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A General Theory of Economic Flow, Social Exchange, and Hegemonic Relationship

Donn Robert Grenda
College of William & Mary - Arts & Sciences

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A General Theory of Economic Flow, 
Social Exchange, and 
Hegemonic Relationships

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A Thesis
Presented to

The Faculty of the Department of Anthropology
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

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by
Donn R. Grenda
1992
This thesis is submitted in partial fulfillment of
the requirements for the degree of

Master of Arts

Author

Approved, April 1992

Norman Barka

Theodore Reinhart

Mary Voigt
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To my wife Janet, thanks for your support, understanding, and everlasting love. To my parents, thanks for everything; I hope you understand. Finally, to everyone that I have forgotten, please believe that eventually I will remember and return your kindness.
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The purpose of this thesis is to develop a general theory of economic flow, social exchange, and hegemonic relationships. The model is useful in four main areas: First, it exposes economic and social relationships as they occur in power-free systems, which allows one to examine the degree of hegemony in the system under investigation; second, it provides a means of classification for economic systems; third, the theory provides the tools to develop a scheme of relative prices for a given economic situation; finally, it provides the means to identify historical discontinuities in economic systems. The model's usefulness in these areas of inquiry allows one to describe the dynamics of an economic system.

The theory combines aspects of the substantivists, formalists, and Marxist schools of thought. Demonstrations that this model applies across both time and space, and in both market and non-market economies are provided. Formal economic models of indifference analysis, consumer optimization, and theories of the firm provide for an examination of the rational behavior and motivations of merchants and individuals. Analyzing risk-return relationships and the effects of ceiling prices provides a more in-depth look at the rational behavior of economic actors. Hegemonic and dynamic relationships are also considered after the construction of the ideal model.

The emergence of the Netherlands as the dominant capitalist state in the seventeenth century provides an interesting test case for the model. The review of the historical background of the Netherlands, within the constraints of the model, sheds new light on the economic and political factors that led to the rise and fall of the state. The model is also briefly tested against Mesopotamian price data from the Ur III period.

The model demonstrates that economic analysis can be employed cross-culturally and that it is an extremely powerful aid in the understanding of dynamic social and economic systems.
A General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships
INTRODUCTION

In 1957 Karl Polanyi rocked the field of economic anthropology with his paper, "The Economy as Instituted Process." This paper was influential because it changed the view of many scholars and provided an opposing sphere of discourse in understanding economic activity in non-western, precapitalist contexts. The major premise of the substantivists was that, contrary to formalist economic theory, the economy in some societies is embedded in non-economic institutions (Godelier 1984:37). With the exception of Marxist anthropologists the field has remained split between the "formalists" and "substantivists" whose methods of analysis and theoretical approaches to precapitalist economics differ.

In this thesis, I develop a new approach to economic anthropology that provides the means for comparative analysis between economies and explains the motivations driving individual economic choice. The goal of this paper is to achieve a truly cross-
disciplinary approach to the field in which both economic and anthropological theory work together toward a single approach. The first chapter of the paper serves as a brief introduction to economic anthropology, and includes a discussion of the history, aims, and goals of the field. After a brief description of the field in general, it follows the development of economic theory from Thomas Hobbes (1651) to John Maynard Keynes (1936). This examination is followed by a discussion of the formalist movement in economic anthropology and the substantivist critique. Critical examination of each position rounds out the discussion. Other topics discussed include early thoughts on self-interest, Adam Smith's impacts on the field of political economy, utility theory, maximization, Karl Marx's impacts on the field, and the concept of rationality. Finally, the present state of the field, and recent trends, including the Marxist approach, are examined. The discussions in this section provide the groundwork for the main purpose of this paper, which is the development of a formal economic anthropological theory of exchange.

In the second chapter of the thesis, the major influences in the development of the Theory of Economic Flow, Social Exchange, and Hegemonic Relationships are
discussed. The model has its roots in neoclassical microeconomic theory and thus a brief discussion of relevant theories and topics is provided. This chapter also examines the substantivist models developed by Karl Polanyi (1957) and Marshall Sahlins (1965), and their influences on the model. These authors's ideas run counter to the thoughts of the formal economists and provide a necessary critique of formalist thinking. By questioning the formalist claim of universal applicability of economic models, the substantivists force a formalist response. Marxist anthropology is another force which, in recent years, has come to the foreground of economic anthropology. Adding the dimension of history, which brought about changes in the forms of production, and raising issues of class conflict, distribution of income, and exploitation, these views are also incorporated into the model. Finally, another important influence in the development of the model is world systems theory (Wallerstein 1974; Lenin 1916; Wolf 1982). The idea of viewing economic actors as parts in a larger world system fits well with the model developed in this thesis. The idea of economic activity crossing political and cultural boundaries is critical to the theory developed here.
In the third chapter, after defining some key terms, the model of Economic Flow, Social Exchange, and Hegemonic Relationships is developed. This theory explains the interdependence of social and economic relations, and provides the tools to identify and analyze the dynamics of economic systems. Hegemonic relationships between actors are also exposed by comparing predicted relationships to the actual situation. The theory combines aspects of substantivist, formalist, and Marxist schools of thought. Microeconomic models are employed and demonstrations show that this new approach applies across both time and space, and in both market and nonmarket economies.

In chapter IV, the model is tested against an historical example from the Netherlands. The emergence of the Netherlands as a dominant capitalist state in the seventeenth century provides an interesting test case for the model. By reviewing the historical background of the Netherlands, within the constraints of the model, new light is shed on the economic and political factors that led to the rise and fall of the state.
Chapter V takes a brief look at another possible application of the model. An examination of the conclusions reached by Daniel Snell (1982) concerning silver balanced accounts during the Ur III period in Mesopotamia provides some interesting questions. The hypothesis that price stability varies with the geographic distance between trading parties is quickly tested under the model’s constraints. The paper concludes by posing some possible questions for further research.
Economic anthropology, a major "sub-area" of anthropology, studies the social aspects of economics. The main goal of economic anthropology is to explain the economic activity of precapitalist, non-market economies. Market economies are studied, but to a lesser degree (LeClair and Schneider 1968; Polanyi 1957). To achieve this goal, the field must explain the economic system's ties with the connected social and cultural systems of the society (Schneider 1974). This explanation of the ties to the connected systems distinguishes economic anthropology from the field of economics.

Today, most scholars would agree on the statement that economic activity cannot be disembedded from other activities, since it is a social process. Any move beyond this statement, however, leads to debate. Most of the credit for the statement belongs to founder of
the field, Bronislaw Malinowski, whose work preceded Polanyi's by several decades. His discussion of the Kula ring among Trobriand Islanders (1922) was the first attempt to examine economic activity as a social process. As has been noted, the problem with his work was that he used outdated and incorrect economic theory. Raymond Firth (1964:209) claims that Malinowski was essentially a descriptive economist who concentrated on demand side factors, failed to discuss how values were arrived at and their relation to price, and ignored the concept of scarcity. Malinowski did, however, start the anthropological inquiry into the social aspects of economics.

A significant problem in anthropological inquiry has been that anthropologists have not adequately examined or comprehended how modern economic theory developed. This hurdle, however, must be crossed in order to advance the field of economic anthropology. In the field of economic anthropology one often encounters anthropologists who know some very elementary economics or economists who are vaguely familiar with anthropological theory. Frequently, this leads to the simple borrowing of data from the other discipline in order to apply it to one's own theories.
A Brief History of Economic Anthropological Thought

In order to fully comprehend the goals of the field of economic anthropology, it is necessary to examine the history of its development. Economics as a behavioral science has only been organized since 1776, when Adam Smith presented the public with his Wealth of Nations. Very few scholars prior to Smith presented the same type of elaborate analysis of economic systems. This, according to E. K. Hunt (1979), was because prior to Smith's time scholars were writing in an era of socioeconomic transition. Since Smith's time, economics has undergone a great deal of change. Economists such as Jeremy Bentham (1780), William Stanley Jevons (1871), Karl Marx (1867), and John Maynard Keynes (1936), have changed the way we analyze and attack economic problems.

One of the major problems Adam Smith (1776) addressed was the relationship between self-interest and public welfare. This problem had been troubling scholars for many years and it continues as a topic of discussion to the present day. Prior to Smith, views ranged from Hobbes's (1651) claim, that man is in a "brutish" state and that self-interest must be controlled by society, to Derham's (1713) view that
self-interest is a gift from God and that it serves the needs of man. A brief view of some of the main themes developed prior to Smith is necessary to provide a complete picture of the problems facing the present day economic anthropologist.

One of the earliest views of self-interest came from Thomas Hobbes's (1651) *Leviathan*. In this work, Hobbes describes self-interest as the most powerful drive in man. In the drive to fulfill these interests, the individual will stop at nothing and will eventually destroy society. Hobbes's answer to this problem is to form a state with absolute control over the individual. In order to contain the destructive drive of self-interest individuals must submit to an artificial being or "Leviathan" which holds the powers of all individuals. Hobbes maintains that life without control is "solitary, poore, nasty, brutish, and short" (1651:65).

There was widespread reaction to Hobbes's book; and according to Myers (1983), the methods used to criticize Hobbes fall into three categories. The first group of scholars (Shaftesbury 1711, Butler 1726, etc.) attacked Hobbes's claim using a psychological approach, proposing that self-interest is but one of many drives inherent in man and that a natural balance controls all
motives. The second group of scholars equated the drive of self-interest with the force of gravity. Drawing on Newton's new discoveries, scholars such as Francis Hutcheson (1727) and Soame Jenyns (1757) use the laws of physics as an analogy to strengthen their arguments. The final group contended that self-interest leads to a natural division of labor within society. This division leads to greater productivity and a better life for all individuals. While Adam Smith had the most memorable view of self-interest and the division of labor, other scholars [William Derham (1713), James Harris (1744), and Joseph Priestly (1768)] had already discussed ideas regarding specialization and how it would lead to a more complex social system.

Scholars prior to Adam Smith can be seen as reacting to Hobbes's negative view of self-interest in a philosophical sense. They were attempting to explain man's actions as products of nature or part of some grand design. According to Myers (1983:5), Smith was the first to use a "genuinely economic solution to the classic problem of self-interest and the public welfare." Earlier reactions to Hobbes's claims acted to lessen the negative social and religious views of
self-interest and prepared the road for Smith's economic theory.

Prior to Smith's analysis, the more developed or "core" (Wallerstein 1974) countries in Europe were operating under mercantilist economic policies. The view was that demand was constant or that markets were in an equilibrium and did not have the opportunity for growth. In a situation such as this, lower prices could only lead to lower profits (Mintz 1985). As a result, mercantilists advocated policies that involved state imposed tariffs on imports (in order to keep prices high), and the creation of trade monopolies. The primary goal of both the merchants and the state was the accumulation of gold and silver (Galbraith 1987:39). Smith's analysis was a reaction to these mercantilist ideas. For Smith, the answer lay in the division of labor and free trade.

Adam Smith

While many economic theories were developed prior to Adam Smith's *Wealth of Nations*, published in 1776, none of these had the same impact on economic thought. "He clearly saw that there were important interconnections between the major social classes, the
various sectors of production, the distributions of wealth and income, commerce, the circulation of money, the processes of price formation, and the process of economic growth" (Hunt 1979:34). Smith's most important theory, for the purposes of this paper, was his labor theory of value which, although never fully developed, laid the foundation on which future scholars could build.

Smith based his theory on the belief that all production could be viewed as a series of human activities. His theory claims that in order for a commodity to have value, it must be the product of human labor. The theory continues by stating that the value of the commodity is determined by the amount of labor used to produce it. Smith believed his theory held true in precapitalist economies where there were no landlords or capitalists; however, in capitalist economies, Smith added profits and rents to labor to determine "natural" prices. Natural prices are the prices which are just sufficient to supply the capitalist, the landlord, and the laborer with the social average rates (historically determined) of profits, rent, and wages. Smith's theory of price can be thought of as a summation of these three components (profits, rents, and wages) and has been described as a
cost of production theory (Dobb 1973). While Smith claimed that everyday market prices are determined by the forces of supply and demand he maintained that they will tend toward an equilibrium around the natural price. While this theory has many flaws, it provided a basis on which subsequent theorists could build more sophisticated theories of value.

While Smith's theory was widely accepted and improved upon, it did spark a reactionary movement. Economists after Smith either attacked his theory or defended it by adding new ideas or concepts. We shall first follow the reactionary movement through its course and then examine the defenders of Smith's theory. The criticisms of Smith's theory originated with David Ricardo (1817) and reached a peak with Karl Marx (1867).

Ricardo's Reaction to Smith

David Ricardo (1772-1823) was writing in times when wealthy landlords controlled most of the land and did not appear to be adding anything to the production process. Agriculture was seen as the most important industry in the economy, and it was here (the margin of agriculture) that profit rates were determined for all
other industries. His main interest was on the distribution of income among the different classes in society. He discussed how if the distribution of income changes then the size of the national product changes also, since measurements of value are relative to the level of an individual's income. In an attempt to solve the problem of value, he tried to find an measure which was invariant to distribution. Unfortunately, this invariant measure of value would not be discovered until more than a century after his death (Sraffa 1960).

Ricardo started the reaction against Smith by focusing on the distribution of income and class conflict. Ricardo viewed the margin of agriculture (where wages are the only cost) as the point where profits are determined. As the margin extends into less desirable land, the productivity of labor decreases, which leads to an increased investment in capital on the inframarginal land, thereby reducing profits. If labor costs drop for any reason, profits rise and capital accumulates. The higher profits reaped by the capitalist on the inframarginal land is seen by the landlord as cutting into his rent (Dobb 1973). Thus, landlords wish to keep prices high and profits low through tariffs and other import duties.
By focusing on profits and rents Ricardo emphasized the class conflict between capitalists and landlords.

Karl Marx

Following the Ricardian school of thought and drawing on Hegelian dialectics, Karl Marx (1867) formulated the most controversial and best known critique of capitalism. Marx focused primarily on labor and class conflict. Marx also stressed that the economy is always changing and that the idea of studying systems in equilibrium was obsolete. While Marx admitted that the capitalist system created enormous amounts of wealth, he simultaneously criticized it for its unequal distribution of power and income, its susceptibility to depression, and the problem of monopolies (Galbraith 1987).

Marx saw that the government was serving the needs of business and that this power led to an unequal distribution of income. Borrowing from Ricardo, Marx claimed that wages reflect the added contribution of labor at the margin. Adding his own terms to the analysis he claimed that this "surplus value" produced by the laborers was extracted by the capitalist. In order to achieve higher rates of surplus value the
capitalist could either lengthen the work day (an increase in absolute surplus value) or increase the productivity of labor (an increase in relative surplus value) (Dobb 1973).

Distinguishing between constant capital (machines and other nonhuman means of production) and variable capital (labor power), Marx explained the cyclical nature of capitalist systems and the reasons behind the tendency for profits and wages to fall. When labor becomes relatively expensive (due to technological advances) capitalists begin to invest in more constant capital in order to increase productivity, this raises the constant capital to variable capital ratio and drives down the rate of profit. During this time laborers are forced out of work and this excess labor forces wage rates down. When wages are relatively cheap compared to capital the capitalist shifts back to labor intensive production. This cycle, inherent in capitalism, then repeats itself.

Marx created a movement which went beyond economics and reformed whole societies. His works gathered many followers in economics and anthropology and the Marxists are particularly strong in economic anthropology today. It is clear that one cannot ignore his works, and they serve to critique the present
thesis. The modern Marxist critique is covered in detail below.

In Defense of Adam Smith

A major breakthrough in economic thought, relative to the present thesis, came from Jeremy Bentham's 1780 publication of An Introduction to the Principles of Morals and Legislation. In this publication he claims that all human motivation can be reduced to one principle: The desire to minimize pain and maximize pleasure. This is Bentham's "principle of utility." While it is true that scholars before him (see especially, Hobbes 1651), and others after him (see especially Senior 1836), had discussed utility, it is also true that Bentham gave it its distinctive, classical formulation. Bentham conceived of humans as calculating maximizers of utility. Following Smith, he claimed the root of motivation is self-interest, which is man's "predominant" interest. Bentham also believed that humans were essentially lazy and ought to avoid any kind of work or exertion. Although considerably different, these principles were constructed on the classical foundation laid earlier by Adam Smith.
Bentham believed that the capitalist system was compatible with a just distribution of income. However, near the end of his career, Bentham became an advocate of social, political, and economic reforms to create complete equality in the society. Subsequent disciples of Bentham (Thompson 1824, Mill 1848, and others) used utility theory to justify social reforms and even the abolition of free market capitalism. E. K. Hunt (1979:137) shows that "whenever Bentham's utilitarianism is used (whether by Bentham, Mill, or Thompson) to justify reforms, restrictions, or abolition of free market capitalism, irreconcilable contradictions are involved.

Another important advance in utility theory came during the 1870s. It was during this decade that William Jevons (1871) and Carl Menger (1871) independently formulated the utility theory of value under which present day neoclassical economics operates. This advance was the formulation of the principle of diminishing marginal utility. This principle states that although total utility may continue to increase with an increasing quantity consumed, the final "degree of utility . . . ultimately decreases as that quantity increases" (Jevons 1970:11). The principle of marginalism allows the view
of humans as "rational, calculating, maximizers" to be put into mathematical terms (Hunt 1979:240). The development of marginalism also marked the transition from the field of political economy to economics (Breit and Ransom 1982:7). Menger (1871) formulated the theory of demand which states that the quantity demanded is inversely related to the price. Menger formulated this theory in the following way: If a consumer's marginal utility of saving money is higher than the marginal utility of consuming a good, the consumer will save; however as the price drops, the consumer finds that the marginal utility of consuming the good increases. This theory is graphically illustrated as a downward sloping demand curve.

