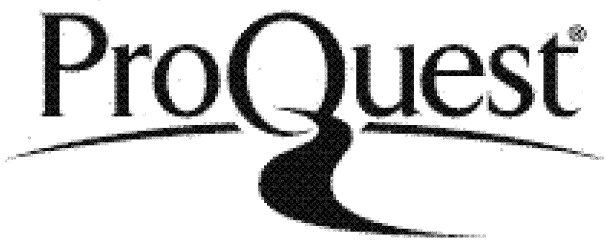
Economic Reality:
The Ontology of Money and Other Economic Phenomena.

Dan Fitzpatrick

PhD Thesis

Department of Philosophy, Logic and Scientific Method

London School of Economics.



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Abstract

The contemporary academic disciplines of Philosophy and Economics by and large do not concern themselves with questions pertaining to the ontology of economic reality; by economic reality I mean the kinds of economic phenomena that people encounter on a daily basis, the central ones being economic transactions, money, prices, goods and services. Economic phenomena also include other aspects of economic reality such as economic agents, (including corporations, individual producers and consumers), commodity markets, banks, investments, jobs and production.

My investigation of the ontology of economic phenomena begins with a critical examination of the accounts of theorists and philosophers from the past, including Plato, Aristotle, Locke, Berkeley, Hume, Marx, Simmel and Menger. Here I discuss various themes that have emerged from these writings, including the metallism-chartalism debates and whether economic value is an objective or subjective notion. Then I turn to contemporary philosophers, such as Searle, Bloor and Collin, who have used money as an example in their accounts of social phenomena. I argue that their accounts fail for a number of reasons, including that they cannot accommodate abstract money (money that is not in the form of notes, coins or commodities). Based on a much modified and expanded version of Hadreas' speech act theory of money, I develop an analysis of exchange into reciprocal, conditional promissory relations and I provide a diachronic account of how money developed out of such promissory relations. I then go on to examine how my account can be applied to money in all its forms and to the development of economic systems and production and I show how it is possible to overcome an epistemological difficulty with respect to how neophytes learn about economic phenomena.

CONTENTS

Introduction

"Papa! What's money?

The abrupt question had such immediate reference to the subject of Mr. Dombey's thoughts, that Mr. Dombey was quite disconcerted.

"What is money, Paul?" he answered. "Money?"

"Yes," said the child, laying his hands upon the elbows of his little chair and turning the old face up towards Mr. Dombey's, "what is money?"

Mr. Dombey was in a difficulty. He would have liked to give him some explanation involving the terms circulating-medium, currency, depreciation of currency, paper, bullion, rates of exchange, value of precious metals in the market, and so forth; but looking down at the little chair, and seeing what a long way down it was, he answered: "Gold, and silver, and copper. Guineas, shillings, half-pence. You know what they are?"

"Oh yes, I know what they are," said Paul. "I don't mean that, Papa. I mean what's money after all?"

Charles Dickens, *Dombey and Son.*

What is it about contemporary money that seems so puzzling? Is it that such otherwise worthless pieces of paper or metal tokens somehow become valuable, as if by magic?

Here is how Menger described this unusual feature of money:

> "But that every economic unit in the nation should be ready to exchange his goods for little metal disks apparently useless as such, or for documents representing the latter, is a procedure so opposed to the ordinary course of things, that we cannot well wonder if even a distinguished thinker like Savigny finds it downright 'mysterious'. (Menger, 1892, pp. 239)

Although we are acquainted with and make use of economic phenomena on a daily basis, there is something elusive about them. We walk up to complete strangers in retail outlets, ask them for some item which we want, hand over some otherwise worthless metal disks or pieces of paper and leave owning the item in question. What makes such transactions possible? Although everyone talks about economic transactions, corporations and markets, it is still difficult to say exactly what they are. Of course I can describe transactions by referring to their function of allowing one to exchange money for a good, or identify the function of corporations as limiting the liability of shareholders; but apart from bringing in additional terms which in turn require elucidation, such as money, goods and shareholders, this still does not tell us what corporations and transactions actually *are*.

Contemporary philosophers do not help us much here and neither do economists. Philosophy of Economics, as a sub-discipline, tends to concentrate on methodological questions in economic theory or on the nature of economic theory but largely ignores ontological questions concerning actual economic phenomena. In the case of money, a division of labour has emerged between the academic disciplines of Economics and Philosophy whereby economists focus on the functions of money, i.e. its functions as a store of economic value, a medium of exchange or as a unit of account, and those philosophers who attempt to provide an account of money usually see it as unproblematically falling out of their accounts of social phenomena. This latter philosophical position on money is wrongheaded, as I will argue in Chapter Two. Contemporary philosophers do not examine the ontology of other important economic phenomena, such as economic exchange, goods or commodities, economic agents, corporations and economic production. Since questions concerning economic reality are

arguably not part of the modern discipline of economics and philosophers tend to ignore economic phenomena, it is not surprising that actual economic phenomena have not received much academic scrutiny in recent times.

It should now be clear to the reader that what I mean by ontology with respect to economic reality is not the same as the ontology of economics as a discipline. The latter are informed by the presuppositions of economic theories; e.g. the assumptions of rationality, consistency and transitivity of consumer preferences in neoclassical economic theory of demand or the assumptions of profit maximization and certainty of a firm's knowledge of its own demand and cost curves in the neoclassical theory of the firm.[1] To the extent that actual consumers disobey these strictures of rationality, consistency and transitivity and actual firms do not actually maximize profits or have certainty of knowledge of their own demand and cost curves indicates the extent to which the ontologies of economic theories deviate from economic reality. I will not be examining the ontology of such theories; instead I will be investigating the ontology of the actual economic phenomena that are part of our daily lived experience, such as economic agents, corporations, markets, banks, investments, jobs and production; hence the title, *Economic Reality*.

My strategy is as follows: my investigation of the ontology of economic phenomena begins, in Chapter One, with a critical examination of the accounts of theorists and philosophers from the past, including Plato, Aristotle, Locke, Berkeley, Hume, Marx, Simmel and Menger. As will become apparent, this will provide a background against which my own account of economic phenomena can be constructed. As well as critically analysing the accounts of economic phenomena that arise in these accounts, such as exchange, production, money, use-value and exchange-value, I also investigate two important debates that arose in the literature, namely the value debates and the monetary debates. I also critically examine the various accounts of the emergence of money.

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[1]These are standard assumptions in neoclassical economics; see Koutsoyannis, 1977, especially Chapters 2, 5, 6 and 7.

Contemporary accounts of economic phenomena are largely confined to money and it is to several of these accounts that I turn to in Chapter Two. Each of the three philosophers I examine, John Searle, David Bloor and Finn Collin, have provided their individual accounts of money as part of their own accounts of social reality. Because, as I argue, economic phenomena are also social phenomena, it is important to examine each of the three accounts of social reality. Most of my critical attention is devoted to Searle's account because he frequently and self-consciously uses money as a central example in his account of social reality. I therefore examine his account of social reality in detail and show that his notion of collective intentionality is an anathema to any account of economic reality. I will also show that although each of the three accounts are different, all three share two important erroneous features; one of these is that none of the three can account for abstract money. (Abstract money is that which does not take the form of coins, notes or commodities). The other is that each thinks that an account of money merely falls out of an account of social reality. In arguing against this view I will be distinguishing between social phenomena that are economic and non-economic social phenomena. I also argue that the self-referential feature of many social and economic phenomena, including money, rules out the possibility of providing a synchronic account of such phenomena. But a diachronic account of such phenomena avoids this self-referential feature and therefore I adopt a diachronic approach with respect to economic phenomena.

In Chapter Three I develop my own account of economic phenomena based on a slightly modified version of Collin's account of social reality. I show that although there are some apparent surface similarities between coercive proposals and economic transactions, economic exchange can never involve coercive behaviour. This does not mean that economic exchange cannot be exploitative. I generate a theory of exploitation which does not involve coercion and I go on to show that exchange is the proper locus of exploitation and not production, as Marx claims through his labour theory of value. Although I find Hadreas' speech act theory of money to be inadequate, with much modification and expansion I use it as a starting point in developing an analysis of exchange as reciprocal, conditional, promissory relations and I provide a diachronic account of how money

developed out of such promissory relations. I also show how money arose out of exchange and I conclude the chapter with a critique of Hadreas' account of credit and banking and show how my analysis incorporates abstract money.

The final chapter provides some refinements of my account in the previous chapter and answers some potential criticisms. The account of exchange, money and credit is expanded to incorporate all aspects of economic reality as encountered in contemporary contexts, including investments, jobs, corporations, financial markets and production. I examine how economic systems arise and show how my account can be applied to economies at different stages in development. I also show how it is possible to deal with an epistemological difficulty with respect to how neophytes learn about economic phenomena and become inculcated into economic reality. This final chapter concludes what I am setting out to do, which is to generate a comprehensive ontological account of economic reality.

CHAPTER ONE

The Philosophical History of Economic Reality.

1.1. Introduction

Before I can provide a thorough account of economic reality, two broad subjects need to be discussed; these are, the relevant views of philosophers and theorists from the past and how economic phenomena have developed and changed throughout history. Although, as I will be arguing, many philosophers in the past were either wrong in their assessment of economic phenomena or they glossed over some of the more important aspects of economic reality, it must be remembered that many of the concepts and conceptual frameworks for discussing these matters can be derived from their writings. In other words, examining their views is a useful exercise because it will establish a background against which a thorough discussion of economic phenomena can take place. However, due to the pressure of space, I have had to be selective in my choice of material. In this I have tried to strike a balance between capturing all the important and relevant concepts and covering as many of the important or well-known philosophers and writers as possible. With some of the theorists I try to indicate, where appropriate, the various elements from their respective historical backgrounds that may have influenced them or led them into making claims that have latterly turned out to be largely true or false. Also, examining the history of the development of economic phenomena is important not only because of the influence certain forms of economic phenomena of particular eras had on contemporary philosophers and theorists, but also because a comprehensive account of economic reality needs to be inclusive of all economic phenomena, including those from the past. In presenting my own views on economic reality, I have been careful to ensure that they are applicable to and coherent with the various forms that economic phenomena took throughout history as well as those forms which we are familiar with today.

But this chapter is not intended merely as a narrative or exposition of the various historical positions; I will be picking out and critically analysing the important elements of economic reality as they emerge in the these accounts, such as exchange, production, exchange-value and use-value, as well as money and all the questions concerning the nature or constitution of money. Since my ultimate aim, as will become clear in later chapters, is to pave the way for a full account of all aspects of economic phenomena, including money, prices, economic transactions or exchanges, goods or commodities, markets and production, a number of the important issues and debates that arise in the historical literature need to be addressed first. For the sake of clarity and ease of elucidation I have divided these debates into two groups: the value debates and the monetary debates. The value debates originated with the distinction drawn by Aristotle between use-value and exchange-value; both use-value and exchange-value are topics that emerge time and again in the literature even though they have not always been followed through by many of the various theorists. As will become apparent later, in order to provide a thorough-going account of economic exchange, both use-value and exchange-value must be thoroughly analysed and the dependence of exchange-value on use-value made clear. Arising out of this distinction is the further question of whether there can be an objective notion of economic value. The labour theory of value, at least as Marx construes it, is an attempt at establishing such a notion of objective value. Although I will be arguing against Marx's labour theory of value, this does not mean that I will be denying Marx's claim that free exchange can still give rise to exploitation. I will be addressing the whole question of exploitation in more depth in Chapter 3 where I will be providing an account of exploitation that does not rely on a labour theory of value.

The questions surrounding whether economic value is subjective or objective have to be settled before any thorough account of economic exchange can be provided. In arguing against the labour theory of value, I will be opposing the view that economic value is objective; instead, I will be relying on the notions of use-value and exchange-value to explain that economic value, is a subjective matter which then becomes an intersubjective matter through the process of exchange. As will become clear in the next chapter, since other economic phenomena, such as prices, commodities, markets, economic agents and,

ultimately, money, emerge from the process of exchange, a thorough and complete account of economic exchange is a prerequisite for a thorough and complete account of these other economic phenomena.

The common theme to be found in the monetary debates is the ontology of money. As will become apparent, some philosophers believed that money had to a substance, such as a precious metal, while others were convinced that money could take the form of a token which would only have value within its monetary role but would otherwise be worthless; this is a highly simplified version of the chartalist-metallist debate which I will be discussing in more depth later in this chapter. A number of other concerns followed in the wake of this debate, including the nature of credit and whether, as chartalists believe, credit could be considered money or something else entirely. Because the metallism-chartalism debates are not simply a debate on the ontology of money, I will be devoting a special section to them at the end of this chapter. As will become clear later in this chapter and in Chapter 3, my critical analysis of the various positions will lead to my initial conclusion that money in its contemporary form is, ontologically speaking, a form of credit. This is, however, an initial conclusion and a fuller account of money in all of its various forms will have to wait until Chapter 3.

Two other points are worth mentioning at this stage: the first is the emergence in the historical literature of a realization that there must be limits to the abundance of money and yet money should not be so scarce as to adversely affect economic activity. In order to elucidate the connection between money supply, prices and volume of transactions in as clear and non-technical a manner, I have chosen to adopt the modern version of the quantity of money equation as a benchmark when encountering this issue in the literature. In addition I have also chosen to examine the role of banking in the creation of money through the banking multiplier[2] as this matter arises in the historical literature. There is no clearer way of showing how it is that banks can create money. However, neither the banking multiplier nor the quantity of money equation are applied anachronistically but are meant to help in the elucidation of the issues and their critical assessment.

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[2]This is also known as the deposit expansion multiplier or deposit multiplier. I will be providing a detailed analysis of this phenomenon in Chapter 3.

In addition to a critical analysis of the various views of economic phenomena, I will also be examining, where appropriate, the development of economic phenomena throughout the ages. Obviously, the economic phenomenon which has changed the most over the centuries is money. I will be arguing that understanding the historical development from barter to developed economy is key to understanding money and other aspects economic reality of today and the past. I will be using this examination of the development of economic reality over the centuries as a basis for my philosophical account of money and other economic phenomena in later chapters.

1.2. The Ancient Views.

Philosophical interest in aspects of economic reality can be traced all the way back to Plato. In his quasi-historical account in the *Republic* of how the polis ultimately becomes socially unhealthy, he is among the first to recognize the importance of the specialization of labour as society developed; but he also claimed that economic development, if unchecked, would leave to greater demands for luxuries and the increasing probability of war as greater resources are required by the polis.[3] But despite his concentration on specialization and his recognition that society originates because individuals are not self-sufficient, he generally ignores economic exchange in his analysis. According to Plato, it is the function of the craftsman or skilled person to benefit the object of his skill and not look to his own immediate material gain. For instance, it is the function of the doctor to care for his patients just as it is the function of the ship's captain to be in control of his crew or the function of the carpenter to make good tables and chairs. In his account of the theory of the forms, especially the form of the Good, the notion of a good chair is decided by appeal to an a priori argument as opposed to any individual or group opinion. In this way, Plato concentrates on his own version of what later came to be called the use-value

[3]See Plato 1987, pp. 57-66 for Plato's account of economic development in the *Republic*.

of a product to the exclusion of its exchange-value.[4] One can also read in this account the germination of an objectivist view of value; this debate between objectivist and subjectivist claims concerning value will be examined in full when I discuss the accounts of Marx and Menger.

The *Republic* does not examine how exchange and distribution among the producer class would occur. This is despite the fact that clearly the producer class encompasses the vast majority of the population. The Guardians are precluded from being involved in any exchange because they are denied the right to own property; however products and services are to be distributed among them on the basis of need. Therefore, in order to provide for the non-productive Guardian class the producer class would have to produce a surplus above that required for their own subsistence. Although Plato does refer to money in his account of economic development, no mention of it is made in his account of the ideal polis; indeed, the ideal polis could be construed as being largely a moneyless command economy of sorts. Even so, given what Plato wants for his ideal polis, it is hard to see how this could be achieved without the exchange of producer and consumer goods within the productive class. In other words, how would producers acquire their inputs if, being specialized producers, they do not produce their own inputs? Arguably, it is hard to see how a surplus that could be used to support the non-productive Guardian class could be achieved without at least a rudimentary monetary system; a monetary system would allow greater efficiency in exchange of both productive inputs and consumer goods. It is interesting to note that in the *Laws* Plato does allow for a form of money, as I discuss below. But it is puzzling that Plato takes such great care in giving an account of economic development while ignoring economic phenomena, namely exchange and money, that are fundamental to such economic development.

Plato's examination of the economic system in the *Republic* is largely confined to the role that economics plays in the development of the unhealthy polis. According to his

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[4]This distinction is examined by Aristotle, as I will describe below.

account, because individuals cannot be self-sufficient in meeting all their needs, they have to band together to form some sort of society. Plato envisages that the original society was a small community which catered only for the most basic needs of its members. In order to be able to provide for the basic needs of the community each member had to specialize at some activity or other. Because "quantity and quality are therefore more easily produced when a man specializes appropriately on a single job for which he is naturally fitted, and neglects all others" (Plato 1987, 60), the community is able to cater for the needs of the individual members better than they could by working alone. As the complexity of the economy increases and especially as the economy becomes involved in overseas trade, the greater is the requirement for specialization. But as the society becomes more developed, its members desire more luxuries. These in turn require more resources, especially land, and this leads the polis into conflict with its neighbours, and inevitably to war.

Plato does not spend much time examining the various fundamentals of economic reality. He glosses over the notions of exchange and money with hardly any discussion. However, some have taken some of his remarks in the *Laws,* such as that money ought to be in the form of a currency or money token, in conjunction with what Schumpeter outlines as "his hostility to the use of gold and silver, for instance, or his idea of a domestic currency that would be useless abroad" (Schumpeter 1994, 56), as evidence that he believed that money did not have to be either derived from a commodity or made of a precious metal. This is not to claim that Plato was unaware of the day-to-day monetary activity of contemporary Athens; despite largely ignoring exchange-value and money in his account of the economics of his ideal Polis in the *Republic*, Plato demonstrates a reasonable understanding of the working of a monetary system in at least one of his metaphorical asides. For instance, he uses the metaphor of paying a debt in full to describe his providing a full account of the Good, and compares it with only paying the interest on a loan, that is describing the "child" of the Good.[5] But it is important not to

[5]See Plato 1987, pp. 244-245. "Tell us about the child and you can owe us your account of the parent," he [Glaucon] said. "It is a debt I wish I could pay back to you in full, instead of only paying interest on the loan," I [Socrates] replied. "But for the present you must accept my description of the child of the good as interest. But take care I don't inadvertently cheat you by forging my account of the interest due." (The

exaggerate Plato's role here, since all that this example demonstrates is that Plato was as aware of the notion of debts and lending as anyone who engaged in such practices at that time. In order to get a more detailed picture of economic phenomena in ancient times we have to turn to Aristotle.

In Aristotle's account of economic reality, all aspects of social theory, as well as economics, are integrated into a whole, into a system which was subordinated to his ethics. In Aristotle's teleological system, it is *eudaimonia*, usually translated as living well or flourishing, which is the final goal for man and which is sought after for its own sake. All other goals are not final goals in themselves without qualification (Aristotle 1976, 66 and 73ff). In this way, economics is subordinated to politics which in turn is subordinated to ethics; economic activity is one of the means by which living well or happiness is achieved. From this, Aristotle is able to draw the distinction between the single-minded accumulation of wealth and the sort of activities which ensure the provision of wealth and goods that are necessary for the good life (Aristotle 1992, 84-85).

Ancient Greek word for interest on a loan is the same as that for a child; interest was the "offspring" of a loan).

Aristotle is the originator of one of the most important distinctions in the history of the analysis of economic reality, a distinction which has been taken up by many other theorists. It is that every piece of property has two uses, the proper use of the piece of property and the use that one can put it to in exchanging it for some other piece of property. This is the distinction between what has become known as use-value and exchange-value where the use-value of a good is taken to be the benefit or use that the consumer or producer gets in using or consuming the good or utilizing the good in a production process; the exchange-value of the good is that which can be received in exchange for the good.[6] Exchange, at first in the form of barter, becomes necessary because individuals or households often find themselves with too much of one product and not enough of another, according to Aristotle. In the *Politics*, he sees money as arising from trade across national frontiers (presumably between city-states). In this account, money appears initially as commodity money; because not all the things that we need are portable, "for purposes of exchange men entered into an agreement to give to each other and accept from each other some commodity, itself useful for the business of living." (Aristotle 1992, 82). This is what is known as the commodity theory of money. "Being useful for the business of living" is just another way of saying that the commodity in question has a use-value, which is something that it shares with all other commodities. Like all other commodities it also had an exchange-value. But if it is to be used as money, according to this account, it would also have to be easy to handle and measure; because metal has these characteristics, money tended to take the form of metal, such as iron or silver. Initially the values of this early form of money were determined by weight but soon the stamping of coins made this unnecessary. While it is the case that the account of money Aristotle provides in the *Politics* is based on a commodity form of money, this form is still decided upon by convention. His point is that, as with any other convention, a coinage or currency can be changed and will then no longer be capable of procuring the necessities of life.

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[6]This and the account that follows is from Aristotle 1992, Book I, chapter ix, pp. 80-85.

According to Aristotle's account in the *Ethics*, exchange between producers of different products gives rise to money.[7] Not only is money a medium of exchange, but it also serves to provide a measure which we nowadays call a unit of account or a measure of value. It informs us, for example, how many shoes (of a certain type) are equivalent in value to that of a house. Without such a formulation of value, and it seems that Aristotle is inferring that money is the best available formulation of such values, exchange cannot take place (Aristotle 1976, 183-184). According to Aristotle, even though, strictly speaking, products that are "so widely different cannot become commensurable" (Aristotle 1976, 186), what makes them equivalent is that there is "one standard by which all commodities are measured. " (Aristotle 1976, 184). This is different from his approach in the *Politics* where money emerges primarily as a medium of exchange whereas in the *Ethics* he also sees money emerging because of the need for a way of equating different products with each other, as a way of creating a common measure of value. As I will be discussing later, the question as to whether money emerged originally as a medium of exchange, along the lines of the commodity theory, or whether it originally emerged as a measure of value is one of the central issues in the monetary debates. However, although some chartalists claimed that money emerged originally as a measure of value and not, as metallists claim, as a medium of exchange, this does not make the Aristotle of the *Ethics* a chartalist concerning the origins of money. His claims in the *Politics* place him firmly in the metallist category, at least with respect to the origins of money, and there is nothing in the *Ethics* which contradicts that.

But to return to his account in the *Ethics*, demand, by which Aristotle means the need on the part of both parties to an exchange for what the other party has, is what gives rise to this common monetary standard. "That it is demand, forming as it does a single standard, that holds such associations together is clear from the fact that when neither party, or only one party, needs the services of the other, they make no exchange." (Aristotle 1976, 185). This demand, by way of convention, is later represented by money. Aristotle is very clear about the ontology of money; it is not a natural thing but arises through custom. Therefore, "it is in our power to change its value or render it useless." (Aristotle 1976,

[7]This account is taken from Aristotle 1976, pp. 183-186.

184). But once it is in place, money provides "a guarantee of exchange in the future." (Aristotle 1976, 185). In other words, the main reason why anyone would accept money in exchange for something else is that they are confident that they will be able to use it in future economic exchanges.

There is an important gap in Aristotle's account of money as a medium of exchange, which is that he does not address the endemic problem, identified by Jevons, of the double coincidence of wants associated with barter (Jevons 1875, 3). In other words, under pure barter conditions,[8] not only must you want what the other party has on offer, the other party must also want what you have on offer. Although Aristotle points to ancillary reasons for having a medium of exchange, such as the difficulties with transportation or portability, his account does not reach the heart of the issue, which is the problem of double coincidence of wants in barter. As I will outline in later in my discussion of the monetary debate, this problem of the double coincidence of wants in barter is believed by the metallists to have led to the emergence of commodity money.

Despite this shortcoming, Aristotle's account of money has cast a long shadow; those who were influenced include metalists, such as Marx, as well as those who follow Menger in his view that money evolved, independently of government, as a market response to overcome the difficulties and costs encountered in barter. Narrowly construed, metallism is the belief that "the value of a currency depends on the intrinsic value of the gold, silver or copper it is made of, or which backs a note issue." (Rutherford 1995, 297). Others take a broader view, that metallism is the claim, "that in order to serve as a medium of

[8]By 'pure barter' I mean the type of transaction that predates money in any form, where not only is there no form of money or currency, but also no commodity has yet emerged as an exchange good to take on the role or function of money. The difficulty is that the term 'barter' is often used to refer to situations where, in times of currency instability, hyperinflation or economic crisis, some commodity takes over the role of currency and is used as an exchange good, e.g. cigarettes.

exchange in the markets of commodities, money itself must be one of those commodities" (Schumpeter 1994, 63), whether that be a precious metal or some other good. For now I will be using the term metallism in this latter sense. The opposing view is chartalism (or cartalism), so called by Knapp after the Latin "charta," meaning 'token' or 'ticket' (Knapp 1924, 32). This is the view that "the value of a currency depends on the power of the issuing authority and not on its intrinsic value or its convertibility into gold." (Rutherford 1995, 62). Some chartalists also deny that money evolved initially as a commodity; their view is that ultimately it was government which made the monetary process possible and, according to one chartalist commentator, this approach "has also received the support of a large number, probably a sizable majority, of those in other disciplines, e.g. anthropologists, numismatists and historians concerned with the origin of money." (Goodhart 1998, 408). This debate between metallism and chartalism is of greater complexity than I have set out here and I will be elaborating on it in much greater detail later in this chapter.

One possible source of confusion in the elucidation of Aristotle's account is his conventionalism about the origins of money. The difficulty about this is that conventionalism can be linked to either metallism or chartalism, depending on how it is construed. For instance, one could claim that money evolved, by way of convention, within certain specific social or cultural settings, as a token or ticket and not as a commodity form; this would be a chartalist claim. On the other hand, one could also claim that money evolved, by way of convention, as a commodity, such as a precious metal. It is clear, especially from his version of the commodity theory of the origin of money in the *Politics*, that Aristotle's views generally fall within this latter metallist category.

Aristotle's was deeply concerned with the creation of wealth through exchange alone in that this does not involve the production of goods at all. Such activity is unnatural, according to this account, because it is not performed in accordance with nature (Aristotle 1992, 84). The claim that is made here is that through such trading, exchanges are only made in order to acquire the means of further exchanges, not for the necessities of life, and are thereby divorced from production. Presumably because production at that time

was bound up with the products of nature and with the processes of nature, the creation of a personal surplus without production could be seen as unnatural or as not being in accordance with nature. In addition, since it was not the function of the household merely to acquire goods without limit but instead to provide the necessities of life for its members, the acquisition of wealth for its own sake would be teleologically mistaken, according to this account. Those who mistakenly believe that wealth should be acquired for its own sake (in the form of money) do so "because they are eager for life, but not for the good life; so, desire for life being unlimited, they desire also an unlimited amount of what enables it to go on." (Aristotle 1992, 85).

Aristotle objects to some monetary practices, especially that of money-lending, for much the same reasons (Aristotle 1992, 85-87). Although he is critical of the non-productive acquisition of wealth through trade, as long as this still involves exchange of goods for money and money for goods, it still retains some connection to nature. However, money lending and the charging of interest is much more unnatural because it does not even involve goods. According to Aristotle, the charging of interest involves the increase of money, that is the interest charged is currency born of currency. Bearing in mind that the Greek word for interest (*τοκος*) is the same as that of offspring, this making money from money can be taken to be contrary to nature because only natural beings can have real offspring.

Certainly, his conception of production as being natural and money lending for interest as being against nature do not have the same ring for his modern readers since much production today has relatively little to do with nature. In addition, many economic transactions today have more to do with retailing and distribution rather than directly with production. His distinction between the accumulation of wealth and goods that are necessary for natural needs and the accumulation of wealth for its own sake is one that has been taken up by other theorists. However, it is a hard distinction to sustain in practice, especially if we allow for retailing and distribution.

Leaving this aspect of his argument aside, it seems that Aristotle is concerned with the social consequences of the acquisition of wealth for its own sake - these consequences

include the creation of monopolies and restrictive practices which are detrimental to the proper running of a just polis (Aristotle 1992, 88-91). While there is general agreement on the controlling of such practices, it is not necessarily the case that the acquisition of wealth for its own sake automatically leads to such practices. Monopolies can occur naturally; e.g. when all the sources of water, which hitherto were plentiful, dry up, except for the stream on the land of one of the poorest farmers in the region; the farmer gains a monopoly by chance rather than by either strategy, restrictive practices or the accumulation of wealth.

For Aristotle, it seems that the acquisition of wealth for its own sake and certain financial dealings are equated at least to some extent. This makes sense to the extent that individuals who are solely motivated by wealth may tend to be drawn into the arbitrage of commodities and ultimately money-lending. Perhaps his concern with money-lending reflects more modern concerns with such sordid activities as loan-sharking. In fact, in one passage he places "money lenders who make small loans at a high rate of interest" into the same class as pimps, card-sharps and pick-pockets (Aristotle 1976, 148). On the other hand, from at least one remark he makes, it appears that he was not against the lending of sums of money between friends, where presumably interest would not be charged (Aristotle 1976, 290). It is also hard to imagine that he would have been against the sort of financing of trade that went on in the larger cities of the ancient world, especially Athens, given the enormous benefits that this brought to the ancient Greeks. For instance, in Athens during Aristotle's lifetime a system of maritime loans or investment, known as bottomry loans, was in place, whereby the borrower offered his ship and cargo as security against a high interest loan (Austin and Vidal-Naquet, 1973, esp. 147-151). However, the ultimate burden of the risk was on the creditor, should the ship or cargo be lost; hence the interest rates were high. But without these loans, many ships would never have sailed because many of the maritime traders were short of liquid capital. And had these financial arrangements been banned, Athens and other cities of ancient Greece would have been much poorer. Even taking into account the social mores of his time, it is hard to square such hugely beneficial financial activities with Aristotle's position on the making of money out of money. At least part of the problem lies in Aristotle's placing money into the ontological category of the unnatural and goods into

the category of what is natural.

Aristotle's views on money and money lending continued to resonate throughout the centuries. According to at least one commentator, his views had an impact on the Islamic world. The Islamic prohibition of usury or charging interest on a loan could have been retained from biblical Judaism, (see Deuteronomy, XXIII, 20), but was probably reinforced by the legacy of Aristotle.[9] Although there is evidence that earning money by trade had some secular approval in Islamic societies, pious Muslims and their religious leaders were disapproving of the amassing of large amounts of money. In the Middle Ages, many in the scholastic tradition took up the Aristotelian notion that since money was sterile, it should not be used to make more money, i.e. lending money for interest was considered wrong.[10]

1.3. The Views of Locke, Berkeley and Hume.

The discussion above concerning metallism and conventionalism is also applicable to Locke. At first glance he appears to be a thorough-going metallist in that he believes that, "Silver, i.e. the quantity of pure Silver separable from the Alloy, makes the real value of money." (Locke 1991c, 311). According to his view, the state or monetary authority cannot affect the value of money because its value is ultimately decided by its silver content. But because there can be problems with assaying the fineness of silver and weighing it, the monetary authority can issue coins which contain a set weight of silver of a certain fineness (Locke 1991c, 312). However, Locke cannot be construed as a metallist

[9]The legacy of Aristotle is examined in Baeck, 1987, pp. 81-104.

[10]For an analysis of some of the strands of thought leading up to and including Copernicus, see Reiss and Hinderlitter, 1979, pp. 293-313. Sen also mentions Aristotle's effect on the Scholastics in Sen, 1991, pp. 33-41.

in the usual or even in the Aristotelian sense in that, although he believes that money has to be made out of precious metal, he did not adhere to a commodity theory of money; by and large, his metallism, if it is that, is not based on a commodity view of money but on a conventionalist one. But even his conventionalism differs from Aristotle's in that while the latter, at least in the *Politics*, provides an account of the evolution of money as a commodity by way of convention, Locke leaves out any account of the origins of money and merely observes that money is, by convention, a precious metal. Although the silver content of a coin is what makes it valuable, "The intrinsic value of Silver consider'd as Money, is that estimate which common consent has placed on it." (Locke 1991a, 410). Locke was not entirely consistent with respect to adhering to his particular version of conventionalist, that is conventionalism without reference to any commodity theory of money, since he sometimes refers to money as a commodity; but in doing so, he also notes that money could never be a true commodity because it was different from all other commodities in "That it serves us commonly by its Exchange, never almost by its Consumption."" (Locke 1991c, 248). Locke is largely unconcerned with the origins of money; his view is simply that money is by convention a metallic substance, such as silver.

This somewhat dogmatic insistence that money has to be metallic is consistent with Locke's ontological distinction between money and credit; for him money was metallic whereas credit was "nothing else but an Assurance of Money in some short time." (Locke 1991c, 235). For Locke, although credit can substitute for money in the short term, it is not money and will not perform as money beyond the short term, as the following quotation makes clear:

> "Credit will supply the defect of it to some degree for a litle while. But Credit being nothing but the expectation of Money within some limited time, money be had or credit will faile." (Locke 1991b, 379).

This claim is extended to paper money in the form of bills or bonds, in effect any form of documented debt. Locke was not denying that such bonds and bills were actually circulating, but he felt that because they would not be accepted as money by foreigners

and because they were open to fraud and counterfeiting "and require other Proofs to assure us that they are true and good Security, than our Eyes or a Touchstone," they could not be considered real money. Not even the state could make real money out of paper money as "a Law cannot give to Bills that intrinsick Value, which the universal Consent of Mankind has annexed to Silver and Gold." (Locke 1991c, 234).

For Locke, the only true form of wealth was precious metals and it was important for an economy to export more commodities than it imported because this would lead to an influx of precious metals and thus add to the wealth of the country. At that time, the upheaval and costs of war had led to an adverse balance of trade and to a currency crisis in England. The problem was that since precious metals were the only medium of settling debts both within the country and internationally, unfavourable balances of trade (having to import more than had been exported because of the war) led to outflows of these precious metals and to a shortage of money within the country.[11] As part of his analysis of the currency crises at the time, Locke formulated an early version of the equation of exchange or quantity theorem of money;[12] according to his view, there was "some

[11]For the economic background, see Kelly's General Introduction in Kelly 1991, pp. 39-67; Chown 1994, Chapter 6.

[12]The modern version of the quantity equation or equation of exchange, also known as the Fisher equation, is MV = PT, where M is the total amount of money in the economy, V is the velocity of money or number of times money circulates within the economy within a given period, T is the number of transactions that occur in the economy within that period and P refers to the prices of the commodities involved in those transactions. For an account of the quantity equation, see Boro 1989, pp.151-155. Locke thought that the price level would remain proportionate to the supply of money, all other things being equal.

proportion of money to trade" which was dependent on both the quantity of money as well as "the quickness of circulation" (Locke 1991c, 235) or what is known today as the velocity of money. Since, according to Locke, the velocity of money is relatively stable, generally speaking the price level will remain in proportion to the supply of money, all other things being equal(Locke, 1991d, 184, 1991c, 214, 264).

From a modern perspective, it is clear that Locke's views on money, credit and related topics are wrongheaded, not least because monetary authorities have long since been able to issue and sustain fiat currencies.[13] In fairness to Locke, his writings and the concerns to be found in them have much to do with the currency crises of the late 1600s in England and Locke's role in that crisis.[14] Against a background of concerns with the scarcity of currency and the large-scale degrading of coins through clipping and other practices, Locke's view, that money must be a metallic substance, does not look out of place.

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[13]A fiat or fiduciary currency is any currency that is officially declared to be acceptable as money by the monetary authorities. Such currencies, being made up of tokens, notes or coins which do not have any intrinsic value, do not depend on convertibility into precious metals for their value. I will be dealing with fiat or fiduciary money in a lot more depth in later chapters.

[14]Locke had been in the service of and an assistant to the Earl of Shaftsbury during many of the latter's important offices, including when Shaftsbury was Chancellor of the Exchequer. Locke had also been appointed as Secretary to the Council for Trade and Foreign Plantations.

However, even at that time there were those who claimed that the denominative value or value *in tale*[15] of a currency was more important than its value *in specie*.[16] As will become clear later, Locke's ontological distinction between money and credit is wrongheaded. However, his approach to currency management is innovative and it is possible that he was the first to arrive at a version of the quantity theorem. As I will show in Chapter 3, the quantity theorem is an important ingredient in the explanation of what the phenomenon of money, especially in its contemporary forms, amounts to.

[15]Coins valued 'in specie' are those whose value depends on their bullion content; coins valued 'in tale' are those whose value depends on their legal or face value.

[16]For instance, William Lowndes held this view. Locke opposes Lowndes in his writings, especially in his papers on the currency crisis; see Kelly 1991, Vol. 2, pp.381-397.

Berkeley, for his part, denies that money has to be exclusively a metallic substance or needs to be dependent on a particular metallic substance. This is not to say that Berkeley's position on the ontology of money is completely correct or exhaustive; but it is to suggest that his views are more farsighted and modern in tone; as I will show, his view of money as credit encompasses more of the various forms of money then and since than had been hitherto possible. There are several possible reasons for Berkeley's greater insight: banking and credit was already reasonably well-developed and bills of exchange and other forms of paper credits had already become well-known in Europe by the time Berkeley began writing on the subject. Berkeley also saw at first hand the economic difficulties of rural Ireland that had resulted from the absence of any proper medium of exchange or system of credit.[17] There was no mint in Ireland at that time and currency, when it was available, tended to be a mixture of gold and silver coinages from a number of different countries. Barter was very widespread among what was largely a peasant population for a number of reasons, including the difficulty of making change because most of the coins in circulation on the island tended to be of high denomination. Berkeley was in a unique position as an observer; he was aware of monetary developments in England and on the Continent, including the existence of paper or bank credits, and he was also in the position of being able to observe the barter and commodity money conditions in Ireland and the effect that the unique monetary and economic strictures had on the island economy.

[17]For the economic background to Berkeley's *The Querist*, see Johnson 1970, especially Chapter 6.

Berkeley's writings on economics are largely contained in *The Querist*, an unusual work written entirely in the form of questions or queries. Taken together, the queries tend to be somewhat jumbled; they had been published in various forms with some parts added or omitted in each edition.[18] But despite its format, the insights in it have a clarity and perspicuity that are not to be found in any other writings on money and economic reality from that time. In *The Querist*, Berkeley claims that the real aim and end of people is power, which he defines as "property of all kinds," but which today we would probably call wealth or purchasing power. (Berkeley 1953, 107 [31]). For him, wealth is the "power to command the industry of others." (Berkeley 1953, 107 [35]). His position contrasts markedly with that of Locke who saw wealth in narrow metallist terms, as gold and silver coinage only. For Berkeley, money is useful in a general sense only if it "stirreth up industry" and enables individuals to participate in the fruits of each other's labour (Berkeley 1953, 105 [5]). It does not have to have an intrinsic value; nor does it have to take the form of some commodity or precious metal; instead it can take the form of a counter or token which has no intrinsic value at all (Berkeley 1953, 106 [23]). In fact, all money is credit, according to Berkeley, whether it takes the form of commodity money such as gold or whether it takes the form of a counter or token (Berkeley 1953, 140 [426]). For him, money can be made up of "tickets or tokens for conveying and recording such power" and that it is not of any great consequence what the tickets or tokens are made of (Berkeley 1953, 107 [35]).

Johnston makes the unusual claim that in regarding money as a conventional token or ticket, Berkeley is largely in agreement with Aristotle (Johnson 1970, 90). This claim is largely unhelpful and ambiguous, as my earlier point concerning Aristotle, convention and the metallism-chartalism debate showed. The problem is that the conventionalist label is ambiguous and it covers a number of opposing positions. Johnson's point makes it appear as if the positions of Berkeley and Aristotle on money and its ontology were similar when they could not be more distinct. While Aristotle believed that the convention was to make some commodity an exchange commodity and therefore money,

[18]The version of *The Querist* I will refer to is that contained in Luce and Jessop 1953, Vol. 6, pp. 105-181. Since each query is numbered, my references to this work will include query numbers in square brackets as well as page numbers.

Berkeley's view was that the item chosen by convention did not need to be a commodity with any intrinsic value in and of itself. By claiming that money did not have to be a commodity, did not even have to be metallic and was essentially credit, Berkeley's view of money could not have been more different from that of Aristotle.

To illustrate his points concerning money, Berkeley uses the example of sailors marooned on a desert island.[19] The sailors would engage in various forms of production and, if they specialized, each would produce a surplus which could be exchanged with the others in order that each could meet his own needs. But then Berkeley makes a unique claim; exchange of this sort gives rise to credit. Although he does not spell it out in detail, it appears that what Berkeley means is that the discharge of exchange arrangements by one side is often delayed due to various seasonal or other local circumstances; for example, if we enter into a transaction whereby I get some of your wheat in return for helping you to harvest your apples, and the wheat is provided before the apples are ripe enough to pick, then I am, technically speaking, receiving some credit from you because I will be in possession of the wheat for a period of time before I fulfill my part of the transaction. In order to record these credits and so that these credits themselves could be exchanged, a system of "tallies, tokens, tickets or counters" would have to be agreed upon. To be in possession of one of these tokens is just to be in possession of a credit, which is to have the power to demand a good or service from someone else who is in the position to supply it. It seems that Berkeley is saying that we come up with these counters so as to record and convey what is owed because to just keep that in one's head would be difficult and problematic. (One could imagine trying to remember that A owes you a load of hay, B owes you some potatoes and C owes you a day of picking apples while you owe E some seed corn and F two days of carpentry.) It is possible that Berkeley knew about the system of tallies which had been used in medieval times; a tally was usually a piece of wood which was split into two, on which was recorded the debts incurred by buyers. The debtor retained the shorter piece while the creditor retained the longer piece and the two

[19]See Berkeley 1953, pp. 108-109, [46,47] for this example of the marooned sailors..

could be rejoined to verify the debt when the debtor came to repay.[20]

Berkeley's account is unusual in he claims that all money is credit, no matter what form it takes. However, Johnson goes beyond this ontological assertion by making the further claim that Berkeley considered credit to be "logically antecedent to the institution of the things called money, and is an essential element in every exchange economy." (Johnson 1970, 74). Johnson appears to be taking Berkeley's example of the tale about the shipwrecked sailors as a paradigm about the origins of money whereas, arguably, the example merely concerns individuals who would already have been at home with the sort of economic reality that included various monetary and trade practices and other aspects of economic organization. Instead of making a point about the origins of money, Berkeley's example is designed to show that a credit form of currency is possible and that money does not have to take the form of a precious metal. Although it is clear that he is in favour of and actively promoting the idea of a fiat currency, the marooned sailors example does not commit him to any views on the history of money. In fact, Berkeley is completely silent on the question of the origin of money. This interpretation is in keeping with the other remarks from *The Querist* as well as its acknowledged aim, which was to persuade the authorities that a fiat currency was possible and preferable to a commodity or metallic currency.

[20]This account is provided in Innes 1913, pp. 377-408.

There are difficulties with Berkeley's account, not least because his account of credit is incomplete. Although Berkeley makes the ontological claim that all money is credit, he does not say exactly what credit is. His claim that exchange produces credit is interesting, although not thoroughly explained, and it requires some interpretation by the reader to make sense of it. If Berkeley is right in his claims that money is credit and credit in turn is produced by exchange, he needs to be able to provide an account of the phenomenon of economic exchange which bears out these claims. In the following chapters, especially in Chapter 3, I will show that Berkeley's instincts are largely correct and that a full-blown account of economic phenomena, especially exchange, will largely substantiate his ontological claim that money, at least in its later forms, is credit. However, one must be careful neither to overplay nor underplay Berkeley's account. It must be remembered that all he had set out to do was to raise questions concerning the economic and financial conditions in Ireland at that time and to lobby the Irish Parliament in an attempt to change monetary and economic conditions on the island. So although *The Querist* was never intended to be a philosophical tract on the nature of money or any other aspect of economic reality, his identification of money as credit has important philosophical or ontological ramifications in that it was a break with the prior notion of money as having to be either a metallic substance or a commodity. It is unlikely that Berkeley would have been able to make this conceptual move if paper credits had not yet emerged. It is this emergence of paper money[21] that allowed Berkeley to realize that money was not a substance and that the metallists, at least in the narrow Lockean sense, were wrong.

Berkeley's practical solution to the difficulties that he had encountered in the economy in Ireland, and one that was also in keeping with his ethical concerns, was to propose the creation of a nationalized banking system that would solve the problem of the absence of credit. A nationalized bank could produce inconvertible banknotes or fiat money in a secure way which would also solve the problem of the shortage of currency (Berkeley

[21]It must be remembered that paper money is not necessarily fiat money. Money that is created by fiat is not backed by metal or any other substance whereas paper money can be if it is redeemable by the issuing authority into a precious metal.

1953, 123-124 [220-230] and 128 [277]). He proposed the establishment of a mint to deal with the problem of the dearth of change or coins of small denomination (Berkeley 1953, 145 [485]). Berkeley was well acquainted with the success of various national banks - he refers directly in one of his queries to the banks of Venice, Holland and Hamburg (Berkeley 1953, 123 [220]). A few years before the publishing of *The Querist*, there had been experiments involving paper money in the form of bank notes with a greater or lesser degree of convertibility; e.g. The Banque General in Paris which was later to become the Banque Royale (Chown 1994, Chapters 22 and 23). Berkeley had been so taken up with his crusade for a national bank that, according to one source, he attempted to lobby the Irish House of Lords and produced an extra set of queries related to his proposed national bank (Johnson 1970, 6-7). His proposals fell on deaf ears and inconvertible currencies did not emerge until much later and then only by default, when the convertibility of bank notes was suspended during times of war, e.g. in the USA during the Revolutionary and Civil Wars, in the UK during the Napoleonic Wars (Chown 1994, 201ff). But adherence to convertibility largely remained until well into the twentieth century when inconvertible fiat currencies finally became the norm, to some degree in keeping with Berkeley's proposals. In all this, his proposals were intended to create the conditions in which the largely peasant economy in Ireland could develop and poverty and underemployment could be alleviated.

His proposals also included redistribution of income through taxation. This was also in line with the ethical point that he inherited from Aristotle regarding excessive consumption. Berkeley drew the distinction between the natural appetites, which are limited to their respective ends and uses, and the artificial appetites, which are infinite (Berkeley 1953, 130 [304]). The purpose of money is to further industry which will answer the natural needs of the population, according to Berkeley. Like Aristotle he claimed that the "passing of money from hand to hand without industry" should be discouraged; he claimed that the appetite for money is infinite because the ends of money are not bounded and therefore it is an artificial appetite (Berkeley 1953, 130 [305-306]). But Berkeley differs from Aristotle in that he is in favour of money-lending for industry. While both share the belief that there is something wrong with trade that does not involve industry or production, Aristotle's objection to money lending is at least in part based on

his claim that money is not a natural entity and therefore cannot be multiplied. Berkeley, on the other hand, relies solely on the claim that while the natural appetites are limited, the artificial appetites are unlimited; the pursuit of the artificial appetites, which includes the appetite for money, is psychologically debilitating and leads to boundless "fancy" which can "kindle immoderate desires, and lead men into endless pursuits and wild labyrinths." (Berkeley 1953, 131 [309]).

Unlike Aristotle, Berkeley does not endorse the banning of the lending of money although, because the appetite for money for its own sake is unnatural and leads to usury, money lending institutions should be nationalized so as to take them out of private hands. But Berkeley does not see anything intrinsically wrong with the activity of money-lending as such because he does not adhere to Aristotle's claim that money is an non-natural entity which cannot increase or reproduce; instead his distinction is between the natural and unnatural appetites of individuals. On one hand, Berkeley wanted to increase effective demand by increasing the consumption possibilities among the poor; but on the other hand, he also wanted to prevent immoderate desires from spiralling out of control. His ethical position is similar to that of Aristotle's in that both were against accumulation beyond the satisfaction of natural needs. But as I pointed out above, the distinction between accumulation for the satisfaction of needs and accumulation for its own sake is a hard distinction to make. Berkeley's frowning on the acquisition of money balances and wealth would also seem to a criticism of saving. It is hard to see how a nationalized bank could survive without depositors holding such money balances. But despite the various short-comings, his account of the role and function of money in an economy was very advanced for its time.[22]

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[22]Relatively little has been written about Berkeley's contribution to economics and monetary theory although a number of articles by Joseph Johnson have appeared in the periodical, *Hermathena* (some later to appear as chapters in Johnson 1970), including the following, Johnson 1942, Johnson 1940 and Johnson 1953.

Many of Berkeley's proposals have long been accepted as important, even though few today realise that Berkeley was their originator. The general thrust of many of Berkeley's proposals are widely accepted today in the form of the considerable powers of central banks, including bank regulation, controls on the behaviour of banks, setting of base interest rates and, in some countries, a deposit guarantee scheme. He was also aware of at least some of the implications of the quantity theorem, although his account of this is not as advanced as that of Locke. While Berkeley recognized that there was a relationship between the amount of currency in circulation and the level of economic activity, he did not realise the importance of the velocity of money, as Locke had done. In other words, while he realised that if the amount of currency were to increase beyond the level required to allow for the circulation of commodities, this would lead to inflation and eventually to the destruction of the currency. But he did not see that the velocity of money also had a role to play in this relationship. In any case, to ensure that the amount of currency in circulation did not rise above that level which would lead to inflation, Berkeley proposed that the nationalized bank would take charge of the issue and control of the currency as well as controlling banking and credit generally (Berkeley 1953, 116 [124-128]). It is surprising that few commentators seem to realize that Berkeley was the author of such ideas. It is equally surprising that, given Hume's shortcomings in this area, there has been more concentration on Hume's work on economics and money than on Berkeley's. This recognition of Hume in this aspect of his writings is probably due to the fact that his connection with and his influence on Adam Smith is so well known.[23] At least one writer claims that it is likely that Hume had read Berkeley's *Querist*.[24] Whether he did or did not

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[23]This point is made by Robertson in his introduction to Robertson ed. 1906.

[24]Rashid makes the point that, given the publication dates of *The Querist*, Hume would have had plenty of opportunity to read this work by Berkeley on money,. Hume also used the same phrase as Berkeley used in *The Querist*, pp. 143, no. 461, when he described money as being able "to oil the wheels of commerce." For a

have access to Berkeley's *Querist*, Hume does not take up any of the claims made by Berkeley and instead reverts to the earlier themes of Aristotle and Locke.

Like Aristotle, Hume could see that as farmers and others produced a surplus, they engaged in exchange with others for the goods they wanted (Hume 1906a, 8). Although he does not dwell on the notion of exchange, it is very clear that he could identify that gains could be made from exchange and that, in the absence of exchange, individuals would be poorer.

> "The riches of the several members of a community contribute to increase my riches, whatever profession I may follow. They consume the produce of my industry, and afford me the produce of theirs in return." (Hume 1906e, 68).

In the same way, foreign trade could also be advantageous; imports can be the inputs for manufacturers and exports can provide employment in that they provide a market for produce which would not otherwise be consumed at home. Foreign trade is advantageous in "augmenting the power of the state, as well as the riches and happiness of the subjects." (Hume 1906a, 10). I will be arguing later in this chapter that while the benefits from trade and exchange that Hume identifies are important economic effects which can often but do not always arise from exchange, the most fundamental and important gains of exchange are those that motivate individuals to enter into exchanges in the first place. In other words, the primary reason for my entering a particular exchange is the gain I get as a result of that transaction; while greater general wellbeing or improved terms of trade may well result from my engaging in that transaction, had they never been available I would still have engaged in the transaction. I will be addressing the issue of the gains from exchange later in this chapter when I will be examining the whole question of value in economic activity.

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discussion on these issues, see Rashid 1984, pp. 156-164, especially pp. 160-161 and footnote 10.

