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MONEY, REALITY, AND VALUE: NON-COMMODITY MONEY IN MARXIAN POLITICAL ECONOMY

A Dissertation Presented

by

JOSEPH T. REBELLO

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 2012

Economics

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A Dissertation Presented

by

JOSEPH T. REBELLO

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Stephen A. Resnick, Chair

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Economics

ACKNOWLEDGMENTS

In many of the pages that follow I argue that a particular type of essentialism has hindered monetary thought. It is difficult not to consider the anti-essentialist overdeterminist orientation of this dissertation when attempting to acknowledge the essential individuals I am indebted too. If I wanted to be especially clever, in a predictable fashion, I might even meditate on the relationship between intellectual and monetary debts. Don't worry. I won't. As for overdetermination, thinking about intellectual indebtedness is one of those cases where it not only makes philosophical, but also practical, sense. I have yet to encounter a person or idea that hasn't influenced me. I can imagine some teachers who might be horrified with what I have done with their inspiration, but such is the nature of the dialectic. There are, of course, some hegemonic figures that I want to mention.

First, and foremost, is Julie Graham. To those who knew her, there is really nothing I need to say. To those that didn't, I doubt my ability to explain. The academy can be a cruel and bitter place, yet Julie was a constant force of truly joyful intellectual surplus. There is a set of wonderful transformative ideas that can withstand serious intellectual challenge, but also invite superficial attacks and dismissals from defenders of archaic orthodoxies and the hyper-masculine gladiators of ideology. I must confess to worrying too much about one might say about me. I'm not sure if Julie had similar worries, but if she did they did not constrain her. I wish I could say that I was more successful in living up to her example.

Agustin Lao-Montes was generous in joining this eclectic dissertation project late. I was incredibly lucky to find a scholar with such diverse expertise, who likely knows most of the varied literatures I engage with better than myself.

If Richard Wolff and Stephen Resnick can share an office for decades, they can share a paragraph here. This dissertation would be impossible without their work. There is little chance I would have had these ideas. There is an even smaller chance I could have linked these ideas together. There is no chance I would have received so much support in exploring them. This applies to everything in this dissertation, but particularly so with my emphasis on Marxian theory. On numerous occasions I wanted to take a detour around the problems I saw in the Marxian theory of money, focusing on the history of monetary thought elsewhere. That hesitancy was intellectual cowardice, and I owe them both greatly for encouraging me not to give in to it. Of course, their influence extends well beyond this dissertation. I first read their work as an undergraduate struggling tremendously with a series of false oppositions (Marxism or Poststructuralism; Rationalism or Empiricism; Social Theory or Economics) they helped me reconcile or leave behind. They are also, in almost comically different fashions, talented and devoted teachers I always keep in mind when working on my pedagogy. I am also indebted to their many students and collaborators for providing the epistemic conditions of existence for this dissertation.

I never imagined becoming an economist after my first course in the subject. I owe Richard McIntyre of the University of Rhode Island for presenting a much better example of what economics could be. More generally I want to thank the faculty in Political Science, Economics, and the Honors Program. I went to the University of Rhode Island due to the accident of being born a Rhode Islander, but in retrospect I'm incredibly grateful I didn't end up anywhere else. The other students of URI's Honors Program made an indelible mark on my thinking. Sometimes given dirty looks by our classmates within our majors for general nerdiness, the Honors Program computer lab was a refuge of interdisciplinary fun, despite that broken window covered with cardboard. I trust the program's fancier new location has not crowded out the intrinsically motivated intellectual community I once enjoyed.

My partner, Özlem Göner has lovingly dealt with me through intellectual and emotional lows. She has helped me persevere despite my self-undermining tendencies, and when the world seemed just way too absurd she was my "nation of two," in the words of Kurt Vonnegut.

Before Özlem relieved the world's burden of dealing with me, I had numerous housemates throughout graduate school. The Economics Graduate Student Organization at UMass provided a cooperative environment almost inconceivable in the academy. During my first years of graduate school, the participants in the Subjects of Economy project and Julie Graham's research seminars provided me with the perfect combination of challenge and encouragement.

I'm fittingly putting the final touches on these acknowledgments at the Haymarket Cafe in Northampton, Massachusetts. There is significant labor turnover in the food industry, and I don't recognize everyone here now, but for many years this was my office away from office. I'm very grateful to those who have worked here over the last decade. Similarly, I must thank the workers at the PVTA and Earthfoods for essential bus transportation and lunch, respectively. All of the staff in the Economics department assisted me greatly. Tony Guglielmi and Judy Dietel were both wonderful people and extraordinary characters. They are missed tremendously.

I feel less like an academic than an emotional Grammy or Oscar winner now. There many names I'd like to name. So many, indeed, that I can't name them. Be assured that if you could imagine possibly being one of those names, you most definitely are.

Finally, my parents, Joseph and Sandra, worked unimaginably hard to provide me with opportunity and happiness. They were patient when I made seemingly bizarre decisions with the options they had given to. When I was very young I thought I'd play in the NBA and buy them a big house. In that sense, I'm sad to only be able to offer a big dissertation, but I do trust they are happy for me nonetheless.

ABSTRACT

MONEY, REALITY, AND VALUE: NON-COMMODITY MONEY IN MARXIAN POLITICAL ECONOMY

SEPTEMBER 2012

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My dissertation offers an advancement of the Marxian theory of money, motivated by a methodological critique of monetary theory in general. As such, my dissertation is located within the philosophy and methodology of economics and the history of monetary thought, in addition to Marxian political economy. This intermingling of fields reflects both my research interests and my argument with respect to the current state of scholarship on Marx and money. Despite increasing acceptance of the compatibility of non-commodity money and Marxian political economy, a dualist social ontology has stunted attempts to theorize the relationship between money, value, and class. I base my development of a Marxian theory of money in a rejection of this dualism. In other words, I contribute a theoretical analysis of the relationship between money, value, and class informed by a critique of these dualist notions of economic reality.

Accepting criticism, leveled by Keynesians among others, of the tendency to reduce money to the status of a mere veil, I further argue that the ontological privileging of a

real economy over its monetary moments is prevalent across time and paradigms. This dichotomy between real economy and less-real money, which I call the *realist dualism*, is thus more general than the classical dichotomy. As such, even fervent opponents of the classical dichotomy may reproduce their own ontological dualism between the real and merely monetary. After outlining the basic features and theoretical consequences of the realist dualism, I present examples of how this philosophical tendency shapes monetary theory and debate, both ancient and modern.

Within the Marxian tradition, dependence on such a dualism has impeded attempts to theorize money in its relation to both (1) the economy in general and (2) its own manifold forms and functions. The distinction between real and less-real on a macroeconomic scale is repeated within the conceptualization of money itself, privileging real commodity money over symbolic and imaginary forms. I provide an alternative to this tendency, based on an overdeterminist understanding of the relationships between so-called imaginary, symbolic, and real/material aspects of money. This alternative ontology informs a critical and deconstructive reading of money within the Marxian tradition and a reframing of the problem of non-commodity money. In lieu of deriving a theory of non-commodity money from a logically and historically privileged notion of real commodity money, my general Marxian theory of money takes as its object the interaction between (1) the imaginary, symbolic, and real/material dimensions inherent to money in general and (2) class processes of value production, appropriation, and distribution. This project accepts that a specifically Marxian theory of money is not produced from the logic of supposedly real commodity money, but through the entry point of class.

TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS . . . iv

ABSTRACT . . . vii

LIST OF TABLES . . . xii

LIST OF FIGURES . . . xiii

CHAPTER

1. INTRODUCTION: MONEY, ONTOLOGY, MARX . . . 1

1.1 Real Economy . . . 1
1.2 Dichotomy and Dualism . . . 3
1.3 Repetition, Dualism, and Philosophy . . . 9
1.4 Marxian Monetary Theory . . . 13
1.5 Dissertation Outline . . . 17

2. THE REALIST DUALISM IN MONETARY ECONOMICS . . . 22

2.1 Introduction: The Philosophy of Monetary Economics . . . 22
2.2 The Realist Dualism as Problematic? . . . 26
2.3 The Language Metaphor: Competing Models of Money and Reality . . . 32

2.3.1 Semantics and Pragmatics . . . 34
2.3.2 Semiotics of the Coin . . . 39

2.4 Aristotle on Money . . . 44
2.5 Dualism and Macroeconomics, or, The Rigidity of Rigidity . . . 50

2.5.1 Modigliani's Classical Models . . . 52
2.5.2 New Classicals . . . 57

2.6 Conclusion . . . 61

3. MARX AFTER THE LETTER: OVERDETERMINISM AND REAL MONEY **63**

3.1 Introduction: RIS 63

3.1.1 Popular Monetary Education 64
3.1.2 Outline 66

3.2 Tensions in Marx's Real Money 67

3.2.1 The Insistence of the Real 68

3.2.1.1 The Money-Form 70
3.2.1.2 Wildest Theories: The Measure of Value 75
3.2.1.3 The Honesty of Paper Money: The Means of Circulation 78
3.2.1.4 Return of the Real: Money as Money 88

3.2.2 Essentialist and Anti-Essentialist Critique 91

3.2.2.1 Monetary Essentialisms and The Realist Dualism 91
3.2.2.2 Monetary Essentialism and Marxian Theory 93
3.2.2.3 Monetary Anti-Essentialism and Overdetermination 94

3.3 Lacan, Money, RIS 96

3.3.1 Goux's Marx and Lacan 96
3.3.2 A Simple Outline of the Lacanian RIS 102

3.3.2.1 Three Registers 102
3.3.2.2 Complication I: Before and After the Letter 104
3.3.2.3 Complication II: The Knot 107

3.4 A Marx-Lacan Framework for Monetary Theory 107

3.4.1 RIS Money 108
3.4.2 (Non)Commodity Money, After the Letter 112

4. MARXIAN ECONOMICS AND NON-COMMODITY MONEY **116**

4.1 Introduction 116
4.2 Money and Moonlight: Hilferding 119
4.3 Against a Marxian Theory of Non-Commodity Money 127
4.4 For a Marxian Theory of Non-Commodity Money 134
4.5 Conclusion: Overdeterminism and Non-Commodity Money 140

5. THEORETICAL GOLDEN FETTERS: THE PERSISTENCE OF COMMODITY MONEY IN MARXIAN POLITICAL ECONOMY 142

5.1 Introduction: Real Gold Commodity Money 142
5.2 Forms of Money/Value 146

5.2.1 Price Forms, Plural 146
5.2.2 If commodities could speak 152

5.3 Gold, Value, and Output 156

5.3.1 What makes a monetary theory Marxian? 156
5.3.2 Measurement and Theory 165

5.4 Positing/Presupposing The Value of Money 169

5.4.1 The Process of Equalization 169
5.4.2 Overdetermination and Equalization 171
5.4.3 Overdetermination without Equalization 176

5.5 Conclusion: Money in General 178

6. CONCLUSION: NON-COMMODITY MONEY AND CLASS ANALYSIS 182

6.1 Introduction: Reviewing the Questions and Answers 182
6.2 The Real-Imaginary-Symbolic, Monetary Functions, and Monetary Forms 183
6.3 Class and Non-Class Processes in a Monetary Economy 188

6.3.1 Monetary Conditions of Existence 188
6.3.2 A Simple Class Analysis of a Commodity Money Economy 192
6.3.3 A Simple Class Analysis of a Non-Commodity Money Economy 198

6.3.3.1 Class, Bank, and State Flows 198
6.3.3.2 Class Analysis of the Value of Endogenous Money 200

6.3.4 Extensions 205

6.4 Money, Contradiction, and Crisis 206

BIBLIOGRAPHY 210

LIST OF TABLES

Table **Page**

1.1 The Realist, and Other, Dualisms 12

2.1 Aristotle's Dual Economies 48

3.1 Goux's Registers 99

LIST OF FIGURES

Figure **Page**

1.1 Real and Monetary in the Fisher Hypothesis 7

2.1 Modigliani's Keynesian and Classical Models as of 1944 57

3.1 Imaginary and Real Conditions of Symbolic Money 86

3.2 Borromean Rings 107

3.3 RIS, Money, and Value 111

5.1 The Priority of Gold Prices in Determining Non-Commodity Money Prices 161

CHAPTER 1

INTRODUCTION: MONEY, ONTOLOGY, MARX

1.1 Real Economy

The ongoing economic crisis that began in 2007 goes by many names. Alongside the naming of the crisis is the identification of what is in crisis and why. For some it is a subprime crisis - a crisis created by a particular set of markets related to real estate. For others it is a crisis of a particular form of capitalism. For example, as a crisis of neoliberalism we are suffering from an excess of capitalism (defined largely as free markets and private property) and deficit of government intervention. Not surprisingly, others have made the exact opposite case, arguing the conditions and triggers of this crisis stem from too much government meddling. Alternatively, this event can be seen as a crisis of capitalism itself. The various merits and consequences of these approaches to crisis are important, but not of interest here. What is salient is the tendency, not universal but common, to present (1) the causes of the crisis as an undermining of some economic *real* and (2) the solution as a return to this *real*.

The specific nature of this real economy varies quite widely across political economic frameworks. The characterization of the less-real varies as well. Depending on who you speak to, the enemies of this reality include Wall Street, finance, banks, the federal government, financial derivatives, (de)regulations, the Federal Reserve, unbacked paper money, China's purchasing of US bonds, the poor, and minorities with (improved) access to credit. In each case, in their own way, these ideas, actors, or activities are deemed less real. In some cases they represent deviations from the natural laws of the real economy. In others, they are deviations from a real America or

processes detached from brute reality of industrial production. However specified, the economy is represented as having real and less-real moments. The real is privileged, and the less-real exists as a potential threat or servant. The economy does well when real and less-real moments, process, agents, or sectors know and play their appropriate roles. One expects that a motivating factor for the use of a rhetoric and logic of the real economy is the apparently natural, obvious, and matter of fact character of that which is real. On the other hand, the multiplicity of ends the real economy rhetoric is used for suggests there is really nothing straightforward or uncontroversial about the matter.

As the dualism between real and less-real, at once philosophical-methodological but also quite political (there is nothing auspicious about being deemed a threat to reality itself during times of social upheaval), overdetermines popular political discourse, it is also at work within the academic realm of economic theory. Given the frequency with which money has been thought of in opposition to some real economic thing, this dualism is featured prominently in the history of monetary thought. And while the philosophical-methodological dimensions of the dualism are most explicit in earlier economic thought, they continue to overdetermine the discourse of modern and so-called analytical monetary theory to this day. In both the popular and academic worlds, this dualism comes in many varieties but nonetheless places its stamp on its discursive products. It is without doubt productive of theories, narratives, and proposed solutions to economic problems, but also forecloses alternatives based on (1) a critical evaluation of the supposedly real economy and (2) a serious analysis of the ways in which the processes located on each side of the presupposed ontological border are articulated together, overdetermining each other without causal priority.

Because money is less real than the real economy, and non-commodity money is often represented as less real than commodity money, the object of this dissertation is on exceptionally shaky ontological grounds - a fake of a fake. This philosophical

debasement suffered by non-commodity money goes a long way in accounting for its status as a problem for Marxian theory. The solution to this problem resides neither in sensationalism over the fictitiousness of modern money, nor in anchoring these fake forms of fiat and credit in the sure ground of an idealized notion of real gold commodity money. This dissertation advances an overdeterminist Marxian theory of non-commodity money by abandoning this *realist dualism.* As I will argue, this abandonment opens new paths for theorizing non-commodity forms of money. What presented itself as a difficulty, perhaps even fatal, for Marxian economics becomes yet another process to which a class analysis can be applied.

Attempting to leave this realist dualism behind is not necessarily easy. In theoretical, pedagogical, and political practice the distinction between the really real and not-so-real is often attractive on a number of grounds. This dissertation argues that resisting these temptations pays dividends in advancing monetary theory within a Marxian framework. My inclination is to say that the same benefits accrue in the context of representing and responding to economic crisis.

1.2 Dichotomy and Dualism

One familiar element of heterodox economics (as well as some mainstream Keynesian economics) is the theoretical and empirical implausibility of any approach in the classical dichotomy, real analysis, and monetary neutrality traditions.[1] For some heterodox and Keynesian economics, the only interesting question such literature poses concerns how someone intelligent could accept it. I have no desire to defend the clas-

[1] The classical dichotomy posits a real and a monetary part of the economy in which the latter has no causal influence on the former. A result of this dichotomy is the neutrality of money. Changes in the supply of money have no influence on real values, so economists would do well to ignore this less-real part of the economy. This bracketing of money is the essence of real analysis. These concepts work well together but should not be conflated. First, they operate at different methodological levels. Second, one may find money to be neutral in the medium to long run but resist the methodology of strict real analysis.

sical dichotomy or monetary neutrality, and if I did this is not the place. The concern I do have about this familiar critique is that in its matter-of-fact familiarity it misses something. What it misses is the dualism between money and real economy common across paradigms, of which the strict dichotomy of only one variant. While the latter (dichotomoy) is a frequent object of critique, the former (dualism) is very rarely interrogated. Indeed, it has been my experience that when I tell economists what I do their first impression is to read dualism as dichotomy. It is therefore important to differentiate the two.

Smithin offers a very concise summary of the orthodox approach to money:

> 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 macroeconomic theory. Although the existence of money is accepted (seeming somewhat grudgingly) as part of the background of economic institutions, monetary changes within a given framework are still regarded as neutral (Smithin, 2003, p.20).

This description of the "standard" approach to money should ring familiar to most economists, regardless of its accuracy or fairness to macroeconomics. The history of monetary thought has been dominated by conflicts over the qualitative and quantitative importance of money. As Smithin points out, there is a link between questions concerning money's ontology, functions, and relationship to greater economy.[2] In particular, the neoclassical emphasis on money as a means of exchange produces a "dual perspective." On one hand, money is assumed to exist because monetary exchange

[2]What is money? What does money do? What effects do monetary processes have on the economy? Answers to these questions tend to condition one another.

is more efficient than barter. On the other, it is assumed that its effects are neutral and can therefore be assumed away.

While Smithin may not have intended anything more than this pair of theoretical positions by using the term "dual," those who have thought about the tradition of monetary neutrality may recognize that it is based on a dualist vision of the economy. A dualist economy is one comprised of two qualitatively different parts, sectors, or types of processes. The most famous example outside of economics is likely found within the philosophy of the mind, in which a dualist position asserts that the body and the mind are ontologically distinct. Competing dualisms seek to explain the nature of both the divide and interaction between these separate entities. Why and how are the mind and body distinct? As distinct, how do they relate to one another? What explains harmony or disharmony between the two? Does one dominate or determine the other?

Analogous questions are implicitly addressed in the dualist vision of orthodox economics. The math and logic of the Fisher Hypothesis (1907) can illustrate how they are approached and resolved. An exceptionally simple theory, it is therefore also a very straightforward example of how economic theory may contain a specific social ontology, even in the familiar forms we take for granted. The hypothesis is typically expressed as:

$$r = i - \pi^e \tag{1}$$

where r is the real interest rate, i is the nominal interest rate, and π^e is expected inflation. The equation itself defines/constitutes a distinction between real and nominal. Indeed, this distinction and definition is now taken for granted as natural and obvious.[3] The nominal rate is the real rate plus an inflation rate. Or, the real rate is

[3] For a critique of this "real" interest rate notion see Tymiogne (2006).

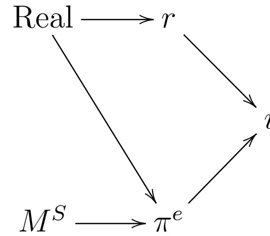
the nominal rate with the inflation rate subtracted from, or accounted for. Implicit, even in this very straightforward math, is a vision of the economy with a real foundation and nominal appearance. Removing, or subtracting, the distortion of inflation we can see the real economy.[4]

Moving beyond the equation, the "hypothesis" itself offers a theory of the interaction between the real and the monetary. It states that a change in expected inflation is offset by a corresponding change in the nominal interest rate, leaving the real rate unchanged. Changes in a real value (r) can influence nominal values (i), but a monetary or nominal change leaves the real rate unchanged.