The next major advance in neoclassical economics came in 1890, when Alfred Marshall published his *Principles of Economics*. Marshall made three important advances in utility theory relating to the firm. First, he discussed how managers of firms attempt to reduce production costs by substituting one factor of production for another. Second, he outlined the law of diminishing marginal returns. When a firm increases the quantity employed of one factor of production relative to the quantity employed of another factor, the amount of increase at the margin, beyond a certain
point, begins to diminish (Hunt 1979:277). Finally, Marshall demonstrated how both the supply side (cost of production) and the demand side (consumer utility) interact to determine relative prices (Breit and Ransom 1982:19). These advances provided a new theoretical approach to the problem of maximization and are still in use at the present time.

Until the 1930s three major ideological elements were at the heart of neoclassical economics. Hunt (1979) outlines these elements as follows:

(1) the marginal productivity theory of distribution, which pictured competitive capitalism as an ideal of distributive justice,
(2) the "invisible hand" argument, which pictured capitalism as an ideal of rationality and efficiency, and (3) the faith in the automatic, self-adjusting nature of the market, which demonstrated that the principal functions of government should be to enforce contracts and to defend the powers and privileges of private property (Ibid:374).
These macroeconomic (the branch of economics that deals with employment and prices) elements of neoclassical economics were used to defend laissez-faire capitalism. Belief in these elements led to non-interventionist government policies until the Great Depression of the 1930s. During the Depression, when unemployment rose to 25 percent and production decreased nearly 50 percent (Hacker 1970), many economists began to believe that neoclassical economics was in need of an overhaul.

John Maynard Keynes

In 1936, John Maynard Keynes published The General Theory of Employment, Interest and Money, a book that dealt a lethal blow to the classical economic beliefs in Say's law [the idea that supply creates its own demand and that the system necessarily stays at full employment of resources (Say 1863)], production, and employment (Galbraith 1987) and provided the tools necessary for the economic overhaul. Keynes attempted to attack only the third element of neoclassical macroeconomics outlined above, the automatic, self-adjusting nature of the market and leave the other two elements intact. Unfortunately, some inconsistencies
in his analysis led to an indirect attack on all three elements. Keynes did, however, leave the microeconomic branch of economics (that branch that deals with individual firms and consumers) intact.

Keynes claimed that the assumption on which Say's Law was constructed did not reflect the actual behavior of economic actors and that workers did not always spend all of their income (Chick 1983). Keynes identified three leakages from the circular flow (business-household-business) of money: savings, the purchase of imports, and taxes. In his analysis of these leakages Keynes departed from the doctrines of neoclassical theory. He claimed that if injections (investment, exports, and government spending) did not exactly match the leakages a surplus in the aggregate supply would lead to a cut in production, which in turn would lead to a lower employment level that would only push the system further into depression. Keynes recognized that the system would eventually reach equilibrium but at a lower level of income and output. Keynes thus advocated governmental policies to overcome the "boom and bust" patterns of unrestricted capitalism.
Keynes's proposal for solving this dilemma was essentially twofold. First, manipulation of the money supply could be used to affect interest rates which would lead to a change in investment. He demonstrated that people have a demand for money or "liquidity preference" which was determined by (among other things) the speculative motive, that was directly related to the interest rate. If people expected the interest rate to increase in the future the demand for money would be high, but if the interest rate was expected to drop in the future people would buy bonds or other investments to lock in at the present rate, thus the demand for money would be low. By expanding or contracting the money supply (monetary policy) the central bank could affect the interest rate and the amount of savings and investment.

Keynes's second proposal was to allow for the government to borrow the excess saving and spend the money on projects which would serve as injections into the economy and help create full employment (fiscal policy). Many economists of the time believed that the massive increases in governmental spending during World War II contributed to the end of the Depression. Since that time the United States has operated primarily under Keynesian economic policies that have kept
recessions short and growth periods long, although inflation and unemployment still persist.

Economists after Keynes, such as Paul Samuelson (1947), Joan Robinson (1970), and Milton Friedman (1962) have considerably affected the approach to modern economic policies. Generally, however, the economic policy of the modern capitalist world has been one of "leaning against the wind." Compensatory countercyclical monetary and fiscal policies are employed to keep the boom and bust patterns, common to unrestricted capitalism, in check. While Keynesian economists of the 1960s based their policy recommendations on a model which implied that economic processes led to steady growth, modern economists incorporate business cycles into their policy recommendations and attempt to keep a moderate amount of growth in the system while managing unemployment and inflation rates (Minsky 1975).

This brief introduction to economic theory is meant to serve as a base to the development of economic anthropological thought. While the field of economics has, in the past, demonstrated vast differences it has recently been united under what is called neoclassical economics. While it is true that other theories exist, the neoclassical approach is clearly the most widely
accepted in economics. In contrast to economics, it will soon become evident that economic anthropological scholars are far from being united in their approach to the field. The major schools of thought, as I have indicated above, are the formalists, the substantivists, and the Marxists.

The Development of Formalist Thought

In the 1930s and 1940s, inquiries using "formal economic theory" began to appear from anthropologists such as Raymond Firth and Melville Herskovits. Firth (1939) and Herskovits (1940) applied formal economic theory to precapitalist economies. This new approach improved on the pseudo-economic approach previously used by Malinowski and others. LeClair and Schneider have defined this formal economic theory as:

a theory of rational choice built around a principle known as the "calculus of maximization." It assumes that people make choices among alternatives in a rational fashion, according to determinable principles; "rational" is defined by the theory (1968:6).
The particular choice an individual makes is the one which, in the individual's mind, will yield the maximum utility (gratification, satisfaction, or pleasure). The theory is based on the notion that human behavior is oriented toward the maximization of some desired end. The individual may choose to increase his social status, political status, or any other area, rather than his economic status, depending on which he feels will provide him with the most overall satisfaction. For example, if an individual chooses to receive a lesser amount of money for a good in order to appear generous (and possibly favorably influence the community's opinion of the individual), it is still an economic decision since he is maximizing something (social status in this case). Utility in this sense serves as a common denominator to be used in comparing heterogeneous materials. In the modern world, money (expressed in units of price) often serves as the common comparative devise but, according to Kula (1976:176), in order to use prices in this capacity certain conditions must be met. First, generally uniform market prices formed through free competition must exist and second, all factors of production and goods must have a market price.
Maximization is a fundamental concept in economics and is employed in both the theory of utility discussed above and the model developed here. Ferguson and Gould (1975) explain the assumptions economists make in the following statement.

Economists frequently assume that consumers attempt to maximize satisfaction and businessmen or entrepreneurs attempt to maximize profit. So defined, the goals of economic agents provide the economist with a frame of reference that permits systematic analysis of individual economic behavior (Ferguson and Gould 1975:2).

Robbins Burling (1962:181) adds that "people do not always try to maximize money, or basic biological satisfactions, or power, though all of these certainly do enter into our decisions, and, in a general way, the more we have, the happier we expect to be." Other fundamental, formal economic concepts such as "surplus" and "scarcity" are also applied to market and non-market economies.

Formalists assume that every society must face the following fundamental economic challenge. How can limited resources be most efficiently used to satisfy
unlimited wants? This is the economic problem of scarcity. They argue, if all resources are unlimited, no economic problem exists. Since all resources are scarce (with the possible exceptions of air, sunlight, and land in some cases), people must choose between scarce means and apply them to a multitude of ends. Scarce resources can be increased, if at all only through effort or sacrifice. Formalists assume that people have always been required to choose between scarce resources.

In order to model people's behavior, economists assume that people act "rationally" and choose the means which maximizes their satisfaction. This is the concept of "economic man" which the critics invariably attack in their critiques of formalist theory. George Stigler explains the assumption as follows:

The concept of an "economic man" does not imply (as almost all of its critics state) that the individual seeks to maximize money or wealth, that the human soul is a complex cash register. It does not affect the formal theory ... in the least whether the individual maximizes wealth, religious piety, the annihilation of crooners or his waistline (Stigler 1946:63-64).
In other words, formalists simply believe that economic theory covers more than just material goods, as the substantivists believe. This belief is one of two fundamental points on which the schools of thought disagree.

The other point of disagreement between these schools of thought is the basic definition of "economic." The substantivists focus on the definition of economic as follows: The provisioning of material goods as it serves to maintain the trading parties and thereby the society itself (this definition will be fully discussed later). Formalists claim that economic refers to "economizing" or, the allocation of scarce means to alternative ends.

The Substantivist Revolution

In contrast to the formalist approach, the substantivists focus on "relationships between people and on the different types of exchange mechanisms such as reciprocity, redistribution, and market systems" (Hodder 1982:199-200). This focus on people and how they relate places the material dimension of the transaction in a secondary position. The actors in a precapitalist economy are not motivated by profit or
material wants but rather respond to social motivations (Valensi 1981). These views were developed by Karl Polanyi in *The Great Transformation* (1944), "Our Obsolete Market Mentality" (1947), and *Trade and Market in the Early Empires* (Polanyi, Arensberg, and Pearson 1957), as a result of which Polanyi gained many followers who have since expanded his theory (Dalton 1961; Geertz 1963; Sahlins 1965; Kaplan 1968; Wheatley 1975; Halperin 1977, 1988).

In order to fully comprehend the Substantivist Revolution, the concept of "formal" must be explained. The concept of formal economic rationality originated with Max Weber (1947) who defined the concept in reference to a culture's ability to quantitatively account for its activities. Since any economy could be formally rational this concept could be applied cross culturally. In 1957, Polanyi defined formal economies in a new way that essentially equated formal economics with microeconomic theory and, as a result, made the formal definition applicable only to capitalist economies (Halperin 1985). Polanyi claimed that a new set of economic principles must be developed in order to analyze nonmarket economies. Finally, the concept of formal has recently been employed in discussions of model building. In this sense "formal" falls back on
Weber's (1949) concept of the ideal type. The recent use of this definition of formal, according to Halperin (1985), can be traced to Plattner's (1975a) edited volume, *Formal Methods in Economic Anthropology*. In this book, Plattner, rather than treating decision-making units as universals, treats them as ideals.

Substantivists claim that formal economic theory is only applicable to economies that operate on the market principle. Substantive economics refers to the fact that everyone in all situations needs sustenance, and in order to procure their needs individuals and groups employ resources, labor, and technology. In addition, humans almost always trade with other humans; thus, substantivists claim that this definition has universal applications (Dalton and Kocke 1983). Substantivists also argue that the economic system functions to maintain the social system. They believe that prior to the development of the market, primitive society acted to minimize conflict. Any economy in which profit serves as a motivating force represents a break of the economy from support of the social system.

According to Polanyi (1944), the economy is "embedded" in the social system. By this he means that the economy acts in conjunction with other forces to maintain the system as a whole and that the economy is
an aspect of the social system rather than a segment of society (Gudeman 1986). Polanyi (1944) illustrates his theory by pointing to modern capitalism. He believes that market exchange and self-interest breeds conflict, a conflict that is dysfunctional to maintaining the system. For example, Polanyi argues that uncontrolled market exchange throughout the nineteenth and early twentieth centuries ultimately led to a collapse of the system and subsequently to strict regulations and tight social controls (a movement toward re-embedding the economy into society).

In contrast, Polanyi believes that in precapitalist societies humans act on the economy in an essentially altruistic, nonaggressive, and noncompetitive mode. "Whatever self-interested elements seem to appear in the exchange, such as the use of and attempt to aggrandize money or other goods, is seen as a gloss on an essentially altruistic relationship" (Schneider 1974:3). Thus transactions, are thought to be weighted toward maintaining the social system rather than serving the individual's self-interest.

A major focus of substantivist economics is the mechanics of distribution. Polanyi (1957) defines three types of distribution or "forms of integration", 
reciprocity, redistribution, and exchange, that occur in different sectors of the economy. In his definition, "reciprocity denotes movements between correlative points of symmetrical groupings; redistribution designates appropriational movements toward a center and out of it again; exchange refers here to vice-versa movements taking place as between 'hands' under a market system" (Polanyi 1957:250). Reciprocity and redistribution are opposed to exchange since in a market system the purpose of the economy is profit (Valensi 1981). Even though Polanyi denies any evolutionary significance of these types, Marshall Sahlins (1965) expands on the concepts when he places the various types of exchange into an evolutionary scheme.

Sahlins places reciprocity in elementary societies and redistribution in chiefdoms and states. He discusses how friendship is related to the obligation to reciprocate in the exchange and constructs a continuum with generalized reciprocity at one end, balanced reciprocity at the center, and negative reciprocity at the other end (Sahlins 1965:152). Along this continuum, as friendship decreases, the social obligation to reciprocate increases. An altruistic relationship exists at generalized reciprocity and the
obligation to reciprocate is nonexistent. At balanced reciprocity the friendship is balanced by self-interest. At the other end of the continuum the material dimension of the exchange dominates and the involved parties are viewed as enemies. Essentially Sahlins claims that prior to capitalism people were friendly but as society evolved friendship was replaced by hostile relations.

On the whole, the substantivist's most important claim is that the economic system is embedded in social organization. They believe that the economic system separates from social organization with the institutionalization of the "self-regulating" market. George Dalton (1961) argues that substantivist economics has universal validity since it refers to the fact that individuals require sustenance which the social system must provide. Generally, the substantivists claim that individuals in a non-market economy are motivated by generosity and mutual cooperation, while individuals in a market economy are motivated by self-interest, which leads to conflict. Many criticisms can be leveled against these substantivist views. A few of these criticisms are now examined.
Criticisms of Substantivist Economics

While many criticisms can be leveled against substantivist economics, this paper focuses on three misunderstandings. First, reciprocity is compatible with the postulate of self-interest. Also, "the principle of generosity in a reciprocal economy can create conflict as well as contribute to solidarity, and can also be manipulated to secure an advantage over one's fellows" (Cook 1966:214). Second, Polanyi (1944) takes a romantic view of primitive economies and claims that the market economy "transformed" natural and human resources into commodities; Polanyi views this transformation as degrading to man. Finally, the distinction drawn between precapitalist and modern economies, based on the claim that precapitalist economies are embedded in social relations and modern economies are not, is incorrect.

Scott Cook (1966) addressed two of these factors in his critique of substantivist methods that marked the beginning of the famous formalist/substantivist debate of the late 1960s and early 1970s. He explains the first criticism as follows. "'Laying on obligations of reciprocity' (Sahlins 1962:1068) in a reciprocal economy is functionally equivalent to the selfish
seeking of gain or profit in a market economy" (Cook 1966:214). In other words, exchange in a reciprocity based economy can operate on the principle of self-interest, and it can also cause animosity, due to the reciprocity obligations. Following this argument, self-interest motivations, clearly present in precapitalist economies, are merely masked behind altruistic actions. As a result of this argument, formal economic theory cannot be dismissed on the basis that self-interest is not present in precapitalist economies.

Cook (1966) also examined the substantivist's romantic view of nonmarket economies. Polanyi's romantic view can be seen in statements such as the following. "Only since the market was permitted to grind the human fabric into the featureless uniformity of selenic erosion has man's institutional creativeness been in abeyance" (Polanyi 1947:115). Polanyi's "Great Transformation" occurred when man lost his dignity to the market system. If one accepts the criticism discussed above, it is clear that people were subservient to their self-interest motivations prior to the institutionalization of the market system. The assumption that people were more creative and imaginative in nonmarket economic systems is simply an unfounded belief in a perfect precapitalist world.
Essentially, this criticism attacks Polanyi's model on the basis that it is founded on the romantic assumptions of an ideal precapitalist world.

The third claim, that nonmarket economies are embedded in social relations while modern economies are not, is also subject to criticism. Basing their argument on this claim, substantivists contend that formal economic theory is only applicable to modern economies, where social relations play no role in economics. However, as Hodder (1982) points out, social relations do exist in modern economies. Offering easier terms to good customers, price discrimination, and discounts to repeat customers are common examples of social relations in the modern economic world. Given these examples, in order for the substantivist's argument to be consistent, it either must reject formalist theory in all economies or accept it in all economies. I examine the modern formalist approach to economic anthropology in light of this issue.
The Formalist Approach

The formalist approach to economic anthropology is based on the belief that formal economic theory is applicable to both non-market or "primitive" economies and market economies. All formal economic anthropological theories are based on the assumption that scarcity is a fact of life and that individuals make rational choices about how to use resources to their greatest advantage (Halperin 1985:346). Harold Schneider claims that three formalist approaches exist within this school of thought: social anthropology; materialistic economic anthropology; and social exchange. The unifying element among these groups is "the partial or total acceptance of the cross-cultural applicability of formal theory" (Schneider 1974:9). Each of these approaches are now examined in detail.

Formalist social anthropological thought is fairly close to substantivist thought in its approach. Social anthropologists actually avoid formal thinking as much as possible and concentrate on attempting to show that economic relations not only involve a material exchange but also involve prestige and social position. This school places economic behavior subordinate to social behavior and, in fact, maintains that social behavior
governs economic behavior. Social anthropologists (Nash 1961; Leach 1961; Firth 1964) also believe that economic behavior is immoral and disruptive of social behavior. The social anthropological school of thought falls into the formalist category because of its belief that some formal economic theory is cross-culturally applicable. The school also assumes that systems maintain themselves in equilibrium. While this school is similar to the substantivist school in many ways, it also displays some distinct characteristics which force it to be classified under the formalist heading.

The next group that falls under the formalist heading is the materialists. This group of scholars (Goodfellow 1939; Cook 1966, 1970; Schneider 1970) admits that formal economic theory may apply to the nonmaterial realm, but focuses on economic analysis and applies most of its theories to material goods. Materialists believe that while formal economic theory was developed to analyze modern Western economies, it may be applied elsewhere by fitting them to each specific situation.

Robbins Burling (1962) speaks out against the materialist view by claiming that the economic anthropologist must do more than apply formal economic models to precapitalist economies. He claims that as
an anthropologist, one must get at the behavior of humans in particular situations, and not simply do what economists do in our society. "As long as we stumble along with the extraordinarily ethnocentric notion that somehow economics is primarily concerned with food production, or with material culture, or land tenure, or certain restricted types of labor, then we are missing any opportunity for fruitful communication with our economist colleagues" (Burling 1962:820).

