, N. side	●									●														
E early							●		●									●						
E late							●									●		●						●
P	●						●	●																
B male weapons							●				●		●			●								
E fill				●			●				●													
A fill			●				●								●									
A male weapons	●			●			●								●			●			●			
N roof							●						●				●			●				●
Y female							●								●		●							●
MYC 58 female		●		●	●		●		●	●								●					●	
A fill	●						●								●			●						
A male weapons							●		●						●			●					●	
E inside, later															●			●						
K								●							●								●	
A 1								●							●									
N later male															●									
Π							●											●					●	
K-112								●							●								●	
M early	●						●			●	●	●					●	●					●	●
N							●								●								●	●
F male weapons		●	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●	●	●
Δ							●						●	●	●		●	●			●			●
Ο					●		●	●				●		●	●	●	●							●

Figure 1.4. Distribution of Pottery in Grave Circle B.⁴⁷

Raiding and Hunting

General Introduction

While feasting and funerary practices have been discussed as mechanisms to display power, there are also driving forces behind holding feasts and acquiring prestige items for burials. For the sake of my argument, I propose that Local Elites use their abilities as hunters and warrior capabilities in order to acquire the necessary supplies to propagate their power.

⁴⁷ Wright 2004, 21.



Figure 1.5. Signet Rings from shaft grave IV at Mycenae.

LH I. Gold.

Through the available burial goods at sites such as Grave Circle A, we can see ample evidence that there was a premium placed on individuals with warrior or hunting abilities. Grave goods with images of hunters and war scenes are abundant (Fig. 1.5). We can see a mixing between hunting animals and fighting humans, and this could be indicative of the same people doing both activities. If this is the case, then it is reasonable to infer that these Local Elites groups were possibly raiding to acquire prestige items, indicated by the sudden influx of wealth in warrior shaft graves starting in MH III,⁴⁸ were also hunting and providing feasts. This link is further solidified through later and richer burial caches (of MH III and LH I-II) with items made out of boars' tusks, including boars' tusk helmets, showing the link between hunting and warfare.⁴⁹ Further, highly valuable, ornate weaponry with images of hunting and warfare show the importance of a man's ability to kill both humans and animals (Fig. 1.6).

⁴⁸ Voutsaki 2010, 101. - A sudden prosperity of wealth may indicate a successful raid: Mee and Spawforth 2001, 179.

⁴⁹ Wright 2008, 243.



*Figure 1.6. Niello Daggers from Grave Circle A
at Mycenae. LH I.*

The ability to raid neighboring communities and acquire goods to bring back to one's own village can easily create an indebted asymmetry within a population.⁵⁰ Thus, Local Elites would have acquired reputations both as strong and powerful leaders and as providers through hunting.

Domestication of animals was already in full use by the MH III - LH II periods. However, while the raising of animals may provide a consistent source of meat, hunting provides an influx of excess meat that is the perfect catalyst for community feasting. If a person brings back a boar to the community from a hunt, then that instantly provides that person with credibility and trust from those who benefit from the kill. Further, as stated before and discussed by Shelmerdine, these villages at the time of the end of the MH period presumably were in the range of 100 people, or twenty families. According to Texas A&M's AgriLife Extension

⁵⁰ Voutsaki 2001a; Voutsaki 1997, 36-37.

Program, the average male boar will weigh approximately 200 pounds.⁵¹ This equates to almost 110 pounds of meat. If every person benefited from a hunt, then that would provide one pound of meat per person. This provision of meat would have further contributed to the indebted asymmetries already in place and solidified the role of the Local Elites as leaders and providers of communities.

Religion

There is limited evidence for religion on the Greek mainland in the time period of MH III - LH II. It is difficult to make assertions with precision or confidence from negative evidence, and the origins of Mycenaean religion are unclear. This is due to a lack of archaeological evidence for religious structures over a long period of time, so we cannot fully trace the development of Mycenaean religion.⁵² While there is evidence for EH ritual-surrounding sacrifice around hearths on the mainland,⁵³ there is a dearth of evidence for the MH period. Nevertheless, there is evidence for communal sacrifices found on the Kynortion hilltop above Epidaurus and on the island of Nisakouli near Methoni, which is associated with an altar/hearth structure,⁵⁴ both locations in remote areas away from mainland MH settlements. Thus, it seems that ritual and religion are aspects of society, but event based, as people would have had to travel to these sites to partake in sacrifice or other ritual. The evidence for sacrifice at these sites is the burnt animal bones found in layers of ash. Further, the pottery sherds found possibly indicate that the sacrifices at these sites were connected with communal feasting.⁵⁵

⁵¹ Source: <http://feralhogs.tamu.edu/frequently-asked-questions-wild-pigs/> - It should be noted that this refers to North American boars, which may differ slightly in weight and size from boars in ancient Greece.

⁵² Lupack 2010, 263.

⁵³ Caskey 1990, 20.

⁵⁴ Choremis 1969.

⁵⁵ See Hägg 1997a; Wright 1994, 39 for other MH - LH II religious sites.

These ritual practices may have been initially simple in the MH period, due to the simple pottery found at the aforementioned sites, but Whittaker argues that religion and cult practices start to become more complex in early LH, as burial rituals (mentioned above) become more elaborate and involve more valuable depositions.⁵⁶ Here, we can see how religion starts to become of greater importance for elite figures, as society gets closer to the divide between the early (MH III - LH II) and the late (LH III) periods. Parameters must be gradually changing to allow religion to come into greater prominence in the LH III period, and we can visibly see this through the eventual rulers of citadels who practice their authority in the symbolic, and arguably religious, center of the palace.

Interpretation of Evidence

The provision of food and wealth to a community is clearly important. It is important because it shows the ability to successfully bring external and valuable goods into an internal system, which in turn benefits the community. Through the evidence above, we can clearly see that feasting was an important aspect of community bonding and social stratification. The arguments for Local Elites, as discussed by Sofia Voutsaki, show that these leaders could presumably gain influence and reputation in their communities through systems of indebted asymmetries.⁵⁷ However, as asserted, these asymmetries could arise from both the acquisition of prestige items, used for burials or feasting, and also through the provision of excess meat from hunting expeditions. The relatively small size of communities allowed the Local Elites to successfully cultivate authority. Through provision of food to either everyone in the village or to select leaders, the Local Elites could have created indebted relationships within a whole

⁵⁶ Whittaker 2001, 357.

⁵⁷ Voutsaki 1997, 36-37; Voutsaki 2001a.

community. However, this system of power would have had difficulty growing larger as populations increased in the LH I – II periods, as shown by Wright (2008).

Argument for Adjustment of Parameters

With the increase of population and consolidation of neighboring communities, Local Elites would have struggled to cultivate authority by providing hunting feasts to larger groups of people. I argue that during the LH I – II periods, as communities became larger, seen through the increased settlement sizes during this time,⁵⁸ Local Elites were outperformed by a new type of elite. I argue that a bifurcation point is encountered during this discrete point in time.

⁵⁸ Wright 2008, 241-242.

Argument for Bifurcation

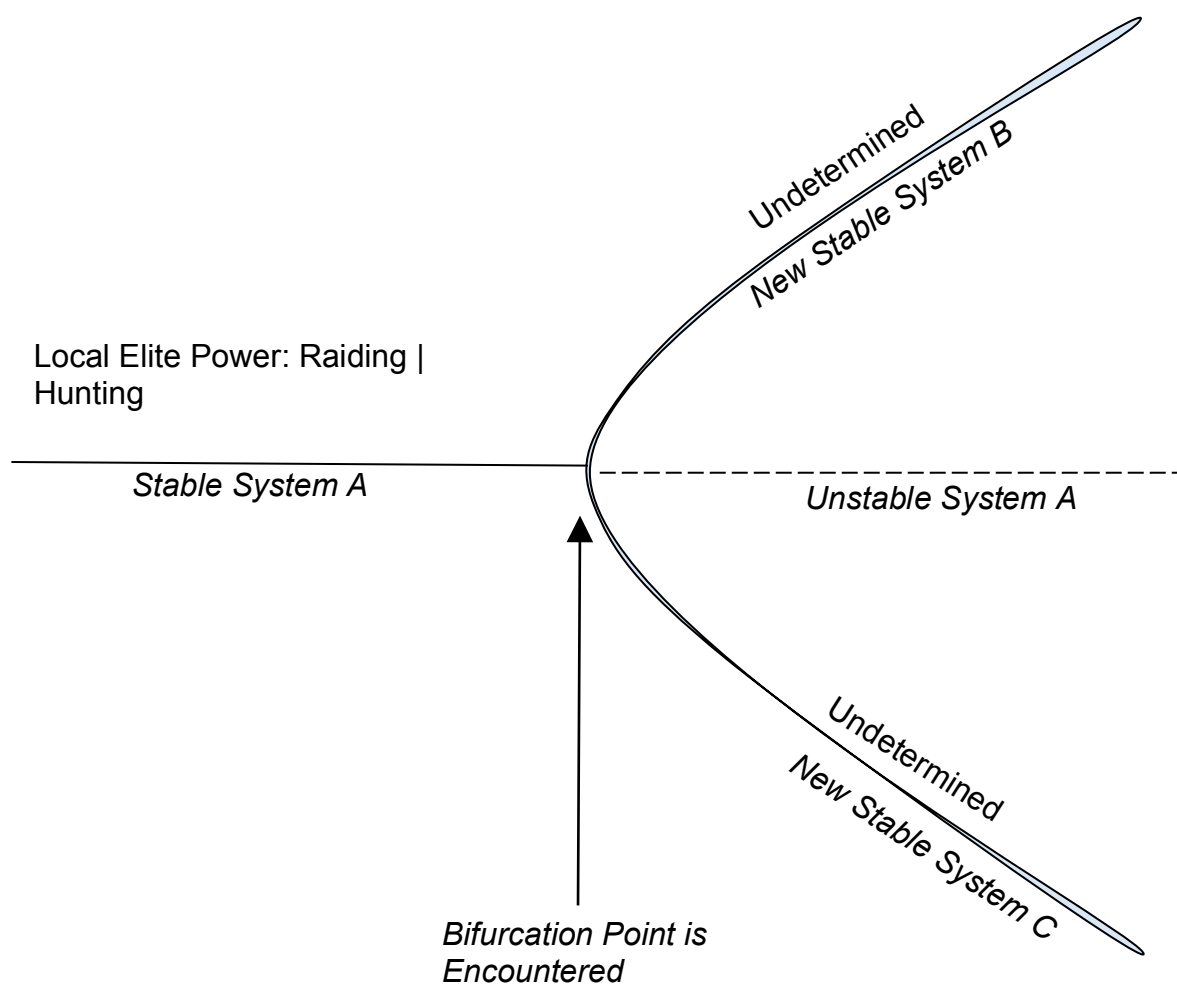


Figure 1.7. Bifurcation Diagram. Point Encountered at the end of the LH II period.