---

[4]This is in line with the idea that money is a veil. A veil hides one's face, but we assume there is indeed a real true face beneath. The metaphor has typically been deployed in accordance to the method of real analysis. To maintain the metaphor, the object of the serious economist is the face (real economy) itself, and not the mere veil (monetary phenomena). Knowledge of the veil itself, like a method for calculating inflation, is useful only in that it allows us to correct for its distorting effects. On the not entirely clear origins of the veil metaphor, see Patinkin and Steiger (1989), Laidler (1990), and Klausinger (1990). Note that there is a tension in the veil metaphor. While it does imply a real, independent face - the wearing of a veil changes one's appearance but not actual face - it is also true that in practice the wearing of a veil is far from a neutral social act. Hawthorne's short story, "The Minister's Black Veil," illustrates the social non-neutrality the mere donning of a veil may entail. This ambiguity in the veil metaphor was recognized by Pigou. His statement on the trope begins in agreement with the metaphor: "Over and against the real facts and happenings thus roughly outlined there stand monetary facts and happening" (1949, p.24). However, despite the fact that money "does not comprise any of the essentials of economic life" he also argues that one can not maintain that "monetary facts and happenings are unimportant to economic life" (ibid., p.25). He offers two methodological solutions to this tension. The first, more conservative resolution, is to distinguish between the "institution of money" (which is important) and the "number of units of money" (which is not) (ibid., p.26). In this case it is important to recognize that money does in fact exist, but in practice its quantity and the various relationships and processes related to it can be left aside. His second suggestion is a more a radical deviation from the spirit of the veil metaphor that approaches a notion of the performative: "Besides these induced changes that occur in the garment [or veil] there are, or may be, other changes that are autonomous, originating in the garment itself. These too have effects on the body" (ibid., p.27).

Figure 1.1. Real and Monetary in the Fisher Hypothesis



This basic logic is presented in Figure 1.1. Entry points are distributed into the categories of real (essential) and monetary (inessential). Fisher placed importance on the marginal productivity of investment as a real component, but various orthodox approaches to the real interest rate can also include other standard (real) entry points such as preferences and endowments (Wolff and Resnick, 1987, Ch.2). In this orthodox approach to the interest rate, real entry points are sufficient to determine the real rate of interest. Given these real entry points, an exogenous (and typically arbitrary) quantity of money, and rational subjects the (expected) inflation rate can be determined. Note that while real entry points influence this nominal value, the determination is one-way. Finally, the strictly real interest rate and the real-monetary inflation rate determine the nominal interest rate, according to equation (1).

So far we have described a very orthodox version of this dualism that follows the the logic of the classical dichotomy. However, as I've suggested above, we err in conflated the dichotomy as a particular type of dualism with the dualism itself. What I call the realist dualism is not the strict dichotomy governing the the causal priority of real and monetary processes or values, but the initial ontological distinction between the two in the first place. In terms of Figure 1.1, one may alter the direction or increase the number of arrows and still maintain an ontological gap between the ultimately

real and merely monetary.[5] I argue that the particular dualism found here is just one variety of a more general methodological-philosophical tendency found across many economic paradigms. I refer to this tendency as the realist dualism because it operates through a distinction between real and less real economic processes or variables. Even the discourse of traditions that emphasize the importance of money nonetheless often do so through language and reasoning premised upon a dualism between the real and the less-real.

The textbook Keynesian critique of the classical dichotomy is premised precisely on such a dualism. The difference between classical monetary neutrality and mainstream Keynesian non-neutrality is that in the latter case a market imperfection (i.e. wage rigidity) creates a short circuit between the two spheres. This short circuit is only intelligible given the presupposition of a dualist economy in the first place.[6]

This is not to say that critiques of the classical dichotomy, found in mainstream Keynesian, heterodox, or Marxian economics, do not contain moments in which the dualism itself is undermined. However, because the dichotomy has been the primary object of critique, the treatment of the dualism has been uneven at best. For example, in the broader Keynesian tradition the critique of the notion of self-contained real economy of classical economics has existed alongside their own ideal of an economy in which the monetary-financial sector acts as a mere servant to the real economy.

As this dissertation will show, Marxian economics has also approached the dualism and dichotomy with mixed results. For example, it is not uncommon for the Marxian discourse to vacillate between (1) a position of utter disdain for monetary neutrality when speaking about crisis and (2) its own very strict monetary neutrality assumption on the topic of money and value. In the context of the first case, the Marxists

[5]These revisions may open up the possibility of an overdeterminist critique, but the opportunity is not taken. In my reading both the Keynesian and Marxian traditions contain moments in which this dualism is seriously challenged, only to be built back up.

[6]This point is made in greater detail in Chapter 2.

have produced forceful denunciations of the ontological bracketing of the monetary. In the second, a very strict dualism approaching the classical dichotomy variant is presupposed in order to theorize the value of (non-commodity) money.[7]

1.3 Repetition, Dualism, and Philosophy

Scholars of the history of monetary thought have often commented on the repetitive character of debates over theory and policy. In a recent book Patnaik (2009) groups all monetary thought into the schools of monetarism and propertyism. Whatever novelty is produced, debates are ultimately reducible to a struggle between these two sides. Mehrling (1998) discusses the development of American monetary thought as a reshuffling of particular positions oriented around the central question as to "whether money or banking is taken as the starting point of analysis" (p. 294). In each case, the practice of monetary theory repeats itself around a central opposition.

Lenin (1970) accounts for the repetition of philosophy through the opposition between materialism and idealism. Idealist and materialist approaches, at least in their crude forms, both share a dualistic view of the world. In each case, ideal and material moments are assumed, and debate surrounds the priority and relationship between the two. As Althusser explains this thesis:

> Besides, that is what Lenin suggests in practice, when...he explains that Mach merely repeats Berkeley, and himself counterposes to this his own repetition of Diderot. Worse still, it is clear that Berkeley and Diderot repeat each other, since they are in agreement about the matter/mind opposition, merely arranging its terms in a different way. The nothing of their philosophy is only the nothing of this inversion of the terms in an immutable categorial opposition (Matter/Mind) which represents in

[7] Again, these are topics which will be dealt with in more detail in the dissertation.

> philosophical theory the play of the two antagonistic tendencies in confrontation in this opposition. (1977, p.55)

There is a striking similarity in the ways in which monetary theory and philosophy repeat. In a repetition of Althusser on Berkeley and Diderot, we could say that the classical and Keynesian models "are in agreement about the" real/monetary "opposition, merely arranging its terms in a different way." This shared dualism is important because it helps explain both similarity and difference. On one hand, it explains why certain problems reappear and why members of competing traditions may be able to speak to each other in a shared language.[8] On the other hand, since different traditions interpret the particular nature of the common dualism in their own way, they struggle.

Within the context of this dissertation, this logic of repetition related to a shared methodological-philosophical dualism is important on two accounts. First, as this dissertation engages with the history of thought an understanding of this logic helps us understand the contours of incessant monetary debate and partial resolution. Second, and perhaps more importantly, since this dissertation seeks to advance a Marxian theory that breaks from this essentialist dualism and the repetition it nurtures, I'm interested in understanding so as to produce something different.

One complication that arises is that the dualism I critique is not the essence of economic discourse. In the accounts of Patnaik, Mehrling, Lenin, and Althusser an implication is made that the opposition they discuss is the central and fundamental one. While I focus on the opposition between the real and monetary, in part because of its rhetorical and theoretical importance in representations of money, it never exists alone and is itself overdetermined by various other oppositions and dualisms.

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[8]For example, New Classical and New Keynesians may both express their basic positions through IS-LM/AD-AS frameworks, representing their differences through competing constructions of aggregate supply (AS).

A return to the simple Fisher Hypothesis can illustrate this point. As I described, a notion of the real and monetary (or nominal), as well as a relationship between the two, is presented by this theory. Once we begin to describe this relationship we begin to use a variety of other oppositions. Because expectations play an important role, a difference between the actual and the expected enters. This brings us to the question of the production of expectations and now we are confronted with the classic social science dualism of agent/structure (Cullenberg (1988), Charusheela (2005), and Madra (2007)). Furthermore, when we characterized the real and the monetary we made reference the opposition between the necessary and the contingent (DeMartino, 1992). When we deal with this hypothesis empirically other dualisms appear. Is this a long run or a short run relationship?

In order to really make sense of the real interest rate and the nominal, we have to rely on all of these related oppositions. Economic "literacy" concerning the real involves being able to speak about the ways the nominal *may deviate* from the **fundamentals** in the *short run*, if agents form expectations *non-optimally*, or if markets *fail* - **but** in the **long run**, the **real** will **necessarily** assert itself. This long run outcome is one of order and harmony. At the heart of this long run reconciliation of the nominal and the real is an orderly world (Ruccio and Amariglio (1998), Ruccio and Amariglio (2003, Ch.1)) in which any apparent disorder or disharmony - between expectations and actual values, price signals and optimal investment decisions, individual and social optimal outcomes, etc. - is resolved.

Many of these dualisms are gendered (Barker, 1998) as well. In some cases this involves use of implicitly gendered language and metaphors to distinguish the really real from the monetary. In other cases, the issue is made explicit and social practices surrounding the monetary-financial are associated with women. Ingrassia (1998) and de Goede (2005) outline the ways financial speculation, particular after things have gone bad, has historically been gendered as feminine, and a threat to the masculine

realm of real economic activity. Racial, ethnic, and religious identities have also helped constitute the dualist ontologies of popular monetary thought.[9]

Table 1.1. The Realist, and Other, Dualisms

Real	**or**	**Monetary**
necessary		contingent
long run		short run
masculine		feminine
rational		irrational
stable		volatile
essence		appearance
nature		convention
active		passive
real		less real

Table 1.1 is far from exhaustive. It also doesn't represent all manifestations of dualist thought since different traditions approach these oppositions in different fashions. Sometimes some of these key terms are reversed. For example, in some progressive Keynesian accounts of the current crisis, monetary and financial factors are given a very active and primary role - they are said to have caused to crisis. This agency is far from the orthodox dualism in which money and finance are largely passive, but it is not necessarily a departure from the realist dualism. I read it rather as a particular take on this dualism in which the monetary is scapegoated in defense of the real economy. The agency afforded to it, allows the real to continue to be privileged as a source of order.

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[9]Shell (1982, Ch.3) reads Shakespeare's *The Merchant of Venice* to show the ways in which the ontological questions of money and credit are approached the binary opposition of Christianity-Judaism. "Natural" and monetary modes of reproduction/generation are mapped onto the dual worlds of Christianity and Judaism, materiality and spirituality, commerce and love, and so on.

While not comprehensive, the table suggests ways in which these oppositions mutually constitute one another. It also helps explain why dualisms come in varieties. Modifying the character of one opposition will overdetermine all of the other relationships. So, while a language of the real versus the monetary reoccurs with regularity over time, its specific content is heterogenous and unstable. This overdetermination should be kept in mind throughout the dissertation. Given the constraints of space and language, my discussions of the dualist character of monetary thought will not account for this complexity.

Although I will primarily focus on the language of the real, lessons from the analysis of these other dualisms shape my approach throughout. Without granting it a priority I have withheld from the other dualisms, the distinction between order and disorder plays an interesting role. I did not include it in Table 1.1, although it could certainly fit. For example, current popular thought on the economy may locate order in the the real economy (Main Street) and disorder in the monetary or financial sector (Wall Street). However, I find the dis/order notion more useful in thinking about the different relations between these dualisms. In other words, the characterization of the economy through a series of oppositions (agents/structures, production/finance, etc.) often implies the possibility of order understood as a harmonious relation between these terms, and the possibility of disorder understood as dissonant relationships. Because the dualisms themselves shape what harmonious or dissonant relations would be, the tendency for the realist dualism to privilege the real produces a particular vision of order as the priority of the real, and disorder as the subversion of the real by the monetary.

1.4 Marxian Monetary Theory

It is not uncommon for Marxian theory to be characterized as deficient in its development of theories of money and finance. Oftentimes this has been the product

of a casual reading of the Marxian tradition that ignores the concern for monetary and financial topics, and accepts the stereotype of a singular focus on industrial production. Certainly productivism has been a problem for Marxian theory in general, and its treatment of money in particular. This is a central part of my dissertation. However, the extent and nature of this problem has often been exaggerated by critics who act as if Marx and Marxists have been completely silent about matters outside of industrial production.[10] Another issue I have found in the appraisal of Marxian theories of money and finance is that the frequency with which Marxists write on money is not matched by a frequency of citing the work of others. The biggest surprise of my research was how much Marxists have written on money. While this should not be taken as a stamp of approval of all this literature - a critical survey will be provided in the dissertation - it needs to be recognized to be evaluated.

I take these defenses of Marxian research on money as important qualifications to be made prior to an outline of its problems. The Marxian theory of money does indeed have problems, just as other theories, both orthodox and heterodox, continue to stumble over monetary questions. The claim that work remains to be done on Marxian monetary theory should be carefully kept separate from the notion that Marxists have more difficulty with money than others.[11] These qualifications aside, this dissertation

[10] Dodd (1994) is an excellent example. He has the insight to see the sociological character of Marx's work on money and I agree that productivism is a problem. However, the assertion that the existence of "present-day international currency and capital markets" in which "profit can be generated, and so money-capital expanded...undermine[s] any contemporary application of his theory" is difficult to accept. If by "generate profits" we mean earn a return for the investor Marx was well aware of ways to make money outside of production. This is certainly not because Marx could see this future we call the present-day. Rather, the ability to earn profits (in the common sense of the term) from exchanging not only goods, but also currency or financial instruments, predates Marx significantly. If Marx/ists were unaware of this, he/they would be guilty of much worse than simple productivism. Indeed, it is the idea that this ability to make some money outside of production is somehow new which betrays a productivism - as if the caricature of Marx would have been applicable prior to 1973. Nonetheless, the suggestion that Marxian theory is superficially attractive, but no longer relevant given some novel historical development often manages to find traction.

[11] It is ultimately meaningless to attempt to compare "how much" difficulty different traditions have with money, but I would assert that neoclassical economics, with its vertical money supply curve and Mengerian origin myth (1892), has no grounds to claim less difficulty. If I had to be

does seek to advance and improve upon what has been done. In particular, I'm interested in developing the Marxian theory of money in a direction that addresses its non-commodity forms while incorporating the logic of overdetermination and class analysis.

The history of Marxian research on money is studied in Chapter 4 and specific details are addressed in other chapters (see outline below). Here I would like to provide a stylized outline of the areas in which theoretical problems appear.

Forms and Functions. How we do understand the different forms money may take? What are the relationships between these forms? What functions does money perform? How do these functions condition one another? Finally, what is the relationship between money's forms and functions? Non-commodity forms of money have traditionally been seen as less fundamental than real gold money. Similarly, functions associated with these less real forms are taken as derivative of the fundamental measure of value function. If we are to theorize non-commodity forms/functions as simply derivative, what is the logic of this derivation in historical and/or theoretical terms. If we are to reject this hierarchy of forms/functions from an overdeterminist perspective, how do we retheorize these relationships in an anti-essentialist fashion?

Forms and Value. Within *Capital*, Marx initially develops a theory of money in his discussion of the forms of value. Because this theory of money assumes a particular form - a commodity - the labor theory of value that Marx produces has been seen as intimately linked to a type of money. A series of problems follow from this entanglement. If money takes a different form, what happens to value? If we see Marx's notion of value as a static concept produced at the beginning of *Capital*,

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trapped on a deserted island with only one account of money I would take Marx's. While a theory of money would do little good in such a circumstance, at least the theory I had would be able to account for its own circumstantial uselessness. In the strict neoclassical approach, the uselessness on the deserted island would just be a special case of the general insignificance of money.

does the unsettling of the money-form undermine the labor theory of value?[12] If we see value as a concept that is transformed through theoretical production (Roberts (1981); Wolff et al. (1994)), what is the character of the transformation of value associated with a change in the money-form?

A Marxian Equation of Exchange. The standard equation of exchange relates the quantity and velocity of money with the level of prices and output. Economic theories ascribe different causal relationships between these variables, based on microeconomic behavioral assumptions, macroeconomic structural conditions, and/or institutional architecture. As with the theory of value, Marx's treatment of the relationship between these "variables" is closely linked to his theory of money. Of course, Marx deploys some notion of the structure of the economy, the character of economic institutions, and in a limited sense what we could individual behavior, but even here these concerns are articulated with the theory of money. Like the form of value, the question of how different forms of money condition different causal relationships between prices, money, and output is important. While Marx provided partial answers, these solutions are based on the strict assumptions of Volume 1, including predetermined levels of output, that are not accepted by Marxian theory in general. Furthermore, some theories of the value of non-commodity money (Moseley (2004), Carchedi (1991)) are built upon undertheorized presuppositions concerning the relationship between money creation, circulation, and production.

Contrary to some approximations, much work, however uneven or limited, has been done on these topics. My dissertation contributes to this literature on two accounts. First, it is methodologically unique in that it applies the overdeterminist framework developed by the AESA school of Marxian economics to the problem of non-commodity money. Roche (1981; 1985; 1988) and Kristjanson-Gural (2008) have

[12]For some examples see Lavoie (1983) and Cutler et al. (1978). As with all these theoretical problems, Chapter 4 will more exhaustively survey this literature.

both dealt with money within this framework but the emphasis was on its commodity form. Biewener (1994) does link an overdeterminist notion of "socially contingent value" to the possibility of non-commodity money and the overdetermination of value by monetary and financial processes. Nonetheless, a number of key monetary questions are not addressed and the character of this possibility and overdetermination are not fleshed out. The theory of non-commodity money, and even the theoretical distinction between different types of money (what do we mean by non-commodity or commodity money?), remains somewhat in limbo within this approach. Second, it will identify a number of limitations that exist within Marxian monetary theory in general. Although the specific theoretical solutions to these problems will be conditioned by the overdeterminist approach I adopt, they are nonetheless problems shared throughout Marxian economics.

1.5 Dissertation Outline

Chapter 2 of this dissertation is a critical introduction to the *realist dualism* as an essentialist methodological-philosophical tendency in the analysis of money. What reoccurring conflict, between economists in the real analysis and monetary traditions for example, both implies and obscures are the methodological principles common to both sides. I argue that these common methodological tendencies are the product of a common social ontology - the realist dualism. After outlining the discursive characteristics and consequences of this realist dualism, I provide a few simple linguistic-inspired models exemplifying its various manifestations. I then provide examples of the realist dualism in both early and modern monetary thought. In the case of Aristotle, I show how attention to his social-economic ontology clarifies the ambiguity surrounding his metallism. In a more recent, and less explicitly philosophical, case I consider the way in which the realist dualism within the macroeconomic tradition helps explain the centrality of rigidity in New Keynesian economics.

After the elaboration of the tendencies and some consequences of the realist dualism, Chapter 3 offers an alternative framework for the study of money. This alternative framework is informed by an overdeterminist reading of Marx on money. In Volume 1 of *Capital* Marx outlines multiple forms and functions of money, as well as the relationships between them. Many interpretations are possible, but traditionally his language of real, imaginary, and symbolic money has lent itself to an essentialist reading in which the real form/function strictly determines derivative forms/functions. I reread Marx's use of the real, imaginary, and the symbolic through Lacan's understandings of these terms. The particular Lacanian notion of the real (after the letter) does not only help us escape the essentialism of the orthodox reading, it also allows us to make sense of much of the nuances of Marx's argument.

Chapter 4 provides a reading of money in the Marxian tradition informed by the methodological-philosophical concerns raised in earlier chapters. It will focus particularly on how a productivist variant of the realist dualism has overdetermined attempts to theorize various non-commodity forms of such as credit or fiat money. While productivism has been theoretically productive in its own terms, and the Marxian tradition also contains various postmodern moments in which the realist dualism has been undermined, subverted, and critiqued, I argue that a Marxian theory of money in general has been impeded by this social ontology. In some cases this failure has manifested itself as an outright rejection of the possibility of non-commodity money and Marxian theory. In other cases, the possibility of a Marxian theory of non-commodity money has been accepted, but has taken real gold commodity money as the true form of money from which others are derived.