The third group of formalists is the one that is attempting to develop a theory of social exchange. While the materialists admit that economic models may apply to nonmaterial goods, they fail to apply their theories to this area. The social exchange theorists are attempting to, among other things, model the exchange which appears on the surface to be altruistic. This is an attempt to formally model what Polanyi calls "reciprocity." This group attempts to analyze social behavior as exchange.

Social exchange theorists (Belshaw 1965; Barth 1966; Ekeh 1974) argue that interactions between persons may be formally modeled as an exchange of goods, material and non-material (Homans 1958). Peter Blau expresses his view of what social exchange consists of in this way:
An apparent "altruism" pervades social life; people are anxious to benefit one another and to reciprocate for the benefits they receive. But beneath this seeming selflessness an underlying "egotism" can be discovered; the tendency to help others is frequently motivated by the expectation that doing so will bring social rewards (Blau 1964:17).

The model developed in this paper, as the title suggests, subscribes to this point of view. This point will become evident as the model is developed. A discussion of some of the criticisms of formalist theory is now in order.

**Substantivist Views of Formal Economic Theory**

Substantivists attack formal economic theory in a number of ways. Three key criticisms are expressed best by Dalton (1961), Arensberg (1957), and Hodder (1982). These criticisms can be viewed as: The inapplicability of formal models to precapitalist systems; the problem of analyzing the economic system independent of other related systems and; problems of
practical application respectively. Each of these criticisms, as well as some others, are now discussed.

Economist, George Dalton (1961) claims that formal economic analysis was designed for, and is only applicable to, Western capitalist societies. He believes that economists have incorrectly concluded that models designed to analyze capitalist markets have universal applicability. Dalton argues that nonmarket economies have many aspects in common with modern capitalist economies but the conclusion that these aspects serve the same function is incorrect. Dalton discusses external trade, the division of labor, debt, the use of money, and other aspects as examples of areas in common between precapitalist and modern economies.

Another problem with formal economic models is that they assume that the economic system is independent of other social systems. Conrad Arensberg (1957) claims that economic problems arise out of man's institutions and their evolutions. If this claim is indeed true, then it would seem impossible to comprehend the economic system without reference to the other relevant systems (e.g. social system, political system). While isolating the economic system can serve to explain certain principles, a more accurate
reflection of society can only be generated by examining the system as a whole. This is clearly one of the major drawbacks of formal economic theory.

Many formalist models, applied archaeologically, employ abstract mathematical formulas to the data in order to predict the amount of material likely to be found on the site. Substantivists have criticized the formalists, claiming "there is little attempt made to explore the social contexts and political strategies that lie behind the observed 'facts' - the artifact distributions, trade centers, and so on" (Hodder 1982:202). Hodder's criticism is an attack on the narrow focus of most formal economic models. Substantivists also criticize the formalists' use of the "economic man" model. The problem with this model is that peasants and farmers do not actually think in the terms the model assumes and using this model in the field is an extremely difficult task (Ortiz 1983).

David Kaplan (1968) claims that the formalists have a serious problem when they attempt to apply their theories to reality. If formal economic theory does not accurately model reality then a serious question arises about its usefulness. Finally, two major questions seem to be at the center of most debates between the two schools: 1. Did "markets" exist in
primitive economies?; and 2. If so, were they equivalent to the markets of modern economies? These questions get at the fundamental differences that exist between the schools. The formalists claim that some form of a market existed in precapitalist economies and that it is subject to formal economic analysis. The substantivists, on the other hand, claim that the production and distribution processes of material goods in nonmarket economies are different from market exchange processes and, as a result, are not subject to formal economic analysis.

**Marxist Economic Anthropology**

Marxist economic anthropology is another approach to the field which, in recent years, has gained a great deal of acceptance. While Polanyi (1944), Sahlins (1972), Wolf (1966), and others have employed many of Marx's ideas, none of them have completely followed in his footsteps. The Marxist tradition came to economic anthropology through Maurice Godelier's (1966) writings and slowly gained acceptance through the 1970s. Marxist anthropology is "concerned with human economy as a whole and especially with its culmination in the present movement of world history, i.e., with the rise
of industrial capitalism as the dominant force of our age" (Hart 1983:106). Marxism is a theory of production and transformation of societies and as a result it confronts the problems of kinship, religious, and economic systems (Godelier 1984). Marxist theory is organized as a criticism of both the social conditions of capitalist societies and the neoclassical theory employed to examine and improve those conditions (Wolff and Resnick 1987). Marxist anthropology has, as a result, been employed in all its varieties (Prattis 1987) to analyze the historical processes of capitalist and precapitalist economies (Terray 1975; Clammer 1987; Godelier 1966, 1978; Frank 1969; Katz and Kemnitzer 1979; Kahn 1980).

The theory is organized around the concept of class. Individuals' incomes are obtained because they participate in class processes that generate income (Resnick and Wolff 1987). In the capitalist mode of production there is a class division between the working class (proletariat) and the capitalist class (bourgeoisie). Most individuals must sell their labor power to an employer in exchange for wages. This labor power produces value equal to the amount needed to reproduce that labor power plus a surplus value that is appropriated by the capitalist. Thus, wages and
profits are determined by the struggle between the workers and the capitalists (Giddens 1971). The capitalist is able to exploit surplus value (profit) because he or she maintains political power over the laborer (Plattner 1989c).

Overdetermination is another major concept on which Marxist theory is constructed. Overdetermination refutes the neoclassical premise that individual preferences, resource endowments, and technology determine supply and demand which, in turn, determines prices (Wolff and Resnick 1987). Marxist theory claims that every factor has both a cause and an effect and that complex linkages between these factors determine prices. Marxists stress that no one factor determines prices or income and that many nonclass processes interact with class processes to make those determinations. Following this argument, Marxists claim that economic systems do not tend toward a state of equilibrium and must be analyzed in a constant state of change.

Marxist economic anthropologists focus on a number of topics. One of the more popular topics in recent years has been "underdevelopment" or "dependency" theory. Although a number of variations of this theory exist (Lenin 1916; Frank 1969; Mao 1971; and
Wallerstein 1974), the main point is that the developed "core" areas of the capitalist world system exploit the dependent, underdeveloped, peripheral areas. This world system theory is discussed in detail later.

A Call for a New Economic Anthropology

Since 1957 the formalists and substantivists have remained split on the analysis of primitive or non-market economies. While the debate of the 1960s and 1970s has essentially passed, the field still maintains damaging divisions. Economic anthropology is clearly an "immature" field (Kuhn 1962) since a general consensus about the main issues, concepts, and conclusions does not yet exist. It appears that the time is right for a new school to emerge and combine the better aspects of both schools and the Marxist critique. In 1939, Raymond Firth had a vision of the requirements for the new school:

...what is required from primitive economics is the analysis of material from uncivilized communities in such a way that it will be directly comparable with the material of modern economics, matching assumption with assumption and so
allowing generalizations to be ultimately framed which will subsume the phenomena of both civilized and uncivilized, price and nonprice communities into a body of principles about human behavior which will be truly universal (Firth 1939:29).

Unfortunately, no theory has lived up to the expectations Firth had for the field. As recent as 1982, Timothy Earle stated the following:

No coherent body of theory exists to explain exchange and its linkage to broader sociocultural forms. However, a theoretical approach drawing from the formalist's notion of individual rationality and from the substantivist's notions of social context and systematic interaction seems both appropriate and feasible for an emerging field of prehistoric economics (Earle 1982:3).

The challenge for economic anthropology, according to Stuart Plattner (1989a:12) is to convert the formal economic models and concepts to "free them of hidden cultural bias." John Dowling (1980) describes the three axioms that link the modern thinking of the three schools of thought together: 1. The idea that people
have infinite wants; 2. There are economy-specific assumptions and models; and 3. The form of the market depends on regional characteristics. Dowling claims that while the substantivists have ignored the first assumption, the formalists have held that all models and assumptions are universal, and the net effect of this has been that the schools have argued past each other. The model constructed below is one answer to the challenges posed by the above scholars and an attempt to unite the three schools of thought into one coherent paradigm.

Summary and Conclusions of Chapter I

This chapter focused on the development of economic theory, the development of an opposition between the formalist and substantivist schools of economic thought, and the Marxist critique of economic theory. The field of economic anthropology became divided in its quest to construct models of precapitalist economic systems and their relations to the accompanying social systems. It is evident that a number of problems associated with a cross-disciplinary study caused this division. One of the major problems
has been determining the relevant economic theories and comprehending their complex developments over time.

Above I attempted to demonstrate that economic anthropology has remained split since 1957. The formalists, the substantivists, and the Marxists have all established a firm foothold in the field. In addition, it has been shown that these three schools have advantages and disadvantages in their approaches. On the whole, however, it appears that the formalist school has the most to offer to the field. It is clear that a total rejection of formal economic theory is justifiable only in ideological terms. While the anti-market mentality certainly has its place in certain types of societies, it is no longer a useful "generic" approach in the field of economic anthropology.

According to Hodges, one reason for the recent waning of substantivist thought could be that "the science of economics, with all its arithmetic calculations induces the arbiter to think twice about the woolier notions encapsulated in the substantivist treatises" (Hodges 1988:13-14). Hodges continues that many of the remaining substantivists have been persuaded to join with the Marxists (a school with which they share a great deal of thought). Marxist anthropology provides a number of important ideas and serves as a powerful
critique of theories. The field clearly needs a fresh paradigm which combines the better aspects of all three schools of thought.

In the next chapter, some of the major influences in the development of the General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships are examined. While the theory is firmly rooted in neoclassical microeconomics, it has been considerably influenced by some of the major substantivist and Marxist arguments. These influences are discussed below in chapter II.
CHAPTER II

THE DEVELOPMENT OF THE GENERAL THEORY

The General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships, although based primarily on formalist principles, was influenced significantly by the works of Karl Polanyi (1957), Marshall Sahlins (1965), and Immanuel Wallerstein (1974). In essence, these models are expanded and converted into a social exchange model firmly grounded in formal, neoclassical, microeconomic theory. The following discussion provides background information on these models and other concepts from which it originated.

Polanyi and Sahlins

The key point of Karl Polanyi's "The Economy as Instituted Process" is the "forms of integration" concept. Polanyi claims, reciprocity, redistribution,
and exchange, are the three types of interdependence that occur between the parts of an economy. These forms of integration serve as the point of departure for both Sahlins's article and the present thesis. While Sahlins places the forms into an evolutionary scheme, this paper incorporates them into less inclusive, more precise categories.

Polanyi claims that reciprocity occurs in the most simple societies and is motivated by obligations to kin. Polanyi adds that the kinship system must exist prior to the reciprocity and "a kinship system never arises as the result of mere reciprocating behavior on the personal level" (1957:251). This idea serves as the inspirational force behind the delayed and equal flow models constructed in this paper. The main difference between Polanyi's position and the present thesis is the motivating force driving the exchange. In Polanyi's scenario the individual is seen as acting in an altruistic manner and in the present thesis the individual is viewed as acting out of self-interest.

The next substantive type of economy that Polanyi discusses is the redistribution economy. In the present thesis, this type of exchange falls into the same analytical categories as an economy operating under reciprocity. While Polanyi focuses on
distribution to establish his types of economies, the present paper focuses on the social relations involved in the exchange and the degree to which pure profit acts as a motivating force. Redistribution, as an analytical type, has no direct parallel in this paper.

Polanyi's final type of economy is one where exchange facilitates the movement of goods. Polanyi lumps all forms of trade into this one universal type of economy. He, for example, fails to separate monopolistic exchange from competitive exchange. Even with this flaw in his argument, Polanyi creates a very powerful model which, when combined with some of the ideas of Marshall Sahlins (1965), serves as the point of departure for the present thesis. In this paper, the universal, formal type of economy is broken down into two, more specific analytical categories: general flow and exploitative flow.

Sahlins' (1965) paper, "On the Sociology of Primitive Exchange", expands on Polanyi's forms of integration by placing them in an evolutionary scheme. Sahlins places reciprocity in elementary societies, redistribution in chiefdoms, and exchange in states. However, more importantly, Sahlins constructs a formal typology of reciprocities. He superimposes the reciprocities onto a continuum ranging from generalized
reciprocity to negative reciprocity. The relationship, between friendship and the obligation to return gifts, along this continuum can be expressed such that as friendship decreases the obligation to reciprocate increases. "The distance between the poles of reciprocity is, among other things, social distance..." (Sahlins 1965:191).

In discussing the different forms of reciprocities developed by Sahlins, one must remember that the economic exchange is strictly material. At the generalized reciprocity end, material flow is unidirectional; nothing material is given in return. The social "spirit of exchange" at this point is "disinterested concern for the other party" (Sahlins 1965:193). Balanced reciprocity assumes that the material flow is equal and the social spirit is mutual concern between the parties. At the other end of the spectrum is negative reciprocity. This is the "unsociable extreme", where the attempt is to get something (material) for nothing. At this end the material flow can again be one-way. Sahlins claims that the type of reciprocity carried out depends on social relations or kinship ties.
Harold Schneider (1974:154) provides a good interpretation of Sahlins's evolutionary scheme. He claims that in a generalized exchange there is a norm that dictates that wealth must be shared without rationalistic, maximizing calculations by the exchanging individuals. In the balanced situation, the norms, which in the generalized situation ensure an even distribution of wealth, now ensure "peaceful and honorable" economic behavior. In negative reciprocity, these norms all but disappear.

There are several problems in Polanyi and Sahlins' analyses; however, the first major problem with the model is the fact that only material goods are considered in the exchange. One can clearly observe the problem with the model when a service is included as part of the exchange between two parties. If we employ Sahlins' model to comprehend a situation in which one person trades a good in return for a service, we quickly witness the limitations of the model. Even if the exchange is "economically" balanced, Sahlins would place the exchange in either the "generalized" or "negative" reciprocity category since the "material" exchange was unequal. This problem stems from the substantivist's definition of "economics" discussed in section I. Even if it is assumed that Sahlins includes
services in his model, it is clear that he overlooks social exchange. Sahlins' model cannot explain an exchange of friendship.

A second problem is that it is limited spatially and temporally. The model only applies to precapitalist, non-market economies. While it is recognized that Sahlins was not attempting to develop a model with space and time dimensions; it is also recognized that a good theory explains many situations. James Lett describes a good theory in the following way:

Good theory explains not just the special case (like catastrophism in geology), but all related cases. The function of theory is to decide whether any two cases are related. Ideally, good theory relates cases that previously were thought unrelated (Lett 1987:29).

An argument can be made that Sahlins' model covers the related cases in primitive economies and leaves modern economies to economists. However, the argument can also be made that the model deals strictly with the special case of nonmarket economies. Clearly, the theory provides many valuable insights into
precapitalist economies, but it still leaves many unanswered questions about the dynamics of those economies.

Third, one can fault Sahlins on his choice of the word "reciprocity." Reciprocity, by definition implies a "back and forth" movement. How can one use the term reciprocity when describing a one-way movement of material? Clearly, Sahlins' only correct usage of the term is "balanced reciprocity." While one could claim that this is a minor semantic point that need not be criticized, one could also claim that this adds to the confusion that Sahlins generates in his model.

Finally, critically reviewing Sahlins' (1960) early work, Clammer (1978) claims that Sahlins uses the argument that nonmarket economic behavior is completely different from capitalist economic behavior since it is mainly an aspect of kinship behavior. One of Clammer's main criticisms of this argument is that if classical economics is not applicable outside of capitalist areas then relations of production similar to those in the capitalist mode of production must not exist. Clammer (1978:6) claims that it is "but a small step from this position to the claims that, firstly, class relations are a characteristic only of capitalism - where capitalism does not exist neither do class relations
(even of a different kind), largely because of the subsidiary claim that in primitive societies differential access to wealth is not related to questions of rank, status and power; and, secondly, that relations of exploitation do not occur within the productive situations discovered in such societies."

Influential Microeconomic Theory

While many economic theories had a great deal of influence on the development of the general theory, the most influential microeconomic theory to the model is the principle of utility. Bentham (1780) claimed that all human motivation arose from self-interest and the desire to minimize pain and maximize pleasure. This concept was improved by William Jevons (1871) and Carl Menger (1871) when they added the principle of diminishing marginal utility. This principle states that although total utility may continue to increase with increasing consumption, the final degree of utility ultimately diminishes as the quantity increases (Jevons 1871).

This theory laid the foundation for the modern neoclassical determination of value. The problem prior to Jevons's proposal was how to quantify use value of
commodities since they could have different use values to different people (Dobb 1973). Employing the idea of utility, models can be constructed to demonstrate the factors that lead to exchange. These models are discussed in detail in the next section. Other economic principles such as risk-return relationships, the effects of ceiling prices, and the model of perfect competition have also influenced the development of the model. Without such theories it would be much more difficult to model economic and social exchange.

Clearly, without Adam Smith's foundation and Keynes's overhaul, the neoclassical economic theories in use today would be considerably different. However, modern economic activity such as compensatory, countercyclical monetary and fiscal policies do not apply to precapitalist economic systems. One of the most important propositions of substantivist economic anthropology is that universal economic principles are difficult if not impossible to construct. I propose that the most basic motivations driving exchange can be universally modeled, but that more complex economic models must be carefully applied to their intended areas of inquiry.
World Systems Theory

In addition to economic and economic anthropological theory, this model also employs concepts developed in the world systems paradigm. Following Wallerstein (1974), Wolf (1982), Rostow (1960), Lenin (1916) and others, this model employs the idea of core states exploiting peripheral areas for their own gain. The unequal distribution of power among states (and individuals) allows exploitative economic exchange networks to exist and even flourish. Scholars who describe economies using world systems or underdevelopment theory argue that the underdevelopment in the peripheral states is a consequence of development in the core states and not the result of internal problems (Emmanuel 1972; Kahn 1978). By analyzing commodity flows, the migration of labor, and the exertion of imperial power within the larger world system, one can clearly see the influence of capitalist core states on peripheral, less developed economies and, as Donham (1990) points out, these factors have connected the core and periphery far longer than anthropology has admitted to in the recent past.
International trade has long been recognized as an important factor in capitalist growth. Adam Smith (1776) and David Ricardo (1817) recognized that international trade could lead to the accumulation of capital and Marx (1867) assumed that expansion of capitalism into international markets would lead to industrialization in those areas. A formal theory of imperialism, however, was not developed until early in the twentieth century (Larrain 1989). The theory of imperialism developed by Hobson (1902), Bukharin (1915, 1924), Luxemburg (1913, 1915), Hilferding (1910), and Lenin (1916), has had substantial influence on the field of economic anthropology and is incorporated into the present thesis.