Hume's views on money are somewhat ambiguous. As with Locke and Aristotle, he claimed to subscribe to a form of conventionalism although, as I showed earlier, conventionalism can be ambiguous with respect to chartalism or metallism. In Hume's case, it is not so much that his conventionalism directly led to metallism but that his metallism grew out of practical concerns with paper money. So, while he claimed that money had "a merely fictitious value, arising from the agreement and convention of men. . ., " (Hume 1906b, 40), and that it was "the instrument which men have agreed upon to facilitate the exchange of one commodity for another" (Hume 1906c, 27), he also held "a great doubt" concerning paper money or what he called "paper credit," which he also described as "counterfeit money." (Hume 1906c, 29). By paper money or paper credit he meant any bills of exchange or credit instruments that were issued by banks but which were convertible into precious metals. According to Hume, one of the problems with paper credit was that it tended to "banish the precious metals" from the economy, as occurred in Scotland; whereas in France where they did not have paper credit at the time, they had plenty of bullion (Hume 1906d, 59, 61). More importantly, paper money would not be accepted in trade with foreign countries as these only accepted bullion in payment.

Hume anticipated the quantity theorem in two ways; he recognized that there was a relationship between changes in the supply of money and changes in prices. However, his approach was more sophisticated than Locke's account in that he was able to distinguish the short term effects of increases in the supply of money from the long term effects; in the short term, an increase in the amount of money in the economy would increase trade in the form of the number of transactions, but as shortages of commodities arose prices would also start to increase (Hume 1906c, 31-32). Hume also recognized that the supply of money was not the only factor to affect prices or the number of transactions in an economy; "if the coin be locked up in chests, it is the same thing with regard to prices as if it were annihilated." (Hume 1906c, 35). Although Hume never treated the matter so systematically as to produce an equation of exchange in the form of the Fisher equation, MV=PT, it is still the case that he recognized that the amount of money in the economy, modified by its velocity, was related to the level of transactions in the economy and ultimately to prices.

As well as his influence on Adam Smith, Hume is also credited with having anticipated a number of aspects of economic theory (McGee 1989, 188). However, with respect to the nature of money and other aspects of economic reality his contribution is somewhat disappointing. With the benefit of hindsight, we can see that Berkeley's views on money were more advanced in that he proposed an ontology of money and foresaw the possibility of inconvertible paper or fiduciary money. Hume grudgingly allowed that a bank, along the lines of the Bank of Amsterdam, might be an improvement on a free-for-all in the financial markets, but only for the policy advantages he thought it would bring, notably the national advantage of keeping wage-rates low, the destruction of paper-credit and having a fund ready to hand to be available in times of national danger or distress (Hume 1906c, 30). Hume does not explain exactly how a bank owned by the public would be able to achieve all of this, especially how it would be able to keep the prevailing wage rates low. In any case, the Bank of Amsterdam was but a municipal bank with very limited powers and, according to Johnston, this type of bank was "something of an anachronism" even before Hume's death (Johnson 1970, 87). In fairness to Hume, his doubts about paper credit rested on his belief that such credits would not be accepted by foreigners. It was probably also influenced by the number of privately issued paper credits that later proved to be worthless. What is ironic is that Berkeley, whose concern was with the underdeveloped economy of Ireland which had no currency, was able to identify some aspects of money and monetary policy that were very much ahead of his time, something that Hume had failed to see in his observation of the large and powerful British economy with a well-established monetary system.

1.4. From Smith to Simmel.

Adam Smith's analysis of economic behaviour begins with his observation that human beings have a propensity to "truck, barter and exchange one thing for another." (Smith 1976, 25). Smith cannot decide whether this is a basic natural propensity or whether it results from the abilities to reason and use language. What is clear for Smith is that animals do not have this ability - although one sometimes observes animals acting in

concert, this is usually because of "the accidental concurrence of their passions in the same object at that particular time. Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog." (Smith 1976, 26). Unlike animals, each human being constantly requires the help and assistance of others but "it is in vain for him to expect it from their benevolence only." (Smith 1976, 26). Smith claims that people are more likely to cooperate if they can be shown that it is to their benefit to do so. In other words, people are unlikely to provide some benefit to others in the mere hope of receiving some benefit themselves; they are only likely to do it on a consistent basis if the benefit is bilateral and each side can make some gain from the interaction. His famous quote makes this clear:

> "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest." (Smith 1976, 27).

This propensity to exchange gives rise to the division of labour. In fact, the division of labour did not come about as a result of human wisdom but evolved as a result of this propensity to exchange, according to Smith. Because individuals are able to engage in exchange, each individual can stick to manufacturing what he is good at (and therefore in greater quantity or quality) and thereby exchange that output for the goods that others are better at manufacturing. Individuals excel at different tasks or skills for several reasons; the upbringing of persons often differs, giving rise to different types of employment, education and experience. These dissimilarities are important because, through exchange, the respective talents of individuals are brought "as it were, into the common stock, where every man may purchase whatever part of the produce of other men's talents he has occasion for." (Smith 1976, 30). In addition, some persons have a natural aptitude for certain tasks. "It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy." (Smith 1976, 456). This encapsulates Smith's view of the benefits of exchange; if it costs less to buy it rather than to make it oneself, the difference between those costs are the gains from exchange. While Smith's account is correct in as far as it goes, it does not provide a complete account of the gains from exchange, especially in the case of consumer transactions. I will be

returning to this issue in my discussion of economic value later in this chapter.

Smith's account of the gains of exchange is confined to the gains that can be achieved through comparative advantages in production. So, according to Smith, shoemakers should not try to make clothing and tailors should not try to make shoes since shoemakers cannot match the advantages that tailors have in the manufacture of clothing and tailors cannot match the advantages that shoemakers have in the manufacture of shoes. Smith extends this maxim to include the comparative advantage that certain countries or geographical areas have with respect to the production of certain commodities. This account is generalized to countries which, like people, should specialize so as to maximize the gains from exchange or trade.

> "What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage." (Smith 1976, 457).

This is the basis for his argument for free trade; there is no point in imposing tariffs on the produce of countries which have a natural advantage with respect to a specific product. Within one's own country, it is also important that trade proceeds unfettered as this allows for greater gains for all concerned. No individual actually intends to promote the public interest but in the pursuit of his own ends, he "is led by an invisible hand to promote an end which was no part of his original intention." (Smith 1976, 456).

Smith's version of the division of labour goes further than Plato's notion of specialization in that it does not just stop at the separation of skills into different general categories, such as farming or shoemaking.[25] While Smith allows that both in rural areas and in other situations where the market is very limited, there will be relatively little specialization, in the urban manufacturing setting the level of specialization may become very high. This

[25]Plato envisages these general categories in the *Republic*; see Plato 1987, 365a-372d.

has to do with the nature of manufacturing itself, which his example of making pins makes clear (Smith 1976, 14-15). The manufacture of pins can be split into about eighteen distinct operations, such as cutting wire, straightening it, making it pointed at one end, grinding it at the other, and so on. A single individual could manufacture pins on his own although he would probably only be able to make one or two per day. This is due to having to run through all the different operations on his own. When each operation is performed by one person and with each operator preparing work for the next operation, the output is far greater. Also, when an employee is confined to performing one operation, this "necessarily increases very much the dexterity of the workman." (Smith 1976, 18). Smith was able to report that a small pin factory which employed only 10 men (who had to share or double up on some of the operations) was able to turn out over 48,000 pins per day, equivalent to about 4,800 pins per employee.

Smith is struck by the complexity and the interdependence of the economic system of his time. The division of labour means that even the simplest of products involves the input of many workers; the coarse and rough woolen coat of the day-labourer "is the produce of the joint labour of a great multitude of workmen." (Smith 1976, 22). It also ensures that there will be a wide variety in the types of trades or specialties of work as well an equally broad range of techniques and implements or machines used. We have already seen that this occurs because of the prevalence of the division of labour which evolved through the propensity of human beings to engage in economic exchange. And what allows this propensity to flourish is the presence of money as a medium of exchange.

Smith provides an account of the origin and evolution of money that is similar to that of Aristotle, albeit more detailed. According to Aristotle, for various reasons including various difficulties with the portability or transportability of goods, money emerges initially in the form of some commodity so as to answer the need for something to take on the equivalence of value in exchange. According to this account, the commodity in question is arrived at by way of convention whereby a particular good or product which is easier to handle or measure becomes the exchange good to be used in all non-barter transactions. As I pointed out earlier, Aristotle never came to realise the fundamental reason for the emergence of money as a medium of exchange, which was to overcome the

problem in pure barter of the double coincidence of wants. However, Smith identifies this problem and shows how individuals deal with the difficulty of not being able to find exchange partners with suitable wares on offer; in such cases, the individual ensures that he goes about his business with "a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse for the produce of their industry." (Smith 1976, 38). As we will see later, this is a similar, if somewhat thinner, account compared to Menger's which spells out in greater detail the emergence of commodity money through the notion of the saleableness of that commodity.

Although a multitude of such exchange commodities were in evidence at various stages in human history, according to Smith there seems to be a convergence of preferences over time towards metals. This is because metals are durable and can be subdivided or reunited without much loss, according to Smith (Smith 1976, 39). Divisibility of the exchange commodity is important, according to this account, because it facilitates exchanges which, under barter, would either be extremely inconvenient or impossible. For instance, the man who wishes to barter for salt but only has cattle to give in exchange would have to buy the whole value of a cow worth of salt because cows are not divisible. In addition, metals already had a high exchange-value prior to their use as a medium of exchange. For instance, precious metals are sought after because they don't rust, are easily kept clean, beautiful and scarce, according to Smith (Smith 1976, 190). Their value predates their use as a medium of exchange although it was this value in part that made them suitable as a medium of exchange in the first place. However, the further demand for these precious metals as a medium of exchange "may have afterwards contributed to keep up or increase their value." (Smith 1976, 191).

Smith then goes on to discuss the emergence of coinage.[26] Although the divisibility, durability and relative scarcity may have favoured one or more particular metals, their utilization as a medium of exchange left the way open for fraud in the form of debasement of the metallic content. Although precious metals were always open to abuse of this kind, it was possible to assay a metal so as to ascertain its purity. But having to assay small

[26]This account of coinage is largely drawn from Smith 1976, pp. 40-42.

amounts of precious metals with each transaction would not be feasible. In order to combat these difficulties, various parties, including the state, monasteries, large towns or cities, began to mint coins. In this way, potential users of these coins were assured that the metal contained in such coins was as it was supposed to be and of the proper weight. Mints also ensured that the stamp covered "entirely both sides of the piece and sometimes the edges too . . ." Such measures ensured that coins were accepted at face value and therefore did not have to be weighed. By ensuring that the stamp covered the entire face of the coin, the potential user could be alerted to any clipping of the edges. This led to coins being accepted in *tale* rather than in *specie,* in other words at denomination or face value rather than by metallic content. Of course, many governments made use of the fact that the coinage was accepted in tale by subsequently debasing the coinage.

Smith also discusses the emergence of paper money and the role of banking and credit. Paper money is substituted for gold and silver money because "it replaces a very expensive instrument of commerce with one much less costly, and sometimes equally convenient." (Smith 1976, 292). At that time, paper money was largely in the form of promissory notes issued by banks. If people are confident that a bank will pay on demand the amounts stated on the promissory notes, they are more likely to accept such notes as money since they are more convenient and less costly to transport. From the bank's point of view, the stock of deposits "is just so much dead stock" (Smith 1976, 320) unless they can be further utilized so as to make further returns. These deposits can be used as a metallic basis for issuing further promissory notes. Smith describes a version of what is nowadays known as the banking multiplier: the following example makes it clear what is meant by this term. In Smith's example, a bank lends out money to the tune of a hundred thousand pounds in the form of promissory notes, knowing that many of these promissory notes will not be redeemed for at least several months. Usually, about twenty thousand pounds in gold and silver is all that is required for day to day redemptions; in modern economic parlance, this means that the bank has a reserve asset ratio of 20 percent. "By this operation, therefore, twenty thousand pounds in gold and silver perform all the functions which a hundred thousand could otherwise have performed." (Smith 1976, 293). In other words, the bank only needs to maintain deposits of twenty thousand pounds while maintaining a loan base of a hundred thousand pounds. If all bankers do

this, "the whole circulation may thus be conducted with a fifth part only of the gold and silver which would otherwise have been requisite." (Smith 1976, 293).

Not only was Smith more comfortable with paper money than Hume, he was also at home with the notion of a paper fiat money, as the following quotation demonstrates:

> "A prince, who should enact that a certain proportion of his taxes should be paid in a paper money of a certain kind, might thereby give a certain value to this paper money; even though the term of its final discharge and redemption should depend altogether upon the will of the prince. If the bank which issued this paper was careful to keep the quantity of it always somewhat below what could easily be employed in this manner, the demand for it might be such as to make it even bear a premium, or sell for somewhat more in the market than the quantity of gold or silver currency for which it was issued." (Smith 1976, 328).

Some take this quotation as an endorsement of chartalist leanings. But what is clear is that, at least with respect to the origins of money, Smith was comfortable with a metallist account while in the case of fiat money he was at home with a chartalist account, as evidenced by the above quotation. I will be returning to this point at the end of this chapter when I will be examining the chartalist-metalist debate in more detail.

Before leaving Smith, one last point ought to be mentioned, which is his alleged adherence to a version of the labour theory of value. There are about seven pages in Chapter 5 of *The Wealth of Nations* where he makes various claims connecting labour with the notion of value. For instance he states that,

> "The value of any commodity, therefore, to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command." (Smith 1976, 47).

But the fact that he seems to veer away from any strict labour theory of value within a

couple of lines of this latter quotation provides grounds for doubts concerning his adherence to such a theory, as the following shows. "The real price of everything, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it." (Smith 1976, 47). As Schumpeter points out, while this is "one of those treacherous platitudes that may mean anything or nothing," it appears to exhibit a tendency to "base the value phenomenon upon the irksomeness or disutility of work, or to adopt a labor-disutility theory of value." (Schumpeter 1994, 309-310). Even if this could be construed as a labour theory of value, Smith does not consistently adhere it; nor is it a central theme in his work. Elsewhere in *The Wealth of Nations* he explains commodity prices by reference to a combination of wages, profit and rent, in effect the total costs of production (Smith 1976, Chapter 6).

It is sometimes hard to see what role, if any, his seemingly pro-labour theory of value pronouncements have to play in his overall project. In at least one place it appears that he wants labour to play the role of a numeraire; in other words he means that the values of all commodities can be translated into labour equivalents. But, as Schumpeter points out, this choice of labour as the units in which to express commodity values or prices "no more implies any particular theory of exchange-value or price than the choice of oxen as units by which to express commodity values or prices implies an ox theory of exchange value or price." (Schumpeter 1994, 188, fn 20). An interesting point made by a commentator who wished to reject the view that Aristotle upheld a labour theory of value is that what both Smith and Aristotle had actually set out was a theory of labour value rather than a labour theory of value (Soudek 1991, 27). In the case of a labour theory of value, labour is the only cause or source of value, whereas in the case of a theory of labour value, labour is not the only source of value. In the case of the latter, one of the other essential ingredients in the creation of value is "the presence of that reflex of individual desires called utility" (Gordon 1991, 126) or what might also be called use-value; the only role that labour plays in a theory of labour value is the role of a numeraire or equivalence in the valuation of goods. In this sense, the use of labour as a numeraire is similar to the way money or some commodity can be used as an equivalence of value or worth. As I show below, Marx's labour theory of value ignores any questions concerning use-value or utility.

Among the various philosophers and theorists I examine in this chapter Marx is unusual in that in addition to providing an analysis of prevailing forms of economic reality, he also argued that the these economic phenomena, including exchange, money, property, commodities as well as bourgeois conditions of production, were bound eventually to be eliminated, at least in the utopian future of communism (Marx 1988, 69). "The theory of the Communists may be summed up in the single sentence: Abolition of Private Property." (Marx 1988, 68). Without property, economic phenomena such as exchange, money, markets and commodities could no longer prevail and the system of economic distribution as we know it would disappear. However, elsewhere Marx alludes to a form of distribution under an early form of communism by which the individual "receives a certificate from society that he has furnished such and such an amount of labour (after deducting his labour for the common fund), and with this certificate he draws from the social stock of means of consumption as much as the same amount of labour costs." (Marx 1938, 8). Marx acknowledges that it can be argued that this is still a form of exchange insofar as the same principle of exchange prevails, the exchange of equal values. However, this too will disappear "in a higher phase of communist society," leading to a new principle of distribution, "from each according to his ability, to each according to his needs." (Marx 1938, 10). Whatever form of economic organization prevails under the utopian conditions of mature communism, if it even makes sense to talk about economics under such conditions, it will be totally different from that which we are familiar with today.

Since Marx revealed relatively little about conditions under mature communism, devoting instead most of his energies to a critique of the economic and social conditions under capitalism, it is to this critique that I will turn in my examination of Marx's account of economic reality. In the early parts of *Capital* he developed a detailed analysis which covers commodities, exchange, his labour theory of value and money. For the sake of convenience and consistency and because it arguably contains his views in their most mature form, I will be referring mainly to *Capital* in my elucidation of his views.

Marx begins *Capital* by drawing the familiar Aristotelian distinction between use-value

and exchange-value. According to his account, many aspects of our lives and our environment are themselves use-values or provide us with use-value in the sense that they satisfy some need or desire, whether directly or indirectly, or are of some use to us in performing some task or other. For Marx, a commodity is anything that can be the subject of exchange. It has exchange-value which, in effect, refers to the amount of some other commodity which will be given or received in exchange for it. All commodities have use-values as well; if they did not have use-values there would be no point in seeking to engage in exchange for them. According to Marx, several distinctions between exchange-value and use-value are important to note at this stage: all commodities must have exchange-value but not all things that have use-value have exchange-value. For instance, "air, virgin soil, natural meadows etc." have use-value but not exchange-value because they cannot be exchanged (Marx 1906, Vol.1, 47). Of course, Marx did not anticipate the developments in environmental legislation and the subsequent environmental pricing brought about by the creation of a market for emission allowances and other licensing arrangements which effectively commoditize these natural phenomena. But this should not take away from his general point, which is that not all use-values have to be associated with exchange-values; not everything that is desired or is useful in performing some task ends up being the subject of an economic exchange.

Another important distinction drawn by Marx between use-value and exchange-value is that the latter "presents itself as a quantitative relation." (Marx 1906, Vol.1, 43). In other words, the exchange-value of a commodity is the amount of some other commodity that will be accepted in exchange for it, but the use-value of a commodity cannot be so quantified; "Being limited by the physical properties of the commodity, it [use-value] has no existence apart from that commodity." (Marx 1906, Vol.1, 42). Exchange-value, on the other hand, is an attribute that all commodities have in common.

Bearing in mind that, so far, the discussion in *Capital, Volume 1*, has been restricted to the notions of use-value, exchange-value and the fact that commodities can be exchanged in proportion to each other in a form of pure barter, Marx then makes the unusual claim that the exchange-values of commodities "must be capable of being expressed in terms of something common to them all, of which thing they represent a greater or lesser

quantity." (Marx 1906, Vol.1, 44). This common element he simply calls 'value', without any qualification. For the sake of clarity and to avoid confusion with other value terms, I will henceforth use the term, 'objective value' or 'value in the objective sense' when referring to what Marx calls 'value'. As I show later, Marx intends that the term be used in this special objective sense. Against Marx, I will be arguing that, at least with respect to the sphere of economics, there is not such thing as objective value, at least not in the sense that Marx intends. My contention will be that economic value begins as a subjective notion, in the form of use-value. In turn, exchange-value is an intersubjective notion that arises out of exchange; only in this sense can exchange-value be seen as objective. However, as I will show, Marx intends that his objective notion of value be prior to exchange, arising in the production process, according to his labour theory of value, and therefore independent of any subjective or intersubjective notions, such as use-value or exchange-value.

Notions of value in this objective sense have a long history. The earliest form of a labour theory of value probably emerged first in the writings of Aquinas and the early Canonists.[27] These writers were mainly concerned with just prices and therefore sought to define the value of goods or commodities in some objective way. A price that deviated from the objective value of the good was deemed unfair and unjust to one or other party to an economic transaction. Such objective values were to be derived from the labour expended in producing the items in question as well as other costs of production. Although the notion of objective value clearly predates Marx, what is novel in his account is that he places the labour theory of value at the heart of his account of economics. Although he does not use this notion of objective value in the same way as the Canonists, the concept of objective value is the foundation of his critique of capitalism.
For Marx, the objective value of a commodity is, in its simplest sense, the crystallization of the amount of labour that went into producing that commodity. This is an unusual and arguably problematic claim in that there does not seem to be any basis for it in pure

[27]For a fuller account of the Canonist approach to the labour theory of value, see Meek 1973, pp. 11-14.

barter. Prior to the emergence of an exchange good or commodity money, all that would be required for any particular exchange to occur is that each party have something that the other party wanted and each be prepared to give up what he had in exchange for what the other was offering. For such exchanges to occur there is no need for any common element or any notion of objective value based on labour or anything else, in terms of which the exchange-values of *all* commodities must be capable of being expressed. In practical terms, no party to any pure barter exchange needs to have access to such a concept that is above and beyond the notion of exchange-value. At this pure barter stage, exchange-value is the amount of a commodity that one receives in exchange for another commodity; there are no markets, no exchange goods or other forms of money and therefore no market prices.

My casting doubt on Marx's claim does not rule out the possibility of comparisons by prospective parties to exchanges between commodities, their use-values or their exchange-values. In cases of pure barter it is likely that potential exchanges sometimes do not occur because one or both parties has decided that what they wanted was not worth what they were being asked to give up. It may also be the case that either or both parties believed that they could get better terms elsewhere. But in such pure barter scenarios there is no appeal to something that is common to all exchange goods other than exchange-value and use-value. Neither is there a requirement for such an objective common factor. While it is arguably the case that eventually something resembling a common factor may evolve, such as some form of exchange good or commodity money, it is not the case that this needs to be present *ab initio*. Also, as I show in Chapter 3, the exchange good or commodity money that does emerge is markedly different in origin from Marx's notion of objective value; I argue that exchange goods and commodity money arise out of exchange and exchange-value and only when there is an exchange good or money will there be the common equivalence that Marx refers to. Under pure barter conditions goods are measured against each other, not against some universal objective measure.

Although, according to Marx, "the exchange-values of commodities must be capable of being expressed in terms of something common to them all," namely objective value, the

two concepts of exchange-value and objective value are sharply distinguished by Marx (Marx 1906, Vol.1, 44). It appears that Marx has good reasons for drawing this distinction; value in the objective sense is expressed in terms of the labour content of commodities, or more specifically the socially necessary labour time required to produce the commodities in question. On the other hand, exchange-value is that which is only achieved through exchange and it is a quantitative factor which must be common to all commodities; exchange value "is the only form in which the value of commodities can manifest itself or be expressed." (Marx 1906, Vol.1, 45). It appears that when Marx claims that exchange-values must be capable of being expressed in terms of something common to all exchange-values, it was because he believed that the actual exchange-values of individual commodities do not take a form that is common to all exchanges. This makes sense at least under pure barter conditions, where the exchange-value of any particular commodity is not restricted to any single commodity or commodity type - in other words, there is no single form of exchange-value because exchange-values take as many forms as there are commodities available for exchange. As I outline below, even in cases where money enters exchange, Marx usually presents it, at least in its real forms, as either itself a commodity, usually a precious metal, or some medium based on precious metal.

According to Marx, the only property common to all commodities is that they are all the products of labour. His argument is as follows: given that exchange-values prior to the emergence of money do not take a form that is common to all exchanges, given that exchange-values must be capable of being expressed in terms of some factor that it common to all commodities, which is objective value, and given that there is no aspect or quality that is common to all commodities other than that they are all the products of labour, the common factor, value in the objective sense, must be the labour content of commodities. This is Marx's labour theory of value, where objective value is identified with the crystallization of labour in a commodity. To be precise, objective value in general represents what he calls "abstract labour"; "the [objective] value of a commodity represents human labour in the abstract, the expenditure of human labour in general." (Marx 1906, Vol.1, 51). In the case of specific commodities, what determines "the magnitude of the [objective] value of any article is the amount of labour socially

necessary, or the labour-time socially necessary for its production." (Marx 1906, Vol.1, 46). Marx is claiming that, at least at some idealized or simplified level, if two goods contain the same amount of socially necessary labour, they will tend to be exchanged on a one-to-one basis. As I show below, this claim is very problematic.

Marx's argument for the labour theory of value depends on several premises, as I outlined in the last paragraph. The first one, that exchange-values do not take the same form in all exchanges is obvious and uncontentious; in other words, the medium of exchange in non-barter scenarios can be changed or, in the case of pure barter where there is no unique medium of exchange, exchange-values can take the form of different goods in different transactions. The second premise, that exchange-values must be capable of being expressed in terms of some factor that is common to all commodities, which Marx claims is objective value, I have already discussed and rejected. The third premise, that all commodities have only one attribute in common which is that they are products of labour, does not hold, as I show below when I examine the production process. My claim is that commodities are not necessarily the products of labour. But what is an attribute to all commodities, and necessarily so, is that they are all either exchanged or offered for exchange. Although it is true in the case of at least some goods that their use-value to consumers results in part from various production processes, no goods can be said to have an economic value, other than whatever use-value they might have to the producer, until prospective purchasers enter the picture. As will become clear later, such economic value is not objective.

The status of the claim, that commodities containing the same amount of socially necessary labour will tend to be exchanged on a one for one basis, is unclear. *Prima facie*, it might seem to his readers that Marx is making an empirical claim, that commodities actually are exchanged in ratios proportional to the amount of socially necessary labour involved in each. However, this is obviously not his intention in that it is clear from the third Volume of *Capital* that commodities in actual markets do not generally exchange at prices that are equivalent to their objective values in the form of socially necessary labour time. But neither is Marx's concept of objective value meant to be merely a theoretical simplification; instead, analogous to the Canonist notion of the

just price, it is meant to be the real value that underlies the nominal values in the form of market prices. According to Marx:

> "The assumption, that the commodities of the various spheres of production are sold at their [objective] value, implies, of course, only that their [objective] value is the centre of gravity around which prices fluctuate, and around which their rise and fall tends to an equilibrium." (Marx 1906, Vol.3, 209-210).

Overproduction or underproduction as well as other market fluctuations lead to such variations, according to his account. But Marx has an additional reason for adhering to his notion of objective value; the labour theory of value and the concept of objective value are crucial for establishing the proper economic balance in some future communist society. "Only when production will be under the conscious and prearranged control of society, will society establish a direct relation between the quantity of social labour time employed in the production of definite articles and the quantity of the demand of society for them." (Marx 1906, Vol.3, 221). But the difficulty that this raises is that the status of the labour theory of value becomes merely utopian or aspiratory. On the one hand, Marx declares that objective value is not meant to be a theoretical simplification but on the other he cannot provide any empirical basis for it.

Marx combines a version of the Aristotelian account of the emergence of money with his labour theory of value. Under pure barter conditions there is "no commodity acting as universal equivalent and the relative value of commodities possesses no general form under which they can be equated as values and have the magnitude of their values compared." (Marx 1906, Vol.1, 98). Money emerges, in the form of some commodity or other, to answer the practical requirement of some universal equivalent. How exactly this occurs is not made clear in *Capital* but Marx is adamant in his claim that money is primarily a commodity, at least at the initial level of analytical simplification in *Capital, Volume I.* According to Marx, the commodity that takes the money form must be divisible, uniform and quantifiable; gold and silver have these qualities. But his account is also a combination of the traditional Aristotelian account with the labour theory of value in that the value of gold,

> "is determined by the labour-time required for its production, and is expressed by the quantity of any other commodity that costs the same amount in labour time. In other words, an ounce of gold is equivalent in value to the amount of any other commodity which cost the same amount of labour time. When it steps into circulation as money, its value is already given." (Marx 1906, Vol.1, 104).

The first and chief function of money, according to this view, is to provide other commodities with a way of expressing their objective values. According to Marx, money has the ability to express the objective values of commodities not because money itself renders commodities commensurable; instead "it is because all commodities, as [objective] values, are realised human labour, and therefore commensurable, that their [objective] values can be measured by one and the same commodity," which for Marx is usually gold (Marx 1906, Vol.1, 106). Of course, one does not require the actual presence of money in the form of gold in order to utilize it as a measure of objective value - when money is used as a measure of objective value, "it is employed only as imaginary or ideal money" (Marx 1906, Vol.1, 108), presumably because like any other commodity the exchange-value of real gold can deviate from its objective value. According to Nelson, Marx is taken to mean that prices or exchange-values, in the form of money as a measure of objective value, "are constituted prior to exchange although the commodity may not in fact realise its 'whole' price/value or may not even be sold at all." (Nelson 1999, 95). The difficulty is that in order for a commodity to be actually converted into money, which is the measure of objective value, it must first be sold. But for that to be the case, it would appear that at least one of the determining factors with respect to objective value would be exchange and not the labour time required for production. As Nelson puts it, "it is only in circulation that a unit or measure of value concretely arises." (Nelson 1999, 95). As I pointed out earlier, goods do not have economic value conferred upon them until prospective purchasers enter the picture.

Money also functions as a medium of circulation, according to Marx. His position is that circulation takes the form of selling a commodity for money in order to use that money to buy something else. Circulation is what allows producers to pass on their goods to

consumers and the consumers in turn to pay for them. Marx treats this function of money as secondary and derivative from the function of money as a measure of objective value. But this is because he cannot make the function of money as a measure of objective value dependent upon the function of money as a medium of circulation without thereby admitting that objective value arises in circulation; this would involve diluting his claim that value in the objective sense arises solely in production. But if his labour theory of value can be denied, as I argue it can, then one is free to accept the more plausible account, that the function of money as a medium of circulation or exchange is primary while the function of money as a measure of economic value is secondary and derivative from its function as a medium of exchange.

Marx depicts circulation in the form of the formula, C-M-C, where C refers to commodities, M refers to money and the relation C-M-C refers to the way an individual exchanges the commodities he owns for money so as to acquire other commodities. The circulation of commodities provides the starting point for capital and money; the "final product of the circulation of commodities is the first form in which capital appears." (Marx 1906, Vol. 1, 163). It arose as the markets and commerce of the 16th Century expanded to become world-wide phenomena, according to Marx. Alongside the simplest model of circulation of the form C-M-C, there is another where, instead of individuals selling commodities in order to buy other commodities, individuals emerge who are buying in order to sell, according to the model, M-C-M. According to Marx, when money circulates in this latter manner, it "is thereby transformed into, becomes capital, and is already potentially capital." (Marx 1906, Vol. 1, 164). According to Marx, unlike the original model of C-M-C in which individuals are happy to finish the C-M-C cycle with the same objective value albeit in the form of different commodities, the owners of capital who operate on the basis of the M-C-M model are obviously not interested in merely getting the same amount of money or objective value at the end of the cycle. If that were the case, they would have been better off hoarding the money instead of risking it in commercial activity. Instead, they want to achieve a greater amount of value in the form of money at the end of the cycle, M*, and so the model is best depicted as M - C - M*. The difference between M* and M is what Marx calls surplus value. Surplus value is that part of the objective value that is created by labour in the production process.

It must be remembered that, on this view, capital is better seen as value in the objective sense rather than money as such; this is because capital that is just hoarded in the form of money no longer functions as capital. Capital in the form of money needs to be transformed into commodities because these commodities are "a wonderful means whereby out of money to make more money." (Marx 1906, Vol. 1, 172). It seems that money or commodities can function as capital only in circulation of the type M - C - M*.

There is, however, a difficulty which lies behind these two models of circulation. This concerns Marx's claim that "circulation, or the exchange of commodities, begets no [objective] value." (Marx 1906, Vol. 1, 182). As I discussed earlier, objective value in Marx's account arises solely in production in accordance with the labour theory of value. Surplus value is not generated through exchange, according to his position, because exchanging in and of itself does not create any new or additional objective value overall. Trading may redistribute objective value but the total objective value before any single exchange or series of exchanges and the total objective value after a single exchange or series of exchanges is the same, according to Marx; this is because objective value cannot be created except through production. To illustrate this Marx uses the example of two persons, A and B, who trade together but where one, A, takes advantage of the other; even after A has managed to sell wine worth £40 (objective value) to B and receives in exchange corn to the objective value of £50, the total objective value of what has been exchanged is the same before the exchange as after the exchange, namely £90. "The [objective] value in circulation has not increased by one iota, it is only distributed differently between A and B." (Marx 1906, Vol. 1, 181).

There are a number of problems with Marx's view that value is objective in that it arises in production but remains unaffected by exchange. In opposition to this view I claim that value cannot be objective and that value arises in exchange. In support of this I will offer illustrative examples of two types of exchange; exchange involving a consumer commodity and exchange involving producer commodities or inputs to a production process.

Generally speaking, exchange normally occurs where there is a double coincidence of wants between two parties. Obviously, each party associates a use-value with what they expect will be the proceeds of the transaction, otherwise there would be no point in engaging in the transaction in the first place. However, it must be remembered that the net use-value that accrues to each party as a result of the exchange includes both the use-value that individual associates with the commodity or money that is received as a result of the exchange minus whatever use-value that individual associates with the good or money that has been handed over as a result of the transaction. In each case, both individuals must feel that they stand to make a net gain in use-value after the exchange compared with the situation prior to the exchange. Several points are worth noting at this stage: what motivates each exchange is the subjective assessment of use-value on the part of each party to the exchange. Because use-values are a subjective matter, at least in the case of consumer goods, they can be very difficult or impossible to assess in others. Also, exchange-values are not necessarily a direct reflection of use-values for the following reasons: exchange-values often have as much to do with the availability or otherwise of the goods in question as opposed to their use-values. What is important to note is that when the exchange-values are set at a level whereby each party to an exchange makes a net gain in use-value, then that exchange will occur. In other words, if the exchange-value of the shoes that I have to offer is two shirts in the case of barter, or £20 in the case of a money economy, I must feel that the shirts or the £20 is preferable to keeping the shoes. If I don't feel that I will make a net gain of use-value by acquiring the shirts or the £20 over keeping the shoes or if I feel that I can gain more use-value by making a better bargain elsewhere, then this exchange will not take place. So, if the exchange-value of a commodity is at a level where one party to an exchange does not make a gain in use-value or where one party thinks that a more favourable exchange-value is available elsewhere, the exchange will not occur. This discussion is not the last word on the subject of gains from exchange; later in my discussion of Simmel I will be discussing in more depth the role that exchange-value plays in exchange.

Although in the early pages of *Capital, Vol. 1* Marx briefly examines the notion of use-value, after that brief examination the notion is quietly dropped and never resurfaces. The difficulty with Marx's approach to exchange and his notion of objective value is that if all

that matters with respect to commodity exchange is the objective value of commodities in terms of their labour content, then it is hard to see why individuals would bother exchanging at all since what is exchanged, according to Marx, are usually amounts of commodities of equal value (unless someone is being cheated). It is hard to see how Marx can ignore the gains in value that are made in exchange and yet accept the existence of use-value. It is not that Marx denies the possibility of use-values; it is just that he seems to give them no role to play in exchange or economics. This is because he privileges what he sees as objective value gains that arise in production while ignoring the use-value gains that arise in exchange.

So far I have looked at value gains that arise in the exchange of consumer goods only. But such gains are a feature of all exchanges, including those which involve goods which are the inputs of production processes. The following example will help to illustrate how such gains arise. In a typical production process, one of the inputs is a commodity, X, which the producer purchases on the open market. Let us assume for the sake of the argument that for some reason commodity X is no longer available; for example a natural disaster has destroyed the factory producing commodity X. We can imagine that there may be several options open to the producer; he can either try to produce commodity X in-house, find a substitute which does not involve a drastic change in his production process or a dramatic increase in costs or he can change the production process so as to be able to produce his output without requiring X as an input. Assuming that all these options are feasible, he will choose the alternative that is the cheapest, all other things being equal. For the sake of the argument, let us assume that he chooses to manufacture X in-house because it is the cheapest option. Some months pass and supplies of X are available again on the market. The producer ceases the manufacture of X in-house and resumes his policy of purchasing it (assuming, of course, that this still makes economic sense). What has happened is that the produce has substituted exchange for production in the process of acquiring a use-value. The amount of use-value he gains from the X that arises in both scenarios is the same but the scenario in which he purchased the input provided him with a gain above and beyond what manufacturing in-house could have provided. The gain in value for the producer is that he acquires the same use-value at a lesser cost; in other words, he had to give up less use-value as part of the exchange than

he had to when he produced X in-house.

Marxists might counter the last example by pointing out that the commodity X, when purchased on the market, must have been produced by someone, namely the original manufacturer. This fact, however, does not impugn the point that the example was designed to demonstrate, which was that Marx's assertion, that there are no gains in value through exchange, is false. Marx claims that something has value because of the labour content it acquired during the production process; my position is that economic value begins with the subjective notion of use-value. Use-value is what motivates exchange and it is through exchange that goods acquire exchange-value. Something is economically valuable because it is valued by individuals and groups and often the labour content of a commodity has little to do with the way that people value it. There are numerous examples of goods which are valued independently of their labour content. Non-transferrable desires for goods that are in limited supply often result in very high exchange-values, e.g. works of art by grand masters. Sometimes undeveloped land in certain locations is highly valued even though it has never seen a day's labour. Even if we take production processes into account, labour is applied in so many different ways and intensities which are not reflected in the prices or values of the finished product. This is not to deny that production is responsible for the creation of the potential use-values of manufactured goods. But what makes the output of a production process valuable or not is to be found exclusively in the process of exchange, not in the production process. While it may be the case that production processes often give rise to what is valued by parties to exchanges, such values are subjective, not objective. It can be granted that exchange-value is not subjective and therefore is objective or perhaps intersubjective; but even if exchange-value can be described as objective in some sense, it still remains dependent on exchange and therefore does not have the objectivity that Marx requires of his notion of objective value. In any case, exchange-value, as Marx would allow, does not arise in production.

According to Marx, surplus value is created through the fact that labour, as a commodity, has "a specific use-value . . . of being a source not only of [objective] value, but of more [objective] value than it has itself." (Marx 1906, Vol. 1, 216). What this means is that the

labourer can produce more objective value in a period of time than the objective value of the absolute basic necessities which he requires in order to survive during that same period. Because the labourer owns no commodities with which to combine with his labour in order to produce further commodities, he has to agree to the exploitative proposal from the capitalist. According to Marx, the owner of capital exploits the worker through appropriating the surplus value that the worker produces in the production process. But is labour the only commodity that can produce more value, whether objective or otherwise, in a specific period of time than the necessities required in order to maintain that source of commodity? Given the right conditions, many living organisms, from bacteria to large mammals, possess this attribute of being able to produce more than the basic necessities required in order to keep them alive or allow them to thrive. It can be argued that human labour is required so as to produce value from living organisms as well as natural inorganic materials. The exceptions to these are services and intellectual property; but even these usually require some material basis, e.g. a novel requires a material medium, such as paper, before it can be sold and a cleaning service requires cleaning equipment as well as surfaces to clean. However, human labour on its own, without the organic and inorganic materials from nature, would not be sufficient to produce anything at all. The production process is a marriage between human labour, knowledge or technique, artefacts or machinery, and natural or material products or their derivatives. Each is necessary for producing the required output and human labour on its own is not sufficient for that purpose. If the output is valuable, what is the reason for attributing all of that value creation to just one of the inputs when it should rightly be attributed to a combination of all of the inputs?

Although Marx claims that objective value, which includes surplus value, only arises in the sphere of production through the involvement of labour, it is the system of exchange that makes it possible for the capitalist to exploit the worker by appropriating the surplus value that really belongs to the worker. Even though the exchange system begets no additional value in and of itself, according to Marx, exchange facilitates the appropriation of surplus value through the hiring of labour at a rate that is less than the value amount which the labourer produces. This is why Marx looks forward to the abolition of exchange under mature communism. Given that all the other aspects of economic reality

flow from exchange, such as markets, prices, commodities and money, as I will show in Chapter 3, this amounts to the abolition of all economic phenomena as we know them. But even setting to one side his blindness to the gains in economic value from exchange, if we accept that exchange allows for the exploitation of workers, why can the exploitation not be the result of the exchange process rather than the production process? If it is exchange conditions that lead to the exploitation of workers, why not change the conditions rather than abolish exchange altogether? Given that exchange, at least in its more developed forms, is based on a set of legally enforceable rights, including the right not to be defrauded, and given that some commodities are largely or wholly determined by legal rights, such as undeveloped land, why not address the problem of labour exploitation through either through the creation and enforcement of certain rights or the regulation of certain practices? In effect, this is what many countries have done through the establishment of minimum wage rates, health and safety standards, equal pay and many other legal measures. Governments also intervene directly in the labour market through funding education and training, providing unemployment payments and adopting job creation policies. While Marx deserves the credit for drawing attention to the fact that exploitation of the grossest kind can be facilitated through the free exchange of commodities, this does not mean that only with the abolition of exchange and all forms of economic reality as we know it can exploitation be eliminated. I will be developing an alternative approach to the whole notion of exchange and exploitation in Chapter 3 where I will be showing in greater detail how exploitation is effected through exchange even when no production is involved.

So far I have dealt with Marx's views concerning exchange, circulation, value and production; but while I have touched on certain aspects of money, such as its role in his theory of circulation and its functions as a measure of objective value and a medium of circulation, I have not examined his views on money in any great detail. Money in its various forms seems to have caused Marx a number of difficulties and his views on money changed as his work developed. As Nelson points out, in some of his early writings Marx believed that the value of money was not based on the labour time involved in its production of the money commodity but was based on the interplay of supply and demand.

"This is a position he later retreats from. Even so the later development of his monetary theory is racked by inconsistencies concerning the distinction between the money commodities and other ones." (Nelson, 1999, 24).

De Brunhoff, who is more in sympathy with Marx's views on money, acknowledges that Marx had originally adopted the view that the value of money was not determined by the labour time embodied by the commodity in question but that the value of money was decided by supply and demand. But these early views "are rejected and refuted in *Capital,*" according to De Brunhoff (De Brunhoff 1976, 34). However, Marx's view that money, in its fullest sense, is a commodity which is usually gold is to be found throughout his work.

Earlier I mentioned Marx's claim from the early sections of *Capital,* that money is essentially a commodity which develops into a universal equivalent and that the commodity in question is invariably a precious metal, such as gold. But although Marx is committed to the view, at least at the level of simplification of *Capital, Volume I,* that money is a commodity and invariably a metallic commodity, this does not mean that he does not allow for paper money. In fact, he goes further than that by claiming that a purely metallic circulation would be impossible because of the amount of precious metal required to maintain it. Inevitably some sort of paper money or credit money emerges to supplement the already existing stock of metallic money, according to this account.[28] But paper or credit money only retains the medium of exchange function of money and loses the function of money as a measure of objective value, according to Marx, since only real money, e.g. gold, can have the latter function. Paper money remains dependent on the commodity gold for its function as a measure of objective value; "credit money is itself but money in so far as it absolutely takes the place of actual money to the amount of its nominal value." (Marx 1906, Vol. 3, 606). In effect, the credit money or paper money that Marx is discussing here are bills of exchange and other credit instruments that would have been issued by businesses and banks at that time. While he allows credit and credit

[28]Marx alludes to this requirement in a number of places in his writings, especially in Chapters 25, 27 and 32 of Marx 1906, Vol. 3.

money into his system, they are only tolerated just so long as they are seen as a sort of quasi money; they cannot be real money in the fullest sense because they lack the function of a measure of objective value that real money, such as gold, possesses and can only function as a medium of exchange or "circulating medium." (Marx 1906, Vol. 3, 144-145). While the denomination of paper is based on gold and silver, the convertibility of the note, i.e., its exchangeability for gold and silver, remains an economic law regardless of what juridical law may say." (Marx 1971, 83). Although Marx was aware of attempts by the state to issue fiat money, he believed that,

> "this power of the state is mere illusion. It may throw any number of paper notes of any denomination into circulation but its control ceases with this mechanical act. As soon as the token of value or paper money enters the sphere of circulation it is subject to the inherent laws of this sphere." (Marx 1971, 119).

In *Capital*, one of the laws concerning the circulation of money is stated thus; "the issue of paper money must not exceed in amount the gold (or silver as the case may be) which would actually circulate if not replaced by symbols." (Marx 1906, Vol. 1, 143).

Marx's claims concerning money, especially his metallism, have long since been overtaken by events. Money in the form of precious metals no longer exists and Marx's pronouncements are not borne out by the facts. It is also important to note that Marx's analysis of credit is very problematic, because it is, at the very least, incomplete. Even De Brunhoff, who presents a sympathetic interpretation of Marx's theory of money, admits that the texts that dealt with credit were hardly edited by Marx and that Engels had, by his own admission, nothing but "a disorderly mass of notes, comments and extracts." (De Brunhoff 1976, 73). However, she still claims that it is still possible to speak of Marx's "Monetary Theory of Credit" even if his points concerning the banking system and the balance of payments "are more stimuli to thought than constituent elements of a completed theory." (De Brunhoff 1976, 73). Nelson is much more critical, describing the relevant texts in *Capital, Volume 3* as a 'shambles'(Nelson 1999, 141). Despite these textual problems and the fact that his account of credit is incomplete, it is still possible to set out a Marxist view of credit, albeit a view that does not stand up to very much

scrutiny.

Marx acknowledges the importance of credit and its growth for the development of capitalism and his extensive quotation of Smith's analysis of what is now called the banking multiplier (Marx 1906, Vol. 3, 555) leads one to believe that he has a reasonable understanding of the role of credit and the functioning of the banking system of his time. He shows an awareness of how trade credit arose and how the circulation of certificates registering such trade debts reduced the need for money in the form of gold and silver (Marx 1906, Vol. 1, 156-157). He also observes how credit reduced the costs of circulation when money, in the form of a commodity, such as gold, began to be replaced by paper in a large number of transactions (Marx 1906, Vol. 3, 515). But some of his claims concerning credit cannot be substantiated; for instance, his distinction between commercial credit and banking credit.

According to Marx, commercial credit is trade credit organised between businesses, in which a certificate of the debt or bill of exchange is given in exchange for goods. Such instruments form a registration of the debt and stipulate certain conditions, such as when the holder or beneficiary of the certificate must be repaid by the debtor. Marx distinguishes trade credit from bank credit or the lending of funds by banks to businesses and claims that the latter "constitute another, quite different, element" (Marx 1906, Vol. 3, 562). without saying exactly why this might be the case. All in all, although a perusal of the Marx's writings on credit may provide the reader with stimuli to thought, as De Brunhoff puts it, Marx also may have found himself with a difficulty of his own making. If, as Marx claimed, the objective value of the money commodity and the objective value of all other commodities are determined prior to exchange, in the production process according to his labour theory of value, then it would make sense to take trade credit as being dependent on or being backed by the objective value of the commodities traded whereas bank loans could be taken to be fictitious capital.[29] This latter term he also uses for any form of shareholding or loan capital as well as government bonds and

[29]Fictitious capital is discussed in Marx 1906, Vol. 3, Chapters 25 and 29.

inconvertible banknotes or currency. This fictitious aspect has to do with the fact that they are all not backed by precious metal or other commodities or are not directly associated with commodities. But if we look back to Marx's view of objective value, the only way that objective value can be properly represented is through commodities in that they embody a certain amount of labour time; unless some commodity is backing the credit, as in the case of trade credit, then it does not represent or embody any objective value and is therefore fictitious as opposed to real. According to Marx's account, real money is gold, but credit money that is backed by assets or commodities, such as trade credit, is not real money although it can function as a medium of circulation and therefore is a good substitute for gold under certain conditions. However credit money without the backing of assets of commodities is fictitious money presumably because, although Marx never makes this completely explicit, it cannot even sustain the function of a medium of circulation. According to Nelson, the term 'fictitious capital' "suggests the precarious and speculative nature of financial assets, as distinct from industrial capital which is real productive capital." (Nelson, 1999, 147). But the point about capitalism is that it is frequently speculative and precarious, because no capitalist is sure at the time of production whether his goods will find buyers. When trade credit is extended in the form of the provision of inputs to a producer, these will often be quickly involved in the production process and will therefore disappear. When a bank extends credit, it may insist on a charge over buildings or other assets of the producer. In any case, if the debtor cannot pay the money back for whatever reason, the bank's debt may turn out to be more secure than the trade creditor's. The point is that Marx's distinction between trade and bank credit is illusory. The difficulty for Marx is that he is tied to his notion of objective value which prevents him from treating the various forms of money and credit as equivalent and prevents him from accepting financial assets as anything other than fictitious capital.

Marx is exercised by the question, how much money is required to allow for the circulation of commodities and adopts a version of what is known as the quantity theorem. According to Marx's version, the stock of commodity money required multiplied by the average number of transactions in which a coin participates within a specific period of time is equal to the total worth of all commodities exchanged within the

economy within that period of time.[30] It does not follow, however, that Marx has adopted the quantity theory of money. Instead of holding, according to the quantity theory of money, that because both the velocity of money and the total amount of commodities available for exchange are generally stable, the quantity equation dictates that any increase in the quantity of money in the economy will cause a proportionate increase in prices, Marx believes that the quantity theorem dictates the amount of money required for the given circulation of commodities and that any changes in the circulation of commodities is absorbed by releasing or absorbing money into hoards.[31] For him, paper money should not exceed the amount in gold which it displaces.[32] Given that, for Marx, money is in the first instance commodity money, often in the form of gold, and given that its value, in the objective sense of the word, is determined by the amount of labour required to produce it, Marx could never consistently accept the quantity theory because the quantity theory does not take into account Marx's insistence that money is always, in the first instance, gold. However, he does accept that if the state increases the amount of

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[30] As I outlined earlier, the equation of exchange or quantity theorem is usually given by MV= PT. Given that PT is equivalent to the total worth of all commodities exchanged within the economy during the specified time period, which for the sake of clarity I will equate to W, then Marx's equation would be, MV=W where W=PT. Marx's outline of the quantity equation is to be found in Marx 1906, Vol. 1, Chapter 2, section 2b, especially pp. 135ff. It is also mentioned elsewhere, such as Marx 1906, Vol. 3, pp. 527-8.

[31]For a discussion on Marx and the quantity theory, see Nelson 1999, pp. 144-145, and Foley 1986, pp. 24-27.

[32]Paper money that is issued by the state is introduced by Marx on pp. 142-145 of Marx 1906, Vol. 1.

paper money beyond "its proper limit, which is the amount of gold coins of the like denomination that can actually be current," this would lead to a proportionate increase in prices with respect to the paper currency only (Marx 1906, Vol.I, 144). The limit beyond which inflation appears is, according to Marx, the amount of gold in the economy, not a limit imposed by the quantity theory, which is the amount of all commodities available in a particular period of time. So, even when it comes to paper currency, Marx is still adamantly anti-quantity theory.

In conclusion, the difficulties encountered with Marx's account of economic reality can, in large part, be attributed to his labour theory of value. There are Marxists who have rejected the labour theory of value; for instance, Cohen claims that the labour theory of value is irrelevant to the concept of exploitation and that it is false (Cohen 1979). But my critique goes beyond this by claiming that if the labour theory of value is discarded, then much else has to be discarded as well, including Marx's notion of objective value. While I agree with Cohen that the labour theory of value is irrelevant to the concept of exploitation, much more need to be said about the mechanism whereby individuals or groups are exploited; this I will leave until Chapter 3. The difficulty with the labour theory of value is that it is the foundation of Marx's economic views and thereby leads him into making counterintuitive claims, some of which have turned out to be false. An example of the latter is his claim that what he considers to be real money must either be a commodity or else based on a commodity because only then will it have objective value along the lines of the labour theory of value; of course, the truth of the matter is that most instances of money today are examples of fiat money. His counterintuitive claims include that the value of a commodity, where value for Marx is always objective, is already given prior to the commodity being sold or even being made available for exchange. His claim, that any form of credit or investment that is not immediately backed by commodities is fictitious, is of a piece with his view that money ought to be gold or at least backed by gold; this is because Marx believed that commodities, including precious metals, were valuable solely because they has been produced by labour and that it was the production process as opposed to the exchange process which was the sole generator of objective value.