Chapter 5 focuses on this latter point in greater detail. In this case, the privileging of real gold commodity money as logically and historically prior produces a theory of non-commodity money as the absence of commodity money. The particular logic governing the relationships between money, value, prices, and output in the com-

modity case persists by treating non-commodity money as simply standing in for the former. This persistence can be subtle. For example, in some Marxian accounts of the relationship between prices and the quantity of money, the causality operative in a non-commodity money regime is obverse of that of the commodity money of case. Superficially, this reversal may appear as a break from the commodity money theory. However, consider a stylized account of the development of this causal argument:

1. In the case of commodity money, prices determine the quantity of money circulating.
2. Non-commodity money is not commodity money.
3. Therefore, in the case of non-commodity money, the quantity of money circulating determines prices.

This account is of course very simplified, and misses some important details, but allows me to illustrate what I mean by the persistence of a gold commodity money logic. The theory of non-commodity money is the combination of (1) the theory of commodity money and (2) its strictly negative definition. The problem of the persistence of gold money logic is twofold. First, it hinders an analysis of the conditions of existence, and consequences, of non-commodity money. Second, it also impedes an understanding of commodity money itself because it takes an idealized case based on Volume 1 assumptions, absent contradictions and tensions.

This is not to say that Marx's work on commodity is money is without value. Chapter 3 will have shown how his writings on "real" gold money itself undermine the idealized case. When discussing the way production conditions in the gold industry lead to monetary effects (changes in prices and the quantity of money), Marx suggests an ongoing process encompassing the production of gold, its moment of entrance into the economy, and uneven price movements that betrays the notion that the labor embodied in precious metals strictly determines (real) prices in any natural or

unmediated way. The specifics of Marx's argument will unpacked in the dissertation, but for now he can speak in his own words:

> We have already seen that the sphere of circulation has a gap in it, through which gold (or silver, or the money material in general) enters as a commodity with a given value. Hence, when money begins to functions as a measure of value, when it is used to determined prices, its value is presupposed. If that value falls, the fall first shows itself in a change in the prices of those commodities which are directly exchanged with the precious metals at their source. The greater part of all other commodities...will continue for a long time to be estimated in terms of the former value...which has now become antiquated and illusory. Nevertheless, one commodity infects another through their common value-relation, so that their prices, expressed in gold or silver, gradually settle down into the proportions determined by their comparative values. This process of equalization is accompanied by a continued increase in the quantity of the precious metals. (1976, p.214)

This "process of equalization" is presumed for various reasons. In the context of Volume 1 assumptions of equal exchange this is not very surprising. However, once we relax these assumptions and consider the ways in which this process may fail due to contradictions and complexities, we are left with a very different theory. Instead of money, its constituting forces, and effects being reduced to one essence that is ultimately manifested, its multiple forms and functions overdetermine one another.

It is this overdeterminist account of commodity money (one that undermines the idealized case) that can help us in constructing a theory of non-commodity money in the Chapter 6. In Chapter 3 I will argue that Marx views "commodity money" as important for the theoretical and political reason that it forces us to think about the production of commodities in class processes. Marx would criticize theorists who

emphasized the imaginary/symbolic aspects of money because they neglected class. In my reading what is unique to Marx on money is precisely class. Commodity money, as a product of a class process, provides a direct link. However, non-commodity forms are not somehow immune or beyond approach from a class analytic framework.

Like commodity money, fiat and credit money must be created and inserted into the economy. Similarly, it will have uneven and complex effects on prices, values, levels of output, and the quantity of money in circulation. These various moments overdetermine each other across a variety of class, subsumed class, and non-class sites. In the case of gold, one of these sites is the fundamental class process in which the money commodity is produced. Absent this one particular site, in the case of non-commodity money creation occurs in subsumed or non-class processes, the moments that make up the economic life of money nonetheless include class processes that overdetermine its value.

CHAPTER 2

THE REALIST DUALISM IN MONETARY ECONOMICS

> "But again at other times money seems to be a nonsense and altogether a thing of law and by nature nothing." - Aristotle, Politics I: 1257b5

> "Ultimately, philosophy has no history, philosophy is that strange theoretical site where nothing really happens, nothing but this repetition of nothing."
> - Althusser (1977, p.55)

2.1 Introduction: The Philosophy of Monetary Economics

I once shocked an economist by claiming an interest in the philosophy of money. "People still do that?" This chapter is motivated by the idea that *everyone still does that*. In other words, philosophical concerns and assumptions, explicit or not, condition monetary thought. Whether we speak about money on the level of conversation, policy, or formal theory we rely upon a plethora of concepts such as nominal, real, natural, symbolic, and representation that all appeal to some discipline outside of economics. I refer to the study of the relationship between these more philosophical concepts and what is taken as analytic monetary theory as the philosophy of monetary economics.[1] In his *Philosophy of Money*, Simmel qualified his work as be-

[1]The term philosophical is used in a very general sense here. I intend to include the ontological, epistemological, linguistic, semiotic, aesthetic, political, and various other fields through which the character of money is thought within this notion of philosophy. I use the term as a shorthand for this diversity for both practical ease and because historically, the philosophy of money tends to be broad in scope already.

ing strictly philosophical-sociological, and not a "statement about economics" (1991, p.54). Without necessarily accepting this claim I want to reject the possibility of the obverse. There is no doing economics without doing/using philosophy. Statements from the standpoint of economics, to use Simmel's language, are conditioned by philosophical standpoints as well.

This chapter presents a critical analysis of the opposition between real economy and less real money that has long influenced economic thought. I argue that opposing this dichotomy on the level of formal theory or empirical evidence is insufficient because it misses its philosophical conditions of existence. One of the interesting aspects of the Monetarist-Keynesian confrontation was the debate within the debate over the actual nature of their disagreement. Friedman (1974) attempted to show that the conflict was of an empirical nature by adopting what some would consider a Keynesian framework. Tobin, and others, responded that there were significant theoretical dimensions to the debate. Without discounting the importance of either the empirical or formal-theoretical aspects, we gain further insight through an analysis of the philosophical-methodological contours of monetary controversies.

Consider Tobin's attempt to get a handle on the object of debate:

> Friedman goes on to say that " 'money is all that matters, period' is a basic misrepresentation of our conclusions." When I [Tobin] tried to clarify the debate by distinguishing among the three propositions 'money does not matter,' 'it does too matter,' and 'money is all that matters,' the context was perfectly clear. It was what matters in the determination of money income. In the same paragraph, 'money is all that matters' is translated into 'the stock of money [is] the necessary and sufficient determinant of money income' (Tobin 1965). There has been no basic misrepresentation...They have been represented as claiming exactly what

> he now agrees 'gives the right flavor of our conclusions.' (Tobin, 1974, 79n)

Without untangling these different positions on the matter of money, this passage suggests that debates over money are complicated by competing notions of what it means for something to matter. In some sense the Monetarist-Keynesian debate was not over whether money mattered, but what it means for something to matter. A telling sign of this is that the charge of not taking monetary concerns seriously is leveled by both sides of the debate. In the eyes of a Monetarist/Keynesian, a Keynesian/Monetarist is an economist who hasn't taken the reality of money seriously enough. Again, while differences over theoretical and empirical approaches are not unimportant, I find they are insufficient in explaining these debates.

A further example of the role the philosophy of money can play is Patinkin's treatment of the classical dichotomy. In chapter 8 of his classic *Money, Interest, and Prices* he produces an interesting critique of neoclassical monetary theory. It is neither a strictly external critique from an alternative framework, nor is it strictly internal. In a limited sense Patinkin's critique can be read as deconstructive.[2] What he shows is that the implicit logic underlying the classical dichotomy involves a violation of this dichotomy.

In Patinkin's view, the neutrality of money results from showing that demand for goods will not change given a change in the price level. The practice of assuming individual behavior does not take the price level into account is invalid, because it assumes away precisely the mechanism through which a change in the price level could fail to influence relative prices. If we accept this evaluation, the obvious question is

[2]I use deconstructive in a *relatively precise* sense. Deconstruction involves an unraveling of the binary oppositions found within a text. When Derrida deconstructs Rousseau's privileging of speech over writing, he does so through Rousseau's own text. Instead of offering an external criticism from an alternative framework, he shows how the textual privileging of speech undermines itself.

how and why this "invalid dichotomy" (Patinkin, 1956, Ch.8) persisted. Patinkin's answer is what he refers to as passwords:

> [I]t also shows the reassuring passwords which discouraged critical examination and thus made the dichotomy's continued acceptance possible. The password of being a friend of the quantity theory, the password of connecting value theory with relative prices and monetary theory with absolute prices. The password of demand depending only on the ratios of prices...All of these are valid passwords - within a certain context. But this very multiplicity of respectable passwords dissuaded economists from looking more closely and seeing that in every single case the context was false. That in every single case there was a seemingly slight - but actually vital - difference. (ibid., p.113)

What exactly are these passwords? They are neither theoretical positions nor necessary conclusions of economic theory. Indeed, for Patinkin's they persist despite theory. Within the very domain of economics - the true context - they are invalid. But if they persist despite economics, what do they persist through? My argument is that these passwords are, at least in part, products of a social ontology. In particular a dualist ontology that understands the economy as fundamentally split between its real and less real sectors. The "context" in which they are valid is the set of presuppositions conditioned by this ontology. The simple quantity theory, the strict distinction between relative and nominal prices, and other passwords, make sense in the context of a dichotomous view of the economy itself.

Due to the reoccurring importance of some conception of the real, I refer to this ontological tendency as the realist dualism. It is not a position on the classical dichotomy or neutrality of money, but rather the broader epistemic conditions of these problems themselves. In other words it does not operate on the level of specifying the relationship between the real and monetary (of which there are multiple approaches),

but rather in the distinguishing between a real and a monetary as ontologically distinct in the first place.

First, I discuss precisely what I mean by the realist dualism, explaining its typical features and influences on economic thought. Language metaphors are a frequent means through which this dualism is thought. However, to say that money is "like language" is a to say very little without specifying a particular notion of language. For this reason, I outline some simple linguistic models corresponding to competing economic approaches to money and reality.

I then present two examples of the realist dualism from very different times and theoretical places. First, I discuss Aristotle's positions on money and economy. Aristotle is a useful case because his economic work is relatively well-known and its philosophical character is quite explicit. Next I turn to the more modern example of the realist dualism in macroeconomics. Macroeconomic theory provides the the opportunity to show how extra-economic meaning still operates within modern economic discourse. In particular, I'll argue that the centrality of price rigidities to 20th Century macroeconomics is in part a product of the particular dualist social ontology it presupposes.

2.2 The Realist Dualism as Problematic?

As stated above, what I call the realist dualism is more general than the classical dichotomy result. While the latter is a solution to the problems posed by a distinction between the real and the monetary, the former is this presupposition of the distinction itself. It is, in other words, the acceptance of a problem. For this reason, it has different manifestations corresponding to alternative solutions. At the same time, because it begins from a particular problem, the real-monetary relationship, it (1) has certain tendencies and (2) may proscribe the posing of alternative problems and

approaches.[3] As I describe it, the realist dualism appears to be an example of what Althusser called a problematic (problématique), Kuhn's notion of a paradigm (1970), or the Foucauldian episteme (1972; 1980). There is, however, an important theoretical distinction whose elucidation will serve to clarify the meaning and significance of the realist dualism.

Althusser describes a problematic in his discussion of the conditions of "science":

> This introduces us to a fact peculiar to the very existence of science: it can only pose problems on the terrain and with in the horizon of a definite theoretical structure, its problematic, which constitutes its absolute and definite condition of possibility, and hence the absolute determination of the forms of the *forms in which all problems must be posed*, at any given moment in the science.
> (1997, p.25)

As a "condition of possibility," a problematic is both productive and restrictive, and we err in seeing simply one or the other. In Althusser's language it makes some objects visible and others invisible. The conditions upon which we can pose one set of questions and answers are the same conditions under which alternative research directions are excluded. Modigliani's distinction between monetarists and nonmonetarists, made in his AEA presidential address, is illustrative here - "Nonmonetarists accept what I regard to be the fundamental practical message of *The General The-*

[3]Examples abound within economics. Within many paradigms, the problem of growth is posed as essential. Different theoretical and empirical approaches to this one problem exist, but each accepts the problem as such. Even attempts to produce alternative measures of economic activity accept certain aspects of this problem when they critique traditional measurement methods. Allocating resources to superior measures of growth, at once challenges the traditional method while accepting the objective of growth, and the ideal of accurate quantitative assessment. This is not necessarily a problem. What is problematic is that the particular object is reified into the natural object of economic analysis. For suggestions on improving measures of growth, by including unpaid labor for example, see Ironmonger (1996), Folbre (2001, Ch.3), and Luxton (1997). For an alternative that poses a different object of analysis and distinct methodology see of Cameron and Gibson-Graham (2003).

ory: that a private enterprise economy using an intangible money needs to stabilized, can be stabilized, and therefore should be stabilized by appropriate monetary and fiscal policies" (1977, p.1). This framing of the debate is productive in the sense that it provides a framework in which to conduct research. Is the economy essentially nonmonetarist or monetarist? At the same time, this very language renders invisible and unintelligible *other non-monetarists*. For example, compared to Modigliani's non-monetarist, Marxian political economists typically have significantly less faith in the capacity of monetary and fiscal policy. In this framing, Marxian economists are not non-monetarists. However, if Marxism and Monetarism are to have any meaning, they can not mean the same thing. In Modigliani's distinction between monetarism and non-monetarism, a whole variety of other approaches become non-existent.

What I call the realist dualism, operates in a similar fashion. It does not strictly dictate what is said, but provides the general framework in which intelligible statements can be made by posing a particular problem. This problem, the relationship between the economic real and the less real, is interesting and productive but is based upon a particular (dualist) social ontology that proscribes alternative approaches informed by, for example, non-essentialist social ontologies.

In this sense the realist dualism is like Althusser's problematic, or the similar concepts of paradigm and episteme. In each case a framework conditions which statements can be made and understood. However, while the realist dualism seeks to explain a degree of continuity/regularity (a repetition of similar theoretical elements), these three notions each describe the history of thought as discontinuous, or incommensurable.[4] The incommensurability thesis states that concepts from one paradigm are qualitatively distinct from concepts from another, even if they are superficially

[4]Kuhn (1970) and Feyeraband (1962) both adopt the mathematical concept of incommensurability around the same time. According to Kuhn (2000, Ch.2) each did so independently. Note that the original publication date of Kuhn's *Structure* was 1961.

similar. For Kuhn, incommensurability follows from a holist understanding of theory. If each individual concept is constituted by its relationships within the totality of the paradigm, differences at the level of paradigm imply fundamental differences at the level of concepts. Because concepts are constituted in this structural manner, they can not be reconstituted through the language (terms, logic, methods) of an alternative theoretical structure.[5]Althusser's problematic and Foucault's episteme also share a generally holistic approach to knowledge production, and hold principles analogous to incommensurability.[6]

From the perspective of a problematic/paradigm/episteme, the history of theorizing money through its opposition to something more *real*, is not a continuation of thinking the same thing, but rather a series of differences under the guise of nominal similarity. The notion of the real (economy), and how money is understood as its other, is heterogeneous across paradigms. So, for example, there is a radical difference in the term "real" as it is invoked in Davidson's classic *Money and the Real World* (1972) and Long and Plosser's "Real Business Cycles" (1983). How then do I square my interest in the continuity of the realist dualism with this principle of discontinuity?

My argument is that with respect to monetary thought, the realist dualism and the concept of problematic, operate at different levels. If there is indeed repetition in the appeal to the real and less real, this regularity is always mediated by problematics (paradigms or epistemes) that vary. In fact, it is precisely this diversity that makes the

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[5]Incommensurability could be stated as the"impossibility of defining the terms of one theory on the basis of the terms of the other"(Kuhn, 2000, p.34, n.2). This impossibility may have epistemologically radical interpretations, but need not be taken as such. Kuhn suggests a "modest version" in which the incommensurability of two theories implies the lack of a "lanugage, neutral or otherwise, into which both theories, conceived as sets of sentences, can be translated without residue or loss" (ibid., p.36).

[6]If you are reading closely, yes, the concepts associated with Kuhn's paradigm, Althusser's problematic, and Foucault's episteme are ultimately incommensurable with each other. The differences, however important, are not of concern to us here.

persistence of the realist dualism interesting. If monetary thought reproduces statements in which money is understood in opposition to reality, diverse frameworks with diverse understandings of reality will produce different monetary theories. If reality were matter-of-fact, and universally agreed upon, it would be much less noteworthy that money has been theorized through reference to it.

This diversity of realities is not in any way dependent on epistemological relativism. Whether an objective extra-discursive reality exists (and if so, its characteristics and our capacity to know it) is an important question. However, our answer to this question, whatever it is, does not undermine the existence of multiple notions of reality. In other words, even if there were an objectively true notion of reality, there would still be a set of false positions whose falsity does not impede them from conditioning the economic theories in which they are invoked.

Second, we can not say that something is real or less real without, explicitly or implicitly, including a what (Austin, 1962). A note from the game *Monopoly* is not a real federal reserve, while it is certainly real game money. A note from a game I imagined in my mind but will never produce is neither a real federal reserve note nor real game money. If money, or the monetary sector, is not real, what type of thing is it not really. The point here is not that we are unable to articulate the "what," but that this "what" can be diverse with diverse discursive effects.

Consider the following stylized account of the "real economy" since mercantilism. According to the standard narrative, modern political economy recognizes the existence of a sort of monetary illusion in the mercantilist system in that it takes money itself as *real* wealth. Political economic thought can then be seen as proposing a series of "real economies" that provide a more appropriate theoretical object. To theorize money as not real, some thing that is real must be presented. The Physiocratic system famously grounds economics in the reality of land. Classical political economy characterizes the real economy as the sphere of production/labor. Finally,

neoclassical economics opposes the objective reality of the classics with the subjective reality of utility. In each case, the illusory linkage between money and real wealth is replaced by a particular distinction between real wealth/economy and money.[7]

While the notion of the real is radically diverse across time and paradigm, a regularity exists in which these notions overdetermine monetary thought. This regularity, the realist dualism, has the following basic characteristics.

Conceptual Dichotomy. This is the social ontology itself. The economy has a real and a less real sector/moment. The defining character of the former and latter, are again heterogenous. This distinction, with the privileging of the real, allows the relationship between the two spheres to function as an intelligible object of economics.[8]

Real Money. Money, which is deemed less real, is itself seen as having real and less real forms and associated functions. Which form/function is primary differs, alongside different concepts of the real economy. The ontology of real and less real on the level of money is related to the broader dualist social ontology, but this relationship is not without contradictions. For example, the persistence of commodity money, as the real monetary form, in Marxian theory is in part attributable to the productivist social ontological found in the tradition.[9]

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[7]This "illusory linkage" between money and real wealth may be understood as simple equivalence - money is wealth - but also in the form of a strong causal link from the former to the latter.

[8]While this dualism is conceptual it is often taken as a matter of fact. In other words, this conceptual distinction is understood as something that empirically-ontologically exists outside of theory. Patinkin, who may not be entirely innocent in regard to the realist dualism, warned about this conflation:

> It should also be clear that the foregoing dichotomy is purely a conceptual one. The real and monetary frameworks of the actual market place are obviously 'specified' simultaneously. Similarly, there are only money prices in this market, and these are simultaneously determined. In brief, our dichotomy has no operational significance other than that of the basic quantity-theory proposition from which it is derived. (1956, p.108)

My argument is that this conflation is probable because the divide is not just a simple modeling tool, but rather the product of deeply-embedded ontological presuppositions.

[9]This example is dealt with in more detail in Chapters 4 and 5.

Harmony/Dissonance and Fidelity to the Real. The articulation of the real and the monetary, and the role of money's own distinct forms, can operate in a harmonious or dissonant fashion. The harmonious, and socially optimal, outcome is understood as being true to the real economy. In other words, a harmonious outcome coincides with one in which the real, as the essence of the economy, is justly given priority. Dissonance occurs when the monetary somehow impedes on the rightful place of the real.[10]

Policy/Politics. Given the existence of harmonious and dissonant real-monetary outcomes, some form of monetary policy (broadly understood) exists that achieves the former and avoids the latter. In each case, the particular type of policy (discretionary, rule-based, etc.) recommended as optimal within a theoretical tradition is overdetermined by the notion of reality they invoke.