As illustrated in my first of three diagrams (Fig. 1.7), society progressed to a point when Local Elites could no longer cultivate the power through the same methods. This is when the previous system breaks down and a new system must take its place. As discussed in the introduction, this is similar to a competition model, where the circumstances leading up to the bifurcation point determines the outcome of the new system. So, the environment surrounding the parameters directly impacts not only how the original system works, but also the reasons why

the model evolves. However, as mentioned in the introduction, it is important to look at these parameters in the context of their time frame at a micro level, as looking from a macro level will apply a monolithic approach to all changes with the same parameters. I argue that due to the increase in population sizes at the end of the MH III period,⁵⁹ increase in settlement sizes, number of settlement sites,⁶⁰ the increase in ritual offerings in burials, and the introduction of increased livestock available at settlements, created the environment necessary for successful leadership by a figure differing from a warlike Local Elite. Chapter 2 will examine the role of religion in the late Mycenaean period and its relationship with feasting, and how the rise of the palatial institution created a new system that outperformed the previous Local Elites society.

⁵⁹ Cherry and Davis 2001.

⁶⁰ Wright 2008, 241-242.

Chapter 2

How Power was Acquired and Maintained in the Late Mycenaean Period | Religion and Feasting

Introduction to the Late Mycenaean Period: LH III

The LH III period brought with it many apparent changes in the Mycenaean world. By c. 1200 BC, the Mycenaean trade network extended from Sardinia to west Asia, a testament to the regional network established in previous centuries.⁶¹ The new systems of administration at palaces controlled numerous facets of daily life for the communities, recorded on tablets written in Linear B. The palace administrators were involved in agriculture, livestock, manufacturing of goods, metalwork, weaving, perfume production, economic documentation (Linear B), labor systems, overseas trade, contract work, slavery, religious practices, storage and distribution of food, surpluses of goods and supplies, workers and wages, and of course feasting.⁶²

Whereas Local Elites and chiefs consolidated power in previous centuries, the ability to be a warrior and hunter does not directly transfer into being an administrator of a palatial system and as such, the methods of gaining power through indebted asymmetries on a smaller, relational level is no longer feasible. Over the course of hundreds of years, the environment and landscape adapted as parameters changed on a micro level. Populations in areas of the Corinthia rose,⁶³

⁶¹ Dickinson 1994, 234-256.

⁶² Voutsaki 2010, 100-102; Shelton 2010, 145; Shelmerdine 2008, 115.

⁶³ Mee and Spawforth 2001, 173.

wealth becomes more pervasive at Mycenae, and as all of these individual societies experience changes, the entire model of how power is cultivated in LH III shifts.

As I argued in Chapter 1, the environment that allowed Local Elites to create relational power was ideal due to the circumstances of that time period. During the LH III period, however, new circumstances created a new environment, ideal for a new type of leadership. A larger system took the place of smaller relational kinsmen groups, bringing with it more complicated mechanisms of cultivating authority. Leaders needed to be capable of ruling economic and administrative systems, however, while the skills of leadership changed, the means of claiming authority remained consistent. Feasting was still a highly important tradition and activity within palatial societies, and through examining Linear B text and iconography in palaces we can better understand the how these palaces were controlled.⁶⁴

Raiding in earlier periods may have helped with the consolidation of surrounding neighbors into palatial systems and this consolidation increased the population of palatial centers so much, that by the 14th century BC, Mycenae occupied a core area over 32 hectares and its estimated population reached 6,400 people.⁶⁵ This population size would have been near impossible to gain influence over through small-scale hunting, as Local Elites may have previously done. So, it is objectively reasonable to state that the previous system of control and power had reached a point of instability that may have resulted in a new form of leadership. It should be noted that new forms of leadership may not have been the result of the changes in society, but could very well have been part of the cause. At a micro level, the decisions made by individuals matter and are capable of effecting widespread change. Therefore, it is possible that a changing environment could create a new type of leader, a powerful individual could change

⁶⁴ Wright 2004, 97.

⁶⁵ Shelmerdine and Bennet 2008, 298.

their environment, and the two phenomena could happen independently of the other. The important thing to remember is that, differing from systems thinking, the whole society is not greater than the sum of its individual parts, as the individual people and their actions matter.

The purpose of this chapter is to explore the developments of authority and power, during the time period of LH III, as vested in a religious king figure and how leaders still utilize feasting to cultivate legitimate authority in late Mycenaean society.

Approach to Evidence for Understanding the Late Mycenaean Period: LH III

Similar to Chapter 1, this chapter will also approach understanding LH III through the use of archaeological evidence and interpretation. As mentioned in the introduction, I will be using information and evidence from multiple palaces to use as an analogy of how attaining power differs and changes with the rise of palaces. However, this is not to assert that all palaces functioned uniformly. Differing from Chapter 1, I will use writing from Linear B tablets as a source of information regarding administration.

Introduction to Elite Rulers and the Palace

Linear B tablets make it apparent that LH III Mycenaean states were ruled by a king, differing from smaller settlements.⁶⁶ In LH III, a new figure, called the *wanax*, emerges into society and fills the position of ruler. The official role of the *wanax* is unclear, but his role in feasting is alluded to in tablets. The name of *wanax* only appears 20 times in a corpus of almost 5000 tablets and only a few times is the king recorded as doing something:⁶⁷ PY Ta 711 refers to an occasion ‘when the king appointed Augewas to the position of *damo-kor-os*,’ probably a

⁶⁶ Shelmerdine 2008, 117.

⁶⁷ Shelmerdine 2008, 127-129.

provincial official, and on PY Un 2 the king is involved in a ceremony at the sanctuary site of *pa-ki-ja-na* ('place of sacrifice'), on which the heading is interpreted as 'upon the initiation of the king...' ⁶⁸ The *wanax* will be discussed more in following sections, but the role is important to establish now, as this figure takes center-stage in this thesis' discussion of power and leadership. The *wanax* has special and exclusive positions, set apart from other officers. His role is the chief political figure of large populations of people, but also that of religious leader and economic administrator of the state. ⁶⁹

Additional titled figures emerge with specific control over aspects of society appear in the tablets. The *lawagetas* is seemingly second in command behind the *wanax*, as evidenced by land holdings in Linear B tablets. The *lawagetas*, whose title suggests that the official 'leads' from the Greek verb ἄγω. ⁷⁰ His role is somewhat linked to military duty on the PY An 724 tablet, but it may just be an obligation to supply soldiers for their military service. ⁷¹ Nevertheless, the *wanax* is the top ruler, indicated by his land holdings on PY Er 312, where his *temenos*, or plot of land, is three times as big as those of other officials listed there. ⁷²

Discussion of Parameters and Archaeological Evidence for Change in Power

Religion and Feasting

General Introduction

As stated previously, evidence for religious ritual in Mycenaean settlements greatly increases in this time period of LH III. The development of the Cult Centre at Mycenae, the

⁶⁸ Carlier 1984, 91-94.

⁶⁹ Carlier 1996.

⁷⁰ Shelmerdine 2008, 129-131.

⁷¹ Shelmerdine 2008, 129.

⁷² Shelmerdine 2008, 128.

production of figurines in society, and the mysterious position of the *wanax* all point towards a shift in focus towards the divine.

Originally, the cult center at Mycenae was located outside of the fortification walls. In Chapter 1, I mention that religion seems to be based at various sanctuary sites, possibly showing that rituals took place away from the center of settlements and instead at remote locations. Although religion is external from communities during MH III, cult worship becomes incorporated with palace architecture during LH III.

There is a focus of religion within the settlement, a development from the previous periods where travel to sanctuary sites seems to be the normative state of religious worship. The rise of cult worship internally, through architecture of altars within the palace and the move of the Mycenaean cult center within walls, shows a mingling of religion with administration, especially regarding the positions of specific rulers and elites in the palace. Many buildings stood inside the citadel, including houses and storage areas, but of prominence was the religious complex.⁷³ The increased focus on religion may point toward societal changes where authority could be better grasped from a divine standpoint, and not just from abilities as a warrior.

As discussed in Chapter 1, there is clearly a shift in the makeup of a ruler between the early and late Mycenaean periods. I argue that this change is due to the increase in population at the palace centers, which makes easier and more capable of being controlled in mass via methods of religion rather than methods of hunting and war prowess.

The key element of this overall shift is: where some forms of feasting, and the legitimate authority that comes with it, was a product of some hunting in early periods, feasting en masse becomes a product of religion during LH III.

⁷³ Taylour 1981.

Evidence in Artwork, Writing, and Architecture

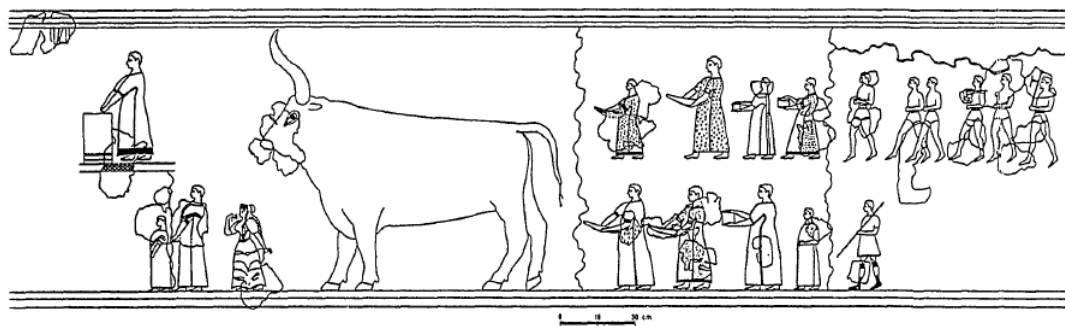


Figure 2.1. Line Drawing of Fresco from Pylos Palace, Room 5. LH III B.⁷⁴

Palatial structures started to fully develop by LH IIIA, implementing elaborate administrative systems that are reflected in the artwork in cities such as Pylos. When discussing feasting and its role in the palace and with the *wanax*, the fresco from Pylos, room 5 (Fig. 2.1) should be discussed. In this fresco we can see a few clues about society and potential ritual practices.