Although Marx can be credited with pointing out that free exchange is perfectly capable of giving rise to exploitation, he still claims that it is only through the production process that labour is exploited. In chapter 3 I will show how it is possible to effect exploitation through free exchange even though fraud or trickery are not involved and production does not feature. I will also be establishing in greater detail exactly how it is possible to generate gains from exchange, a point which Marx denies. Much of my critique against Marx has been based on arguments against his labour theory of value or against his separation of exchange from production. In later chapters I will be providing a more substantial account of both exchange and production and their interrelation.

In opposition to Marx's objectivist views, Menger claims that value is always subjective. For Menger, value " is the importance a good acquires for us when we are aware of being dependent on command of it for the sake of the satisfaction of one of our needs." (Menger 1950, 227). It does not matter whether the satisfaction of the need takes place in a direct or indirect way; in the example that Menger provides, a hunter can endure the hardship involved in tracking and killing a bear either for the direct satisfaction of wearing the bear skin or for the indirect satisfaction of another need that is met through exchanging the skin for something else. According to Menger, while value in the first instance is use-value and in the second case it is exchange-value; they are "only two different forms of the same phenomenon of economic life." (Menger 1950, 228). Even so, many goods that have a very high use-value to their owners have little exchange-value, if any; e.g. notes that can be used only by the writer who made them. On the other hand, it is often the case that goods that are manufactured, stocked and sold for their exchange-value usually provide little or no actual use-value for their manufacturers or retailers.

Menger's subjectivist account of value is derived from his view of what he terms 'economizing'. According to his account, all goods can be divided into three categories; goods where the requirements are greater than the quantity available, those where the requirements are less than the quantity available and those where the requirements are equal to the quantity available (Menger 1950, 94ff). In the latter two cases, such goods are not scarce and therefore are not what Menger calls 'economic goods.' But in the first case, such 'economic goods' lead men to behave in an economizing manner, namely that

having realized that such goods are scarce relative to requirements, they attempt to acquire them, conserve them with respect to their useful properties, make choices with respect to their own needs and maximise the result from their particular endowment of such goods. While it is true that the scarcity of goods with respect to human requirements can have much to do with their natural availability or the availability of their constituents in nature, it is also possible that the scarcity can be brought about artificially. Menger provides the following example: even though timber in a certain forest is so plentiful that it would more than meet local needs and therefore could be expected to be a non-economic good, the owner of the forest is able to exercise control over the natural supply and can therefore charge a price for it, thereby making what would naturally be a non-economic good into an economic one (Menger 1950, 104).

For Menger, all economic goods must be scarce and only economic goods can have value for us. While he allows that non-economic goods can have 'utility,' only economic goods can possess both utility and value. According to his account, the scarcity of certain goods "stimulates our provident activity, thus causing goods subject to this relationship [between the scarcity of the goods relative to our needs] to become objects of our economizing." (Menger 1950, 115). We become aware "of the significance that command of each concrete unit of the available quantities of these goods has for our lives and well-being, thus causing it to attain *value* for us." (Menger 1950, 116). According to Menger, value is not inherent in goods and is not a property of them; nor is it "an independent thing existing by itself." (Menger 1950, 121). Instead, value is "a judgement economizing men make about the importance of goods at their disposal for the maintenance of their lives and their well-being." Menger is adamant that "not only the *nature* but also the *measure* of value is subjective." (Menger 1950, 146). In arguing against labour theories of value, Menger claims that the "determining factor in the value of a good . . . is neither the quantity of labor or other goods necessary for its production nor the quantity necessary for its reproduction, but rather the magnitude of importance of those satisfactions with respect to which we are conscious of being dependent on the command of a good." (Menger 1950, 147).

While Menger is acknowledged by Hayek as one of the originators of the subjective

approach to economics and is credited, along with William Stanley Jevons and Leon Walras, with the "independent and practically simultaneous discovery of the principle of marginal utility" (Hayek 1934, 394), there are good reasons for claiming that Menger's account is not completely subjectivist. According to O'Neill, Menger combines subjectivism with respect to value with an objectivist account of well-being "which insists on a distinction between real and imaginary goods and values." (O'Neill 1998, 37 and 42-3). For Menger, imaginary goods are those which either are imagined to satisfy certain needs but in fact do not or which are imagined to satisfy needs that do not actually exist. But while it is the case that Menger was not entirely subjectivist in relation to all matters, this does not detract in any way from Menger's subjectivism with respect to value; nor does it provide any support for any objectivist claim for value such as the labour theory of value.

One important methodological point that should not be overlooked when examining any aspect of Menger's work is that when he gives an account of an economic phenomenon, he invariably creates an idealization. As Cartwright points out, when Menger uses the term 'we' in his characterization of value as "the importance we first attribute to the satisfaction of our needs" (Menger 1963, 116), he is already idealizing. According to Cartwright, "he does not mean the importance "we" real people each attribute to our own needs, but rather the importance attributed by "the economizing man," i.e. the importance that *should* be attributed to the need." (Cartwright 1994, 177). Menger idealizes all economic categories, such as goods (both economic and non-economic), commodities, price, exchange and value; in fact, he believes that they are a priori categories. To illustrate further how this idealization takes place I will use as an example his category of goods or what he sometimes calls 'goods-character.' For a thing to become a good or acquire goods-character, the following conditions must be simultaneously present: there must be a human need for the thing; the thing must have properties which "render it capable of being brought into a causal connection with the satisfaction of this need;" the individual involved must have knowledge of this causal connection and the individual must also have sufficient command of the thing such that it satisfies the relevant need (Menger 1950, 52).

This is clearly not a realistic situation that Menger is describing here. First, while it is clear that there are causal connections between the properties of some goods and the satisfaction of a certain needs, this is clearly not true of many goods. For instance, although water has properties which render it capable of being brought into a causal connection with the satisfaction of thirst, this is not true of more complex goods such as an evening's entertainment at the theatre or cinema, a package holiday, a work of art or a computer. Instead of allowing for a more complex scenario involving various complicated reasons why individuals desire such goods, Menger creates an idealized and much simplified system involving goods-character whereby humans are said to have a need for a certain good and the satisfaction of that need is causally connected with certain properties of the good in question. Leaving aside this question of how goods can be said to be causally connected with the satisfaction of a need, Menger is also engaging in an idealization with respect to his condition that the economizing individual must have knowledge of this causal connection. The problem for Menger is that if this knowledge condition does not hold, then the good loses its goods-character. The performance of Menger's idealized system is dependent on the economizing man being able to distinguish between those things which satisfy needs and those which do not; according to Menger's account, the only way he can accomplish this is through knowing the causal connection between the property of the good and the satisfaction of the need. Even if we take actual examples where there is a causal connection between some property of a good and the satisfaction of a human need, it is often the case, especially in contemporary contexts, that the purchaser does not know how the need is actually satisfied by the good. For example, I may purchase a pain-killer so as to relieve my headache even though I have no idea how the pain-killer actually kills pain. Of course the purchaser must at least have the belief that, in such cases where there can be said to be a causal connection between some property of a good and the satisfaction of a need, the good will actually satisfy the need. In cases where there is no direct causal connection between the property of the good and the satisfaction of the need, it goes without saying that unless the consumer believes that there is at least some potential payoff in consuming the good in question, the consumer would not bother purchasing that good. Often the payoff is uncertain in that the potential purchaser or consumer merely hopes that the good will meet his requirements; e.g. I pay for my cinema ticket in the hope that I will enjoy the

film.

So, the conditions which Menger claims must be present if a good is to have goods-character are in fact idealizing assumptions: the idealizing assumption that there is a human need for the good in question, the idealizing assumption that there is a causal connection between that need and its satisfaction and the further idealizing assumption that the economizing individual has knowledge of these causal connections.

The economizing man appears again in Menger's elucidation of the category of exchange. "The principle that leads men to exchange is the same principle that guides them in their economic activity as a whole; it is the endeavour to ensure the fullest possible satisfaction of their needs." (Menger 1950, 180). There are several prerequisites for an exchange, as follows: one economizing individual must have command of a good which he values less than the good that another economizing individual possesses and *vice versa*; both economizing persons must recognize this relationship and they must have the power to perform the exchange. Once again, the presence of the economizing individual indicates that this is an idealization of an exchange as opposed to an account of actual exchange. Actual exchanges often occur in spite of Menger's prerequisites; for instance, I may engage in an economic exchange so as to show off and therefore do not value the good I have purchased more than the good I have relinquished. Also, even though two parties may value more the good that the other party has and both recognize the relationship, either party could decline to enter into an exchange for all sorts of reasons; one party could be too lazy to bother with the exchange or might want only to engage in an exchange with an old acquaintance for reasons of sentimentality.

While Menger wants to motivate his particular economic theory through the use of various idealized categories of exchange, value, goods and so on, at no stage does he actually state what an actual exchange amounts to and how it actually takes place. As I pointed out, it can be the case that two individuals could actually satisfy the conditions as set out in Menger's idealized exchange and yet not actually engage in the exchange. Moreover, it can also be the case that two individuals actually engage in an economic exchange even though they have never actually satisfied Menger's conditions. As will

become clear in Chapter 3, there is more to actual exchanges than the conditions set out by Menger for his idealized version.

This brings me to an important distinction between what some commentators on Menger call economic reality and what I refer to as economic reality. For instance, Zuniga describes economic reality as being constituted, along Mengerian lines, "by economic objects such as goods, commodities, money, value, price and exchange." (Zuniga 1999, 299). By objects Zuniga means the same as Menger's categories. However, as we have seen, for Menger such economic phenomena are idealized and while Zuniga adds to Menger's account, at no stage does she distinguish between real economic phenomena and the idealized version; nor does she say that her account and Menger's are idealizations even though they clearly are. The same term, 'economic reality,' also turns up in Smith's discussion of Menger's Economics; according to Smith, Menger "seeks to develop a categorical ontology of economic reality" and "seeks to establish how the different sorts of building blocks of economic reality can be combined together in different sorts of structured wholes . . ." (Smith 1984, 313). If what both Zuniga and Smith mean by economic reality is an idealization which is necessary so as to be able to engage in economic theorizing, then they are entitled to use the term. While I do not disagree with their right to use the term, for the sake of clarity I want to point out that my use of the term is different. By economic reality I mean that part of social reality which we encounter as actual persons on a daily basis and which has to do with actual economic phenomena, such as transactions, property, goods and services, money, corporations and actual economic agents. While space does not permit an in-depth critique of Menger's economic methodology here, his attempt to produce economics based on a priori principles has left us with no way of bridging the gap between the idealized and the actual. As Cartwright puts it:

> "Menger may be able to figure out merely by reasoning how things he calls *value* and *exchange* behave. But then he has a major job to justify that what we call *value* and *exchange* in the real world are examples of Menger-value and Menger-exchange." (Cartwright 1994, 185).

Despite the various problems I have outlined concerning Menger's account, this does not mean that his account is without important and useful insights. For instance, in the next chapter I will be making use of Menger's claim that scarcity is the hallmark of economic goods when it comes to distinguishing economic and non-economic social activity. Also, I have not yet mentioned one of Menger's most important contributions, namely his account of the emergence of money. I will be dealing with this latter topic when I discuss the metallism-chartalism debates later in this chapter.

The last theorist I will be examining with respect to past views on economic reality is Simmel. Although Simmel did not intend to provide an exhaustive analysis of money and other economic phenomena in his important work, *The Philosophy of Money*, there is much in this work which casts some light on the issues. Also, unlike Menger and other economists, Simmel does not engage in any economic theorizing or idealization, as is clear from the following important statement which appears in the preface to *The Philosophy of Money*:

> "Not a single line of these investigations is meant to be a statement about economics. That is to say, the phenomena of valuation and purchase, of exchange and the means of exchange, which economics views from *one* standpoint, are here viewed from another." (Simmel 1990, 54).

Simmel goes on to state that there are no pure economic facts; "so the fact that two people exchange their products is by no means simply an economic fact." (Simmel 1990, 55). An exchange can also be a psychological, moral or aesthetic fact as well as being an economic fact. Although it is clear that Simmel takes an interdisciplinary approach, as Frisby points out, setting out exactly what this approach entails is a lot more difficult than saying what his approach does not entail (Frisby 1992, 81). Some of the ideas contained in *The Philosophy of Money* received their first outing in a lecture called "The Psychology of Money," but to claim that psychology is the main subject of *The Philosophy of Money* would be an error. Nor is it a work of pure philosophy - although there is much in it that is philosophical, it also contains much that is historical analysis, sociology, anthropology and theory of culture among other subjects. Without attempting

to sound trite, one aspect that unifies *The Philosophy of Money* is that it is concerned with money. The reason for this focus on money seems to be that it provides a starting point for Simmel on which he could base his investigations of the constantly shifting aspects of human interaction in the broadest sense. Simmel's primary intention in *The Philosophy of Money* and in his other writings is to contribute to his project of a theory of modernity, where, according to Frisby, "modernity is identified with the dissolution of our contact with the external world through concrete practice." (Frisby 1992, 66). Such discussions of modernity and Simmel's contribution to them need not detain us here; what is important for the purposes of my examination of Simmel's views on economic phenomena is that acceptance or otherwise of his claims regarding economic phenomena does not require adherence to his project of a theory of modernity.

One reviewer of *The Philosophy of Money* wrote, "the author looks down upon the market-place of life, the comings and goings of which seem so intricate, where people seem to be jumbled up, and where you look in vain for the *archimedean point* from which the earth can be moved out of its poles . . ."[33] Frisby claims that for Simmel there is no single privileged starting point for sociological analysis but that "money does have an advantage as a starting point for Simmel because it symbolizes an extension of the first principle, namely the fundamental inter-relatedness of social reality." (Frisby 1992, 97). For one of his contemporaries, Gustav Schmoller, Simmel "takes what we know of money historically and economically as it were as the raw material in order to make use of it sociologically and philosophically, in order to extract psychological, social, scientific, cultural conclusions from it."[34] Whether this is a viable project need not detain us here; what makes Simmel worthwhile, from my standpoint of seeking out an account of economic phenomena, is that he "throws up much that is relevant to economics even though this is not his primary intention," as Frisby notes in his introduction to *The Philosophy of Money* (Simmel 1990, 8). Although his accounts of money and other economic phenomena are incomplete, they are a genuine advance on many earlier

[33]Quoted by Frankel in Frankel 1977, pp. 7.

accounts, as I will show later.

For Simmel, exchange is key to the examination of economic phenomena; it is what allows the individual's desires to be expressed effectively. According to his account, it is only through exchange that the relationship between individual and object, which has hitherto been a "subjective process," becomes transformed into "an objective supra-personal relationship between objects." (Simmel 1990, 79). While Simmel is not using the language of use-value and exchange-value here, it is clear that what he means by the relationship between individual and object is use-value whereas what he calls "the objective suprapersonal relationship between objects" is exchange-value, which Simmel refers to as "economic value". For Simmel, economic value, which I have equated with exchange-value, has nothing to do with Marx's notion of objective value, not least because it arises through economic exchange. According to Simmel, what makes something economically valuable is that it can be acquired in exchange for something else or has some effect on an exchange even if it is not directly the subject of that exchange; so although there are values other than economic ones, it is this connection with exchange that makes for economic value (Simmel 1990, 88). Simmel uses the example of wild grain to illustrate this point about something having economic value even though it is not directly the subject of an exchange. If one could harvest wild grain without effort and consume it, all without the direct involvement of an exchange, then the wild grain is an economic good "only if its consumption saves some other expenditure." (Simmel 1990, 88).

[34]The remarks by Schmoller are quoted in the Introduction to Simmel 1990, pp. 8.

Built into Simmel's view of exchange are the dual notions of gain and sacrifice - simply put, in every exchange, each side to a transaction has to sacrifice something in order to gain something else. But "the value that a subject sacrifices can never be greater, in the particular circumstances of the moment, than the value that he receives in return." (Simmel 1990, 87). It is clear that if what is given up in exchange has a use-value (or subjective value, as Simmel puts it) to the person giving it up, then that person sacrifices that use-value in anticipation of a greater use-value. However, many exchanges take place where what is exchanged has no use-value to the party giving it up as part of an exchange. In such cases, a sacrifice is still made, which not a subjective or use-value but an exchange-value, or what Simmel calls an economic value.[35] In fact, in engaging in any exchange, both parties are not only sacrificing whatever use-values they associate with the goods they are giving up, if any, as part of the exchange but also those other potential exchange-values that could have been realized through entering into alternative exchanges. Having made the point that what is given up in an exchange is often an exchange-value, Simmel does not realise the possibility (or at least does not state it) that exchanges can also be entered into solely for the exchange-value of the goods received. For instance, one may enter into a pure barter exchange, not for the use-value of the good received, but because the good received allows one to enter into some further exchange. In this case, it is the exchange-value of the good that motivates entry into the initial exchange. This is the norm in the case of exchanges in monetary economies; in entering an exchange whereby one sells a good for money, the money is accepted not for itself as such but because of the numerous exchange-values it has. Of course, money can also be said to have use-value, at least to certain persons. But that use-value, such as the feeling of security or excitement that money or cash can engender, relies ultimately on the fact that money has as many exchange-values as there are commodities whose payoff is ultimately in the form of use-value.

Probably one of the most important points that Simmel makes on the subject of exchange, one that I have already discussed in my analysis of Marx and which I will discuss in more depth in later chapters, is his view that exchange can be just as value creating as

[35]Simmel makes this point with respect to labour. See Simmel 1990, pp. 85.

production. In both production and exchange what matters is that "the final situation shows a surplus of satisfaction as compared with the situation before the action." (Simmel 1990, 84). In both cases, the subjective or use-value of the proceeds of the exchange or the production process must exceed the subjective or use-value of that which had to be sacrificed. In fact, Simmel goes even further by claiming that production is virtually the same as exchange, the only difference between them being that in production the exchange partner is "the natural order and regularity of things which, just like another human being, does not satisfy our desires without a sacrifice." (Simmel 1990, 83). In addition, exchange and production in this respect are also intersubstitutable. "It is of no concern to the economic subject whether he invests his property or labour power in the land or transfers them to another person, if the result for him is the same." (Simmel 1990, 83). This intersubstitutability of exchange and production is an important point which I will be returning to in Chapter 4.

According to Simmel, money derives its value from its role as a medium of exchange (Simmel 1990, 156). It originated in barter. According to his account, "all commodities could be regarded as money in a certain sense. Every object A that is exchanged for B, and in turn for C, plays the role of money independently of its tangible qualities." (Simmel 1990, 127). One of the reasons why a particular good might be chosen over all others as an exchange good is that it is divisible; "Money is that divisible object of exchange, the unit of which is commensurable with the value of every indivisible object." (Simmel 1990, 128). Precious metals were often the chosen good because of this ease of divisibility as well as the fact that they could be easily changed from some other form, such as a commodity, to the form of money (Simmel 1990, 153). In the initial stages, money had to take the form of some valued good. According to Simmel, "Money could not have developed as a means of exchange or as a measure of values unless its material substance had been experienced as immediately valuable." (Simmel 1990, 141). Because of this adherence to a commodity theory of money, one might be led to expect that Simmel is a metallist. But this is clearly not the case since his views of modern money are avowedly chartalist. First of all he argues that it is obvious that modern coins are not made of valuable substances. Second, to claim that paper money is valuable solely because it is backed by gold or some other precious metal is wrong because there are

examples of unsecured paper money which are not backed by metal but are still regarded as money. However, "in arguing against the dogma of the intrinsic value of money, we should not become victims of the dogma that money is valueless." (Simmel 1990, 152). If we examine even those situations where some kind of useful object is used as money. we find that such an object "must renounce its usefulness in order to function as money." (Simmel 1990, 152). Only if the object is withdrawn from circulation can it be put to some alternative use.

Simmel goes much further in his examination of fiat money. While money in the earlier forms of commodity money was limited in quantity by the scarcity of the relevant exchange goods or precious metals that played the role of money, and hence severe inflation was avoided, the quantity of modern money must be limited by the issuing authority (Simmel 1990, 162). Although he does not set out a quantity theorem, it is clear that he was aware of the effect that changes in the quantity of money could have on the economy. Simmel makes a number of other observations concerning the economic effects of money, such as that it facilitates trade, establishes a standard of value and that it allows for more efficiency in taxation than taxation paid in the form of commodities as opposed to currency. He also draws attention to the same point that Berkeley made about the importance of being able to make change, especially for the poor. He cites several examples of how a debased low denomination coinage can becomes even more valuable than its equivalence in gold when the supply of small change becomes inadequate (Simmel 1990, 189).

Simmel also puts forward a theory of purposive action as part of his account of economic life. As I show below, this has ramifications for both production and exchange. For him, "our actions are the bridge that makes it possible for the content of the purpose to pass from its psychological form to its real form." (Simmel 1990, 206). This is achieved through what Simmel calls teleological chains, whereby one brings about an intended end by performing certain intermediate actions or by bringing about certain intermediate stages in the chain. Generally speaking, "we can attain more, and more essential, ends with a long series of means containing numerous elements than with a short series" (Simmel 1990, 208). Of course, one must have the ability, including the technical ability,

to be able to bring the intended end about. One way of being able to accomplish more by way of lengthening the teleological chain is through the use of tools. "By using tools, we deliberately add a new link to the chain of purposive action, thus showing that the straight road is not always the shortest." (Simmel 1990, 209). Of course, in the process the subject often becomes increasingly physically removed from the natural processes involved.

There are a number of difficulties with this part of his account. First of all, Simmel claims that it is necessary to know all the causal processes in the teleological chain, as the following quotation demonstrates; "A teleological chain can never occur unless the causal connections between its elements are known." (Simmel 1990,208). This is plainly not the case in practice. Simmel seems to be requiring too much detailed knowledge in his account of teleological chains. It may be that he intends to make a weaker claim, such as that not *all* the causal connections must be known but that some surface knowledge is necessary for the completion of teleological chains. For instance, he states that "if a purpose D is to be attained and a chain of mechanical processes A, B, C has to be produced so that B is caused by A, C by B and D only by C, then this series, the content and direction of which is determined by D, depends upon the knowledge of the causal relationship between its members." (Simmel 1990, 207-208). This could be interpreted to mean that he is restricting his account to just those causal connections the knowledge of which are necessary for the process to be completed. But that is not clear from what he has written. Even if causal connections are to be understood in this restricted sense, it is by no means clear how exactly those necessary stages are meant to be individuated and why knowledge of each stage is necessary. The problem for Simmel's account of teleological chains is that in practice causal processes are often hidden; for instance, modern electronic devices and computers can be used effectively by those who know virtually nothing about electronics. To use an example from Simmel's own era, one can fire a gun without knowing in detail how the firing mechanism works. In addition, for centuries people had been performing tasks in the absence of knowledge on their own part or on the part of any of their contemporaries of the underlying causal connections; for instance, animals were bred and husbanded in the virtual absence of any detailed knowledge of the underlying causes of development, growth, disease or reproduction.

Even with the advent of industrial processes, little was known of the underlying causal connections that made these possible. While the notion of teleological chains has its uses, as will become apparent below, his requirements concerning knowledge of the causal processes involved is far too strong.

Secondly, contrary to Simmel's claim, the introduction of tools often shortens the teleological chain. What is important in such scenarios is that the introduction of tools, technology and innovation often results in more output using the same size or smaller teleological chain; for instance, adopting a strategy of division of labour, as in Adam Smith's example of pin manufacturing, could yield more pins at the same cost, using the same number of employees and the same number of stages of production. However, Simmel is right to the extent that, at least in some instances, with innovation teleological chains can become longer rather than shorter. But this issue requires more examination and I will be returning to it in Chapter 4.

Simmel expands his account of teleological chains to include social institutions; for him, social institutions are tools "by means of which the individual can attain ends for which his personal abilities would never suffice." (Simmel 1990, 209). For instance, institutions, such as "the roundabout legal forms of contracts, testaments or adoption etc.," increase the power of the individual by allowing him to achieve what he otherwise would not be able to achieve or they increase the effectiveness by which he can attain his intended ends (Simmel 1990, 209). According to Simmel, money, in this sense, is the purest form of tool (Simmel 1990, 210ff). Firstly, in the case where one party desires what the other party has but does not have what the latter wants in exchange, money is inserted into the teleological chain as an additional means; without money, such exchanges would not take place. Secondly, money also facilitates exchange by providing an objective means of valuation. Money undoubtedly increases the power of the individual by allowing him to attain ends that would not otherwise be achievable and it also increases the effectiveness by which he can attain those ends through exchange. Simmel also points to an intriguing element in the means-end story; that all ends are, in the last analysis, really means. "Out of the endless series of possible volitions, self-developing actions and satisfactions, we almost arbitrarily designate one moment as the

ultimate end, for which everything preceding it is only a means." (Simmel 1990, 236). This whole question of purposive action and its role in economic action, production and monetary matters will be discussed further in Chapter 4.

In conclusion, Simmel provides an account of certain aspects of economic reality even though his discussion can sometimes be diffuse. However, it must be remembered that it was never his intention to provide a thorough-going account of exchange and money as such; his discussion of money and economic phenomena generally was intended as a backdrop to his analysis of modernity. Despite this, his account is thorough and broadly based; he unifies the metalist and nominalist accounts of money, indicates how exchange might give rise to money, how production and exchange are intersubstitutable, how exchange can generate value just as production can, how exchange can be assimilated into a notion of purposive action and teleological chains and how money plays the role of a tool in such teleological chains. However, while Simmel is adept in uncovering these aspects of economic reality and often provides a parade of interesting examples to illustrate them, he seldom argues for them. Probably because his interest is not to provide a thorough going account of economic reality, what the reader gets is usually in the form of a narrative, albeit an interesting and very original and insightful narrative. In the chapters that follow, I will be taking up some of these issues and providing arguments for them.

1.5. The Metallism-Chartalism Debates

The metallism-chartalism debates are worth examining for several reasons; they shed light on the various positions taken by theorists of the past and they clarify those aspects of economic reality that have to do with money and its origin. These debates go to the heart of the question of the ontology of money. For that reason alone they merit a close examination as part of any account of economic phenomena. In addition, each side of the debate is taken by some to have theoretical ramifications and in this sense the debate has relevance to certain aspects of economic theory and practice today. An understanding of

the metallism-chartalism debates will also facilitate the systematisation of the various positions already described and will provide a closure of some of the questions raised in the historical overview that I have already provided. In addition to summarizing the achievements of the two traditions, a detailed examination of the metallism-chartalism debates will uncover where improvements to the various accounts can be made. However, because the metallism-cartalism debates are problematic and prone to confusion, I will now examine the issues that are relevant to the debate more closely before returning to each of the theorists I dealt with earlier so as to clarify their respective positions. I will conclude by providing arguments for my own views on the chartalism-metallism debates

The term 'chartal,' which first appeared in a work by Knapp in 1905, was derived by him from the Latin word 'charta', whose meanings include paper, writing tablet, papyrus or anything that can be written on. Knapp intended that chartal be used as an adjective, meaning taking the form of a ticket or token; so, when he claimed that money had a chartal form, he meant that money took the form of a ticket or token (Knapp 1924, 32). However, although the term first appeared in the 1905, various forms of chartalism have been identified going as far back as Plato. But it was not until Berkeley identified money as credit that chartalism could have the philosophical basis for claiming that money could take the form of otherwise worthless tokens.

Before discussing various forms of chartalism, I want to make a few general clarificatory remarks. As I discussed earlier in this chapter, metallism is, in a narrow sense, the claim that money must take the form of a precious metal or else it must be backed by a precious metal. But metallism can also be used to refer to broader claims, including that other non-metallic commodities can play the role of money;[36] the term 'metallism' is used largely because the more developed versions of commodity currencies have generally involved gold or silver. It has also been observed that precious metals have attributes which are likely to make them more suitable candidates for the role of money; as Williams points out; unlike other commodities, especially foodstuffs and other organic

[36]For an account of the various forms that money can take, see Einzig 1966.

commodities, precious metals do not decay in the short-term, they are not subject to seasonal supply fluctuations and the fact that they are relatively scarce ensured that they maintain their value.[37] In addition, precious metals tend to be more portable than other commodities, they can be easily measured by weight and they are, at least in some of their forms, easily divisible.

There are various degrees of metallism; the strong version of metallism is the view that money must take the form of a precious metal or some other commodity. A weaker version would be that promissory notes which are backed by either metal or commodities can also be taken to be money in the form of a medium of exchange only. An even weaker version would be that a paper currency can have all the functions of money just so long as it is 100% backed by metal. A further watering down of this position would be that what is important is that the paper currency be convertible on demand but that this requires that only a fraction of the relevant precious metal be held as a reserve since relatively few demands for conversion are actually made. All of these views take the label of metallism although some are more liberal in their uses than others.

A further clarification, in this case raised by Schumpeter, is that metallism and chartalism can both be divided into theoretical and practical versions. According to Schumpeter, theoretical metallism is the claim "that it is logically essential for money to consist of, or to be 'covered' by, some commodity so that the logical source of the exchange value or purchasing power of money is the exchange value or purchasing power of that commodity, considered independently of its monetary role." (Schumpeter 1994, 288). Practical metallism, in contrast, involves adherence to the principle that money ought to be firmly linked to or freely interchangeable with a precious metal or some other commodity. Theoretical metallism, as Schumpeter points out, is untenable since "it is not true that, as a matter of pure logic, money essentially consists in, or must be backed by, a commodity . . ." (Schumpeter 1994, 289 [footnote 5). Clearly, rejection of practical metallism does not necessarily follow from the rejection of theoretical metallism; as Schumpeter points out, one can consistently deny theoretical metallism and yet believe

[37]These points are made in Williams 1997, pp. 23-23.

that because of a persistent lack of confidence in the monetary authorities, it would be better if the currency returned to being backed by or consisting of a precious metal (Schumpeter 1994, 289).

Theoretical and practical chartalism both involve the negation of the corresponding metallist positions. Theoretical chartalism denies that "it is logically essential for money to consist of, say, gold, or to be promptly convertible into gold," while a practical chartalist will deny that the value of the monetary unit ought to be tied to the value of a precious metal or any other commodity, according to Schumpeter (Schumpeter 1994, 288). Schumpeter does not make it clear whether by theoretical chartalism he means that,

> a) it is logically essential that money *not* consist of gold or be convertible into gold, or
>
> b) it is *not* the case that it is logically essential for money to consist of gold or be promptly convertible into gold.

Since a) is obviously untenable, involving as it does the claim that, as a matter of logic, money cannot consist of or be backed by precious metal, it would appear that by theoretical chartalism he means b). But if this is the case, then the theoretical chartalist can exhibit some very metallist beliefs indeed since all that is denied by the theoretical chartalist is that it is logically essential for money to be linked to a commodity. For instance, a theorist who believes that money initially emerged in the form of a commodity would be classed as a theoretical chartalist, according to this interpretation. In Schumpeter's favour, it must be remembered that these distinctions between theoretical and practical metallism and chartalism are designed solely to facilitate the discussion and exposition of the various positions of theorists from the past and do not necessarily reflect Schumpeter's own views. However, arguably hardly anyone would adhere to either theoretical metallism or version a) of theoretical chartalism. In addition, version b) of theoretical chartalism is not specific enough to delineate any particular position and is therefore of no use in facilitating discussion and exposition of the various theoretical positions.

In order to further facilitate the discussion and to overcome the aforementioned difficulties, a third term should be added to the analysis; the term I am advocating is 'historical,' as in historical metallism and historical chartalism. By historical metallism I mean the claim that money emerged initially in the form of a commodity while by historical chartalism I mean that money did not emerge initially as a commodity but as a token. The latter view usually subscribes to some account that involves the authorities or the state in the emergence of money although that does not necessarily have to be the case, as is indicated below in the discussion of tallies. There is at least one important reason for invoking this extra term; if we admit into the discussion the theoretical versions of metallism and chartalism along with their practical versions but without their corresponding historical versions, this would leave out all those theories which specifically address the origins of money. Such theories are still debated and are seen to be relevant to economic theory today, as I will show later. For now it is sufficient to make the point that the practical-historical distinctions, even possibly in contention with the relevant theoretical positions, are useful in that they facilitate the elucidation of the various positions of theorists in the past and the identification of conceptual confusions. They will also play a crucial role in the critical analysis of the various aspects of metallism and chartalism, as I will show later

But first I will briefly examine each of the theorists I cited earlier in this chapter so as to describe their views on money in a more fine-tuned way. The first, Plato, has relatively little to say about money as such but the couple of remarks he does make can be construed as chartalist. According to the Schumpeter, Plato "remarks in passing that money is a 'symbol' devised for the purpose of facilitating exchange." (Schumpeter 1994, 56). This would put Plato in the category of a chartalist. However, much depends on the translation here and Schumpeter's interpretation is not supported when checking the reference in the Lee translation, where the reference is translated as, "And that will require a market, and a currency as the medium of exchange." (Plato 1987, 61 [370b]). Schumpeter admits that what is really a passing remark does not amount to much. But Plato also makes reference elsewhere to the form that money ought to take, when he asserts, in the *Laws* that the only money that would be allowed in his proposed polis is a

token currency which would be valueless abroad but would be used within the state for the purposes of day-to-day exchange only (Plato 1934, 124 [742a]). The possession of gold and silver would not be permitted. Based on this reference, Plato's chartalism, such as it is, is practical rather than theoretical or historical. Although he is advocating some sort of currency that is not itself a commodity, he does so on moral or political grounds and does not deny that commodity currencies are not possible. In fact, he also advocates in the same part of the text that the state maintain a store of currency from other Greek city states for the purposes of paying for foreign expeditions and the support of embassies. In conjunction with his lack of any metallist pronouncements, these sort of comments might make it seem that Plato is a sort of practical chartalist but there is really very little to go on. What is unusual though is his advocacy of some sort of fiat currency at a time when such currencies were unknown. But it must be remembered that the comments that Plato makes in this regard amount to a few isolated lines and since these questions were not central to his views, it is important not to read too much into them.

Aristotle, especially in his account of money in the *Politics*, is a good candidate for what I called historical metallism. His account of a convention arising by which individuals use a particular commodity as an exchange commodity or as a form of commodity money is the first in a long legacy of historical metallists; as I will examine below, this tradition continues to this day. But in the *Ethics*, he seems to push the conventional aspect to the fore when he claims that it is within the power of the users of money to change the value of money or render it useless. Currency that is valuable because it is declared valuable and which can be declared useless sounds like a fiat currency. But it is by no means clear that Aristotle meant it in that way. If we take it that Aristotle meant that a currency can become useless *qua currency* if the convention changes even though the currency *qua commodity* still remains valuable, then his metallist credentials remain intact.

Some of Locke's pronouncements seem to be leaning towards a stronger version of metallism than practical metallism, especially when he claims that the silver content of the currency is what makes for its real value. While it is clear from elsewhere in his account that he is no theoretical metallist, whether he is an historical metallist is open to debate. The difficulty is that his position is not based on any commodity theory of the

origin of money and although he claims that money is by convention a precious metal, he never really gets to grips with how it might have originated as a convention. In fact, all he really has to say about money in the form of precious metal is that, unlike other substances which people might hold, such as foodstuffs, money (in the form of metal) is durable. "And thus came in money, some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful, but perishable supports of life." (Locke 1999, 138). There seems to be a confusion at the heart of Locke's position; if money is by convention a precious metal, why does he oppose any form of money that is not precious metal, such as paper money? Indeed, if all that matters is convention, then any substance will do, as chartalists claim. It is hard to see how his metallism is sustainable without some additional element, such as a commodity thesis of money. All that can be said about Locke on this score is that he is a practical metallist, even though there are indications that he had tendencies towards theoretical metallism.

With respect to money, both Locke and Hume held similar positions although Hume's theoretical views on economics, such as his claims concerning the effects of changes in the quantity of money, were more worked out and more sophisticated. But for our purposes, all we can say about Hume and Locke with any certainty is that they were conservative practical metallists. Their metallism was of the conservative kind insofar as they argued against the issuance of paper credit that was convertible into precious metal. A more liberal metallist might claim that as long as money is tied to or backed by a precious metal or commodity, it is still money or at least takes on the role of money. Both believed that such paper money would drive metallic money out of the country and should therefore be avoided. It must be remembered that paper money at that time was largely made up of bills of exchange or other forms of documented debt. But because Locke saw money and credit as being ontologically distinct, he could hardly allow that credit in the form of paper or documented debt be admitted as money.[38] Hume did not go

[38]Credit money is the same as documented debt since, as is always the case in creditor-debtor relations, in order for the debtor to become indebted there must be a

so far, confining himself to expressing doubts concerning paper money.

As with Locke, Hume does not provide a thorough account of the emergence of money although he appears at times to adopt an even stronger form of conventionalism when he claims that money has a merely 'fictitious' value which arises from the agreement and convention of people. Just as with Locke, he adheres to metallism for reasons that go beyond practical metallism and yet there is no account given as to why a chartal form, such as paper or base metal, would not suffice as a form of money. The confusions that lie at the heart of the accounts of Locke and Hume could be explained away by the fact that their main concerns were with contemporary economic difficulties and not with the historical questions regarding money or other aspects of economic reality. But it is hard to sustain such an accommodating position in the light of Berkeley's account, which was also keenly concerned with contemporary economic problems to the exclusion of historical developments and yet was able to avoid the confusions of Locke and Hume.

Berkeley's claim that money does not have to be exclusively a metallic substance or tied to a metallic substance is a clear denial of both practical metallism and theoretical metallism. But whether he is in favour of or against historical metallism is unclear as he arguably is not concerned with the origins of money. His example of the sailors marooned on an island is not a pronouncement concerning how money originally emerged since, as I argued earlier, the point of marooning the sailors in the thought experiment is to deny the sailors access any other economic system or to currency in the form of precious metals. Since each of those sailors would have been already well versed in monetary and economic practices prior to landing on the island, as this line of argument would allow, it would not be surprising that they would resort to a system of tallies, tokens, tickets or counters. Given that Berkeley accepts that metallic currencies had at least until then been the norm, that he does not put forward any arguments against the claim that money originally emerged as a commodity and that he does not make any claims for some earlier chartal currency, it would appear, on balance, that he would have accepted some sort of historical metallism. So, the best evidence we have supports the

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creditor who has extended the credit in the amount of the debt.

view that Berkeley was both a practical chartalist and an historical metallist in that although he acknowledged that contemporary money consisted largely of precious metal coinage, for various social and economic reasons he advocated a fiat currency as well as a system of bank regulation to back it up, as I outlined earlier. But for our purposes, Berkeley's main contribution to the philosophy of economic reality was his claim that money was credit. This ontological claim is the philosophical basis for chartalism. Although I will be arguing later that, on the balance of the evidence, historical metallism is the most tenable position, the prevalence of fiat currencies today is the argument, if one were needed, for practical chartalism. Berkeley's ontological claim, that money is credit, provides the best basis so far for an account of such fiat currencies, as I will show later.

Although Smith is an historical metallist who, following Aristotle, claimed that money evolved as a commodity within a system of barter, he is no practical metallist. Not only is he comfortable with the notion of paper credit backed by a precious metal or commodity, a view that would have already placed him in the category of liberal metallist, he is also agreeable to the notion of fiat money. In fact, chartalists often latch onto his argument mentioned earlier that if a ruler decrees that taxes, or at least a significant proportion of them, be paid in the relevant fiat currency, then this creates a demand for that fiat currency and the value of it could be maintained provided it is kept in scarce supply. To claim that Smith is an out-and-out chartalist of any kind would be to overstate the case but an argument can be made that he at least allows for practical chartalism even if he does not subscribe to full-blown practical chartalism by wholeheartedly advocating a chartalist policy.

Among the theorists I have examined, Marx's position on money is the closest fit to theoretical metallism. Although he does not specifically state that it is logically essential for money to be a precious metal or some other commodity, some of his assertions could lead one to believe that either he held this belief or that he thought that it was a matter of natural or historical necessity for money to be gold or some other commodity. According to Marx, the objective value of all commodities, including gold, is determined by the labour time required for its production and this objective value is determined prior to exchange. "When it [gold] steps into circulation as money, its [objective] value is already

given." (Marx 1906, Vol.I, 104). From this, it appears that there is some sort of necessary connection between money and gold or whatever commodity is performing the monetary role; while it is clear from Marx's theory of value that gold, just as any other commodity, acquires its objective value in the production process, it is not clear why money, in the full or real sense, must take the form of a precious metal - if money must take the form of some commodity so that money can be said to have objective value, then so much for Mark's notion of objective value.

Whether Marx can be categorized as a theoretical metallist or not, he undoubtedly adhered to historical metallism, or at least his version of it. According to his account, money is a commodity that emerges from the pure barter scenario so as to answer the practical requirement of some universal equivalence between commodities, although Marx does not show exactly how this is supposed to occur. Also, in a certain sense he is a practical metallist of a moderately liberal kind in that he allows for paper money or paper credit as a circulating medium only just so long as it is backed by either commodities or precious metals. But this liberalism with respect to paper money is rather thin in that he does not allow that such paper money is anything more than a sort of quasi-money since it lacks the function of a measure of value which real money, such as gold, possesses.

Simmel is a good example of a theorist who is able to combine historical metallism with practical chartalism. According to his position, money developed out of exchange within barter and derives its value from its role as a medium of exchange along Aristotelian lines. For Simmel, without the commodity money stage, which allowed the exchange good to be appreciated by its users as a valuable commodity in its own right, money could never have developed. This adherence to the commodity theory of the origin of money places him firmly within the historical metallist category. However, he also acknowledges that there are and have been examples of fiat money, thus placing himself in the practical chartalist category. Simmel's position on the metallist-chartalist issues are similar to the mainstream views of today. Like Simmel, virtually all theorists today are practical chartalists; this is due in large part to the prevalence and success of fiat currencies. As with Simmel, the majority of modern economists and other theorists are historical metallists, in that they see money as having developed as a response to the

transactions costs associated with barter. However, there is still a minority group of historical chartalists who persist in arguing against historical metallism.

This dispute between historical metallism and chartalism is mainly motivated by the view that adherence to historical metallism entails proceeding in one direction in economic theory while adherence to historical chartalism entails proceeding in another. Following Goodhart, let us call these theories or paradigms the M and C models or approaches respectively (Goodhart 1998). The essential difference between these two approaches is based on the historical metallist-chartalist debate, which to put it bluntly, is whether money initially emerged largely without any interference by the authorities as a response to the costs of barter, which is the M approach, or whether money was initially the creation or invention of the authorities, which is the C approach. Whether one adopts one side or the other is said to have important theoretical ramifications. Although space does not allow for a thorough-going account of all the theoretical ramifications of both approaches, the following is a brief overview of how each approach is said to give rise to such different theoretical positions. I will not be judging the merits or otherwise of these positions - these theoretical and methodological questions would require an entire work on their own to do them justice. All that I intend to do is to provide a bare outline of the dispute and to show why the followers of the C approach adhere to historical chartalism and eschew historical metallism and why the followers of the M approach adhere to historical metallism while eschewing historical chartalism.

The M approach is based on the familiar historical metallist account of the origin of money, the roots of which go all the way back to Aristotle. One of the shortcomings of the Aristotelian and the later versions of historical metallism is that they did not show exactly how one or more commodities took on the role of money. In his more modern version of historical metallism, Menger goes further than his predecessors by providing the mechanism by which certain commodities actually emerged as commodity money. Stated briefly, Menger's claim is that the commodity that is the more saleable than the others that are available is likely to become the standard medium of exchange (Menger 1892, 239-255). Saleableness is described as follows:

> "A high rate of saleableness in a commodity consists in the fact that it may at every moment be easily and surely disposed of at a price corresponding to, or at least not discrepant from, the general economic situation - at the economic, or approximately economic, price." (Menger 1892, 245).

High saleableness in a product does not mean that it will have a high exchange value. Products with high saleableness are those which are easily adaptable or divisible for individual customers, which are easy to transport, which are durable and, most importantly, for which there is a constant demand and supply. To use a modern example, surgical instruments may be very expensive to acquire but are not very saleable in the sense that they are not easy to sell on quickly at their full economic price. On the other hand, cigarettes are highly saleable even though they are relatively cheap. Menger goes on to explain that those economic agents who are in possession of highly saleable goods are in a more favourable position when seeking to engage in bartering for other goods. Under conditions of pure barter, if one goes to market with the intention of selling goods of low saleableness and acquiring other goods of low saleableness, seeking out someone who wants approximately what one has and who has approximately what one wants is *not* the best strategy - this double coincidence of wants on the part of both parties who are each trying to barter goods of low saleableness for other goods of low saleableness is unlikely. Instead, each party would be better employed in first exchanging their initial endowment of less saleable goods for some highly saleable goods and only then exchanging the highly saleable goods for what each actually wants. The point is that it is a lot easier to find an exchange partner when either one is looking for or offering a good which is highly saleable. This is also true for situations where, because of war or some social upheaval, the local currency has collapsed; if one were to try to exchange surgical instruments for petrol in such a scenario, one would be best advised to exchange the surgical instruments for a highly saleable commodity, such as cigarettes, and then use the latter to bargain for the petrol rather than trying to find someone who both requires surgical instruments and who wants to sell petrol.

This policy of always exchanging one's less saleable goods for goods which are more saleable is self-reinforcing; as more and more individuals see the benefits and adopt this

strategy, one or more highly saleable goods will become even more saleable, eventually leading to a situation where such goods become more sought after as a medium of exchange than as a good. In other words, they become more sought after for their exchange-value than their use-value. The reason why precious metals take on the role of money is because they are highly saleable and because they are naturally scarce in relation to the demand for them. Other factors tend to reinforce their acceptance, including that they are not seasonal goods and hence are less likely to fluctuate in value with the seasons, they do not deteriorate and they are easily portable and divisible. This account of saleableness does not deny that state recognition and regulation has played a role in perfecting and adjusting the social institution of money to the varying needs of commerce; but it is to claim, as Menger does, that "money has not been generated by law." (Menger 1892, 255).

The M position now incorporates the view that money evolved as a market response to the high transaction costs of barter. But some theorists today believe that the M approach has certain theoretical ramifications, as the following quotation illustrates:

> "This standard view of money, that is as primarily a technical device for overcoming the inefficiency of barter, leads on naturally to the characteristic dual perspective on the relationship between money and real economic activity which is found in most mainstream monetary and macroeconomic theory." (Smithin 1994, 13).

If money is only a technical device for overcoming the inefficiency of barter, then it does not have to play a meaningful role in any model of the so-called "real" economy, according to this view. This is clear in the Walrasian system where money is reduced to the role of a numeraire "which enables the multilateral exchange of goods in instantaneously clearing markets in a world of virtual barter. As has been frequently noted, the presence of money makes no difference to the logical structure of such general equilibrium models." (Ingham 1996, 513). In such models, money becomes only a symbol or token of what is going on in the "real" economy, of "real" goods and services.

The M approach also supports the 'exogenous' money view, which is that "the central bank can directly control the quantity of money and that the money stock can be taken to be 'fixed' such that it does not respond to 'money demand'." (Wray 1998, 32). In addition to this, Goodhart points to what he sees are specific ramifications of the M approach when he claims that what is known as the Optimal Currency Area Paradigm is "a natural extension of the M team theory into the spatial geographic domain." (Goodhart 1998, 409). In a simplified sense, an optimal currency area is a geographic area "within which it is least costly to adopt a currency specific to that region." (Miller et al. 1993, 787). In other words, an optimal currency area is a geographical area where there are no gains to be made by the population as a whole in subdividing the region into separate areas with different currencies. According to Goodhart, the optimal currency approach is inferior to the C position because the latter has more predictive and explanatory capacity. His further arguments concerning this debate and his claims concerning a common currency within the European Union need not detain us here. My reason for raising these issues is solely to demonstrate that the debate between the historical versions of metallism and chartalism is still seen by at least some economists to be relevant to economic theory and practice today.

Goodhart believes that the C approach depends on strict adherence to historical chartalism and he claims that "the use of currency was based essentially on the *power* of the issuing authority." (Goodhart 1998, 408). According to this view, instead of money arising in response to the transaction costs of barter, money was initially created or defined by the authorities and this continues to be the case today. How exactly this was supposed to occur I will discuss presently. In any case, according to this view, the state was originally able to create a demand for its fiat currency and therefore acceptance of it by insisting that its subjects pay their taxes in that currency. If the C approach is correct, then there is no reason to believe that money evolved as a medium of exchange purely as a market response to the transaction costs of barter. For followers of the C approach to be able to deny that money evolved as a medium of exchange due to the transaction costs of barter, they must either downplay the role of pure barter in pre-monetary history in favour of some approach whereby money was introduced by the authorities or emerged as some form of tally system. It would also be possible to claim that while pure barter did play a

role in such economies, the transaction costs were neither as high nor as important a feature as the M theorists claim they were; if transaction costs could be shown to be not as high especially in the early stages, then pure barter could occur and instead of leading to commodity money, it would lead to either a tally system of some sort of monetary system that would have been introduced by the authorities.

At this stage it is important to raise an issue which is hardly ever discussed in these debates; this is the question of exchange rates under conditions of pure barter. In such circumstances of pure barter where there are no exchange goods and therefore no common standard of value, individuals must be able to value each type of good in terms of all others; individuals have to know the exchange rates for each type of good in terms of all the others if they are to participate effectively in such a system of pure barter. This does not pose a problem when there are only a handful of types of goods available; for instance, if there are only three types of goods there will be only three exchange rates, four types will require six exchange rates, six will require fifteen and ten forty-five. The situation becomes unmanageable when the number of types of goods reaches 100, leading to 4,950 exchange rates - with 1,000 types of goods the number of exchange rates reaches 499,500.[39] Invariably, some form of common standard would have to be arrived at so as to get around this problem. This point demonstrates that pure barter becomes untenable when the number of types of goods increases beyond a relatively small number.

M theorists will claim that the exchange rate problem is a point in their favour in that it would have encouraged the emergence of a medium of exchange. However, C theorists can also claim that the exchange rate problem supports their approach, as follows. Earlier

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[39]This point and the associated calculations are to be found in Davies 1995, pp. 15. The number of exchange rates is arrived at using the following mathematical formula for deriving combinations: ${}^{n}C_{r} = n!/[(n-r)!r!]$. Jevons makes a similar point, although in a less well worked out fashion, in his argument for the requirement for money. See Jevons 1875, pp. 5.

I referred to the fact that, because followers of the C approach reject the claim that money evolved as a medium of exchange purely as a market response to the transaction costs of barter, they must either deny that pure barter ever played a role in pre-monetary history or else allow that pure barter did play a role in such early economies but that it was not as inefficient in the sense that transaction costs were not as important in the way that M theorists claim they were and therefore did not lead to the emergence of a medium of exchange in the form of an exchange good. If all that could be achieved under pure barter is the exchange of a relatively small number of goods, this hardly amounts to a market economy and therefore money could hardly have emerged as a market solution to the transaction costs of barter. Those of the C theorists who deny the historical role of pure barter can argue that the exchange rate problem demonstrates that pure barter could never have played a role in the first place. But C theorists who allow that pure barter did have a role to play in monetary history can claim that the exchange rate problem demonstrates that the biggest difficulty with barter was not that transaction costs were high and therefore led to the emergence of goods which could play the role of media of exchange, as M theorists claim; if pure barter were restricted to a mere handful of goods, then the transaction costs issue would have been of little importance.