2.3 The Language Metaphor: Competing Models of Money and Reality

"A pound sterling is not a thing at all. It is a name handed down in history."
- Pigou (1949, p.3)

Although my interest in the realist dualism is in the first instance motivated by its ubiquity, it is the diversity of its possible manifestations and effects that necessitates a careful analysis of its features. This section presents a series of linguistic-semiotic

[10]Consider Keynesian and what we could call Neoliberal opinions on the merits of financial regulation. While each group would differ greatly over whether the pre-1970 or post-1970 institutional-regulatory environment is preferable, the contours of their arguments are similar. In each case, the good monetary-financial system is one that serves the real economy. For many Keynesians the post-WWII system of regulations provided constraints on the financial sector that forced it to serve the real sector. Deregulation allowed finance to serve itself, at the cost of the real economy. For Neoliberals, it is the inflexibility of regulation that prevents the financial sector from efficiently providing services (risk-sharing, information, capital allocation, etc.) to the real/general economy. It is not that there is no important difference between the two positions, but the significance of what they do share - the privileging of an idealized real economy that can/should be served by a financial sector as a goal of economic theory/policy - is overshadowed by the more obvious matters of contention.

models exemplifying this diversity. The history of monetary thought is littered with linguistic-semiotic metaphors in which the relationship between real economy and its monetary other is viewed as analogous to the relationship between an objective reality and the reference to this reality through words and signs.[11]

Linguistic-semiotic metaphors are not in themselves a problem. Because I accept metaphor as asymptotically unavoidable, I am not a critic of this practice itself. At the same time, accepting these models uncritically is problematic because it assumes a singular and universally understood conception of the word or sign. Dyer (1986) and Wennerlind (2001) both discuss linguistic-semiotic models and metaphors within monetary thought but fail to identify the radically different forms this may take. There is no semiotic model in general. Consider Pigou's comment apropos of the pound. The statement that the pound is a name is ambiguous because there are multiple theories of the names.[12] Pigou implicitly acknowledges this by also stating that the pound is "not a thing," invoking a dualism of things and names that marginally clarifies his argument.

Since the recourse to the word/sign is historically ubiquitous, different linguistic-semiotic approaches can be used to represent different interpretations of the relationship between the real and the monetary.[13] Because this dualism between economy-

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[11]It is important to note that this relationship operates in both directions. If money is thought through language and reality, language and reality are themselves thought through monetary metaphors. As Maurer notes, "The difficulty in...the anthropology of money is compounded by the reliance of much anthropological research on theories of meaning and symbols that derived analytical precision through monetary metaphors" (2006, p.16).

[12]See Soames (2005) for one example.

[13]The interplay between the philosophical-linguistic - broadly understood - and the monetary is the object of a sizable literature. Certainly, no text on money hoping to reach a broad audience of the educated and curious is produced without some appeal to the philosophical. Among work that can be characterized as having a serious commitment to the problem Shell (1982) stands out. See also Shell (1995; 1978). Goux is noteworthy for work focusing on the shift in literary models corresponding to shifts in monetary regimes (1984; 1988), and attempts to incorporate these insights into a political economy type framework (1990). Karatani perhaps goes furthest in explicitly bringing the philosophy of money to political economy, introducing what may be called a linguistic interpretation of Marx's writing on money (or monetary exchange) (1995), that is further developed in relation to Kantian

money is repeated in the concept of money itself (real money - symbolic/imaginary money), I take two passes, using simple linguistics for the former and semiotics for the latter. First I use a stylized account of the divide between semantic and pragmatic approaches to language to characterize different theories of the relationship between the real economy and less real money. Second, I use the famous semiotic triad to discuss alternative notions of *real* money.

2.3.1 Semantics and Pragmatics

Semantics, in its simple traditional sense, is the field of linguistics that studies a word's literal meaning. From a semantic perspective, the significance of a word is what it signifies or refers to. Despite the negative connotations tied to the notion of "playing semantics" the semantic view on language is roughly similar to common sense ideas of speech. In the semantic model of the realist dualism emphasis is placed on money's capacity (or incapacity) to accurately reflect/represent the real economy. A money-price is to a commodity as a word is to its referent. As good speech, semantically speaking, is speech that accurately represents the ideas meant to be communicated, a good monetary regime is one in which money accurately reflects some fundamental aspect of the real economy.

Pragmatics, in the sense I am using here, focuses on how context dependent speech acts arrive, or fail to arrive, at goals. Pragmatics seeks to explain how speech acts with ambiguous or exceptionally little literal significance can *work* in achieving an outcome. This approach is at odds with the common sense notion of language as strictly literal and referential but it is also a typical part of our social lives. For example, most of us use utterances with very ambiguous literal value that none the less succeed. At a dinner table with close friends someone can bark "salt" if they

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philosophy (2003). For a critique of Goux and Karatani's developments of a Marxian approach to money see Chapter 3.

want to have the salt passed to them. This will often work - someone will pass the salt - even though on literal grounds alone it could have meant infinitely many things involving salt.

- Pass the salt.
- Don't pass the salt.
- Throw the salt out of the window.
- My uncle loves salt.

Some of these are ridiculous and absurd interpretations of what a friend could possibly have intended. This is precisely the point. The literal meaning of the utterance alone can not account for the speaker's (lack of) success. The success/failure of an utterance is context dependent, and is not strictly about literal accuracy. In the pragmatic model of the realist dualism, the principle feature of money is its capacity to achieve desired objectives. In particular, a good monetary system is one that assists the economy in realizing the goals of the real economy.

A similar, but not identical, way to think about this distinction is through the difference between constative and performative speech (1975). The principle way to distinguish between the two is how statements can be judged. Any statement that can either be true or false falls into the category of the former. These are claims that attempt to mirror/reflect/represent a preexisting state and can therefore do so accurately or inaccurately. Performative statements can not be judged as simply true or false. In the typical example of the pronouncement of marriage, the utterance that a couple is "husband and wife" is without a preexisting state it can accurately reflect. It produces the outcome it describes.[14] The distinction constantive/performative

[14]Despite certain interpretations, the notion of performativity is not a suggestion that merely stating something will bring it into existence. This has very little to do with performativity. The

roughly maps onto the semantic/pragmatic binary, with the qualification that performativity entails a relatively strong pragmatic position.

Aristotle's work is an example of the pragmatic model. It is not that there is no concern with the representational or referential role of money but that the central problem is whether money helps us achieve our desired real economy ends. The difference between C-M-C' and M-C-M' does concern not the accuracy with which monetary prices reflect some essence of commodities. The significance of this subtle movement is that money changes its role due to a contextual shift in which the same elements end up doing different things. We will return to Aristotle in more detail in section IV.

In the history of social thought the clearest member of the semantic tradition might be Rousseau. As Marc Shell (1978) documents, Rousseau's views on money are directly informed by his theory of representation. This theory leads Rousseau to analogous critiques of representation in pedagogy, politics and economy. The similarities between these critiques stem from an underlying distrust in representation:

> In general, never substitute the sign for the thing except when it is impossible for you to show the latter, for the sign absorbs the child's attention and makes him forget the thing represented. (Rousseau, 1979, p.170)

This same dualism between the privileged *thing* and the threat of the mere sign/representative is at work in again in the famous attack on the English in Chapter XV of *On The Social Contract*:

> Sovereignty cannot be represented for the same reason that it cannot be alienated. It consists essentially in the general will, and the will does not

point is not that such statements are always successful in producing effects. Not everyone can utter - "let there be light," and produce light (Butler, 1993, Preface), but the key difference between the God of Genesis and the average person attempting such a feat is not on the level truth/falsehood but rather effects.

> allow of being represented. It is either itself or something else; there is nothing in between...The English people believes itself to be free. It is greatly mistaken; it is free only during the election of the members of Parliament. Once they are elected, the populace is enslaved; it is nothing. (Rousseau, 1987, 198)

Rousseau was apparently well aware of the relationships between his understanding of social ontology, representation and the issues of pedagody, linguistics, politics and economy. He explicitly uses the artificial character of representation in one field to attack the integrity of representation in another. Writing on Poland, he critiques the fixation of money by comparing it to a sign, where a sign is assumed to be less than real/riches - "L'argent n'est pas la richesse, il n'en est que le signe" (quoted in Shell 1978, p.121). Here he uses the artificial character of the sign, to argue money is also not real (wealth).Chapter XV of *On The Social Contract* begins with the topic of money through a reference to the danger of citizens who "prefer to serve with their wallet rather than their person" (p.197) and Rousseau quickly associates money with slavery - "Give money and soon you will be in chains. The word *finance* is a slave's word"(pp.197-198). In these cases, the implicit artificiality of money is deployed to oppose fictitious forms of citizenship.

Both of our examples here are skeptics in the sense that they distrust money, worrying about its influence of economy and society. For Aristotle, the elevation of money to an end itself produces negative consequences. With Rousseau, money's representative character is dangerous because representation itself is taken to be suspect. Given the history of anxiety over the threat of money, this is not surprising. However, this anxiety over dissonance between the real and money, is coexstensive with an implied image of a harmonious relation. And while, they differ in specifics, both Aristotle and Rousseau find harmony when money stays in its place, as determined by the real economy.

It is also not surprising that in the modern era we can find approaches to economy-money that place more trust in monetary exchange. Classical dichotomy type models are a more modern version of a semantic, and in this case skeptism-free approach. It is semantic in the sense that money prices are merely descriptive of goods and services whose existence, production, or distribution is presupposed. Money-prices do not have effects, they do not call behaviors into action. Money-prices are strictly constative. In this sense they can be true or false - in terms of representing fundamentals - and are typically the former. Because real relative-prices are both optimal and logically prior to the determination of the money price level there is no Rousseauian danger that using representative names (nominal prices) will subvert the real world of commodities.

The theory of monetary circuit (see Graziani (2003)) is a useful modern example of a more pragmatist approach to money and economy. In a circuitist framework the role of money is related to its effects. The accuracy in which money allows prices to reflect a fundamental is of little theoretical concern. Money is theorized through conditions of capitalist reproduction. The monetary economy doesn't so much reflect/represent, as allow certain activities to occur.[15]

As a final note on pragmatics-semantics, we should take these models as ideal types. While the differences between them are heuristically useful, they are not necessarily mutually exclusive in all cases. The importance of the semantic fidelity of money/finance/prices to the real economy is often driven by the effects it has on behavior. In other words, the descriptive capacity of a set of prices is socially efficient because it helps produce/guide socially efficient behavior. For example, the efficient market hypothesis has a semantic dimension. For each asset price exists a real fundamental. Market efficiency is understood as a (best possible given available

[15]It is not a coincidence that this pragmatic, and potentially even performative, notion of money exists in a theory based on the concept of reproduction, as opposed to equilibrium.

information) correspondence between prices and fundamentals. However, the social desirability of efficient financial markets is motivated by the economic activities it allows.

> The primary role of the capital market is allocation of ownership of the economy's capital stock. In general terms, the ideal is a market in which prices provide accurate signals for resource allocation: that is, a market in which firms can make production-investment decision, and investors can choose among the securities that represent ownership of firms' activities under the assumption that security prices at any time 'fully reflect' all available information. A market in which prices always 'fully reflect' available information is called 'efficient.' (Fama, 1970, p.383)

The efficient market hypothesis is therefore not a purely semantic view of money-economy, despite the strong semantic features. However, even when the effects of prices/finance on behaviors are considered, it is nonetheless the descriptive optimality of prices that is essential. It is in the last instance a strictly constative (as opposed to truly performative) view of financial markets.

2.3.2 Semiotics of the Coin

If a simple dualism between the represented and representation characterizes the logic of the difference between real economy and money, the difference between real and less real forms of money itself has often been thought of in threes. In particular, money has been considered to exist in real, symbolic, and imaginary forms. While this is a triad, it does fit within the scheme of the realist dualism. First, although money comes in threes, each of the three are typically distributed into the category of real or less real. Second, one of three may play the role of intermediary between real and less real money. Finally, there is mutual conditioning between the dualism ontology of general economy and this ontology of money itself.

The monetary triad bears a strong resemblance to the standard semiotic triad. One of the most well-known statements of the sign is offered by Pierce (1932) who distinguishes between three elements - representamen, interpretant, and object. The *representamen* is that which represents or stands for something else. The *interpretant* is the mental-imaginary representation produced by the representamen. Finally, the *object* is the thing the referred to. While the representamen is what we most commonly understand as the sign itself, Pierce sees the sign as a unity of the three. Signification always involves each element.

A similar logic is applied to money. As we discussed in the previous section, money has been thought of as a language with a commodity as its object. The distinction between the real and a symbol, does not stop there, but is also applied to money. Money itself has real, symbolic, and imaginary manifestations and forms. The common trope in beginning a text on money invokes a history of dematerialization in which hegemonic forms of money evolve from their most real, material forms to merely imaginary and symbolic forms.[16] Despite the diversity of possible monetary forms, economic thought often takes one of these dimensions as the *real* essence of money. The essence may be what we have called the real commodity form, but it need not be. Multiple essentialisms, which take either the physical, imaginary, or symbolic aspect (and its respective form/function), as the singular essence of money are possible. For example, Simmel (1991, pp.198-200) takes what others see as the dematerialization of money (he calls it a "spiritualization") as a movement towards

[16]The introduction to Marc Shell's *Money, Language, and Thought* (1982) is entitled "From Electrum to Electricity," referring to the material content of original coins and the current medium of our supposedly dematerialized electronic money. Ferguson begins his recent contribution to popular histories of money, by opposing the brute presence of physical silver money with the meekness of paper-representative money and the absence that marks imaginary digital money:

> But what exactly is money? Is it a mountain of silver, as the Spanish conquistadors thought? Or will mere clay tablets and printed paper suffice? How did we come to live in a world where most money is invisible, little more than numbers on a computer screen? Where did money come from? And where did it all go? (2008, p.1)

the true essence of money. The "real" form of is thus money as pure function liberated from the real (qua physical-material) form.

Marx's discussion of money in Part 1 of *Capital* is an interesting counter to Simmel because it *can* be characterized by both an emphasis on different imaginary and symbolic types of money (corresponding to different functions) and an insistence on the ultimate priority of the real commodity form.[17] In this we get a sense of both the three registers of monetary ontology, and how they fit within the realist dualism as it exists in the Marxian tradition.

> In its function as measure of value, money therefore serves only in an imaginary or ideal capacity. This circumstance has given rise to the wildest theories. But, although the money that performs the functions of a measure of value is only imaginary, the price depends entirely on the actual substance that is money. (Marx, 1976, p.189)

In the same chapter we see how real commodity money provides the ground upon which valueless (and less real) symbolic money can function as money. Note that paper money is not really money, but a "symbol of money." Furthermore, the third term, the imaginary, plays the role of intermediary between symbol and symbolized.

> Paper money is a symbol of gold, a symbol of money. Its relation to the values of commodities consists only in this: they find imaginary expression in certain quantities of gold, and the same quantities are symbolically and physically represented by the paper. Only in so far as paper money represents gold, which like all other commodities has value, is it a symbol of value. (ibid., p.225)

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[17]Emphasis is placed on the "*can* be characterized" because other readings will be produced in this dissertation.

The condition of existence of paper money, in Marx's analysis, involves all three monetary forms (symbolic, imaginary, and real) and multiple functions. Paper money can act means of exchange because (1) it represents real gold and (2) commodity values are expressed according to a standard of price stated in imaginary units of gold. Nonetheless, at least in the orthodox interpretation, we should not mistake the imaginary or symbolic as being on the same level of determination as real commodity money. In the last instance, the imaginary and the symbolic are determined by the real. Deviation from this logic has been viewed with great suspicion, in part due to the realist dualism in orthodox Marxism. While Marxists have increasingly sought to theorize non-commodity forms of money, the abandonment of commodity money is experienced as a threat to the link between the real economy, characterized by forces and relations of production, and the less real sphere of distribution and exchange. The idea that the movement away from commodity money to fiat or credit regimes may undermine the labor theory of value is illustrative of this link between the ontology of the real economy, and the ontology of real money.

It would follow that alternative traditions, with their own notions of the real economy, would have different ontological concerns over money. Pigou nicely expresses the particular reality of the neoclassical economy- "In the deepest sense economic reality comprises states of mind - the satisfactions and dissatisfactions of human beings - and nothing else" (1949, p.19). A contributor to the founding of neoclassical economics and a commentator on monetary theory Jevons, exemplifies how this distinct ontological contributes to distinct monetary problems. Like Marx, Jevons distinguishes between money that is truly money, and money that stands in for, or represents, true money:

> We may pass, in fact, by gradual steps from the perfect standard coins, whose nominal value is coincident with their metallic value, to worth-

> less bits of paper, which are yet allowed to stand for thousands, or even millions of pounds sterling. (1896, p.194)

Jevons also deploys semiotic language in making sense of money. Although he follows the tradition of defining a coin itself as a unity of the real/ignot and symbolic/stamp (1896, p.57) - he also makes distinctions between three types of coins, according to the determination of their value:

> We must further distinguish coins according as their values depend upon the metal they contain, the metal for which they can be exchanged, or the other coins for which they are the legal equivalent. (ibid., p.67)

Again, despite the triad, these types of coin are theorized through a dualism. Jevons refers to the first form as "standard" and the latter two as "token" (ibid., 74). These three bear some resemblance to Marx's monetary forms. However, despite characterizing token types of money as less real, they do not pose the pose the problems for neoclassical economics that they do for Marxian. Neoclassical discussions of token money are not full of reminders that ultimately it is real commodity money that determines its value. This is not to say that less real forms of money do not pose different problems for neoclassical economics. Jevons concludes his discourse on money with a policy position that exhibits one of these problems - one that has persisted to this day despite his hope for the progress of economic science:

> In my opinion, it is the issue of paper representative notes, accepted in place of coin, which constitutes an arbitrary interference with the natural laws governing the variations of a purely metallic currency, so that strict legislative control in one way leads to more real freedom in another. I am quite willing to allow, however, that questions of great nicety and subtlety arise in this subject, and that only in the gradual progress of economic science can they be finally set at rest (ibid., 342).

The language here is quite rich. Paper money is representative, in place of (not a presence but a marker of an absence), arbitrary, and issued as an interference. This spectral ontology is opposed to both a real money that is *present* (not representative), metallic, and in line with natural law, and the real economy that is the source of these laws. However, despite the rhetorical and logical privilege afforded to this physical commodity type of money, Jevons is not a metallist. Token money can relate harmoniously with the real economy, but requires a policy reversal with respect to standard money. Absent the natural laws that would operate in a regime of real money, artificial laws are needed to govern artificial money.

2.4 Aristotle on Money

Many discussions of Aristotle's economic thought begin with the question of his analytical content. Does Aristotle engage in real analytical economics or are his writings mere philosophy/ethics? Are his categories economic or metaphysical? My understanding of the philosophy of monetary economics makes it impossible to answer these questions. Certainly, I am personally interested in the way in which his analysis is conditioned by a series of mutually supporting/dependent economic, ontological and ethical dualisms. However, in my reading of the history of monetary economics, the overdetermination of his monetary analysis by normative and philosophical concerns is just one example of the way supposedly innocent categorical distinctions between real and monetary processes are always connotatively and denotatively overdetermined by extra-economic conceptions of reality. Aristotle is an appealing example of the realist dualism in monetary thought for a few reasons. First, the philosophy is explicit in his work. The extra-economic dimensions I argue are ubiquitous over time in often implicit forms, are explicit here. Second, Aristotle's monetary thought is relatively well-known. Finally, despite the relative familiarity of Aristotle, our understanding

of his specific monetary positions contains some ambiguities and tensions that are illustrative of the realist dualism.

For many economists, the most significant appraisal and representation of Aristotle likely comes from Schumpeter who credited him with great historical influence. According to Schumpeter, Aristotle is responsible for the metallism that "prevailed substantially to the end of the nineteenth century" (1954, p.63). Because metallism is not held in high regard, and is seen by some as an oversimplification of Aristotle's thought, this popular interpretation has been challenged. Gordon (1961, p.609) charged Schumpeter, as well as Monroe (1923), with deriving Aristotle's monetary thought primarily from a single passage, neglecting other moments that represent money as a "creature of the law" (ibid., p.611). Alter attempts to evaluate the strength of Gordon's argument and arrives at the anti-climatic conclusion that given the textual evidence we can "side with" neither Monroe and Schumpeter, nor Gordon, but that it is perhaps a "safer bet" to read Aristotle as a metallist than non-metallist (1982, p.563).