First, we notice the groups of people bringing forth offerings to what appears to be a priest or priestess. The figures, as interpreted by Lang and McCallum, march forward, leading a presumably domesticated bull to sacrifice. The procession continues into the megaron proper, and to the right as one approaches the throne in the megaron.⁷⁵ This fresco is found in the anteroom to the megaron of Pylos, the largest and arguably most important room in Mycenaean palaces. This room features a throne on the wall, a place that is argued to be the seat of the *wanax*. Thus, it seems plausible that the procession of these people in the fresco are approaching the megaron to present him with what could be interpreted as either taxes, religious offerings, or even just contributions to communal feasting. The procession scene continues into room 6 at

⁷⁴ McCallum 1987, 195.

⁷⁵ Wright 2004, 41.

Pylos, which contains sequential activities with the bull procession. In the wall frescoes in this room, we see scenes of the bull sacrifice and then banqueting imagery, suggesting a major festival.⁷⁶

It is fitting that the procession would culminate in the megaron, as this is also the location of the hearth of the palace, a symbol associated with feasting in ancient times and possible religious connections in late Mycenaean society. The increased prominence of clearly religious artwork within palaces extends to architectural features. Whether it is the potential circular altar in the main court at Tiryns, directly across from the megaron, or the hearth in the megaron itself, ritual in LH III seems to be mixed into the construction of palace society. By the hearth at Pylos there was a tripod altar, several miniature vessels, and on either sides of the throne in the megaron were circular depressions, possibly for pouring liquid libations to the figure who sat in the throne.⁷⁷

Furthering the discussion of religion in architecture, the construction of Mycenae shows that you could not walk through the palace without fully being immersed in religious architecture and iconography. The cult center at Mycenae is located on the south side of the palace citadel and was linked to the megaron by a processional path. There were four specific shrines that we know of, which were built on varying levels of the hill, constructed around LH IIIB. Additionally, the Tsountas House, another important building in the palace, features a horseshoe altar with indentations for libations. The hearth in the megaron is situated above the temple, which opens out into a court with another circular altar.⁷⁸

It is also possible that the imagery in Figure 2.1 is used to represent incorporation of people into religious ritual. The *wanax* figure helped mobilize resources and human labor, but

⁷⁶ McCallum 1987, 123-124.

⁷⁷ Mee 2011, page 266.

⁷⁸ Mee 2011, 266.

there are also potential religious elements to the position. The feasting element of the *wanax* is evident in a Linear B tablet listing feasting preparations necessary for the initiation of the king.⁷⁹ As mentioned earlier, on tablet PY Un 2, the *wanax* is involved in a ceremony at the sanctuary site of *pa-ki-ja-na* (Sphagiana or ‘place of sacrifice’) and the most plausible interpretation of the heading is ‘upon the initiation of the king.’ This tablet is then one of several texts that are now recognized by scholars such as Godart, Killen, and Wright as lists of ceremonial banquet supplies, including barley, honey, figs, olives, a bull/ox and other animals, wine, and cloth.⁸⁰ Feasting was utilized to celebrate or commemorate numerous events and it is evident that the *wanax* was a position that was tied closely with administrative or economic control over feasting. Therefore, the fresco could be indicative of either procession of goods in preparation for a feast for the initiation of the king, or to indicate offerings to a figure who oversees other feasting events.

The role as an economic leader is one that would have required special skills of administration. To be the elite ruler in late Mycenaean societies, one had to be capable of acquiring legitimate authority through one’s ability as an economic and religious figurehead. The parameters of society had adjusted gradually and radically over enough time that new methods of obtaining relational power arose. However, there are similarities between both types of leadership. In both societies, the ruler brings forth food to the people. The Local Elite can hunt to obtain meat for his people, but the *wanax* can manipulate and organize multitudes of people to grow food, raise livestock, and bring the food to him as he sits on a throne. In both cases, the ruler is capable of providing, but the system has radically shifted. Nevertheless, remnants of the

⁷⁹ Duhoux and Davies 2008, 127-129.

⁸⁰ Godart 1999; Killen 1994; Wright 2004.

previous system are evident through similar mechanisms such as providing food to gain authority.

Feasting could take an entirely new ideological role within the religious palatial system. In previous centuries, Local Elites might have hunted and brought back dead animals to distribute out for feasting. With the increase in livestock, as discussed in Duhoux and Davies (2008), religious leaders could now more readily use animals for not only for feasting, but sacrificial purposes. There were clearly animal sacrifices at early Mycenaean sanctuary sites, due to bones found in the ash layers,⁸¹ but with increased numbers of domesticated animals in the palatial system, greater numbers of animals could be sacrificed to the gods, presumably on behalf of the community. This is another indication of separation between the Local Elites of old and the *wanax*. By incorporating feasting and ritual sacrifice, the *wanax* can outperform the Local Elites by not only providing meat for feasting, but also ideological bonding through religious ritual. Even further, because religion was more incorporated into the communities, for example the cult center at Mycenae (moved within the walls in LH IIIB) and the religious complex at Pylos, sacrifice was now performed closer to the heart of communities, the administrative center. Sacrifice and feasting could be more routinely and consistently utilized, and the evidence at Pylos show that study of burned bones from six excavation sites dating to LH IIIB (inside and outside the palace complex) reveal that almost exclusively cattle (many were adult bulls) were sacrificed there, with the exception of a single deer at two of the six sites. Further, the bones that are burned are from select areas of the bovine, including the humerus, femur, and mandible bones, showing the consistent process that must have taken place with these sacrifices.⁸²

⁸¹ Cline 2010, 263-65.

⁸² Wright 2004, 62

Beyond the scope of just religious feasting, the palatial administration had the capabilities to organize labor amongst civilians through religious offerings. Specifically, in tablet Tn 316 at Pylos we can see the recording of offerings for three deities, including: 13 gold vessels, 8 women, and 2 men.



PYLOS: "perform a certain action" at the place of Zeus.
 and bring the gifts and bring "lead" the pe-re-na
 To Zeus: one gold bowl. one man.
 To Hera: one gold bowl. one woman.
 To Drimios the "priest" of Zeus: one gold bowl. [one man?]⁸³

Figure 2.2. Artist Line Drawing of a Record of a Major Religious Rite at Pylos and Translation. Tn 316.

The text (Fig. 2.2) shows direct orders of what to bring to each god or goddess and the palace's role in this text is understood due to the bolded "PYLOS" before each command on the tablets.⁸⁴ The significance of this text, along with the rooms 5 and 6 frescoes, as mentioned above, is that the offerings are rendered by the palace, under a palace edit, showing the palace official's abilities to organize quantities of goods and prestige items through religious edicts.⁸⁵

⁸³ McCallum 1987, 111.

⁸⁴ Chadwick 1976, 90.

⁸⁵ McCallum 1987, 112.

This is significant when looking at the LH III period as a discrete period. Due to the circumstances around the rise of palatial systems, administrations can organize vast quantities of wealth from the community elites, as most likely only elite members of society could bring forth 13 golden vessels. So, due to the parameters of pervasive wealth during the LH III period and increased population surrounding the palatial communities, the ultra-elite can collect greater quantities of wealth due to their religious positions of power. However, it is important to keep in mind that these parameters only allow power during this discrete snapshot of time. This method of cultivating power within relationships would not have functioned the same way hundreds of years prior during the MH III - LH II periods. So, while the temptation is to apply a monolithic parameter of change to both periods, we must keep in mind that methods of power, such as edicts for religious offerings in this case, change due to the circumstances of the immediate environment. This is how bifurcation varies from systems thinking, as instead of viewing a change in society from a macro level, due to broad parameters that persist across boundaries, it is important to view parameters on a micro level and deduce inferences from them on how these adapting methods of authority were changed by the circumstances of the immediate environment. The same parameters can change in both time periods, but the parameter affects each time period differently and due to the circumstances of the environment, the results of the shifting parameter will vary.

Funerary Practices in Relation to Power and Feasting in Late Mycenaean

Society

As populations and wealth grew, so did the need to further differentiate funerary practices between the elite and the lower classes. The previous centuries had already set in motion gradation in graves through drastic shifts in including grave goods, specifically pottery, and

restriction of private grave, Grave Circles A and B. However, the tholos was the pinnacle of expression in showing wealth and power in death.

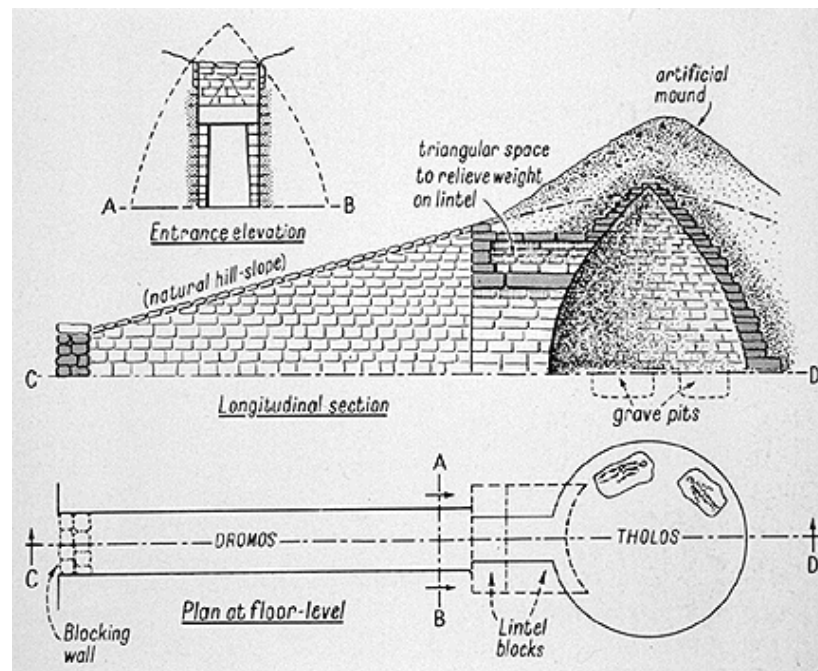


Figure 2.2. Cross-Section plan of a tholos tomb.