Power within the modern capitalist world economy has been (and still is) unequally distributed. Following Wallerstein (1974) and Braudel (1977) every world economy is divided into three zones. The core or the area where economic power is centered, the semi-periphery or intermediate zones around the core state, and the periphery or subordinate area. The standard of living drops as one moves away from the core and within the peripheral zones "life often resembles purgatory or even hell" (Braudel 1977:82). When one core state becomes overwhelmingly dominant it is defined as a
"hegemonic" state. Wallerstein (1980:38) defines the hegemonic situation as one "wherein the products of a given core state are produced so efficiently that they are by and large competitive even in other core states, and therefore the given core state will be the primary beneficiary of a maximally free world market." The ability to trace the dynamics of hegemony across the world system adds an important dimension to the model developed here.

With formal neoclassical economic theory as a base and Polanyi and Sahlins' substantive economic models as a point of departure, the model is clearly constructed on solid ground. The social exchange theory developed in the present thesis pushes economic anthropology to the next step of development. Modeling the motivations driving exchanges of individual economic actors and the dynamics of hegemony within the world systems paradigm provides valuable insights into economic development and change. The theoretical background discussed above should provide the reader with the tools necessary to comprehend the model constructed in chapter III.
CHAPTER III

A GENERAL THEORY OF ECONOMIC FLOW, SOCIAL EXCHANGE, AND HEGEMONIC RELATIONSHIPS

The theory constructed below provides the field of economic anthropology with a valuable new tool that can be employed to analyze both past and present economic systems. The general theory is useful in four main areas of inquiry. First, by exposing economic and social relationships as they occur in a powerless system, the theory allows one to examine the degree of hegemony in the system under investigation. Second, the theory provides a means of classification for economic systems that can be employed to determine which particular formal economic models apply to each situation. Third, the theory provides the tools to develop a scheme of relative prices for a given economic situation. These three uses allow one to describe the dynamics of the economic system under
analysis. Finally, the model provides the means to identify historical discontinuities in economic systems. Before I can construct the model, however, I must provide the definitions of key terms and explain and describe the essence of the problems the model is intended to solve.

What's in a Name?

Prior to constructing the model, one must first understand the reasoning behind the choice of the word "General" in the title. The reasoning becomes more evident as the theory develops, but essentially the term is used because the theory ignores many detailed variations. As a result, the very basic theory is applicable across both time and space, and works on an individual, societal, and world economy scale. It covers both precapitalist, nonmarket economies and the highly complex industrial economies of the modern world. It is recognized, however, that models used to examine particular exchange scenarios may not be universally applicable. The more basic model developed here is an attempt to gain insights into the motivations driving exchange. Most economic principles, as discussed in section I, were developed
in response to a particular historical problem and, as a result, usually serve to shed light on that problem. For example, while Adam Smith advocated free trade in eighteenth century England, he most certainly would not have advocated it in the seventeenth century since England's infant industry needed protection from outside forces [protectionist policies are presently being discussed in the United States to protect industry from cheap foreign imports (Stein 1984)].

The terms "economic flow" and "social exchange" are integral to the model. While many people associate economics only with the material world, this paper does not. Economic flow is defined as the exchange of material and nonmaterial goods. A nonmaterial good can be viewed simply as a service, such as paying a gas station attendant to pump your gas, or more complexly as friendship, power, love, or any other nonmaterial good. In situations where no material goods flow in either direction between the parties, the term "social exchange" is employed. It is important to remember, however, that economic flow does not necessarily imply a two-way flow of material goods.
Profit and Interest

A capitalist is the owner of the means of production (capital) and this individual's remuneration (interest) is determined by the contribution the capital makes to the production process. Capital is defined simply as financial resources (including material goods used in a production process) (Braudel 1977). The entrepreneur, as defined by Schumpeter (1911), is the individual who introduces a new process or a new type of productive organization and with the aid of bank credit upsets the established equilibrium of the system. The term "profit" is key to the model. Profit is defined as the entrepreneur's or capitalist's remuneration for taking an economic risk.

For the purposes of this paper, profit and interest will be considered as interchangeable terms (the two frequently blend in the real world). [Pierro Sraffa (1960) provided a powerful critique of the neoclassical model when he demonstrated that capital is inextricably linked to the interest rate and that profits are the result of negotiations between capitalists and laborers and power is a major force in these negotiations. Profit is simply surplus minus wages and thus risk is not a factor in normal profit].
Remuneration can come in any form; the entrepreneur may receive social benefits, monetary payments, political power or any other form of payment. This definition of profit is what economists refer to as "normal" profit. Any profit over and above the "normal" return for a given risk is called "pure" profit (Maurice and Phillips, 1986:341).

Normal profit can be viewed as a cost that the consumer pays to the entrepreneur. Other costs that the consumer faces when purchasing a good or service include: the wages for the labor involved in the production of the good; the cost of the resources used to produce the good; and the rent on the land where the good is produced. All of these costs are figured into the "price" of the good. Many other factors such as supply and demand, market structure, and price discrimination also affect the final cost of a product. The simple fact that a profit is involved in an exchange does not necessarily create an unequal exchange.

Pure profit is an important concept in the model, since it can be seen as creating a dividing line on the continuum between primary and secondary social relationships. The model demonstrates that on the side of the line where social relations exist prior to the
exchange (primary social relationship), pure profit is not the motivating force. On the other side of the dividing line the profit motive is the incentive driving the exchange (secondary social relationship). In fact, in secondary social relationships, the individuals are attempting to maximize profits and achieve a pure profit in the exchange (it is demonstrated later that certain market conditions prevent pure profits from being earned in the long-run). The two types of relationships between exchanging parties have been defined by Granovetter (1985) as "atomized" and "embedded." Atomized transactions are short term, impersonal, and not organized in any social structure (secondary social relationships) while embedded transactions involve personalized relationships that endure beyond the exchange (primary social relationships).

It is recognized that "profit" is not always the goal of rational economic actors. Power, prestige, salary, and a host of other motivations can serve as the motivating force for exchanges. Plattner (1985:xi) claims the current view of individual economic decision making "sees individual economic behavior as the outcome of a multicausal, goal-driven decision procedure, where the actor is operating in relative
ignorance and uncertainty, with complex goals and constraints." Although the actor may not always recognize the full terms and conditions of the exchange, it is assumed that the actor behaves rationally and maximizes something of interest. For convenience, the term "profit" and "pure profits" will be used to represent the goals of economic actors.

The final term that must be defined is hegemony. Hegemony is used in this paper to describe the ability of one actor, participating in a series of exchanges with another actor, to maintain an economic advantage over the other actor, without recourse to force, by exchanging on a more exploitative, less social level. This definition is similar to Wallerstein's (1980:38), but includes a social relationship aspect. A more descriptive definition of hegemony is provided after the dynamics of the model (constructed first in power-free, static form) are discussed.

Areas of Inquiry

In a situation where power plays no role, each type of economic flow has a specific type of social relationship that accompanies it. This critical relationship between the economic and social relations
is the first area of inquiry that the model addresses. In a given situation, assuming neither actor maintains hegemony, once one relationship (economic or social) is determined and classified, the theory predicts the specific corresponding relationship. When a given economic relationship fails to correspond with the predicted social relationship, this is an indication of hegemony. Different degrees of hegemony can be measured by determining the amount of discrepancy between the predicted and actual relationship. The usefulness of this area of inquiry is displayed in chapter IV.

It is recognized that individuals and groups may be involved in a number of exchange activities at any one time, and as a result, the participants may be in a number of categories. In this situation, parties involved in a number of exchange relations must be analyzed in one category at a time. As a result of multiple classifications, it often becomes difficult to determine the dominant category for the system as a whole. This leads to the second area of inquiry, that the theory addresses.

The theory provides for a classification of exchange systems that can be employed to determine which particular formal economic models apply to each
situation. In addition to determining which models apply to the situation, this classification also allows for price studies to be conducted. Price studies can demonstrate to the researcher, who is confronted with a list of prices, whether a particular price is comparatively high or low. This type of study can be important in establishing the context and meaning of the economic transaction. Once a system has been placed into a specific category, this allows the move to a more sophisticated level of analysis. At the higher level of analysis, the classification allows one to postulate the dynamics of the system by identifying its fundamental characteristics.

Describing the dynamics of a given exchange system is the highest level of analysis and ultimate goal of the model. Applying microeconomic models to each "ideal" (Durkheim 1915; Weber 1949) category allows one to view the dynamics of the system. Each of these categories or types of economic flow and social exchange are discussed below in detail.

The identification of discontinuities in economic systems is the fourth area of inquiry. When describing the dynamics of an economic system as a whole, certain parameters necessarily apply to each ideal type. If the parameters exceed the bounds of that type, the
particular models designed to explain the system breakdown. It is at this point where an historical discontinuity is identified.

If one was simply to analyze a material exchange in a market economy, microeconomic analysis of individuals and firms could be readily applied to the situation. The substantivists, however, claim that in precapitalist economies situations exist in which goods seemingly flow in one direction (gift giving). It is in these situations (and the others discussed above) that they claim microeconomic analysis breaks down. The model constructed below disputes this substantivist claim. Exchange modeled in this analysis may involve both material and non-material goods. The flow may consist of economic goods or services, social exchange, or a combination of both. In order to model a seemingly unidirectional material flow, one views the giver of gifts as equivalent to the firm and the receiver as a consumer. In a situation such as this, one would analyze the giver using microeconomic theories that apply to firms (see Shepard 1985; Ehrenberg and Smith 1982) and the receiver using indifference analysis. These theoretical approaches are addressed below.
In the model, we begin by assuming first, that exchange occurs in a power-free system. Secondly, each type of flow discussed below models the first economic exchange between the actors. According to Levi-Strauss (1969) exchange behavior is dynamic and creative in that humans assign meaning to what they give and receive and alter their interactions with others on the basis of their interpretations. It is acknowledged that social relationships develop as a result of economic exchanges and that social relationships change over time. The role of hegemonic and dynamic social relationships, however, are discussed after the theoretical model has been constructed.

The Model

The model, graphically illustrated in Figure 1, is constructed in the following way. First, an economic flow continuum is constructed. On this continuum six "forms of integration" exist: 1. Delayed flow; 2. Equal flow; 3. General flow; 4. Exploitative flow; 5. Unidirectional flow; and 6. Non-flow. These types of flow are divided into these categories according to the following criteria: 1. The degree to which the transaction is or is not economically equivalent; 2.
Whether or not social relations exist prior to the economic transaction; and 3. Whether or not pure profit is the motive driving the transaction. Delayed and equal flow are referred to as secondary economic relationships; general, exploitative, and unidirectional flow are referred to as primary economic relationships; and non-flow is a situation in which an economic relationship is nonexistent. The purpose of distinguishing between these relationships is addressed later.

The question of which type of transaction is the most "rational" depends on the particular case under investigation. When risk is involved, economists assume that humans act rationally and maximize their "expected" utility (Heath 1976). Stuart Plattner discusses how, in peasant economies, transactions cannot always be neatly differentiated as impersonal, short term exchanges and long term trading partnerships. "The goal of each actor is his or her economic self-interest, yet the maintenance of the relationship is valued over an immediate short-run profit" (Plattner 1989b:212).

The other half of the model deals with social relations. The economic flow continuum is superimposed onto a specific set of social relations. For the
purpose of creating a general model, attention must be given to the fact that "distance" is a relative term and cannot be used as a qualifier in every instance. In the modern world, geographic distance between exchange partners is rapidly becoming irrelevant, modern technology allows for global communications and reduces shipping time to a minimum. On the other hand, according to Sahlins (1965), in precapitalist societies trade distances are short and exchange partners are usually within the kin group. Sahlins constructs his model of nonmarket exchange using kinship residential sectors. He discusses five sectors: The household; the local lineage; the village; the tribe; and the intertribal sector. Sahlins (1965:198) points out that "relations within each sphere are more solidary than relations of the next, more inclusive sector." As one moves away from the household relationships become less trusting.

Ian Hodder (1978) examines artifact distribution and the effect of distance on human interaction by employing fall-off curves. His analysis suggests that, in addition to the friction effect of distance, a number of factors contribute to the distribution of artifacts. Included among the other contributing factors are physical geography, the social and economic
value of the artifact, freedom of exchange, and accessibility to other exchange networks. Hodder claims that "with distance away from a source or centre there is less likelihood of interaction with that centre" (1978:157). Figure 1 is a graphic illustration of the model of Economic Flow and Social Exchange in a power-free situation. Figure 1 shows that, as one moves out from the center point, kin-residential distance increase as well as the desire to reap profits from the situation. The illustration displays the predicted social relations for each economic relation under the assumption of no hegemony.
FIGURE 1. A diagram of economic flow and social exchange in a power free situation.
Delayed Flow

Delayed flow is the most "social" type of flow on the continuum. In order for this type of flow to take place, permanent social relations must exist prior to the economic transaction. These types of relations exist in the family group and possibly within a group as large as a village. Sahlins (1968) claims that since a profile of exchange is "purely hypothetical", it is necessary to adjust the standard model to fit variations found in real societies. In times of shortages the normal tight sphere of delayed exchange may be extended to include a larger group. The permanent social relationship between the parties allows for a time lag or "delay" to exist between the initial economic flow and the return flow.

As stated previously, one can analyze the apparently altruistic giving of a gift by viewing the giver as a firm and the receiver as a consumer of the product. First, we analyze the gift giver in the relationship. It is assumed that the giver (firm) operates to receive a return on his or her investment. Giving a gift away involves some amount of risk; which simply means that there is a probability that things will turn out badly. The receiving party must
compensate the giving party by paying a risk premium, as illustrated in Figure 2.

FIGURE 2. The risk-return relationship in delayed flow.

In delayed exchange, on a strict economic level, the exchange is equal in "value" and neither a pure profit motive nor a markup over cost is involved. Since the parties have a close, permanent, social relationship the risk premium is nonexistent (point D in Figure 2). However, even without a risk involved, the giver still receives a normal return (OD) on the investment. At some undefined point in the future, the recipient will return the giver with a greater gift. In some cases an individual will give a gift without
calculation and with no intention of collecting on the return; in this situation the individual either gains social benefits from the community, some other form of return on the investment, or simply the personal satisfaction that comes with giving a gift. In this case the cost of the exchange is placed on the individual giver and attributed to the society rather than the receiver of the gift. This action allows delayed flow exchanges to be freed from "the disruptive consequences of attributing the cost of social exchange activities to those who benefit from them" (Ekeh 1974:47). Marcel Mauss (1925) examined exchanges of this type and claimed that they yield a moral code of behavior for society that exists outside of the particular exchange situation and affects all economic, political, and social relationships in society.

Meillassoux (1981) points out that, legally speaking, children owe nothing to their mothers for raising them, familial (or social) ties are what makes children repay (not necessarily monetarily) their debts.

The formal economic model that examines the effects of ceiling prices, allows one to view the degree of economic sacrifice that the giver of a good faces. This economic sacrifice equals the amount of personal satisfaction gained in the exchange. If an
individual imposes a maximum price ceiling on a good, the effect is to cause a shortage of that good. Clearly people always want more gifts than are supplied. This situation can be modeled in the following way.

In Figure 3, a ceiling price, $P_c$, is imposed on good X. This ceiling can be either self-imposed or set by the norms of the society in which the good is exchanged. In the case of delayed flow the price per unit is set at zero, which is below the equilibrium price $P_e$ (charging more for the good is socially unacceptable). At this price, the "momentary" supply

\[
\text{Figure 3. Effect of a ceiling price in delayed flow.}
\]
is the vertical line at $X_e$, where only the amount $X_e$ is offered. However, at this ceiling price, $X_d$ is demanded. Over time the shortage increases and an adjustment period on the part of the supplier results in a decrease in the quantity supplied to $X_s$. The result of this decrease in supply is excess demand shown in Figure 3 as $X_sX_d$. The seller must devise a method of allocating the limited amount of the product. In a delayed flow situation the supplier limits the availability of the products to people whom with he or she has permanent social relations.

Two examples that fall into this category of economic flow are: An exchange of gifts between close friends; and a mother's time spent raising her child. In each of these examples a strong social tie exists prior to the economic transaction. This permanent, primary social relationship allows for an indefinite time and quantity of goods or services to exist between the initial flow and the reciprocal flow. In discussing long-term trading partnerships, Plattner explains that "the key element is that exchanges do not have to be balanced in the short run, since past or future short-falls are adjusted in the continuing stream of exchanges" (1989b:212). For example, when a birthday gift is given to a friend, the return flow may
come in the form of an immediate "thank you" and a future gift on one's own birthday, but the secondary economic exchange is not stipulated by time or quantity. The social exchange between the parties is the most important aspect of the encounter. This situation differs from equal exchange (discussed below) in that the primary social relationship is close and permanent.

Equal Flow

Equal flow is the next point on the continuum. In this situation, social relations exist prior to the exchange but their permanency is unclear. These unclear social relations require an immediate economic exchange as opposed to an exchange with a time lag as described in delayed flow. Transactions are conducted in specific economic terms but the primary social relationship supports the economic transaction. This exchange is equal on an economic level and "pure" profit is not a motivating force in the exchange.