But this latter claim is arguably erroneous. The issue is that even though exchange rates increase in number very quickly once the number of types of goods increases beyond a relatively small number, transaction costs arguably increase at an even faster rate as the number of types of goods increases and they kick in at even lower numbers of types of goods. To illustrate this let us look at the following scenario: imagine a pure barter economy where no individual has a starting endowment of more than one type of good and each individual wants to acquire only one kind of good; for the sake of simplicity, there are a fixed number of types of goods which are randomly distributed among all the individuals. This means that the chances of picking a potential trading partner who has the type of good that you want is $^{1}/_{(x-1)}$ where x is the number of types of commodities available.[40] But what you really require is someone who both has the type of good that you want *and* wants the type that you have. For the sake of simplicity, let us assume that

[40]The formula is $^{1}/_{(x-1)}$ because one is not going to try to acquire the good that one is prepared to give up.

the wants are randomly distributed among all individuals as well. So, the chances of finding someone who wants what you have is also $^1/_{(x-1)}$; therefore the chances of picking someone who both wants what you have and has what you want is $[^1/_{(x-1)}]^2$.[41] So, in the case of three types of goods, the chances of picking a suitable bartering partner are $^1/_4$, with four types the chances are $^1/_9$, with six types the chances are $^1/_{25}$ and with ten the chances of picking a suitable partner is $^1/_{81}$. In the case of the exchange rate problem we saw that when there are three types of goods there will be three exchange rates, four types will require six exchange rates, six will require fifteen and ten forty-five. What this exercise demonstrates is that, if the assumptions are appropriate, even at very small numbers of types of goods, such as six, the issue of the transaction costs associated with finding a suitable exchange partner is important and that the problem of transaction costs kicks in long before the exchange rate problem does; even with only six types of goods, while the exchange rates required amount to merely fifteen, the probability of finding a suitable bartering partner is 1/25 and therefore the costs of engaging in such a transaction will be high. So, if such a scenario reflects what actually occurred in pre-monetary history, it cannot be claimed by those C theorists who allow that pure barter occurred that transactions costs were not significant even in cases where the number of types of goods was low. If this is the case, then C theorists cannot allow that pure barter could have taken place without also having to accept that transactions costs were an important feature even in barter economies with few types of goods. If one allows that pure barter had taken place, then it is hard to avoid the M theory claim concerning the emergence of money along Mengerian lines as a market response to transaction costs.

But does the scenario I have outlined above reflect what actually occurred in pre-

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[41]Since the events 'finding a person who has what you want' and 'finding a person who wants what you have' are independent, the probability of both events occurring is the product of the probabilities of each individual event occurring. For independent events A and B, $P(A \cap B) = P(A) \cdot P(B)$. Since in this case $P(A) = P(B) = [^1/_{(x-1)}]$, then $P(A \cap B) = [^1/_{(x-1)}]^2$

monetary history? In the absence of any conclusive evidence it is not possible to answer this question. However, one can surmise that at least one of the assumptions probably would not have held. For instance, it is unlikely that goods would have been randomly distributed among all individuals since goods are commonly distributed by geographical location; e.g. root crops occur in abundance where root crops grow well. Also, it could be argued that trading posts would have been likely to emerge whereby those wishing to acquire or dispose of a certain kind of good would have congregated. Such factors would be likely to facilitate the double coincidence of wants and therefore would go some way in reducing transactions costs. But arguably there is no way of eliminating completely the transaction costs associated with pure barter except by individuals adopting the strategy of exchanging less saleable goods for more saleable goods, as Menger showed, and thereby facilitating the emergence of money in the form of an exchange good. Once one admits that pure barter may have taken place in pre-monetary times, then it is hard to avoid the M theorist's conclusions. Of course some C theorists are likely to claim that a tally system would have been just as good as an exchange good in dealing with the exchange rate problem and the transaction costs associated with pure barter, but it is by no means clear how such otherwise worthless tallies would have become acceptable to prospective exchange partners who did not know each other well. The M theory does not encounter such problems.

Of course, those C theorists who deny that pure barter had any significant role will be unmoved by these arguments. These C theorists can claim that the difficulty posed by both the exchange rate problem and the transaction costs associated with finding a suitable exchange partner is one which can be solved by the creation of a common standard of value by the authorities. Since these followers of the C approach claim that the authorities instigated this common standard of value under the guise of a means of payment or unit of account, and that money as a medium of exchange is therefore only a secondary feature, the exchange rate problem and the issue of transaction costs can also be recruited by C theorists who can claim that these problems demonstrate that pure barter could never have flourished and therefore it was the authorities which came up with the notion of money which in turn allowed exchange to take place. However, this does not mean that the M approach has been proved wrong. It does not follow from the claim that

the transaction costs issue kicks in before the exchange rate problem that pure barter could never have occurred and therefore the authorities actually instigated a means of payment or unit of account so as to remove these obstacles to exchange. Since the exchange rate problem and the transaction costs problem can be recruited by either side, it is not possible to therefore decide between the M and C approaches on this basis.

Whether the monetary economy emerges from pure barter or from some sort of command economy, the C approach ultimately relies on the claim that the state creates demand for its currency by insisting that its citizens pay their taxes in that currency, as I pointed out earlier. This ties in with the historical chartalist view that initially money involved and continues to involve a credit relation between the government and the governed. In other words, when the government pays for goods or services in currency, it is really obtaining credit from the population and the currency is really made up of markers or tallies which are units of account which can in turn be used by the citizenry to redeem tax liabilities. According to this view, if government is implicated in economic and monetary activity right from the beginning, then there is no sense in separating money away from the so-called "real" economy; hence any model, including the Walrasian system, which leaves out the very important endogenous variable of money, is deeply flawed. Money is endogenous, according to this view, in that the money supply responds to money demand and therefore is not fixed.[42] According to Goodhart, under the C approach, "money is intimately bound up with the stable existence and fiscal functions of government in any area." (Goodhart 1998, 420). He goes on to claim that models not in accordance with the C approach, such as the Optimal Currency Area Model, do not account for the fact that governments are key to either the unification of a currency or its fragmentation.

Various historical arguments and counterarguments are used by both sides in this debate to substantiate their respective positions. While space does not permit a thorough analysis of all these historical claims, I will restrict myself to listing them here. Historical chartalists claim that the origins of money "are not to be sought in the market but in a much earlier stage in communal development, when worth and wergeld were

[42]This view is held by Wray 1998, pp. 34.

interchangeable terms." (Grierson 1977, 33). Wergeld, in its broad sense, was a tariff or compensation set by the authorities which a perpetrator of harm or injury had to provide as compensation to those who had been injured or to relatives if the victim had been killed. The idea behind such a system of compensation was that it would "prevent resort to bloodfeud and all the inconvenient social consequences that might flow therefrom." (Grierson 1977, 19). Thus, prior to the introduction of a market or to the notion of the evaluation of commodities, "the conceptual difficulty of devising a common measure for appraising unrelated objects is avoided." (Grierson 1977, 21). In other words, the phenomenon of wergeld indicates that, even prior to the emergence of markets, there could have been a common measure for appraising unrelated objects and that it was this, through the instigation of the authorities, which gave rise to money. Thus, according to this account, the historical metallists are wrong to claim that money emerged as a response to the transaction costs associated with barter. The main difficulty with this claim is that wergeld was a feature of fifth or sixth century A.D. Anglo Saxon, German and other related peoples whereas money in the form of currency had already been in existence for over a thousand years; since these peoples had lived on the margins of the fading Roman Empire, it is not surprising that they might have already been introduced to money and market practices. Compensation usually presupposes some shared notion of economic value; without such a shared notion, it is hard to see how such a compensation system would be successful in turning wronged individuals and families away from taking their revenge.

Another set of chartalist arguments are directed against the notion of precious metal as commodity money. In these arguments, doubts are cast on the use of unminted precious metals as money except in some very unusual circumstances. According to such arguments, assaying precious metals is a highly specialized task and costs associated with it are quite high; therefore precious metals are not likely to be used as media of exchange.[43] Only with the introduction of minting could individuals be able to use precious metals in the form of minted coinage as money without the attendant costs of assaying. According to the C approach, the minting of coins was usually in the hands of

[43]This argument is set out in Ingham 1996, pp. 410-412.

the authorities or at least under their control and therefore money in the form of precious metals actually only arose with the minting of coins.

While the minting of coins was often in the hands of the authorities, this was the case because the state recognised the gains from seigniorage and the power that issuing currency conferred on the issuer. As regards assaying, arguably this only became a problem when debasement of a convincing sort became technically feasible and worthwhile. In addition, it is clear that certain precious metals, such as silver, were used as commodity money from the earliest times, as I discuss below in the case of the Sumerian civilization.

There another separate branch of historical chartalist argument which opposes historical metallism but which does not rely on the claim that the government or the authorities were involved in the emergence of money. This view holds that prior to minted coinage and often in parallel with it, commerce was carried out under a system of tallies. The basic idea behind this is that whenever a transaction took place, one party to the transaction handed over the relevant goods while the other registered the debt to the other party.[44] Sometimes this registration of debt was accomplished through recording it on a wooden tally which would then be split down the middle with the creditor retaining one half and the debtor the other. Later, governments began to issue tallies or currency in exchange for goods and services and received them back in payment of taxes. In this way, the tally system can be considered to fall within the bounds of historical chartalism. As I pointed out earlier, such tally systems are supposed to solve both the exchange rate problem and the cost of transactions problem associated with pure barter although it is hard to see how they could ever have taken off since prospective exchange partners who do not know each other would not be likely to part with goods in exchange for an otherwise worthless tally. Some sort of oversight by government or some other authority would have to have been in place before tallies could have become widely acceptable as a means of payment.

There are a number of difficulties with these claims for historical chartalism. First of all,

[44]This account of tallies is drawn from Wray 1998, pp. 40-47.

while the earliest coinage emerged in the sixth or seventh century B.C., and while tallies may have been used earlier than that, there is no evidence to show that such tallies were used *as currency* at that time. While it is true that tallies were widely used as currency among merchants in Europe a few thousand years later, it would be mere conjecture to claim that this also occurred much earlier. What the historical and archaeological evidence actually points to is the existence of a form of precious metal commodity money in the twenty-fourth century B.C. during the Sumerian civilization; the Sumerians are understood to have been responsible for building the first city on the planet, Ur, and had a reasonably developed legal system and economy. In addition to the use of silver as a medium of exchange among the merchant class, local trade among peasants often made use of grain as money (Wooley 1929, 117).

> "Hoards of silver found by archaeologists in Mesopotamia and Iran suggest that the (silver) metal was made into large ingots, cut into small scraps or drawn out into thin wire in order to facilitate the correct weighing out of silver in bullion form. The silver wire was also made into rings which, documentary evidence suggests, were sometimes made to a certain weight" (Williams 1997, 19).

This archaeological evidence indicates that the Sumerians were using silver as a proto-currency which had none of the chartalist traits but which was sufficient to perform the functions of a medium of exchange. Such use of silver and grain as money as early as the twenty-fourth century B.C. predates by far the use of wergeld or tallies and indicates that some version of historical metallism is correct. However, this is not to claim that the historical evidence is at all decisive; after all, there may be much evidence from ancient times which has never reached us and that which has requires much interpretation and guesswork. But the best evidence available is strong circumstantial evidence against the claims of historical chartalism and in favour of historical metallism.

Leaving aside the question whether the balance of evidence is in favour of historical metallism, chartalists claim that historical metallists, and by implication M theorists, "have difficulties with explaining the introduction and use of fiat currency" (Goodhart 418). Those who follow the C approach accept both historical and practical chartalism

and therefore have no such difficulties. In the rest of this section I aim to show that this chartalist claim can be answered; in other words, I aim to show that a position which combines historical metallism and practical chartalism, such as Simmel does, is tenable. Arguably, minting originally involved the rough stamping of pieces of precious metal which were largely accepted in transactions by metallic content. But minting authorities were able to pass on these coins at a premium above their bullion equivalent possibly because such coins were acceptable without the need for assaying or because, as Aristotle pointed out, minted coins were of a stipulated weight and therefore did away with the need to weigh bullion (Aristotle 1992, 83). This premium on minted coins which accrued to the minting authorities was known as seigniorage. But the authorities began to realise that a new and much more lucrative form of seigniorage could be realised; because minting allowed for the separation of the face value of a coin from the value of its content, a separation of the value in tale from the value in specie of a coin, once coins began to be accepted in tale the authorities could gain even more seigniorage through reducing the content of the precious metal, either by weight or by fineness, while maintaining the value of the coin in tale. Although this sort of debasement of the currency often led to severe social and economic problems, in a certain sense it opened the door for the possibility of a fiat currency. However, this was only achieved after a long period of time and many setbacks.

The next major monetary development occurred when paper money, which was backed by precious metals or commodities, began to be circulated. Although the first instance of paper money occurred in China in the eleventh century A.D., (Williams 1997, 177) the practice did not begin in Europe until the thirteenth century in Italy and paper money only became more generally accepted throughout Europe in the late sixteen hundreds. Initially, all sorts of paper instruments were used as media of exchange, including contracts, bonds, bills of exchange, bank notes and later interest bearing instruments issued by government agencies. Invariably, these paper instruments at that time were either backed by precious metals in the form of bullion or coinage, or by commodities or their value was assured by the status of the issuer, such as the government in the case of exchequer bills. With the exception of the latter, such items of paper money were invariably pieces of paper on which was stated how much of a precious metal or other

commodity was owed to the bearer and when it was payable and by whom. Such instances of paper money were really credit notes.

The next important development in monetary history was the emergence of legal tender in the forms of paper currency and base metal tokens. These became commonplace in Europe in the eighteenth century but such currencies "derived their value from an implicit or explicit undertaking that they could be exchanged or converted into precious metal currency" (Williams 1997, 220). In this sense, such currency was still made of credit tokens which were redeemable into precious metal on demand. The inscription to be found on Sterling notes today, "I promise to pay the bearer the sum of . . . ," is a relic from this time. However, in times of war or other great difficulties, convertibility was often suspended, as it was in the U.K. between 1797 and 1821.[45] Although these periods of inconvertibility showed that a purely fiat currency was possible, even though pure fiat currencies did not become universally accepted until the next century, they do raise a very important point concerning the nature of inconvertible or fiat currency. Although it is clear that a convertible currency is really made up of credit notes which can be redeemed for precious metals, it is not so obvious whether inconvertible currency is also made up of credit notes. The answer to this can be seen in the further examination of seigniorage with respect to fiat currencies.

As I pointed out earlier, seigniorage in its original form was the profit that the state made from the minting of coins. As the state decreased the content of precious metals while maintaining the face-value of the coinage, a process better known as debasement, the amount of seigniorage increased in proportion. Later, when convertible currency was issued which was not one hundred percent backed by precious metal, the state was doing something similar to what is now standard practice among banks; just as banks lend out almost all of their deposits while retaining only a tiny percentage of deposits to cover day to day withdrawals, in issuing a convertible currency the government learned that it could

[45]For the historical details of these suspensions of convertibility see Chown, 1994, especially Chapter 26.

issue convertible paper currency far in excess of their holdings of gold or other precious metals just as long as they kept enough for day-to-day conversion requests. But just as a loss of confidence could lead to what is known as "a run on the bank," the same has been known to occur in the case of a state's holdings of precious metal. As with a bank that is running out of reserves, all the state can do is to cease honouring requests for conversion. An example of the latter, brought on by commercial crisis and the costs associated with wars with France and America, led to the 24-year suspension of convertibility in Britain in 1797. What this discussion establishes is that if one follows the historical progression in monetary history, stage by stage, one can explain without any difficulty the introduction and use of fiat currency. That this was not an easy progression is clear from the fact that although there were suspensions of convertibility in various countries from the late seventeen hundreds onwards, fiat currencies did not become universal until well into the twentieth century.

But in establishing that historical metallists do not encounter difficulties in explaining the introduction and use of fiat currencies, I have also shown that Berkeley was right to claim that fiat money is credit. As I outlined in the case of a convertible currency, the currency notes issued are really credit notes whereby the government undertakes to pay the bearer a certain amount of gold on presentation of the note. What happens when convertibility is suspended, either temporarily or permanently, is that this undertaking no longer holds. However, the currency is still used as legal tender and remains in essence a credit note to the extent that the government pays it out in exchange for goods or services from members of the population and redeems it in discharge of debts owed by the population to the government, of which taxes make up the largest part. Fiat money is therefore best seen as a form of credit where the government is the borrower and the population the lender. This is not to claim that the population does not get something out of this credit relation as well, such as a proper form of legal tender, but it is to make a claim concerning what fiat money actually is. To this extent, Berkeley, who saw money as a form of credit, was right all along.

To summarise, the debate between chartalism and metallism is a complex one and therefore requires some refinement, such as the distinctions between the historical and

practical versions. I have argued for an account of the development of money which incorporates practical chartalism with historical metallism along the lines suggested by Simmel. Since fiat currencies have been shown to perform well if they are managed properly, practical chartalism appears to be the only sensible position to take with respect to currencies today. However, this leaves open the question concerning the origin of money which, as I have outlined, is also taken to be of importance by various contemporary economic theorists. On the balance of evidence, historical metallism is the only tenable version of events although it is impossible to give decisive arguments either way. For this reason, when I give a detailed account in Chapter 3 of exchange and how it is related to money, I will be providing an account that will be compatible with both historical metallism and historical chartalism.

1.6. Conclusion

In this chapter I have set out and critically analysed the claims of a number of theorists from the past concerning economic phenomena. I have also explained some of the important developments in economic phenomena that have occurred historically. These explanations combined with the results of the critical analysis of past theorists forms the starting point for the philosophical account of economic reality that I will be providing in Chapter 3. In my discussion of the value debates, I rejected the objective version of economic value in favour of a subjective version. My claim was that what motivates economic exchange and production is fundamentally use-value and that although exchange and production are often undertaken for the exchange-values they provide, such exchange-values are invariably sought after for the use-value which, through further exchange, they in turn give rise to. This has provided me with the basis for a thorough philosophical account of economic exchange which I will provide in Chapter 3.

The monetary debates are more complex and less conclusive. I argued that practical chartalism is the only tenable position now given the undoubted success of fiat currencies. While I argued that on the balance of evidence that historical metallism appears to be the more tenable position, it cannot be said to be conclusively so. Because of this I will be

providing an ontological account of money in Chapter 3 which will be compatible with both historical metallism and historical chartalism. In other words, my account will have to be compatible both with Menger's notion of saleableness and the historical chartalist claims concerning the involvement of government or the emergence of a tally system. It will also have to be compatible with modern versions of fiat money. I also explained how modern versions of fiat money could develop out of metallic forms and I argued that Berkeley's ontological claim concerning money being credit was applicable to such fiat money. In Chapter 3 I will be showing how such a claim is compatible with the ability of banks to create money.

The question now becomes, what is there left to explain or give an account of if it has already been established what money is, how it developed, what economic value is, and so on? First, while it has been argued that money, at least in the form of fiat currency, is credit, no account of credit has been given. Second, with the exception of a discussion concerning the role of use-value and exchange-value in economic exchange, no comprehensive account of economic exchange has been provided. Third, nothing has yet been said about the commercial and financial structures and institutions which inhabit the economic world of today. Lastly, there is the further difficulty concerning money which I have not investigated so far; this is the matter of what I call 'abstract money'. The problem is that the discussion so far has been solely concerned with money in the form of either tokens, pieces of metal or commodities. But by far most money in contemporary developed economies is paid over, stored or transferred without anyone counting or handing over coins or notes. For instance, payments using credit or debit cards, telegraphic or electronic transfers of funds and other forms of electronic banking involve neither the counting, holding nor physical transfer of tokens or coins. While the function of money as a unit of account is recognised by economists and others in the sense that all commodities can be converted into a common standard of monetary value and one can thereby use double-entry book keeping to generate accounts, budgets and keep track of costs, this is not the same as money *qua* abstract money. I will be claiming that the argument will have to move beyond the confines of the metallist-chartalist debates if abstract money is to be accounted for. I will be discussing these matters in greater detail in Chapter 3 after I have looked at some recent attempts to give an account of economic

phenomena, especially money, in Chapter 2.

CHAPTER TWO

A Critique of Contemporary Approaches to the Ontology of Money

2.1. Introduction

Contemporary philosophers generally do not concern themselves with economic reality although a few have addressed some ontological questions concerning money, albeit in a wrongheaded way, as I discuss later in this chapter. Those philosophers who have demonstrated an interest in the subject see money in purely social terms, usually as some sort of social convention or institution which performs monetary functions purely in terms of it being collectively accepted as money. In the latter case, something is money because it is accepted as money in much the same way as certain sets of actions within specific contexts count as marriages, scored goals or elections because sets of actions of that kind are accepted as marriages, scored goals or elections. I will be arguing that this view is shortsighted in that it fails to distinguish between economic and non-economic social phenomena. In one sense it is not surprising that this distinction has gone unnoticed; after all, economic phenomena are also social phenomena.[46] But this in itself does not warrant the assumption that economic phenomena are on all fours with non-economic social

[46]Clearly, economic phenomena such as economic exchanges, money and prices are social phenomena. The only possible exception to the claim that economic phenomena are social is the case of someone who engages in production for the sole purpose of providing for his own consumption. The appropriation of inputs in combination with the running of even the most simple of production processes without any involvement by others is rare. For this reason it is, generally speaking, not controversial to claim that economic phenomena are also social phenomena and therefore I will ignore this possible minor exception.

phenomena. Ignoring this important distinction between economic phenomena and non-economic social phenomena has led to philosophers to make the mistake of thinking that an account of some economic phenomenon, such as money, simply falls out of an account of social reality, as I will show later.

At this stage, it is important to note that I am not denying that economic phenomena have social aspects; nor am I denying that they are also, in some fundamental sense, social phenomena and indeed require or presuppose an already existing social reality. My contention is that economic phenomena have certain additional aspects which mark them off from the non-economic social phenomena, as will become clear later. This is hardly a controversial claim; to say that money, firms or economic transactions belong to a different class of phenomena than marriage, political parties or families, at least from our contemporary perspective, is intuitively obvious even though it requires a certain amount of work to establish it philosophically.

Much of the rest of this chapter will be devoted to an examination of the accounts of economic and social reality provided by John Searle, David Bloor and Finn Collin. I have chosen these three because each has independently provided an account of one economic phenomenon, namely money, albeit as part of their overall account of social reality. Because of this, the discussion in this chapter will be focussed largely on money as opposed to other economic phenomena. Also, I will be spending more time on social reality than economic reality in this chapter for several reasons; first, since the philosophers in question treat money as unproblematically falling out of their accounts of social reality, some account of their approaches to social reality is required. Second, since economic phenomena also fall into the class of social phenomena, an account of social phenomena is a prerequisite to providing an account of economic phenomena. Third, at least some general or basic account of social phenomena is required if one is to be able to draw the distinction between economic and non-economic social phenomena.

Although this chapter will contain the accounts of money from all three aforementioned philosophers, for the following reasons most of the discussion will be devoted to the account provided by Searle. First of all, in his extensive writings on social reality Searle

frequently uses money as an example to illustrate his claims concerning social reality. Also, his account of money, though wrongheaded, is more complete and thorough than that of the other two, for whom money is not much more than a passing interest. But most importantly of all, he provides an account of social reality that is an anathema to any account of economic reality, as I will show later. But all three accounts have one unifying theme; in their individual approaches to money, each makes the mistake of running economic and non-economic social phenomena together and each fails to realise that an account of money, or any other economic phenomena for that matter, does not simply fall out of an account of social reality.

The rest of the chapter will be structured as follows: I will begin by providing a thorough account and critique of Searle's approach to social reality and money. Searle claims that several ingredients go into the construction of social reality, namely collective intentionality, constitutive rules and status functions. But by far the most important and contentious ingredient is his notion of collective intentionality. Searle postulates his notion of collective intentionality as a solution to a conflict between two of his own problematic claims; the irreducibility of collective intentions to singular intentions and what he sees as the requirements of methodological individualism (Searle 1995, 24-25). According to Searle, methodological individualism would seem to require that we reduce collective intentionality to individual intentionality and yet this would contradict his claim that collective intentionality is irreducible to individual intentionality plus some mutual beliefs. I will show that at least part of what is really at stake here is Searle's internalism or, as he puts it, his 'brain in a vat condition'. I will also demonstrate that the conflict, as he sees it, between the requirements of methodological individualism and the irreducibility of collective intentionality does not actually arise. My strategy will then be to examine his internalism and show that Searle's account is more radical than other internalists in that he extends internalism beyond its usual bounds to incorporate social facts. While there are no knockdown arguments in favour of either internalism or externalism as normally construed, I will be showing that Searle's extension of internalism into the social realm is untenable. Finally I will return to Bloor and Collin and will then address the distinction between economic and non-economic social phenomena which they and Searle overlook and will show why an account of economic reality does not just fall out of an account of social reality.

2.2. The Constituents of Searle's Account of Social Reality

One of the central aims of Searle in *The Construction of Social Reality* is to provide an account of social reality that is in keeping with his realism.

> "How can there be an objective world of money, property, marriage, governments, elections, football games, cocktail parties and law courts in a world that consists entirely of physical particles in fields of force, and in which some of these particles are organized into systems that are conscious biological beasts, such as ourselves?" (Searle 1995, xi).

This question actually involves two questions, one regarding how social reality is possible and another concerning how any such account can accommodate or be consistent with the sort of realism that Searle espouses. In his own words, his overall picture of philosophy "proceeds by way of external realism through the correspondence theory of truth to the structure of social reality." (Searle 1995, 199-200). According to Searle, external realism is the view that "the world (or alternatively, reality, or the universe) exists independently of our representations of it." (Searle 1995, 150). This claim is not an empirical thesis, according his account, but is a precondition for much of our language and thought (Searle 1995, 182). The correspondence theory of truth is the claim that a statement is true if and only if it corresponds to the facts where, for Searle, facts are "conditions in the world that satisfy the truth conditions expressed by statements." (Searle 1995, 211). Although these claims are contentious I will not be addressing them directly; I am merely noting them as a way of showing Searle's motivation for his account of social reality.

Although Searle sees the mind purely in terms of "a set of higher-level features of the brain," he also claims that there is an important distinction between what he terms intrinsic and observer-relative features of the world (Searle 1995, 9). The latter features are those which exist relative to the intentionality of observers and some of them are

features of our social and institutional reality. But since intentionality is a feature of the mind, which for Searle is but a higher level feature of the brain, and social and institutional reality can be constructed out of certain features of intentionality, as I outline below, Searle is able to put forward a hierarchical taxonomy which shows "the place of the social, institutional and mental reality within a single physical reality." (Searle 1995, 121). What follows is an account of Searle's attempt to construct social reality while remaining true to his claims about realism, truth and intentionality.

2.2.1 'Status Functions and Constitutive Rules'

There are three main components in Searle's account of social reality; status functions, collective intentionality and constitutive rules. Taking status functions first: for Searle, there are features of the world that exist independently of us and other features that are dependent on us for their existence. An example of the former might be a physical object that is composed of metal and wood. These physical features are intrinsic to that object and exist independently of us. But when I describe that object as a screwdriver, "I am specifying a feature of the object that is observer or user relative." (Searle 1995, 10). Later, Searle explains that human beings can impose or assign such features or functions on aspects of the world, whether they be objects, such as combinations of pieces of wood and metal that function as screwdrivers, or sounds that are produced in speech where the function that is imposed is words. Searle calls these 'agentive functions' in that they serve the interests of agents and are for their use. Included among the examples he uses of objects with agentive functions are chairs or a stone that is used as a paperweight. But, according to Searle, this category of agentive functions contains within itself another sub-category of what he terms 'status functions'. When a status function is assigned to an object, according to Searle, the object takes on the function of standing for or representing something else. Chairs and screwdrivers are usually not made to stand for or represent something else whereas marks on paper can and often do represent objects or states of affairs that are independent of them as such. All forms of language have this representational or intentional function imposed on them, according to Searle. "In the use of language we impose a specific function, namely, that of representing, onto marks and

sounds." (Searle 1995, 21). Status functions are both agentive and intentional and are an important factor in Searle's account of social reality.

The second main component in Searle's account, his notion of a constitutive rule, also incorporates status functions. According to Searle, the form that constitutive rules take can be stated as a formula as follows; "X counts as Y in C," where the Y term assigns a new status function to some object X, which does not carry this feature intrinsically. C represents the context or type of context in which the function is invoked. What makes such rules constitutive, according to Searle, is that they create the very possibility of certain activities. In effect, they are constructive in that they bring into being the relevant practice or activity in question. For instance, the following of certain rules of chess is constitutive of playing chess. According to Searle, "These rules come in systems, and the rules individually, or sometimes the system collectively, characteristically have the form, "X counts as Y" or "X counts as Y in C"." (Searle 1995, 28).

Obviously, if such rules are to be constitutive, and if the function that is imposed is to be intentional, then what satisfies the X term should not be sufficient for satisfying the Y term, according to Searle's account. So, for instance, "objects that are designed and used to be sat on by one person" as the X term is already sufficient for satisfying the Y term, as in "count as chairs," and therefore cannot be constitutive in the sense that Searle requires. But that certain kinds of bits of paper (X) count as money (Y) is a genuine constitutive rule because the notion of money is not intrinsic to the piece of paper as it is not a physical property.[47] It is through the acceptance of such constitutive rules that one is able to move from the level of brute facts to that of institutional facts. If everyone accepts that certain pieces of paper issued by the Bureau of Engraving and Printing (X) count as money (Y) in a certain context (C), then such pieces of paper are money, according to this account. Although Searle does not say exactly what the context is supposed to be in this case, it appears that he means C to be the context of the United States; this is problematic, as I will show later. In any case, according to his account, the pieces of paper in question are mere physical objects but it is the status function that is imposed on them that gives

[47]Both the example involving the chair and the example of a piece of paper counting as money are cited by Searle (Searle 1995, 44).

rise to the institutional fact, that makes them money in the form of dollar bills. This notion of constitutive rules connects up the world of brute facts and physical objects with the world of institutional facts, according to Searle's analysis.

What is fundamental to this account is that the relevant constitutive rules be collectively accepted. For it to be an institutional fact that certain pieces of paper count as money, it must be generally accepted that those pieces of paper are money. This is where Searle's postulation of collective intentionality comes in. According to Searle, all social facts, whether institutional or non-institutional, involve collective intentionality (Searle 1995, 26). But institutional facts are a special subset of social facts because, unlike non-institutional social facts, they involve the imposition or assignment of status functions, according to Searle's constitutive rule formula, X counts as Y in C. In other words, non-institutional social facts, such as two persons going for a walk together, do not involve the assignment or imposition of status functions according to his constitutive rule formula, X counts as Y in C, whereas institutional facts, such as certain kinds of pieces of paper which count as money, do. Because of the key role that Searle's notion of collective intentionality plays in his account of social reality, it deserves examination in more depth. I will be arguing that the postulation[48] by Searle of collective intentionality is wrong-headed and is ultimately refutable. In addition, as I will show later, collective intentionality presents a serious obstacle to providing a thorough-going analysis of economic phenomena.

2.2.2 Collective Intentionality

Searle's account of collective intentionality is controversial and arguably counterintuitive. Not only are animals capable of cooperative behaviour, according to his account, but many species "share intentional states such as beliefs, desires and intentions" and collective intentionality is a capacity that we share with animals (Searle 1995, 23). For

[48]Searle uses the term 'postulate' in Searle 1990, pp. 408.

him, collective intentionality covers all kinds of collectively intended activity, whether they are those in which the actions that each member of the group performs are identical or highly similar, such as a group of people going for a walk, or those where the actions each member of the group performs are highly dissimilar but where there is a common goal, such as instances where "*I* am doing something only as part of *our* doing something." (Searle 1995, 23). Examples of the latter case include team efforts of all kinds, such as football teams or orchestras. Even events which incorporate conflict, such as boxing matches, court cases or faculty members trading insults at a cocktail party, involve collective intentionality, according to Searle (Searle 1995, 24).

Searle claims that he is struck by the fact that collective behaviour among human beings often does not even require language. The example he uses is of seeing a man (a total stranger, presumably) pushing a car to get it started and without speaking or exchanging signs he (Searle) pushes with him.[49] This is also true in the case of animals, according to Searle; for instance, a group of hyenas who are closing in on an isolated lion is a demonstration of collective intentionality in that the hyenas coordinate skilfully and respond to each other although this does not require any linguistic or cultural apparatus (Searle 1995, 37-38). But to see that collective behaviour is not merely the sum of individual behaviours one must understand that the same bodily movements could have been made without the behaviour being collective. The example that Searle offers involves two contrasting cases (Searle 1990, 402-403); in the first case a group of people in a public park are each moving independently towards a building so as to shelter from a storm that threatens. Each individual's intentions are entirely independent of everyone else's and are not collective; it just so happens that each individual's intention has the same goal. Searle then asks us to imagine a second case where there is no impending storm but that everyone in the park belongs to a *corps de ballet* and their moving towards the building is part of their performance. Viewed externally, there is nothing in the various bodily movements to distinguish either case from the other since we are to take it that all the movements are identical. But given that the first does not involve collective behaviour while the second does and given that, when viewed externally, there is nothing to distinguish the first from the second, it must be the case that what distinguishes the first

[49]This example is taken from Searle 1990, pp. 402.

instance from the second is internal to each individual, according to Searle. So, in the case of the ballet, each individual's intentionality is collective and each individual's collective intentionality must be internal, in the head.

Searle postulates his particular notion of collective intentionality in the form suggested so as to solve what he sees as two potential difficulties. The first difficulty is that, according to Searle, all attempts to reduce collective intentionality to singular intentionality plus some mutual beliefs fail because of the infinity of beliefs required (Searle 1995, 24). What he means is this; if you and I intend to do something together, that would mean, according to the individual intentionality plus mutual beliefs approach, that I intend to do it in the belief that you intend to do it and you intend to do it in the belief that I intend to do it and I will have to have beliefs about your beliefs and you about mine in a "potentially infinite hierarchy of beliefs." So, the propositional attitude that would be required to express each individual's putative set of mutual beliefs in such a case would be an infinite regress of the form, "I believe that you believe that I believe that you believe . . ." (Searle 1995, 24). According to Searle, this regress problem makes it impossible to reduce a we-intention to an I-intention plus mutual beliefs in just the same way as it makes it impossible to construct a we-intention out of a combination of an I-intention plus some mutual beliefs. Any such sets of mutual beliefs are impossible because they involve infinite regresses. As Searle puts it,

> "No set of 'I consciousness,' even supplemented with beliefs, adds up to 'We consciousness'." (Searle 1995, 24).

The second difficulty that Searle's particular notion of collective intentionality is intended to deal with is closely related to the first. According to Searle, many philosophers are convinced that collective intentionality must be reducible to individual intentionality because the alternative would be to appeal to the existence of what Searle terms "some Hegelian world spirit, a collective consciousness or something equally implausible." (Searle 1995, 25). The problem is that "the requirements of methodological individualism seem to force us to reduce collective intentionality to individual intentionality." (Searle 1995, 25). But the regress problem makes it impossible to reduce

collective intentionality to individual intentionality, according to Searle. What exactly Searle means by methodological individualism here is unclear and is problematic, as I will show later. However, what is clear is that Searle's internalism in the form of his brain in a vat condition, denies the possibility of a third option, that of allowing that other minds (or anything else in the external world) might account in any way for a 'we-intend' inside the head. Searle's internalism is encapsulated in his brain in a vat condition; that is that not only are all mental states consistent with the possibility that they are actually being entertained by a brain in a vat, but that each of us *is* a brain in a vat where the vat is the skull and the inputs arrive at the brain via the nervous system.[50] So, Searle's internalism dictates that the we-intentions that one entertains must be contained within one's own head and must be independent of the existence of other individuals or anything else. As will become clear, Searle's postulation of collective intentionality as a "biologically primitive phenomenon that cannot be reduced to or eliminated in favour of something else" (Searle 1995, 24) is intended to solve the putative dilemma without involving the regress problem and without eroding the internalism to which he is committed.

Searle's solution to these difficulties is to deny that there is a real dilemma between the irreducibility of collective intentionality and the Hegelian alternative. While it is the case that all one's mental life takes place inside one's brain, according to Searle, "it does not follow from that that all my mental life must be expressed in the form of a singular noun phrase referring to me." (Searle 1995, 25). To put it another way, although his internalism dictates that all the mental states of an individual take place only within that person's head, there is nothing in his internalist thesis, in his brain in a vat condition, that denies that some of those states can be expressed in statements involving 'we' rather than 'I'. In his own words, in such cases "the intentionality that exists in each individual's

[50]This is Searle's brain in a vat condition. "Each of our beliefs must be possible for a being who is a brain in a vat because each of us is precisely a brain in a vat; the vat is the skull and the 'messages' coming in are coming in by way of impacts on the nervous system." (Searle 1993, 230).

head has the form 'we intend'." (Searle 1995, 26). He also claims that this account of collective intentionality is consistent with methodological individualism, since, as he states, "individual agents can think of themselves as part of a collective without thereby supposing that the collective is an ontological primitive." (Searle 1997, 449-450). The we-intentions that one entertains are a form of collective intentionality. Because collective intentionality is postulated as a biological or psychological primitive, there is no need to look beyond the inside of the head to account for collective intentions, according to this account. Instead Searle indicates that an evolutionary account of collective intentionality can be given based on what he sees as the obvious selectional advantages to cooperative behaviour.

One important point must be made here. Although Searle is not alone in being an internalist, what is unusual and controversial about his position is that he is also an internalist with respect to social facts. Since Searle stipulates that all social and institutional facts must involve collective intentionality and such we-intentions are solely to be found within the head, then Searle is committed to an internalist view of social facts. Later I will show that, while there is no knockdown or conclusive arguments for or against internalism or externalism as usually understood, there is however a conclusive argument against Searle's internalist claims for social and institutional facts.

To sum up Searle's position, the postulation of collective intentionality as a biological or psychological primitive is intended to solve the putative dilemma without involving the regress problem while also remaining consistent with his particular form of internalism. The regress problem is bypassed because there is no need to resort to mutual beliefs since collective intentionality, postulated as a biological or psychological primitive, ensures that we-intentions do not require any mutual beliefs involving other persons. It is consistent with his internalism or brain in a vat condition in that one can entertain a collective intention in one's own head, independently of whether there is, in fact, any collective that answers to that collective intention. But nowhere in Searle's account of social reality is there a constructive argument for collective intentionality as such. The argument that he puts forward, that it does not follow from his internalism that all one's mental life must be expressed in the form of the first person singular, does not actually

establish collective intentionality. All that it establishes is the possibility of having mental states that can be expressed in terms other than the first person singular. That argument is by no means a conclusive argument in favour of collective intentionality, nor does it establish collective intentions along the lines that Searle suggests.

2.2.3 Some Initial Difficulties with Searle's Account

Before critically analysing the central issues in Searle's account of social reality, I want to first draw attention to several areas of disquiet. Arguably, it is the absence of argument in key parts of Searle's account of social reality that gives rise to these areas of disquiet. First, while constitutive rules are meant to be constructive in that they are supposed to bring into being something that was not in place before, it is not clear how the formula 'X counts as Y in C' actually achieves this in at least in some instances, including the example of money which Searle provides. When Searle introduces his discussion on constitutive rules he uses the example of a certain move of a chess piece counting as a legal pawn move in a game of chess; here X stands for moving the chess piece, Y for the legal pawn move and C stands for the context of playing chess (Searle 1995, 28). Searle later uses the example of paper money in the United States elucidate the same formula, where certain pieces of paper with certain markings that are issued by the Bureau of Engraving and Printing count as dollar bills (Searle 1995, 45-46). So, according to this example, X stands for the relevant pieces of printed paper issued by the aforementioned bureau and Y is U.S. paper money or dollar bills. But what exactly is C in this example? Despite presenting this as an example of the workings of his formula, Searle does not spell out what C is meant to represent in this example. In an earlier mention of the same example he describes the X and Y terms as above and describes the C term as the United States (Searle 1995, 28). But it is clearly the case that there are many sets of circumstances where such pieces of printed paper are taken to be dollar bills outside the confines of the United States. Anyone can use those pieces of paper as dollar bills at any time and in any place; all that matters is that these pieces of paper count as dollar bills at those times and places. So, arguably C represents all the circumstances where those

pieces of printed paper issued by the Bureau of Engraving and Printing count as dollar bills. But then the formula, X counts as Y in C, is to be translated as these pieces of paper (X) count as dollar bills (Y) in circumstances where these pieces of paper count as dollar bills (C). But the invocation of such a circular constitutive rule in the formula in this instance does not really tell us anything at all. While it might be argued that the formula at least informs us that certain pieces of paper are to be treated as dollar bills, it is not constitutive and lacks any explanatory power in that it does not tell us under what conditions or circumstances they are to be so treated. If the circumstances cannot be specified under which a putative constitutive rule is supposed to apply, then nothing can be constituted according to that rule. So, claiming that certain pieces of paper count as dollar bills under circumstances where they do count as dollar bills is hardly an account of money or any other economic or social phenomenon.

Searle claims in later section that an institutional fact such as money "cannot exist in isolation but only in a set of systematic relations to other facts." (Searle 1995, 35). For instance, for anyone to have money, there must already be a system of exchange of goods and services, some sort of system of property ownership and so on. But Searle does not tell us exactly how money fits into a system of exchange and property ownership; nor does he say how systems of exchange and property ownership are themselves constituted. Nor does this get around the problem of how paper money is constituted. In addition, if the constitutive rules that make up these other systems of exchange and property ownership are also circular, then we cannot tell under what conditions or circumstances such systems of property ownership or exchange pertain.

The next point of disquiet in regard to Searle's account of social reality concerns the way Searle deals with the self-referentiality of many aspects of social reality. Again, Searle uses money as an example to illustrate his solution to this problem. The difficulty, according to Searle, is that any attempted definition or explanation of money will include "being thought of, or regarded as, or believed to be money." (Searle 1995, 52). But Searle denies that such self-referentiality results in circularity or infinite regress[51] because

[51]Searle refers to an infinite regress when he discusses the following feature of money, namely that something is money only because people regard it as, use it as or

"the word 'money' marks one node in a whole network of practices, the practices of owning, buying, selling, earning, paying for services, paying off debts etc." (Searle 1995, 52). So, according to his account, "the word 'money' functions as a placeholder for the linguistic articulation of all these practices" and we do not actually need the word 'money' to be able to accept, believe or think of something as money just so long as "the entities in question are media of exchange, repositories of value, payments for debts, salaries for services rendered etc." (Searle 1995, 52). But the problem with this way of dealing with the self-referentiality of money is that "expanding the [explanatory] circle by including other institutional concepts," in the way he suggests, does not solve the issue. All that Searle accomplishes, by claiming that we do not need the word 'money' as long as we can refer to media of exchange, repositories of value etc., is to pass on the burden of explanation to these other concepts. Arguably, each of the various concepts referred to cannot be explained without reference to both money and the other practices or institutions in the network and therefore Searle has only succeeded in shifting the burden of explanation onto these other practices or institutions in the network. In anything, he has not solved the problem of circularity but only passed it on. In practical terms, even if it could be claimed that money can be defined or explained in this limited way in terms of other economic phenomena, such as goods, services, transactions, economic agents and prices, this leaves open the problem of how these other aspects of economic reality can themselves be explained without reference to money or some other aspect of economic reality already mentioned.

But does self-referentiality mean that it is not possible to provide an account of money or

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believe it to be money. "If the content of the belief that something is money contains in part the belief that it is money, then the belief that something is money is in part the belief that it is believed to be money; and there is, in turn, no way to explain the content of that belief without repeating the same feature over and over again." (Searle, 1995, 33.) By circularity Searle means that the word 'money' appears in the definition of money. (Searle, 1995, 52.)

any other economic or social phenomena? The answer is no. The account that Searle is attempting to give is a synchronic one and, for the reasons stated above, it is not possible to give a synchronic explanation of such concepts as money without falling into either circularity or regress. But this is not true of diachronic accounts. My point is that the problems associated with self-referentiality in social phenomena only arise in attempted synchronic accounts; the circularity that results is vicious in the sense that any putative explanation that makes use of the concept it is supposed to explain is hardly a proper explanation. On the other hand, a diachronic account of money looks to the origins, emergence and development of money and does not fall into either circularity of infinite regress. Such a diachronic account is not an attempted reductive account of money in the sense of attempting to define a social institution in terms of something non-social. As will become clear in the next chapter, the diachronic account of money and other economic phenomena that I will be providing will be firmly rooted in social institutions, especially the institution of language.

A further point of disquiet regarding Searle's account of social reality concerns why it must always be the case that all social and institutional facts involve Searle's notion of collective intentionality. It is not difficult to contrive certain social activities where no we-intentions are necessarily involved, as the following example shows. A progressive military academy has come up with the perfect method of teaching cadets how to march in formation. What is unusual about this method is that each cadet is taught to concentrate on one simple rule which, as I will show, only requires an I-intention. In effect, each cadet is taught to maintain the length of one arm between himself and the soldier in front of him and the soldiers to his left and his right. In order to ensure the proper outcome, each cadet is told not to think about the overall effect of these orders and to simply follow the rule, namely to maintain the length of one arm between himself and the soldier in front and to each side. So, is the fact that the cadets are marching in proper formation on the parade ground a social fact given that all their intentions are singular? Of course it can be countered that what is important here is that the soldiers are all playing their parts and that even if one could construe it in such a way that the soldiers do not possess collective intentionality with respect to each other, it must be the case that they possess certain we-intentions with respect to their commanders or instructors. But

even if that is the case, it would seem odd to claim that marching in formation in the way I have described is not a social action when the instructor is not present.

Weber has some important insights into such examples and is an appropriate reference at least to the extent that he shares some important views with Searle. Both are methodological individualists. Also, both claim that instances where the behaviour of individuals is similar are not necessarily social actions. For instance, using a similar example to Searle's ballet in the park, Weber claims that if people in a street suddenly put up their umbrellas because it is going to rain, this is not a case of social action. Weber defines what he means by social action as follows:

> "Action is social in so far as, by virtue of the subjective meaning attached to it by the acting individual (or individuals), it takes account of the behaviour of others and is thereby oriented in its course."Weber 1947, 88).

While Weber would accept the example of the soldiers marching in formation as a social fact, Searle does not because his claims for social action are much more restrictive. Weber's weaker claim, whereby all action that takes into account the action of others is social, places both collective actions and some non-collective actions within the class of social actions. Searle makes the stronger claim, namely that all social action is collective action. As I outlined earlier, he stipulates that all social facts involve collective intentionality. So, for Searle, social facts are not merely concerned with action which takes into account the behaviour of others; for him, social facts involve action that takes into account the behaviour of others *and is reciprocated.*

This stipulation that social facts are collective facts arguably leaves out some social phenomena and therefore there is a lacuna in Searle's account of social reality. This lacuna is very apparent in the economic sphere where often a number of non-collective actions precede and lead to or result in collective actions. For example, farmers often take into account the behaviour of other farmers in their various decisions concerning which crops to plant, when to harvest, whether to keep animals over the winter, which livestock to purchase, and so on. A farmer is more likely to change his crop if he believes

that too many other farmers will be raising his original crop and will therefore create a glut. In the event of the farmer not changing his crop, the glut would mean that either the farmer would not be able to engage in economic transactions at the price he requires or else, if the glut were to be very severe, he would not be able to engage in any economic exchange at all. These individual decisions by farmers are economic actions and such economic actions result in all sorts of economic and social effects, such as changes in prices, market supply, agricultural employment rates and changes in profits, to mention a few. They are social actions in that they are performed in response to the actions or anticipated actions of others and their performance will have effects on others, including their future decisions. From this example it is clear that economic or social action involves both collective and non-collective economic or social action and that collective and non-collective social or economic action go to make up the kind of social or economic reality faced by individuals and groups.

2.3 Critique of Searle's Account of Social Reality.

Having discussed some of the various ancillary difficulties with Searle's account of social reality I want now to see whether some of the central points of his argument stand up to scrutiny. The foundation of Searle's account of social reality and the main point that differentiates his account from others is his particular notion of collective intentionality. For Searle, all social action is collective and therefore it is not surprising that he uses a notion of collective intentionality to underpin his account of social reality. As I outlined earlier, Searle presents his particular notion of collective intentionality as a solution to a putative dilemma between reductionism and some sort of Hegelian world spirit or collective consciousness. The Hegelian alternative is obviously implausible, according to Searle, but "the requirements of methodological individualism seem to force us to reduce collective intentionality to individual intentionality." (Searle 1995, 25). The problem with the term 'methodological individualism' is that it has several different meanings. In an effort to understand how it is that the requirements of methodological individualism seem to force us to reduce collective intentionality to individuality, I want to first examine

what Searle means by that term.

2.3.1 'Methodological Individualism'

Searle does not tell us exactly what he means by methodological individualism nor how it is that methodological individualism might be seen as forcing us into reducing collective intentionality to individual intentionality, as he claims it does. This is important in that, at least in the way Popper construed it, methodological individualism need not force us into such a move at all; if this is the case, then there would be no putative dilemma and therefore no need for Searle's particular notion of collective intentionality. Popper saw methodological individualism as the claim that "the 'behaviour' and the 'actions' of collectives, such as states or social groups, must be reduced to the behaviour and the actions of human individuals." (Popper 1966, Vol. 2, 91). But he rejected what he termed psychologism, "the doctrine that, society being the product of interacting minds, social laws must ultimately be reducible to psychological laws, since the events of social life, including its conventions, must be the outcome of motives springing from the minds of individual men." (Popper 1966, Vol. 2, 90). Popper would have rejected completely the idea that methodological individualism would force any reduction of collective intentionality to individual intentionality because that would have amounted to psychologism. In fact, he claimed that if such reduction were to be attempted at all, it would be "more hopeful to attempt a reduction or interpretation of psychology in terms of sociology than the other way around." (Popper 1966, Vol. 2, 93).

It is obvious that Searle does not share Popper's views on methodological individualism or psychologism. But it is still not clear why he thinks that methodological individualism seems to be forcing us into reducing collective intentionality to individual intentionality. The problem with methodological individualism is that, since there are different interpretations and claims associated with it, merely invoking it, as Searle does, provides the reader with no insight into how the subsequent argument is supposed to work. What follows is an attempt to disambiguate Searle's use of the term in the particular context in which he uses it. I will also attempt to uncover which aspect of the principle of methodological individualism Searle adheres to and how it is supposed to force us down

the reductionist path.

Textbook accounts identify several related claims within the principle of methodological individualism: these can be labelled as the conceptual, metaphysical and explanatory theses.[52] The conceptual or meaning thesis is the claim that social concepts must be definable in terms of concepts relating to individuals. This can be presented as the claim that all social concepts in social discourse must be translatable without remainder into psychological concepts in psychological discourse, as Ruben outlines (Ruben 1998, 425). It is safe to say that this is not the thesis that Searle has in mind given that Searle is concerned with the way the requirements of the principle of methodological individualism "seem to force us to reduce collective intentionality to individual intentionality" (Searle 1995, 25) and is therefore not concerned with the translation of collective intentionality into individual intentionality as such. Although the conceptual thesis can be stated in such a way as to say that it requires the reduction of social concepts to concepts concerning the individual, Searle is not concerned with the latter.

At first blush, the explanatory thesis might appear to be what Searle has in mind when he invokes methodological individualism. This thesis, according to Little, is the claim that "all social facts and regularities must ultimately be explicable in terms of facts about individuals - their motives, powers, beliefs, capacities." (Little 1991, 186). Or as Ruben puts it, the thesis "is that *ultimately*, for every explanatory chain containing at least one social fact, as one moves to the left, the chain at some point will become social-fact-free and remains so, no matter how far to the left one travels." (Ruben 1998, 429-430). At first glance Searle could be interpreted as adopting the explanatory thesis; on such an interpretation Searle could be claiming that the principle of methodological individualism seems to force us to explain collective intentionality in terms of individual intentionality. Although there are linkages between the metaphysical and the explanatory theses, I can think of two reasons why this interpretation is likely to be false. First, the central theme running throughout Searle's *The Construction of Social Reality* is one of ontology rather than explanation. Second, other aspects of his account cast doubt in his intention to adopt

[52]Although they use slightly different terminology, these distinctions are explained in the following two works: Little, 1991, Chapter 9 and Ruben 1998, pp. 424-432.

methodological individualism as an explanatory thesis. There is an ambiguity in his account in this regard; on one hand he could be interpreted as claiming that collective intentionality can be explained by reference to facts about individuals and their minds and not by reference to social entities. But on the other hand, in claiming that collective intentionality, a social phenomenon or fact, is a primitive and therefore beyond explanation in terms of some other non-collective or individualist phenomena or facts, Searle cannot be seen to be adhering to the spirit of the principle of methodological individualism as an explanatory thesis.