The tholos tomb, as can be seen in Fig. 2.2, was a style of burial that had already been in use in previous periods. The first tholoi appear in Greece, in the Western Peloponnese, in the MH III period, however, they start appearing in Mycenae closer to LH II. These tombs fully allowed the elite to reflect the glory of their lives onto their final resting places. Again, these tombs are circular in shape, similar to Grave Circles A and B. These tombs are highly visible displays of power to the community and surely allowed for ornate ceremonies during times of mourning over the death of elite rulers.

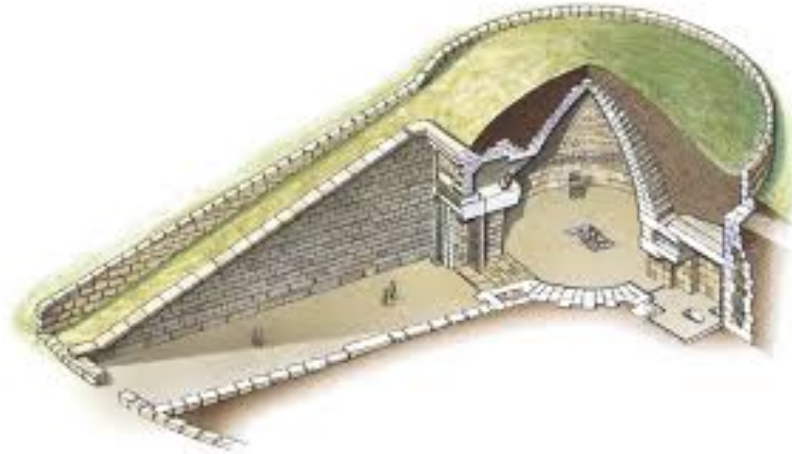


Figure 2.3. “Treasury of Atreus.” Mycenae. LH IIIB c. 1250 BC.

The “Treasury of Atreus” (Fig. 2.3) is perhaps the best-preserved tholos and representation of the grandeur of elite burials at this time. The interior of this tomb measures nearly 43 feet high and 48 feet across. The corbeled dome is built of cut masonry and dug into the side of a hill. The amount of labor required to build a tomb like this would have been immense, estimated to require approximately 20,000 man days,⁸⁶ which is another testament to the power of the elite during this time to mobilize labor. Additionally, in order to build this monument, houses on the Panayia ridge were likely demolished, and thousands of tons of stone was quarried and moved to construct this memorial to the ultra-wealthy. This in and of itself indicates the level of power these individuals had and the amount of importance vested in certain individuals. Further, the extravagant grave goods that were buried with these people essentially took the items out of circulation. Thus, these rulers felt so comfortable with the consistent flow of prestige goods that they were supportive of effectively removing precious items from the world of the living. These tombs could be used and reused for years, allowing continuous generations to display their wealth and power before a regional audience.

⁸⁶ Cavanagh and Mee 1999.

Overall, however, construction of tholos tombs tapered off in use in LH III. With the exception of the “Treasury of Atreus,” tholos tombs were no longer constructed, but existing ones were still used. This could be due to a number of reasons, one of which is the increase of a wealth gap. The majority of power and wealth was moving into fewer hands, meaning that there were fewer people with the ability to create these large and expensive tombs. It is possible that elite families no longer felt that they could afford to outspend the leading families at Mycenae, so they invested their resources in different avenues of display. Those who were not wealthy enough to be in the elite tholos community buried their dead in the less elegant chamber tombs, long passageways that lead to underground graves. However, some chamber tombs contained prestige items that rivaled those of some of the richest tholoi. Thus, as mentioned in the sections on artwork and pottery, the LH III period was a time of drastic change in how wealth could be displayed. Some of the society still had large, grand displays of wealth and power in the tholos tombs. However, some wealthy families may have not needed that kind of attention to legitimize their power. Instead, there were other methods of display that were more worthy of investment.

It was at this time period in LH IIIA2 c. 1370-1300 BC when cyclopean walls were added to the citadel. Then, in LH IIIB, the walls were extended to include Grave Circle A and allowed everyone to immediately associate the current rulers with rulers of the past who may have been buried in the same grave circle.

Hunting and Raiding in LH III



Figure 2.4. Fresco showing hunters. Pylos. LH III B.

Hunting and its purposes also changed in the system shift during LH III. While it is still utilized, I argue that hunting is no longer for the same purposes as previous societies. As can be seen in hunting frescoes (Fig. 2.4, 2.5, 2.6) hunting was a common motif for palace artwork.



Figure 2.5. Boar Hunt Fresco. Tiryns. LH III B

However, while hunting still appears to be an important activity for food, I argue that it is no longer a viable method of cultivating authority. Despite the increased use of domesticated animals in the palatial system,⁸⁷ hunting was still a viable method of supplementing meat in the community. The hunting of deer is alluded to in the Cr Linear B tablets and in frescoes at Pylos.

⁸⁷ Shelmerdine and Bennet 2008, 305 - Records of up to 100,000 sheep used for food and wool production.

Hunting still remains a consistent activity for the elite class, in both MH III - LH II and in LH III, and in two Cr tablets the references to deer may represent the contribution of elites to feasts through their own personal activities.⁸⁸



Figure 2.6. Fresco of Hunting Dogs. Pylos. LH IIIB

Similar to hunting during LH III, the acquisition of prestige goods through raiding was no longer a viable method of cultivating influence and indebted asymmetries in societies. Scholars argue that a wider spread of valuable goods and imports into palace systems in LH III A - LH IIIB indicates an ability for palace centers and elites to restrict access to prestige items.⁸⁹ This pervasive wealth made the acquisition of wealth through raiding obsolete, another possible parameter towards the shift in power structures during early LH III. Further, while there are references to militaries in tablets, I argue that it is highly unlikely that these were standing militaries.

There is limited evidence for military action, as palaces are argued to have been at peace with each other and in trade alliances.⁹⁰ While warfare between palaces is still an open discussion about alliances, it is reasonable to believe that there was limited constant fighting, as this would be ruinous to the palaces involved.⁹¹ Further, while raiding and piracy may have been practiced in certain parts of the Mycenaean world, it is doubtful that such acts were encouraged

⁸⁸ Bennet 2001, 35

⁸⁹ Voutsaki 2001, 195.

⁹⁰ Voutsaki 2010, 103.

⁹¹ Mee and Spawforth 2001, 179.

by palace societies, because of the strong central authority of the palace.⁹² The Linear B tablets indicate at Pylos armies of men and their necessary equipment and food provisions, and while these records show that measures were taken for security, it is doubtful that palaces mobilized and attacked other cities with these armies. Through the *o-ka*, *orkha*, military command tablets in the An series, we can see that men were chosen from varying districts to serve in the ground army or with the rowers, boasting 600-700 men to crew approximately 15 ships for the latter group. Additionally, Pylos kept 800 men as coastguards, an indication of a necessity to watch for potential outside raids.⁹³ This information, however, is not linked to tablet records to rations or equipment.⁹⁴ Therefore, while there are references to the military, the administration of the palace did not deem it necessary to record rationing of food.

Tablets also listed palace officials when listing military records. However, while these officials have connections to the military, the role of individual elites seems limited. For example, the *lawagetas* is indicated to have certain control over rowers on tablet PY An 724, however, the tablet itself reveals no evidence that he was ‘the commander in chief.’⁹⁵ Further, while tablets boast these large numbers of soldiers, it is doubtful that there was a large standing army. The palace would have needed the men to be working, farming, and crafting goods to sell. It is unlikely that there would have been a thousand men standing guard, consuming resources, and not contributing to agriculture or production unless there were imminent and frequent military threats. Therefore, while the tablets have mentions of military issues and the *lawagetas* is involved to some extent with rowers, the rulers seem to have had more involvements in religion and its incorporation with the economic system of the palace. This is especially true of

⁹² Killen 1985, 260.

⁹³ For further reading on military service: Chadwick 1988; Godart 1987 -- *o-ka* tablets: Lang 1990; Palmer 1977.

⁹⁴ Duhoux and Davies 2008, 147.

⁹⁵ Shelmerdine 2008, 129-131.

the *wanax*, who is not mentioned in the tablets in the context of the military.⁹⁶ Yet, as discussed previously, is involved with religious rituals and economic collections of goods.⁹⁷

Interpretation of Evidence

As parameters of LH III changed, society itself changed. As proposed earlier, it is not clear which came first, the *wanax* or the palace. However, it is likely that as populations increased and wealth became more pervasive, there were a number of leader archetypes that vied for power before the arrival of the *wanax*. It is possible that many would-be-rulers tried to use ancient methods of relational power, but were unsuccessful. With our current extent of evidence, it is not possible to know the exact process. Therefore, we can only make qualitative inferences of what happened during these in-between periods, between Local Elites societies and the kingdom of the *wanax*.

Nevertheless, the *wanax* fills the ‘power vacuum’ left behind from the previous ruler, Local Elites, as the environment of palatial society provides the necessary circumstances for this kingly figure to use previous mechanisms of control in new contexts, namely feasting, to cultivate authority and relational power over growing populations. Through the interpretation of Linear B tablets, we can better understand the increasingly important role of religion in LH III Mycenaean life. No longer are warriors and hunters garnered as leaders of communities, but instead wealthy state officials, who oversee economic systems, take over the roles of leadership. Further, while military strength of societies naturally increase as population increases, there seems to be limited evidence that these militaries were standing armies or that they even saw much use. All of this evidence points to a major system shift from late MH to early LH society.

⁹⁶ Shelmerdine 2008, 127-129.

⁹⁷ Further reading and references: Carlier 1984; Lindgren 1973.