Any situation in which primary social relations exist and an immediate economic exchange occurs, can be expressed as equal flow. A situation in which gifts are exchanged at an annual Christmas party, can be
viewed as an example of equal flow. Buying and selling among friends can also be described as equal flow, if a pure profit motive is not involved in the transaction. These types of exchange are analyzed similar to delayed flow, by examining the risk-return relationship model and employing the model of the effect of a ceiling price.

The uncertain social relations between the exchanging parties increases the degree of risk involved in the exchange. While in delayed flow the risk premium is nonexistent; the risk premium in equal flow becomes a factor. Figure 4 displays the risk premium involved in an equal flow situation. In equal flow the degree of risk is RE with the rate of return shown at point E. The degree of risk involved in the exchange is relatively low when compared to an exchange with a stranger.
Figure 5 displays the effects of a ceiling price under equal flow. The price per unit is set at the amount $P_c$, which simply covers the seller's investment in the production of the good and lies below the equilibrium price $P_e$. This price is set by the norms of the group in which the exchange occurs. Since an excess demand $X_{sd}$ exists, the only consumers who gain from this situation are the ones who have access to the limited amount of goods available. The access to goods is limited by the seller to his or her acquaintances and friends.
FIGURE 5. Effect of a ceiling price in equal flow.

The amount lost in profits is gained in social benefits such as future access to the small exchange group. Thus while sellers clearly lose economically, in the immediate transaction where a price ceiling is imposed, the sellers gain in social benefits and future transactions where he or she becomes the buyer. It is clear that equal flow can only occur in a situation where primary social relations exist.

A key point must be stated at this time regarding both delayed and equal flow. When these types of flow are evident, the social relations underwrite the economic relations. In other words, social relations
exist prior to the economic situation (primary social relationship). In his "Economic Behavior in Markets" Plattner calls these types of economic relationships "equilibrating":

I name this class of economic relationships "equilibrating" to call attention to these key features: the predominance of long-over short-run goals and the flexible, continuing process of reciprocating value in a relationship that is explicitly instrumental. In some circumstances equilibrating relationships become so strong and regular (that is, formalized) that they are described as "trading partnerships." One of the most significant contributions of the economic anthropology of markets has been the analysis of such relationships in the markets of underdeveloped societies" (Plattner 1989b:213).

For every type of exchange after this point on the continuum, the reverse is true; the exchange occurs before social relations are established (a primary economic or secondary social relationship). The economic exchange underwrites the social relations. This line also divides the exchanges conducted without
a pure profit motive from the exchanges that are motivated by pure profits.

General Flow

The next point on the continuum is general flow. At this point, a pure profit motive drives the exchange. In this situation social relations are nonexistent prior to the exchange. Although a pure profit motive drives the exchange, it is necessarily an advantageous economic transaction for both parties. This type of flow is common in capitalist economies, but also exists in precapitalist, nonmarket economies.

On an abstract level, analytical concepts about competition are applied to this category. While it is true that competition comes in many varieties, (e.g., pure competition, monopolistic competition, or loose oligopoly) it is also true that each variety serves the same basic role. Effective competition forces the economic system to perform well, or provide for low prices, innovation, fairness, and efficiency (Shepard 1985).

Markets that fall into the pure competition category of analysis have a number of firms or individuals, all with negligible market shares and thus
no influence on the market. For the purpose of analysis, an ideal situation is constructed. In describing this ideal situation, called "perfect" competition, Shepard (1985:23) assumes the following:

1. Perfect knowledge by all participants of all relevant present and future conditions in the market.

2. Perfect mobility of resources and participants.

3. Rational behavior by all participants (consumers maximize utility, producers maximize profits).

4. Stability of the underlying preferences, technology, and surroundings, so that an equilibrium can be reached.

5. No nonmarket interdependencies among consumers or among producers.

6. Pure competition on both sides of every market. Each firm's average costs turn up at a very small level, relative to the entire market, so that all firms have small market shares.

These assumptions can be more fully explained as follows. First, all participants in the market must be aware of prices, wage rates, costs, and other factors that affect the outcome of transactions. Consumers, for example, must be aware of all existing prices in order to choose the lowest price of the product. Second, resources must be able to move freely in order to capture the highest rate of efficiency. This means that markets must be free from external controls such
as collusion or government regulations. Third, all participants must behave rationally. Assuming that participants have access to perfect knowledge, it is also assumed that they will use this knowledge rationally. Fourth, it must be assumed that the participant's preferences, technology, and other influencing factors will remain constant. In order to isolate an existing situation, technological advancements and consumer preferences must be held constant or else market dynamics change the situation entirely. Fifth, all participants must act independently from one another. Collusion and other forms of dependencies are not allowed in the model of perfect competition. Finally, pure competition must exist on both the supply and demand side of the market. No producer or consumer has influence over prices. All of these assumptions guarantee a large market where the allocation of resources and the distribution of income is determined by the forces of supply and demand.

To maximize profits, all firms set the price of their product where the marginal cost (mc) = marginal revenue (mr). Marginal cost is defined as the cost of producing one more unit and marginal revenue is defined as the amount of revenue received from selling one more
unit. The manager of a firm increases output until the added revenue from the additional unit exactly equals the additional cost of producing that unit. It is in this way that firms maximize profit.

In the perfectly competitive situation, modeled in figure 6 below, since the firm has no control over price (price taker), the firm's demand curve (which is also the firm's marginal revenue curve) is a horizontal line set at the going market price. The only choice that the firm must make is how much to produce. The amount produced is determined by the marginal cost of the firm. Over the long run, all firms reach the same output condition, and as a result, price equals marginal cost. In this situation, without any central planning, all firms must be efficient and all resources are used efficiently. This is what Adam Smith meant when he discussed the "invisible hand" of competition guiding the allocation of resources.

As stated above, this type of exchange is necessarily advantageous for both parties involved. In order to show that the exchange is advantageous for both parties, another microeconomic model is employed. This model demonstrates that in a general flow situation, after the exchange takes place, one or both parties will be better off, and neither will be
worse off. Trade will continue until no further trade will improve one party without making the other party worse off. This situation is said to be a "Pareto-optimal" situation.

![Diagram](image)

**FIGURE 6.** Conditions reached under competition.

The Edgeworth box diagram is a technique used to graphically illustrate the interaction between two economic actors when their inputs are fixed in quantity (Ferguson & Gould 1975). The bilateral monopoly model is constructed with the following assumptions. An economy is divided equally among two actors, A and B,
both of whom are allotted an amount of the goods, X and Y. However, the amounts of goods X and Y are unequally allotted between A and B.

Assuming the actors are free to exchange goods, the problem of exchange can be diagrammed as in Figure 7. The Edgeworth box is created by constructing an origin for A, (O), and plotting quantities of the good X along the abscissa and good Y along the ordinate. A similar graph for B is constructed and rotated 180 degrees to the left to form the box. Next, we add indifference curves for A and B to the diagram, (labeled IA, IIA, IIIA, and IB, IIB, IIIB).

Indifference curves show different combinations of X and Y that yield the same level of satisfaction for the actors. In other words, actors are indifferent to the different combinations of goods along the same curve. Higher indifference curves yield greater levels of satisfaction, thus IIA represents a greater level of satisfaction than IA.

If we assume the initial allotment of goods is point D, exchange between A and B will occur for the following reasons. "At point D, A's marginal rate of substitution of X for Y, given by the slope of TT', is relatively high; A would be willing to sacrifice, say three units of Y in order to obtain one additional unit
of X. At the same point, B has a relatively low marginal rate of substitution, as shown by the slope of SS'" (Ferguson & Gould 1975:437-438). The two actors will continue to exchange until their marginal rates of substitution are the same.

FIGURE 7. General equilibrium of exchange.

Bilateral monopoly analysis predicts the mix of goods that satisfies the two trading parties on a given indifference curve. The exact spot of exchange cannot be determined, but it will be located somewhere on the "contract curve" CC', and between the points P2 and
The contract curve is an optimal locus in the sense that if the trading parties are located at some point not on the curve, one or both can benefit, and neither suffer a loss, by exchanging goods so as to move to a point on the curve" (Ferguson & Gould 1975:438). The exact spot is determined by such factors as bargaining strengths, power, prestige, and haggling abilities of the individuals involved in the exchange.

The nonexistent social relations between the exchanging parties increases the degree of risk involved in the exchange. While in delayed and equal flow the risk premium is either nonexistent or minimal, the risk premium in general flow is a large factor. Figure 8 displays the risk premium involved in a general flow situation. Here the degree of risk is RG with the rate of return shown at point G. The degree of risk involved in the exchange is extremely high when compared to exchange with a close friend or relative.

Buying and selling on the open market is a typical example of a general flow situation. Any purchase in a modern supermarket would fall into this category. The consumer purchases a good from a producer without having a prior social relationship. The consumer pays a price that he or she believes is equal to the value
FIGURE 8. The risk-return relationship in general flow.

of the good purchased. Figured into the price of the good is a profit that the owner of the supermarket receives for taking the economic risk of owning the store. The exchange is viewed as beneficial by both parties. After the exchange a social relationship may develop between the consumer and the producer, but this has no bearing on the present economic relationship. Modern corporations can remain in the general exchange arena even after social relations have developed, since the corporation is an entity larger than the individuals involved in the actual exchange.
Exploitative Flow

At this point on the continuum, exploitative flow, the exchange between the parties is unequal. While the flow is still two way, the economic value of the exchanged goods is unequal when compared to a competitive exchange of the same goods. The transaction is fueled by a pure profit motive, and social relations do not exist prior to the exchange.

In order to examine exploitative flow exchange, formal economic models of price under a monopoly are applied. While it is true that real world monopolies are difficult to find, it is also true that many markets closely approximate monopoly organization. This model is treated as an "ideal" type similar to the perfect competition model employed earlier.

According to Maurice and Phillips (1986), monopolists have no "direct" competitors but they still face "indirect" competition. First, similar to all other products, a monopolist's commodity must compete with other commodities for a place in the consumer's budget. Secondly, as the definition of a monopoly implies, there are no close substitutes for the commodity at the price charged, but as the price of the commodity increases, other goods tend to become closer
substitutes for the product. "The presence of a monopoly therefore depends on relative prices between the monopoly product and other 'poor' substitutes" (Maurice and Phillips 1986:403). Since it is usually difficult to decide if a seller is a monopoly, economists analyze the degree of monopoly power a seller holds. This power is defined as the ability of a seller to raise the price of the product without loosing all sales. In a perfectly competitive situation if a seller increases the price of his good he looses all sales, thus he has no monopoly power.

Formal economic analysis of a monopoly differs from the analysis of a competitive firm. First, assuming that the monopolist wishes to maximize profits (a rational producer), production of the good is set where marginal cost equals marginal revenue, similar to a competitive firm. The difference, however, is that marginal revenue, for the monopolist, is less than the unit price of the good, and the seller cannot sell all it desires at that price. The monopoly can only increase sales by decreasing the price of the good. This is a result of the fact that the monopolist, by definition, faces the industry demand curve since it is the only producer of the good. In this situation the demand curve must have a negative slope. The slope of
the demand curve depends on how many substitute goods exist and how good the substitutes are for the product.

A measure of the relative sensitivity along a demand curve is described in economic terms as the elasticity of demand. "Demand is said to be elastic if revenue falls with a price increase and rises with a price decrease; it is inelastic if total revenue rises with a price increase and falls with a price decrease" (Maurice and Phillips 1986:21). Using this concept, one can measure the monopoly power of a given firm. In a situation where elasticity is infinite (a horizontal demand curve), the firm has no monopoly power (perfect competition). On the other hand, if the firm's elasticity is equivalent to the market's elasticity, the firm has the maximum attainable monopoly power.

Figure 9 (Maurice and Phillips 1986:414) graphically displays an equilibrium condition attained by a monopolist in the short-run. Similar to the competitive model, a maximum profit is attained when producing at a rate of output where marginal revenue (MR) equals marginal cost (SRMC). With a given demand curve (D), the monopolist produces x amount and charges price p. The total revenue earned by the monopolist is the rectangular area \( O_pBx \). At this level of output the unit cost of this amount of the good is c. The total
cost at this level of production is the area $OcDx$, leaving a profit of $cpBD$.

The situation modeled below is an example of a monopolist earning a short-run pure profit. In reality a monopolist may not always earn a profit and in fact may incur losses. Over the long-run the monopolist is able to earn profits because there is no competition sharing the market; however, most monopolies will not earn pure profits because the value of the firm's assets increases and the returns reduce to normal. This is what economists refer to as capitalized profits.

![Figure 9. Short-run equilibrium under monopoly](image)

**FIGURE 9.** Short-run equilibrium under monopoly
In an exploitative flow (unequal exchange) situation, both parties may gain from the exchange (Emmanuel 1972). Exploitation does not imply a one-way flow of material, it simply implies that one of the actors maintains an absolute advantage over the other. "A saving of labor results for both parties even from an exchange taking place under unequal terms of trade when certain countries always pay less in terms of their own labor for the labor of others" (Cerniansky 1959:113). It is important to remember that the exchanges modeled here take place without the consideration of power. These exchanges must be viewed as occurring without coercion or physical force (monopoly power may appear to be forcing individuals to exchange in some instances, but it is assumed here that the consumer still has alternatives, albeit poor in many circumstances). Exploitative flow forced on the consumer due to the hegemonic power of the producer is considered later.

An example of an exploitative situation is when a producer maintains a monopoly over a product. One modern example of a monopolistic situation is when a producer has a patent on a product. The patent laws of the United States make it possible for a person to obtain the exclusive right to a commodity or process
for 17 years (Ferguson and Gould 1975). If the product is desired, the consumer has no choice but to purchase it from the only producer.

Unidirectional Flow

At this point on the continuum, the flow ceases to be two-way. A pure profit motive drives the flow, but only one party gains from it. The social relations (if they exist) in this situation are hostile. In this context, examples of the two possible situations are now examined.

One possible situation of economic relations preceding the social relations is the following. A group of raiders attack a ranch and steal some horses. Prior to the raid, the rancher and the thieves did not have any social relations. After the raid, the relations are hostile. The raiders stole the horses in order to achieve a one-sided economic gain. The economic flow was unidirectional, with the economic relations underwriting any hostile social relations that might develop at a later time.

Another situation can be illustrated with a continuation of the same example. Assume that the rancher gets a group of men together and strikes back
at the raiders camp, retrieving his horses and some extra equipment. In this situation, the hostile, social relations exist prior to the economic transaction. Clearly, the answer to the question of which relations come first in unidirectional flow, depends on the particular situation.

An economic model, that can be used to predict when unidirectional flow will occur, is difficult to construct since the field of economics usually deals with legal exchanges. However, a model that explains the actions after they have occurred is rather simple to construct. A model of consumer optimization (similar to the Edgeworth Box model) is used to analyze the actions of a thief.

Everyone is familiar with the everyday task of attempting to maximize satisfaction subject to a limited monetary income. Figure 10 graphically illustrates this task. In this model, a rational consumer attempting to maximize satisfaction with a limited income is faced with dividing his or her income between two bundles of goods, X and Y. In order to maximize satisfaction, the consumer chooses the combination of X and Y that is on the highest indifference curve. The consumer, however, is constrained by a limited income shown in the figure as
the "budget line" AA'. In this situation, the consumer chooses the combination of X and Y found at point P on indifference curve III. Recall that the point of consumer equilibrium (similar to the Pareto-optimal situation reached in the bilateral monopoly model under general flow) "is defined by the condition that the marginal rate of substitution (MRS) of X for Y must equal the ratio of the price of X to the price of Y" (Maurice and Phillips 1986:147).

Let us now assume that the consumer's income falls to the point where he is now constrained by budget line BB'. It is impossible for the consumer to maintain the
same consumption pattern with this income, without resorting to thievery. Stealing goods results in the same effect as increasing income; the budget line is shifted to the right back to AA'. Stealing goods helps the consumer maintain a particular pattern of consumption.

In order for a consumer to resort to this form of "increasing income", the predicted gains must outweigh the risks involved in such actions. Any social relations in this category of economic flow are necessarily hostile. Since only one party has a decision making capability, and one party will be made worse off; a Pareto-optimal solution to the allocation of resources is impossible. Any situation in which the economic gain is completely one-sided, falls into this unidirectional flow category.

Non-Flow

Non-flow is the extreme end of the continuum where economic flow ceases. In this situation the parties either are not aware of each other or simply do not interact. Although it is realized that this point might seem out of place on a continuum of economic "flow", it is also realized that the continuum must
have an "ideal" endpoint. At this point, neither economic nor social relations exist.

One example of this situation is the relations between the old world and the new world, five thousand years ago. The flow between the two worlds was nonexistent. Another example is the relationship between two people passing each other on a street; each is aware of the other's existence but nothing flows between them.

Dynamic Relationships and Hegemony

Up to this point we have analyzed social and economic relationships in a static state. Looking at the first economic exchange between actors allowed us to construct a formal model of ideal types. As stated above, it is recognized that social and economic relationships have a dynamic quality that cannot be overlooked. With the theoretical model firmly established, adding a dynamic component to it is now a rather simple exercise.

A hypothetical situation in which two individuals with no prior social relations enter into a series of economic exchanges, will serve as an example to trace the dynamics of social and economic relationships.
Individual A is the owner of a small hotdog cart on a street in the downtown section of a large city. Individual B is a businessperson who has recently transferred to the city and now works in the area of individual A's hotdog cart. A reasonable chronology of events, outlined below, allows us to examine the changing relationship within the constraints of the model. The following exchange takes place in a situation where hegemony plays no part.

The first time individual B visits the hotdog cart, individual A charges, as the general flow model dictates, the standard price of a hotdog sold in a competitive environment (a number of hotdog carts operate in the area providing a competitive market). Assuming individual B likes the product provided by individual A, he or she begins to return on a regular basis. If we assume the economy is growing, and businesses are hiring more workers, the market for hotdogs in the area would be increasing, thus leading to higher profits. The increasing profits in the hotdog industry begins to lure more entrepreneurs into the market, increasing competition and reducing profits back to normal levels. In order for individual A to remain in the competitive market he or she begins to offer good customers, like individual B, a discount.
This may reduce profits on a few sales but since a social relationship has been established with these customers the economic exchange is now at the equal flow level. The social relationship between the two individuals now becomes more important to individual A than the economic relationship. Individual A recognizes that customers standing, eating, and talking near the cart will draw in new customers, and begins to value the social relations of repeat customers (even if for economic reasons).