Given his claims for his notion of collective intentionality, this raises the question as to whether he can coherently claim to be an adherent of methodological individualism of any kind. The last one on our list, the metaphysical or ontological thesis, involves the claim, according to Little, that "all social entities are reducible without remainder to logical compounds of individuals" and are "*nothing but* ensembles of individuals in various relations to one another." (Little 1991, 183). As Ruben puts it, the metaphysical thesis claims that social phenomena "are merely (sets of?) individuals in certain psychological states (and who stand in certain relations)." (Ruben 1998, 427). In a certain sense, this appears to be the variety of methodological individualism that Searle wants to appeal to when he invokes the principle. When he contrasts the alternatives of Hegelian world spirit or collective consciousness with the reduction of collective intentionality to individual intentionality, he appears to be making an ontological point concerning collective intentionality. But Searle then renders the metaphysical thesis problematic by invoking collective intentionality in the way that he does because then, according to his account, social phenomena do not consist of individuals who stand in certain external relations; instead, according to Searle, what is required for a social fact to obtain is that the relevant we-intention must be present within each of the heads of every member of the putative collective. Although this could be construed as a relation between individuals, or at any rate between putative mental states of individuals, it is not what is usually understood by relation in this context.

In a discussion which predates *The Construction of Social Reality* by several years, Searle refers to two constraints with respect to collective intentionality; the second one refers to

the brain in a vat condition but the first is worth reproducing in full:

> "It [collective intentionality] must be consistent with the fact that society consists of nothing but individuals. Since society consists entirely of individuals, there cannot be a group mind or group consciousness. All consciousness is in individual minds, in individual brains." (Searle 1990, 406).

In the first two sentences of this constraint, Searle says enough to allow us to say that by methodological individualism he means the ontological thesis. But in making consciousness an internal matter within the same constraint, his understanding of ontological individualism is indicated by his extreme internalism. This is brought out well in a footnote referring to this constraint and the brain in a vat constraint, Searle comments as follows:

> "Readers will recognize that these two constraints are close to "methodological individualism" and "methodological solipsism" as traditionally construed. I am anxious if possible to avoid sinking into the morass of the traditional disputes, so I am trying to present a version of these in which they can be construed as just commonsensical, pretheoretic requirements." (Searle 1990, 415, fn 1).

It is hard to locate Searle's first constraint in any of the accounts of methodological individualism as traditionally construed. On one hand, his claims about consciousness being located within the brain does not belong in any of the accounts from the social science tradition; on the other hand, the claim that society must only consist of individuals does not belong in the traditions of the Philosophy of Mind. Searle's footnote, quoted above, is oddly reminiscent of a distinction drawn by Fodor between methodological solipsism and methodological individualism; according to Fodor, methodological individualism "is the doctrine that psychological states are individuated *with respect to their causal powers*" whereas methodological solipsism "is the doctrine that psychological states are individuated *without respect to their semantic evaluation.*" (Fodor, 1987, 42).[53] But while this might indicate what Searle meant when he referred to

[53]There is another possibility, which is that Searle did not intend to adopt methodological individualism as it is understood in the philosophy of social

the traditions of methodological individualism and methodological solipsism, it does not help us in gaining a precise understanding of what he means by methodological individualism, except that he intends it to be taken in some vague ontological sense. But the trouble with this vagueness is that it allows for a slippage between the categories of the social and the mental and in doing so fails to be informative. It also leaves open the question as to why Searle is making use of the term, especially since he does not use it in strict accordance with any of the recognized usages.

2.3.2. The Regress Problem.

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science. In the very small number of cases where the term methodological individualism has appeared in the context of the philosophy of mind, it is used to refer to internalism or to a specific version of that thesis. For instance, under the entry for 'Methodological Individualism' in *The Routledge Encyclopedia of Philosophy, Vol. 6.*, Edward Craig ed., 1998, pp. 341-344, Gabriel Segal claims that methodological individualism is "the thesis that certain psychological properties are intrinsic properties, such as 'being made our of iron,' rather than externally relational properties, such as 'being an aunt'."More specifically, he claims that methodological individualism is the view that "every psychological state has a narrow content." The only other reference to this use of the term 'methodological individualism' in the context of the philosophy of mind that I have been able to discern, and probably the source of this use of the term in this context, is Fodor 1987, Chapter 2, esp. pp. 42-43.

We are now in a better position to appreciate Searle's construal of methodological individualism and how it bears on the regress problem. The Hegelian option of some sort of collective consciousness is obviously implausible, according to Searle. But while the requirements of methodological individualism seem to force us to reduce collective intentionality to individual intentionality, this alternative of reducing collective intentionality to individual intentionality plus something else, such as mutual beliefs, gives rise to an infinite regress, according to Searle. The problem with incorporating mutual beliefs into collective intentions, as Searle sees it, is that if we intend to do something together, then I have to have beliefs about you and you about me and I have to have beliefs about your beliefs and you about my beliefs and in turn each has to have beliefs about those other beliefs, and so on, giving rise to "a potentially infinite hierarchy of beliefs." (Searle 1995, 24). So, the regress problem makes the reductionist alternative impossible and therefore we are forced to opt either for the implausible Hegelian alternative or Searle's notion of collective intentionality.

Is the regress inevitable and must it have the devastating consequences as Searle claims? Clearly, if some way can be found by which we-intentions could be generated from I-intentions plus some mutual beliefs, then the original dilemma would never arise nor would the need for postulating collective intentionality. It is not that Searle is alone in noticing this regress; what is unusual about his view is that he thinks that the regress is vicious in a practical sense. For instance, Tuomela and Miller have a completely different take (if a more orthodox one) on the question of mutual beliefs and social action. They see mutual beliefs as a necessary ingredient in joint social action.[54] To use their example,

[54]Searle uses the term 'collective' to include both joint social action and the weaker notion of action that is collective but not joint social action; I am using the phrase 'joint social action' here in the sense that Tuomela and Miller use it, namely to refer to situations where agents act in a coordinated manner with the purpose of achieving a specific goal. There are weaker forms of collective action, for instance, where the action can be said to be collective but where the goal is less specific or the element of togetherness is diluted. For example, going to a party may well be a collective act but it requires very little coordination and the goal itself is somewhat diffuse, especially if everyone arrives at different times, expects different people to be there and leaves at different times. So, although the example that Tuomela and Miller cite is applicable to joint social action, this does not detract from the point that I go on to

if two murderers try to give a lethal poison to a third party without either murderer harbouring beliefs about the other's intentions, then we cannot say that both jointly intended to kill their victim. According to Tuomela and Miller, one central reason why we cannot claim that they jointly intended the outcome is that "each lacks a belief that the other one will intentionally do his part of the action." (Tuomela and Miller 1988, 371). This claim leads them directly to the question of the regress; although it is worded differently from Searle's version, the intended meaning is the same. However, as is plain from the quotation below, the regress causes them no practical concerns:

> "A mutual belief, ideally and in the strongest sense, that everyone (viz. every participant) will do *X*, consists in everyone's believing that everyone will do *X* and everyone's believing that everyone believes that everyone will do *X*, and so on theoretically *ad infinitum* (even if in actual practice only two or three layers may be needed)." (Tuomela and Miller 1988, 371).

This point is similar to that made by Ruben in his discussion of nested systems of interlocking beliefs and expectations. Like Searle, Ruben only allows relations to be social if they are reciprocal; in other words, for Ruben all social relations are collective. Ruben's claim is that for any two or more persons to have social relations, they must have interlocking beliefs and expectations about each others actions. For instance, "in the case of x paying y for a stone, x will expect y to surrender the stone in return for something that x gives y, and x will expect that y will not try to regain control of the stone unless in return for something x willingly accepts from y." But Ruben claims that there is an additional requirement, which is that there will be second-order beliefs and expectations which will be interlocking beliefs and expectations about the other party's beliefs and expectations.

> "In the standard case, x believes that y has these beliefs and expectations; y believes that x has these beliefs and expectations; x believes that y believes that x has them; y believes that x believes that y has them; and so on." (Ruben 1985,

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make, which is that the admission of mutual beliefs into an account of social action does not create a practical difficulty.

109-110).

Although Ruben agrees that there is a regress, he does not believe that it is, in any practical sense, a vicious one. According to his view, the beliefs in question are typically dispositional rather than occurrent and therefore the regress does not deny the practical possibility of the individuals engaging in social relations in the manner suggested. As Ruben points out, "the regress is limited by the natural ability of agents to form third- or fourth-order beliefs and expectations." (Ruben 1985, 110).

So, given that others do not find the regress to be an obstacle, at least in the practical sense, why does Searle find it so compelling? For the regress to be an obstacle for Searle he must believe that the regress make it *practically* impossible to achieve a we-intention through the combination of I-intentions plus mutual beliefs. To show what I mean by practical impossibility and why I think that it is wrong for Searle to see the regress as making it practically impossible to achieve a we-intention in this way, I will make use one of Zeno's paradoxes. According to one of these well-known paradoxes, before a runner can run a specific distance he must already have run half of that distance; before running half of that distance, he must already have run half of that again, namely a quarter of the whole distance, and so on. The problem is that since the original distance can be thus divided into an infinite number of successive distances, how would it be possible for a runner to complete the whole distance if he had to complete the infinite number of successive segments in a finite amount of time?

While I do not present any solution to this paradox here, I still want to make use of the important point which it illustrates for our purposes. In the minds of most readers, Zeno's paradox does not create a practical difficulty; no one claims that runners are thereby not able to complete races. Analogously, Searle appears to be claiming that his regress amounts to more than a thorny theoretical problem; unlike the Zeno example of a regress, his creates a *practical* impossibility for an individual to run through the infinite number of mutual beliefs so as to generate a we-intention. In other words, if, *per impossibile*, two or more individuals were to attempt to harbour mutual beliefs along the lines suggested, they would never be able to work through the infinite hierarchy of beliefs involved in a finite period of time and therefore would never succeed in arriving at a we-intention. But Searle

never engages in any discussion on why he believes that individuals would have to work through the entire hierarchy of mutual beliefs before the requisite we-intention could be generated. This adherence to the regress problem is especially unusual in the light of his views on the circularity and infinite regress issues that result from self-referentiality in the definition of social kinds, such as money, and the circularity that emerges in some instances of his formula, X counts as Y in C. If the self-referentiality of social kinds and the circularity of some instances of his formula for institutional facts do not pose practical problems for Searle, then why does "the potentially infinite hierarchy of mutual beliefs" create a practical problem?

2.3.3 De Re Beliefs and the Regress Problem

Given the various criticisms I have outlined above, why does Searle insist that there is an issue to answer with respect to the regress problem? The explanation I favour is that the regress problem arises out of his particular views of the de re/de dicto distinction which in turn follow from his internalist views with respect to the philosophy of mind. Although this strikes me as the best explanation, it will require some setting up and I must ask the reader's indulgence in doing this.

Searle's internalism, often referred to as his brain in a vat condition, dictates that none of one's mental states can involve anything outside of the head. This carries the implication that all beliefs and intentional states, being mental states, must be de dicto, according to Searle's account. For Searle, there cannot be de re beliefs if this means that something that is not in the head is involved in a belief, if that belief involves a direct relation between the believer and some object in the world. In the case of the regress problem, the beliefs in the putative infinite hierarchy of beliefs are de dicto, as all beliefs must be, according to Searle's position. But restricting individuals to de dicto beliefs is bound to lead to infinite hierarchies in cases of mutual beliefs, as I will discuss below.

It would not be surprising if readers were to wonder whether I am running the de re/de

dicto distinction and the internalism/externalism debates too closely. Historically the earliest writings on the subject of the de re/de dicto distinction were largely concerned with the application of the distinction in modal logic; in the case of necessity, such discussions involved the distinction between de dicto necessity and de re necessity where the former involves the application of the predicate 'is necessary' to a dictum or proposition while the latter involves the attribution of a modal predicate to either one or more entities or individuals.[55] "The proposition that every man who steps on the moon steps on the moon, is necessary," is an example of de dicto necessity whereas "Every man who steps on the moon is such that he necessarily steps on the moon" is an example of de re necessity.[56] According to a more recent tradition begun by Quine, the de re/de dicto distinction also concerned differences in the scope of terms in the subordinate clauses of propositional attitudes; in other words the distinction was used to explain the logical consequences of a characteristic of propositional attitudes, namely opacity (Quine 1956). In both the earliest and the Quinean forms just outlined, this distinction has nothing to do with internalism or externalism as understood in the philosophy of mind. However, having been relocated to the philosophy of mind, following the writings of Burge, the distinction became more an epistemic one than a logical one. But although Searle rejects Burge's claim for a distinction between de re and de dicto beliefs by denying that there can be de re beliefs proper, at no stage does he actually engage with Burge's arguments. Rather, the running together of the de re/de dicto distinction by Searle is an artifice of his own account of intentionality, as we shall see.

Lets briefly consider Burge's account. While acknowledging the traditional views of the de re/de dicto distinction, Burge claims that there is also an important epistemic basis for the distinction with respect to beliefs. According to Burge, a de dicto belief, from the traditional semantical viewpoint, "is a belief in which the believer is related only to a completely expressed proposition" whereas from the epistemic viewpoint it "*is a belief*

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[55]See Nagel et al., 1962, pp. 622-633.

[56]These examples are taken from Burge, 1977, pp. 339-340.

that is fully conceptualized." (Burge 1977, 345 [Burge's italics]). What is important is that de dicto beliefs from the epistemic viewpoint are identified "purely by reference to a "content" all of whose semantically relevant components characterize elements in the believer's conceptual repertoire." (Burge 1977, 346). On the other hand, a de re belief from the epistemic viewpoint is one "whose correct ascription places the believer in an appropriate nonconceptual relation to objects the belief is about." (Burge 1977, 346). Burge does not mean that no concepts or other mental notions will be involved in such a relation. All that matters is that "the relation not be merely that of the concepts being concepts of the object." (Burge 1977, 346). Burge goes on to claim that de re beliefs are more fundamental than de dicto beliefs (Burge 1977, 339). Briefly, when one focuses on the role that such de re beliefs play in the basic cognitive contexts of child development, it is clear that the first sentences used by children "are invariably keyed to their immediate, perceptually accessible surroundings" and that the attitudes associated with such use are invariably de re (Burge 1977, 347). If an entity lacked such de re attitudes, "we would not attribute to it the use or understanding of language, or indeed propositional attitudes at all," according to Burge (Burge 1977, 347). It is unfortunate that at no stage does Searle deal with Burge's claims concerning the epistemic aspects of de re beliefs and attitudes, especially his claim that entities that lack such de re attitudes cannot be attributed the use or understanding of language.

De re beliefs in this epistemic sense are ruled out as impossible, according to Searle. De re beliefs in this sense "are relations between believers and objects; for them, if the world were different in certain ways, the beliefs themselves would be different even though what is in the head remained unchanged." (Searle 1983, 209). For Searle, de re beliefs in this sense are impossible because they are not consistent with the brain in a vat condition; they are not completely contained in the head. Although Searle's brain in a vat condition rules out de re beliefs, it must be emphasised, however, that Searle does not deny that some beliefs are about real people, things or states of affairs. He allows that we can choose to use the term 'de re' to describe those beliefs so as to distinguish them from beliefs that are not about or directed at real people, things or states of affairs. But this minimal sense of de re does not allow that beliefs can be individuated or identified by anything outside the head. All beliefs are de dicto, according to Searle, because all

intentional states "are entirely constituted by their Intentional content and psychological mode, both of which are in the head." (Searle 1983, 208). Beliefs are necessarily de dicto because they are independent of how the world actually is, according to this view. De re beliefs, in the special and minimal sense allowed by Searle, form a subset of de dicto beliefs.

But in denying that beliefs can be de re, Searle does not deny that there are beliefs "that are not fully conceptual in the sense that they do not consist in verbal descriptions in general terms." (Searle 1983, 211). Another possibility exists, according to Searle, in that "there are forms of Intentionality which are not general but particular and yet are entirely in the head." (Searle 1983, 211). Certain forms of intentionality contain self-referential elements, Searle claims, and this is sufficient to deal with de re beliefs in his narrow sense. Searle goes even further by claiming that a belief, "even though it is not characterizable in general terms and contains nonverbal forms of Intentionality," is still de dicto; for instance, "many beliefs contain, for example, a perceptual content," according to Searle (Searle 1983, 214). To establish what this amounts to, it is instructive to examine his account of visual experience because it will illustrate what Searle means by self-referentiality in this sense and how it is that there can be no de re beliefs proper. Since Searle considers perception to be more basic or "primordial" than belief even though both share a similar structure because they are both intentional states (Searle 1983, 36), explaining belief with reference to perception within his account is perfectly proper.

For Searle, the content of a visual experience is causally self-referential in that while the content is "entirely specified by stating the conditions of satisfaction of the experience, that statement makes essential reference to the visual experience itself in the conditions of satisfaction." (Searle 1983, 48). According to Searle, for a visual experience to be veridical, not only must it be the case that the world is as it visually appears to me, it must also be the case that the way the world is has caused me to have the visual experience in question. "The sense in which the visual experience is self-referential is simply that it figures in its own conditions of satisfaction" (Searle 1983, 49); the self-referentiality of the visual experience is shown but not seen, according to Searle.[57]

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[57]There are a number of problems which Searle's account of causal self-

referentiality raises for his brain in a vat condition. First, in the case of visual experience, it is not clear what is being referred to when Searle speaks of the content of such experience being causally self-referential. There are many things that are causing a visual experience even when it is veridical, including various chemical changes in the retina, neural firings in the optic nerve and other neural firings in the brain. (This criticism is made in Lepore and Loewer 1986, pp. 608.). In addition, how do we specify the particular cause, in this case an external cause, without compromising the brain in a vat condition? Moreover, it is not at all clear how assigning meanings to "external cause" or "visual experience" can be said not to presuppose the existence of anything outside the head. This can be generalised to all intentional states in Searle's account; under the brain in a vat condition, by virtue of what can something inside the head refer to something outside the head?

In an analogous manner, the contents of non-perceptual intentional states can also contain self-referential elements although they will not be *causally* self-referential. For instance, indexical expressions are self-referential to their utterance although this self-referentiality is "shown but not said," according to this account (Searle 1983, 213). For Searle the lexical meaning of the indexical expression by itself does not determine which object is being referred to. But instead of appealing to some contextual feature that is external to the person, Searle claims that the user of the indexical expression refers "by means of indicating relations in which the object referred to stands to the utterance of the expression itself." (Searle 1983, 221). So, when someone uses the word "I," that person is referring to himself or herself. "You" refers to the person addressed in the utterance of the expression while "here" refers to the place of the utterance and so on. While still retaining the view that there are no de re attitudes, what Searle is doing is trying to avoid a descriptive or translational theory such that "this" is translated as "the table" or where the indexical expression can be readily translated into some descriptive phrase.[58]

Returning now to the question of the regress problem, if all my beliefs must observe Searle's strictures to the extent that they must all be de dicto beliefs, it is no surprise that if I attempted to entertain a mutual belief concerning someone else I would encounter the regress problem. Since I can only be related to the purely propositional contents of my beliefs in this de dicto sense, and if such contents are themselves beliefs with contents that are wholly propositional and in turn are also beliefs, it should not be surprising that when my mutual belief is spelled out in all its content, it will be an infinite regress of the

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[58]By denying that indexicals can be translated into descriptions in this way, Searle avoids the immediate problem which Devitt calls "passing the referential buck." While one can use a description theory to explain the referential properties of one category in terms of another and one can in turn explain the latter category in terms of yet another category and so on, there must come a point where this process stops, "otherwise language as a whole is cut loose from the world." See Devitt, 1990, pp. 82.

form, "I believe that you believe that I believe that you believe . . ." The only way Searle see of avoiding the regress is by invoking collective intentionality.

An obvious response in the face of such regresses would be to deny that the contents of at least some beliefs are propositional, to deny that all beliefs are de dicto. In the case of mutual beliefs, all that is required is for one individual to have a de re belief, albeit a complex one, concerning the another party and the latter to have a de re belief concerning the former. For instance, the first can have a belief of the second that the second intends to participate or is prepared to participate in some activity with the first just as long as the first also intends to participate as well; likewise, the second can have a similar belief of the first. Additional de re beliefs might be required, such as the belief that the other party is reliable or physically capable and so on. So, a we-intention can be realised in this way through two or more individuals having singular beliefs and singular intentions only, just so long as the beliefs are de re. Of course such beliefs are defeasible. But the issue here is that mutual beliefs can be expressed without running into infinite regresses and without the subsequent need for postulating additional biological or psychological primitives. If there is no regress problem, the alternative of collective intentions capable of being reduced to individual intentions plus mutual beliefs is open to us.

2.3.4 Refutation of Searle's Notion of Collective Intentionality: a Counterexample.

Having outlined the unusual constellation of views that compel Searle to postulate collective intentionality, in this section I will demonstrate, by way of a counterexample, that Searle's notion of collective intentionality is untenable. As I have already outlined, a social fact, for Searle, is any fact that involves collective intentionality.[59] Also, as his ballet in the park example is meant to demonstrate, two cases of behaviour may appear identical, when viewed externally, but one can involve collective intentionality on the part of the participants while the other does not. According to this account, collective intentionality is contained within the head and therefore "must be consistent with the fact

[59]It must be remembered that, for Searle, all social action is collective action.

that the structure of any individual's intentionality has to be independent of the fact of whether or not he is getting things right, whether or not he is radically mistaken about what is actually occurring." (Searle 1990, 406). This internalism with respect to social facts gives rise to the conclusion that although an individual may harbour a we-intention, that individual is never sure whether others in the putative collective share the same we-intention because he has no way of ascertaining whether any of the others also harbours that we-intention. No one inside the group or, by the same inference, outside the group, can ever be sure that he is not radically mistaken with respect to whether certain we-intentions are shared or not among that group.

But there is a problem with this account. In the case of many kinds of social or economic facts it is crucial that the participants and others be able to establish the occurrence of the fact in question in some way. I will show later that this is a necessary condition for a number of social and economic facts. In fact, certain of these facts, of necessity, create evidence of their occurrence so that it can be established later whether they occurred or not. The problem with Searle's account is that, by claiming that all social facts involve collective intentionality which in turn is contained within the head and therefore only available to the individual subject, he rules out the possibility of establishing whether the social fact obtained or not. All any individual can establish is that he or she is entertaining or has entertained the relevant we-intention.

The example I have chosen to provide a concrete illustration of this problem is that of a single economic transaction between two parties. I have chosen this example for several reasons. Economic transactions are social facts, as Searle would allow. As I pointed out earlier, for Searle collective intentionality covers all kinds of collective social activity just so long as there is a common goal, which in this case is to arrive at a successful exchange of goods, services or money. It does not matter that the actual actions performed by each party are different; what matters is that, for instance, "*I* am doing something only as part of *our* doing something." (Searle 1995, 23). It does not matter that each party to an economic transaction has his or her own personal agenda and is interested solely in the outcome as it applies to him or her. Searle allows that conflict can play a part in social facts. For example, he claims that prizefighters engaging in a boxing match, opposing

litigants in a court case or even two faculty members trading insults at a cocktail party "are all engaged in cooperative collective behaviour at a higher level, within which the antagonistic hostile behavior can take place." So, economic exchanges bear all the hallmarks of Searle's account of collective intentionality.

In addition, an economic transaction is an obvious choice as an example when one is trying to shed light on economic phenomena. Although my example involves an economic phenomenon, it can easily be generalized to at least some other social phenomena, such as voting or marrying.

The example I am proposing is of an economic exchange that has gone wrong. Exactly what has gone wrong is not of great importance but, for the sake of clarity, lets say that the exchange has actually taken place but that the goods have not been delivered by one side. What matters is that one party is attempting to show that there had been a *bone fide* economic transaction involving another party and that the latter has reneged on the transaction. Let us also assume that this aggrieved party has resorted to the law to prove his case. In court the defendant claims that there never had been an economic transaction at all. In examining such a no-transaction defence on behalf of one party, a court will usually be expected to review any evidence to establish or indicate whether there had actually been a transaction or whether there had been any intention to enter into the transaction by the defendant. (In legal terms, the court would attempt to establish whether a contract existed, either implied or otherwise, between the two parties.) Statements made in front of third parties, undertakings entered into at the time, letters, invoices, contracts, signed delivery dockets or down payments are the sort of evidence that a court will examine in determining whether there had been a *bone fide* economic transaction or contract.

But if we are to follow Searle's account, the defendant can simply deny that there ever had been a social fact in the form of the putative economic transaction, despite any purported evidence to the contrary, because he had not harboured any relevant we-intention in relation to such a putative transaction. While he cannot say anything about what went on in the plaintiff's head, according to Searle's account, he does know for

certain what went on inside his own head and no one else can gainsay that. Since, in accordance with Searle's account, neither the plaintiff nor anyone else is in a position to say what went on inside the defendant's head and since, as I pointed out earlier, Searle claims that any party to a putative social fact can be radically mistaken about whether there ever was such a social fact, if the court were to accept Searle's account of social facts it could not enforce contracts or economic transactions. Any purported external evidence, such as invoices, signed contracts or the like, would not be admissible because such evidence could never establish that a social fact had occurred because it could never establish collective intentionality inside the relevant heads at the appropriate time. As the ballet in the park example is meant to show, a case of behaviour which does not involve collective intentionality may, when viewed externally, be indistinguishable from another case which does involve collective intentionality. The purported evidence may be consistent with facts that are not social facts; the defendant can claim that he had not harboured any we-intention with respect to the other party. Alternatively, the purported evidence could be consistent with other social facts that do not involve an actual economic transaction; the defendant can claim that he harboured a we-intention with respect to the other party but that it was to act *as if* they were engaging in an economic transaction but not actually engaging in that transaction.

This point can be generalized over many non-economic social facts as well as economic facts. Without any independent criteria to establish whether a social fact had occurred or not, it would be impossible to say whether any social or institutional fact had actually occurred. For instance, it would be possible to claim in court that since one had not harboured the relevant we-intention at one's wedding, that one's marriage was void despite clear evidence of one uttering 'I do' at the right moment and signing the register. Or one could claim that one was not actually joining the political party when signing the relevant papers or that one was not actually voting when placing a tick in the relevant box on the ballot paper.[60] But clearly this is not what actually occurs in courts or in other aspects of social reality. Arguably, voting consists in placing the mark on the ballot

[60]Does voting involve collective intentionality along the lines of Searle's account? He would probably argue that the we-intention involved refers to the electorate, or at least to that part of it that has turned out to vote.

paper, just as getting married consists in uttering 'I do' and signing the register. Although such actions would not have meaning unless they were embedded within a rich social, institutional and legal framework or background, once that is in place all that matters in many cases is the creation of the external evidence without which the social fact could never be established as having occurred.

To return to the example of the economic transaction, a contract that is signed by both parties is binding regardless of the reported alleged hidden intentions, collective or individual, of either party (assuming of course that there are no unusual circumstances, such as allegations of coercive behaviour, pleas of insanity, incapacity and so on). By signing the contract, the defendant not only indicates his intention to enter into the transaction; by this signing of the contract he actually enters into the economic transaction. Even in cases where there are no signed contracts, all other forms of evidence are admissible, including witnessed handshakes, deposits paid, signed delivery dockets, and so on, in establishing whether or nor a transaction has taken place.

External factors are also important in the case of social institutions outside the economic sphere. Playing the part of the prospective spouse in signing the register and so on is tantamount to getting married. Filling out the party membership form is part and parcel of joining a political party. Making a mark in a box on the relevant form is voting. There may be instances where one might say that one performed the action of getting married, joining the party or voting for reasons other than the usual or proper ones. For instance, one can marry someone with the sole intention of getting one's hands on their money. Or one can join a party, not because one primarily wants to be a member of that party, but because one wants to infiltrate the party organization. But even in those cases, it is still the case that one got married or joined the party and so on. Given that this is the case, it makes no sense to maintain internalism with respect to social facts.

To summarize, I have shown that Searle's complex 'construction of social reality' labours under significant restrictions due to his extreme internalism. These restrictions compel him to postulate his notion of collective intentionality which, besides preventing him from recognizing social actions other than collective ones, also reintroduces an element of

privacy that is utterly incompatible with the need for public accessibility of the conditions on the basis of which we take social facts to obtain.

2.4 Bloor and Collin on Economic and Social Phenomena.

Now that I have rejected Searle's view of social reality, I want to focus attention on what I claim is the fundamental problem with contemporary accounts of money. As I pointed out at the beginning of this chapter, hardly any attention is paid to the nature of economic phenomena in contemporary writings. What little attention there is has been focused solely on money and the prevailing mistaken view, as exemplified by Searle's account, is that an account of money unproblematically falls out of an account of social reality. But Searle is not alone in thinking this. Collin and Bloor also run economic and non-economic social phenomena together as if there were no distinction. The issue is that although economic phenomena are also social phenomena, this does not mean that an account of an economic phenomenon, such as money, merely falls out of an account of social reality. As I briefly pointed out earlier and will show in greater detail in the next chapter, although economic phenomena cannot exist without a pre-existing social reality, one of the most important aspects of which is language, it is not the case that in merely providing an account of social reality one has also provided an account of economic reality. What follows in this section will be an outline and critique of the accounts of social reality from Bloor and Collin followed by a critique of both their and Searle's account of money. I will then show that all three accounts of money are too thin and that an account of money or any other economic phenomenon does not just simply fall out of an account of social facts.

2.4.1 Bloor on Social Institutions.

Bloor adheres to the so-called strong programme of the sociology of knowledge. With

Barnes, he claims that "all beliefs are on a par with one another with respect to the causes of their credibility." (Barnes and Bloor 1983, 23). The causes referred to here are sociological and include tradition, authority, vested interest and socialization. Even the truths of logic are amenable to sociological explanation, according to this view (Bloor 1997, 45). These aspects of this arch-relativist programme need not detain us here; all that is intended in referring to them is to provide the backdrop for Bloor's account of social phenomena.

However, in his later work where he examines social phenomena, Bloor seems to have stepped back from certain aspects of the strong programme of the sociology of knowledge. For instance, in a recent work he separates out those entities which are social kinds, such as "coins, monarchs, masters, slaves, etc." from natural kinds, such as "trees, pebbles, cats, waves, molecules etc." In fact he claims that natural kinds "have an existence independent of our regard" and that "the kind, class or concept may be of human invention, but the objects falling under the concept, or belonging to the kind or class, are not human inventions." (Bloor 1997, 30). But in making this distinction it would appear that Bloor is admitting that beliefs involving objects that are natural kinds are not amenable to sociological explanation.[61]

In any case, his point in his more recent work is that social kinds, such as coins, monarchs, masters and slaves, are dependent on us collectively for their existence qua social kinds whereas natural kinds are not. For instance, to use his example of money in the form of coins, the institution of money consists of the entire repertoire of behaviour associated with thinking of these pieces of metal as coins, treating them as coins, regarding them as coins. Such practices are self-referring in the sense that, for instance, these metal tokens are coins because they are called coins and are regarded as coins. The same holds true for other social institutions, such as property and marriage. Bloor also

[61]The issue of interpreting the original emphasis placed on purely sociological causes in the strong programme is a highly contentious one and will not be pursued here.

claims that social institutions "can be treated like giant performative utterances, produced by the social collective." (Bloor 1997, 32). While Bloor claims that "a performative utterance makes itself true by being uttered" (Bloor 1997, 32), he does not elaborate on why it is that social institutions can be treated as performative utterances beyond making the claim that they can be treated thus. Presumably he intends, following Barnes, to present such institutions as idealized social kinds, "the use of which is entirely and wholly constituted of such speech acts." (Barnes 1983, 525).

Bloor then sets as his task the location of these self-referential and performative processes within a collectivist interpretation of Wittgenstein's account of rules and rule following. While Bloor acknowledges that although Wittgenstein did not provide an account of institutions, he claims nevertheless that Wittgenstein used the notion of an institution and that Bloor's collectivist account of institutions can be applied to Wittgenstein's use of that notion. What Bloor's collectivist account of institutions amounts to is that the community supplies the standard of correctness in these self-referential performative processes. For Bloor, "ultimately there is no standard outside social collectivity according to which it can be judged." (Bloor 1997, 71). Normative standards arise due to consensus among interacting rule followers and "it is maintained by collectively monitoring, controlling and sanctioning their respective individual tendencies." (Bloor 1997, 17). As I will show below and in my discussion of Collin, this is a problematic claim.

For Bloor, a social institution "is a collective pattern of self-referring activity." (Bloor 1997, 33). Philosophically speaking, he sees social institutions as self-referential and performative processes which are located within a collectivist view of Wittgenstein's account of rules and rule-following. So, for Bloor a rule is a social institution and following a rule is participating in a social institution. Such institutions "can usefully be analysed in terms of collective processes having a self-referring or performative character." (Bloor 1997, 134). But the problem with this self-referring character of institutions is that any attempt to explain an institution, in the sense of providing a synchronic account of that institution, is going to be circular because the *explanans* itself will require mention of the *explanandum,* as I outlined earlier in this chapter with

reference to the institution of money. Because the process is self-referring, the origin must lie outside the process itself, according to Bloor (Bloor 1997, 32). Although it is not possible to justify or rationalise such practices without circularity, according to his account it is possible to demonstrate how they came about in terms of Barnes' concept of 'priming the system' (Barnes 1983, 532). So, "any complete account of an institution must try to show how the self-referring system can be set in motion by something outside itself," and therefore "the 'circularity' is then confined to discourse within the institution, once it is a going concern." (Bloor 1996, 843). In other words, a separate account of how the system originated or was primed is required "because the origins of the system must be understood in terms lying outside the system itself." (Bloor 1997, 32). While this is an important point which is reflected in my claim concerning the requirement for a diachronic as opposed to a synchronic account of social phenomena, both Bloor and Barnes provide only one example of priming the system, namely in the case of money. I will be examining this example in a separate section below which will be concerned with Bloor's account of money.

While there are a number of problems with Bloor's analysis of social institutions, including a vagueness concerning exactly how social institutions arise, I want to restrict my critique to the following difficulty. There is a lacuna in his account in that while his account is arguably applicable to basic social conventions where the participants rely for a standard of correctness merely on what people think or do, it cannot be applied to more complex institutions where the participants can be mistaken with respect to the standards of correctness involved in those institutions. As I will outline later in my evaluation of Collin's account, the more complex institutions must in some way be independent of their participants in that there has to be some way in which each institution indicates how participants ideally ought to proceed according to the institution. The problem with complex institutions is that the standards of correctness are too complex for them to be amenable to consensus. In addition, while certain kinds of social phenomena are arguably very changeable and new phenomena emerge while others die off, many of our more complex social institutions are surprisingly long-lived. Institutions such as economic exchange and property rights have proved to be very robust; even the institution of marriage survives, albeit with some changes in its internal rules such as the right to

divorce. The longevity or permanence of certain more complex institutions is not explained by Bloor's account; if consensus is the only standard of correctness within such institutions, how is it possible for consensus to have remained so constant throughout the generations?

2.4.2 Collin, Complex Institutions and the Lewis Account of Conventions.

Although Bloor is not mentioned by Collin in his critique of various accounts of social reality, the latter rejects the project of the sociology of knowledge along with what he terms 'broad arguments' in favour of social construction. What he means by broad arguments are those "based upon certain general premises of an idealist nature, to the effect that we generate reality as the object of our cognitive activities;" these arguments "in principle pertain to natural as well as social fact." (Collin 1997, 21). In rejecting such arguments Collin develops what he terms a 'narrow argument' of social construction, which, as I will outline presently, is an argument based on the well-known Lewis account of convention; by narrow argument Collin means an argument in favour of social construction that pertains to social facts only.

Collin takes as the foundation to his account of social reality Lewis's analysis of convention (Lewis 1969) although he adds some modifications later. According to Lewis, conventions are stable solutions to what he calls 'coordination problems'. His account begins with an analysis of circumstances which approximate what are described in game theoretic terms as 'games of pure coordination'; in such scenarios, individuals are taken to have coinciding interests but no ways of communicating with each other. The point about such problems of coordination is that they have no unique solution. Instead, there are multiple 'coordination equilibria' available and each coordination equilibrium is a possible favoured outcome just so long as all participants choose it. This is because each individual prefers that everyone else also conforms to that single solution. Given that there are multiple coordination equilibria available and no unique solution and given that there can be no communication between the participants, the coordination problem

facing the participants amounts to how all participants can independently arrive at the same coordination equilibrium. The following examples will illustrate the point:[62] a group of people want to meet for some purpose; while the coordination equilibria are numerous in that there are many places where they could meet, the coordination problem facing them is one of how to chose a single meeting point in the absence of any communication among the participants. Another example involves car drivers who would prefer to collectively drive exclusively either on one side of the road or the other; while there are two coordination equilibria in this scenario, either drive on the left or drive on the right, the coordination problem is to decide, without communicating, which side everyone is to adopt. The point is that car drivers do not have a preference for either the left or the right sides just so long as everyone drives on the same side.[63]

The latter two examples are meant to show how such coordination problems arise although they do not indicate how such problems can be solved. Lewis believes that many such coordination problems can be overcome because there is often some salient feature of the situation which favours one coordination solution over another. What makes a feature salient it that it has to be unique in some way such that each of the participants will notice the unique feature and each will expect that the others will notice it as well (Lewis 1969, 35-36). In the case of familiar coordination problems the source of the mutual expectations among the individual participant is precedent (Lewis 1969, 36). In other words, past solutions of similar coordination problems inform the participants' expectations with respect to the current one. One of Lewis's own examples illustrates these points (Lewis 1969, 43); two persons are cut off in the middle of a phone call and both wish to resume the conversation. The problem is that if each tries to call the other, both will get a busy signal but if neither calls back the conversation will not continue. There are two coordination equilibria; either the original caller phones back while the other waits for the call or the original caller waits for the call while the other phones back.

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[62]These examples appear in Lewis 1969, pp. 5-6.

[63]Both examples appear in Collin 1997, pp. 201-202.

The coordination problem facing the two callers is how to realise one of these coordination equilibria collectively. Lewis suggests that there may be a reason why one of the coordination equilibria might be favoured over the other, which is that the original caller would be more likely to have the other person's number conveniently to hand since he or she dialled it when initiating the call. After many instances of interrupted calls, each participant will gain in confidence that both will operate according to the formula of the original caller phoning back while the other waits. A convention is said to arise when such a formula become a stable solution.

What is novel in Lewis's analysis of conventions is that there is no requirement for the prior existence of social or linguistic institutions, such as language or the linguistic institution of promising or agreeing. In other words, because communication is ruled out between participants, such institutions are not applicable to the analysis. Obviously, any account of conventions that relies on linguistic institutions and conventions could hardly be complete. However, in describing conventions, use is often made of terms such as 'agreeing' and so on; but the use of the term 'agree' and its derivatives do not indicate agreement in the literal sense and should not be taken to be anything more than a *façon de parler,* as Collin points out (Collin 1997, 205).

Although Collin uses Lewis's account of conventions as a foundation for his claims concerning social reality, he also points to a lacuna in Lewis's analysis which is similar to the one I pointed to in Bloor's account. The problem, as Collin puts it, is that the distinction "between a correct and an incorrect way to proceed within a convention, which creeps into all human conventions once they move beyond the most rudimentary stage" (Collin 1997, 206), is absent from Lewis's analysis. There are a number of strands to Collin's concern with this lacuna: since mistakes can be made with respect to the rules of more complex conventions or institutions, this means that we cannot always rely for a standard of correctness merely on what people think or do. As I pointed out earlier, this is also a problem which Bloor, in his insistence that there is no standard of correctness outside social consensus, does not address.

Collin distinguishes between basic conventions which are dealt with in the Lewis account

and more complex conventions or institutions which are "systems of conventions that are independent of the particular identities of their subjects at any given time." (Collin 1997, 206). This also means that the standard of correctness of proceeding according to such complex institutions is independent of the participants involved in those institutions, as Collin illustrates in this legal example: "a proper understanding of the judicial process must allow for a distinction between what the judges happen to decide and the true content of the law." (Collin 1997, 207). Institutions also have a certain permanence, according to Collin; in fact, many of the institutions present in contemporary society have been in existence for hundreds of years. The point that Collin is making here is that, in moving from the relatively simple convention to the more 'idealized' convention or institution, the distinction between the right and wrong way to proceed according to the convention "is deepened and extrapolated into a distinction between how subjects, even the totality of subjects, *actually* proceed, and how they *should* ideally proceed." (Collin 1997, 208). In effect, the idealized convention or institution incorporates an idealized conception of correctness or "an idea of ideally correct conduct according to a convention, purified of the errors and imperfections with which the actual practice will be afflicted." (Collin 1997, 218). Although Collin claims that such idealized conventions and institutions "transcend the concrete thought and action upon which they are based," this does not mean that they are completely divorced from human action or thought. According to Collin, the independence of such complex institutions from the identity of their subjects is limited at least to the extent that "no conventional fact would exist if there were no actual social practice to sustain it." (Collin 1997, 208-209).

Collin does not make it clear how such idealized conceptions of correctness are incorporated into idealized conventions and institutions. However, there are a number of clues in his analysis which indicate how his account might be filled out. His example of the distinction between judges' decisions and the institutions of the law is meant to illustrate the distinction between the idealized conception of correctness of an institution and the actual decisions made by its participants. It is also clear that Collin believes that language plays an important role in such matters. We know that Collin believes that the question of the correct way to proceed within a convention arises once such conventions move beyond what he terms the 'rudimentary stage'. Collin also claims that there is a

mutual dependence between the use of language and social practice.

> "The use of language makes possible intricate social practices (such as science, mathematics or metaphysical and religious speculation), which in themselves make possible sophisticated uses of language unthinkable apart from those practices." (Collin 1997, 214).

In addition, Collin also points out that in the case of deciding the correct way of proceeding with respect to complicated conventions, "such decisions can hardly be made without explicit discussion in a verbal medium." (Collin 1997, 210). Despite acknowledging the necessity of language with respect to complex conventions and institutions, Collin does not explicate the connection between language and the idealized conceptions of correctness in those conventions and institutions. It is important to make the point that Collin fails to state, that language is the medium which allows for the idealized conception of correctness in idealized conventions and institutions. So, Collin's account can be filled out as follows: because language allows for the codification of rules or ways of proceeding according to the institution, this makes possible the institutionalisation of such idealized conceptions of correctness. Language, especially in its written forms, allows for the permanence and independence of such institutions; the standard of correctness is no longer a matter of consensus among participants, as in basic conventions, but the written word in which rules are codified as a permanent record. For instance, the rules of marriage, voting, economic transactions and property are laid down in great detail in the written law. But the written word also plays another role with respect to such institutions; it allows for the maintenance of information in the form of written records which can then be used to substantiate whether the rules of the institution were followed or not. Receipts, signed agreements, contracts, registration of papers such as property deeds all provide evidence as to whether the rules were followed or not. As I will show in the next chapter, language, or more specifically certain linguistic institutions, are crucial to a complete account of economic reality.

Collin's account, with the inclusion of my amendment, has a number of distinct advantages over that of Bloor. As we have seen, Bloor's account does not spell out in any

detail exactly how social institutions get off the ground; because he limits all standards of correctness to matters of human consensus, he is unable to account for more complex conventions or institutions, as I have outlined. For his part, Collin is able to overcome these problems because his account is specifically designed to deal with them. Collin's analysis also avoids all the difficulties found with respect to Searle's account. In setting out my account of economic reality in the next chapter I will be building on Collin's account of social reality, with the inclusion of the aforementioned amendment concerning the role that language plays in complex conventions and institutions. Collin's account allows that "a convention may transcend the explicit understanding of the individuals who take part in it." (Collin 1997, 215). There are many examples of such lack of explicit understanding, especially in cases of contemporary complex institutions; e.g. many aspects of contemporary law. Bloor's analysis, with his contention that only the community provides the standard of correctness, cannot encompass anything more than the most basic of conventions; in fact, although he does not appeal to the Lewis account of conventions in his analysis of social institutions, this is what Bloor's analysis amounts to. Also, Collin's account does not run into the sort of difficulties that Searle's does with respect to problems of circularity and regress associated with self-reference in explanations of social or economic phenomena, as I discussed earlier in the chapter. Collin's analysis can be combined with a diachronic account of each institution and therefore the problems associated with self-reference in explanations of social or economic phenomena can be avoided, as I will show in the next chapter with respect to the institutions of money and exchange.

But there are still two outstanding problems with respect to all three accounts. As I discussed earlier with respect to his account of social reality, Searle equates social action with collective action. This I described as a lacuna in Searle's account in that it leaves out all social action that is not collective or reciprocated action but which, as Weber pointed out, is nevertheless social in that it takes into account the behaviour of others. This Weberian point is also missed out by both Bloor and Collin and their accounts cannot be said to be complete without them. All I want to say about this point is that arguably many non-collective social actions are dependent on social institutions which involve collective actions. The examples I provided earlier of the farmer changing his crop or the soldiers

marching in step illustrate this point; the soldiers marching in step depend on various other collective actions and military institutions while the farmer changing his crop is dependent on the economic transactions he anticipates in the future. I will have more to say about this last example when I come to discuss whether economic actions can be non-collective social actions. I am also happy to allow that there are non-collective social actions which are not dependent in some way on collective actions or institutions; leaving home early so as to avoid the inevitable morning traffic jam is a social action in that it takes into account the actions of others but it is not a collective action. The point about such actions is that not only do they not involve reciprocal action, they also do not involve any other related conventions or institutions, including linguistic ones. Once I begin leaving home early because, like all other car owners in the region I have just signed up to a new ordinance designed to ease traffic congestion by staggering departure times over a number of hours, then the action is no longer non-collective. As will become clear in my discussion of economic action, economic actions do not usually involve non-collective social actions which are not dependent in some way on some future collective actions.

The second problem that Searle, Bloor and Collin share is that, for all three, an account of money merely falls out of an account of social phenomena. To see how this is so, I will now outline each of their accounts of money before proceeding to showing where their accounts fail.

2.4.3 Searle, Bloor and Collin on Money.

Although I claim that Searle, Bloor and Collin all commit the same error of thinking that an account of money merely falls out of an account of social phenomena, this is not to claim that they all commit this error in exactly the same way. As will become clear, part of the difficulty is that none of the three see the complexity that is involved in the institution of money. Since, as I have already argued, Bloor's account fails to cover complex social institutions, it should not surprise us that his account of money is deeply

flawed. Although Collin's analysis of social phenomena does allow for complex social institutions, his claim that money is merely a basic convention means that his account of money is also similarly flawed. Searle's case is somewhat different and it is to his account which I will now turn.

As I have already outlined, Searle's account of money, which he provides as part of his account of social reality, involves the imposition of monetary status on some entity that does not otherwise possess this status. His claim, that the status of money is imposed on notes and coins that are issued by the Bureau of Engraving and Printing in the USA, is used to exemplify his formula for social institutions, that X counts as Y in a certain context C (Searle 1995, 45). These notes and coins must be continually accepted by everyone as money for them to continue to be money; this is the role that his notion of collective intentionality plays. I have already shown that there is a problem of circularity with respect to this application of the formula X counts as Y in C to money; the problem is that given that certain pieces of paper (X) are said to count as money (Y) in a certain context (C), it is not possible to characterize the C as anything but those circumstances where those pieces of paper count as money. While Searle points out that the institution of money can only persist within a set of systematic relations to other facts, such as facts concerning ownership and exchange, this does not draw the sting of the charge of circularity. Searle does not see any difficulties with respect to the self-referentiality of such social terms as money because he thinks that since money marks only one node in in a whole network practices, such as owning, exchanging and other economic practices and therefore the explanatory circle can be expanded to include these terms, the word money does not need to be used in its own *explanans*. I have already provided arguments against this position earlier in this chapter.

Although Searle thinks that there is no problem in providing a synchronic account of money, he also presents what he calls a "standard textbook" account of how money evolved; in this very bare diachronic account, commodity money, which was itself a good and was valuable anyway, gave way to contract money, which comprised promissory notes to pay the bearer a certain amount of a commodity (usually gold) and in turn gave way to fiat money, which is money that is declared to be valuable by government or

monetary authority (Searle 1995, 41-42). But while Searle helps himself to this textbook account of how money evolved, he does not say how this coheres with his synchronic account along the lines of the formula, X counts as Y in C. In addition, although he outlines the emergence of commodity money, he does not say how it became possible for promissory notes to become money, nor how it became possible for money to be declared valuable by government. Despite citing money in various other forms, such as commodity money and promissory notes, he does not attempt to show how these forms of money are meant to cohere with his formula. Instead, Searle only applies his formula to fiat money and even this is found wanting, as I have already shown.

For his part, Bloor sees money as an uncontroversial case of a social institution, just as marriage and property are. According to his account, in showing how the self-referring practice of using money came about, economists have speculated that in order for something physical to have originally been used as a currency, it must have been considered to be intrinsically valuable. This sounds like a gloss on the standard textbook account of money. However, the use of the phrase 'intrinsically valuable' is troubling, especially in the light of his further elucidation, as follows:

> "That is, most people found themselves independently and instinctively drawn to it, so when a market came to exist the commodity was readily disposable. This is why gold and silver provided the basis for many systems of coinage." (Bloor 1997, 32).

Although he does not spell it out in any detail, Bloor appears to be claiming here that people are drawn to gold and silver by instinct and in that way gold and silver or similar substances are therefore intrinsically valuable and because of this intrinsic value that such precious metals have they became currencies when markets came into existence.

As a general claim about the emergence of money this is unclear and may contain several possible and distinct claims. If Bloor means that certain items or substances have an intrinsic objective value, then this claim has already been rejected in my discussion on Marx and objective value in Chapter 1. Even if he is not making that claim, it is by no

means clear what he means when he says that "most people found themselves independently and instinctively drawn" to gold and silver. This account of how gold and silver came to be money is extremely thin, is unsupported by the literature and the historical evidence (as is clear from Chapter 1) and is therefore most likely false. If one wants to adopt some sort of historical metallism, then the more plausible account is that some commodity emerged as commodity money, along the lines set out by Menger, and that it was that commodity's saleableness that led it to be used as a form of money, not because people found themselves instinctively and independently drawn to it. In addition, given the extremely low level of economic development that is associated with pure barter economies, the good that initially emerges as the commodity good is very unlikely to be gold or silver since, in such underdeveloped proto-economies, such goods would hardly be highly saleable. But Bloor is also making a separate and less controversial claim in the previous paragraph; it is that no system of money could have originally come about by explicit agreement or legislation alone. While I reject Bloor's account of social phenomena and his account of money, I will be returning to the latter point at a later stage.

Although Collin rejects Searle's analysis of social reality in terms of assignment of function according to the formula, "X counts as Y in C," his account of money shares a certain important similarity to Searle's, when he claims that "we bestow a value upon these valueless tokens by collectively believing them to have value." (Collin 1997, 3). Collin claims that the analysis that Lewis provides of a basic two-person convention, such as his example of the formula of the original caller phoning back in the event of being cut off, "shares many features with familiar, large-scale social conventions, such as that of accepting certain tokens, which in themselves would otherwise be almost entirely without value, in exchange for goods and services. This is the convention of using money as a means of exchange." (Collin 1997, 203).

In this account of what amounts to fiat money, Collin also refers to the general precedent of money being used as legal tender and to the fact that each buyer and seller knows this. But he does not say exactly how this precedent comes about. More importantly, he does not say exactly which features such large-scale social conventions as money share with

Lewis type conventions. Arguably, the most salient feature of Lewis type conventions is that prior communication is not possible between the participants. Because something that is created by fiat must involve prior communication, otherwise how would all those involved know which particular item had been chosen by fiat to be the medium of exchange. By definition, fiat money cannot be the result of a convention as outlined by Lewis. It is interesting to note that Lewis claims that commodity money arises as a convention but he does not make any claims for fiat currency and therefore largely avoids such difficulties by restricting himself to accounting for commodity money as a convention. Lewis defines a medium of exchange "as any good that is conventionally accepted in some population in return for goods and services." (Lewis 1969, 48). Although he confuses the issue somewhat by referring in his brief discussion to a "coin of the realm," it is clear from his account of a medium of exchange that gains its own special status by convention that what he means here is commodity money. Unlike fiat money, if the monetary convention breaks down, commodity money can still be exchanged for other goods because it still retains its exchange-value as a commodity. Although Lewis's account is very thin in that it merely glosses over the origins of commodity money, it is still at the very least generally compatible with the standard account of commodity money, such as Menger's. Also, in restricting himself to an account of commodity money, Lewis avoids any mention of other more complicated forms of money, such as the sort of fiat money which Collin discusses. While commodity money in its basic form resembles a basic convention as outlined by Lewis, fiat money resembles more the sort of complex institutions discussed by Collin (even though Collin does not realize this). I will be developing these accounts of commodity and fiat money in greater detail in the next chapter.