Argument for Adjustment of Parameters

As argued in Chapter 1, the incorporation of populations and an overall increase of population made it impossible for Local Elites figures to continue to cultivate power over people. The same can be true for LH III society. However, it cannot be oversimplified that population is the only factor that caused raiding and hunting to no longer be the methods of power.

The pervasive wealth in early LH also hurt the original system of power. If Local Elites could no longer exert restrictive control over prestige items, then there would have been less opportunity to create the indebted asymmetries that Voutsaki argues for. Further, the relative peace between palaces, with the incorporation of alliances between neighboring palaces such as Mycenae and Tiryns,⁹⁸ and the increased fortifications at palaces such as Mycenae, raiding would have become an increasingly obsolete method of obtaining wealth.

⁹⁸ Voutsaki 2010, 103.

Argument for Bifurcation

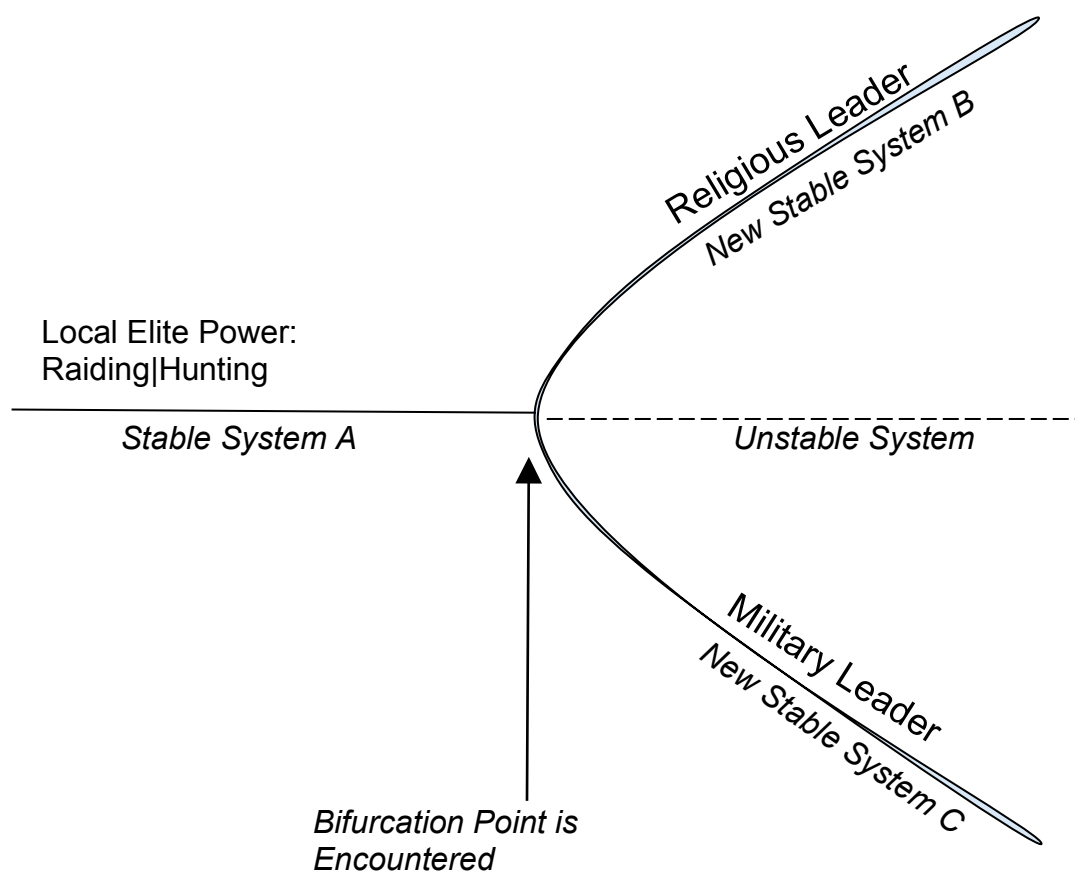


Figure 2.7. Bifurcation Diagram. Point Encountered at the end of the LH II period.

When a leader is no longer capable of outperforming competing rivals, then that leader must either adapt their methods of cultivating power, or their competitors will overtake them. While Local Elites of MH III - LH II were most likely not directly competing with religious leaders, the increased populations became more difficult to influence through hunting and the acquisition of prestige items. Therefore, the system of authority vested in raiding and hunting reached an impasse.

There are a myriad of systems that could have taken the place of Local Elites, but due to the circumstances directly before the bifurcation point is encountered, as indicated in my second of three diagrams (Fig 2.7), a religious leader took the seat of power. The system could have been different had the environment required another type of leader. For example, if the budding palaces were in violent competition with each other, then an administration more focused on military would have taken over. However, this was not the case. Instead, due to increased populations,⁹⁹ focus on religious items in burial,¹⁰⁰ and relative peace, a system and capable king emerge together to fill the role of institutionalized administration.

⁹⁹ Shelmerdine 2008, 289-309

¹⁰⁰ Dickinson 1994, 220-224

Concluding Thoughts | Systems and Enduring Change

Interpretation of Evidence

Society changed on the Greek Mainland between the MH III - LH II periods and the LH III period. These changes were highly visible in the formation of palatial communities around large populations with considerable wealth. The mechanisms behind these changes, however, were internal and complicated. Through the use of bifurcation thinking as an analogy and tool to better understand how a society changes, we are able to examine how an increase in wealth and consolidation of populations forced society to switch its paradigm leader. The parameters of each individual system influenced their respective environments to create micro level changes that influence the entire model on a macro level. For the purpose of my argument, I used feasting and funerary practices as the main mechanisms of society to create relational power, as both of these traditions remain relatively consistent, but adapt to fit the environment as the society changes by the aforementioned parameters.

Local Elites of early centuries were able to consolidate relational power through raiding and acquiring prestige goods to use in reciprocal debt relationships, and hunting and providing food for feasting to community members to further these reciprocal debts. However, as populations grew from the MH III - LH II periods and there were more livestock available and more pervasive wealth in the hands of community leaders, hunters and raiders were no longer able to perpetuate these debt relationships as successfully. It is possible that such men attempted to maintain power for centuries, but as society changed, the successful methods of obtaining power changed.

In LH III, religion became the elevated platform for the elite to become truly powerful. The *wanax* became the figure of authority and the king of the palatial system, vested in religious

and economic roles. Military prowess became of lesser importance, and while there is clearly a military and need for fortifications, there is no evidence that figures such as the *wanax* take part in military activity. However, the king did have extensive roles in feasting and religious rituals, an indication that the same overall mechanisms of creating authority work, but the methods of implementing these traditions has changed to fit the discrete period of time in LH III.

Argument for Adjustment of Parameters

One of the issues with systems thinking is the viewpoint that a macro level parameter change can permeate between system changes. At first glance, this seems to be the case with my argument that increasing populations was a parameter that greatly affected the power systems of both Local Elites and the *wanax*. However, upon closer inspection, the real change happens in discrete intervals, independent of one large parameter change.

In the MH III - LH II periods, changing population affected the system that the Local Elites used to cultivate authority. As proposed, the smaller settlements allowed these men to create reciprocal debt relationships that could then be leveraged or used for authority in a community. However, the growing population was a problem for Local Elites. This parameter was a cause of the instability in this system, and so the model had to shift to a new point of stability with the *wanax*.

However, the stability that comes with the *wanax* is also directly affected by the parameter of population, independent of the issues it created with Local Elites. In the case of the palatial king, increased populations and pervasive wealth allowed the *wanax* to cultivate authority, as a palatial organization can only function on organized labor and cooperation. Therefore, the *wanax* receives authority due to a larger population of people.

In both systems, population is an always-changing parameter, and in both systems the methods of relational power and authority are adapting. However, in both cases, the parameters function differently due to the circumstances at the time and the immediate environment of the period.

Argument for Bifurcation Thinking

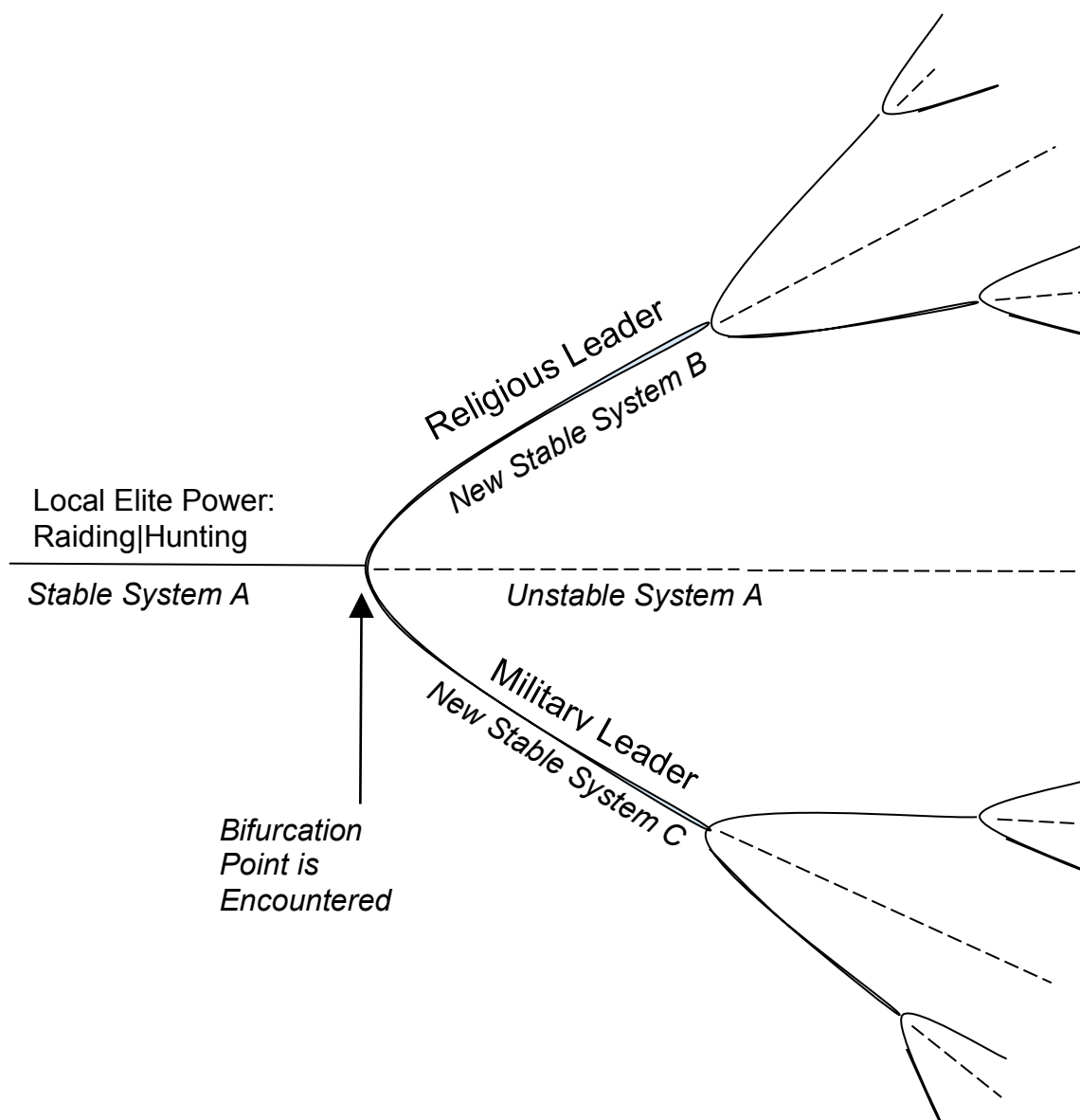


Figure 3.1. Bifurcation Diagram.