More recently, Wood (2002) identifies two streams of thought in Medieval monetary thought premised on the theory of money as an intrinsically valuable commodity and a mere conventional sign.[18] In her reading, this tension is never resolved. There is no collapse into strict metallism. Monetary thought of the period operates with "a mean between the two, and seems to subscribe to both" (2002, p.73). This challenges both Schumpeter's claim concerning the relative dominance of metallism, and the

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[18]Wood (2002, p.70) describes the two tendencies in language in line with the realist dualism:

> For the scholastics, money had two distinct roles. It was, firstly, an artificial measure of value, authorized by the State, against which all things could be gauged, but which had no other use. Secondly, since it was given physical reality by coinage made of precious metal, it came to be seen as a commodity with a value that could rise and fall, like that of any other commodity. These two ideas were given practical expression in the two types of money prevalent in the Middle ages, actual money in circulation, and 'ghost' money, or money of account.

nature of Aristotle's influence. For Wood, this tension existed because, not despite, Aristotle's own ambiguities and influence.

From the perspective of the realist dualism, this ambiguity is not surprising. As we mean manifold things when we speak of the real economy, money - as in real money or as in opposition to the real economy - takes on different forms. The presumption that the presupposition of the economic real is innocent and uncontroversial prevents understanding of these complexities. In this case Aristotle's monetary thought is confusing because he (1) refers to money as a metal *thing* and (2) thinks of money as less real, or even as a *nothing*. This is only contradictory with respect to a particular notion of real economy. To better make sense of Aristotle, a discussion of the specific manifestation of the realist dualism in his thought is useful.

The importance of dualism(s) in Aristotle's economics is hard to ignore. And while economic orthodoxy presumes to have transcended these normative or metaphysical problems, others have pointed out their continued relevance. Meikle goes so far as to claim that Aristotle's "difficulty about the nature of money is not an elementary one which can be resolved easily with the resources of modern economic thought, because the same duality is present there too" (Meikle, 2000, pp.167-168). However, for Meikle this continued dualism is not social-ontological but a political-normative "contention between the friends or foes of market economy" (168). Kozel (2006) makes a similar point concerning the continued relevance of Aristotle's economics. For Kozel however, Aristotle is relevant not so much for being either friend or foe, but for illustrating a more subtle and less reductionist approach to markets and exchange.

It is here that money enters our discussion. Aristotle's analysis of exchange centers on the telos of a set of exchanges and the subsequent role of money in the process. Money may exist as either a means or an end. In the process of C-M-C' money (M) is a mere means used to gain a necessary/desired commodity (C). In the process of M-C-M' money becomes an end in of itself. While Aristotle finds the first natural

and likely beneficial to society, he finds the second unnatural and potentially harmful. What I want to stress here is that while this position involves a political claim about markets (friend and/or foe), the structural role of money goes beyond being a simple metonymy for exchange. The question of whether we should be 'friends or foes' of the market that Meikle recognizes is overdetermined by various other dualisms in Aristotle's work, including an ontologically dualist understanding of economy and money.[19]

> But again at other times money seems to be a nonsense and altogether a thing of law and by nature nothing, because of its users change the currency, the original one is not worth anything nor useful at all with a view to necessities, and someone who is rich in money will often be lacking in necessary food. Yet it is a strange thing for that to be wealth which one can abound in and still starve to death, like that fellow Midas in the fable when, because of the insatiability of his prayer, everything placed beside him changed to gold. (Politics I: 1257b5)

This passage illustrates a rather dense network of mutually supporting dualisms that overdetermine Aristotle's economics. The first sentence alone references distinctions between sense and nonsense, law and nature, something and nothing, necessity and (an implicit) contingency, riches and biological needs, insatiability and sufficiency. These dualisms constitute the difference between the natural science of household management (or oikonomikê where money is a means) and the unnatural world of business (or chrêmatistikê with money as an end).

These distinctions constitute the realist dualism in Aristotle's economy and can be used to help us make sense of Aristotle and the characteristics of the realist dualism

[19]This is the limitation of work like Frankel's *Two Philosophies of Money* (1977) that reduce the multiple dualisms and conflicts constituting monetary thought to a debate between proponents and opponents of the free market.

Table 2.1. Aristotle's Dual Economies

Oikonomikê	**Chrêmatistikê**
nature	convention
commodities	money
money as means	money as end
necessity	contingency
sufficient	unlimited
quality	quantity
use-value	exchange-value
real	less real

in general. While I'm responsible for the specific language of real and less real, I do not think it is a drastic move to read an ontological dualism privileging the realness of commodities (real wealth) over money. Money is a merely a "thing of law" and from the point of view of nature "nothing." Aristotle's use of the story of Midas suggests that in the extreme money becomes even less real - further removed from the world of biological needs and actual wealth and nourishment - the more one has of it. This means that the gap between money and actual goods and services is not quantitative. More money (Midas) does not bridge but rather accentuates the gap.[20] Furthermore, it should be quite clear that the lack of reality that marks money is completely independent of its physical materiality. The difference between gold currency (a nothing) and food, for example, is not that the latter is any more solid. Rather, they fall into "the different categories of quality and quantity"(Meikle, 2000, p.171).

[20]This point is crudely expressed by the classic Mtv cartoon *Beavis and Butthead*. In the 'Green Thumbs' episode they attempt to bribe a cashier into accepting poorly counterfeited cash with additional obviously-photocopied dollar bills and "coins." This is also an example of the way the real/less-real distinction is inscribed in money itself in the forms of ingot/stamp, backed/unbacked and real/counterfeit.

Aside from this very particular notion of the real/natural economy, ambiguity over Aristotle's true money is also conditioned by the absence of any serious discussion of different monetary forms. This is not to say he does not imply true and untrue money. It is more that the question of real money (the second characteristic of the realist dualism) is directly collapsed into the problem of harmony/disharmony. Money, in whatever form, has an important, natural and beneficial role but it also always threatens the oikonomikê it was meant to serve. When it operates in the latter mode, money had the potential to be especially unnatural - it is not only a convention meant to serve a natural process, but dares going against its own nature (the 'nature' of a convention) by becoming an end itself. Aristotle is likely not a metallist in any strict sense, but at the same time he is only a non-metallist to the extent that his notion of real money focuses primarily on its role with respect to the real economy, and not on the particular form money can/must take.

Aristotle's model, simply expressed in Table 2.1, poses both a harmonious world where convention/money is subservient to the natural/real economy, and the threat to this world. It is also a model in which claims about what should be and *what is* are intimately entangled, making the abstraction of one from the other suspect. Aristotle's 'positive' understanding of money as primarily a medium of exchange is informed by his 'ethical' understanding of a good economy as one in which money serves exchange. But this ethical position itself is conditioned by his ontological assumptions about *what is*. To be clear, this positive "what is" is not a pre-theoretical objective reality, but philosophical-methodological concept produced by privileging one aspect or dimension of economic life as fundamental and natural.

2.5 Dualism and Macroeconomics, or, The Rigidity of Rigidity

It should be quite clear that dichotomous macroeconomic models are consistent with the tendencies of the realist dualism. They posit a logically prior, mathematically predetermined, real sector opposed to a neutral monetary side of the economy. While this is straightforward, less obvious is the ways in which variants of Keynesian economics, often introduced in direct opposition to the so-called classical model, are conditioned by a similar dualist vision. For this reason I'll discuss the existence of ontological dualisms at work within variants of Keynesian influenced macroeconomics. The principle features of Keynesian thought are subject to profound disagreement.[21] For example, the oft-cited Keynesian reliance on price rigidity is in direct opposition to the Post-Keynesian view in which price flexibility would make the economy less, not more, stable.

Why has rigidity been considered so important for Keynesian economics, despite - according to the protests of Post-Keynesians (see Davidson (1974; 1998)) - Keynes himself? Ball and Romer's 1990 paper begins with a very unexceptional statement, that nonetheless suggests a link between the dualist ontologies behind modern macroeconomics, and the persistence of rigidity - "According to Keynesian economics, nominal wages and prices are rigid, and so nominal disturbances have real effects" (p.183). The whole project is motivated by the search for the real effects of nominal disturbances. This is familiar economic knowledge, but it has the familiarity that Hegel warns might impede understanding. Lest we simply take this project for granted, there are two points of interest here.

[21] Not surprisingly, the existence of this heterogeneity is well-known only among those belonging to the "heterodoxy" so that while Post-Keynesians critique New Keynesian interpretations, the latter largely operates as if the former did not exist.

First, note that the nominal is characterized as a disturbance. The denotative and connotative content of this term is apparent. Disturbances are not only bad, but they are secondary. However annoying they may be, they are both temporary and external to the thing being disturbed. The unexceptional character of such claims is evidence of the ubiquitous condensation of normative, methodological, and rhetorical dimensions of the realist dualism.

Second, the problem concerns what we could call the performativity of the monetary sector. While orthodox economics, Keynesian or non-Keynesian, can account for the representational or constative dimension of money, it stumbles in theorizing the performative. This difficutly operates on two levels. First, there must be an explanation of how prices can do something other than reflect fundamentals. Surrounding this problem is the literature on the microfoundations of nominal rigidities. However, in the language we used earlier in characterizing linguistic models of economy, the existence of nominal rigidity remains on the level of the semantic/constative. Despite the fact that prices are in some sense wrong, they are nonetheless judged from the perspective of correspondence with a preexisting real economy (defined according to tastes, endowments, and technology). The second step is moving from the constative, but wrong, to the truly performative, where money has *real effects*.

Orthodox macroeconomics exhibits uneven development on these theoretical fronts. Modeling constative success is trivial, constative failure not terribly difficult. Performativity becomes the stumbling block. The problem is that modern macroeconomics, at least in most of its mainstream variations, is premised on a realist dualism I have described as semantic. As such, any project to theorize the performativity of the monetary-financial is frustrated by its philosophical-methodological conditions of existence.

2.5.1 Modigliani's Classical Models

Textbook presentations of Keynesian macroeconomics almost never begin with Keynes himself.[22] By and large Keynes is introduced in opposition to the classicals. Given this entry point, the way classical economics is understood and the character of Keynes' opposition is quite critical in the evolution and understanding of Keynesian thought. Despite the ambiguity over who these classical economists were, where this classical model came from, and the multiple ways in which this monolithic model might be opposed, the truth of Keynes is formulated as a system of equations that differs from the system of equations economists "believed in" before him.

As Darrity and Young (1995) exhaustively document, in the aftermath of of Keynes' *General Theory* there was no consensus on either the economics of the classicals or Keynes himself.[23] A variety of different mathematical presentations of the character of the two models circulated before one variation found its way into textbooks. However, once IS-LM became a pedagogical fixture, the history of its production, including both the specificity of the interpretation of Keynes and the retroactive formulation of the classical mode, was effaced.[24] An illustration of this effacement is the complete absence of references to the any supposed classicals in these presentations.

Chapter 1 of Sargent's macroeconomic theory textbook (1987) focuses solely on the classical model. Outside of a text on differential equations from the 1940s, the earliest reference in the entire chapter is Cagan's 1956 paper.[25] Morgan (1978, Ch.2)

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[22]To the extent that they do it is simply through reference to his famous quotable moments.

[23]See also Young (1987).

[24]Protests that Hicks *bastardized* Keynes, are also guilty of this effacement. While recognizing the existence of an other Keynes outside of the textbooks, such claims accept the singularity of Hicks' mathematization and the monolythic status of the classical model. For a useful history of macroeconomic heterogeneity during the inter-war years see Laidler (1999).

[25]On the whole, this chapter on the classical model has 18 references, with an average publication date of 1971.

excludes any references in his presentation, and is not exceptional in doing so. Neither of these texts are an attempt at the history of economic thought, and their respective approaches are likely legitimate given the (pedagogical) goals of each. Nonetheless, in service of these goals a certain understanding of the classics, Keynes, and the macroeconomy itself is reproduced.

While Hicks (1937) is often given credit for the IS-LM framework, De Vreoy (2000) reminds us that the IS-LM interpretation (and the nature of the Keynes-classics distinction) the discipline is most familiar with owes much more to Modigliani (1944). While the existence of rigidities are important for both, the shift from Hicks to Modigliani significantly transforms the understanding of the classical model. For Hicks, the key difference between the classical and the Keynesian model is the effectiveness of monetary policy (Vroey, 2000, p.304). The former allows an expansion of the money supply to lower unemployment, while such policy is ineffective in the latter. While the limitations of monetary policy, especially in the case of the liquidity trap, should not strike the reader as foreign to Keynesianism, Hicks' characterization of the classical model is without doubt at odds with the contemporary received view.[26]

Modigliani's models are much more familiar. Whereas unemployment existed in both of Hicks' models, Modigliani presents a dichotomous classical model with a full employment equilibrium and monetary neutrality, and a non-dichotomous Keynesian model in which equilibrium may not coincide with full employment. In the latter

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[26]Hicks is in fact quite lucid when making this point. Here he is discussing the classical model:

> An increase in the supply of money will necessarily raise total income, for people will increase their spending and lending until incomes have risen sufficiently to restore k to its former level. The rise in income will tend to increase employment, both in making consumption goods and in making investment goods. The total effect on employment depends upon the ratio between the expansions of these industries. (ibid., pp.149-150)

The distance between Hicks' classicals and ours is hardly due to any ambiguity in his exposition. Nor was this understanding unique to this 1937 paper. Two decades later in his review (1957, p.283) of Patinkin he makes the same essential point.

model expansionary policy can move the economy towards fully employment. But this should remind us of Hicks non-Keynesian model. As De Vreoy puts it, Modigliani "rebaptized Hickss classical model as the Keynesian model" (2000, p.307). From the perspective of the Hicks framework, Modigliani has two classical models.

Due to its influence, Modigliani's contrast between the classical and Keynesian models should be familiar. The models are exact in 7 equations and the consumption identity. They differ only in the parameters of the labor supply equation (9) that completes the model.[27]

$$(1) \quad M = L(r, Y)$$

$$(2) \quad I = I(r, Y)$$

$$(3) \quad S = S(r, Y)$$

$$(4) \quad S = I$$

$$(5) \quad Y = PX$$

$$(6) \quad X = X(N)$$

$$(7) \quad W = X'(N)P$$

$$(8) \quad C \equiv Y - I$$

$$(9) \quad W = \alpha w_0 + (1-\alpha)F^{-1}(N)P$$

[27]Modigliani also describes a "crude classical" model that is identical to the classical except that equation (1) is replaced by the Cambridge cash balance equation. Darrity and Young present additional equations in describing Modigliani. For example, they include both an exogenous money supply equation ($\mathrm{M}^s = \bar{\mathrm{M}}$) and the money market equilibrium condition ($\mathrm{M}^d = \mathrm{M}^d$). These two equations are certainly implicit in Modigliani's analysis, but it is also noteworthy that he does not make them explicit in his direct presentation of the two models. If their implicit existence is necessary for understanding Modigliani's construction of the IS-LM model, their explicit absence is a clue as to Modigliani's own understanding. For instance, that he takes an exogenous supply of money for granted, and not as part of the model per say, is illustrative of his notion of money.

The notation is standard.[28] For classical model, the value of α is zero. In the Keynesian model it is either zero or one depending on the level of unemployment:

$$\alpha = \begin{cases} 1 & \text{if } N \leq N_0 \\ 0 & \text{if } N > N_0 \end{cases}$$

where N_0 is the level of full employment.[29] The only difference between the two models is the shape of the labor supply curve. In the classical model it is always upward sloping, and in the Keynesian case it is perfectly elastic below full employment and upward-sloping beyond.

In the space of interest rate and money income, the IS curve is downward sloping up until full employment at which point it becomes flat. Beyond that point any expansion is simply inflationary, and the interest rate remains fixed because "the 'real' value of investment that it pays to undertake at any interest rate is unchanged since yields and costs change in the same proportion" (1944, p.59).

Modigliani views the determination of money income as prior to (physical) output. The IS-LM model ("IS-LL" at the time) represents what Modigliani calls the "monetary part of the system" (ibid., p.65), and at least in terms of the logic of his presentation, determines the nominal income before the level of output, as determined by the "real part" of the system, gives us a price level. Since capital is assumed fixed, the sole determinate of output for a given production technology is labor, hence the centrality of labor supply (and wages). In the Keynesian specification, the N* (below full employment) is determined by:

$$w_0 = X'(N)\frac{Y^*}{X}$$

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[28] M is the demand for money, I investment, S savings, Y nominal output/income, P price level, X "physical" output, N employment, and W the wage.

[29] Modigliani actually uses a β in the second term of (9) but defines it as $(1 - \alpha)$.

where Y* is the nominal output determined by the monetary section (IS-LL). Because the wage is fixed, nominal output is not neutral. The neutrality of the monetary part of the economy in both the classical and Keynesian full employment case is straight forward. Equilibrium in the labor market reduces to:

$$F^{-1}(N) = X'(N)$$

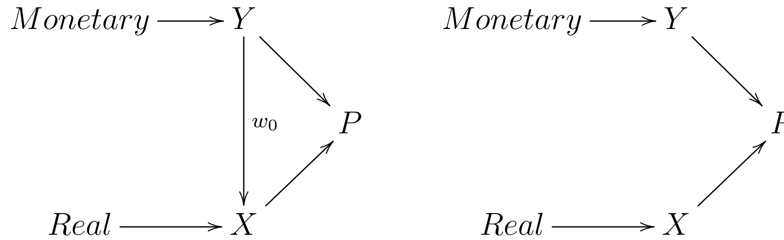
where nominal output has no influence on the level of employment or real output. The link between rigidity and non-neutrality is so familiar to the contemporary economist that we might miss the novelty of Modigliani's arguments. This is not to say he was the only one advancing a rigidity interpretation of Keynes, but that amongst the multiple understanding of macroeconomy during the period this was but one. Modigiliani provides evidence of this diversity by viewing the linkage between rigidity and Keynesianism as insufficiently recognized:

> It is usually considered as one of the most important achievement of the Keynesian theory that it explains the consistency of economic equilibrium with the presence of involuntary unemployment. It is, however, not sufficiently recognized that, except in a limiting case to be considered later, this result is due entirely to the assumption of 'rigid wages' and not to the Keynesian liquidity preference. Systems with rigid wages share the common property that the equilibrium value of the 'real variables' is determined essentially by monetary conditions rather than by 'real factors.' (ibid., p.65)

The basic logic of the classical and Keynesian models in Modigliani's 1944 paper are presented in Figure 2.1. The critical point I want to make is that while only the classical model is strictly dichotomous, they are both dualist. This dualism is apparent in a number of respects. Modigliani's language makes clear that even the

monetary sectors of the model has real effects, the economy is still thought to be constituted by real and monetary "parts" whose interaction is the object of analysis. The mathematical-logical relationship between these two parts continues in this dualist direction.

Figure 2.1. Modigliani's Keynesian and Classical Models as of 1944



As Figure 2.1 depicts, the difference between these two models is that in one case the dualism is strictly dichotomous, and in the other case there is a short circuit between the dual sectors. The conceptual condition of existence for this particular theory of the non-neutrality of the monetary sector is the classical model that presupposes a dichotomous dualism. The Keynesian model is the classical model that fails. The classical model is a Keynesian model that doesn't fail.