2.4.4 Why the Above Accounts Fail: The Problem of Abstract Money.

Although each of their positions on social reality is different, Searle, Bloor and Collin make the same important error. This is that, in their accounts of money, they focus exclusively on a particular physical manifestation of money, that of coins and notes only.

Searle, with his requirement of imposing the function of money or currency on a physical element such as a note, Collin with his claim that there is a convention whereby worthless tokens can be used as a means of exchange and Bloor's requirement that people treat those pieces of metal as coins, all centre on this point. Of course it is necessarily the case that at some level money must have some physical manifestation. Otherwise it would not be countable and it could not perform its functions as a medium of exchange, a store of economic value and a unit of account. But this physical manifestation does not have to be in the form of coins or notes. By far most of any contemporary country's money is not in this form. Instead it is mostly in the form of marks on a page or bits in a computer, what I term 'abstract money'. The reasons why notes and coins are still in use is largely historic and it is possible that we will eventually abolish coins and notes in favour of some form of electronic medium in the near future. So, any account of money as an institution that relies exclusively on money in the form of coins and notes is bound to be too thin.

None of the three accounts I have examined are able to deal with money in this abstract form. Although Searle does make a passing reference to money as a "blip on a computer disk" (Searle 1995, 56), he does not say how such entities can be treated as money; how exactly do we impose a function on some blips in a computer memory and how are those blips collectively accepted as money? Bloor's account of money ignores money in any form other than coins and his account of social institutions is not sufficient to deal with more complex institutions, such as the institution of money. It just is not possible to account for abstract money on the basis of mere consensus. On the other hand, although Collin has developed an account of social institutions which is sufficient to deal with more complex institutions, including abstract money as I will show in the next chapter, he fails to see that money, especially in its more developed fiat form, is not merely a basic convention but is instead a complex institution.

In giving an account of money, some acknowledgement of the different forms of money, both historical and contemporary, would have to be given if that account is meant to have broad application. In my next chapter I will show that my account of economic reality will cover all forms of money, including notes, coins and money in the form of 'plastic,' what economists call 'near money', such as timed deposits and certificates of deposit,

various monetary instruments including drafts and cheques and the various historical forms of money, including gold, shells and, in times of war, cigarettes. The view that must be relinquished is the idea that money is necessarily and intrinsically tied to some specific physical entities in some way, such as coins, notes or even tokens. Of course it manifests itself in some physical medium. But this is not necessarily always the same single medium, such as pieces of metal or pieces of paper or cotton.[64]

I will be using the term 'abstract money' to refer to money in the form of cheques, bank accounts, electronic transfers between financial institutions and payments by credit card or other kinds of charge cards, in effect any form of money that is not coinage, paper currency or commodity money. There is an important distinction between abstract and non-abstract money; when money in the form of paper currency or coinage is destroyed, that money also disappears whereas when a computer disk containing the balance of one's bank account in electronic form is accidentally destroyed, this does not mean that all the money in one's bank account is gone forever.

[64]As I understand it, most so-called 'paper money' is in fact made of cotton.

Although it is not brought out clearly in each case, each of the three accounts is mainly concerned with what is called fiat money. Although Bloor makes reference to early forms of money in the form of precious metals and Searle refers to a form of commodity money, they do not provide any analysis of such forms of money. Fiat or fiduciary money refers to that form of currency that is declared to be acceptable as money by a monetary authority or government. So, currently the pound sterling and its derivatives are declared to be acceptable or deemed to be legal tender in the U.K. But this does not mean that the total amount of notes and coins that are issued by the monetary authority is in fact the total amount of money in the economy. Money is also created by individual banks through a mechanism known by economists as the deposit multiplier. Put very simply, banks only retain a very small percentage of the total amount deposited with them; the rest is lent out to borrowers. Because borrowers spend the money and at least some of that money finds its way back into banks as deposits, the total amount of money in the economy increases.[65] This capacity of banks to create money leaves each of our three theorists with difficulties. If money is whatever the monetary authority declared to be money (and acceptance of money in the form of coins and notes is dependent on this), how or why does this bank-created money get to be money according to their analysis? Also, arguably a relatively small proportion of the population realises that banks can create money. If so, does this bank-created money count as money, given that for something to count as money it must be considered or regarded to be money?

2.4.5. The Distinction between Economic and Non-economic Social Phenomena.

Having dealt with the narrower point concerning how Searle, Collin and Bloor deal with one specific economic phenomenon, money, I want now to move on to the wider issue,

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[65]The deposit expansion multiplier or deposit multiplier is a well known phenomenon. It received a brief mention in Chapter 1 but I will be providing a more detailed analysis of it in the next chapter.

which is the question of the distinction I have already mentioned between economic and non-economic social phenomena. As I pointed out earlier, this distinction is ignored in all three accounts. But as yet I have not shown how this distinction can be made. Weber offers a very important insight into this question concerning the distinction between economic and non-economic social phenomena. According to Weber, all action, including social action, can be divided into four ideal types according to their respective "mode of orientation." (Weber 1947, 115). The first he identifies is *Zweckrationalität* which approximates the notion of means-end or instrumental rationality. Such actions are performed with the purpose of arriving at some goal which has been chosen by the individual performing the action. The second ideal type concerns the type of action which in some way embodies its own value. In other words, the action is not performed with some goal distinct from the action in mind but is performed for its own sake. This form of action, *Wertrationalität,* encompasses absolute values, such as ethical, aesthetic or religious values; the key point is that such actions are performed for their own sakes only. It is important to recognize that it is often the case that what ought to come under the ideal type of *Wertrationalität* may be corrupted or changed and therefore resembles another ideal type. For instance, *Wertrationalität* may be the most appropriate ideal type for marriage, at least in its present form, but there have been times when marriage was merely treated as a means to an end, such as increasing family assets or forging political or social alliances.

The third form of action that Weber identifies, affectual or emotional action, concerns unreflective expressions of feelings, and need not concern us here. The fourth type concerns unreflective habitual action, although Weber designates it as 'traditionally orientated' action because the only reason it is performed is because that is the way things have been done in the past. With the possible exception of actions of the first two ideal types becoming so routinized as to resemble traditional orientated action, neither the emotional nor traditional action types are of much relevance to our discussion here. It is important to note that all four types of action, as presented by Weber, are ideal types and, according to his account, actual examples of these in undiluted form would be unusual. Nor are these classifications meant to be exhaustive. They are invoked so as "to formulate in conceptually pure form certain sociologically important types, to which

actual action is more or less approximated or, in much the more common case, which constitute the elements combining to make it up." (Weber 1947, 117-118).

It is clear from the discussion above that economic activity is zweckrational; it is goal orientated activity which uses means-ends rationality. But *Zweckrationalität* alone does not individuate economic phenomena. Many non-economic social phenomena also involve *Zweckrationalität.* For instance, political activities, such as voting, demonstrating or petitioning, are often performed with the view of arriving at some goal. So, *Zweckrationalität* on its own is not enough to distinguish economic from non-economic social phenomena even though it is an important ingredient.

One of the issues that needs to be clarified at this stage is the question as to whether economic activity is always social. The difficulty with the term 'economics' and its derivatives is that although they are normally used to refer to social activity, they can also be used to refer to non-social activity as well. Weber agrees that economic action does not necessarily have to involve social action, as the following quotation shows;

> "The economic activity of an individual is only social if, and then only in so far as, it takes account of the behaviour of someone else." (Weber 1947, 112-113).

This point relates back to one I made earlier in this chapter.[66] Economics, as a discipline, is usually seen as a social science which is concerned with economic systems, competition for scarce resources, distribution, money and economic transactions, all of which require taking into account the behaviour of others. But it is not difficult to imagine solitary activity which involves making available for oneself material resources for one's own comfort and welfare; one could imagine a solitary castaway on a desert island engaging in such activity. Or one could imagine someone who wishes to be self-sufficient by producing solely for his own consumption. But these cases of complete self-sufficiency are arguably very unusual and most forms of economic activity really do have some social dimension.

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[66]See footnote 46.

If we accept that economic activity has an important social dimension, which sense of social is more applicable to economic activity, the weaker Weberian sense or the stronger collective sense? As I discussed earlier, Weber takes social action to be action which takes into account the behaviour of others whereas Searle, Bloor, Collin and others take social action to be collective action which is action that takes into account the behaviour of others *and is reciprocated.* To illustrate the answer to this question of which sense of social is applicable to economic activity I will briefly refer to an example I had used earlier in my discussion of Searle and social facts, namely the example of the farmer changing his crop. I had used the instance of a farmer changing from cultivating one crop to cultivating another as an example of an action which is not collective but which takes into account the behaviour of others. The example was intended to illustrate that social actions do not have to be collective actions. My claim is that, with the exception of unusual cases of complete self-sufficiency, economic activity can be both collective as well as non-collective social activity. However, I also want to emphasise that there is an important further point to be made in this regard, which is that although some economic actions are non-collective, they are invariably dependent on other collective actions and institutions. In the farmer changing his crop example, the farmer is not engaged in collective activity but is merely responding to the actions of others. But the ultimate reason for the farmer changing his crop is that he wants to be able to maximize his gain in some future economic transaction. So although the action of changing his crop is social in the weaker Weberian non-collective sense, it is still ultimately dependent on the future collective action in the form of an economic transaction.

Another important feature of economic activity involves Menger's important observation, namely the scarcity of economic goods. Following Menger, for a good to be an economic good, it must be the case that its availability is less than the demand for it. If it were in such abundance that the availability were greater than the demand for it, there would be no point in individuals giving up anything of value in exchange for it. However, Menger's claim needs to be qualified as follows; it is not so much that the good itself is scarce, it is that the individuals who want it must believe it to be scarce relative to demand for it. This qualification is important in that something can become an economic

good even though its availability actually outstrips demand for it; for example, in the desert it is possible to sell water for a good price to travellers who are unaware that there is an abundance of water freely available at a nearby oasis. So, economic activity is orientated towards goods which are perceived to be scarce.

Another important feature of economic activity is that such activity is normally orientated towards the material interests of either individuals or specific groups. In the case of the latter, these groups are usually family or household groups although there are other larger formulations, including extended families, communes and religious groups, all of which can be said to operate as economic units. As I will discuss in the next chapter, there is also another kind of economic unit which performs much as an individual but is made up of a number of persons in an institutional context, namely the corporation.

Leaving aside such complications I can now specify that which distinguishes economic from non-economic social activity. Economic activity is zweckrational activity which is orientated towards the material interests of individuals and groups and involves goods which are perceived to be scarce; also, while many economic actions do not involve economic exchange in an immediate sense, all economic activity is ultimately dependent on economic exchange. Non-economic social activity arguably does not share all of these features. Of course there are instances where it is difficult to say exactly whether an action is economic or not. We have seen how this is possible in the case of marriage. Also, a street demonstration that involves a demand for improved economic conditions for a certain section of the population may be taken to be a purely political event; however, the trade union which has organized the demonstration may actually see themselves as being involved in economic activity. Their goal is an increased hourly rate and therefore their activity is zweckrational and is orientated towards the material interests of individuals. The commodity that they seek is money, which is a scarce commodity and the demonstration is ultimately aimed at improving the union's hand at the forthcoming negotiations with the employers and is therefore dependent on a future economic exchange.

So, in claiming that these features are what distinguishes economic activity from non-

economic social activity, it must be remembered that the lines of distinction can sometimes be blurred. Although economic activity can involve non-collective social actions, such actions are ultimately dependent on future collective actions in the form of economic exchanges. As I will show in the next chapter, these features can give rise to more complex economic institutions, such as money, corporations and markets, in fact the sort of economic phenomena which we encounter on a daily basis in contemporary economies.

CHAPTER THREE

Exchange and Money: The Fundamentals

3.1 Introduction

At the end of the last chapter I pointed out that although economic activity can involve non-collective social actions, such actions are ultimately dependent on future economic exchanges. Because exchange plays this central role in economic activity, it is important to provide a thorough-going account of this fundamental economic phenomenon.

Initially I will briefly examine Hadreas's speech-act theory of money. Although I find that there are difficulties with this theory, especially in that it is too thin, his claim that money and economic exchange involve promissory relations is a step in the right direction and I will be incorporating some of his points in my own account of exchange and money. In an attempt to clear the ground in advance of my own analysis I begin with a discussion of some of the basic background conditions to exchange before outlining some of the necessary preconditions for exchange. As a preliminary view I identify that economic exchange involves commitments to action which involve conditional sentences of the kind, "If you X, I will Y." But coercive behaviour also involves such conditional commitments to action. I will show how it is possible to draw a sharp and clear distinction between economic transactions, including 'hard' or exploitative economic transactions, and coercive proposals.

Although our intuitions might tell us that coercion does not have any part to play in economic transactions, it is not easy to say exactly how this might be so. My analysis will show that, not only is it possible to distinguish between economic transactions and

coercive proposals, but also why coercion cannot have any part to play in economic transactions. In demonstrating that economic exchange can never involve coercive behaviour, I also show that this does not mean that exchange cannot be exploitative. I then go on to generate a theory of exploitation which shows that exchange is the proper locus of exploitation and not production as Marx claims.

Although I find Hadreas' speech act theory of money to be inadequate and somewhat thin, with much modification and expansion I use it as a starting point in developing an analysis of exchange as reciprocal, conditional, promissory relations. I go on to show that economic exchange involves the exchange of promises and not the actual exchange of goods or money as such. I also show how the conditional sentences of the kind, "If you X, I will Y" are in fact the content of such promises. I then demonstrate how money emerges in this model of exchange in two ways, one which is consistent with historical metallism and one which is consistent with historical chartalism. Although, as I pointed out in Chapter One, I find the claims of historical metallism more compelling not least because both the archaeological and other historical evidence is stacked in favour of this account, this does not mean that historical chartalism has been disproved; therefore, an account of how money emerged according to both positions is warranted. As I pointed out in the last chapter, because of problems of circularity and regress associated with self-referential phenomena, it is not possible to provide a synchronic account of social or economic phenomena such as money or exchange. However, these problems associated with self-reference do not arise in a diachronic account. Therefore, I will proceed to provide a diachronic account of money which incorporates my analysis of exchange, and I will demonstrate how money arose out of exchange relations and then developed ultimately into fiat money or fiduciary money.

As I stated in the last chapter, in setting out my account of economic reality I will be building on Collin's account of social reality. I will argue that economic exchange is a typical social institution in the sense that Collin uses the term. I will use Collin's account of social institutions to develop my account of exchange and will show how the institution of exchange gains the features of independence and permanence.

How exactly economic exchange originally emerged as a social institution is difficult to say. But it seems likely that it arose out of what must have been a common difficulty, which was how to acquire the means of satisfying certain needs which were either impossible to produce or too costly to produce within one's own family group. Various coordination problems had to be solved, including the problem for each potential participant of which good would be the best to bring to market in order to be able to acquire what one wanted. The coordination problem was that all participants would have to bring different products to market; if everyone brought the same product to market there would be no point in engaging in exchange. But the coordination problem goes further in that each participant would want to bring to market the product that most of the others did not have but which those others really wanted or needed. This scenario exemplifies an important feature of coordination problems as outlined by Lewis, namely that there could have been no communication between the participants prior to going to market. How exactly such coordination problems were solved is not clear; but what is clear is that for even local markets to persist there would have to have been some sort of variety of desirable products available so as to make the trip to market worthwhile.

Somewhere along the way money emerged as an institution. If we believe the historical metallism account, commodity money initially emerged as a solution to a two-fold coordination problem under conditions of pure barter. The first element in this coordination problem was the exchange rate problem which I discussed in Chapter One, whereby the number of exchange rates would become too unwieldy once the number of commodities available for barter grew beyond a relatively small number. For instance, with only ten commodities available for barter, the number of exchange rates would amount to forty-five but when the number of commodities reached a hundred the number of exchange rates would increase to 4,950. The second element in this coordination problem concerned the problem of how to find a suitable exchange partner for less saleable commodities. As Menger highlighted, those who arrived at a market with a less saleable commodity and in search of another less saleable commodity would have difficulties in engaging in any exchange at all. The solution to this coordination problem, according to this view, is that some highly saleable commodity would emerge as the exchange commodity or commodity money. However, if we are to believe the historical

chartalist account, then either the coordination problem never occurred or it is of lesser significance, as I discussed in Chapter One. If it was the case that the authorities were involved in the distribution of goods and services prior to the emergence of exchange and that they had already introduced some counting or tally systems, then the monetary system, at least in the form of a unit of account, predated exchange. This would mean not only that the Menger account of the emergence of commodity money is false, but also that pure barter never existed. As I have already discussed in Chapter One, there are good reasons for believing, including historical evidence, that this version of historical chartalism is false. But, some historical chartalists allow that barter occurred but that the exchange rate problem and transaction costs problem quickly led to the emergence of tally systems and therefore to money in a chartal form. So, at least some historical chartalists would agree that money emerged in the form of a tally system as a solution to various coordination problems. I have already voiced doubts regarding the acceptance of tallies by prospective exchange partners who do not know each other. However, in developing my account of exchange and money as institutions later in this chapter I will be showing how my account can cohere with both historical metallism and historical chartalism.

I will conclude this chapter with a critique of Hadreas's account of credit and will provide my own analysis of credit and banking in contemporary economies. Part of this analysis will include an account of abstract money. So, by the end of this chapter I will have provided an account of exchange and money in all its various forms. As I will show in the next chapter, these features can give rise to more complex economic institutions, such as corporations and markets, as well as many of the features of economic phenomena which we encounter on a daily basis in contemporary economies.

3.2 Hadreas and the Speech-Act Analysis of Money.

Hadreas takes the analysis of speech acts, specifically that of promise-making as proposed by such philosophers as Searle, and applies it to the three distinct historical versions of exchange, namely barter, exchanges involving commodity money and exchanges

involving fiat money[67]. Hadreas examines each of these stages in the light of what he terms "conversations designed to produce the exchange of goods and services." (Hadreas 1989, 115).

In the bartering version of exchange, he splits up the interaction into a request phase and a promissory phase. The request phase of the 'conversation designed to produce the exchange' involves offers and counteroffers. It is here that all the bargaining and haggling takes place. The conversation may end without any transaction taking place because the best offers of both are incompatible. If a common area is found, then the next phase is entered. It is here that the conversation enters what Hadreas describes as the 'promissory phase'.

The difference between the request phase and the promissory phase, according to Hadreas, is that a sense of commitment has entered into the conversation. While there is often a very blurred line between each phase, according to his view, when the agreement is struck, this involves mutual promise-making by both parties; each party promises to hand over some of his property to the other party. Although the separation of the two phases may have some explanatory merit, I am not entirely comfortable with Hadreas' claim that the request phase cannot contain the element of promise-making. If the bartering scenario opens with an offer, such as "my two goats for your cow," this offer already contains a conditional commitment; in fact it is a conditional promise which is conditional, among other things, on a reciprocal promise being supplied, as I will outline later.

[67]The following account is drawn from Hadreas 1989, pp.115-129.

Hadreas refers to certain features of Searle's account of speech acts, specifically promise-making, to show exactly why he claims that barter exchange and other forms of exchange involve promissory relations. The most salient features of Searle's account in this regard are his 'preparatory conditions' and the 'essential conditions'. According to the first preparatory condition, "a hearer prefers that the speaker would do the act promised and the speaker believes that the hearer would prefer it." (Hadreas 1989, 115).[68] So, in the case of bartering, each party to the transaction believes that the outcome of the exchange is preferable to no exchange at all. The second preparatory condition simply states that the speaker would not perform the promised act in the normal run of events and that this is obvious to both the speaker and the hearer. In the case of the bartering example, both parties understand that in the absence of the transaction, neither party would part with the goods in question. Finally, the essential condition states that the speaker intends that the utterance of the promise will place him under an obligation to perform the promised act. So, each party to the barter transaction intends to place himself under obligation to the other party to carry out what he had promised.

[68]Hadreas is referring to Searle 1969, 57-71.

While I do not wish to dwell too long on Searle's account of promise-making, it is important to note certain features that are very pertinent to exchange. Promising involves the predication[69] of future actions on the part of the promise-maker. But what distinguishes a promise from other predications of future actions by a speaker is that what is promised is preferred by the hearer, and the speaker believes that the hearer prefers it or might prefer it. It is this which sets promises apart from threats or coercion, according to Searle.[70] This is essentially a shorthand way of stating a distinction which I will draw between offers and threats later in this chapter. In the case of exchange, the promise-making is reciprocal, as I will show later. For an exchange to occur, each party prefers what is promised by the other side and believes that the other party prefers what is promised in turn to it. For both parties, the state of affairs in which the exchange takes place is preferable to the possible state of affairs in which the exchange does not take place.

Searle points to other preparatory conditions for promise-making, including that the hearer and the speaker expect that the speaker would not carry out what is promised in the normal course of events - in other words, I cannot properly promise to do something which I had already intended to do anyway. To make such an improper "promise" is likely to create the belief in the hearer that it was not obvious to her that I was going to carry out the intended act. Searle describes the example of the happily married man "who promises his wife he will not desert her in the next week; such a promise is likely to provide more anxiety than comfort." (Searle 1971, 48). If it were obvious to one side that the other party intended to carry out the act in any case, there would be no point in the former making any undertakings to that effect.

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[69]I am consciously using the term 'predicate' and its derivatives here rather than the term 'predict'. 'Predicate' is the term used by Searle, as follows; "In a promise an act must be predicated of the speaker and it cannot be a past act." (Searle, 1969, 57.) The problem with using the term 'predict' and its derivatives as in, 'promising involves the *prediction* of future actions of the promise-maker', is that this offends against another condition of promising which Searle identified, which is that it cannot be merely a matter of fact, obvious to both the speaker and his audience, that the speaker will perform the actions in question.

[70]Searle's analysis of promising is contained in Searle 1971, pp. 46-51 and Searle 1969, pp. 54-62.

Searle also points to what he describes as the essential condition in promising, that the speaker intends that his utterance of a promise will place him under an obligation to the hearer. In an economic exchange, both sides place themselves under an obligation to carry out what they have promised. It is important to note, as Hadreas does, that the notion of obligation is not the same as prediction. But promises can be broken and transactions can fail. Often, there is appeal to some third party or community sanction or law to provide confidence to either or both parties that the promises are being given in good faith. Obviously, if one party reneges on an exchange or enters into it insincerely, the conditions for exchange never existed at least for one side of the exchange.

Hadreas claims that while an appeal can be made to sanctions when one side reneges, we could hardly call such an interaction an exchange (Hadreas, 1989, 118). Hadreas misses the point in this regard; the presence of sanctions does not mean that the interaction is no longer an exchange. Hadreas ignores the possibility of enjoining such appeals to sanctions at the time of entering into an exchange. For an exchange to take place, both sides must feel that they can rely on it. In cases of exchange between two parties who know each other well, who trade regularly in a market where everyone knows everyone else or who are bound by community bonds of honesty, there may be little need for appeals to sanctions in such exchanges; fear of not being able to enter into future exchanges, loss of friendship or consequences of community opprobrium will tend to prevent reneging and will provide both parties with a sense of trust and confidence that the other party will discharge his obligations. But where such elements of community or family trust do not exist, appeals to sanctions may play a greater part in exchanges; these may involve the use of witnesses to exchanges and the possibility of complaining to some civil or other authority by one party if the other reneges. However, if strangers are to engage in economic exchanges with each other, usually they will need to be able to gain access to some sort of legal process in case transactions go wrong. Without such an authority to appeal to, strangers would most likely lack the confidence to engage in economic exchanges with each other and therefore markets as we know them could not exist.

This raises certain questions concerning the nature of markets and what would constitute a so-called 'free market'; what follows is a brief digression on the subject of markets before returning to the issue of exchange and promising. The term 'market' can be used in a variety of ways but the common theme in all its uses is the notion of exchange. When we talk about very specific markets such as the eurobond market or the British market for grain, we are referring to the past or current range of actual exchanges or the range of possible future exchanges of eurobonds or grain in Britain, depending on whether we are referring to past, present or future markets; when we use the term 'market' in a general sense we mean all actual exchanges or potential future exchanges lumped together. Originally all markets were located in physical space, in actual market places, and were therefore bounded in space as well as time. But with advances in technology and communication, markets are no longer limited by their location as such. This description of markets as a range of actual or possible exchanges is a relatively simplified account. There are many different kinds of markets with widely differing behaviour. Some markets clear instantaneously, as is often the case in international currency dealing, whereas other markets are very slow to clear, such as real estate. It is often the case that if a seller is prepared to be patient in a slow clearing market, he will find a larger range of exchange possibilities; whereas if he is in need of cash quickly, he is only likely to find a smaller range and invariably this means a lower price. There are many attributes that one can use to describe particular markets; markets can be volatile or stable, complex (with lots of sub-markets) or simple, cosy (in that all participants know each other) or fragmented, to name a few. Sometimes this is due to the kinds of commodities which are sold in a particular market; for instance, a highly seasonal market for some perishable good may be very volatile. Sometimes it is due instead to historical reasons, social factors or government legislation. These features of particular markets need not detain us here; when I refer to markets I mean the range of past, present or future exchanges.

I want to briefly examine what constitutes a so-called 'free market'. This term is usually used to describe a situation where the government or some other authority do not interfere in the market. But a little examination reveals that markets cannot be free-for-alls. In one sense, the only markets that could exist completely free from any government regulation are those local markets which I referred to earlier where everyone knows everyone else

and where the costs of reneging are very high. In cases where the costs of reneging are not naturally high, at the very minimum, markets must be backed by contract laws. Otherwise, there is a tendency to free-ride by reneging on commitments. The widespread reneging on commitments will ultimately ruin a market. For example, once a number of individuals decide that they will renege on their obligations at every opportunity, and there are no costs to reneging, others will be tempted to follow suit. In addition, those who are reneged on will be less likely to risk entering into further exchanges. At some stage, the chances are that engaging in exchanges in that market will become so risky that few will want to take it on. Exchanges might continue to take place within local communities or between members of the same extended family where the bonds of trust are strong and the costs of reneging are high. But such community and family bonds of honesty and trust will only allow for a very limited market. If we want economic activity to range much further than that, we have to have rules backed by sanctions which participants can rely on to make the costs of reneging high.

Returning to the discussion on promising and exchange, the kind of promise-making scenario referred to earlier is also present in the case of exchanges involving money, according to Hadreas. In such exchanges the request phase involves offers and counter-offers between one party who has commodity money to offer in exchange for some commodity and another party who has that commodity to offer in exchange for a sum of commodity money. Again, in the promissory phase there is some mutual promise-making but there is also an additional requirement of greater trust than was the case in the barter scenario. The issue here is that the seller of the good must believe that he will be able to enter into future exchanges with the commodity money he will receive as part of that exchange. According to Hadreas, this involves an additional requirement, "that money implies a declaration, held to be valid among a group of suppliers, that money will be received for goods and services." (Hadreas, 1989, 121). While commodity money often relies on certain "scarcities in nature" for its regulation and on the fact that it is also a commodity which has a use-value, systems of rules are often developed so as to limit which commodities can be used as money.

For Hadreas, "there is no mystery to the fact that the need for more regulatory rules

concerning money increases as money has less intrinsic value." (Hadreas, 1989, 120). This is especially true of fiat or fiduciary money. Exchanges involving fiat or fiduciary money feature the same promissory conditions as that in barter or commodity money, according to Hadreas. He uses the example of a payment by cheque to illustrate what occurs in transactions involving fiat or fiduciary money before going on to provide an analysis of credit.[71] I will leave my critical discussion of Hadreas' analysis of credit until later in this chapter. Although Hadreas refers to payments by cheque and asserts that "money is primarily rooted not in the ontology of substance but in the ontology of relations, in particular promissory relations" (Hadreas, 1989, 127), he does not provide any thorough-going account of abstract money, how such forms of abstract money are possible and how this connects up with an ontology involving promissory relations.

But Hadreas has provided us with a starting point in our search for an ontology of money and exchange. However, his account is very thin and somewhat imprecise. Although I agree with his view that money "is primarily rooted not in the ontology of substance but in the ontology of relations, in particular promissory relations," he does not spell out what these relations amount to beyond providing the barest of outlines of typical conversations which may lead up to such exchanges. Nor does he provide an account of how money emerged in its various forms. But most telling of all, his account of exchange is perfectly in keeping with other forms of collective action which are not economic; in other words, his account could be applied to Weberian wertrational kinds of action which, as I outlined in the last chapter, are not economic. For instance, Hadreas' analysis is applicable to

[71]Hadreas seems to equate fiat or fiduciary money with that which is to be found in a demand deposit account in a bank. While it is correct to describe contemporary demand deposits as fiat or fiduciary money, fiat or fiduciary money also takes the form of notes and coins as well as various forms of plastic or electronic money. This is why I use the term chartal money to refer to fiat money in the form of notes and coins and abstract money to refer to fiat money in bank accounts as well as electronic money of all kinds.

marriage in its contemporary, largely wertrational form. Such an analysis would go as follows: marriage could be said to involve two phases along the lines of barter; in the request phase one party makes a proposal of marriage which the other party may accept, reject or make a counter-offer; for instance, he or she may be happy to marry the other party just as long as they get married according to a certain religious rite or tradition. If all goes well, the two parties may go on to the promissory phase which would be the wedding itself. This demonstrates that although there may be some resemblance between exchange and marriage in the sense that both involve promissory relations, exchange is an economic activity whilst marriage, at least in its contemporary wertrational form, is a non-economic social action. As I pointed out in the last chapter, what distinguishes economic from non-economic social action is that the former is zweckrational, is orientated towards the material interests of those concerned and involves resources that are at least perceived to be scarce; while prospective brides and bridegrooms may be scarce, contemporary marriage is not meant to he zweckrational, nor is it meant to be orientated towards material interests only. But although Hadreas' account has such shortcomings, it does provide us with an important starting point, which is that money and economic exchange involve linguistic commitments and it is these promissory relations which, against the background of a number of other conditions, allow for the formation of economic phenomena.

3.3. The Ontology of Economic Exchange.

By now it should be clear that a necessary requirement for economic exchange is the sophisticated use of language. Among many species of animals, one can observe certain levels of cooperative behaviour and some instances of specialization. Those who study the higher primates may claim that gift giving takes place among higher animals and it is clear that some rudimentary communication involving movements and sounds also takes place. But economic exchange does not take place between animals. As Adam Smith

points out,

> "No one ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours." (Smith 1981, 26).

A variety of explanations may be given for this phenomenon; the level of specialization among animals is too low, animal behaviour is too heavily loaded by instinct etc. These arguments notwithstanding, my contention is that exchange cannot take place without a highly sophisticated language and that animals cannot engage in economic exchange because they lack this high level of linguistic ability. Although language is a necessary condition for economic exchange, it is not sufficient condition. Certainly, what is to be exchanged, whether goods, commodities or services, are also necessary ingredients to the extent that they must be available for exchange. But this is not to say that the combination of the required level of linguistic sophistication in conjunction with the relevant goods is sufficient for economic exchange. Historical examples of groups living strictly communal hierarchical lives show how it is possible for systems of distribution of goods that do not involve economic exchange to exist. Other factors also have to be in evidence; it must be the case that there is a need, desire or demand for the goods or services in question. And for such goods and services to become the subject of exchanges, they have to be scarce relative to those needs and wants, as Menger points out.

3.3.1 Preconditions for Exchange

Some typical examples of everyday economic exchanges appear to take the form of two parties simply handing over money, goods or services to each other. How many times have we encountered someone entering a shop, picking up a good, handing some money to the shopkeeper and leaving with hardly a word being uttered by either party? And how are economic exchanges fundamentally linguistic, as Hadreas claims, if it is possible to enter into such transactions without uttering a word? To decide that all there is to

exchange is the handing over of the relevant goods, services or money is to miss out on the rich and complex contextual conditions that must already be in place prior to any putative transaction. Without these contextual conditions, what could we say about a situation in which two parties who, without uttering a word or making any gesture, hand over goods to each other, except that each might be holding the property of the other? Something else must be at work in the context of an economic exchange in that it is not just physical possession that changes but also ownership.

Generally speaking, there are a number of conditions that obviously must be in place before exchange is possible. There has to be a desire on both sides for what the other has. But it is always possible for either party to obtain what is desired by means other than exchange, i.e. steal it, beg for it, cheat someone out of it or go out and find it or produce it oneself. In addition, some element of trust or cooperation is also necessary. In other words, both parties need to feel confident that no foul play or trickery will take place. This obviously requires some social, cultural or legal setting, without which one or both parties would lack the confidence to go ahead with the transaction. It is also not enough for both parties to communicate their individual desires to each other. One party saying, "I want your X," and the other party saying, "I want your Y," could mean that each party wants the other's goods so much that both are willing to fight so as to obtain what the other has. Instead of being an exchange, this could be a declaration of war! As will be clear later, it is important to distinguish economic transactions from interactions that involve coercion.

As we saw in Hadreas' basic account, all economic exchanges, either implicitly or explicitly, follow certain specific stages, such as making offers, accepting or rejecting offers, the setting of terms etc. One of the elements that Hadreas' account leaves out is that economic transactions exhibit a certain logical structure in that all exchanges are dependant on the logic of statements that are made or are assumed by both parties during or prior to an exchange. To get a flavour of how this works I will now provide a preliminary overview of such exchange scenarios. As Hadreas pointed out, prior to any exchange there is an offer or request stage; this can be simply the posting of prices or it

can involve some active negotiation or haggling. As a preliminary view, we can say that these offers are really conditional sentences, such as "If you X, I will Y." So, if I see that you have a car for sale, I may make you an offer for your car, such as, "If you give me your car, I will give you $100." Alternatively, you could offer me your car in exchange for $100 - all that is important for my purposes now is that an economic exchange is initiated through the making of an offer which involves the uttering of a conditional statement by one of the parties. Of course it is the case that many economic transactions take place without anyone uttering such conditional sentences; all that I am trying to isolate here is the element of an offer which is either spoken by one or more parties or is understood by both parties to a potential exchange during this offer phase. At this preliminary stage we can say that, from the linguistic standpoint, economic transactions involve a certain logical structure at the offer phase; the logical structure of such offers is the standard conditional proposition. However, there is a serious problem concerning this simple analysis involving conditional propositions because such an analysis is also applicable to other types of human communication, such as that of making coercive proposals. The formula of the conditional proposition, "If you X, I will Y," can also stand for the following proposition, "If you tell the police that I committed the crime, I will kill you." While it is obviously the case that some economic transactions can be extremely exploitative, does this mean that at least some economic transactions can also be coercive? I show in the next section that threats or coercive proposals[72] have no place in economic transactions. Moreover, although some economic transactions can be exploitative or hard, it is important to see the distinction between them and acts of coercion

3.3.2 Distinguishing Exploitative Offers and Coercive Proposals.[73]

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[72]I use the terms threats and coercive proposals interchangeably. However, it must be noted that coercion necessarily involves the making of threats (whether implied or otherwise) while threats are not always coercive - I might make a threat, such as "When I find you, I am going to beat you up," without giving you an alternative to contemplate. Although I have threatened to do you harm, I am not trying to coerce you into doing or refraining from doing something. However, here I will be using the term 'threat' and its derivatives only in the sense of a coercive proposal.

[73]Some of the discussion in this section and the next has appeared in my "The

Before getting involved in the discussion regarding the distinction between exploitation and coercion I want first of all to clarify certain matters concerning coercive proposals. Coercion is the use of threats to get someone to do something or to prevent them from performing some act. Generally speaking, although the issuing of threats or coercive proposals can be illegal and are often viewed as being immoral, they are not necessarily so. "If you produce any more sloppy work like this I will fire you," is a threat that is certainly not prima facie illegal or immoral while the threat, "Your money or your life," certainly is. There are examples of threats that would even meet our moral approval and of which it can be said that one has a duty (morally and legally) to issue. "If you don't desist from stealing money from your fellow employees, I will inform the police," would be a candidate for such a threat if it were issued by an employer. Not all threats have to involve harm or a disbenefit to the threatened. One could threaten a child with giving him or her a bath or tell a workaholic who has worked herself into a state of ill health that if she does not try to relax and work less that she will be transferred to a quieter position within the organization. In the latter case, the employee might view such a statement as a threat because she loves her work so much and is averse to the boredom of a quiet office, even though what is threatened might be of great benefit to her health and well-being. So, the important point about a coercive proposal is that it offends against what the recipient would want or welcome. Whether the proposal might actually result in a great benefit to the recipient in some objective sense does not make it any less coercive. In this sense, all the threats cited earlier are coercive in that the recipient is faced with an unwelcome outcome unless he or she complies.

Although coercive proposals involve giving the recipient a choice, this should not be taken as a dilution of their coercive impact; when a protection racket offers a shopkeeper the choice of paying up or his shop being burned down or at least badly damaged, the actual presenting of the coercive choice adversely changes the shopkeepers

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Philosophy of Blackmail: Indecent Offers or Coercive Proposals," *Journal of Social Philosophy*, 1998, Vol. XXIX, no. 1, pp. 37-48.

circumstances. An offer, such as one which occurs in the preliminaries to an economic exchange, never involves coercion, even when it is exploitative, because the presentation of the offer does not place the recipient in a worse set of circumstances than before the offer was made. In the case of a coercive threat however, the recipients have moved from a *status quo*, where they did not face either paying up or being burned out, to a new set of circumstances where at least one of those outcomes is going to occur. It is this change in the recipient's *status quo* that identifies coercion and that is absent in the case of making an offer; this I refer to as the *status quo* argument. That both cases involve a choice between alternatives and that one alternative is preferable to the other, should not be used to confuse offers and coercive proposals.

To the extent that all coercive proposals involve threats, I am in agreement with Gorr.[74] However, I disagree with much of the rest of his analysis. Gorr splits all such potential proposals into two propositions; in the case of the coercive proposal,"Your money or your life," there are two implied alternatives: "If you give me your money, I will let you live" and "If you do not give me your money, I will kill you." Gorr sees the first alternative as neither a threat nor an offer, but neutral, while the second is clearly a threat. But it does not make sense to split up such the proposals in this way as the following analysis shows.

If we take it that what the issuer of the coercive proposal says is true (and for it to be a threat we would have to believe him), it is the logical conjunction of the two statements that must be true. The issuer wants to present them as a logical conjunction; if they were presented as a disjunction, it could not be a coercive threat. For that logical conjunction to be true, both sides of the conjunction must be true. Removed from the conjunction, we could say that the first statement, "If you give me your money, I will not kill you" is neutral because, by the rule of material implication, the conditional statement can still be true even when the antecedent of a conditional statement is false while the consequent is true; but one's *status quo* has not been altered, strictly speaking. In other words, one is not going to be killed whether money is handed over or not. But the force of the conjunction of the two conditional statements is such that the antecedent and the

[74]The analysis that follows has its origins in Gorr, 1986, pp. 383-405.

consequence of one of the conjoined statements must both be true while those of the other statement are both false; otherwise, the conjunction will be false. This is because the antecedent and consequent of the former must be the negations of the antecedent and consequent of the latter respectively for it to be a conditional threat.

(This can be worked out in a truth table: if P and Q are the antecedent and consequent of the first conditional statement, the antecedent of the second statement will be the negation of P, that is ~P, and the consequent of that second statement will be ~Q. The conjunction, that is {{P -> Q} & {~P -> ~Q}} will be true only when P and Q are both simultaneously true or both simultaneously false.)

Any attempt to deal with one of the conjoined statements separately and to decide whether it is neutral or a threat is to pervert the meaning of a conditional threat. Each of the conjoined statements only has its specific meaning within the conjunction. If we take the so-called neutral statement within the conjunction of our example, (i.e. "If you give me your money, I will not kill you,") it cannot be neutral because it always implies a change in circumstances, i.e. handing over money, from within the conjunction. Outside the conjunction, it can be neutral because the statement can still be true when the antecedent is false and the consequent is true. But if it is independent of the other statement, then it is no longer part of a coercive proposal.

Gorr also applies his method of separating the two conditional statements in the case of offers. If I propose to sell you my car for a hundred dollars, I am really providing you with two alternatives; "If you give me a hundred dollars, I will give you my car," and "If you do not give me a hundred dollars, I will not give you my car." According to Gorr, the first alternative is an offer while the second is neutral. Again, it does not make sense to split up these proposals and call one neutral and the other an offer. Both statements are interdependent, as I have argued in the case of coercive proposals. Strictly speaking, the statement, "If you give me a hundred dollars, I will give you my car," can be true even in cases where you are prepared to give me the car as a present or exchange it for one dollar. Because of the rules of material implication, whether the antecedent is true or false, whenever the consequent is true, the whole statement will be true. It is only when such a

statement is conjoined with the statement, "If you do not give me one hundred dollars, I will not give you my car," that the conjunction of the two statements becomes a conditional offer. So, we find that the offers involved in economic exchange share a similar logical structure with coercive proposals, as in, {{P -> Q} & {~P -> ~Q}}.

Of course, it is not the case that everyone who makes an offer or a threat spells it out in such a pedantic manner. Just because the relevant conjoined statements that make up the offers that are involved in economic transactions are usually not explicitly uttered does not mean that they are not understood as a crucial condition in any economic transaction. Much of our spoken and written language is made up of indirect speech acts. The actual words uttered are often a shorthand for such involved meanings. However, there are certain kinds of economic transactions when at least some of the implied propositions are gone into in some detail, such as in the case of certain legal agreements which require documentation, e.g. purchasing and selling houses and real estate.

It might be argued that there are certain cases which do not cohere with this analysis; for instance, how can this analysis be applied to bribery and can we say whether bribery involves coercion or whether it is a *bone fide* economic transaction? If bribes can be said to involve coercive proposals, then clearly they would be ruled out of the set of *bone fide* economic transactions. But from the following analysis, it is clear that, unlike extortion, bribes are not coercive proposals. Bribery involves offers while extortion involves coercive proposals. The potential recipient of a bribe has an open choice and his *status quo* has not been adversely affected by the offer of the bribe. This is obviously not the case with extortion.[75] So, if bribes are offers or play a part in some offers, how are we to distinguish between them and bone fide economic transactions?

Although they are offers, bribes involve reneging on other obligations. The bribe accepter is illegally appropriating money from a third party and working against the conditions in his contract with that third party. The bribe offerer is also acting fraudulently by failing to make a *bona fide* offer. In some circumstances bribery involves the corruption of practices or rules, such as legal codes, contracts or conventions. The force of self-imposed

[75]For an alternative approach on the topic of bribery and extortion, see Phillips 1984.

market conventions should not be down-played; these are often rigidly enforced by the players in the market, especially if the working of the market depends on them. An example is the "my word is my bond" convention that operates in many paper markets (i.e. stock, bond, futures and options markets) where all deals are done by phone; if this convention did not exist, the market could not function in the way it does and it is in the interest of all participants to enforce such rules and to threaten deviant operators with sanctions, such as exclusion from the market. However, I am not claiming that such conventions are sufficient for the sound operation of those markets. Both the markets and their conventions or rules rely ultimately on the law and robust systems of state regulation.

So, although bribery is an offer, it is not a *bone fide* economic offer because it works against the rules which make markets possible. While a bribe does involve an economic transaction in that something is received in exchange for the bribe, this transaction involves the reneging on other obligations, including contractual ones. Bribes also reduce the transparency of prices, distort the allocation of resources and reward corrupt practices rather than efficiency and innovation. Arguably, widespread bribery and corruption can either destroy a market or at least severely depress it.

To conclude this section, offers are not coercive because the making of the offer leads to no adverse change in the actual circumstances of the recipient of the offer along the lines of the *status quo* argument. The individual is faced with the option of changing the circumstances only if he or she wants to, or of remaining at the *status quo*. In the case of a coercive proposal, the choice is between two sets of changed circumstances; in the example of "Your money or your life," a choice between death or reduced circumstances (i.e. paying out money); both options involve an adverse change in circumstances for the recipient. Because economic exchange involves offers as opposed to threats, coercion does not have any place in proper economic transactions.

3.3.3 Exploitation.

Although offers do not involve threats or coercion, this is not to say that some offers are not exploitative, sometimes extremely so. The example of a hard economic transaction or exploitative offer (I use both terms interchangeably) cited by Mack concerns the parent of a dying child who knows that the only thing that will cheer up the child is a baseball signed by the late Babe Ruth (Mack 1982, 275). A ruthless person in possession of such an autographed baseball and aware of the parent's predicament could exact an extremely high price for it, especially if there are no others available. This example involves non-transferable wants or desires; the desire of the child for a baseball signed by the late Babe Ruth is non-transferable in the sense that no substitute can come near to satisfying such a desire.

Economic exploitation often trades on such non-transferable wants or needs. We may find such behaviour disgraceful in that it is extremely exploitative but in cases where the non-transferrable desire or need is unusual or isolated, it is difficult to say why we should make it a crime if we accept the general notion of market pricing. There is nothing illegal in trying to get the best price for a piece of property; house vendors do this all the time. If the parent is prepared to buy the autographed ball for the extremely high price, and the transaction is non-coercive because there is no attempt to worsen the *status quo*, can we say that the transaction victimises the parent? The exploitative transaction does not change the *status quo*; instead it exploits it. The example may sound farfetched or contrived but it illustrates the extreme difficulty of legislating for isolated transactions that involve non-transferable desires.

But this example also helps to illustrate the way in which exploitation operates in cases which do not involve isolated or unusual non-transferable desires. Marx was correct to point out that the free exchange of commodities allows for exploitation of the grossest kind. But his claim that exploitation operates via the production process and not through the exchange process is false. As we already saw in the example of the non-transferrable need or desire on the part of the sick child for the baseball, it is the non-transferability of the need or desire plus the strength of that need or desire that allows one party to exploit the other. Often the situation in which an individual or group find themselves is

responsible for the non-transferability of the a desire. For instance, an individual in a desert without any water and dying of thirst will have a very strong non-transferrable desire for some water or water based product. Workers who have no other source of income and no other choice of employer can be exploited because the situation dictates that they have a powerful need for wages which is not transferrable because there is only one source of wages. So, even though these instances exemplify offers as opposed to coercive proposals in that they allow the relevant parties the option of changing their circumstances or remaining at the *status quo*, they are still exploitative offers in that the other parties to these exchanges are exploiting the circumstances in which their counterparts find themselves. This is not to claim that workers are never coerced but it is to claim that once coercion enters the picture it is clear that no free economic exchange can be said to pertain and the situation becomes one of forced labour rather than labour freely exchanged.

It is also clear from the first two examples I have cited that, contrary to Marx's claims, exploitation occurs even when there is no production involved. The point of all three examples is that exchange is the locus of exploitation and that it is the circumstances in which the exploited find themselves which allows for their exploitation. While I have addressed examples where the exploitation is starkly obvious, nevertheless exploitation is a relative term and there are degrees of exploitation. For example, a less extreme example of exploitation would be where there is more than one possible employer but where employers are able to bid down wages because of high rates of unemployment. The more actual options for exchange an individual faces, the less is the likelihood that that individual will be exploited.

Hard economic transactions, those transactions that involve exploitative offers, usually only become the subject of legislation when large numbers of individuals become involved. For instance, governments pass laws against restrictive economic practices, that is against ploys to restrict competition or to exploit market conditions unfairly. These rules govern monopolistic and monopsonistic practices either by attempting to prevent such practices, as in anti-trust legislation, or by maintaining controls on pricing and provision in the case of natural monopolies, such as the regulation of water and

electricity utilities. Governments tend not to try to regulate isolated transactions; therefore transactions that involve isolated or unusual non-transferable desires tend to be ignored. So, governments may legislate against the more gross forms of exploitation of the labour force by enforcing a minimum wage; but they normally do not legislate against the exploitation of individuals who have unusual non-transferrable desires, such as in the example of the sick child and the autographed baseball. Instead, policy makers concentrate on the sort of transactions that are likely to be repeated many times throughout the economy.

The point about non-transferable desires is that they are multifarious and the resources of the government are limited. A government that insisted on legislating for or taking a hand in every transaction that involved a non-transferable desire would find little time for anything else. Only in the case of non-transferable *needs* is a government likely to take an interest, and even then the provision can often be sketchy. Given that human needs, as opposed to wants, tend to be highly similar and their satisfaction comes in many forms (allowing for much substitution), the issue of non-transferable needs arises more rarely. Having said that, technological advances often lead to the possibility of the satisfaction of a need which was hitherto not possible and this has led to an increasing prevalence of non-transferrable needs, especially with respect to medical needs and this makes for new challenges for government. But in the case of non-transferrable desires, would there be any sense in insisting that the government become involved in all those transactions that involve rare stamps, antiques of all kinds, certain rare works of art, certain kinds of real estate or even sports equipment and effects that have been signed by famous exponents of those sports? Governments of countries that allow free enterprise or open market participation tend to try to operate at the level of the market as opposed to the level of the individual transaction on the principle that if greater choice at market level exists, the opportunity for exploitative or hard transactions in that market tends to disappear.

3.3.4 Exchanging and Promising

So far, we have seen that although coercive proposals have a similar structure to offers and, by extension, economic transactions, it is still possible to distinguish between them. But, at least in the case of economic exchanges, it seems that more is involved than the mere assertion of a conjunction of conditional statements by both sides. The assertion, "If you give me your X, I will give you my Y, and, if you do not give me your X, I will not give you my Y," does not contain any commitment or normative element other than the making of a sincerely uttered statement about the future, namely a prediction. But sincerely uttered predictions often turn out to be wrong and they do not place the utterer under any further commitment to the other party. As will become clear later, what is missing is a necessary condition for exchange, which is that specific promises are made in a certain context which place both parties under certain obligations. The conjunction of the conditional statements becomes the content of those promises. This will put together the analysis that I used in the last section with some important elements from Hadreas' account.

Two parties who are engaging in an exchange must believe or be in a position to believe that the exchange will be completed by both parties. They have to be in a position in which they trust that this will be so. Otherwise, there would be no incentive for either to get involved with the other. Of course, this does not necessarily mean that both must believe that the other person is completely trustworthy; all that is required is that there are good reasons for both to believe that the other will not renege. These might involve conventions, tribal rules, moral codes, rules of kinship, taboo, the legal system, appeals to higher authority or any other sanction. In more advanced economies where trade often occurs over greater distances, exchanges are often more formal in that they involve written contracts with the explicit backing of extensive legal codes backed by sanctions; otherwise participants would not have the confidence to engage in them. Trust will usually be dependent on social, political, cultural or, as is more common today, legal contexts. The form that these contexts take does not concern me here.[76] But what does concern me at a this stage in the discussion is the linguistic context that is necessary for

[76]It might well be that the only factor keeping both parties on the straight and narrow is that their exchanges are iterated. In such cases, if one party reneges (or free-rides), the other may operate a tit-for-tat strategy or the free-rider might find himself excluded from the market completely by the other participants.

exchange.

We have already seen in my preliminary account that the statements made during the offer stage of economic exchanges have a certain structure in that they are made up of conjunctions of conditional statements. However, on its own, this account is too thin. One can easily imagine instances where one could invoke a conjunction of conditional statements with the logical structure as set out above and yet not be issuing offers nor coercive proposals either; e.g. "If it rains tomorrow, then I will stay at home and if it does not rain tomorrow, then I will go out." What is missing is the element of commitment to engage in collective action. This commitment to collective action requires the mutual making of promises along the lines as set out by Hadreas. How this fits in with my account of conditional statements will become clear in what follows.