When using bifurcation thinking, there is no one size fits all model. In this type of system thinking, models work independently of each other, but piece together as a system moves and progresses over time. Parameters in a current model are not dependent on previous parameters, and systems can change independent of previous system circumstances. Ultimately, the only certainty in this type of model is that the system is changing and will continue to evolve, adapt, and shift. As indicated in my final diagram (Fig. 3.1), the system will continue to grow over time. Each path that the model jumps to is entirely dependent on the circumstances of its individual environment and specifically how the ever-shifting parameters interact with the immediate circumstances.

This type of thinking is valuable in understanding how a society changes, but it has its limitations. One could reverse engineer Greek society and model a bifurcation diagram from modern government figures to ancient Greece, but this is the limit to its uses in archaeology, as quantitative applications of bifurcation theory are currently too complex to apply to an historical model.

Why Bifurcation Thinking is Important

Thinking in terms of a more modern understanding of mathematical dynamical systems can prove to be a better analogy for understanding the dynamics of history, because it discourages us from believing that from a small piece of information we can extrapolate significant predictions from that. It limits our predictive power, because the emphasis is on the sensitive dependence upon initial conditions. However well we understand the state of a society at a given time from archaeological evidence, there will still be gaps in knowledge that could result in reality being significantly different from our model.

There is a belief in systems theory that based on parameters of a system you can make a macroscopic model of the system that will hold in the long-term.¹⁰¹ The problem with this is that according to modern mathematical research in complex systems, the phenomenon of chaos has shown that many systems cannot be described on the macroscopic level in the long-term. Whenever a system is dependent on many varying parameters, it is common for that system to be sensitive to initial conditions. Any errors in experimental data can result in the model producing embarrassingly inaccurate predictions. Therefore, when trying to describe something on the macroscopic level, it is best to describe the state of the system only for brief time intervals and then use qualitative methods of thinking to uncover the details of the behavior of the system in between these brief intervals where we make predictions of what the system looks like.

This is like having a snapshot of my model at discrete time intervals and then, using qualitative reasoning and logic, one can deduce the behavior of the system during those brief time frames. This kind of reasoning would discourage one from attempting to apply a model outside of its scope. Rather, you can use models for specific moments in time and other evidence is applied to provide possible explanations for what happened in between these areas of relative certainty.

Future Use of Bifurcation Thinking and Systems Theory in Archaeological Studies

Mathematics should only be applied to modeling history in a discrete manner. Mathematical reasoning can provide us models of the past at discrete moments in time that only hold for those brief moments. In the past, researchers have incorrectly attempted to model history in a continuous manner abstracted from the details of the system. As described above, this approach in any field of study can be misleading. Rather, mathematical thinking should only be

¹⁰¹ Further reading on Systems Thinking: Hodder 1991, 259-263.

applied so far as to process data from factual evidence and not to make inferences. Inferences, to fill in the gaps in the archaeological record, must be made from qualitative study of the specifics of a system.

Bibliography

- Aprile, Jamie D. 2013. The New Political Economy of Nichoria: Using Intrasite Distributional Data to Investigate Regional Institutions. *AJA* 117.3. p. 429-436.
- Bennet, John. 1995. Space Through Time: Diachronic Perspectives on the Spatial Organization of the Pylian State. *Laffineur, Robert and Wolf-Dietrich Niemeier, eds., Politeia: Society and State in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference / 5e Rencontre égéenne internationale, University of Heidelberg, Archäologisches Institut, 10-13 April 1994, Vol II., Aegaeum* 12. Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin, Program in Aegean Scripts and Prehistory. p. 587-602.
- Bennet, John, and Jack L. Davis. 1999. Making Mycenaean: Warfare, Territorial Expansion, and Representations of the other in the Pylian Kingdom. *Robert Laffineur, eds. POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP* 19. Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 105-120.
- Bennet, John. 2001. Agency and Bureaucracy: Thoughts on the Nature and Extent of Administration in Bronze Age Pylos. *Voutsaki, Sofia and John Killen, eds. Economy and Politics in the Mycenaean Palace States. Proceedings of a Conference held on 1-3 July 1999 in the Faculty of Classics, Cambridge. Cambridge: Cambridge Philological Society. Cambridge Philological Society Supplementary Volume 27. 0-906014-26-3 . p. 25-37 (References 239-254).*
- Betancourt, Philip P. 2007. *Introduction to Aegean Art*,. Philadelphia: INSTAP Academic Press. ISBN 978-1-931534-21-5.
- Bintliff, John. 2012. *The Complete Archaeology of Greece: From Hunter-Gatherers to the 20th Century AD*,. Chichester, West Sussex: Wiley-Blackwell. ISBN 978-1-4051-541-85 (print edition) and ISBN 978-1-1182-551-79 (online).
- Carlier, Pierre. 1984. *La Royauté en Grèce avant Alexandre*. Association pour l'étude de la civilisation romaine, Strasbourg.
- Carlier, Pierre. 1996. A propos des artisans wa-na-ka-te-ro. *Ernesto De Miro, Louis Godart, and Anna Sacconi, eds. Atti e memorie del secondo Congresso internazionale di micenologia, Roma-Napoli, 14-20 ottobre 1991. Volume 2: Storia. Incunabula Graeca* 98. Rome: Gruppo editoriale internazionale. p. 569-580.

- Caskey, Miriam. 1990. Thoughts on Early Bronze Age Hearths. *Hägg, Robin, and Gullög C. Nordquist, eds. Celebrations of Death and Divinity in the Bronze Age Argolid: Proceedings of the Sixth International Symposium at the Swedish Institute at Athens, 11-13 June, 1988.* ActaAth, 4°, 40, Stockholm. p. 13-21.
- Cavanagh, William, and Christopher Mee. 1998. *A Private Place: Death in Prehistoric Greece. SIMA 125.* Jonsered: Paul Åströms Förlag.
- Cavanagh, William and Christopher Mee. 1999. Building the Treasury of Atreus. *Betancourt, Philip P., Vassos Karageorghis, Robert Laffineur, and Wolf-Dietrich Niemeier. Eds. Meletemata: Studies in Aegean Archaeology Presented to Malcolm H. Wiener as He Enters His 65th Year. Vol. I.* Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin: Programs in Aegean Scripts and Prehistory. p. 93-102.
- Chadwick, John. 1976. *The Mycenaean World.* Cambridge: Cambridge University Press.
- Chadwick, John. 1988. The Women of Pylos. *MINOS Supp. 10.* p. 43-95.
- Cherry, John and Jack Davis. 2001. 'Under the Sceptre of Agamemnon': The View from the Hinterlands of Mycenae. *Branigan, Keith, ed. Urbanism in the Aegean Bronze Age.* . London and New York: Sheffield Academic Press. Sheffield Studies in Aegean Archaeology. 1-84127-341-4. p. 141-159.
- Choremis, Angelos C.M.E. 1969. Vomos is 'Iisakuli' Methonis (Middle Helladic Altar on Nissakouli-Methoni). *AAA 2:1.* p. 10-14.
- Cline, Eric, ed. 2010. *The Oxford Handbook of the Bronze Age Aegean.* Oxford: Oxford University Press.
- Cosmopoulos, Michael B. 2005. State Formation in Mycenaean Greece: Pylos and the Iklaina Archaeological Project. *Ancient Greece at the Turn of the Millennium: Recent Work and Future Perspectives. La Grèce antique au tournant du millénaire: Travaux récents et perspectives d'avenir. Actes du Symposium d'Athènes/Proceedings of the Athens Symposium. 18-20 mai/May 2001, Kennell, Nigel M., and Jonathan E. Tomlinson, eds.* Athens, Canadian Archaeological Institute at Athens/Institut Canadien d'Archéologie à Athènes, Publications of the Canadian Archaeological Institute at Athens 4, 0-9737979-0-8 . p. 45-68.
- Cosmopoulos, Michael B. 2006. The Political Landscape of Mycenaean States: A-pu2 and the Hither Province of Pylos. *AJA 110.2.* p. 205-228.