After a number of years, individual A builds up a reputation as an honest merchant who sells a good product. This reputation has led to a large market share, as other merchants could not attract customers. Once individual A gains a large enough market share, monopoly power begins to allow for an increase in the price of hotdogs. Individual A has now moved to the exploitative flow level of exchange with new customers. The entrepreneur cannot, however, charge the exploitative price to repeat customers since the social relations underlie the economic relations and the merchant does not maintain any overwhelming power over where they eat (assuming that hotdogs have many substitutes and other foods are available in the
area). Hegemony has played no role in this hypothetical situation.

The relationship between England and Colonial America in the eighteenth century is probably a good historical example of exploitative flow maintained over a period of time when social relations existed due to the hegemonic power of the mother country. The economic value of raw materials flowing out of America was unequal to the economic value of finished products returning from England. While social relations clearly existed prior to the economic relationship, primary economic relations underwrote any secondary social relations that existed because England's hegemony allowed the exchanges to flow on the exploitative level. While general flow would be predicted in a power free situation, the hegemonic position held by England allowed the exploitative situation to continue for many years. England, in this situation, would be defined as maintaining a hegemonic power factor of one since it was able to maintain an economic flow one position further out on the economic continuum than it would have been able to in a power-free exchange. Laws were enacted to favor England in the exchanges and since the colonies had little to say about the laws, they were forced to comply. If England had not held a
hegemonic position, the colonies could have shopped around to find the most favorable trading partnership.

Hegemony, as defined earlier can be explained as the ability to maintain an economic advantage over the exchanging partner in a dynamic relationship without recourse to force. The hegemonic actor moves to a more profitable (exploitative), less social sphere than would be possible in a power-free situation. It is assumed that economic actors have an insatiable desire for power. Human communities are characterized by a precarious balance of power that is susceptible to reform as individuals, lower down in the line of power, find new roads to achieve greater power, and if the opportunity presents itself, any individual will attempt to gain all of the power possible to attain in the system (Schneider 1988). It is assumed that human beings wish to exchange on the most exploitative level possible but social relations keep this desire in check. Social relations thus, tend to keep profits from increasing in a power-free society. Hegemony can be scaled based on the number of economic spheres the actor is able to increase over the predicted level in a power-free situation. The colonial situation discussed above is an example of a power factor of one. A situation where a slave, who knows his or her master on
a fairly close social level, and who would exchange on the equal flow level in a power-free relation, actually exchanges on the extreme edge of exploitative flow (possibly even on the unidirectional sphere) and is the victim of a power factor of 2 (or 3 if seen as exchanging in the unidirectional sphere). While it is recognized that power can originate from a number of sources (i.e., political, economic, military, ideology), this model simply deals with the effect that power has on exchange situations. Using this model one can determine the level of hegemony one actor maintains over the others, and levels of hegemony can be compared over time and space.

In a discussion of this type it is impossible to leave out coerced exchange. Blau discusses an example of coerced exchange when he writes: "An individual may give another money because the other stands in front of him with a gun in a holdup. While this could be conceptualized as an exchange of his money for his life, it seems preferable to exclude the result of physical coercion from the range of social conduct encompassed by the term 'exchange'" (Blau 1964:91). This exchange allowed both individuals to become better off than they would have been without it. However, as Heath points out, "although the two individuals will be
better off than they would be if they did not carry out the exchange, they need not necessarily be better off than they were before. Indeed whether or not they are is a good way of defining whether it is a voluntary exchange or a coerced one" (Heath 1976:19).

Summary of the Model

The model of Economic Flow and Social Exchange provides a classification scheme for all types of exchange and matches them to their coinciding social relations. It demonstrates that as social relations decrease in importance, economic exchange increases in importance. If a primary social relationship exists, economic relations are not a necessary component in the overall relationship. If a secondary social relationship exists, economic relations are necessary for the relationship to develop. Hegemony is used to explain cases where economic relations do not coincide with their predicted social relations.

In delayed flow, a close, primary social relationship allows for a time lag between the initial and reciprocal flows. In equal flow, the primary social relations are semipermanent and require an immediate exchange. Neither of these situations
involve a pure profit motive. Modeling risk-return relationships and the effects of a ceiling price provides for some interesting insights into exchanges in these categories.

Beyond equal flow, the economic relationship becomes primary and the exchange involves a pure profit motive. General flow results when two parties conduct an economic transaction in a competitive environment, without prior social relations. The economic flow in this situation is equal and immediate and is modeled using indifference analysis for the consumer and theories of the firm for the producer.

Table 1 displays the model in a convenient chart. The different flow types are displayed in the first column on the left side of the chart. The second column shows the direction of the flow of goods with a broken arrow indicating either a time lag or a smaller flow of goods (notice that non-flow does not have an indicator arrow since there is an absence of flow). The third column describes the type of social relations that accompany the corresponding economic flows. The last column simply provides some typical examples of each type of exchange relationship.
Exploitative flow is next and is also driven by a pure profit motive. However, in this situation the flow is unequal for the parties involved. Models that apply to monopolies are used in this category. Unidirectional flow is also driven by pure profit but is one sided. Only one party gains from this situation and the social relations are necessarily hostile. The continuum ends with non-flow, where both exchange and social relations are nonexistent.
## Flow Economic Social Continuum Flow Relations Examples

### Primary social or secondary economic relationships.

<table>
<thead>
<tr>
<th>Flow</th>
<th>Economic Flow</th>
<th>Social Relations</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delayed Flow</strong></td>
<td>A</td>
<td>Close, permanent, primary social relationship.</td>
<td>1. Birthday gifts.</td>
</tr>
<tr>
<td>allow for delayed</td>
<td>time lag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>economic exchange.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange covers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amount invested</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equal Flow

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>Not close but still friendly, semipermanent, primary social relationship.</th>
<th>1. Gift exchange.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent relations</td>
<td></td>
<td></td>
<td>2. Buying and selling among regularly exchanging parties.</td>
</tr>
<tr>
<td>relations require</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>an immediate economic exchange.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange covers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amount invested</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### General Flow

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>No prior social relations.</th>
<th>1. Buying and selling on the open market.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate economic exchange, driven by a profit motive.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange is equal and both parties gain from the transaction.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Exploitative Flow

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>No prior social relations.</th>
<th>1. Some colonial situations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation occurs.</td>
<td></td>
<td></td>
<td>2. Monopolistic situation.</td>
</tr>
<tr>
<td>Profit motive.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal exchange.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Unidirectional Flow

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>Hostile relations</th>
<th>1. Stealing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way economic flow. One party gains.</td>
<td></td>
<td></td>
<td>2. Seizure.</td>
</tr>
</tbody>
</table>

### Non Flow

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>No relations or no contact groups.</th>
<th>1. Nontrading groups.</th>
</tr>
</thead>
</table>

### Table 1. Economic flow and social relations in a power free system.
CHAPTER IV

AN EXAMINATION OF THE NETHERLANDS

Employing the Theory of Economic Flow, Social Exchange, and Hegemonic Relationships, one can gain a new perspective on the rise and fall of the Netherlands in the seventeenth century. Taking a regional view of the Netherlands operating within the larger world system, allows one to concentrate on the specific economic and social relationships it maintained with other political entities during its rise to the most powerful state in the world during the seventeenth century. A brief look at the historical circumstances leading to the rise of the Netherlands is provided as the starting point for the analysis.

The early economic history of the Netherlands (most of which centers around Holland) provides the background necessary to understand its rise to power. In the eleventh and twelfth centuries, polder boards were formed to organize the diking of rivers to drain
swamps, the construction of dams to protect the dikes (Lambert 1985), and the construction of sea walls to hold back the tide (Tracy 1990). After the completion of the diking system in the thirteenth century, economic expansion began. The fourteenth century saw the development of the agriculture and cattle industries (Postan 1952) and the growth of many important towns, which began to serve as entrepots for trade. By the middle of the fifteenth century the Dutch had important and powerful industry developed in cloth production, beer brewing, and fishing, and had established control of the Baltic trading route for grain imports. By the end of the century "Dutch ships were well known in most ports of northern Europe, carrying furs from Russia, wheat from Poland, cloth from Flanders" (Burke 1956:108).

Political Background

The complicated political history during the medieval period is also extremely important to the understanding of the Netherlands' rise to power. The direct line of the ruling dynasty of West Friesland died out in 1299 transferring the power to two collateral lines: the Avesnes counts of Hainaut (1299-
1346) and the Wittelsbach dukes of Bavaria (1346-1428) (Tracy 1990). During this time the Netherlands was able to expand economically since the great powers of France and England were at odds with each other. A lull in the action, due to the peaceful reign of Louis IX and the internal weakness of England, set the stage for the massive expansion of the Netherlands (Vlekke 1945). Also, during this time the towns began to expand their commercial interests and started their rise to economic power. In 1425, Holland was invaded by Duke Philip "the Good" of Burgundy, and fell in 1428, leading to the first rule of Holland from outside its border. Under this rule, Holland's towns were able to form town councils which, over time, changed into the hierarchical system of the "States of Holland."

Philip the Good died in 1467, leaving the leadership of the Netherlands to his son Charles "the Bold", who was slain ten years later in the war with France. The death of Charles left his daughter Mary in control of the state. Facing revolts, Mary implored Maximilian of Habsburg, to whom she was betrothed by her father, to come to the Netherlands (Hugenholtz 1964). Upon his arrival, Maximilian controlled Burgundy, Austria, and now the Netherlands. His son Philip took power in 1494, and then in 1496 wed
Johanna, the daughter of Ferdinand and Isabella of Spain. It was then Charles, the eldest son of Philip and Johanna, who became Duke of Burgundy in 1515, Charles V of Spain in 1516, and upon Maximilian's death in 1519, Holy Roman Emperor and ruler of Austria (Kennedy 1987). Charles ruled the Netherlands until 1555 when his successor, Philip II, took power and ruled until the revolt of the Netherlands in 1568, led by William "The Silent", Prince of Orange, marking the beginning of the Eighty Years War. By the seventeenth century the native nobility, still residing in the Netherlands, had lost most of its political power to the merchants and according to Price (1974) the nobility had very little influence even in the economic, social and cultural spheres.

Before proceeding to the revolt, a quick note must be made of the Reformation and its impact on the Netherlands. The Habsburg's were loyal to the old church and in 1520 Charles issued an edict against heresy in the Netherlands. The Inquisition began in 1523 and between 2,000 and 3,000 heretics were martyred between 1523 and 1566 (Schoffer 1964). Although the population was not overwhelmingly against the Inquisition at first, Calvinism was becoming an important force, and in the 1560s the Netherlands began
to receive refugees from Spain and other countries. The Inquisition, coupled with increased meddling with the Dutch economy and increasing taxes, was a major contributor to the first revolts in 1566.

The Revolt

In response to the revolts in 1566, Philip sent the Duke of Alva to act as Governor and put down the riots. A number of factors, when added together, serve to explain Spain's trouble in putting down the revolt. First, during the Habsburg rule the Dutch merchant fleet was able to trade throughout the Mediterranean, and trade was started with the East (1602) and West (1621) Indies. One of the many rewards of this trade was the experience gained in shipbuilding and seamanship. Second, the northern provinces were very defensible since dikes could be opened to flood attacking troops. Third, Spain, the most powerful state in the world, had a number of powerful enemies occupying a good number of its troops in other wars. Finally, the Dutch were very determined to defend their country against attack. All of these factors contributed to the length of the war with Spain (Parker 1979). Treaties with other powers began to play a part
in the war in 1585 when England agreed to provide support to the Netherlands. The most important factor, however, was the massive economic development, from 1590 onwards, of the maritime trade of Holland and Zeeland (Boxer 1965).

It was early in the sixteenth Century when the power of the Netherlands began to take shape. Modern capitalism was beginning its expansion into the areas of the globe opened up by the age of discovery, markets were expanding, transportation and travel was becoming safe and political consolidation had stimulated overseas trade (Barbour 1950). Growth can also be attributed to the fact that England and France had not yet instituted damaging mercantilist policies (Wallerstein 1974).

Partially reflecting the fact that the Netherlands was in a favorable location on the European trade route (Wallace 1990), the merchants of the maritime provinces already had a major share of the trade between Western Europe and the Baltic by the middle of the sixteenth century and, as a result, the political power of the merchants and mariners was increasing (Boxer 1965). When war broke out, overseas trade increased [including trade with Spain (Braudel 1966)], further adding to the merchant's power. This power "enabled them to use the
town councils for the purpose of fostering the development of trade and industry in the towns at the expense of the home and cottage industries of the countryside" (Boxer 1965:11).

Amsterdam

"Each town in Holland had its own special character, each its own history, political organization and economic activity" (Roorda 1964:117). The domestic political terms were supposedly equal; however, Amsterdam, which paid one-third of the expenses of Holland, clearly had more influence in the province (Wansink 1971). Each town concentrated its political activity on the main industry operating in the area. The ruling class tended to be merchants who acted to serve other merchants. The actions of the ruling class were generally oriented toward free trade. While the East and West India companies were instrumental in bringing the Netherlands to power, the lack of restrictions and the absence of state interference played the greatest role (Huizinga 1968). The political disunity was a major disadvantage for the Netherlands during the first decade of the war, and it was not until 1578 that Amsterdam joined in the cause.
After the fall of Antwerp in 1559, Amsterdam became the center of economic power. The city served as an entrepot for trade, a center for banking, and the center for shipbuilding (Wallerstein 1974). Ships were constructed cheaply using the finances of numerous shareholders. Between 1580 and 1604, 1083 persons were engaged in shipbuilding (Murray 1967:57). One of the most important inventions for the industry was the sawmill, to which the original inventors had monopoly rights from 1589-1619. After the monopoly expired, sawmills increased and by 1665 there were 74 mills operational in Amsterdam alone (Murray 1967).

Reflecting the general attitude toward free trade, the shipbuilders sold ships to fellow Amsterdamers, other merchants, and foreign governments including those with which the Netherlands was at war (Barbour 1950).

The enormously profitable Baltic grain trade led to increasing riches and a large banking industry. The Exchange Bank of Amsterdam was created in 1609 and its functions were typical for capitalist economies of the day: the purchase of bullion from states such as Spain, holding of deposits, exchanging money, and transferring accounts (Van Dillen 1934). While lending was not a major function of the bank, it did extend credit to the city of Amsterdam, The Lending Bank of Amsterdam, and
the East India Company (Barbour 1950). In 1621 private banks appeared on the scene and competed with the Exchange Bank. The private banks, however, were not nearly as successful as the Exchange Bank and were often ruined in times of war (Murray 1967).

The Baltic trade was the key to the expansion; merchants purchased the grain cheap, transported it in cargo ships called flutes (20% smaller than other ships of equal tonnage and able to be handled by a small crew (Braudel 1984)), and stored it until the price went up, at which time they sold it for large profits (Cotterell 1972). Grain shortages in Italy and Spain in the late sixteenth and early seventeenth centuries created even larger profits for the Dutch, who were well stocked with Baltic grain and could act as a monopolist supplier (Van Dillen 1962).

The Eighty Years War was temporarily halted in 1609, when a 12 year truce was signed. During this truce the Dutch continued to gain in economic power and when hostilities resumed in 1621 the struggle was evenly matched. The war officially ended with the Peace of Munster in 1648. The Netherlands had emerged from the conflict having fought off the most powerful empire in Europe and gained a great deal of land in the process (Lambert 1985).
Factors leading to growth

While a number of factors leading to the growth in power of the Netherlands in the seventeenth century have already been discussed, many other factors can also be figured into the equation. When the price of grain dropped, intensive agriculture rapidly expanded due to increased poldering (pumping water out to create land), thus keeping the domestic peasants and farmers alive and in business (Van Veen 1950). Peasants also shifted their crops from grain to industrial crops like flax, hemp, and hops (De Vries 1974). Sugar refining also became a very important industry in Holland. Most of the sugar bound for England and France was refined in Holland where Amsterdam alone had 60 refineries in 1661 (Masefield 1967). Insurance was another industry that grew along with trade. This industry was extremely large and so unregulated that during the war with Spain it even insured enemy ships (a practice halted by regulation in 1622) (Barbour 1950). Finally, the massive growth rate and the dream of freedom from religious persecution drew large numbers of immigrants from other countries and artisans from the countryside into the cities and filled the demand for labor (the
population of Amsterdam went from 50,000 in 1600 to 200,000 in 1660) (Wallerstein 1980).

An interesting note can be made of the problems associated with the Netherlands' main factor leading to growth: the Baltic grain. Exports from the Baltic states far exceeded the imports, meaning that the traders were required to bring a large amount of silver to the Baltic. Trade with Spain, the leading producer of silver, thus had to be maintained even during the Eighty Years War. Later in the seventeenth century, after the Dutch had established trade routes to areas that could supply the Baltics with the products it demanded (spices, tea, tobacco, sugar) all of this changed and the Dutch sailed with goods rather than bullion, effectively negating the need for the Spanish trade (De Vries 1976).

The Trading Companies

One of the most important political and economic decisions the Netherlands made was the organization of the East and West Indies trading companies. The East Indies Company, chartered in 1602, and the West Indies Company, chartered in 1621 (the West Indies company would have been chartered earlier but the 12 year truce
was signed and the need for the company was lessened), served as trading companies, colonizers, investment opportunities, and war machines (Boxer 1965; Wallerstein 1980). A brief discussion of each of these powerful trading companies is necessary to stress their importance to the Dutch empire.