When I say, to use the preliminary form of an offer, "If you give me X, I will give you Y," I am not stating a fact as in, "If my car breaks down, I won't be able to drive to town today." Instead I am engaged in making you an offer. I must want this exchange to take place, otherwise what would be the point of my making the offer. The making of an offer as part of an exchange is a performative. By saying the relevant words, I am using them to perform an action. The action of making an offer as part of an economic transaction is in effect the creation of a conditional commitment, which just is conditional promise making. In other words, the conditional propositions are the content of the promise, as follows:

> "I promise that
> (if you give me x, I will give you y,
> and,
> if you do not give me x, I will not give you y)."

In turn, acceptance of the offer involves the other party reciprocating by providing an undertaking in the form of another conditional promise as follows:

> "I promise that

(if you give me y, I will give you x,
and,
if you do not give me y, I will not give you x)."

Or the other party might issue a counter offer involving different amounts of the same goods or different goods; such a counter offer will take the same form as a conditional promise, as outlined above.

Although it makes no sense to talk about the truth or falsity of performatives, the issuer of a conditional promise undertakes that the conditional propositions that form the content of the promises will become true at some stage. If the utterer of the performative does not believe or is not committed to making the embedded proposition of the performative true, then he cannot be said to be issuing a *bone fide* promise. Incidently, a similar structure is applicable in the case of coercive proposals. The issuer of the coercive proposal is strongly committed to making the conditional statement contained within his proposal true or at least wants to appear to be strongly committed. However, a coercive proposal can never be a promise since it offends against Searle's first preparatory condition, which is that in the case of promise making the hearer prefers that the speaker would perform the promised act and the speaker believes that the hearer would prefer it.

So far I have been discussing economic exchange without actually stating what is actually exchanged in an economic transaction. My contention is that an economic exchange is essentially an exchange of promises or undertakings and it can only take place if both parties believe that the promises or undertakings will be kept. It may sound strange that it is promises that are exchanged, as opposed to commodities or services. But if we look at some typical examples, we can see how this must be so. Imagine that we are engaging in barter in some sort of early society; it can be seen that my handing you my deer-skin and you handing me your knife might only mean that I am holding your property while you are holding mine. Or it might be that we are in fact engaging in some sort of pre-transactional inspection of goods. To use a more up-to-date example, when houses are bought and sold, the properties are not physically handed over as that would be impossible - even handing over the keys does not amount to disposing of a property.

Instead, what is exchanged in the case of house sales are legal papers and contracts and it is the existence of these papers and their registration which counts as evidence of ownership. Among these papers will be a contract for sale which contains all the undertakings and promises relating to the property. Also, as I will discuss below, there can often be a significant period of time between the exchange of promises and the final discharge of all relevant obligations. Economic exchange is primarily the creation of obligations by both parties to each other through the exchange of promises and any actual physical handing over of commodities, services or currency is the discharging of obligations, not their creation.

So far I have only outlined the most basic promise that is issued in an economic exchange; in fact, since the account of exchange I have so far provided does not include any reference to money, it can be assumed that it only refers to the more basic forms of barter. In fact, each economic transaction requires that a number of additional conditions be attached to the basic promise or that additional promises be exchanged. They can include promises regarding time and location - "I promise to give you my deer-skin if you promise to give me you knife" must carry the presumption of here and now, unless otherwise stated. The exchange of promises or undertakings always precedes the handing over of what is to be exchanged, even if by a few seconds. Sometimes the action of taking what is on offer and handing over whatever is asked in exchange takes the place of the verbal utterance. For instance, to use the last example, after I have made an offer in the form of a conditional promise of my deer skin for your knife, you may simply hand over your knife and wait for me to honour my promise. But by handing over the knife, you have shown your agreement to my proposal and implied that you are bound by the usual promises of exchange. Of course, if one side reneges on the exchange, the other is normally released from any further obligations related to that exchange.

Other promises are also implicit in a proper exchange. Clearly it must be understood that both sides have promised to give up their property rights over what is to be handed over, unless it is otherwise stipulated, and not to seek further recompense after the bargain has been struck. It is also assumed that each party has exclusive ownership over what is to be exchanged, or will have at the time and place of handing over possession. So far I have

not included any discussion of money in my account of exchange. As I will show later, when money plays a role in an economic transaction, certain other promises or undertakings are also involved or assumed. Usually, these promises are not made explicit during the exchange discussion but they are understood to obtain as part of the context of the exchange. In fact, no promises need to be actually uttered as long as they are understood or implicit in what is going on. Negotiation prior to an economic transaction may involve all sorts of winks, nods, raised eyebrows, grunts or movements of the head. Anyone who has been to an auction will realise that a slight incline of the head or a movement of the program can be taken as a bid. Agreement to the exchange of promises can be shown by other sorts of non-verbal behaviour, such as nods, grunts, shaking hands, marks on a page or whatever. Since exchange is a linguistic activity and many forms of linguistic behaviour are non-verbal and context dependent, we should not be surprised that so much of what goes on in an exchange is non-verbal and context dependent.

It is worth noting that this account of economic exchange is perfectly in keeping with my amended version of Collin's account of social institutions. As I have shown, economic exchange involves a system of linguistic institutions and conventions, such as promising and the use of conjoined conditional statements, and is idealized in the sense that there is a right and wrong way of proceeding according to the institution. In keeping with my amendment to Collin's account, it is language that makes possible the idealization of correctness within the institution of economic exchange and facilitates its features of independence and permanence.

3.4 The Ontology of Money I: Historical Accounts of its Origin.

Now that we have a filled-out account of the institution of exchange, I will now proceed to show how the institution of money emerges in this account. In Chapter One I explored the two traditions of historical metallism and chartalism. Now I will show how my analysis of the institution of exchange will support both accounts of how money emerged as an institution. I will demonstrate how money is rooted in linguistic activity in that it

arose out of exchange and how it developed historically. This is in keeping with my assertion that, because of the problem of self-reference, it is not possible to provide a synchronic account of money that does not fall into either circularity or infinite regress; the only account of money that will avoid either circularity or regress is a diachronic one.

3.4.1 The Institution of Exchange and Historical Metallism.

Historic metallism is the view that money emerged initially in the form of a commodity. As I showed in Chapter 1, Menger provides a mechanism by which certain commodities emerge as commodity money. According to his account, the commodity that is more saleable than others is likely to become the adopted medium of exchange. Menger's account shows how such commodity money emerges within a system of pure barter; this account is in keeping with Lewis's analysis of conventions, as I discussed in the last chapter. The coordination problem in this context is a matter of how everyone can adopt the same commodity as a medium of exchange; as in other coordination problems, each individual would prefer to use a single commodity as a medium of exchange just so long as everyone else does the same. The benefits of always using the same exchange commodity to discharge obligations are obvious since, in attempting to find someone who is offering what you want that, one is always sure that the other party will accept the exchange good that one is offering in exchange; this reduces transaction costs drastically. Also, there is no longer the difficulty of the unwieldy number of exchange rates which arise once the number of commodities rises above a relatively small number.[77] The salient feature of the commodity that becomes the exchange commodity is its saleableness.

In the case of this basic form of commodity money, the same conditions of exchange apply as in the case of barter. The central reciprocal promises are made, as I outlined

[77]According to the scenario I used in Chapter 1, the benefits of money in the form of an exchange commodity are that it increases the chances of finding a suitable exchange partner from $[^1/_{(x-1)}]^2$ to $^1/_{(x-1)}$ and it reduces the set of exchange rates to a set of prices, namely one exchange rate per type of good.

earlier. As is clear from the Menger account of saleableness, it is possible that the commodity that emerges as a medium of exchange may change over time or even with the seasons, depending on its availability and possible changes in its saleableness. As long as the exchange commodity is merely whatever is the most saleable commodity, then the form that commodity money takes is set by convention. However, the form that commodity money takes can also become institutionalized when the form that the commodity money takes becomes very stable and the state becomes involved in regulating it. When the form that commodity money takes becomes more permanent and especially when it takes a more specific physical form, such as a stamped coin, the commodity money in question moves from being a mere convention to becoming an institution. What occurs is that in exchanges that now involve commodity money as an institution, an additional promissory relation or presumption is involved; that is the relation or presumption among a group or community of exchangers, such as the community of merchants in the Sumerian civilization, that a certain commodity will always be acceptable for the discharging of all obligations that arise in economic exchanges. It is not hard to see that this relation among a relatively small group would not be sustainable in larger populations and therefore the relation that ultimately developed was one between the population and the state.

The distinction between commodity money as a convention and commodity in the form of an institution often may not be very sharp. For instance, although commodity money in the institutionalized form is more permanent than the conventional form, it is still a commodity and would become unusable as a currency if it became too plentiful. Even though it is an institution, its function as a currency is still heavily dependent on its value as a commodity. As the institution of commodity money becomes more sophisticated this is less likely to become a problem. With the emergence of a metal coinage, metal retained its commodity value by weight. Certain institutional features were introduced so as to prevent the debasing of the coinage through various practices, such as clipping and sweating; coins were heavily imprinted with authoritative seals and their edges were serrated. This coinage now required regulation by the authorities to prevent counterfeiting through the minting of fake coins out of inferior metals because such coinage relies, at least in part, on the value of the metal contained in it. For vendors of

goods to have confidence in such coinage, they have to be reasonably sure that it will retain its value, that they will be able to engage in future exchanges using such coins. In more developed forms of commodity money, the state was meant to act as guarantor by ensuring that only a limited number of coins are minted, by refraining from debasing the coinage, by designing the coins so that they were hard to copy or debase and preventing counterfeiting through legislation backed by severe penalties. But, as I discussed in Chapter One, the amount of profit or seigniorage that the monetary authorities could make through debasing the coinage was often too tempting and the consequences were often disastrous.

For a coinage to count as money, it must reflect previous obligations and it must carry the potential for engaging in future exchanges. For now, we can take it that money is the set of previous obligations that one can call on; it is money which provides us with the ability to retain these obligations for use in future exchanges.

3.4.2 The Institution of Exchange and Historical Chartalism

As I discussed in Chapter One, historical chartalism is the view that money emerged initially, not as a commodity, but as some sort of token. There are several contrasting versions of historical chartalism but I can boil them down to two groups; those which involve the claim that pure barter never played a role in our economic development because of various factors, including the exchange rate problem, and those which involve the claim that barter did have a role to play in our economic development. The latter group usually maintain that the exchange rate problem only became a serious issue once the number of different commodities increased above a relatively small number. But as long as the number of commodities remained small, pure barter was still feasible. According to this group, the exchange rate problem did not lead to the emergence of commodity money but instead to the emergence of a chartal form of money, as I will outline shortly.

A position that denies that pure barter ever had a role to play in economic history obviously leaves no room for the emergence of economic exchange prior to the existence of money. As I outlined in Chapter One, this version of historical chartalism appeals to some sort of social institution, such as wergeld, which they claim gave rise to money and that exchange involved money of this kind right from the very beginning. It also follows from this position that the authorities either created or instituted the notion of exchange or that exchange arose in some way from the existence of wergeld in combination with certain other actions on the part of the authorities, such as the granting of property rights to individuals or groups. While this version of events is hard to square with the historical facts as generally understood, as I discussed in Chapter One, it is still the case that it coheres with my theory of economic exchange as the exchange of promises or commitments but without the claim that money emerged initially without the intervention of government. It is also coherent with my account of fiat or fiduciary money which I will provide presently.

The version of historical chartalism which allows for the feasibility of pure barter is also consistent with my account of the emergence of economic exchange as a solution to coordination problems and coheres with my theory of economic exchange as an exchange of promises or commitments, as follows. In every instance of pure barter, each party issues an undertaking or obligation to the other party through the making of a promise and each receives a undertaking or obligation from the other party to the exchange. Since the promise making in an exchange is reciprocal, each party is in possession of an obligation from the other party and each is under obligation. Since exchange is an exchange of promises which allows each side to gain an obligation from the other side, and because the exchange of promises is conceptually and temporally distinguishable from the actual handing over of goods (even if by only a few seconds), then each party to a particular exchange can be said to be in possession of obligations or undertakings from the other party for a period of time, even if only for a very short period of time; the promises must be exchanged before the obligations they create can be discharged. This temporal difference will often be dictated by physical factors, such as lifting, carrying, rounding up animals etc.

If the temporal difference is substantial enough, it is possible, under conditions of pure barter, for one party to an exchange to enter into one or more further exchanges with one or more third parties, effectively bargaining with the result of the original exchange before the first party has actually discharging the original obligation. Is that second exchange a proper one, given that one of the parties is not in possession of the goods that are the subject of the promises he or she is making? Given that exchange is the reciprocal making of promises, then, given that one of the parties is in possession of an undertaking or obligation from a previous exchange, (because promise-making is the creation of obligations), the second exchange is a proper one. Economic transactions often contain a risk that one or other party will not be able to deliver their side of the bargain; if I, in good faith, agree to exchange my cow for your three sheep, there is always the danger than something could happen to the sheep or the cow between striking the deal and delivering on the obligations. But aside from such practical considerations, there is nothing to prevent someone from entering into an exchange armed only with the commitments from a previous proper exchange. To put it in a contemporary context, I can quite properly enter into a rental agreement now even though I am not in possession of all the rent; as long as I can demonstrate that I am engaged in an exchange with an employer or have some other way of generating the money over the period of the lease, my prospective landlord will satisfied.

What follows from this is that while such further exchanges can be entered into, they cannot be discharged until the undertaking from the original exchange is discharged. As I discussed in Chapter One, Berkeley provides the solution to such difficulties in his example of sailors marooned on a desert island. According to Berkeley, because of the delays in discharging the undertakings that arise in transactions due to seasonal or other factors, exchange will tend to give rise to credits and debits between participants in exchanges. Some system has to be put in place in order to record such credits. If a system of tallies or tokens is put in place, then this will deal with the need for recording such credits; and if the tokens or tallies are circulated, then this will facilitate trade by allowing for the discharge of undertakings in a more efficient way.

Once again, Collin's version of social reality can be applied to this account of how money emerged. The initial coordination problem is one of how individuals can engage in

exchanges when they are unable to discharge their undertakings in a timely manner. The issuing of some sort of tally by such parties may allow the exchange to take place but this would depend on whether the recipient trusts the other party. If an issuing party gains a good reputation for trustworthiness in honouring such tallies, then such tallies may become acceptable to third parties as they become aware of his reputation. The salient feature in this case is the fact that the issuer has a good reputation. I still harbour reservations about how such a tally system would become generally accepted. But granting that a certain kind of token would become acceptable among a large group of exchangers, this would require some policing by an authority of some kind. This form of chartal money has become an institution in that it becomes independent of any single individual or the reputation of any individual and also becomes permanent. Such exchanges now involve an additional promise or presumption, which is the promise or presumption among a group or community of exchangers or between a population and the state that a certain token will always be acceptable for the discharging of obligations that arise in future transactions.

3.5 The Ontology of Money II: Beyond Commodity Money.

3.5.1. Fiat Money

Fiat or fiduciary money is any form of money which is created by fiat of a monetary authority, such as government or a branch of government. Although coins are still being used as part of out currency today, this is merely a relic of commodity money since its metallic value as a commodity is so low. Also, barter can still take place in a modern money economy, e.g. house exchanges, although these are often not instances of barter alone as one party sometimes pays over a sum of money in addition to what is bartered. Usually, the examples of widespread barter and commodity money that have existed in

this century have occurred because of a breakdown in the monetary system or due to an absence of currency, such as in countries in the grip of war or economic crisis and less developed areas where a currency economy has never developed.[78] What such examples make clear is that fiat or fiduciary money requires even more regulation by the authorities than commodity money. This is not just because there is more opportunity for counterfeiting and for fraud, as we shall see in the case of abstract money. The requirement for more regulation lies at the very heart of what fiat money is and what it is for fiat currency to count as money.

The fundamental difference between commodity money and fiat money is that in the case of the former the relative scarcity of the commodity in question is what gives it its value or at least plays a role in deciding the value of the currency. Some more developed forms of commodity money have displayed some of the characteristics of both fiat and commodity money in that the value of the currency depended to some extent on the metallic content and to some extent on the fiat of the issuing authority. The development

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[78]For an example of a twentieth-century barter and commodity money economy, see Radford 1945, pp. 189-201. This is probably the closest that the discipline of Economics has ever come to "laboratory conditions." An account is provided by Radford of barter and commodity money, arbitrage and speculation, economic cycles, the difficulties involved in price-fixing and exchange. The behaviour of different forms of money and their effects on the economy are examined and the labour theory of value is rejected, given that markets existed virtually without any production (and therefore without labour) as most commodities were provided by Red Cross parcels or "over the wire" trade. Despite the equal distribution of resources generally largely in the form of Red Cross parcels among the relatively homogenous population (all male of military age), very active markets emerged rather quickly, as did a form of commodity money, namely cigarettes.

from commodity to fiat money was a slow process, involving the separation of the face value of the coinage from the commodity value of its metal content. Monetary authorities were motivated to follow this course of action because of the enormous gains in seigniorage that resulted. Although this debasement of the coinage led to severe economic and social problems, it opened the way for the possibility that a currency could consist of tokens with no intrinsic value and did not have to depend on the value of its metallic content.

Clearly, it does not require a large step for the sort of chartal forms of money I discussed in the previous section to evolve into fiat or fiduciary money; all that is required is that the governing authorities increase their role in monetary matters. The governing authorities can begin to play a greater role through the policing and control of various forms of paper money before taking over full control by becoming the sole issuer of such currency.

While a commodity currency can rely on the relative scarcity of that commodity to retain its value, the amount of fiat currency made available must be carefully controlled because there is no natural scarcity of it. When a fiat currency is adopted, its notes represent a credit note issued by the government which the government pays out in exchange for goods or services and accepts back in the discharge of debts of which taxes make up the largest part. In effect, to possess money in this form is to possess an obligation from the issuing authority and to this extent Berkeley was correct in his assessment that all money was credit. Sterling notes still contain the words, "I promise to pay the bearer on demand the sum of X pounds." By handing out these notes of obligations as wages to soldiers, civil servants and other government workers as well as payments to providers of goods and services to government and by accepting them as payments of taxes and other debts, the government plays a central role in generating confidence in the fiat currency. In addition, by keeping the currency relatively stable in value through controlling the amount in circulation, the government adds to the advantages of individuals who use it as money; the other advantages are its portability, divisibility and relative durability. (Notes made of paper or cotton are not as durable as metal coins. In fact, the government in the U.K. regularly withdraws used notes from the system and replaces them with newly

printed ones as the life of lower denomination notes are often less than a few weeks. But the cost of printing is tiny when compared with minting coins and the shredded notes are sold off as animal bedding to offset the cost.)

In exchanges that involve fiat money, the reciprocal promising takes place as described in the cases of barter, chartal and commodity money. The purchaser promises to hand over a registered obligation (some amount of currency) on condition that the vendor hands over the goods or services in question. In some countries there are laws that state that any financial obligation to any other party can be discharged using the national currency. However, the background conditions for exchange and money still remain. If individuals do not trust the currency for some reason, because of hyperinflation or an extremely high level of counterfeiting, there will be a flight to some other form of money. For anything to count as money, it must be capable of preserving obligations from one exchange to the next. Vendors will not accept a particular form of money if they do not believe that it can be used in future exchanges.

3.5.2 Credit

Money is also created through a phenomenon known as the deposit multiplier or deposit expansion multiplier, as every economist knows. This deposit multiplier operates as follows: when person A deposits a thousand pounds in the bank, the bank retains a small percentage of the sum (as it does with all deposits to cover day-to-day withdrawals on demand and to cover current costs) and loans out the rest. For the sake of argument and ease of calculation let us say that the bank retains twenty percent, although usually this percentage is a lot less in contemporary practice. The rest, eighty percent, is loaned out. The person who receives the loan, in this case £800, uses it to pay a creditor who in turn deposits it in a bank. That bank keeps 20 percent and loans out £640, and so on. I still have my £1000 in my bank account and can call on it at any time. But all the other depositors can also call on their money at any time (just as long as they don't all do this at

the same time!). But the debtors are also using that money as well. If you add up all the money that everyone has from A's original £1,000, it amounts to over £3,000. Of course, if every one of those debtors were required to pay back their loans to the bank, then this amount of credit would collapse back to the original £1,000. But since all money is actually obligations, and paper currency is actually the registration of obligations made by government or credit extended by the population to the government, we should not be surprised that the creation of obligations, through lending, will increase the amount of money in circulation. This explains the deposit multiplier.

Credit is extended along the same lines as any other economic exchange. When a bank extends credit to a debtor, thus allowing him to become involved in exchanges which he otherwise would not be in a position to engage in, an additional obligation or set of obligations has been created and added to the obligations that are circulating within the economy in the form of money. This is known by economists as increasing the money supply through credit extension or credit expansion. This transaction between the bank and a borrower is itself an exchange. Although the terms borrower and lender are used, the situation is very similar to renting or leasing.[79] In extending credit or granting a loan, the bank and the debtor enter into reciprocal promise-making such that the bank promises to rent (lend) a sum of money to the debtor while the debtor promises to pay the rent on that sum (the interest). However, the exchange is not complete until the debtor also makes the promise to return the money within an agreed period.

But Hadreas opposes such an analysis, claiming that there is a difference between the transactions of credit and normal transactions which is that credit transactions only require promise-making from the debtor only because the creditor has already made good his delivery of the funds in advance (Hadreas 1989, 124-127). It is unclear whether Hadreas sees such transactions as being arrived at through exchange or through some other means. According to my analysis, there is an exchange of promises whereby the bank promises to provide the money for a specified period of time on certain terms while the potential debtor promises to pay the interest and to repay the money at or before a

[79]This point is made in Phillips 1982, pp. 249-250.

certain period of time. The point that Hadreas fails to realize is that since the start of the loan term does not have to be immediate, the potential borrower needs to be able to ascertain that the bank will provide him with the funds when they say they will. This requires some promising on the part of the bank. Agreed overdrafts belong to this category. Banks are often willing to provide businesses what they call a 'facility'; this is an optional line of credit which the business may or may not take up. Naturally, the bank charges for the provision of bank facilities even when they are not taken up. The upshot of all of this is that the bank also has to enter into obligations in such credit transactions.

When the bank actually provides the debtor with the money, it has discharged most of its obligations (although it may also have made other undertakings concerning the terms of the loan etc.) However, the debtor has not discharged any. If Hadreas believes that the extending of credit involves unilateral promise-making, how would he view other rental situations. The only dissimilarity between standard rental situations and the extending of credit by a bank is that, in the case of renting property or goods, the same goods or property are usually returned whereas in the case of a bank loan, the same individual banknotes are not usually returned. But this is because all money is the same. Its ontology is not that of substance, such as goods or property, but that of promissory relations, in effect obligations.

We have seen how the linguistic approach to exchange can also be extended to money and banking. Various forms of financial assets are really forms of debt. Gilt-edged securities and commercial paper are just loans from investors to the government and companies respectively which can be dealt with in the same way as bank loans. However, there are other forms of financial assets where what is owned is not money. In the case of futures and options, what is owned is an amount of a commodity, currency or financial asset in the future or a chance to buy or sell a certain amount of that commodity at a pre-specified price in the future. All of these can be dealt with by extending the linguistic approach to exchange. A future is a contract where one pays a price now (or a deposit) in return for the ownership of a certain amount of a commodity at some specified time in the future. The original purchaser of the future can sell it on to a third party, making a substantial profit or loss if the price of the actual commodity has moved compared with

the price of the future. In the case of options, the purchaser is buying something less substantial in that the purchaser can decline to exercise the right to engage in the transaction when the option matures.

One type of financial asset that requires more explanation is company shares. A share is a portion of the capital of a company which confers on the shareholder certain ownership rights. How these rights may be articulated and what other benefits certain shares confer on their holders need not detain us here. All that has to be noted at this stage is that share ownership in a company or corporation confers on the shareholder ownership rights and when the latter owns a certain percentage of the total shares, then that person is said to own that percentage of the company.[80] In the next chapter I will examine such entities as firms and companies and in more detail. For the moment we can view companies and firms as repositories of contracts or economic exchanges which are dependent on a complex legal framework.

One of the claims that I have avoided making is that the government enters into some sort of exchange relationship with the population. The idea might be that the government provides certain services and goods in exchange for taxes. In opposition to this view I am arguing that the role of the government extends far beyond the mere provision of certain goods or services and is infinitely more complex than I have so far described. In addition, unlike *bone fide* economic exchanges, the interaction between government and population does not usually involve the freedom to enter or refraining from entering into the relationship. Also, the government, through its various departments, is often the arbiter in economic exchanges, the entity in charge of economic policy generally through its role in maintaining the currency and enforcing various laws involved in issues such as labour and consumer law. Some governments are more democratic than others, some are more interventionist in markets than others. But it is a mistake to claim that the actual or ideal

[80]I am ignoring certain complexities, such as that certain types of shares are fixed in value at redemption. For the sake of simplicity, I am taking all shares to be ordinary equity shares.

relationship between government and the population is one of exchange; after all it is quite possible to run a modern market economy under a dictatorship just so long as the dictator allows for certain economic freedoms.

As I have outlined, we can see that the government must, of necessity, play a role in the creation and maintenance of economic phenomena if such phenomena are to develop beyond a bare minimum. Many markets would not exist without government regulation. Firms are created by fiat along lines that are authored and maintained by government. Also, currencies are maintained by government. Even the laws of contract, property and tort can be invoked in the case of everyday transactions. Without these interventions or regulation by government, must less economic activity would be possible.

3.5.3 Abstract Money.

As I outlined before in Chapter One, when it comes to contemporary forms of money practical chartalism is undisputed. But there is a sense in which events have even outstripped practical chartalism as a claim about money. Although it is true that we still use otherwise worthless tokens as money, the greatest part of our money stock today does not consist in notes or coins. So, although contemporary money remains as fiat or fiduciary money, most of it does not take the form of tokens and is what I have called 'abstract money'. I use the term 'abstract money' to refer to money in the form of cheques, bank accounts, electronic transfers between financial institutions and payments by credit card or other kinds of charge cards, in effect any form of money that is not in the form of coinage, paper currency or commodity money.

While most people will accept that their bank accounts do not consist of a metal box with their name on it containing the same amount of currency as stated on their bank statement, there is still a puzzle concerning how money in this abstract form actually functions as money. In the case of chartal money or commodity money, the counting of money and the transferring of money is a simple matter of manipulating or handing over the relevant

notes or coins whereas with abstract money there are no coins or notes to manipulate or hand over as such. But if abstract money is nothing but some figures written in some computer file, what is there to prevent someone from adding a few noughts here and there as there is no stock of physical items against which to verify the number. To put it another way, if a business performs a stock-take by comparing figures on stock sheets with the actual items present in the warehouse, how does a bank verify its stock if there are no physical items to count? In addition, while it may sometimes be difficult for a member of the public to tell whether a bank note is a forgery or not, banks and other organizations have sophisticated methods of distinguishing forgeries from genuine bank notes. But how can one tell whether one figure in a computer file is a forgery and another one genuine.

In order to understand how abstract money can function as money it is instructive to look at a scenario where something has gone wrong with a stock of abstract money, such as an error in the operation of a bank account. Imagine a situation where, due to some computer error, the contents of my bank account have been wiped out and instead of showing a healthy balance my bank statement now displays a series of zeros. This does not mean that my healthy bank balance is gone forever. Inquiries at the bank will reveal that at a certain time earlier in the month my account balance was at a certain level and the bank will be able to ascertain the amounts paid in and out and will then be able to arrive at my proper balance. In order to clarify how we can establish whether abstract money is genuine or not I want to borrow a concept from the art world where the issue of whether a work of art is genuine or a fake is of extreme importance.

There are a number of good reasons why there is a strong interest among those involved in art concerning whether a seemingly important art work is genuine or not; some of this interest is purely commercial, of course. But some of this interest has to do with a genuine interest in art. It is also a question which has exercised those interested in aesthetics; for instance, it has been argued that one would be justified in having a different aesthetical response to a painting after learning that it was not an original but in fact an exact copy.[81] Such matters need not detain us here. But my reason for raising these issues is to point out that what often establishes whether a work of art is genuine is the

[81]This argument is put forward in Radford 1978, pp. 66-76.

provenance of that work of art; the provenance is also used to help in establishing whether the painting properly belongs to a prospective seller. In the first instance the provenance of a painting refers to some sort of documentation regarding the origin of the painting, for instance a receipt or bill of sale indicating that the painting had been sold by the original artist. But the term provenance also refers to the history of ownership of the work from the time it was sold by the artist until the present day. This concept of provenance is also applicable in the case of abstract money. What makes the balance in an account a genuine balance is that it has a provenance. In other words, all the debits and credits that gave rise to that true balance can be examined, verified and subsequently totalled. This notion of provenance can be expanded to include other forms of abstract money, such as balances in the accounts of charge and credit cards and electronic transfers of money. Balances in the accounts of charge and credit cards operate in a similar fashion to bank accounts; the provenance of a balance can be checked with respect to the various debits from the account and payments to the account. Electronic transfers of money also have a provenance in that there will be documentary evidence of their initiation and documentary evidence of their arrival in another account.

As in the art market, falsifying or otherwise changing provenance is a fraudulent practice. This sort of fraudulent practice has become very prevalent in Internet commerce where such transactions involve abstract money only. Because there are no face-to-face transactions in Internet transactions, new ways of generating provenance have been emerging so as to cut down on Internet fraud. These involve encrypting credit card numbers and using various pre-registered verification services so as to ensure that payments of abstract money are debited to the proper accounts. It is hard to say whether new forms of money will emerge in the future or whether we will ever relinquish our bank notes and coins. Unlike abstract money, money in the form of notes and coins is anonymous and does not allow for the tracing of parties to a transaction. Also, they provide an easy way for children as neophytes to become inculcated into the world of economic phenomena without first having to master some of the complexities of abstract money. I will be turning to this epistemic question concerning how neophytes learn about economic phenomena in the next chapter.

CHAPTER FOUR

Additional Features of Economic Reality.

4.1. Introduction

In the last chapter I provided a basic account of exchange and economic reality that encompassed many aspects of economic exchange, including money. However, several issues or possible criticisms need to be addressed and refinements made before this account can be properly described as a full account of economic reality. These issues are as follows: first, this earlier account does not encompass all the forms of economic reality which ordinary human beings encounter in their everyday lives. In other words, it could be argued that the linguistic approach that was followed in the last chapter only provides the barest account of economic reality and amounts to less than a full account of modern economic reality. Such a full account should include all aspects of economic reality as encountered by human beings in the modern context, including investments, jobs, corporations, financial markets, and so on. The second point of criticism arises out of the first; it is not clear how the linguistic account, on its own, could be applied to different types of economies at different stages of development or in different social or political circumstances. Third, although an account is given of how money in its various forms emerged, there is no attempt to show how economic systems themselves emerged. Fourth, no account is given of production, which is a fundamental factor in any economic system. Lastly, this linguistic account, on its own, does not deal with a fundamental epistemic difficulty concerning economic reality, namely the difficulty concerning how neophytes learn about economic phenomena. This epistemological problem concerns how individuals or groups can come to recognize, make sense of and make use of economic phenomena, given that any attempt to explicate or define or explain such

phenomena to neophytes ends in circularity, as I will explain below. This is a separate problem from the ontological difficulty which was resolved in Chapter Two. That ontological difficulty concerned whether it would be possible to give an account of economic phenomena, specifically money, without resorting either to the term 'money' or to some related economic phenomenon which, in turn, would require resorting to the term original term 'money' for its own explanation. Resolving that ontological difficulty does not resolve the epistemological problem. This latter problem will be the subject of the next section while the other problems outlined in this introduction will be dealt with in later sections.

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4.2. The Appropriation of Economic Reality

In order to be a fully-fledged economic agent, it is not a necessary requirement that one has to be aware of the historical developments that led to the sort of economic reality we have today. Nor do economic agents necessarily have to know how a modern economy functions in order to be able to engage in economic activity. Arguably, most economic agents are largely unaware of either the historical developments or the workings of a modern economy. However, there are some minimum qualifications that one must possess if one is to function as an economic agent at the most basic or unsophisticated level. Given that an economic agent is some person or some unified group[82] that is capable of engaging in economic activity independently, these minimum qualifications must include knowing how to make sense of, make use of and recognize economic phenomena, at least at the most basic level. There are many levels of competence, understanding or sophistication with respect to economic activity; e.g. to be able to engage in economic activity in a futures and options exchange, one must have acquired a reasonable understanding of such financial instruments and their markets. But in the case of basic economic activity, all that is required is knowledge of how to use, recognise and make sense of the sort of economic phenomena we encounter on a daily basis, such as

[82]Groups of persons can be regarded as economic agents, e.g. firms.

money, prices, transactions and goods or services. For instance, the average user of money only has to know how to use, make sense of and recognize money in the form of the local currency but does not have to concern herself in detail with monetary theory, how the money markets operate or the functions of the central bank. Consumers do not have to know anything above or beyond how to use, recognise and make sense of transactions, prices, money and goods or services in order to be able to purchase a good or service. Of course, at least some awareness of availability, quality and local price variations will allow a consumer to be more successful in satisfying needs and wants. However, not every consumer has to be endowed with such awareness in order to be able to engage in economic activity.

The epistemological problem can be described as follows: explanations of economic phenomena are either self-referential, as in the case of money, or they rely on some other aspect or aspects of economic reality and are therefore circular. For instance, in attempting to explain the economic phenomenon of price to a neophyte, we would have to refer to other economic phenomena, such as money, goods, economic agents and transactions which, in turn, cannot be explained without reference to the phenomenon of price. If we take other aspects of economic reality, such as goods or services[83], money, firms, economic agents etc., the circularity problem restricts us to giving an account of each phenomenon in terms of the others. An explanation of the notion of price will have to involve other aspects of economic reality, including goods or services, money, transactions and economic agents. But the phenomena of goods and services themselves can only be explained with reference to economic agents, price, money and transactions; the phenomenon of transactions can only be explained in terms of economic agents, price, and goods or services while the explanation of what the phenomenon of economic agents amount to relies on terms such as goods or services, money, price and transactions. Any putative explanation to an economic neophyte of the economic phenomenon of money must rely either on some appeal to the fact that everyone treats a certain something as money or must refer to some other economic phenomena. The former type of putative

[83]For the sake of clarity and brevity, I take it that the notion of ownership must already be in place prior to the acceptance or understanding of basic economic phenomena.

explanation fails because it helps itself to the very notion that stands in need of explanation while the latter is circular. It appears that any putative explanation of any individual economic phenomena will involve referring to the same set of economic phenomena. But for the economic neophyte, it is this set of economic phenomena that also stands in need of explanation. Given that these are fundamental or basic economic phenomena without which there can be no economic reality, how can the neophyte accept what she is being taught or explained if there is no possible way of relating what she is being taught to what she already accepts, believes or knows?[84] The explanations are circular and the neophyte is left none the wiser because at no stage has she been able to connect up what she already knows with the new attempted explanations she is receiving. Therefore it appears that the neophyte can never gain the requisite knowledge for engaging in economic activity. Since it is obviously the case that most children do mature and become competent economic agents of varying degrees of sophistication, there must be some way out of this impasse. But while the diachronic account of economic phenomena resolves the ontological issues that arise due to the self-referentiality of such phenomena, the epistemological problem is clearly of a different order and therefore requires a different resolution.

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[84]It could be argued that money is not a basic or fundamental economic phenomenon because it is always possible to resort to barter. However, with respect to a monetary economy there is always the suspicion that barter transactions are conceptually parasitic on the notion of money. If money is left out of this description of the epistemological problem, the argument still goes through; explanations of economic phenomena will always be circular whether money is included or not. However, if a full explanation of economic phenomena is required in the case of non-barter economies, money has to be included. Only in instances of a pure barter economies could it be properly claimed that money is not a basic economic phenomenon.

4.2.1 The Epistemological Problem

Economic reality does not normally appear in the curricula of schools. Nor is it explicitly taught at home. Nor is knowledge of economic phenomena acquired through learning the way economic phenomena emerged and evolved through history. That can be seen by the fact that many, if not most, competent economic agents are totally unaware of such historical matters. Besides, a reasonable knowledge of economic phenomena would arguably be an essential requirement for understanding an historical account of economic phenomena. So, if such knowledge of economic phenomena, that is the knowledge that allows someone to recognize, make sense of and make use of economic phenomena, is not acquired in the manner set out above, then how is it acquired? What is clear is that economic agents actually do manage to recognize, make use of and make sense of economic phenomena usually without any awareness of how such economic phenomena developed. While the historical and linguistic account that I have provided in the last chapter is an account of the ontology of economic phenomena, it does not, of itself, deal with the epistemic issue of how neophytes learn to become economic agents.

4.2.2 Resolving the Epistemological Problem.

Understanding exactly what sort of knowledge the neophyte must acquire in order to become an economic agent is the key to solving the epistemological problem. It is clear that, at the most basic level, what is required of the economic agent is know-how rather than propositional knowledge. I will argue that the way this knowledge is acquired by a neophyte with respect to economic phenomena is analogous to the acquisition of language by a linguistic neophyte, as set out in Wittgenstein's *Philosophical Investigations*.[85] This should not be surprising, given that economic phenomena are largely linguistic phenomena, or at least arise out of linguistic phenomena, as is clear from the ontological account in Chapter Three. However, I need to go into further detail than Wittgenstein

[85]In the case of Wittgenstein 1963, for the sake of clarity I will be referring to the numbered remarks as opposed to the corresponding page numbers.

does for the following reason: in this regard Wittgenstein's intention was not to provide a thorough-going and detailed account of how certain abilities are acquired. A more comprehensive account will have to show not only how the basic or unsophisticated abilities are acquired, but will also have to be consistent with the acquisition of more abstract knowledge by ever more sophisticated economic agents. Such an account can be gleaned from aspects of the psychological theories and empirical work of Vygotsky; his theory of child psychological development and his concept of the zone of proximal development provide the framework for such an account, as I will show below. In making use of Vygotsky's analysis I am not claiming that his is the only analysis that can be applied in this regard. There may be many more which are compatible and perhaps some that are even more informative. All that I hope to achieve with Vygotsky's analysis is to show how it might be possible for individuals to acquire the sort of abstract knowledge required in order to become more sophisticated economic agents.

Wittgenstein devotes much of the *Philosophical Investigations* to undermining a wrong-headed view of understanding and meaning. Among other points, he rejects the cartesian picture of the human being as a combination of a private mind and a physical body and the view of this private mind of the linguistic neophyte as being already endowed with wishes and thoughts and able to divide up and think about the world in such a way that all that is required is the introduction of language for these inner workings to be communicated. This latter point is analogous to the epistemic difficulty with respect to economic reality where it seems that the economic neophyte must be already be endowed with the relevant knowledge concerning economic reality before she can begin to engage in it.

If we accept the wrongheaded view of the human being as a private mind accompanied with a physical body that acts as a physical interface with the outside world, how does such an individual learn a language unless she has already mastered another language. Wittgenstein makes the point that,

> "Augustine describes the learning of human language as if the child came into a strange country and did not understand the language of that country; that is, as if it

already had a language, only not this one." (Wittgenstein 1963, 32).

The problem that Wittgenstein addresses is how the linguistic neophyte can even begin to use language without already being endowed with linguistic mastery. Analogously, the epistemic problem with respect to economic phenomena is to give an account of how the economic neophyte can begin to engage in economic activity without already being endowed with mastery or knowledge of economic phenomena.

Wittgenstein provides a solution to this problem along the following lines: language should not be treated as merely words or signs which, shorn of context and abstracted from human practices, miraculously mean or represent something. Wittgenstein wants to move us away from the notion of language as "some non-spatial, non-temporal phantasm" (Wittgenstein 1963, 108). and to proceed towards viewing language as a technique, an activity that is embedded in our everyday activities, contexts or circumstances. A move in chess does not merely consist in moving a piece about a board, nor in the psychological feelings (Wittgenstein 1963, 181) that we may have in moving a piece around a board, "but in the circumstances that we call 'playing a game of chess,' 'solving a chess problem,' and so on." (Wittgenstein 1963, 33). In the same way, solely moving around money and goods between people does not amount to economic activity in and of itself. Wittgenstein uses the term 'language-game' with reference to two sorts of activities; one is the use of language where the language is woven into everyday activities and practices; the other involves games by which children learn how to use language (Wittgenstein 1963, 7). Engaging in economic activity bears all the hallmarks of a language game in the former sense. Learning how to engage in economic activity resembles the meaning of language-game in the latter sense.

How linguistic neophytes learn language or mastery of linguistic skills, according to the Wittgensteinian account, parallels how economic neophytes learn the mastery of the abilities, the know-how required in order to become competent economic agents. The linguistic neophyte is introduced to various language games; Wittgenstein refers to various language games, such as learning the natural numbers, chess, other board games and simple elements of language. In all cases, learning a language game invariably

involves being or becoming embedded in a particular context or circumstances wherein the linguistic element is woven into the practice in question. Of course it is possible, once certain abilities have been mastered, to learn from ostensive definition; for instance, "someone coming into a strange country will sometimes learn the language of the inhabitants from ostensive definitions that they give him." (Wittgenstein 1963, 31). Once certain other linguistic abilities have been mastered, it is possible to teach someone chess by getting them to learn the rules first before allowing them near the chessboard, according to Wittgenstein. "You can imagine his having learnt the rules of the game without ever having been shewn a piece." (Wittgenstein 1963, 31). But these are not the only ways in which a game can be learned. One can begin by watching some simple board games first, learning as one goes along, then progressing to more complicated ones. In this way, "one can also imagine someone's having learnt the game without ever learning or formulating rules." (Wittgenstein 1963, 31). Wittgenstein's point is that there are many ways of learning language games and that fully-fledged participants in language games do not have to be even aware of the rules, such as they may be.

This approach parallels the learning that the economic neophyte must engage in and supports the point that practised economic agents do not have to be explicitly aware of the rules of economic exchange. But there is still no account of how exactly a neophyte acquires the relevant know-how that is necessary for engaging in economic activity. One can imagine a child imitating adult economic behaviour when at play but how does this become meaningful activity as opposed to mere imitation? Vygotsky's notion of the zone of proximal development provides some insight into how children actually learn to be economic agents. His account of psychological development demonstrates that although children may be able to engage in some aspects of economic behaviour, this is very limited because they lack the level of understanding required. His account also allows for distinctive levels of understanding; these distinctive levels of understanding are also applicable in the case of economic phenomena, as I will outline later.

Vygotsky developed the notion of the zone of proximal development as part of his argument that more can be learned about a child's development through assessing the potential or prospective level of mental development of a child rather than solely relying

on the actual development level (Vygotsky 1987, 208-209). As Vygotsky puts it,

> "Research indicates that the zone of proximal development has more significance for the dynamics of intellectual development and for the success of instruction than does the actual level of development." (Vygotsky 1987, 209).

The zone of proximal development is defined as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers." (Vygotsky 1978, 86). Apart from being a superior way of assessing levels of mental development, the zone of proximal development also exhibits an important aspect of learning in that "learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers." (Vygotsky 1978, 90).

Although Vygotsky does not specifically examine the question of how children, as economic neophytes, can be inculcated into economic practices, his concept of the zone of proximal development can be used to demonstrate how this is possible. The following example illustrates how the zone of proximal development is applicable to learning about economic phenomena. For the purposes of illustration I will use as an example a child who would be too young to be capable of independently entering into an economic transaction. However, under the guidance of a parent, such a child could become involved in some aspects of a purchase at a local shop, such as handing over the money to the shopkeeper at the appropriate time. Because visits to the local shop are relatively frequent and the context becomes well known to the child, she becomes more adept at dealing with some of the basics of local shopping. Since, as Vygotsky points out, "what lies in the zone of proximal development at one stage is realized and moves to the level of actual development at the second" (Vygotsky 1987, 211), what the child can accomplish only in collaboration today she can accomplish independently tomorrow. But this is a step-by-step process. While the child may be able to enter into the shop and purchase some item from the local shopkeeper, whom she knows reasonably well, this does not mean that she

is now capable of engaging in economic activity generally. It could be that because of the local situation, where there is a certain amount of trust between the shopkeeper and the parent, that the situation within the local shop acts as a zone of proximal development, with the trusted shopkeeper providing guidance, when required. In such situations, the concrete situation can act as a guide. But this does not mean that the child has become proficient as an economic agent; all that has occurred is that the child has become proficient at shopping at the local store. Somehow the child has to learn to generalize from those specific experiences to be able to recognize and utilize economic phenomena generally. To understand how this is possible, I will turn to Vygotsky's account of concept development in children.

For Vygotsky, the origins of the development processes that ultimately lead to concept formation are to be found in the earliest stages of childhood. But these processes only begin to mature during the transitional or adolescent phase. But although the early formations of the child are functionally equivalent to the full-blown concepts of an adult, "experimental analysis indicates that their psychological nature, their constituents, their structure, and their mode of activity differ significantly from those of a true concept." (Vygotsky 1987, 130). For instance, the meanings of the words uttered by a child frequently coincide with those of adults, allowing for mutual understanding between child and adult, at least at some level. But Vygotsky claims that "the mental paths or modes of thinking that lead to this point of intersection are completely different." (Vygotsky 1987, 134). According to Vygotsky, children pass through a number of stages in concept development; the early stages involve generalizations that are formed "on the basis of subjective connections arising in the child's impressions." Later the child moves on to thinking in complexes, which involves generalizations which are "complexes of distinct concrete objects or things that are united on the basis of objective connections, connections that actually exist among the objects involved." (Vygotsky 1987, 136). An important distinction between this stage of thinking in complexes and the more advanced stage of thinking in concepts is that the former does not involve abstract logical connections. "The foundation of the complex lies in empirical connections that emerge in the individual's immediate experience," whereas "The concept is based on connections of a single logically equivalent type." (Vygotsky 1987, 137). What is important to notice

here is that because the complexes of the child correspond *empirically* with the concepts of the adult, both turn out to be functionally equivalent. Vygotsky works through these stages and their sub-stages in great detail; however, this amount of detail need not detain us here. What is important is that at a certain stage, if the social and cultural conditions are right, the child masters the processes of abstracting and learns to re-synthesize abstract features; according to Vygotsky, the concept arises "when this abstract synthesis becomes the basic form of thinking through which the child perceives and interprets reality." (Vygotsky 1987, 159). What makes conceptual thinking possible is language; "The concept is not possible without the word. Thinking in concepts is not possible in the absence of verbal thinking." (Vygotsky 1987, 131). The transition from non-conceptual thinking to conceptual thinking is a "transition from unmediated intellectual processes to operations that are mediated by signs." (Vygotsky 1987, 133).[86] There is a lot more to Vygotsky's account of development than I have put forward here. However, what I have outlined will be sufficient to round off my account of how economic neophytes learn about economic phenomena.

The zone of proximal development plays a role in allowing the economic neophyte to develop, step by step, through collaboration with more adept peers or adults. Learning how do perform the practice of purchasing small items at the local shop does not mean that the neophyte has immediately become an economic agent. As she matures, the child has to learn how to deal with other more complicated transactions and to become inculcated into related practices. Working in parallel is the development of concepts. If the child is literate and becomes adept at the use of language, this process should be well under way during the adolescent years. If this is the case, then the maturing teenager can

[86]Note that Vygotsky uses the term 'conceptual' and its derivatives to refer to thought that is mediated by language. According to this account, there are different degrees or levels in the ability to think conceptually; for instance, someone who is illiterate but who can converse in a language will have a lower level ability to think conceptually than someone who is literate.

move ahead very quickly in becoming an adept economic agent because she is now able to deal *conceptually* with economic phenomena, such as economic transactions, prices, goods, services as well as money in its various forms without having to be trained for each specific scenario involving economic phenomena. In addition, many economic scenarios contain within them a zone of proximal development; for instance, many businesses provide free advice or help to prospective customers.

However, it is not the case that one has to have achieved the full-blown capacity for conceptual thinking in order to be an economic agent. First of all, thinking in complexes is not completely supplanted by conceptual thinking in maturing adults. According to Vygotsky, "Vestiges of complexive thinking can be found in adult speech." (Vygotsky 1987, 136). Elsewhere he claims that, "The higher forms of complexive thinking . . . are maintained in our everyday thinking . . ." (Vygotsky 1987, 156). Second, those who have been deprived of education and literacy invariably lack the abilities to use abstract thought and word meaning to control or restructure their experiences. This was born out by the results of a study organised by Vygotsky and his colleague A.R. Luria into the impact of education and the socialist revolution on the peoples of what was then Soviet Central Asia.[87] This study concentrated on an area which had largely been untouched by the forces of modernization and where a large section of the population was illiterate and uneducated. One of the main findings was that among those who were uneducated and illiterate, both their thought and reasoning were tied to practical situations which they had already encountered in their everyday experience. On the other hand, those who received a little additional education, especially literacy training, were able to deal with more abstract or conceptual matter with some success. Although not one of the actual findings which Luria or Vygotsky directly specify, what this tells us is that one does not have to have mastered high-level conceptual or abstract thinking in order to be an economic agent, albeit an unsophisticated one. The argument runs as follows; universal literacy and organized education are relatively recent phenomena. Before universal literacy and widespread formal education, individuals were still able to engage in economic life. There are no indications that illiteracy or lack of education would prevent anyone from

[87]Although the study was originally undertaken in the early 1930s, the results were not published until 1974 (in Russian). The English translation is Luria 1976.

engaging in economic transactions, just so long as they had some sort of basic grasp of counting and spoken language. However, in such societies, economic life was a lot less complex than it is today. If we are to accept the results of the Luria study that those with no education or literacy were unable to perform high-level conceptual thinking, this leads us to the conclusion that in order to be an economic agent, albeit an unsophisticated one, one does not require to be able to think in abstract concepts.

This brings out the wider point that lies behind many of the claims that Vygotsky and his colleagues were making, which is that cognitive development is tightly linked to the cultural, social and historical context in which the developing child or adult finds herself. In fact, the motive force that sets the individual on the path of development is located in the social environment. This is born out by the Central Asia study. As Vygotsky puts it, "The tasks that are posed for the maturing adolescent by the social environment - tasks that are associated with his entry into the cultural, professional, and social life of the adult world - are an essential functional factor in the formation of concepts." (Vygotsky 1987, 132). This is also true of economic circumstances. Contemporary economies are much more complex than in the past and the economic agent who is capable of a high level of conceptual thinking has the advantage. However, economies in the past were less complex and the economic tasks required of economic agents then were largely restricted to basic exchanges; such basic economic tasks would not have required a high level of conceptual thought.

In conclusion, economic agents differ in terms of their sophistication; the more sophisticated the economic and social environment, the more high-level conceptual thought is likely to dominate among economic agents. Economic agents who do not utilise this kind of conceptual thinking can still learn how to be economic agents of the less sophisticated type through being inculcated into specific practices via the zone of proximal development. A higher level of conceptual thinking allows for more varied and sophisticated economic activity as the individual economic agent is no longer tied to practical situational thinking. While it is not impossible for someone who does not utilize higher-level conceptual thinking to operate in a modern economy, they are more likely to either have to restrict their economic activity to those scenarios which are very similar to

those they have already encountered or to have to rely on the abilities of others. Certainly, learning about new developments in economic phenomena is a lot easier for the sophisticated economic agent.

4.3. Constructing the Economic System out of Basic Exchanges.

The next two sections will be devoted to the other outstanding issues, which I listed at the beginning of this chapter. Obviously, some additional discussion is required to show how the approach in the last chapter can be used to deal with these issues. As will become clear, expanding on that basic account will answer all these outstanding questions. Since production requires a separate treatment, I will leave that discussion until last. In effect, what I have to show is how an economic system, with all the relevant subsystems, can be generated out of the simple notion of economic exchange. I will suggest why and how economic systems and subsystems emerge. In doing this I will also show how this basic account can be applied to all kinds of economic reality, including contemporary versions.