- Crouwel, Joost. 1999. Fighting on Land and Sea in Late Mycenaean Times. *Robert Laffineur, eds. POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP 19.* Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 455-463.
- Deger-Jalkotzy, Sigrid. 1999. Military Prowess and Social Status in Mycenaean Greece. *Robert Laffineur, eds. POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP 19.* Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 121-131.
- Dickinson, Oliver. 1994. *The Aegean Bronze Age.* Cambridge: Cambridge University Press.
- Dickinson, Oliver. 1999. Robert Drews's Theories about the Nature of Warfare in the Late Bronze Age. *Robert Laffineur, eds. POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP 19.* Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 21-29.
- Dickinson, Oliver. 2006. *The Aegean from Bronze Age to Iron Age: Continuity and Change Between the Twelfth and Eighth Centuries BC.* London: Routledge.
- Duhoux, Yves and Anna Morpurgo Davies, eds. 2008. *A Companion to Linear B: Mycenaean Greek Texts and their World. Volume 1.* Louvain-la-Neuve: Peeters.
- Foias, Antonia E., Diane Z. Chase, and Arlen F. Chase. 2013. *Ancient Maya Political Dynamics.* Gainesville: University Press of Florida.
- Flannery, K.V. 1972. The Cultural Evolution of Civilizations. *Annual Review of Ecology and Systematics*, Vol. 3. Annual Reviews. pp. 399-426.
- French, Elizabeth. 2000. *Mycenae: Agamemnon's Capital.* Tempus: Stroud.
- French, Elizabeth. 2002. *Mycenae: Agamemnon's Capital. The Site in its Setting.* Gloucestershire: Tempus Publishing Ltd. 0-7524-1951-X.
- French, Elizabeth. 2010. Mycenae. *The Oxford Handbook of the Bronze Age Aegean (ca. 3000-1000 BC)*, Cline, Eric H., ed. Oxford: Oxford University Press. ISBN 978-0-19-536550-4. p. 671-679.

- Galaty, Michael L. and William A. Parkinson, eds. 2007. *Rethinking Mycenaean Palaces II*. Los Angeles: University of California Press.
- Godart, Louis. 1987. La Série Fh de Cnossos, vingt ans après. *Killen, John T., José L. Melena, and Jean-Pierre Olivier, eds. Studies in Mycenaean and Classical Greek Presented to John Chadwick. Minos 20-22*. Universidad de Salamanca, Salamanca. p. 201-210.
- Godart, Louis. 1999. Les sacrifices d'animaux dans les textes mycéniens. *Deger-Jalkotzy, Sigfrid, Stefan Hiller, and Oswald Panagl. Eds. Floreant Studia Mycenaea. Akten sed X. Internationalen Mykenologischen Colloquiums in Salzburg vom 1.-5. Mai 1995. Band II*. Wien: Verlag der Österreichischen Akademie der Wissenschaften. p. 249-256.
- Hägg, Robin. 1997. Did the Middle Helladic People Have Any Religion? *Kernos 10*. p. 13-18.
- Halstead, Paul. 1992-1993. The Mycenaean palatial economy: Making the most of the gaps in the evidence. *PCPS 38*. p. 57-86.
- Hayden, Brian. 2001. "Fabulous feasts: A prolegomenon to the importance of feasting." In M. Dietler and B. Hayden (eds.), *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*. Smithsonian Institution Press: Washington, DC. pp. 23-64.
- Hodder, Ian. 1991. *Reading the past: Current approaches to interpretation in archaeology*, 2nd ed., Cambridge: Cambridge University Press. ISBN 0-521-32743-1 (hardback) and ISBN 0-521-33960-X (paperback).
- Iakovidis, Spyros E. 1999. Late Helladic Fortifications. *Robert Laffineur, eds. POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP 19*. Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 199-204.
- Killen, John T. 1985. The Linear B Tablets and the Mycenaean Economy. *Morpurgo Davies, Anna, and Yves Duhoux, eds., Linear B: A 1984 Survey. Mycenaean Colloquium of the VIII Congress of the International Federation of the Societies of Classical Studies. Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain 26*. Cabay, Louvain-la-Neuve. p. 241-305.
- Killen, J.T. 1994. Thebes Sealings, Knossos Tablets, and Mycenaean State Banquets. *BICS 39*. p. 67-84.
- Killen, J. T. 2008. Mycenaean economy. A Companion to Linear B: Mycenaean Greek Texts and their World, Duhoux, Yves and Anna Morpurgo Davies, eds. Volume 1, Bibliothèque des cahiers de l'Institut de Linguistique de Louvain 120, Leuven: Peeters. ISBN 978-90-429-1848-1 (Peeters Leuven) and ISBN 978-2-87723-955-4 (Peeters France). p. 159-200.

- Lang, Mabel L. 1990. The oka Tablets again. *Kadmos* 29. p. 113-125.
- Lindgren, Margareta. 1973. The People of Pylos. Prosopographical and Methodological Studies in the Pylos Archives. *Acta Universitatis Upsaliensis. Boreas, Uppsala Studies in Ancient Mediterranean and Near Eastern Civilizations* 3:1-2. Uppsala.
- Lupack, Susan. 2007. Palaces, Sanctuaries, and Workshops: The Role of the Religious Sector in Mycenaean Economics. Rethinking Mycenaean Palaces II, Galaty, Michael L. and William A. Parkinson, eds. Revised and expanded second ed, Cotsen Institute of Archaeology at UCLA Monograph 60, Los Angeles: University of California. ISBN 978-1-931745-42-0 (paperback) and ISBN 978-1-931745-43-7 (cloth). p. 54-65. (Bibliography, pp. 201-244).
- Lupack, Susan. 2010. Mycenaean Religion. *The Oxford Handbook of the Bronze Age Aegean (ca. 3000-1000 BC)*, Cline, Eric H., ed. Oxford: Oxford University Press. ISBN 978-0-19-536550-4. p. 263-276.
- Lupack, Susan. 2011. A View from Outside the Palace: The Sanctuary and the Damos in Mycenaean Economy and Society. *AJA* 115.2. p. 207-217.
- Lupack, Susan. 2014. Offerings for the Wanax in the Fr Tablets: Ancestor Worship and the Maintenance of Power in Mycenaean Greece. *KE-RA-ME-JA: Studies Presented to Cynthia W. Shelmerdine, Nakassis, Dimitri, Joann Gulizio, and Sarah A. James*, eds. Philadelphia: INSTAP Academic Press. ISBN 978-1-931534-76-5. p. 163-177.
- Maran, Joseph and Eftychia Stavrianopoulou. 2007. Πόρτιος Ἀνὴρ - Reflections on the Ideology of Mycenaean Kingship. *Keimelion: Elitenbildung und Elitärer Konsum von der Mykenischen Palastzeit bis zur Homerischen Epoche. The Formation of Elites and Elitist Lifestyles from Mycenaean Palatial Times to the Homeric Period. Akten des internationalen Kongresses vom 3. bis 5. Februar 2005 in Salzburg*, Alram-Stern, Eva and Georg Nightingale, eds. Veröffentlichungen der Mykenischen Kommission ed, 27, Österreichische Akademie der Wissenschaften Philosophisch-Historische Klasse Denkschriften 350, Wien: Verlag der Österreichischen Akademie der Wissenschaften. ISBN 978-3-7001-3779-5. p. 285-298.
- Maran, Joseph. 2009. Mycenaean Citadels as Performative Space. *Constructing Power: Architecture, Ideology and Social Practice. Konstruktion der Macht: Architektur, Ideologie und soziales Handeln*, Maran, Joseph, Carsten Juwig, Hermann Schwengel, and Ulrich Thaler, eds. 2 ed, Geschichte Forschung und Wissenschaft 19, Münster: Lit Verlag. ISBN 978-3-8258-9314-9. p. 75-91.
- Maran, Joseph. 2010. Tiryns. *The Oxford Handbook of the Bronze Age Aegean (ca. 3000-1000 BC)*, Cline, Eric H., ed. Oxford: Oxford University Press. ISBN 978-0-19-536550-4. p. 722-734.

- McCallum, Lucinda Rasmussen. 1987. Decorative Program in the Mycenaean Palace of Pylos: The Megaron Frescoes. *Ph.D. Dissertation, Department of Art History, University of Pennsylvania*.
- McDonald, William A., and Nancy C. Wilkie, eds. 1992. Excavations at Nichoria in Southwest Greece. Volume II: The Bronze Age Occupation. The University of Minnesota Press, Minneapolis.
- Mee, Christopher, and Antony Spawforth. 2001. *Greece: An Oxford Archaeological Guide*. Oxford: Oxford University Press, 0-19-288058-6.
- Mee, Christopher. 2011. *Greek Archaeology: A Thematic Approach*,. Chichester, West Sussex: Wiley-Blackwell. ISBN 978-1-4051-6734-5 (hardcover) and ISBN 978-1-4051-6733-8 (paperback).
- Mylonas-Shear, Ione. 1987. *The Panagia Houses at Mycenae*. The University Museum, University of Pennsylvania, Philadelphia.
- Nakassis, Dimitri. 2010. Reevaluating Staple and Wealth Finance at Mycenaean Pylos. *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007, Pullen, Daniel J., ed.* Oxford and Oakville: Oxbow Books. ISBN 978-1-84217-392-3. p. 127-148.
- Nakassis, Dimitri, Michael L. Galaty, and William A. Parkinson. 2011. “Redistributive Economies from a Theoretical and Cross-Cultural Perspective.” *AJA* 115: 177-184.
- Nakassis, Dimitri. 2012. Prestige and Interest: Feasting and the King at Mycenaean Pylos. *Hesperia* 81.1. p. 1-30.
- Nakassis, Dimitri. 2013. *Individuals and Society in Mycenaean Pylos*. Leiden: Brill.
- Palaima, Thomas G. 1995. The Nature of the Mycenaean Wanax: Non-Indo-European Origins and Priestly Functions. Rehak, Paul, ed., *The Role of the Ruler in the Prehistoric Aegean*. *Aegaeum* 11. Histoire de l'art et archéologie de la Grèce antique. Université de Liège and Program in Aegean Scripts and Prehistory, University of Texas at Austin. p. 119-142.
- Palaima, Thomas G. 1999. Mycenaean Militarism from a Textual Perspective: Onomastics in Context. lawos, damos, klewos. Robert Laffineur, eds. *POLEMOS: Le contexte guerrier en Égée à l'âge du Bronze. Actes de la 7e Rencontre égéenne internationale Université de Liège, 14-17 avril 1998. Aegaeum: Annales d'archéologie égéenne de l'Université de Liège et UT-PASP* 19. Liège: Histoire de l'art et archéologie de la Grèce antique; Austin, Program in Aegean Scripts and Prehistory. p. 367-379.
- Palaima, Thomas G. 2004. Sacrificial Feasting in the Linear B Documents. The Mycenaean Feast. Wright, James C., ed. Princeton, New Jersey, The American School of Classical Studies at Athens, Cullen, Tracey, ed. *Hesperia* 73.2. ISBN 0-87661-951-0. p. 97-126.