2.5.2 New Classicals

The message of the previous section is that the Keynesian break from dichotomy was not a break from ontological dualism, of which the classical model was only an exceptionally pure case of. I'll now turn to the relationship between this shared dualism and more recent macroeconomics. In particular I want to consider how the realist dualism as it exists in the old Keynesian model, has helped shape New Keynesian economics. From our vantage point there is no singular New Keynesian model. At the very least there are two New Keynesian types of models (Greenwald

and Stiglitz, 1993b). The realist dualism can help us understand both the intersection and point of contention between the two.[30]

Because Mankiw has been key to both the development and presentation of New Keynesian economics, his views on Keynesianism itself are of interest. His critique of the real business cycle approach is a nice opportunity to see his own view on the distance between Keynesians and classicals, as well as New Classicals and New Keynesians. He presents the methodological choice of the macroeconomist in simple either/or terms:

> The professor of macroeconomics must in some way deal with the classical dichotomy. Given the assumptions of Walrasian equilibrium, money is largely irrelevant. The macroeconomist must either destroy this classical dichotomy or learn to live with it. Keynesian macroeconomics destroys the classical dichotomy by abandoning the assumption that wages and prices adjust instantly to clear markets. This approach is motivated by the observation that many nominal wages are fixed by long-term labor contracts and many product prices remain unchanged for long periods of time. Once the inflexibility of wages and prices is admitted into a macroeconomic model, the classical dichotomy and the irrelevance of money quickly disappear. (1989, p.80)

In my reading, this either/or is either a false choice in the sense that one can both destroy *and* live with the classical dichotomy, or Mankiw is wrong in his characterization of the Keynesian macroeconomist's decision. Certainly the mainstream Keynesian must live with the dichotomy because his/her own model is the dichotomy

[30]Other factors have without doubt shaped the development of macroeconomics. These factors include political shifts, the economic instabilities of the 70s, methodological trends in formal theory, and empirical techniques. However, none of these are sufficient conditions alone. Simple scatter plots - think Phillips curve - do not in of themselves mandate any particular change in economic research. I simply add the dualist ontology of macroeconomics to this list of factors.

with a failure. If this model was destroyed, and left behind, its Keynesian version would cease to be intelligible. The Keynesian model may undermine, critique, or challenge the classical dichotomy but it does not destroy it. This is not a mere issue of semantics and the consequences are significant. In Mankiw's framing of the macroeconomic choice, the persistence of the classical dichotomy is invisible.

Consider an innocent statement from Neary and Stiglitz - "It is well-known that, if all prices are flexible, all factors (which are not in absolute surplus) will be fully employed in equilibrium " (1983, p.199).[31] How exactly is this known? Unless price flexibility was defined so as to make this a simple truism this position is not trivial without a specific economic model in mind. Nonetheless, this *fact* is well-known because the classical model, as either a benchmark from which the Keynesian model is derived or the result of removing the failures from the latter, is itself well-known. It persists. We live with it.

With respect to Figure 2.1, New Keynesian economics is simply the project of theorizing the conditions of existence of the arrow that bridges the divide between the real and the monetary. As in the case of the original model, the object of New Keynesianism research is unintelligible outside of this dualist ontology. This continuity should be clear for the New Keynesian approach of associated with Romer, Mankiw, and others.[32] Here, the research objectives include (1) providing the microfoundations (required by the standards of orthodox economic methodology) for rigidity and (2) the theoretical and empirical study of the precise relationship produced by the short circuit between the real and monetary.

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[31] It is possible that the later Stiglitz might be more careful when discussing price flexibility given his interest in distinguishing his New Keynesianism from other variants.

[32] A non-exhaustive sampling of this tendency includes Mankiw (1985), Ball et al. (1988), Ball and Romer (1990), Blanchard and Summers (1986), Blanchard and Kiyotaki (1987), Mankiw (1989), Akerlof and Yellen (1985; 1990), and Gordon (1981).

Less obvious is the how the New Keynesianism associated with the work of economists such as Stiglitz and Greenwald fits into this tradition.[33] For example, Greenwald and Stiglitz (1993b) take care to distance themselves from the standard rigidity framework, claiming that given information imperfections, increased price flexibility may only make recessions worse. This New Keynesian approach seems to pose a direct challenge to the dualism we've described.

In what sense is this still New Keynesianism then? The simple answer is that both variants use microfoundations to study economic fluctuations and the non-neutrality of money. This simple answer suggests another. To the extent that they take the same object of analysis, seeking to explain the same problems, they also share the dualist presuppositions that make these concerns intelligible. Whereas the first variant attempts to produce microfoundations for the traditional linkage between the monetary and the real (rigidities), this latter version advances a new type of short circuit. In each case a failure in the real economy creates (1) broader economic failures and (2) non-neutralities.

These New Keynesians are both repetitions of the realist dualism at play in the construction of the old version. This doesn't preclude repetition with a difference. The imperfect information approach to non-neutrality is novel and an example of the way in which in appeals to the real evolve along with notions of what the real is. It does not seem to be a coincidence that models attributing inefficiency to information failures arise after the development of the efficient market hypothesis that associated efficiency with perfect information regarding the (real) fundamentals.

If rigidity, as a critical concept of Keynesian economics, persists it is because flexibility is key to making sense of the relationship between the monetary sector and the real sector in dichotomous models. Dropping the dichotomy, while maintaining

[33]See Greenwald et al. (1984) and Greenwald and Stiglitz (1993a).

the dualism, involved finding a short circuit or failure in this logic. Similarly, the increased prominence of questions of information in later models with dichotomy-type implications, made necessary - in absence of a fundamental rethinking of the methodological presuppositions of macroeconomics - theories of information failures.

2.6 Conclusion

The critique of the realist dualism does not in any way imply that abandoning its tendencies is simple. On the contrary, it is precisely the difficulty of thinking of the economy and money without a notion of a real and its other, that makes an understanding of its effect important. In the lonely last instance, it may even be impossible and undesirable to completely abolish this dualism. For example, is it really possible to abandon the concept of the real wage?

One of the misconceptions of deconstruction is that it is strictly destructive. It takes oppositions and obliterates them. This is a misconception because many of the objects of deconstruction - consider race, nation, gender, presence, nature, etc. - are quite simply not things we can just leave aside on the basis of a good philosophical argument. Critiques of nationalism, for example, can not prevent the nation from being fundamental to many individuals' worldview. At the same time, our inability to act without some reference to these concepts does not render insignificant critical evaluation of their uses and abuses. The nation is neither something we accept as is, nor simply forget about.

The same is true for the real economy. At some point, and in some sense, the distinction between a real and nominal value may be unavoidable. However, at what point this occurs, and the sense in which the terms (i.e. real and nominal) are to be applied, are important methodological questions that are precluded by the naturalizing language of the real. By denaturalizing these metaphors/models and advancing an alternative ontology, we can retheorize the problems that have characterized monetary

economics - in some cases suggesting new solutions.[34] The realist dualism is productive. Economic thought of a dualist nature has not been sterile. Nonetheless, it has its limits - some of which may be surmounted by abandoning an ontological distinction between the real and monetary. Unfortunately, the philosophical-methodological level of this dichotomy is often overlooked, leading economists to oppose one variant of dualist thought with their own.

The next chapter shows how Marx's own use of the language of real, symbolic, and imaginary money undermines ontologically dualist interpretations of these terms. While one strategy of opposition to the realist dualism may involve completely abandoning this language, I will show an overdeterminist account of the real, imaginary, and symbolic can both (1) produce an alternative monetary ontology and (2) help us make sense of the persistence of the essentialist ontology. In my reading, what Marx shows is how the various forms and functions of money are all equally "real" (and/or equally less real), but are experienced as otherwise. The perceived superficiality of certain forms/functions of money is but part of their (social) reality. And alternatively, the crude objective reality of other forms and functions is just part of their social contingency.

[34]My dissertation focuses on this reframing of the problem of non-commodity money in Marxian economics, but similar projects are possible in other economic paradigms.

CHAPTER 3

MARX AFTER THE LETTER: OVERDETERMINISM AND REAL MONEY

3.1 Introduction: RIS

In the previous chapter I looked at ways in which an ontology of real economy and less real money conditioned, and from the perspective of overdetermination impeded, monetary thought in general. The remainder of the dissertation will focus on Marxian economics. One of my arguments is that the absence of any neutral pre-theoretic notion of the "real" prevents this dualism from operating identically across paradigms. As "real" takes on different meanings across these paradigms, the conceptualization of money as its economic other also varies. The methodological basis for an overdeterminist Marxian theory of money involves locating and critiquing the particular notion of the real in operation within Marxian discourse.

As discussed in Chapter 2, Marx uses the language of real, imaginary, and symbolic (RIS) when discussing money. It is not difficult to see how this may lend itself to essentialist readings privileging the real over the merely imaginary or symbolic. From an anti-essentialist perspective, one strategy for resisting the subsumption to the real (form or function of money) is to abandon this language. Indeed, as my dissertation is in large part a critique of the *real*ist dualism, one may infer a desire to banish any such realist references. In this chapter I argue that this is not necessary, and may indeed be a mistake. While following chapters show ways in which Marxian economics has indeed progressed along essentialist and dualistic lines, I'll show here how Marx's use of these categories actually offers a powerful critique and overdeterminist alternative.

This overdeterminist interpretation of Marx on the RIS is a product of reading the contradictions and tensions found in Marx's positions on money through a Lacanian lens.

While the psychoanalytic work of Jacques Lacan has gained a certain infamy for its difficulty, I argue that Lacanian theory provides a straightforward way to think about the categories of RIS within Marx that (1) undermines essentialist interpretations of real money, and (2) helps make sense of the tensions in Marx's monetary theory as consequences of the complex and contradictory character of the RIS. These tensions are not confusions, but rather the product of the overdetermined relationship between money's real, symbolic, and imaginary aspects.

3.1.1 Popular Monetary Education

A small monetary experiment I encountered in Providence, Rhode Island further illustrates why the categories of RIS can not, or should not, be so easily abandoned. An artist going by the name Obadiah Eelcut began issuing his own paper currency, each with a portrait of a person he knew one on side and their favorite bird on the other.[1] The denomination of each and every note was zero and the quite fitting name he gave to this currency was *Noney* - rhymes with money. However large your stack of Noney, you knew exactly how much you had, none. Presumably the person behind Noney hoped to (1) make a point about the symbolic, fictitious, or empty nature of at least some forms of money and (2) see if his money could catch on.

I don't want to attach any profound significance to Noney. The monetary questions, hopes, and fears behind such a project are not uncommon, which is precisely the point. Even if we do not accept essentialist notions of real, symbolic, and imaginary money, an overdeterminist approach to money must take into account the heterogenous and ever-changing social conceptions that money is real, symbolic, or

[1] The website for the project can be found at: http://noney.net/

imaginary as part of the constitution of monetary phenomena. For example, although I oppose the characterization of gold as a real money, ontologically prior to supposedly more social monetary forms, I recognize this view itself as an overdetermining contributor to the particular social constitution of gold.

Another example from Rhode Island addresses this point. In junior high school a teacher once taught me that US currency had value because it was backed by gold. While not being a spring chicken, I am not old enough for him to have been even remotely correct. There are a few lessons in his misleading lesson. The obvious one would be that belief in a real money, stored away somewhere waiting for you to claim it, may act as a condition of existence for another form of money. Of course, as in this case, this real money may not actually be waiting for you. Consequently, we are left wondering exactly what sort of real fails to exist. There are two avenues for taking this lesson further, one which broadly leaves the categories of real and symbolic as is, and another that challenges them.

One interpretation proceeds along the self-fulfilling prophecies line. A non-commodity form of money *works* (has value in some sense, are accepted for commodities, etc.) because we believe it does. Alternatively, if we lost faith in these instruments of money they would cease to function as money. They are not really money without our belief in them. This is quite similar to the familiar logic of a bank run. Fractional reserve banks work because we believe they work. If we were to lose faith in the ability of these institutions to give us our money, they would have difficulty meeting their obligations to depositors.

However, this interpretation is at once too idealist and too (crude) materialist, betraying a dualism. Money is simply in our heads, a belief brought into the world. However, this is only because some form of real money is absent. For example, in the absence of fractional reserve banking the ability of banks to satisfy any depositor would be independent of beliefs. Similarly, if money really were (backed by) real gold

money, our beliefs or faith would cease to really matter. To hazard a pun, the notions that money may simply be a social illusion and that it is some pre-social piece of brute reality are two sides of the same coin.[2]

An alternative way to approach the relationships between what appears to us as real, symbolic, and imaginary is to interrogate these categories. If the real money isn't there, what sort of real is it really? Or, if the symbolic money depends on an image of the real, not really stored away somewhere, on what does this imaginary real depend on? Perhaps this particular image of the real was a product of symbolic money itself. Yes, my teacher's belief in a reserve of real money provided a condition of existence for his use of paper notes, but did not the processes and practices related to this symbolic money also provide conditions of existence for his mistaken belief in a vault of gold?

By asking and answering such questions we would begin to think about the aspects of money *experienced* as real, imaginary, and/or symbolic as overdetermining one another, in every and any monetary system, whether or not vaults of precious metals exist. Obviously, such an approach would significantly transform these very categories from their familiar usage. What this chapter proposes, and illustrates, is that the Lacanian understanding of the RIS is adequate for this task.

3.1.2 Outline

The following section will provide a summary of Marx's treatment of money in *Capital* (Vol. 1) with particular emphasis on the role of the RIS in his description of money's various forms and functions. I'll argue that despite explicit insistence on the priority of money's real forms/functions, the text offers a more nuanced and tenuous

[2]Without doubt it would be hard to find many academics who would openly accept the idea that money could ever simply be a pre-social piece of metal, but such an idea exists implicitly in (1) many popular ideas about monetary (mis)management and (2) popular and scholarly reflections on how a *certain* form of money is *now* a social construction.

status of this real money in it's arguments and logic. I'll then consider the stakes this issues raises from an overdeterminist perspective. While overdeterminist analysis has targeted the relationship between money and other aspects of economy, less attention has been paid to thinking about the multiple aspects, dimensions, forms, or functions of money itself in an overdeterminist fashion.[3]

Once I document the tasks and problems posed by overdeterminism, I begin to produce an anti-essentialist methodological framework inspired by Marx and Lacan. I will begin summarizing the work of Jean-Joseph Goux, who has himself attempted to produce a Marx-Lacan understanding of money, taking note of the points I take from him and grounds on which we part ways. I'll then outline a simple understanding of the RIS in Lacanian terms. The final section bring this conceptualization of the RIS into the ambiguities in Marx's insistence of the real to provide this overdeterminist framework for monetary forms and functions, and by extension the problem of value in the context of various non-commodity forms of money.

3.2 Tensions in Marx's Real Money

While this dissertation does draw on the later volumes of *Capital*, I find a special significance in the first part of Volume 1 for the questions related to non-commodity money, value, and the notion of real economy/money. This is despite the fact that Volume 3 contains significantly more material on the financial subsumed class processes so closely related to both state-issued fiat and bank-generated credit money. While that material will indeed be very useful in theorizing non-commodity money and its relationship to class, pursued largely in Chapter 6 of this dissertation, it lacks details on the character of money's forms and functions in relationship to value.

[3] Resnick and Wolff (1987), the seminal contribution to the overdeterminist class analytic tradition itself contains much commentary on money and credit. Other contributions, including Roche (1981; 1985; 1988), Russell (2007), and Kristjanson-Gural (2003; 2008), will be discussed in the following chapters.

If Volume 3 is the place to find analysis of critical non-commodity money processes, Volume 1 contains the methodological material for making sense of categories such as (non)commodity money, real, symbolic, or imaginary money, etc. Furthermore, as any text offers multiple readings, the interpretation of these categories is of great methodological consequence. From a methodological perspective, essentialist interpretations of the categories, producing a Marxian variant of the realist dualism, delimit the possibilities of an overdeterminist analysis of these subsumed, non-class, and/or even class processes related to the operation of non-commodity forms of money.

3.2.1 The Insistence of the Real

Marx's writing on money exhibits a certain insistence on the real, where temptations to think of money as imaginary or symbolic are warned against. Ultimately, despite any appearances suggesting otherwise, it is money's real form and function that is essential. Such an insistence betrays the existence of such temptations; we are justified asking from where they come. Does this vigilance against folly raise the possibility it may be more than just folly? We could isolate two distinct sources of these temptations. First, they come from proponents of erroneous monetary theories, motivated by idealist philosophy or uncritical reformism. Here, at least from a Marxian perspective, this insistence lends no credence to their ideas. However, I will argue that a second source of these temptations is the text of *Capital* itself. Marx's analysis of money, its various forms and functions, requires an insistence on the real, not simply to critique (exogenous) theoretical opponents, but as a response to the (endogenous) undermining of the concept of real produced by the text itself.

Unlike the debate between Marx and his opponents, this second, endogenous conflict, between the insistence of the real and the temptations produced in its undermining, does suggest that from a Marxian perspective we should take the symbolic

and imaginary seriously. The question is how, and what to make of this tension. I will argue that the appropriate overdeterminist response is to resist the resolution of this tension into one pole - concluding that ultimately, in the last instance, money is either (1) just a symbol or product of the (social) imagination or (2) a material chunk of real commodity money from which other epiphenomenal monetary forms/functions are derived. On the contrary, we should read these tensions in the text as the impossibility of a simple, straightforward, and non-contradictory relationship between the real, imaginary, and symbolic aspects of money.

What is Marx doing when he insists on the real?[4] Marx's realism in the monetary context is in part the product of his political motivations and broader social-economic ontology.

> Where did the illusions of the Monetary System come from? The adherents of the Monetary System did not see gold and silver as representing money as a social relation of production, but in the form of natural objects with peculiar social properties.(Marx, 1976, p.196)

As Marx was often explicit about, theories of money have important political consequences. For example, the "Chapter on Money" from the *Grundrisse* (Marx, 1973) begins with a critique of utopian socialist banking and monetary reforms meant to improve the capitalist economy in terms of stability and some notion of equality. Marx has been caricatured as having a crude metallist theory of money that naturalizes the social character of money along similar lines as orthodox economics. However, leaving aside the specific (non)commodity status of money in the *Grundrisse* or elsewhere, it is clear that Marx is not reducing economic phenomena to physical properties.

[4]We might also think of it as the real insisting on itself. Again, even if we deprive any monetary form of the privilege of being ontological prior, why should we be surprised that a the form (gold commodity money) experienced as really real includes in its concept an insistence on this special status?

It is not the brute materiality of gold (the illusions of the Monetary System) that limits utopian attempts to reform capitalism, but rather the social relations of capitalist production that the utopians leave off the table when discussing banking and monetary changes. That he opposes both utopian socialist and mercantilist ideas about money, despite their radical differences on the "material" of money, is evidence that the distinctiveness of Marx's monetary thought resides in the emphasis on social relations. While this does not necessarily acquit Marx from the charge of advancing a commodity theory of money, he is certainly not a simple metallist. The theoretical allure of gold is that as commodities they are immediately linked to - produced in - the social processes Marx wants to highlight - class.[5]

This is the link between the dualism of real/monetary economy and the dualism of real/less-real money. Because essentialism in the Marxian tradition is typically of a productivist sort (the real economic as the sphere of production), the conceptualization of real money is overdetermined by this emphasis on production. And while productivism *is* a problem of its own, what follows will seek out the tensions that undermine, and provide an alternative for, this tendency. The remainder of this section will outline the appearance and development of money in Volume 1 with the focus on this dialectic of insistence and undermining at work in the treatment of the categories of RIS.

3.2.1.1 The Money-Form

Money first appears in *Capital* as a particular form of value. Marx's analysis here is well-known so I will not repeat it in great detail, but a brief outline is of use.

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[5]The difference between even a determinist Marxian commodity theory of money and a credit approach emphasizing "faith" in money has nothing to do with the latter being more "sociological." For example, it is sometimes said that credit based money is social because it depends on relationships of faith and trust, as if such relationships are inherently more social than those involved in production.

The money-form is the final step of a (presumably) logical and/or historical series of developments.

1. *Simple, Isolated, or Accidental* ($xA = yB$). In this form of value, x amount of commodity A has a value equal to y of commodity B. This is simple and isolated in that it is not systematic. It does not involve the totality of commodities, and while the two commodities play distinct roles with respect to each other (what Marx called the relative and equivalent forms), the commodities that play this role are random or accidental. Neither A nor B have a particular socially designated role.

2. *Total* ($xA = zB, yC, qD...$). In this form, a quantity of a commodity is expressed as equal to a quantity of every/any other commodity. Like the previous form there is no particular commodity that plays the the specialized role of expressing value. Unlike the previous form, we no longer have an isolated relationship, but an equality constituted by the totality of commodities.

3. *General* ($zB, yC, qD... = xA$). The general form can be understood as the reversal of the total form. Instead of one commodity having its value expressed by different amounts of every other commodity, every other commodity expresses its value through a single commodity.

4. *Money* ($zB, yC, qD... = xG$). The movement from the general to the money form is the simplest but nonetheless of great consequence. Formally, nothing has changed. What makes the money form is that one commodity (G, gold as the money commodity) attains a social monopoly on this role of general equivalent.