The United East India Company (VOC) was founded in 1602 in order to secure a monopoly in Asia against other merchants in the Netherlands, but the company eventually tried to get the monopoly over the Europeans and the Asians (Meilink-Roelofsz 1968). Along with monopoly rights the state granted the Company the right to make war (the Company was partly designed to aid in the war against Spain). In the Company's early years its territory was limited to Banda, Amboina, and Formosa (Meilink-Roelofsz 1968). The Netherlands, however, did have significant trade routes in the Mediterranean and the Atlantic (Americas and Africa), and later in Ceylon, Java, and Japan (Nagasaki).

The West India Company, organized in the northern provinces (Amsterdam, however, had the most voting rights) in 1621, was much less successful than its counterpart. The main reason for establishing the company was to wage war against the Spanish; colonizing and trading came second (Goslinga 1971). In the first
25 years the Company established New Amsterdam (New York), captured, with a great deal of resistance, a large portion of Brazil, and then Elmina (West Africa) and Luanda (Angola) (Wallerstein 1980). Brazil was chosen as the first major project for the company since it was controlled by the less powerful Portuguese, and had a sugar industry that was thought to be large enough to pay for the costs of taking and establishing the colony (Boxer 1957). Another important factor in the decision to attempt to control Brazil were the large salt reserves discovered there after the salt trade with Spain became dangerous in 1585. Salt was one of the main imports critical to the success of the fishing industry. Salt was needed, due to the new method discovered by the Dutch in the middle of fifteenth century, to cure the herring (Goslinga 1979).

The most important victory for the company, however, came in 1628, when it captured the Spanish silver fleet and paid its investors a 75% dividend that year (Van Hoboken 1960). Once the company had established the Atlantic routes, the Dutch started what has come to be known as the triangle trade. Slaves from Africa worked the plantations in the West Indies, which then supplied Europe with sugar, tobacco, rum, and cotton. In 1638 the Brazil monopoly was lost to a
vote for free trade, but its power was still dominant until 1654 when it lost out to the Portuguese (the Dutch were involved in the first war with England at the time). According to Van Hoboken (1960), the company never recovered from the loss of Brazil, and was liquidated in 1674. A new company was organized but never had much power or economic strength.

The World System

Fernand Braudel (1977) claims the world system in 1650 had the following composition.

The center of the world was tiny Holland, or to be more accurate, Amsterdam. The intermediate or secondary zones were the very active remainder of Europe, that is, the Baltic and North Sea states, England, the Rhine and Elbe regions of Germany, France, Portugal, Spain, and Italy north of Rome. The peripheral regions were Scotland, Ireland, and Scandinavia to the north; plus all of Europe east of a line running from Hamburg to Venice; Italy south of Rome (Naples and Sicily); and lastly beyond the Atlantic, Europeanized America, the periphery par excellence (Braudel 1977:91).
The Netherlands had attained the ability to compete in the markets of other core countries and through political and economic means, kept the prices of raw materials coming into the country at low levels (Wallerstein 1974). By 1670, the Dutch had more ships than all of the other major countries combined (Wallerstein 1980).

The first seeds of the decline of the Dutch republic were sewn in 1651, when England passed the Navigation Acts, marking the first of the mercantilist policies aimed at eroding Dutch hegemony (Harper 1939). By 1672 the Netherlands were involved in the third Anglo-Dutch war and a separate war with France (Wallerstein 1980). Increasing military costs as well as low grain prices started to push the Netherlands into decline. The other powers in Europe had correctly perceived the Netherlands as the economic (and often military) enemy and enacted a number laws and other political devices to cut into its power. The weak neighbors that had helped the Netherlands gain a hegemonic position were now strong and establishing their own hegemony (Huizinga 1968). While power was fading it was by no means gone, and the Netherlands remained the dominant power until 1700, when the war in
Europe forced them to fight and give up their hegemonic position.

**Employing the Model in the Early Years**

Looking at the changing position of the Netherlands, within the framework of the model, sheds new light on its political and economic relations with other states. While under the protection of other empires (Burgundy and Spain) the Netherlands was able to construct an infrastructure that could facilitate the growth of later years. During Burgundian rule, the Netherlands enjoyed an unusually free political environment in which to conduct economic activities. The town councils formed during the period also facilitated the growth of towns and independent rule. When Charles "the Bold" took power his policies changed the free environment to one of harsh rule. Charles increased the role of the central government and raised taxes. Reaction to Charles's new rules was divided, however, since most of the taxes and policies were directed toward the guildsmen leaving the rest of the town unaffected. The negative reaction did not spread since the Baltic grain trade, the herring industry, cloth production, and the beer brewing industry, were
supplying a good amount of wealth to the provinces and served to counter the higher taxes (Tracy 1990). Another factor that divided the provinces was the fiscal negotiations with the government. Town councils could negotiate how much taxes were paid and the more prosperous towns had better bargaining positions.

Charles the Bold's reign ended in 1477 and the harsh policies were slightly relaxed by Mary. Economic decline began around 1480, and poor weather conditions combined with the war against the city of Utrecht (1481-1484) put the provinces into severe economic hardship (Tracy 1990). The cloth industry suffered since credit was denied to the them by the English from whom they received their wool. The beer brewing industry was also hit hard due to increased competition from Germany. Even the normally strong Baltic trade had diminished due to conflicts in the region.

In 1494 Philip, at the of age 14, took the reins of government and was heavily influenced by the Netherlands and the higher aristocracy (Vlekke 1945). During these last decades of the fifteenth century the provinces started to develop a "national" policy and Philip's political ideas began to reflect this development (Hugenholtz 1964). Wars were brought to an end and trade routes were reinstated. All of this
began to change, however, when Philip married Johanna in 1496; and all other heirs to the Spanish throne died in 1500. The advantageous trade relationships established with England were scrapped as Philip tried to secure England as an ally against France. Many other policies advantageous for the Netherlands were similarly dropped as Philip set his sights on a dynasty. Philip died in 1506, leaving the empire to Charles.

Charles gave legal status to the United Provinces and established the borders which, for the most part, survive to this day (Vlekke 1945). Uniting the Provinces proved difficult (a 40 year war) and stirred a great deal of anti-Habsburg feelings. Early in the sixteenth century the heavy tax burden was reinstated and steps to eradicate Protestantism were taken, planting the seeds of revolt (Burke 1956).

The Netherlands, oscillating between exploitative and general economic flow with Spain during the fifteenth century, began to develop anti-Habsburg feelings and the desire to have control over their own political and economic destiny. Determining social relations based on the economic flow would lead one to predict that no social relations existed prior to the economic exchange. Since this is clearly not the case,
a hegemonic relationship is indicated. Since social relations existed prior to the exchange the economic flow should have taken place on the equal level. Originally on the receiving end of exploitative economic flow the provinces faced a hegemonic power factor of two. Reaction to the exploitative relations was kept to a minimum due to policies aimed at dividing the population, which was a fairly easy task since a civil war had been raging for a number of years, and an overall level of economic prosperity in the Provinces. In order to model specific economic exchanges during this period, neoclassical microeconomic models of monopolistic price setting would necessarily be employed.

As political and economic policies eased, and the Netherlands gained in economic power, the economic exchange shifted to the general flow level. We spot the historical discontinuities as models of monopolistic exchange begin to fail. These discontinuities can be placed where policy changes resulted in lower taxes and easier import/export activity. Models that examine competitive markets would better explain these periods of exchange. The winds of change began to blow in the last decades of
the fifteenth century and the Netherlands started its rise to power shortly thereafter.

Sixteenth Century Power Shifts

Although unquestionably the most dominant state in western Europe, the hegemonic position of Spain began to fade during the sixteenth century (Parker 1979). Even though the Habsburg empire continued to grow and consolidate due to marriages and deaths, wars with France (Franco-Spanish wars of 1494-1516 and the Habsburg-Valois rivalry of 1494-1559), and overextension had drained some of the economic strength of Spain (Wallerstein 1974). The Treaty of Cateau-Cambresis (1559) settled the rivalry and Spain emerged the most dominant power in Europe (Endress 1975). The war with France was not over for more than a year when Philip decided to attack the Turks in Tripoli. This campaign cost Philip a good portion of his galley fleet and damaged Spain's reputation (Parker 1979). Although victorious in the end, the period in which Spain was occupied with other wars opened the door of opportunity for the Netherlands and from this point Spain's hegemony would begin to fade.
The extent of the Habsburg empire provided massive trade opportunities for the merchants of the Netherlands (Lambert 1985). Growth was still held back, however, due to the civil war draining the economic gains made in trade. When the war ended in 1543, the Netherlands pushed past another barrier toward economic hegemony. With internal peace came economic prosperity. Every industry showed signs of growth leading to an increase in population that quickly outpaced farm production. It became clear that more land was necessary to support the growing population. Towns began to band together to conduct land reclamation projects to large for independent towns to handle (Vlekke 1945). Even with these projects it was clear that the country was not able to support its population. Trade became even more critical to the Netherlands' survival. With decreasing internal problems, the Netherlands began to focus on the fact that it was being taxed and controlled by a power that was concerned only with itself. In addition, Calvinism had spread across the Netherlands and the Inquisition (1523-1566) was adding to the unrest (Schoffer 1964).
From the beginning of the sixteenth century, the Netherlands was able to operate in a fairly free international market. While Spain was occupied with external enemies, the Netherlands was establishing a foothold in many industries and by the middle of the century it had gained a good deal of economic power. While still paying taxes to Spain, the Netherlands had moved from being in an exploitative economic flow situation to trading on the general flow level. Spain still maintained a power factor of one over the Netherlands but this power was fading fast.

Analyzing the Revolt

By the time of the revolt (1566) the Netherlands had secured a strong position in the world market and controlled most of the Baltic grain trade. Warning signs concerning the revolt had come to Spain around 1559, and Philip II dispatched the Duke of Alva to deal with the situation (Wegg 1924). In 1570, however, the Turks had gone on the offensive, and Philip was forced to shift his resources to concentrate on the Mediterranean trade and the war with the Turks (Parker 1979). The two front war between 1572 and 1576 cost Spain a great deal of revenue and resulted in Philip
deciding to make peace with the Turks. Concentration on the Netherlands lasted only two years, however, since the king of Portugal died in 1578, leaving Philip II as the heir. Annexing Portugal took four years and drew the best troops out of the Netherlands. During that time Amsterdam, which had stayed out of the fight against Spain, decided it was now economically advantageous to join (Lambert 1985).

In 1585, Antwerp fell to Philip creating the opportunity for Amsterdam to assume the role of leading the Netherlands (Wegg 1924). Trade was already strong in Amsterdam when many of the merchants from Antwerp moved in and brought their trading-relations with them (Van Dillen 1964). Merchants and traders who were thrown out of Portugal and Spain, and German Jews also found refuge in Amsterdam (Cotterell 1972). With trade expanding rapidly, the alliance with England (1585) and the defeat of the Spanish Armada in 1588, and the bad harvests of 1586-1590 driving grain prices up, the Netherlands were in good economic shape (Boxer 1965). While the war continued, Amsterdam traders, seeing that profits could be made, continued to do business with both sides. Storing grain in large warehouses until the price went up allowed the merchants to reap enormous profits during the widespread famine of the
last decade of the century (Cotterell 1972). Heading into the seventeenth century, the Netherlands were building up the economic strength to become a hegemonic power.

During the early years of the rebellion, Spain's resources were divided for a number of other factors. While united, Spain was able to crush the rebellion, but these times of unity were few and far between, allowing the Netherlands time to rebuild and gain allies. By the time Amsterdam joined in the rebellion, Spain had clearly lost its ability to exploit the Netherlands and was now forced to compete with it on the general flow level of exchange. While the traders had social relations with each other, the motive driving the exchange was a desire for pure profits and thus the exchange took place on the general level with a power factor of one. The Netherlands controlled a large portion of the grain trade, but not enough to significantly affect the price level on the world market. Spain and the Netherlands both had the option of trading with other states for their goods. This situation changed just after the turn of the century, and we examine this historical discontinuity below.
The Golden Age of the Netherlands

The first decade of the seventeenth century marked the true beginning of Dutch power in the world economy. While Spain and other powers of western Europe were concerned with dominating the continent, the Netherlands was concerned with dominating trade. Originally the Dutch seafarers were masters of transporting grain, salt, and timber (i.e. high volume, low value goods), but when they began shipping cloth, spices, and silks, their skills truly shined. The development of the "fluit" led to a ship that could carry a large volume of cargo at relatively cheap operating costs (De Vries 1976). These ships were also specialized for transporting cargo. The Netherlands expanded on the assumption that they would trade peacefully with other states and, thus, the ships did not have to double as naval vessels. When the ships sailed into areas of danger due to war or piracy, the ships were sent as part of a larger convoy that included naval vessels.

Establishing monopolistic trading companies in the East and West Indies led to an even more powerful trading empire. The Netherlands had built their empire by maintaining monopolistic power throughout the wars
involving other states and itself. Once the 12 year truce with Spain was signed (1609) the Netherlands, already the dominant force in trade, could fully concentrate on establishing economic hegemony. The truce was essentially the end of the war, although it was not formalized until 1648, Spain had essentially given up on the hope of keeping the Netherlands. By the end of the truce, monopolies in grain, herring, spices, furs, copper, and a number of other commodities were established, and the goal of hegemony had been achieved. The key to the monopolies was the huge warehouses where the goods could be stored until the prices were high. Amsterdam merchants stuffed their four and five story warehouses full of goods and made phenomenal profits during wars, when the commodities were scarce (Braudel 1982). Dutch hegemony would reach its peak at midcentury.

Without the problem of war, the Netherlands had passed the final barrier to economic power. With established monopolies in a number of industries, the Dutch could manipulate prices and control the supply of goods to the world. Exploitative flow models once again can be used to explain the economic situation; however, this time the state doing the exploiting is the Netherlands. While social relationships were
clearly established with trading partners, the monopolistic situation allowed the Dutch to trade on a more exploitative level. At the peak of hegemony, the Netherlands maintained a power factor of two with the other European states, demonstrating the fact that it had monopolies in most industries and, most importantly, that it had monopolized trade. The Netherlands possibly maintained a power factor of three in its peripheral colonies in the east and west Indies, reflecting its overpowering military and economic strength in those regions.

The historical discontinuity can be placed in the year 1609, the year the truce with Spain was signed. Without the burden of war, the Netherlands was free to complete its economic domination of the world. Models of competitive markets fail to accurately explain the exchanges that took place after this year, and monopolistic exchange models begin to show promise. The model of exploitative flow explains the exchanges taking place within western Europe and in certain areas of the east and west Indies, unidirectional flow models fit best. These models serve to explain the hegemony of the Netherlands until its decline at the close of the seventeenth century.
The Decline of the Netherlands

Hegemony of the Netherlands started to erode when other states began to perceive them as the enemy and the wars in Europe started coming to an end. The first act that cut into the hegemonic power of the Netherlands was the English Navigation Act of 1651. The peace with Spain and the end of the Thirty Years War brought the cold wars into play (Wallerstein 1980). With fewer wars to fight other countries began to focus on economics, and the Netherlands began to feel the pinch. Three separate sea battles were fought with England in response to mercantilist acts passed to counter Dutch hegemony. Although Dutch hegemony remained until the end of the seventeenth century, England and France's recognition of the Netherlands as the force that had to be reckoned with, cut into its power.

During its reign of hegemony the Netherlands followed a path of neutrality in order to foster the best trading arrangements. Once its economic power had established it as the most powerful state in the world this policy was forced, by other states, to change (Carter 1975). The policies and wars of France and England against the Netherlands had done their damage;
and the Dutch, who consider themselves a peaceful people (Huizinga 1968), were content to return to a semiperipheral state of existence.

Final Thoughts

While many volumes have been written on the rise and fall of the Netherlands, this thesis has barely scratched the surface of these historical changes. This thesis has, however, placed the history of the Netherlands within a new framework of social and economic exchange that incorporates hegemonic relations between trading partners. The model, constructed in Section III, has shed new light on the social, economic, and political dynamics of the Netherlands within the larger world system. Historical discontinuities are placed at the specific dates where particular economic models begin to fail. Employing the model allows one to identify five main economic periods for the Netherlands during the years examined in this paper. During the early years, the Netherlands went through a series of general flow - exploitative flow, oscillations in its relationship with Spain. The second period lasted until 1543 when the internal civil wars ended and allowed the Netherlands to concentrate
on economic matters. The rise to power occurred between 1566 and 1609 when the revolt broke off friendly social relations with Spain. The "Golden Age" of the Netherlands lasted from 1609 to 1651. During this period, the rise to hegemonic power allowed exploitative and possibly unidirectional economic flow to occur and the Netherlands reached a power factor of three with its heavily exploited periphery. Finally, the decline period is placed from 1651 to 1700. While hegemonic relations continued in this period, a noticeable decline in power occurs, and England and France begin to make inroads into the Netherlands' power.

The general review of economic and political history has allowed the historical situation of the Netherlands to be placed within the Model of Economic flow, Social exchange, and Hegemonic Relationships. While specific price data were not incorporated into this example, I am confident that prices between trading partners would reflect the conditions outlined above. A brief example of how price data can be used within the framework of the model is outlined below in Section V, where the model is applied to Mesopotamian evidence.
CHAPTER V

APPLICATION OF THE MODEL TO MESOPOTAMIAN EVIDENCE

While the model showed a great deal of promise in its application to the shifts in power of the Netherlands, it is important to show that other applications are possible. While a full scale analysis of Mesopotamian trade systems is beyond the scope of this thesis, a brief examination of some data that appears to be troubling archaeologists, within the context of the model, may help explain the situation. Adding sophistication to evidence provided by Daniel Snell (1982) concerning price stability allows one to gain a better understanding of the problem and what sort of data is needed to solve it.