4.3.1 The Nature of Economic Actions

In the last chapter I substantiated the claim that economic exchange is primarily and fundamentally linguistic. Every economic transaction is primarily an exchange which, as I have outlined, is an exchange of reciprocal commitments between at least two parties. These commitments arise out of the issuing of conditional promises from both parties; at least some of the conditions attached to the promises involve the discharging of commitments by the other party or parties and *vice versa*. Since promises are speech acts, both parties can be said to perform actions when they issue such conditional promises. What I have in mind here is not merely the actions involved in communicating or speaking but the action of making a promise; the distinction is between locutionary and illocutionary acts, where a locutionary act is that of merely saying the words and an

illocutionary act is that of doing something by saying something, which in this case is the act of promising. The object of the action of promise-making is to commit oneself to performing or not performing some act. In the case of an economic exchange, the action of conditional promise-making is, *inter alia*, to commit oneself to some course of action or inaction on condition that the other party is also committed to some other course of action or inaction.[88] The action of engaging in an economic transaction involves the exchange of conditional commitments by both sides. As an action economic exchange is unusual; as I discuss below, it is a meaningful action in that it is not primarily focussed on a physical occurrence as its intended result.[89] It is instrumental in that it is performed not for itself but for what it provides for its agents or participants. Also, although exchange is a joint action by at least two parties, unlike other joint actions where the desired or

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[88]It may seem surprising that one can commit oneself not to do something as part of an economic exchange. However, although it is obviously more rare to exchange a commitment to inaction as part of an exchange, examples are not hard to find. For example, companies and employees sometimes enter into severance agreements, whereby employees who have been privy to commercial secrets receive a financial consideration in exchange for not making use of that information for a set period of time, either by agreeing not to sell it, not to use it while working for a competitor or not to start a competing business. More mundanely, one may enter into an arrangement with a neighbour such that one will pay him a consideration in exchange for his discontinuing some activity which is damaging to one's own interests.

[89]Obviously meaningful actions require some physical element for their successful performance but this does not take away from the fact that their focus is on the meaningfulness of the actions themselves.

intended goals are the same for both parties, exchange by necessity always involves different intended outcomes for both parties.

The action of engaging in an economic exchange differs in kind from the sort of actions that philosophers are usually interested in. When it comes to action, the philosophical debate has been largely concerned with questions of agency, freedom of the will, the ontology of actions and whether reasons are causes. But the debate has overlooked the important distinction between actions where the focus is on the physical happenings that are the intended result, such as the switching on of a light or killing someone, and actions which Moya describes as 'meaningful' in that they are "actions that can be said to have a meaning or symbolic content, such as bidding at an auction, holding a lecture, voting, making a chess move, signalling for a turn when driving or greeting a friend." [90]

According to Moya, the results of meaningful actions, to the extent that it makes sense to speak of results in such contexts, are not mere happenings as such because their results cannot occur without the actions themselves being performed; e.g. a lecture cannot take place without someone performing the action of giving the lecture. Actions that do not fall into this category of meaningful actions have as their results happenings which could take place in the absence of any intended action on the part of the agent. In other words, Smith can die without anyone killing him; my arm can be raised without my performing the action of raising my arm. But in the case of meaningful actions, lectures cannot be held nor candidates voted for without the involvement of an agent. If meaningful actions can be said to have a result, it is the performance of the meaningful action itself, e.g. the result of giving or holding a lecture is that a lecture was held; the result of voting for a candidate is that the candidate was voted for. As Moya puts it, meaningful actions do not have results in the same way as non-meaningful actions do; the results of meaningful

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[90]Moya 1990, pp 38. Moya claims that, as far as he knows, the fact that there are meaningful actions "has not been noticed" by philosophers. Other than discussions concerning speech acts, I have been unable to unearth any discussion on the subject elsewhere.

actions are the actions themselves, not mere happenings (Moya 1990, 38).

Another point that Moya makes concerning meaningful actions is that they are not tied to specific acts; no specific act or acts need to take place in order for a meaningful action to have occurred. For example, my signalling while driving could involve my making a hand signal but it also could involve my revealing a sign, such as a flashing light or indicator (Moya 1990, 41). Lectures can be given through the use of a voice simulator and a keyboard rather than through the use of the lecturers voice. Basic intentional actions that do not fall into the category of meaningful actions are usually tied to specific acts; there is only one way of intentionally performing the action, "raising one's arm." In the case of more complex actions that do not fall into the meaningful actions category, there are often many ways of bringing about the required result; e.g. bringing it about that Smith dies can be done in a variety of ways. So, although some complex actions can be performed in a number of different ways, basic actions cannot. More importantly, meaningful actions never involve being tied to a specific act.

It might be argued that there is one type of exception to this claim that meaningful actions are not tied to specific acts; this concerns highly regulated situations, such as when a powerful institution, such as the state, dictates that only one specific form of acting will count as a certain kind of meaningful action in certain highly specified contexts. For example, the highway code could stipulate that the only form of signalling by automobile drivers that is allowed and recognized is the use of indicators and that any other form of signalling, such as hand-signalling, is unlawful and therefore open to prosecution. But this is not a true exception since it is still possible for road users to recognize signalling as a meaningful action even when it is not performed in accordance with the law. Despite such rulings by the authorities, it is always possible that errant drivers would still insist on using hand-signals when the police are not looking and hand-signals can be used and understood by others in the case of an emergency or when indicators are malfunctioning.

My contention is that economic exchanges involve meaningful actions in that exchanges are the reciprocal making and exchanging of conditional promises. The results of the

action of making and exchanging conditional promises is that conditional promises or commitments have been exchanged. As with other meaningful actions, the results of the action in question, in this case the making and exchanging of commitments, is not a happening because it cannot occur without the action of promise making being performed. An economic exchange is made up of conditional promises; therefore, it is a meaningful action that is made up of other meaningful actions. An exchange cannot occur without both parties being involved in the action of conditional promise making. As with other meaningful actions, promises can be made in a number of ways, such as verbally or in writing; they are not usually tied to specific acts although certain highly regulated transactions, such as transactions that involve property title, require that a signature be provided before the transaction can be completed. Given that an economic exchange consists of two or more parties exchanging conditional promises, such exchanges are not tied to specific acts. In fact, the physical acts that underpin the meaningful actions involved can diminish to almost nothing because, as I pointed out in the last chapter, they can fade into the background, especially in certain contexts. For instance, in the local shop that sells newspapers and sweets, one can pick up an item, hand the money to the shopkeeper and leave without a word being said. But this does not mean that a meaningful action has not taken place. Because the purchase is habitual, the prices are well-known and it is accepted that there is no haggling, the bare minimum that is required to indicate that a meaningful action is taking place is all that is required. What is important in the case of a successful economic exchange is that each meaningful action is recognized and, if acceptable, a binding commitment results.

Many attempts to engage in an economic exchange fail for a variety of reason, just as many intended meaningful actions are not successful. For an action to be included in the category of successful meaningful actions, a fundamental requirement is that it be recognised as such by the relevant parties. But what is unusual about economic exchanges is that they rely for their success on the proper and acceptable reciprocal meaningful action from both parties. Within the meaningful action of engaging in an economic exchange by two or more parties are other meaningful actions, such as the issuing of conditional promises. This is what makes economic exchange unique and this reciprocity with respect to commitments leads to some unusual results, as I will show

below.

4.3.2. Exchange as instrumental action

In the last chapter, in the discussion of pure barter, we saw that, because of the possible discrepancy in time between the exchange of promises and the discharge of commitments, either party could engage in some further exchanges, armed only with the commitments from the original exchange. We also saw how this might play a role in the emergence of money in some chartal form. What is important to notice about this kind of scenario is that economic exchanges are often instrumental actions. By instrumental action I mean that the ultimate goal of the agent is neither the action itself nor what results from it; instead, the goal of the agent in performing an instrumental action is subordinate to some further goal or goals. This idea that the goals of some actions can be subordinate to other goals originated with Aristotle (Aristotle 1976, 63). Although economic agents often engage in economic exchanges non-instrumentally in that they desire to keep or consume what they have received from the exchange and not to trade it on, many, if not most, contemporary economic exchanges are entered into as an instrumental action by at least one party to the exchange; in other words, that party intends to trade on what they have received from the exchange. By far the majority of economic exchanges today involve money. With the possible exception of a few who physically hold onto money for the psychological pleasure they get in holding cash, most of those who accept money as part of an economic transaction do so in order to be able to enter into some further transactions at some later stage. Even those who deposit the money in the bank are engaging in a further transaction with that bank. Few engage in economic transactions with the intention of never engaging in further transactions with the money received. Also, many of the transactions that take place in a contemporary economy involve production inputs or distribution. Since production and distribution are instrumental actions, such transactions will be entered into instrumentally. As we shall see, much of the modern economy operates on the basis of instrumental action.

The term 'instrumental action' is also used in a very different sense, such as when

referring to actions that involve the use of instruments or artifacts (Mertens 1992, 229ff). Engaging in economic exchange is also an instrumental action in this sense in that exchange itself can been seen as an instrument which is used by each party so as to reach separate goals. In this sense, the action of entering into an exchange is an instrumental action for both parties because it is always possible, at least in theory, for both parties to achieve their separate goals without engaging in that exchange. Apart from doing without the proceeds of the exchange, either party could try to manufacture or make a substitute. Alternatively, either party could steal it or beg it from someone else. The point being emphasised here is that exchange is, in a fundamental sense, an instrumental action for both parties to the transaction. Although it is possible that there are highly unusual individuals who enjoy engaging in transactions for their own sake, most of us engage in economic exchanges in order to gain the proceeds.

4.3.3. Exchange as joint action

Exchange is obviously a joint social action[91] in the sense that it involves two or more agents acting in a coordinated manner with the purpose of achieving a specific goal. However it differs from most joint actions in at least one important respect. As will become important in the section below on economic systems, although exchange is a collective or, more specifically, a joint action, it is unusual in that, unlike most collective or joint actions, there is not just one single goal or desired outcome which is shared by both parties. Collective actions usually involve cooperation between parties so as to achieve a single outcome or at least a similar set of outcomes. Two persons rowing a boat usually entails that both intend to arrive at the same destination. Engaging in a conversation requires that both have the intention to engage in the same conversation. There are also activities where each person plays a different part or performs different actions so as to achieve the same joint goal. For instance, cooking an elaborate meal involves different tasks which can be performed by various parties in cooperation but the

[91]See footnote 54 in Chapter Two on the subject of joint social action.

desired result by all concerned is that the meal is cooked. This is true of all forms of production in which all the operatives involved cooperate closely in performing tasks which are orientated at a single goal. However, as we will see later in the discussion on production, such cooperative relations between operatives are usually not exchange relations, at least not in a direct sense. Sometimes, in competitive scenarios such as games, there has to be the intention on both sides to follow the rules even if the desired goal by each side is to score more points than the other. In the case of economic exchange, such similarity of goals does not exist. Although it can be said that both parties intend to engage in a single transaction, the fact remains is that each engages in that economic exchange instrumentally and each party's goal is to acquire what the other has. So, even though both parties jointly engage in a single transaction, each party seeks an outcome from such a transaction that is, by necessity, different from that of the other party to the transaction in that each party receives what the other has given up.

4.3.4. Economic Exchange and Machines

It seems to be completely obvious, especially in the light of the earlier discussion on meaningful action, that economic transactions necessarily involve agents. But how is this possible if we, as we do in contemporary contexts, increasingly interact with machines instead of people when we engage in economic activity? Automatic teller machines provide us with banking services, vending machines provide us with hot drinks and it seems that the Internet will be able to provide us with just about every tradeable good we could possibly need.[92] Although transactions are becoming increasingly disembodied in this sense, this does not mean that no agency is involved. Instead, such machine transactions are set up in advance. Bearing in mind what I said about meaningful actions not being tied to specific acts, I can sell cups of coffee by personally shouting out loud my

[92]On its own, the Internet cannot provide non-tradeable goods or services, e.g. haircuts. Either I must visit the hair dresser or the hair dresser must visit me. However, this is not to say that the Internet will not play a role in the searching for or advertising of non-tradeables.

offer of so much for a cup or I can put up a sign or I can hold up the requisite number of fingers to someone who does not speak the local language. There is nothing intrinsically different for our purposes between someone in person making available cups of coffee for sale from a coffee making machine, a robot making available coffee for sale from a coffee making machine and a vending machine which delivers coffee in a plastic cup when one inserts the correct amount of change. The reasoning is as follows: I may make available some goods or services for exchange or I may advertise this fact in some way. Such an offer is the making of a conditional promise on my part, as I outlined in the last chapter. In other words, I promise that if any other party agrees to my conditions, I will provide the goods or service in question. When someone places some coins in the slot, they are indicating agreement to these conditions. But is this an exchange of promises? Just as when I enter a shop and, without saying anything, pick up a chocolate bar and hand over the money, I am still engaged in exchange with all the complexity involving promissory relations as outlined in the last chapter. However, in such scenarios the entering into the transaction and the discharging of the commitments are more or less simultaneous. When I place the coins in the slot of the vending machine, I have made certain commitments, including that the disks that I have placed in the slot are actual coins. The inserting of the coins in the slot indicates that I am willing to enter into the transaction. My exchanging my conditional promise and my discharging of it are simultaneous.

To see that my making a purchase from a machine is a *bone fide* economic exchange, it is instructive to see what happens when something goes wrong. For instance, let us assume that someone decides to alter the vending machine so as to benefit from what it provides without placing the money in the slot or to take money from it. If caught, the perpetrator will be charged with theft or fraud, depending on the nature of the act.[93] Suppose that someone, having placed the right amount of money in the machine, does not receive what has been promised, the person or corporation which owns the machine is liable. Even suppose that what the machine vends is below standard in some way, the owners will also

[93]Public telephones are unusual in this respect, at least in the UK. If someone manages to illegally make a long-distance call on a public phone, the charge in the UK usually refers to theft of electricity as it is hard to specify in British law exactly what has been stolen.

be liable. The owners of the vending machine are responsible for providing what the machine vends in just the same way as if there were a live person performing the duty. The customer is also responsible for providing the money in just the same way as if there were a live person there to receive it. The same goes for transactions on the Internet except that such transactions are more complex due to the fact that credit or charge cards are used to pay for goods. For these reasons, those who provide goods for sale on the Internet often include the full text of the sale's contract and insist that the purchaser indicates that he is bound by the stated conditions.

What distinguishes the Internet from the example of the vending machine is that problems that customers have with the latter can be dealt with in the jurisdiction within which the vending machine is located and which is taken to be the place where the exchange took place. In the case of the Internet, it is sometimes difficult to establish exactly where the transaction has taken place and if things go wrong it is sometimes difficult, if not impossible, to find an authority to appeal to.[94] This does not mean that Internet trading will not grow. First of all, any transactions that occur involving corporations within the same country as the purchaser are covered by local law. Second, customers who are uncertain on this issue will probably deal on the Internet only with those established corporations which have brands and reputations that are worth protecting. As I pointed out in the last chapter, there is hardly any point in engaging in an exchange if you do not trust that the other party will live up to its commitments. In cases where there are not likely to be repeated exchanges in the future or where there are no kinship or other social ties, some external authority is required so as to provide parties to exchanges with the confidence or trust that when commitments are given they will be honoured. As

[94]At the time of writing, there is a difficulty in the case of an electronic bank which, although providing services to UK customers, is based in another EU country. For complex legal reasons which need not detain us here, this means that UK customers with complaints cannot appeal to the authorities in the UK (the Banking Ombudsman), nor to the banking authorities in the European country where the electronic bank operates. Whether the banking authorities in yet another EU jurisdiction where the head office of the electronic bank is located can be appealed to is unclear; the bank in question claims that this is possible but the banking authorities deny this. If this can occur within the EU (and one presumes that it will be solved at some stage), *a fortiori* it is just as likely to occur in any international context where there is no appropriate legal framework.

economies develop, exchanges are more likely to involve parties who do not know each other and who are not bound by the usual local social ties.

There is an additional reason for the establishment of an external authority or government to oversee the economic system; although it provides many benefits, technological and scientific development also has its share of risks. For instance, consumers can no longer be as sure of the side effects of goods or services which are more technically advanced and some check has to be kept on products to ensure that they are not harmful and that they function just as the providers say they do. Hence, the role of government and other authorities becomes increasingly important in enforcing exchanges and maintaining standards in goods and services. As well as ensuring that consumers do not suffer form harmful effects of the goods they have consumed, governments also have a role in ensuring that the production or consumption of goods do not adversely affect the environment or the population in general.

4.3.5. Exchange: A Social Mechanism

If asked why they are purchasing something, consumers will probably reply that they need it or they desire it; further probing might elicit exactly why they need or desire the good in question. But as I have pointed out earlier, the purchaser has a number of options open to her; she can make the good herself, she can steal it or find some cost-free substitute. Or if it is not possible to manufacture it or steal it and there are no free substitutes, it is possible to do without, assuming that it is not one of life's necessities. So, given these other options, why choose to engage in exchange rather than one of these other options? There are a number of possible reasons; the purchaser may not want to go to the trouble of making or manufacturing the good or engage in the effort of finding a substitute or run the risk of stealing it. Stealing it may attract potential costs or risks which are so high as to make it very unattractive[95] especially if we are dealing with a

[95]One of the costs could be that, even if she is not caught, she could suffer from feelings of guilt afterwards.

potential purchaser who has the economic wherewithal to make the purchase. So the gains that the purchaser makes in engaging in the economic exchange include the following: she saves on the effort of having to manufacture the good on her own, if this is indeed possible; she saves on the effort of having to look for a free substitute, assuming that there is one. And she avoids all the attendant risks, costs and effort in stealing it. Taking the instance where it just is not possible to manufacture the goods in question and assuming that the circumstances dictate that stealing is not a viable option, the purchaser can still be said to gain something which she would otherwise not have; as I have emphasised already, it must be the case that she wants the proceeds of the exchange more than what she is prepared to give up as part of the exchange.

This provides us with a general reason for economic agents to engage in economic exchange. As a way of achieving their goals, economic agents engage in transactions for several reasons: to save on effort,[96] to avoid risk, to avoid or reduce costs or to achieve goals which would otherwise be out of their reach. We can speculate at the kind of conditions that had to persist in order to allow for the emergence of exchange. Perhaps it began between tribal groups only when each tribe began to realise that it would be to everyone's benefit if surpluses could be exchanged. Certainly it would have to be the case that the various parties had different endowments or had different desires or needs.[97] In any case, the reason for economic exchange emerging is that individuals or groups could achieve their goals while saving on effort, risk or some other cost, or could achieve goals which would otherwise not be achievable. In other words, economic exchange can

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[96]I am assuming that effort is expended over a period of time. What most people describe as 'saving time' is really a matter of the same outcome being achieved within a shorter period and using the same amount of effort per unit of time; hence, saving time really amounts to a saving of effort.

[97]Trade can still flourish among individuals with identical endowments but with different needs or desires, as Radford shows in Radford 1945 pp. 189-201.

be seen as a social mechanism for reducing effort, cost or risk or as a social mechanism for achieving goals which would otherwise be impossible.

Many tasks can be labelled as either involving mostly cognitive or alternatively mostly physical effort. However, in economic activity there can be a tradeoff between cognitive and physical effort; many economic needs or desires can be met either through largely cognitive or alternatively through largely physical effort or through a mixture of both. Exchange makes it possible to pass on such effort to others who may, through economies of scale, technological advances or specialization, be able to complete the task using less effort. The same sort of scenario operates with respect to cost; those who are specialized or geared up for specific tasks are more likely to be able to complete them at less cost than those who are not.

Risk can be seen as the probability of the need in the future to expend effort, either cognitive or physical, or the probability of future costs. At a very basic level, a cost is any liability that arises, whether through a specific activity or through bad luck; a cost can only be ameliorated, if at all, through entering into transactions or through expending effort. So, risk can be seen as the probability of liabilities in the future which can be ameliorated, if at all, through expending effort or engaging in transactions. In assessing risk, the agent does not even have to be able to quantify the specific probability involved. All the agent has to be able to do is to decide subjectively that one scenario involves more risk than another, that one scenario involves a greater probability for the future need to expend effort or a greater probability of increased costs in the future. For instance, the risks attached to acquiring a good in ways other than exchange may be much higher than the risks attached to engaging in exchange. Manufacturing the good oneself or stealing it can be risky activities in that there are probable increased future costs or effort attached to both.

4.3.6. Money: A Social Mechanism

It is easy to see from the historical development of money that money retains some similarities to exchange as a social mechanism in that it also functions to reduce risk, cost or effort and it allows one to acquire goods which one could not otherwise acquire. In cases of pure barter, individuals or groups would have expend much effort, cost and risk in finding suitable exchange partners. One can imagine individuals or groups wandering the countryside or from town to town in search of other persons or groups who had what they wanted and who in turn wanted what they had to offer. One can also imagine how a party might engage in an exchange instrumentally so as to be able to enter into another transaction with some third party for what they really want. But the more transactions one becomes involved in just so as to arrive at a single desired outcome, the more risk is involved. One solution, which would reduce the amount of effort, cost and risk and would allow one to acquire goods which one could not otherwise acquire, is the emergence of certain conventions, such as regular markets held in specific locations. But without money in any form, going to market would still involve the effort of having to engage in numerous instrumental exchanges so as to get what one wanted. Once a stable exchange good emerges, this would allow possessors of that good to successfully engage in exchanges which would otherwise not have occurred or which would have occurred only through the greater effort and risk involved in engaging in multiple exchanges. So, although money emerged from the process of exchange, it shares certain functions with exchange; both function so as to reduce effort or risk in the achieving of goals or for the achieving of goals which would otherwise not be achieved. Commodity money in the form of exchange goods was an improvement on its parent social mechanism, pure barter exchange, which in turn was an improvement on what went on before.

Just as commodity money in the form of exchange goods is an improvement on barter exchange, so too is the emergence of currency in the form of coinage an improvement on commodity money in the form of exchange goods. Because currencies are standardised forms of money, it is possible to achieve greater precision in pricing; hence less effort, cost, or risk is involved in assessing the value of the commodity in terms of the exchange good which itself could vary in quality and scarcity and therefore value. Currencies in the form of gold and silver coinage may still have relied on the quality and quantity of precious metal in the coins for its value but at least the fact that it was state issued

currency meant that it was less risky. Fiat money in the form of chartal notes is more portable and less easy to counterfeit even though it is cheaper to produce. Fiat money in the form of abstract money has even greater portability and enhanced security because it can now be kept in bank accounts and moved about electronically, thereby involving less effort, cost and risk. Cheques, credit cards and electronic money are other ways of improving or expanding on the social mechanism that is money, either through allowing one to enter into transactions which would otherwise not be possible or to at least enter into them more conveniently.

4.4. Constructing Economic Systems

The development of economic systems is an historical process. Over the centuries many systems of trade have developed, sometimes helped by the spread of religious movement, sometimes through expanding kingdoms and empires or political or military alliances. But what drove this development then and what continues to drive it today are the benefits that inevitably arise from trade, which are the reduction of effort, cost or risk in the attaining of a goal or the ability to attain a goal which would not otherwise be possible.

4.4.1. The Emergence of Economic Systems

First of all I want to examine the emergence of an economic system as it develops from being a regional one to being an international one. Later I will examine some aspects of developed economic systems today to show that the same basic principles apply, as I set out in the last chapter. With the emergence of various political and legal institutions, trade can move beyond immediate localities and later become international. Individuals or groups begin to specialise as traders or merchants. Great webs of trade build up, whereby merchants from one country or continent purchase from merchants of another. Retailers in turn purchase from merchants and sell on to end users or consumers. These

exchanges are entered into because they allow the merchants and the retailers to make gains which would also not otherwise be possible. If the product is not locally available, the end users or consumers do not otherwise have the opportunity of consuming the product. Or it may be the case that despite the difficulties of transportion, the product is still of better value or of superior quality than the local version. But as the economic system develops, it becomes more difficult for the merchant to accompany his goods in person, especially if he is importing from different regions or countries. He may employ or subcontract some of these routes to others. This is possible because engaging in economic exchanges does not require that the agent in question be present, as I discussed in the case of machine transactions; nor does it require that the agent in question discharge the commitments or collect the proceeds in person. He can delegate this to one of his subcontractors or employees. If the acts involved have been delegated to an employee, the exchange is not between the employee and the other party but between the merchant and the other party. In the case of subcontracting, as long as the ownership of the goods have not passed to the subcontractor, then the situation is the same as in the case of an employee in that the subcontractor is effectively transporting the goods on the merchants behalf only. What this delegating or subcontracting, which is an additional exchange, allows the merchant is the achievement of a goal which would otherwise be impossible. In any case, he would probably have already employed others to help him in the loading and transporting of his goods. One of the restrictions which might hold him back is the fact that he has to pay for his goods on or before receipt. This means that the amount that he can import is restricted by the amount of money he has to hand, by his cash-flow position. But enter the banker who can extend him a loan, thereby removing this restriction and allowing him to achieve a goal which would otherwise not be available to him.

In turn, all those others who engage in economic exchanges with the merchant do so either because the exchange allows them to achieve a goal which would not otherwise be possible or because it allows them to achieve a goal at much less cost, risk or effort on their own part. Those who help the merchant with loading or unloading are making more in return than they otherwise would or they might have to work at something which to them would be even more disagreeable. Without merchants the bank would not be able to

make as much in interest. Why this whole discussion is instructive in that it demonstrates an important distinction between this more developed economy and the undeveloped or locally based economic scenario which preceded it. In the local scenario, consumers would have been acutely aware of the origin of their goods and often would have purchased directly from local producers whom they would have known. Engaging in economic activity at this level would simply involve interaction with other locals. However, in the case of the more developed scenario as I outlined above, entering into exchanges now involves interacting with an entire system of exchanges. This is especially clear in the case of the consumers of the merchant's goods. By entering into exchanges with the retailers, consumers are plugging into an entire network involving not only the retailer but also the merchant, the banker and the merchants employees. In addition, this system also encompasses the far distant local economy where the goods originated.

As well as being a system of distribution, the economic system also transmits information over great distances. The more or less that consumers buy from the retailer, the more or less he will demand from the merchant, and so on throughout the system. Changes in price which, whether they arise from changes in amounts demanded by consumers or changes in the amount of risk or costs, provide signals in the economic system. In this way the system of distribution is also an information network. However, because consumers, retailers and, in some cases, the merchant are separated from the origin of the goods in question, they know little or nothing about whence the goods came and have to rely on the information which the network provides, which is largely price information.

4.4.2. Contemporary Economic Systems

The economic system of today shares certain similarities with earlier economic systems. However, there are several important distinctions. The economic system of today contains different institutions, such as firms and corporations. As we saw earlier, money has developed in its various different forms and the government is much more involved in

contemporary economic life. The nature and type of markets have also changed. All in all, the contemporary economic system is much more complicated not least because of the huge increase in the variety and quantity of goods and services that are supplied and consumed. As we saw earlier, this complexity comes about because it allows economic agents to achieve goals which they otherwise would not achieve or it allows them to achieve them with less cost, effort or risk.

Some of the increase in complexity in modern economic systems arises because of the emergence of corporations. The following example should illustrate how this comes about. This example concerns someone called Joe who is self-employed - for the purposes of the example it does not matter what economic activity he is involved in as long as it is understood that he engages in this activity for economic reasons. For the sake of simplicity let us assume that he has a very small number of customers, say two, and only two suppliers. Let us then assume that for various reasons he decides to incorporate his business. Depending on the jurisdiction, he will need at least one or two directors other than himself. As managing director he will be both an employee and a director of the company. He will also have to engage an auditor. From the original situation where there were only four exchange possibilities there are now many more. Although the corporation has the same number of suppliers and customers as before, yielding four exchange relations between the corporation and the two suppliers and two customers, Joe has also entered into an exchange with the corporation as an employee; he is also a shareholder, a director and there are two other directors and an auditor. Altogether there are ten exchange relations where before there had been only four. This does not even include the transactions between Joe, the relevant government department and possibly a lawyer in the setting up of the corporation. It is clear that there has been an increase in the number of exchange relations and therefore an increase in complexity. But does this increase in complexity help anyone, including Joe? Why would anyone want to incorporate?

There are many reasons for incorporating but by far the main attraction is the limited liability which serves to reduce the risk of the shareholder, who is Joe in this case. Limited liability means effectively that the shareholder is not liable for anything above and beyond the value of his original investment. Incorporation may also have other

attractions, including administrative or fiscal benefits. One could imagine that Joe might want to formalise part ownership of his business with his spouse or partner by providing her with a shareholding. Other kinds of administrative arrangements which do not include limited liability are also possible, including sole trading or partnerships. But whether the organizations are private companies with limited liability, public companies with limited liability or whether they involve some other arrangement which does not involve limited liability is immaterial; in each case, a legal entity or legal person is created based upon certain specific rules.[98]

[98]A number of other types of organization are also possible, including mutual societies, friendly societies and so on, which need not detain us here.

The creation of a firm[99] is similar to the creation of other organisations, such as charities, trusts, political parties and other non-profit organisations. The process involves specific declarations made according to the law; these entities are in effect created by legal fiat. In the case of a firm, there is usually a statement of intent concerning what sort of activities the firm will be engaged in; in the case of a corporation there will also be a subscription for shares and an election by shareholders of a board of directors. Part of the creation of a new corporate entity involves an economic exchange in which the investors exchange their money for certain property rights or shares in the new venture. In one sense, the corporation is a repository of contracts or exchanges but with some very important ingredients added. The directors of the corporation have effectively contracted through the corporation with the shareholders to run the organization on their behalf. Although they have therefore taken upon themselves certain responsibilities with respect to their shareholders, they have also agreed to abide by certain other specific laws which set out their fiduciary responsibilities. Since corporations are created by government fiat, it should not surprise us that company directors also have fiduciary responsibilities which go beyond their responsibilities to shareholders. Therefore not all of the director's undertakings are made directly to the shareholders. All of this requires that various promises and undertakings be made, especially by the directors. Some are declarations made to the government via the relevant department in the civil service. Not only is it not surprising that the government takes an interest in the stability of the economy, but also were the government not to be engaged in the parts of the economy which it has created by fiat, these parts of the economy would cease to exist, at least to the extent that we know it. It is possible that, without any government involvement, some commercial associations would exist. However, without various requirements such as requiring that directors live up to their fiduciary responsibilities, obey the laws on fraud, make regular reporting of financial status etc., it is hard to see how the corporate sector could have developed to the extent that it has.

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[99]The term 'firm' has a number of different meanings; often it is used to refer to an independent production unit but it is also used to refer to an administrative or business organization of a general kind. A corporation is a firm that has been incorporated.

Although state or government involvement is necessary for the creation and maintenance of firms of all kinds, such entities as corporations would not be used unless there were good reasons for their use. As we saw in the case of Joe and his setting up of a private corporation, the primary reason for creating and maintaining a private limited liability corporation is that it reduces risk. This is also true of publicly quoted corporations whose shares are regularly traded on the stock market. If shareholders could not avail of limited liability, public companies would not be able to access the investment funds that are available on the markets as potential shareholders would be scared off. Only investors who had an extensive knowledge of the inner workings of a firm and probably were involved in the day-to-day decision making would be prepared to invest. Limited liability in public companies allows such organizations to achieve goals which they otherwise would not be able to achieve, which is primarily access to investment funds.

As the example of the limited liability company shows, the emergence of new institutions can lead to new markets, such as the various markets for shares. Markets for commodities, metals, currencies and so on, in combination with the need to reduce risk through forward buying, has led to markets in futures and options. To illustrate why forward buying occurs, imagine a firm that wishes to import some goods from another currency zone. The problem is that the firm does not know what the exchange rate will be at the time when the bill has to be paid and it does not want to tie up such a large amount of its cash flow now by purchasing the entire amount of foreign currency required. If the currency fluctuates in the wrong direction, they stand to make a loss on the import deal. By purchasing a forward contract for the currency, which is an agreement to exchange amounts of the currencies at a specific date at a predetermined exchange rate, they can avoid such risks. Such contracts can be traded. Even if the importation deal falls through and the foreign currency is no longer required, the contract can be sold on to a third party.

As well as entering into exchanges with shareholders, corporations are also employers. Employees enter into exchanges with corporations for the instrumental goal of receiving wages or salaries. Corporations enter into exchanges with employees for the instrumental goal of making use of the effort of the employee which in turn they hope will be useful in making a profit for their shareholders. As is clear by now, the corporation is a peculiar

entity in that it is legally a person which can perform all the economic actions that a flesh-and-blood person can do. However, it is also a social mechanism in the following senses; it is the means by which employees can get wages and the shareholders a return on their investments without either necessarily having to interact with each other directly. Like other social mechanisms, such as money and exchange, corporations allow for the achievement of goals by employees and shareholders which they would not otherwise be able to achieve or which they would not be able to achieve with the same level of cost, effort or risk, namely the acquisition of investment returns and wages.

The corporation exemplifies the points that were made concerning the construction of economic systems. Corporations are made up of various exchanges which could not otherwise occur except through engaging in the reciprocal making of conditional promises by both parties. However, these exchanges do not require that the shareholders and employees even meet and such exchanges are instrumental. Mediated by the corporation, shareholders and employees are engaged in joint action, but at one remove. As I will show in my discussion on production, many of the exchanges in corporations are nested within other exchanges.

My discussion of corporations has indicated how complexity in the economic system and subsystems increases and how that is driven by the need to save on cost, effort and risk in the achievement of goals or the desire to achieve goals which would otherwise not be possible. My earlier discussion concerned the complexity of mercantile economic systems which became extended over regions and countries. The mercantile scenario was intended to show the development of the economic system across geographical areas while the scenario of the typical firm brings out the developing of the economic system through the creation of a more complex system. The economy of today is an integration of both. This discussion is only meant to be a very general view of modern economic systems. Obviously, much more could be filled in and there are some specifics which vary somewhat in different countries. What is important are the enduring features of economic systems, including the reasons for entering into exchanges, that exchanges are instrumental and meaningful joint actions and that the economy is a complex system of such exchanges.

4.5. Production

Before I enter into a full discussion of production and its role in economic development, I want to anticipate one possible criticism of my approach; this concerns how production, which is usually regarded as physical action involving artefacts or machines, can be incorporated into the activity of exchange, which, as I showed earlier, are meaningful actions. In my discussion of meaningful actions, I took great pains to distinguish them from all other sorts of actions. Meaningful actions are not tied to specific physical acts or activities. So, if engaging in exchange is meaningful action, then how exactly can production, which is usually regarded as a physical activity and therefore not meaningful action, be integrated into economic activity?

This criticism is based on some misconceptions. Production, even when the production process involves just one person, always requires some sort of planning, knowledge and organization. Planning, knowledge and organization require the involvement of meaningful action, especially at the learning stage; even though the production process might only involve one person, the inputs for the production process and the relevant tools or artefacts must have been acquired from someone else. "People do not usually attack their environment with their bare hands," as one philosopher of technology puts it (Mertens 1992, 340). Once more than one person is involved in the production process, meaningful action has to be involved if any cooperation is to be possible. Meaningful action is very important to economic production. As I will show below, not only is exchange, which is a form of meaningful action, deeply involved in economic production, but exchanges can be substituted for production and *vice versa*. Goods which are required as inputs to a production process can either be bought in as finished goods or they can be produced in-house. Of course, the substitution of exchange for in-house production of inputs by one party does not mean that production never takes place. All that happens is that it is passed on to another party. Also, as I pointed out before, although many economic actions can be said to only involve a single individual, as in the example I used

in earlier chapters of the farmer changing his crop, such economic actions are performed with the intention of engaging in some future exchange. Production is usually carried out with a view to engaging in some future transaction where the product will be exchanged for money or other goods or services.

Another possible confusion that is important to dispel at this stage is that production does not require agency. The sort of argument here would be that there are automated factories and other processes where human beings are not involved. Production shares this aspect with economic exchange; both are goal orientated activities and both require agency. As I showed earlier, transactions involving vending machines require the existence of an economic agent apart from the machine itself. While it is true in the case of production that robots and animals can carry out certain very specific tasks, thereby substituting for human operatives, these are best seen as instruments, or as some writers on the philosophy of technology call them, 'functional objects' (Mertens 1992, 340). I will have more to say about such functional objects below.

Even fully automated factories require management. Though many decisions in such factories are automated, somewhere along the line some person made the decision to automate those decisions. So, a necessary condition for production is the involvement of a person, even if this involvement is restricted to manipulating or directing functional objects. In any case, even though production was traditionally seen as mainly involving physical action which incorporated artefacts and machinery or functional objects, there are modern examples of production where what is produced largely involves meaningful action, e.g. advertising, media and publishing. As I pointed out earlier, exchange is often resorted to so as to save on effort. What makes production important in an account of economic reality is that it feeds into and is in turn directed by exchanges. Production processes, technology, environmental and geographical factors all decide what is feasible and therefore what is available for possible exchanges in the future. In turn, exchange possibilities tend to direct producers in what they produce and how much. However, it must be remembered that production does not necessarily have to be economic in this sense; people engage in production for all sorts of non-economic reasons. Also, as I pointed out earlier, economic activity without production being involved is at least

theoretically possible even though it would be difficult to envisage an economy without production.[100]

4.5.1. The Production Process

Production is essentially the use of specific procedures involving the expenditure of effort and cost which are aimed at specific goals or results. Whilst philosophers have generally avoided the notion of production as such, at least one has looked at the production process as part of a more general approach to his philosophy of technology (Mertens 1992, 339ff). In Mertens' account, one could substitute the term 'production' for his chosen term 'instrumental action'. By instrumental action, Mertens means actions which involve instruments, and especially technical instruments. For him, such actions involve procedures which can be split into sub-actions. The point of a procedure is to bring about a desired change in the world, to achieve a goal. Whether the goal is desirable or not "might properly be called the 'political' prerequisite of instrumental action," according to Mertens. However, on my analysis the goal must be worth the risk, cost or effort involved - otherwise there would be no point in engaging in the attempt to achieve it.

The prerequisites of instrumental action are goal definition, technological knowledge, organization and instruments. According to Mertens' account, the instruments are tools, machines or observational devices - what he calls 'functional objects', which are used in combination with acting subjects to change some aspect of the world. By acting subjects he does not only mean individual human beings. "Collectively operating individuals may form a coordinated organization functioning as what might be called a macro-subject." (Mertens 1992, 340). In economic parlance, this would be a firm or a department within

[100]Although production is largely absent in Radford's account of economic activity in a POW camp, many of the products that were traded within the camp were manufactured goods which had been produced elsewhere.

a firm. In addition to being organized, subjects need to have adequate know-how with respect to the processes that involve them and their functional objects. According to Mertens, instrumental action is really performed by "human-machine complexes" in procedures which are "sociotechnical action systems." The structure of a production process or, as Mertens puts it, instrumental action, can be changed in three different ways: either through the development of new instruments, through a change in organization or social division or through new technological knowledge. Mertens also notes that in modern societies functional objects that are used in one kind of instrumental action are actually manufactured in another very different instrumental action, e.g. combine harvesters are produced in a very different production setup from the farms where they are utilized.

We now have a basic setup for production processes which can be applied to all forms of production. Immediately, in the case of organization and instrumental objects, we see the need for some mechanism which lies outside the production process and which supplies both the acting subjects, the instrumental objects and other inputs. The procedure which provides acting subjects, instrumental objects and other inputs in contemporary economies is economic exchange. In addition, what Mertens calls the political prerequisite, the goal of instrumental action or production, is also taken care of by economic exchange, as we shall see later.

4.5.2. Production and elementary forms of exchange

It is fairly safe to presume that production did predate economic exchange. Before there could have been barter, there had to have been something which would have been available for barter. This could not have been something that could have been easily acquired through some other means; therefore it would not normally have been available in abundance. Even if it were available in abundance, it could still have become subject of economic exchange if it could have been alienated from potential users. For instance, it is possible to imagine a group who jealously guard a piece of land on which grow some

highly sought plants; this group could sell gathering rights to outsiders. The argument might be that this is one of those examples of economic transactions that do not involve production. But this is erroneous since the group who control the land have to guard the property at all times and to police the outsiders who have been granted gathering rights. This example is illustrative in that it shows how production should not be always construed as persons interacting with implements or machines in a factory. Services also have to be produced, including security services. If we restrict production to industrial production of physical goods, much of the modern economy will be left out. Management consultancy, software, Internet services - none of these involve traditional production processes resulting in finished physical goods. As I pointed out earlier, production is the use of specific procedures, incorporating risk, cost or effort in the pursuit of some specific goals or results. It is also the process by which a good or service is made available for exchange. This means that all sorts of activities, from retailing to transport, will come under the category of production. As I will show below, these processes share some fundamentals with industrial production. Before I engage in that discussion, I want to provide a basic account of how production would have begun to be affected by exchange and *vice versa*.

What can be presumed to have given rise to pure barter in the first place was that one person or group had goods which were surplus to their requirements while some other person or group had different goods which were also surplus to the latter's requirements. These surpluses could have been accidental or merely potential, what we now call excess capacity. But once economic exchanges began, the scenario changed. Now, total production would not have been for immediate consumption but would become responsive to the sorts of exchange possibilities there were. Specialization was likely to follow, along the following lines. Those goods which were most likely to be of benefit to sellers when it came to exchange were those which could be easily produced by the seller so as to generate a surplus, which had a good use value for the buyer and which were not so easy to produce elsewhere. In addition, exchange possibilities would encourage efficiency of production since the more that one would have available for exchange, given the same risks, effort or costs, the more of other goods one would be likely to receive in return. It is easy to see that exchange possibilities would soon dictate what was produced;

it is also important to note that certain criteria which were pertinent to production often dictate which exchange possibilities are more likely to be engaged in, e.g. a local advantage in growing a certain crop might lead to that being the subject of exchange. What is important here is that both production and exchange can have important effects on each other.

Not surprisingly, there are some important parallels between the development of the economic system and developments in production. The economic system as a system of exchange allows parties to exchanges to be able to achieve goals in the form of goods and services which they would not otherwise be able to achieve or it allows them to be able to achieve those goals with less risk, cost or effort. Developments in production techniques and technology also allow producers to achieve goals which they would not be able to otherwise achieve or it allows them to be able to achieve goals with less risk, cost or effort. Also, just as exchange can be entered into instrumentally, so too can production be performed instrumentally in that what is produced is only required instrumentally; in other words, the product is only a sub-goal for the producer - he does not want it for itself but instead wants the economic or financial gains which it affords him. As I will show below, exchange and production are not only very similar, functionally speaking, but they are also very intimately bound up with each other. The motivation to engage in economic exchange is that one is likely to save on effort, reduce risk and cost or even that one will be able to get some good which would otherwise not be available. In the same way, the motive to engage in economic production is that it allows producers to achieve goals, usually financial ones, which they would not otherwise be able to achieve or it allows them to be able to achieve those goals with less risk, cost or effort. Since production is usually only entered into instrumentally, without exchange the producer would be unlikely to bother. Production without exchange is likely to be minimal; the paradigm of instrumental action which Mertens provides shows that any production process relies on some system or procedure of supplying inputs, functional objects and acting subjects. Production without exchange would most likely be subsistence production for the following reasons: the functional objects would have to be home made, the acting subjects involved would have to be bound to the production process through kinship with the producer or through some other relationship, the inputs would have to be local and

immediately available to the producer and the produce would have to be consumed completely by the producer and his kin group.

4.5.3. Production: A Contemporary Example

I want now to turn to a more modern example of economic production so as to illustrate some important points. Imagine that our producer has decided to engage in melting down scrap metal; in the Mertens approach, this is the goal definition. First of all, he will have to engage in a certain amount of physical effort through collecting the scrap or input, building the means for melting the metal, the instrument or functional object, and collecting and carrying combustible material as well as a number of other physical tasks. He will also have to engage in a certain amount of cognitive effort, such as working out the amount of combustible material required for melting down the scrap metal, the time required, methods for cooling the finished metal, and so on; this is the technical know-how requirement. Although production incorporates both physical and cognitive effort, often there is the possibility of a tradeoff between physical effort and cognitive effort and *vice versa*. For instance, imagine that he is only a beginner in the business of melting down metal. In order to find out the amount of combustible material required he can engage in physical effort by adopting a trial and error approach, hoping to hit on just the right amount and the right method. On the other hand, he can engage in a certain amount of calculation and research, thereby discovering the correct amounts of combustible material required through cognitive effort.

There are several possible answers to the question, why is our producer melting scrap metal in the first place? This refers to what Mertens calls the 'political prerequisite'. It may be because the producer wants to earn some money, to make a profit, and given his circumstances this may be the easiest way. Or it may be the case that what he actually wants is the metal itself because he has plans for the finished metal; let us say that he wants the finished metal so as to be able to manufacture medallions. In turn, the point of manufacturing the medallions is so as to make a profit. Here we see the nesting of

instrumental goals within other goals; the goal of manufacturing the metal is nested within the goal of manufacturing medallions which in turn is nested within the goal of making a profit. As we saw earlier, money is a means of gaining other goods or services and is usually not an end in itself. So, production shares the nesting of instrumental goals with exchange. In a direct sense though, our producer has embarked on production because either he would not be able to achieve his ultimate goal of making a profit in some other way or perhaps he could have done so but at greater cost, risk or effort. There will be all sorts of social, environmental, cultural and psychological factors that may have led him to making this decision, although these need not detain us here. The important point with respect to my account is that, given the circumstances in which he finds himself, if he could somehow come up with the finished product or the profit in some other way which would not be more risky, costly or requiring more effort, he would have done so. Another way that could be open to him might be, instead of producing the metal himself, he could engage in an economic transaction in order to acquire it from another party. In this sense there is a strong element of similarity between production and exchange. Both are means or mechanisms for the reduction of risk, cost or effort in the achieving of some goal or the means or mechanism without which the goal would never have been achieved at all. Exchange and production often involve a symbiotic relation in the following sense; while exchange is often the mechanism which allows one party to acquire what he could not feasibly produce himself, in so doing it also provides another party with the reason for engaging in production.

It is easy to see how intimately production and exchange operate together if we expand on our example of the metal melting operation. So far, the producer has performed all operations on his own. Let us assume for the moment that some of the market conditions have changed, such as that there is now a greater demand for metal ingots. Because he cannot physically produce more on his own, he has to gain the cooperation of others; he has to employ someone or contract out some of the work. So far, his goal of employing someone or contracting out the work, both of which involve economic exchanges, is nested within his further goal of making metal ingots. If he then goes on to manufacture medallions, the goal of making the ingots and all the nested goals encompassed within that goal are further nested within the goal of manufacturing medallions which is in turn

nested within the goal of making a profit.

In such economic structures as firms or corporations, each party enters into the arrangement in order to obtain a gain which he otherwise would not be able to achieve on his own or at least could not do so without increased risk, cost or effort. Each party to an economic exchange stands to make a gain. Initially, it might appear that corporations or firms play a dual role in that they are economic mechanisms for the making of profits from the point of view of their owners or shareholders and that they are also mechanisms from the point of view of their employees and managers in that they are the means of earning wages and salaries. It might also appear to be the case that they are mechanisms to be used by both customers and suppliers. But such claims are strictly speaking erroneous. Taking the instance of a contractual relation between two corporations, while it is true that corporations can be said to use other corporations to complete tasks, what is being relied on for the completion of the task is not the corporation as such but the commitments that the corporation provides. For example, corporation X may "use" corporation Y to clean its windows. But strictly speaking, corporation X does not use corporation Y in the same way as one uses an instrument. All corporation X acquires is the service that corporation Y provides. For all corporation X knows, corporation Y might be contracting out its window cleaning operation to others. So, strictly speaking, corporation X uses the services committed to and ultimately provided by corporation Y. So, the mechanism that shareholders rely on so as to make gains is the corporation whereas the mechanisms that the employees, managers, customers and suppliers rely on are the particular exchanges that they have entered into with that corporation.

Strictly speaking, corporations are for the sole unfettered use by their owners. Sometimes the owners are other corporations. Managers and employees, customers, suppliers and anyone else who enters into a contractual relationship with a corporation are not authorized to use the corporation as an economic mechanism in the same way as owners do. There is a simple reason for this; in their role as owners, shareholders have not engaged in a relationship of economic exchange with the corporation whereas managers, employees, customers and suppliers have. The mechanism relied on by those who enter into transactions with corporations so as to make gains is the relevant exchange itself,

while the mechanism that the owner or shareholder of a corporation relies on so as to make profits is the corporation itself. If an employee or a manager were to use a corporation as an economic mechanism for his or her own ends, this would amount to fraud. It would be equivalent to the use of someone else's possession in an unauthorised manner. Of course, someone who has entered into a contract with a corporation can sell that contract on, if this is permitted under the terms of that contract.[101] But this only amounts to selling on the contract with the corporation and not any part of the corporation itself. Only the owners of a corporation can sell on the corporation or any part of it.

In a certain sense, what remains after the exchange, which are the commitments undertaken by each party to the other, is often the only stable factor in such relations. This can be seen clearly if we take it that the original parties to an exchange can change over time; contracts can be sold, inherited or taken over by a guarantor in the case of defaulting by the original party. Of course, some parties to certain kinds of exchange relations are less likely to change because the commitments are person specific, e.g. employment contracts usually do not allow the selling on of such contracts by employees to some third party.

4.5.4. The Network

The entire economic system is made up of economic mechanisms which are made up of various kinds of reciprocal undertakings or commitments between two or more parties. By entering into an exchange, one is plugging into this whole network of nested exchange relations and one is also adding yet another exchange relation to what is already there. The request phase which occurs prior to any actual exchange often makes use of existing or potential exchange relations in the network. When someone goes into a retail outlet

[101]Certain contracts may have restrictions with respect to trading on to other parties. For instance, employment contracts are usually non-transferrable.

and asks for an item that is either not in stock or which the retailer has never stocked before, this request can be passed on to a network of wholesalers and others in the trade. These agents can also use their contacts to source what is required, if they think it is worthwhile. It is through this network of potential or existing exchange relations that needs, desires and wants are articulated. The network also serves to provide information, either through requests for information, prices or through actual exchanges. When one purchases some good or service, this fact is added to the information concerning other purchases of the good or service and is transmitted through the network. In this way the network provides feedback on how products are selling, price are changing, the supply of goods is fluctuating and so on. This is not to claim that the network works very efficiently or well; nor is it to claim that even when the network provides the relevant information that individual agents react appropriately or in time. But it is to claim that the economic system has the potential to transmit information which agents at every level can find useful.

4.6. Conclusion

This chapter dealt with several outstanding issues that were left over from chapter three. The first of these issues concerned what I call the epistemological problem, which was how economic neophytes could learn to become economic agents despite the problems of circularity and reflexivity in the explanation of economic phenomena. I showed how this difficulty was overcome by applying some of the ideas from the later Wittgenstein as well as some of the insights from Vygotsky's theoretical and empirical work in psychology.

The other issues were largely concerned with how the linguistic account of Chapter Three could be applied to economic reality in general. I showed that my account could include all aspects of economic reality, including investments, employment, corporations as well as other aspects of a contemporary economy. I also went on to demonstrate that the linguistic account could be applied to economies at different stages of development and to the emergence of economic systems. Lastly, I described how production could be

incorporated into this comprehensive account.

In dealing with all these issues, several points became apparent. In the last chapter I showed how economic exchanges are comprised of the reciprocal exchange of commitments or promises. Since promises are speech acts, the case was made that engaging in economic exchange was what had been termed meaningful action. Several other aspects of exchange also became apparent, including that it was a joint action, albeit an unusual one, that it was an instrumental action, in both senses of that term, and that it was a social mechanism. Several difficulties with the account were ironed out, including how it was possible, according to the linguistic account, for individuals to enter into economic transactions with machines. This account of economic exchange as a meaningful, joint, instrumental action and social mechanism was then applied to a typical example of economic reality in development, showing how economic networks develop and how they become more and more complex. The example also illustrated various aspects of firms and corporations and how they cohere with my account of economic phenomena. Lastly, I showed how production fitted into the account and how production and exchange could be substituted for each other and how they often operated in a symbiotic fashion.

This chapter concludes what I set out to do in the Introduction, which was to find an account of economic reality which was comprehensive. This chapter demonstrates that my account is comprehensive in that, from the most basic or primitive examples of economic exchange to the most sophisticated, contemporary forms of economic system, there is no aspect of economic reality to which it is not applicable.

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