Thus, the origin of money is to be found in the relationship between commodities - or rather the social relations behind commodities. Two points on the character of

this origin story are important. First, money is understood as one of the totality of commodities. As we move on to consider monetary phenomena further, its baptism as a commodity has the tendency to render non-commodity forms as derivative. In other words, the original, and therefore perhaps real/essential, form of money is the commodity. Second, while money is a commodity, it is the *money* commodity. It is not just any commodity. This origin of money narrative includes a tension between money as commodity and money as other than commodity that will later express itself in terms of the RIS.

> But only the action of society can turn a particular commodity into the universal equivalent. The social action of all other commodities, therefore, sets apart the particular commodity in which they all represent their values. The natural form of this commodity thereby becomes the socially recognized form. Through the agency of the social process it becomes the specific social function of the commodity which has been set apart to be the universal equivalent. It thus becomes - money. (Marx, 1976, p.180)

Not only does this notion of social action - the "agency of the social process" - distance Marx's particular commodity origin of money narrative from the Mengerian agency of rational atomistic individuals story, it produces a concept of money that is both less and more than a commodity. It is a commodity, but an excluded commodity; one that is "set apart" and in the process given a particular social role. This concept of the money commodity includes both the idea that (1) money is the privileged, most desired, commodity and (2) money is but a mere function allowing us to attain real commodities. For Marx, the contradictions we find in money, or in between money and the commodity, are the product of this social process that constitutes the money

form, and ultimately the contradictions in the commodity with its dual character as use-value and value.[6]

The footnote associated with the previous quote contains Marx's well-known Pope metaphor:

> From this...petty-bourgeois socialism, which wants to perpetuate the production of commodities while simultaneously abolishing the 'antagonism between money and commodities'...One might just as well abolish the Pope while leaving Catholicism in existence.(ibid.,p.181, fn.4)

Marx's critique of utopian and petty-bourgeois monetary politics is *not* necessarily motivated by the conviction that money/exchange is insignificant (in relation to production). Are we to believe Marx found the Pope to be unimportant with respect to Catholicism? On the contrary, the argument is not that money or the Pope are insignificant, but that their importance is not as we imagine it. They are not simply independent, *alien* powers that externally control us, but are rather the products of the totality of social relations (commodity production or the Catholic Church) they head.[7] Consequently, the contradictions and antagonisms we seek to ameliorate or

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[6]Money is opposed to commodities as the external expression of an internal contradiction:

> [E]very change of form in a commodity results from the exchange of two commodities, namely an ordinary commodity and the money commodity. If we keep in mind only this material aspect, that is, the exchange of the commodity for gold, we overlook the very thing we ought to observe, namely what has happened to the form of the commodity... Commodities first enter into the process of exchange ungilded and unsweetended, retaining their original home-grown shape. Exchange, however, produces a differentiation of the commodity into two elements, commodity and money, an external opposition, which expresses the opposition between use-value and value which is inherent in it. (ibid., p.199)

[7]I would not disagree with the possibility of a determinist reading of Marx's critique. Such an interpretation, where the constitution of money by the totality of social relations is understood as unidirectional, non-contradictory, and determined by the forces/relations of production can quite easily be produced. I disagree with the assumption a determinist interpretation is necessary. This constitution can just as easily be interpreted as a process of overdeterminism.

abolish are not the consequence of money (or the Pope) in itself, but rather this totality of relations.

The contradictions in the commodity-form, which overdetermine the constitution of the money-form and its own antagonism between being and not-being (just) another commodity, also help produce "confusion" over the ontology of money. The following passage is lengthy but should not be passed over because it marks the arrival of the imaginary, symbolic, and (implicitly) real in *Capital*:

> We have seen that the money-form is merely the reflection thrown upon a single commodity by the relations between all other commodities...The process of exchange gives to the commodity which it has converted into money not its value but its specific value-form. Confusion between these two attributes has misled some writers into maintaining that the value of gold and silver is imaginary. The fact that money can, in certain functions, be replaced by mere symbols of itself, gave rise to another mistaken notion, that it is itself a mere symbol. Nevertheless, this error did contain the suspicion that the money-form of the thing is external to the thing itself, being simply the form of appearance of the human relations hidden behind it. In this sense every commodity is a symbol, since, as value, it is only the material shell of the human labor expended on it. But if it is declared that the social characteristics assumed by material objects, or the material characteristics assumed by the social determination of labour on the basis of a definite mode of production are mere symbols, then it is also declared, at the same time, that these characteristics are the arbitrary product of human reflection. (Marx, 1976, pp.184-185)

Marx immediately worries about the consequences of the money-form as a "mere" reflection. If it is only a reflection, might any arbitary object do the reflecting? He attempts to counter this immediately through the distinction between money's value

and value-form. The danger of confusing the two, according to Marx, is an idealism in which the value of gold and silver is imaginary. He also takes this moment to attack the idea that money is "merely" symbolic. But unlike the previous critique, he instantly qualifies his position. Money is not just a symbol, but it is also a symbol. Indeed, even as a commodity it is necessarily symbolic. This is an important point. I ultimately want to argue that money is never merely real, merely imaginary, nor merely symbolic because it is always already real-imaginary-symbolic. While Marx seems to outright reject the imaginary dimension here, we do see that the rejection of the symbolic is strictly of the "merely symbolic." As we will see, the imaginary itself is not completely rejected either.

The danger in the mere symbolic is the idea that the economy is the "arbitrary product of human reflection." While this critique has a determinist reading, where a deterministic real economy of production is opposed to this arbitrary product, it is also well at-home within an overdeterminist tradition. To say that money, value, circulation of commodities, etc. is the mere product of unimpeded human reflection is a thoroughly essentialist position, which can be countered with an alternative deterministic essentialism, or overdeterminism.

Already in money's very form, as a universal equivalent without consideration of its various functions, we encounter contradiction and multiplicity marked by this tension between the real and the merely symbolic/imaginary. As Marx analyzes these functions we continue to see an insistence of the real, as well as the deferral of its priority, while money acts as (1) a measure of value, (2) a means of circulation, and (3) money.

3.2.1.2 Wildest Theories: The Measure of Value

Because money originates as a universal equivalent (of/for value) it makes sense for Marx to proceed onto its functions with the measure of value role. In actuality,

Marx considers two functions, often treated together, that he considers distinct - money as a measure of value and as a standard of price:

> As measure of value, and as standard of price, money performs two quite different functions. it is the measure of value as the social incarnation of human labour; it is the standard of price as a quantity of metal with a fixed weight. As a measure of value it serves to convert the values of all manifold commodities into price, into imaginary quantities of gold; as the standard of price it measures those quantities of gold...But gold can serve as a measure of value only because it is itself a product of labor, and therefore potentially variable in value. (ibid.,p.192)

A pair of oppositions exist here. First, we may oppose the measure of value, determined by the value of gold as a product of labor, with the standard of price, decided upon by the state which as relative autonomy in the naming of different quantities of gold. This is a distinction between an internal (with respect to the economic totality) necessity and an external contingency. Marx compares this nominal act of the state to the naming of persons - "I know nothing of a man if I merely know his name is Jacob" (ibid., p.195). Nothing is known because there is no necessary link between an individual's name and the individual. Similarly, there is nothing essential about the name given by the state to various quantities of gold. As a standard of price the state is free to name any weight of gold a pound, yet as a measure of value gold functions according to its actual weight and the associated quantity of labor socially necessary for its production.

The second opposition is internal to the measure of value function itself. First, the measure of value, in opposition to the state denominated standard of price, depends on *actual* gold produced by labor. Behind the arbitrary, nominal, symbolic standard of price lurks the real gold commodity. However, at this moment real gold does not

operate in its *actual* physical form. This actual substance is the condition of existence for the money form, but the money used as a measure of value is the *idea* of this gold.

From a practical perspective this imaginary dimension of the measure of value function is hardly a discovery at all. Everyone knows that gold or silver are not required to be present in their physical form when we use them to measure the value of commodities. This is the case regardless of the notion of value assumed. For example, we could use gold, or any other substance, to express the value of an apple in classical Ricardian, Marxian, or subjective neoclassical terms. Certainly, the theoretical content of such expressions would vary radically, and methodological and epistemological problems exist in knowing/calculating values, but the existence of physically present gold is not one of these barriers.

If not pathbreaking by any means, the significance in this context is that just when we expect to see "cold, hard" commodity money in its brute physical form, its appearance is temporarily deferred. At which point Marx warns us to maintain our bearings, and resist going wild, in response to this deferral:

> In its function as measure of value, money therefore serves only in an imaginary or ideal capacity. This circumstance has given rise to the wildest theories. But, although the money that performs the functions of a measure of value is only imaginary, the price depends entirely on the actual substance that is money. (ibid., pp.189-190)

From a deterministic perspective, what Marx refers to as the wildest theories could be said to have mistaken an appearance for an essence. Seeing that money need not exist in a present physical form at one moment - the moment of measuring value - they miss the functioning of the real "actual substance" that strictly determines the prices expressed by imaginary money.

This is not the only reason money should not be taken as simply imaginary, despite the character of the measure of value function. Real money need not be present in

order to state the price or measure the value of a commodity, but in order for this value to be realized it must be purchased. At this moment the mere idea of gold is insufficient. As Marx puts it:

> Though a commodity may, alongside its real shape (iron, for instance), possess an ideal value-shape or an imagined gold-shape in the form of its price, it cannot simultaneously be both real iron and real gold. To establish its price it is sufficient for it to be equated with gold in the imagination. But to enable it to render its owner the services of a universal equivalent, it must be actually replaced by gold. (ibid., p.197)

3.2.1.3 The Honesty of Paper Money: The Means of Circulation

Real money, in its actual substance, never quite appears in itself in Marx's analysis of the measure of value function. This is despite Marx's insistence that it is what determines prices. Even suspending methodological suspicion over this problematic distinction between the mere appearance and true hidden essence, one must still wonder when and how this real money will present itself. Again, even if we grant this essentialism temporarily, there must be some moment at which this actual substance of gold enters the scene to assert itself. This "hard cash" only "lurks within the ideal measure of value" (ibid., p.198), but we are assured it will appear at the moment of realization, when money operates as a means of circulation.

What I will show is that yet again real money is compromised. Despite repeated claims that it is money's actual real gold substance that is ultimately determinant, there are contradictions and tensions. There are three I want to point out in Marx's analysis of money as a means of circulation.

First, we have the continued dialectic between the real/ideal and commodity/money. At the end of the section on money as a measure of value, the idea put forth was that real money must become *present* as a means of exchange to realize the value of

commodities. Here, money is the real substance that realizes an ideal value. However, Marx also holds that this process of exchange also involves a realization of money, implying that this real character of money is not simply the precondition of commodity exchange, but at least in part the product money's operation as a means of circulation. Second, Marx begins to assert a hierarchy between money's multiple functions that is difficult to maintain. Finally, we see that in playing the role of a means of circulation money has a "spontaneous" tendency to become a symbol.

In what sense is money realized? How, and why, do commodities and money realize each other? The answer is yet again to be found in the contradiction between use-value and value. Prior to the moment of exchange, when money operated as a measure of value, the commodity and the money commodity were mirror images.

> On the one hand, both sides of this opposition are commodities, hence themselves unities of use-value and value. But this unit of differences is expressed at two opposite poles, and at each pole in an opposite way. This is the alternating relation between the two poles: the commodity is in reality a use-value; its existence as a value appears only ideally, in its price, through which it is related to the real embodiment of its value, the gold...Inversely, the material of gold ranks only as the materialization of value, as money. It is therefore in reality exchange-value. Its use-value appears only ideally in the series of expressions of relative value within which it confronts all the other commodities as the totality of real embodiments of its utility. (ibid., p.199)

The commodity is a real use-value but only an ideal value. The bread at the bakery may be good to eat, but whether it will be socially demanded depends on it attracting money. Money is the real representative, equivalent, or "materialization" of value but its use-value is only ideal. Money has no use in its own, other than ideal capacity to attain objects of real utility. In debt to Shakespeare, Marx made this

point more concisely, and poetically - “We see then that commodities are in love with money, but that ‘the course of true love never did run smooth”’ (ibid., p.202). Each needs the other, but need is not a sufficient condition for its own fulfillment.

Marx’s argument follows from his understanding of the contradictions in the commodity form, and is not in that sense a contradiction in his analysis. The tension that does arise is that in this analysis money is not fully “real” prior to exchange - “It became real money because the commodities, through their alienation, suffered...a transformation” (ibid., p.204) in their sale. This notion of real money constituted through exchange is at odds with Marx’s subsequent attempt to characterize the means of circulation function as secondary to both (1) real commodities and (2) money as a measure of value.

As with the ideal measure of value, Marx is intent to immediately counter the wildest interpretations that may spring from his analysis. If money is realized while acting as a means of circulation, it may be thought this is the essential function of money. We may begin to think of the quantity of money thrown into the economy as the critical economic variable, attributing any fluctuation in output to it. If insufficient commodities were realized, perhaps there was a shortage of money to realize them. And if real money is simply that which is itself realized through exchange, creating more of any arbitrary form of money should solve the problem. In addition, Marx is also concerned about the quantity theory essentialization of the means of circulation/exchange function with its own problematic neutrality results.

Consider a simple equation of exchange, $MV = \sum P_i UV_i$, where M is the stock of money in circulation, V its velocity, and $\sum P_i UV_i$ is the sum of use-values multiplied by their respective prices or aggregate nominal output.[8] Marx criticizes theories that

[8]This is typically written as $MV = PY$ where P is the price level and Y is the real level of output. My notation is mathematically equivalent, but doesn’t deploy the notion of a level of real use-value outputs that can be added together prior to, or without reference through, prices.

view causality as running from right to left, whether the accommodating variable on the right-hand side of the question is use-value output (non-neutral money supply) or prices (neutral money supply). Marx characterizes both ideas as superficial, based on appearances:

> Money constantly removes commodities from the sphere of circulation, by constantly stepping into their place in circulation, and in this way continually moving away from its own starting-point. Hence although the movement of money is merely the expression of the circulation of commodities, the situation appears to be the reverse of this, namely the circulation of commodities seems to be the result of the movement of money. (ibid., pp.211-212)

Such claims could lead to an interpretation of Marx as a member of the real analysis tradition. Despite putting forth an argument for the necessity of money, based on the contradictions in the commodity form, money's movement is epiphenomenal. Ultimately, the essence of circulation is the circulation of commodities, which would be considered logically prior to that of money.[9]

This distinction between the essence and appearance of circulation also plays into the hierarchy of monetary functions. Consider the implications of the priority of commodity circulation for the two monetary functions we have discussed so far. Commodities determine the circulation of money. But how? What is the nature of this determination? How do we move from presupposed amount of commodities to the circulation of money as a means of exchange?

The answer is through the measure of value function. Given these commodities, we have an aggregate amount of value. The amount of money that will/must circulate

[9]Both Chapter 4 and 5 of this dissertation discuss how this priority of commodities influences the theorization of non-commodity money.

as a means of exchange depends on its value and the velocity of money. This is Marx's well-known critique, and reversal, of the quantity theory. It does however have its own limitations. For example, it prioritizes the measure of value function over money as a means of circulation, despite the latter's role in realizing the former.

> We have already seen that the sphere of circulation has a gap in it, through which gold (or silver, or the money material in general) enters as a commodity with a given value. Hence, when money begins to functions as a measure of value, when it is used to determined prices, its value is presupposed. (ibid., p.214)

This gap is theoretically important. What it implies is that money's value - the condition of its operation as a measure of value - is an external datum introduced into the realm of circulation. It's value, presupposed, influences prices and ultimately, given a quantity of commodities in circulation, the quantity of money as a means of circulation, but the causality moves in one direction.[10]

This logic also makes the quantity (and value) of commodities purchased independent of the quantity of money. It presupposes that the course of love does always run smoothly. The process of realization is not contingent, or, at least not contingent upon the quantity of money in circulation. The key qualification that must be made here is that this is an assumption made for the text, not about the operation of capitalism:

> The division of labour converts the product of labour into a commodity, and thereby makes necessary its conversation into money. At the same

[10]Marx's analysis of the presupposition of money's value and its determination of prices, and the quantity of money in circulation is discussed in greater detail in Chapter 5. Similar to the points made here, I will further argue how this very insistence on a real/essential function/form of money contains contradictions that undermine it.

> time, it makes it a matter of chance whether this transubstantiation succeeds or not. Here, however, we have to look at the phenomenon in its pure shape, and must therefore assume it has proceeded normally. (ibid., p. 203)

Assuming things proceed normally, a necessary quantity of circulating money will follow from a quantity of commodities, the value of the money commodity, and the velocity of money. This is a simple tautology, given equal exchange assumptions and this interpretation of "normal." However, what happens when things do not proceed normally?

What happens if there are crises, or even small difficulties, in the process of realization related to the money as a means of circulation? Such a possibility, implied in the characterization of the transubstantiation as a "matter of chance," is of course well-accepted within the Marxian tradition.[11] The problem, which we will return to later in the dissertation, is that most of the analysis in this section of *Capital* assumes this chance away. Therefore, relaxing this assumption, allowing for the *abnormal* where chance plays its role, must involve a retheorization of the role money plays as a means of circulation with respect to money's value, forms, and functions. We can not simply add the caveat that crises may occur and keep the same exact theory of

[11] Marx himself qualified that his opposition is to the idea that money's quantity is the essential matter, and not to the perfectly reasonable notion that money's quantity may matter:

> It should be mentioned in passing that it by no means follows, from the fact that the popular ascription of stagnation in the processes of production and circulation to an insufficiency of the circulating medium is a delusion, that an actual shortage of the circulating medium resulting from, say, bungling government interference with the 'regulation of currency' may not for its part give rise to stagnation. (ibid., p.218 fn28)

Marx is clarifying here that it is not delusional to think that monetary processes could create a problem. Of course they could. The delusion is to always everywhere only imagine that crisis, and the corresponding solution, involves figuring out the ideal way in which to organize a monetary-financial system such that the real economy may thrive, without paying any attention to its own problems and contradictions.

money (its various functions, forms, relationship with commodity production, etc.). Their possibility changes the theoretical analysis of money.

Thus far we have encountered an ideal measure of value, ultimately determined by the actual substance of gold and its conditions of production. This gold however need not ever be present when money is a measure of value - the idea of it is sufficient. The price expressed by the measure of value is only ideal and must be realized through exchange. Here money, "cold hard cash," must present itself. However, despite this real character of money as a means of circulation (it helps realize commodities and money itself), we see that it too suffers a certain lack. In being theorized as epiphenomenal (a function of commodities), the monetary is rendered less essential than the real economy and the measure of value function gains the privileged role linking these economic spheres. A further ontological lack of money as a means of circulation is its tendency to become a symbol of money.

Marx's language on the development of money into a symbol is important. Although symbolic money will be theorized as less essential and real than *money itself*, its existence is not considered accidental or pathological:

> The *natural* and *spontaneous* tendency of the process of circulation to transform the coin from its *metallic existence* as gold into the *semblance* of gold... (ibid., p.222; emphasis added)

and

> [T]he circulation of *money itself* splits the *nominal content* of coins away from their *real content*, dividing their *metallic* existence from their *functional* existence, this fact implies the *latent possibility* of replacing metallic money with tokens made of some other material, i.e. symbols... (ibid., pp.222-223; emphasis added)

In many respects this description follows the standard dematerialization narrative. Money which was once a real metallic thing gradually becomes simply functional- a semblance. Marx continuously describes this token money a symbol of money, and therefore not fully money itself. Of course this narrative has multiple versions. In one version, this substitution of the symbol for the thing is treated as a perversion of the real social-economic order, attributable to the inappropriate behavior of the state, finance, or some other institution.[12] Alternatively, in the Simmelian narrative, it is this fully dematerialized money that is truly real money.[13]

Marx's take shares the sharp distinction between metallic real money and mere symbolic money with the former gold-bug analysis, but does not see it as accidental and does not take part in their moral condemnations.[14] He shares the developmental approach of Simmel, but does not consider this developed form of money to be true money itself.

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[12] Thomas Nast, a German-American cartoonist, starkly depicted this view in the late 19th Century. His "Milk Tickets for Babies, in Place of Milk" (1876) uses the image of a hand presenting a note claiming to be milk by an "act of congress" to a ragdoll baby as a metaphor of the attempt to replace real commodity money with fiat money. In the background behind the doll are other notes claiming to be a house by the "act of the architect," and in a quasi-Magrittean gesture a cow by act of the artist. Alongside, and implicitly *at home* amongst, these ontological absurdities is posted a fiat dollar. See Shell (1982) and Caruthers and Babb (1996).