According to Snell "the motivations of the [Mesopotamian] price-setters in changing their prices or in keeping them stable elude us" (1982:190). This and other similar statements leads one to the conclusion that there is much to learn about the
Mesopotamian economy. Mesopotamian evidence is specifically evaluated here for the following reasons: First, the question of whether or not Mesopotamia operated under the market principle or not is still a topic of debate; second, interesting problems about price variability are plaguing archaeologists; third, price data is available in the quantity necessary to generate some interesting hypotheses; and finally, the General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships is capable of addressing the data. Price variability is the main concern of this examination but the other issues are also addressed.

Since 1957, when Karl Polanyi challenged the market concept, scholars in the fields of economic anthropology and archaeology have spent a good deal of time attempting to prove that a market did in fact exist in ancient Mesopotamia (see especially Cook 1966, Veenhof 1972, and Snell 1982). Scholars have failed to directly attack Polanyi's theory and its applicability to Mesopotamian evidence. Most critics attack one of Polanyi's weakest points: that since no physical evidence exists for a "market place", Mesopotamia could not have operated under a market principle (Polanyi 1957).
The dependent relationship, which Polanyi stresses, between the existence of a "market place" and the operations of a free market, is false. Veenhof (1972:351) correctly points out that Polanyi's assumption of the interrelatedness of the "market place" and the market is incorrect. In other words, the absence of a "market place" does not dismiss the possibility of the economy operating under the market principle. Trade can occur in households, squares, or on the street. An important point to keep in mind regarding the fact that archaeologists have not found a "market place" is that archaeologists rarely excavate in open spaces. Structures and other features are relatively easy to spot, and with limited funds available to the archaeologist, he or she is not likely to spend time excavating open spaces. In the broadest sense, however, the "market" can be viewed as rational individuals attempting to maximize their utility through exchange with other individuals who are attempting to maximize their own utility. Even if material goods did not physically change hands according to the principles of a free market in a market place, social exchange and rational actions on the part of individuals and firms cannot be dismissed by Polanyi.
After Veenhof's argument against Polanyi, he goes on to claim that markets did in fact exist in Mesopotamia. "The fact however that markets existed where goods could be sold with profit (nemelum) does not fit well into POLANYI'S system" (Veenhof 1972:356), (see also Foster 1977). While this argument is important, it fails to attack the heart of Polanyi's theory. The current model exposes the limitations of Polanyi's theory and also demonstrates the existence of a market economy by exposing the reasons for price stability and instability. Before the model can be applied to the evidence on price variability a critical assumption must be reviewed.

One of the main principles of the general theory is that as social relations decrease, the desire to attain a pure profit from the exchange increases. The assumption, which must be made in order for the Mesopotamian price data to apply, is that social relations decline with an increase in geographic distance. This assumption is convincingly supported by Hodder (1978) in his analysis of artifact distribution and the effect of distance on human interaction. He claims that as distance increases from a center, the amount of interaction with that center decreases. Hodder concludes that "especially when communication is
pedestrian, most interaction is limited to nearby meetings" (1978:157). If one excludes relationships with kin living in other cities, it is safe to assume that in a society where communication is pedestrian (i.e. Mesopotamia during the Ur III period), social relations at the intercity level are generally more exploitative than social relations at the intracity level. The assumption of no hegemony must also be made in order to set up the ideal categories of economic flow discussed in Section III. With these assumptions in mind, we can now proceed to analyze unstable prices in Mesopotamia.

Analysis of Unstable Prices

Although investigations of the Ur III period evidence are limited and incomplete (almost no private economic documents exist from the Ur III period while thousands of state records exist), they do appear to demonstrate that prices on a range of goods were stable within cities and unstable between cities (Snell 1982:189-196). These price trends are both predicted and explained by the present theory. The unstable price trend in intercity exchange is now explained.
Daniel Snell's discussion of unstable prices states that trends are difficult to find and that "much more remains to be discovered about the economic life of Ur III times before the full significance of pricing and price movements can be understood" (Ibid 1982:196). Again, application of the Theory of Economic Flow, Social Exchange, and Hegemonic Relationships explains these price fluctuations as a consequence of different merchant risks and market structures.

According to Snell (1982), goods of foreign origin display irregular prices. The argument presented here is that irregular or unstable prices indicate the merchant's attempt to capture a pure profit from goods exchanged between cities. Initial social relations in an intercity exchange are nonexistent and the primary economic relationship is at either the exploitative or general level, depending on the type of good, competition, supply and demand, and a number of other factors. The profit attained from the transaction would cover, among other things, the added risk involved in transporting goods between cities. Clearly, long-run prices between a particular merchant and his steady clientele will exhibit more stability. However, this stability only develops after social
relations have been established and the economic relationship has become secondary to the social relationship. Prices on goods produced and sold within a city should, based on this theory, exhibit more stability in both the short and long-run.

Irregular prices arise, in part, from the fact that imported goods arrive from a number of different locations, each with different risks involved in the trade. The risk involved with transporting goods to market increases with geographic distance for a number of reasons: perishable goods that may not survive a long trip; an increased possibility of theft; poor demand for the product at the destination; and many other factors. Thus, a good imported from a greater distance will display a greater price than that same good imported from a closer location. The instability of prices is a reflection of the different risk-return schedules, illustrated in Figure 11, demanded by the merchants.

Another reason goods of foreign origin display unstable prices is that the social relations can be at either the general or the exploitative level, and in the long-run these relations may move to the equal level. As a result of the multitude of undefined and different social relations involved in the exchanges
Figure 11. Risk-return schedules for geographically different merchants.

analyzed by Snell, a relative price scheme cannot be generated. The result of the price analysis of goods arriving from different, undefined locations, with undetermined social relations involved, is what appears to be unstable or irregular prices.

A merchant who has, in the long-run, established a steady customer in another city would predictably engage in an equal flow exchange of goods. In this situation he may establish a price ceiling on his good in order to express good faith, friendship, or thanks
for the customer's continued patronage. On the other hand, if the economic relationship remains primary, the merchant will continue attempting to reap a pure profit from the exchange. The price in this situation is determined by the market forces and costs of production.

Merchants who travel great distances to sell an exotic product are able to fetch a higher price because the product is only available in limited quantities, and thus the merchant maintains a monopoly on the good. A producer will not travel a great distance to sell his goods that are available locally, unless he has lower production costs than local producers, which will compensate for the costs of transportation. These lower production costs must allow him to receive relatively greater profits than local merchants. Goods on which the merchant maintains a monopoly will be priced in the exploitative category. The social relations are limited due to the geographical distance between the parties, and the merchant exploits this monopolistic situation by charging higher prices.
Analysis of Stable Prices

A number of theories have been advanced to explain the apparent trend of stable prices within Mesopotamian cities (Curtis and Hallo 1959; Snell 1982). The theories advance such explanations as active governmental price controls, general economic stability, and the possibility that the bureaucratic system is providing a traditional price rather than the actual price. One explanation for stable prices within cities (Curtis and Hallo 1959:111f) claims that stable prices reflect the state's effort to control them. Snell (1982:191) refutes this claim since "the prices of the capital products, some of which appear to come from the state, are not uniform". This claim is also in question because of the fact that no evidence has been found that confirms the existence of price controls. Price controls are very difficult to implement even in the modern world. Information about current supply levels, elasticity of demand, costs of production, and other critical data must be readily available to the controlling body or else economic instability will result.
In the case of Mesopotamia, price levels would be difficult to actively stabilize since communications were extremely slow. By the time the price level was determined, market prices reflecting the true supply and demand market clearing price would be established and difficult to eradicate. If there was a governmental attempt to regulate prices, this would most likely result in unstable price data. Ledger accounts reflecting true prices would thus disagree with governmental prices.

Robert McC. Adams (1974) and Charles Redman (1978) advanced the hypothesis that part of the Mesopotamian economy, during the Early Dynastic period, was controlled by the temples, while traders conducted business on the side for their own benefit. This is a reasonable hypothesis, but no evidence exists to support the idea. It would also seem that a situation such as that would have created competition between the temples and the merchants. This sort of competition would certainly have damaged the temple's power over the people, since it would not have had complete control over the economy.

Daniel Snell advances his own theory about stable prices in a different period. He claims that stable prices reflect a "general economic stability during the
middle years of the Ur III state" (Snell 1982:191). He claims that any instability during this period reflects bad and good years for certain products and the political situation during the particular time. Finally, Snell mentions that prices could reflect individual price decisions made in response to unseen forces. These unseen forces are exposed by the formal economic theories employed in the present model.

Stable prices can be explained by applying the concepts of the present theory. Again, in order to apply the theory to the Mesopotamian evidence, it is assumed that the "closeness" of social relations decreases with increasing geographic distance. An examination of intracity social relationships exposes the reasons behind the stable prices.

Production costs should be similar for producers within the same area, since it is assumed that producers were relatively homogenous in their scales of production and had access to the same suppliers. The markup of goods produced and sold within a city should be lower, reflecting lower risks, since production and transportation are minimal and the social relations (distance) between the producer and the consumer are relatively close. In the short-run merchants and consumers have a primary economic relationship, but
based on the model's predictions, in the long-run these economic relations should become secondary since the merchant is most likely trading in a fairly competitive environment and regular clients would help attract other customers. With a low markup and relatively small risk, long-run prices will tend to settle around an equilibrium price, which is demonstrated in the silver balance accounts.

If we assume that over time a merchant builds a social relationship with a steady customer, in the long-run the type of flow at the intracity level falls into the category of equal flow. The merchants are in business for profit, but due to the constraints of relatively close, primary social relations that develop in a geographically limited market area, they cannot (assuming no hegemonic relationships) exploit their customers. Also, the normal economic pressures generated from other competitors and imports, serve to keep prices hovering around a stable equilibrium.

A model of intracity exchange between a merchant and a regular customer can be constructed under the assumptions discussed above. The uncertain permanency of the social relations require an immediate economic exchange of goods, and thus risk is a factor in price determination. An examination of the risk-return
relationship, illustrated below in figure 12, demonstrates that when a merchant faces the degree of risk $RE$, he must be compensated with the rate of return shown at point $E$, for taking that risk. This risk will remain constant as long as the merchant and the customer retain a good social relationship.

![Risk Return Relationship Diagram](image)

**Figure 12.** The risk-return relationship in an Ur III period intracity exchange.

Employing the model that demonstrates the effects of a ceiling price provides a graphic illustration of the exchange price. Figure 13 illustrates the effect of a ceiling price in a Mesopotamian intracity exchange. The price per unit is set, by the exchange
type and the norms of the trading group in the city, at the amount $P_c$ covering the merchant's investment in the good, but falling below the market clearing price $P_e$. Excess demand $X_sX_d$ is the result, but access to the goods is restricted to inhabitants of the city since the distance between cities is not easily overcome.

The problem of comprehending apparently stable intracity prices has been solved by applying the theory of economic flow and social relations. The theory has shown that primary social relations and relevant economic pressures have led to a long-run intracity price equilibrium. Merchants are essentially
forced to charge a fairly consistent price to their regular customers.

Relative Prices

In the process of examining price stability, the model has exposed the fact that Mesopotamia was operating on the market principle. Individual merchants and consumers are acting in a rational manner in response to economic and social pressures. The fact that "market places" have not been found in the archaeological record does not prove that Mesopotamia was operating under some other economic system and, in light of the above analysis, Polanyi's "anti-market mentality" must be questioned.

The model can be employed to determine a relative price scheme for the different types of exchange that occurred in Mesopotamia. The lowest prices for a given commodity displayed in the silver accounts should, according to the model's predictions, reflect equal flow occurring between a merchant and a regular customer within a city. A concurrent higher price on the same good can reflect a number of possible situations. If the exchange is similarly intracity, it is predicted that the customer is either not a regular client of the
merchant or is not involved in good social relations with the merchant.

The next highest prices should be found in intercity exchanges. These exchanges are conducted at the general flow level between merchants and infrequent customers. The highest prices should reflect an exploitative flow situation where the merchant has a monopoly on the good. These highest prices would be charged to individuals who have little or no contact with the merchant and live in another city.

Clearly this relative price scheme is not precise. The limited nature of the evidence prevents the development of a complex price scheme. If a true price scheme is eventually developed, however, the dynamics of the Ur III period economy will become more clear.

Conclusion

The Theory of Economic Flow, Social Exchange, and Hegemonic Relationships provides an explanation for stable intracity prices and unstable intercity prices. Unstable, intercity pricing strategies reflect: 1. The merchant's attempt to capture the largest pure profit attainable; 2. The fact that imported goods arrive
from a number of different, unspecified locations, and that the different risks involved are overlooked; and 3. The fact that economic relations can be at either the general or the exploitative level, and in the long-run may, in some circumstances, move to the equal level. Prices on goods produced and sold within a city should be stable for the following reasons: They reflect similar production costs; lower, more stable markups are involved; and the long-run, primary social relationships create lower merchant risks, and also result in self-imposed price ceilings.

The "limited and incomplete" evidence from Mesopotamia has proven to be complete enough to offer some support for the hypothesis that a market system was in effect during the Ur III period. The evidence has also provided enough information to shed some light on which "unseen forces" are acting on merchants and consumers. With further investigations the motivations of the price-setters should no longer elude us.
CHAPTER VI

SUMMARY AND CONCLUSIONS

The first chapter of this thesis discussed the complex development of classical economic theory, Marxian economic thought, and neoclassical economic thought. This discussion provided the background necessary to critically examine the three schools of thought presently dominating the field of economic anthropology: the formalist school, the substantivist school, and the Marxists. The examination exposed the similarities and differences between the three schools. A brief explanation of the history, aims, and goals of the field of economic anthropology was also provided. Following the examination of the field of economics, the first chapter examined the development of formalist theory prior to 1957. Next, the substantivist movement, led by Karl Polanyi, was discussed. Each school was critically examined after
their respective discussions. The first chapter concluded with an examination of the present state of the field, and the goals toward which it is aiming.

The second chapter of this thesis discussed the influences in the development of the model of Economic Flow, Social Exchange, and Hegemonic Relationships. Problems with the earlier models developed by Polanyi and Sahlins were exposed. Influential microeconomic theories developed by economists such as Bentham, Jevons, and Menger were discussed. Finally, the influences of world systems theory were examined. This chapter set the stage for the development of the model.

Chapter three developed the General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships. This section discussed the model's usefullness in four main areas: First, by exposing economic and social relationships as they occur in power-free systems, the theory allows one to examine the degree of hegemony in the system under investigation; second, the theory provides a means of classification for economic systems that can be employed to determine which particular formal economic models apply to each situation; third, the theory provides the tools to develop a scheme of relative prices for a given economic situation; finally, the
model provides the means to identify historical discontinuities in economic systems. The model's usefulness in these areas of inquiry allows one to describe the dynamics of an economic system.

The theory combines aspects of the substantivist, formalist, and Marxist schools of thought. Demonstrations that this model applies across both time and space, and in both market and non-market economies were provided. Formal economic models of indifference analysis, consumer optimization, and theories of the firm provided for an examination of the rational behavior and motivations of merchants and individuals. Analyzing risk-return relationships and the effects of ceiling prices provided a more in depth look at the rational behavior of economic actors. Hegemonic and dynamic relationships were also considered after the construction of the ideal model.

The fourth chapter of this thesis applied the Model of Economic Flow, Social Exchange, and Hegemonic Relationships to historical evidence from the Netherlands. The emergence of the Netherlands as the dominant capitalist state in the seventeenth century provided an interesting test case for the model. The review of the historical background of the Netherlands, within the constraints of the model, shed new light on
the economic and political factors that led to the rise and fall of the state.

Chapter five briefly examined the Mesopotamian, Ur III period. The model was employed to explain price stability within cities and price instability between cities, during this period of civilization. It was demonstrated that unstable prices reflect: The merchant's attempt to capture a pure profit; the differential in risks involved in intercity trades and; the many possible social relations that can exist at the intercity level of exchange. Stable prices within cities were shown to be a reflection of: 1. similar production costs for merchants; 2. more stable markups; and 3. primary social relationships that result in stable, self-imposed price ceilings.

In the process of examining price stability, the model exposed the fact that Mesopotamia could have been operating under the market principle. The model supports the hypothesis that individual merchants and consumers acted in a rational manner in response to economic and social pressures. The "limited and incomplete" evidence from Mesopotamia proved to be complete enough to show that a market system could have been in effect during the Ur III period. The evidence also provided enough information to determine which
"unseen forces" acted on merchants and consumers during that time period.

This paper demonstrates that the field of economic anthropology is in need of a better paradigm. The early formalist approach was based on incorrect economic assumptions and had many problems. Karl Polanyi's anti-market approach provided the field with a new approach, but it is now outdated. Polanyi's approach was also originally based on incorrect economic assumptions. The formalist's answer to Polanyi was a move in the right direction, but still lacked critical assumptions. Recently, some authors have discussed approaches similar to the present theory, but stopped short of completing it (see Klein 1973 and Adams 1976).

The General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships allows one to predict social relations based on economic relations and vice-versa. Comparing predicted relations to actual observed relations exposes the hegemony present in the system. The model demonstrates that economic analysis can be employed cross-culturally and that it is an extremely powerful aid in the understanding of dynamic social and economic systems. Premarket economies as well as market economies can be analyzed
with this approach and more economic situations should be tested with the model to insure its cross-cultural applicability. An examination of the recent changes in the global economy with the inclusion of the Eastern Bloc states would be an interesting test case for modern economics, and an application of the model to an archaeological hunter-gather community would test the models ability to explain prehistoric economies.
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Weber, Max  

Wegg, Jervis  
Wheatley, Paul

Wolf, Eric

Wolff, Richard
VITA

Donn Robert Grenda

Born in Phoenix, Arizona, September 15, 1966. Graduated from Tustin High School in that city, June 1984. Received a B.A. in Economics and Anthropology from the University of Redlands, 1988. The course requirements for this degree were completed in 1989, and the thesis: A General Theory of Economic Flow, Social Exchange, and Hegemonic Relationships was completed in 1992. In September 1990, the author entered the University of Arizona as a graduate student in the Department of Anthropology.

The author has done field work in both prehistoric and historic archaeology in California, Nevada, and Arizona.