- Palaima, Thomas G. 2006. Wanaks and related power terms in Mycenaean and later Greek. *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*, Deger-Jalkotzy, Sigrid and Irene S. Lemos, eds. *Edinburgh Leventis Studies* 3, Edinburgh: Edinburgh University Press. ISBN 0-7486-1889-9 and ISBN 978-0-7486-1889-7. p. 53-71.
- Palaima, Thomas G. 2007. Mycenaean Society and Kingship: Cui Bono? A Counter-Speculative View. *Epos: Reconsidering Greek Epic and Aegean Bronze Age Archaeology. Proceedings of the 11th International Aegean Conference / 11e Rencontre égéenne internationale*, Los Angeles, UCLA - The J. Paul Getty Villa, 20-23 April 2006, Morris, Sarah P. and Robert Laffineur, eds. *Aegaeum* 28, Liège and Austin. p. 129-140.
- Palaima, Thomas G. 2012. Security and insecurity as tools of power in Mycenaean palatial kingdoms. *Études mycéniennes 2010: Actes du XIIIe colloque international sur les textes égéens, Sèvres, Paris, Nanterre, 20-23 septembre 2010*, Carlier, Pierre, Charles de Lamberterie, Markus Egetmeyer, Nicole Guilleux, Françoise Rougemont, and Julien Zurbach, eds. *Biblioteca di "Pasiphae"*. *Collana di filologia e antichità egee* 10, Pisa and Roma: Fabrizio Serra editore. ISBN 978-88-6227-472-2 (paperback), ISBN 978-88-6227-473-9 (hardcover), and e-ISBN 978-88-6227-474-6. p. 345-356.
- Palmer, L.R. 1977. War and Society in a Mycenaean Kingdom. *Armées et fiscalité dans le monde antique. Colloques Nationaux de Centre National de la Recherche Scientifique, 936, Paris, October 14-16, 1976*. Éditions du Centre National de la Recherche Scientifique, Paris. p. 35-64.
- Pullen, Daniel J., ed. 2010. *Political Economies of the Aegean Bronze Age*. Oxford: Oxbow Books.
- Renfrew, Colin and John F. Cherry, eds. 1986. *Peer Polity Interaction and Socio-Political Change*. Cambridge: Cambridge University Press.
- Renfrew, Colin. 2011. *The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium BC.*. Oxford and Oakville: Oxbow Books. ISBN 978-0-9774094-7-1 (hardback) and ISBN 978-0-9774094-6-4 (paperback). (With a foreword by John Cherry, pp. xxi-xxvi).
- Renfrew, Colin; Paul Bahn. 2013. *Archaeology: The Key Concepts*. Abingdon, Oxon: Routledge.
- Schloen, J. David. 2001. *The House of the Father as Fact and Symbol: Patrimonialism in Ugarit and the Ancient Near East*. Winona Lake, IN: Eisenbrauns.
- Schon, Robert. 2011. By Appointment to His Majesty the Wanax: Value-Added Goods and Redistribution in Mycenaean Palatial Economies. *AJA* 115.2. p. 219-227.

- Shanks, Michael and Christopher Tilley. 1987. *Constructing Archaeology*. Cambridge University Press, Cambridge.
- Shelmerdine, Cynthia, ed. 2006. *The Cambridge Companion to the Aegean Bronze Age*. Cambridge: Cambridge University Press.
- Shelmerdine, Cynthia W. 2008. Host and Guest at a Mycenaean Feast. Dais: The Aegean Feast. Proceedings of the 12th International Aegean Conference / 12e Rencontre égéenne internationale, University of Melbourne, Centre for Classics and Archaeology, 25-29 March 2008, Hitchcock, Louise A., Robert Laffineur, and Janice Crowley, eds. *Aegaeum* 29, Liège and Austin: Université de Liège, Histoire de l'art et archéologie de la Grèce antique and University of Texas at Austin, Program in Aegean Scripts and Prehistory. . p. 401-410
- Shelmerdine, Cynthia W. 2008. Mycenaean society. A Companion to Linear B: Mycenaean Greek Texts and their World, Duhoux, Yves and Anna Morpurgo Davies, eds. Volume 1, Bibliothèque des cahiers de l'Institut de Linguistique de Louvain 120, Leuven: Peeters. ISBN 978-90-429-1848-1 (Peeters Leuven) and ISBN 978-2-87723-955-4 (Peeters France). p. 115-158.
- Shelmerdine, Cynthia W. and John Bennet. 2008. Economy and Administration. *The Cambridge Companion to the Aegean Bronze Age* Shelmerdine, Cynthia W., ed. Cambridge: Cambridge University Press. ISBN 978-0-521-81444-7 (hardback) and ISBN 978-0-521-89127-1 (paperback). p. 289-309. (With Plates 12.1-12.3).
- Shelmerdine, Cynthia W. 2011. The Individual and the State in Mycenaean Greece. *BICS* 54.1. p. 19-28
- Shelmerdine, Cynthia W. 2012. Iklaina tablet IK X 1. *Études mycéniennes 2010: Actes du XIIIe colloque international sur les textes égéens, Sèvres, Paris, Nanterre, 20-23 septembre 2010, Carlier, Pierre, Charles de Lamberterie, Markus Egetmeyer, Nicole Guilleux, Françoise Rougemont, and Julien Zurbach, eds. Biblioteca di "Pasiphae". Collana di filologia e antichità egea 10, Pisa and Roma: Fabrizio Serra editore. ISBN 978-88-6227-472-2 (paperback), ISBN 978-88-6227-473-9 (hardcover), and e-ISBN 978-88-6227-474-6. p. 75-77.*
- Shelton, Kim. 2010. Late Bronze Age: Mainland Greece. *The Oxford Handbook of the Bronze Age Aegean (ca. 3000-1000 BC)*, Cline, Eric H., ed. Oxford: Oxford University Press. ISBN 978-0-19-536550-4. p. 139-148.
- Sjöberg, Birgitta. 2004. Asine and the Argolid in the Late Helladic III Period: A socio-economic study. BAR-IS 1225. Oxford: Archaeopress.
- Strogatz, Steven H. 2014. *Nonlinear Dynamics and Chaos: With Applications to Physics,*

- Biology, Chemistry, and Engineering (Studies in Nonlinearity). Boulder: Westview Press.
- Taylour, W.D. 1981. *The Excavations: Well Built Mycenae. The Helleno-British Excavations within the Citadel at Mycenae, 1959-1969. Fascicle 1*, Taylour, W.D., E.B. French and K.A. Wardle, eds. Aris & Phillips, Warminster.
- Voutsaki, Sofia. 1997. The Creation of Value and Prestige in the Aegean Late Bronze Age. *Journal of European Archaeology* 5.2 p. 34-52.
- Voutsaki, Sofia, and John T. Killen, eds. 2001. *Economy and Politics in the Mycenaean Palace States*. Cambridge: Cambridge Philological Society.
- Voutsaki, Sofia. 2001. Economic Control, Power and Prestige in the Mycenaean World: The Archaeological Evidence . *Voutsaki, Sofia and John Killen, eds. Economy and Politics in the Mycenaean Palace States. Proceedings of a Conference held on 1-3 July 1999 in the Faculty of Classics, Cambridge*. Cambridge: Cambridge Philological Society. Cambridge Philological Society Supplementary Volume 27. 0-906014-26-3 . p. 195-213 (References 239-254).
- Voutsaki, Sofia and John Killen. 2001. Introduction. *Voutsaki, Sofia and John Killen, eds. Economy and Politics in the Mycenaean Palace States. Proceedings of a Conference held on 1-3 July 1999 in the Faculty of Classics, Cambridge*. Cambridge: Cambridge Philological Society. Cambridge Philological Society Supplementary Volume 27. 0-906014-26-3 . p. 1-14.
- Voutsaki, Sofia. 2010. Argolid. *The Oxford Handbook of the Bronze Age Aegean (ca. 3000-1000 BC)*, Cline, Eric H., ed. Oxford: Oxford University Press. ISBN 978-0-19-536550-4. p. 599-613.
- Weber, M. 1946. *From Max Weber: Essays in Sociology*. Oxford: Oxford University Press.
- Weber, M. 1978. *Economy and Society: An Outline of Interpretive Sociology*. Berkeley: University of California Press.
- Whittaker, Hélène. 2001. Reflections on the Socio-Political Function of Mycenaean Religion. *Laffineur, Robert and Robin Hägg, eds. Potnia: Deities and Religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference / 8e Rencontre égéenne internationale. Göteborg, Göteborg University, 12-15 April 2000*. Liège: Université de Liège. *Aegaeum* 22. p. 355-360.
- Wright, James C. 1994. *The Spatial Configuration of Belief: The Archaeology of Mycenaean*

- Religion. *Susan E. Alcock and Robin Osborne, eds., Placing the Gods. Sanctuaries and Sacred Space in Ancient Greece.* Clarendon Press, Oxford. p. 37-78.
- Wright, James C. 2001. Factions and the origins of leadership and identity in Mycenaean society. *BICS* 45. p. 182.
- Wright, James C. 2004. The Mycenaean Feast: An Introduction. *The Mycenaean Feast.* Wright, James C., ed. Princeton, New Jersey, The American School of Classical Studies at Athens, Cullen, Tracey, ed. *Hesperia* 73.2. ISBN 0-87661-951-0. p. 1-12.
- Wright, James C. 2006. The formation of the Mycenaean palace. *Ancient Greece: From the Mycenaean Palaces to the Age of Homer,* Deger-Jalkotzy, Sigrid and Irene S. Lemos, eds. *Edinburgh Leventis Studies* 3, Edinburgh: Edinburgh University Press. ISBN 0-7486-1889-9 and ISBN 978-0-7486-1889-7. p. 7-52.
- Wright, James C. 2008. Early Mycenaean Greece. *The Cambridge Companion to the Aegean Bronze Age* Sheldermine, Cynthia W., ed. Cambridge: Cambridge University Press. ISBN 978-0-521-81444-7 (hardback) and ISBN 978-0-521-89127-1 (paperback). p. 230-257. (With Plates 10.1-10.2).