[13] "Only to the extent that the material element recedes does money become real money, that is a real integration and a point of unification of interacting elements of value, which only the mind can accomplish"(Simmel, 1991).

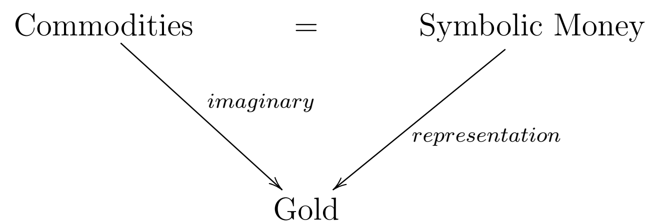
[14] "It should further be examined, or rather it would be part of the general question, whether the different civilized forms of money - metallic, paper, credit money, labour money (the last-named as the socialist form) - can accomplish what is demanded of them without suspending the very relation of production which is expressed in the category money, and whether it is not a self-contradictory demand to wish to get around essential determinants of a relation by means of formal modifications? Various forms of money may correspond better to social production in various stages; one form may remedy evils against which another is powerless; but none of them, as long as they remain forms of money, and as long as money remains an essential relation of production, is capable of overcoming the contradictions inherent in the money relation, and can instead only hope to reproduce these contradictions in one or another form. One form of wage labour may correct the abuses of another, but no form of wage labour can correct the abuse of wage labour itself." (Marx, 1973, p.123).

This distinction between the symbolic and actual money has important consequences for Marx's monetary theory. Returning to a quote we discussed in the previous chapter:

> Paper money is a symbol of gold, a symbol of money. Its relation to the values of commodities consists only in this: they find imaginary expression in certain quantities of gold, and the same quantities are symbolically and physically represented by the paper. Only in so far as paper money represents gold, which like all other commodities has value, is it a symbol of value. (ibid., p.225)

Yet again Marx is arguing that despite appearances, it is real gold that determines monetary processes. The necessary condition of existence for the relationship between symbolic money and value, is the dual relationships between said money and the commodity to actual gold.

Figure 3.1. Imaginary and Real Conditions of Symbolic Money



The readily observable instances of exchange made with paper money are essentially constituted by (1) the imaginary relationship between commodities and gold, and (2) the symbolic relationship between paper money and gold. The real is the condition of existence of both the imaginary measure of value and the symbolic means of circulation.

Again, this insistence is not completely convincing. Following Marx's own analysis, does not the relationship between paper money and commodities itself help

overdetermine whether realization occurs, as opposed to being founded on some always already real gold money? Another complication is that symbolic money may itself be made of precious metals:

> Their [silver and copper coins] function as coins is therefore in practice entirely independent of all value. In its form of existence as coin, gold becomes completely divorced from the substance of value. (ibid., p.223)

At odds with the notion that paper money is a deception and lie (see footnote 12 above), it is actually metallic money that Marx finds misleading. At least paper money is upfront about being a symbol. The fool is not only the person who thinks paper money is real, but the person who thinks metallic money is real: "This purely symbolic character of the currency is still somewhat disguised in the case of metal tokens. In paper money it stands out plainly"(ibid., p.224).

The consequences of a metallic money that is actually a disguised pure symbol are quite significant. Let us consider the logic of symbolic money's relationship to the value of commodities again (Figure 3.1). The commodity is equated with an imaginary quantity of real gold. The symbolic money represents a quantity of real gold. In the case of metallic tokens, this money is actual gold itself, but it is the represented gold that determines value relations. It is important to note that this represented, and supposedly real gold, is actually absent. It plays no role other than being the essence of money. Yet, in being causally prior to actual metallic coins, the very distinction between the mere functional semblance and the actual metallic existence is undermined.

We return to a familiar place. This real gold, the product of labor with value, is said to be ultimately determinant, but in each function some other type of money - the imagining of gold or the representing of gold - is actually present. Once again, we are told real gold will soon appear, in this case in money's various functions Marx calls "money as money"

3.2.1.4 Return of the Real: Money as Money

In the section concerning "money as money," we expect it to finally appear in it's real form without deferral. Marx actually describes a number of functions here with the commonality that they all in some sense represent an assertion of the ultimate necessity of real money - (1) hoarding, (2) means of payment, and (3) world money. Again, the results of his analysis are mixed and the insistence of real money produces contradictions. I'll focus primarily on the second function, and discuss the other two briefly at the end.

The interesting aspect of money as a means of payment is that it insists on the need of a real money to settle accounts, but also introduces a new way for money to exist in a less-real form through the production of such accounts. Marx himself is well-aware of this tension: "There is a contradiction immanent in the function of money as the means of payment. When the payments balance each other, money functions only nominally, as money of account, as a measure of value"(ibid., p.235).

How does real money appear as a means of payment? Marx argues that it is through an interruption of this balance of payments, a "general disturbance" in the "chain of payments" that transforms money from "its merely nominal shape...into hard cash." The path for the return of real money is crisis. Crisis is required for true money to appear. Marx references data from a large merchant's use of bills and cheques as an "example of how little real money enters into true commercial operations"(ibid., p.238, fn.54).

Marx is well aware of the contradictions in capitalism that express themselves in these contradictory aspects of money through periods of economic growth and crisis. However, he does not comment on how the analysis here *contradicts* his treatment of money as a means of circulation. Remember that in the latter function, we assumed exchange proceeded normally without crisis in order to show mere symbolic money was epiphenomenal. Since that realization of value was assumed, concerns about

the quantity of (symbolic) money, and its potential influence on the economy, were neutralized and the role of real gold money as the ultimate measure of value was given dominance. Given these competing treatments, the relationship between real money, normal economic activity, and crisis is at best ambiguous.

From one perspective the coincidence of crisis and the return to gold money proves its reality. This perspective maintains that when things are going well mere semblances will suffice but eventually this artifice collapses and we must return to money with real value. Hence, the counter-cyclical behavior of gold shows that it remains actual money. Without critiquing these arguments here I will point out that the coincidence of crisis and some form of money is of no obvious consequence concerning the preferability or ontological priority of this form. On the contrary, the already presumed privilege of this form overdetermines both (1) its return during crisis and (2) the extent such a coincidence is convincing.

The latter point is sometimes called confirmation bias; information is interpreted in a way that supports already head beliefs. With a commodity theory of money, the flight to gold in a crisis is taken as proof of its reality. However, the use of non-commodity local currencies in response to a crisis would be taken quite differently. In this case, the prevalence of its use in crisis simply confirms it is exceptional and not true money.[15]

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[15] An example somewhat outside economics proper can clarify this point. Most of us have heard stories of religious conversions. In the United States, a show such as the *700 Club* will often present the inspiring story of a person or couple who at their lowest point found Jesus and are now happy. This person was poor, maybe even homeless, losing all their friends on account of their drug and alcohol fueled anti-social behavior. Then they (re)discovered Christianity, embraced its teachings, and are now a completely happy and fully-devoted member of the Church. The lesson of such a story is that only a real, existing, and true deity could perform such a miracle. However, the extent to which this is a convincing story depends on a pre-existing degree of faith in truth of Christianity. Consider what happens when we replace Christianity with Scientology and imagine presenting the same story almost anywhere in the United States - "I was completely miserable and alone without a dime to my name, abusing multiple drugs, but then I found Scientology, read all of L. Ron Hubbard's books and am now a completely happy and devoted member of the Church (of Scientology)." In this case, because Scientology is already widely considered fraudulent, its appearance at a moment of crisis is further proof of its illegitimacy. In the case of religions we follow, we see that the power

Finally we should look at hoarding and world money. These are the two functions with the least theoretical tension in the status of real money. In the case of hoarding, Marx never even insists on its real metallic character. Instead, it is assumed that the hoarder would always seek some precious metal. This may make some sense in terms of the expected future value of a precious metal versus a non-commodity form of money, but this is essentially a portfolio decision and does not directly effect the ontology of money. Furthermore, if a hoard existed as a fund for planned or unplanned future purchases, liquidity would be important. Therefore, even in a world of possible inflation non-commodity money may help fill the hoarding function. If the hoard of stores wealth has no relationship to future use through other monetary functions (planned or otherwise), then its relevance to the essence of money is unclear.

In the case of world money a series of empirical and theoretical questions could be raised. If it is money, circulating between countries, would there not exist the same natural and spontaneous tendency towards its dematerialization that Marx's has already discussed? If not, would it be more appropriate to think about world trade (to the extent precious metal operates as such) as a type pre-monetary commodity exchange and not monetary exchange proper? What are the particular conditions of existence for world money at various historical moments? Are we really to think that during international trade money "falls back into its original form as precious metal" (ibid., p.240) as if its stripped of its historical overdetermination, or is it more that money *jumps* from one particular set of social, economic, natural and political conditions into another?

By definition, this concept of world money implies exchange outside the bounds of a singular nation-state. It is then hardly surprising that commodity money may play an important role historically. Theoretically speaking, this institutional detail

of God overcame the stupor of drug addiction. In the case of religions we do not support, we see someone imagining things because they are high on drugs.

has little to no bearing on the logical priority of real gold money. Unless we already assume this priority, it is not apparent why the money used between borders should be taken as more essential than that used within.

3.2.2 Essentialist and Anti-Essentialist Critique

By focusing on real money's contradictions and deferrals it is possible I may be interpreted as falling for the "wildest" theories Marx set out to criticize. Read in such fashion, the methodological and theoretical goal of knocking real money from its pedestal would produce a decidely non-Marxian monetary theory. Given the complexity and diversity of Marx's own thought, as well as the thought of Marxian tradition in general, moments of contestation between different Marxisms are unavoidable. I should stress that despite this dissertation's methodological goals, it does indeed share Marx's opposition to these wildest theories that view money as a simple image/idea or symbol. The crux of the matter is that there are two basic ways of thinking about this critique. One is based on essentialism and determinism. The other is premised on anti-essentialism and overdeterminism.

3.2.2.1 Monetary Essentialisms and The Realist Dualism

Put concisely, I understand a wild monetary theory as an essentialism of the imaginary or symbolic. Resnick and Wolff (1987) describe essentialism as the presumption that:

> [A]ny apparent complexity - a person, a relationship, a historical occurrence, and so forth- can be analyzed to reveal a simplicity lying at its core...essentialism is the presumption that among the influences apparently producing any outcome, some can be shown to be inessential to its occurrence while other will be show to be essential cases. (p.3)

These theories move from the appearance of money as symbolic/imaginary to the idea that money *is*, essentially, symbolic/imaginary. In doing so they bracket, ignore, or deny other elements of money and a monetary economy. Money is complex. It takes various forms and fulfills multiple functions. The monetary essentialisms that Marx sets out to critique are those that take this complexity, and reduce money to a singular imaginary or symbolic essence. Once this essence is established the other moments are then understood as inessential. So, for example, the reduction of money as a measure of value or wealth (two distinct concepts) to a mere image/symbol, likewise reduces the concept of value and/or wealth to a simple product of human imagination or arbitrary symbols.

Returning to the concept of the realist dualism, developed in the previous chapter, such essentialisms operate on both the macroeconomy and the concept of money itself. The essence of money, its essential form and function, and the essence of the economy in general inform each other. The conceptualization of one overdetermines the other. For example, consider the neoclassical representation of an economy, taking the form of an essentialization of use-values. The economy is, essentially, the teleological circulation of commodities towards a pareto optimal distribution. Neoclassical theory does not deny the existence of other processes in the economy, but they are treated as inessential with respect to the real economy of use-values.

Similarly, money's essential function is that of a means of exchange. Money can do other things, and may take various forms, but these other functions and its appearance/development through such forms are inessential products of its essential nature. The link between the essence of the economy and money is clear. In an economy that is ultimately about the exchange of use-values, real money is essentially a means to this end.

3.2.2.2 Monetary Essentialism and Marxian Theory

One obvious counter to the essentialization of the imaginary/symbolic dimension of money, is an alternative essentialization of the real (material, metallic substance) dimension. Marx's writing on money, including parts of *Capital* discussed in previous sections, could indeed be read as such an alternative. Doing so would produce a distinct, essentialist, theory of money with a particular conceptualization of the real as the essence of money, with a real form/function from which other less essential forms/functions are derived. This theorization of money would exist in an overdetermined relationship with a broader view of the economy in general. Historically, this has taken the form of a productivist version of the realist dualism.

Productivism conceptualizes the real economy as that of production, and hence essentializes forces and/or relations of production. Other aspects of the economy are secondary. Like neoclassical economics, productionism is not naive. It is not that it is ignorant of other social and economic processes than production. It merely casts these activities are secondary or inessential.

According to this view, the sphere of production (with both its forces and relations) is the essential moment of the economy and society. Economic activities related to distribution or consumption are subsumed to the development of production. Productivism has multiple variants, but within the Marxian tradition value plays a critical role. It is in part because the process of production is the sole location of the creation of value that it is given priority. Marx's famous formula of capital (M-C-M') highlights the definitive character of this acquisition of more (surplus) value. Implicit in this formula is exchange, and presumably at some point consumption of the use-value, but these are not essential. If we want to understand capital we need to understand this augmentation of value, which leads us to production.

Like the neoclassical view, this dualist treatment of the economy is related to a particular approach to money. The associated monetary theory follows what I call a *real gold commodity logic*. It can be characterized by four features:

1. The measure of value function is the real (essential) function of money.
2. Commodity money (i.e. gold) is the real (essential) form of money.
3. Other forms/functions, understood as symbolic or imaginary, are historically, practically, and theoretically derivative of real forms/functions.
4. The real economy, grounded in production, is considered independent of monetary processes; especially when theorizing the value of non-commodity money.

This theory of money will be discussed in detail in Chapter 5. For now I want to point out that it has informed the Marxian critique of monetary economics. And as other theories of money were shaped by the corresponding realist dualisms, the essentialism found in this Marxian approach to money is in part a consequence of the productivist version of the realist dualism in its tradition.

3.2.2.3 Monetary Anti-Essentialism and Overdetermination

Granting the possibility of essentialist Marxian counters to non-Marxian theories of money, this dissertation aims at an overdeterminist alternative. Whereas the former opposes these so-called wildest theories for essentializing the wrong aspect of money, overdeterminism challenges the essentialization itself.

In the field of competing essentialisms, the task of a monetary theory is to make sense of the multiplicity of phenomena through a singular essential aspect or dimension of money. In the simplest sense of the term, overdetermination works in the opposite direction. It understands any social process as being conditioned, and constituted, by the social totality.

Freud first used the concept of overdetermination in his *The Interpretation of Dreams* (1998) to describe the condensation of meaning in dreams. The popular understanding of dream analysis is an excellent example of essentialism. Despite the mind-boggling complexity any dream might have, analysis allows us to isolate the key feature unlocking the essential meaning of the dream. In this popular view, the Freudian approach to dreams is but a sexualized version of analysis; its essential meaning is always related to the psycho-sexual development of the subject.

Freud himself warns that "as a rule one always underestimates the amount of compression that has taken place" (ibid., p.313) in a dream. Even a seemingly complete, consistent, and powerful interpretation of the simplest of dreams misses a multiplicity of meanings and thought condensed within it. This simplest of dreams is overdetermined by an innumerable amount of thought material.[16]

Althusser is responsible for importing the concept of overdetermination into Marxian thought. In doing so he identified a non-deterministic tendency within the Marxian tradition.[17] In opposition to the identification of essential contradictions, Althusser characterizes any contradiction as overdetermined:

> the 'contradiction' is inseparable from the total structure of the social body in which it is found, inseparable from its formal conditions of existence...it is radically affected by them, determining, but also determined in one and the same movement, and determined by the various levels and instance of the social formation it animated; it might be called overdetermined in its principle. (1996, p.101)

This ontology includes both mutual determination and complexity. By mutual determination, we mean that any social process is both (1) determined by all other social

[16] "Strictly speaking, then, it is impossible to determine the amount of condensation" (ibid., p.313).

[17] Althusser explicitly references Lenin and Mao (1996, pp.94-101). Resnick and Wolff (1987, Ch.2) provides a detailed history of opposition to economic determinism in Marxian theory.

processes and (2) a participant in the determination of all others. The complexity of any social process follows from its inseparability from its conditions of existence. The mutual relationship between processes is not one of simple influence (or statistical correlation); each and every process is constituted by its others.[18]

Applying overdeterminism to the topic of money involves breaking with both the realist dualism view of money/economy and essentialist attempts to isolate the true form of money from amongst its multiple manifestations: "Althusser's concept of contradiction emphasizes the necessary complexity of all contradictions, as against notions of contradictions that are simply dualistic opposites"(Resnick and Wolff, 1987, p.88). An overdeterminist monetary theory applies this notion of complexity to both economy/money and money's own diversity. In the first case there is no independent real *and* monetary economy we can theorize the relationship between. Secondly, as there is no essential real economy, there is no essential monetary form/function that plays a privileged role in articulating the two sectors.

3.3 Lacan, Money, RIS

3.3.1 Goux's Marx and Lacan

In the historical exchange between the theoretical descendants of Marx and Freud, Jean-Joseph Goux has gone the furthest in developing Marx's use of the real, imaginary, and symbolic money along Lacanian psychoanalytic lines.[19] In *Symbolic Economies*

[18] "Each contains 'within itself' the very different and conflicting qualities, influences, moments, and directions of all those other social processes that constitute it" (Resnick and Wolff, 1987, p.88).

[19] Because I reject any matter of fact notion of the real, we must also reject the notion that categories such as symbolic and imaginary (understood in reference to the real) are pre-theoretical. It is specifically with respect to these categories of RIS and their application to money that I'm interested in psychoanalysis.This dissertation does not deal with the implications of psychoanalytic theory more broadly. I assume this would be unsatisfactory to many readers of psychoanalytic theory, since as in the Marxian tradition, a holistic notion of theory is ascribed to. I recognize and accept the limitations this very selective application of psychoanalysis may raise but must submit to the limitations of time and space in the context of this dissertation.

(Goux, 1990), he specifically uses the real-imaginary-symbolic language, but we can see this analysis at work in his *The Coiners of Language* (Goux, 1984) as well. In the latter, he uses the language of treasury, archetype, and token but the terms are used fairly synonymously in relation to money.

Goux attributes different dominant monetary functions to these three types of money. Quoting Marx, he explains this scheme:

> Thus when 'money serves as a measure of value, the money is only imaginary or ideal money.' Second, gold functions as the 'circulating medium' or instrument. But in this function, 'gold can be replaced by worthless symbols of itself'...Third and finally - this is the order of the real - there are functions in which gold 'has to be present in its own golden, or silver, personality...' Here the image of gold is no longer sufficient; gold must be present as real money, as cold, hard cash. (1990, pp.47-48)

This in itself is fairly simple and straight from Marx; although as we have seen, Marx's use of these categories contains ambiguities. What makes the analysis here interesting is (1) the particular theorization of these categories and their interaction and (2) the use this particular Lacanian interpretation is put to. In addition to claiming money may be symbolic or imaginary, he provides a framework within which to make sense of these terms, and from which to draw theoretical implications.

The implications of Goux's work relate both to money and the historical relationship between money-economy and other economies of production, circulation, and representation (literature, the unconscious, etc.). His most famous argument is that a break in realism or "gold-language" in modern literature occurs with a break in (inter)national monetary systems. Adopting a linguistic-semiotic approach to money with a structuralist-deconstructionist slant he discusses money after the gold-standard in terms familiar to these traditions:

> Just as nominal money has value only in relation to other signs in a system, and its convertibility into a unit of intrinsic, real value is always deferred, likewise language becomes a system of pure values, with no roots in things and in no way deriving sense from the simple operation of direct designation of an object. (1988, p.20)

His argument goes beyond correspondence to causation, explaining changes in 20th Century literature through this *nominalization* of money/language:

> At the same time, a break in literary form *inevitably follows.* To a system of circulating gold-money (and of materialized value) would correspond language oriented to a referent and thus also literature primarily concerned with the objective representation of reality. On the other hand, to a system of nominal money (that of tokens) would correspond a new conception of language and of literature, marked by the relationships among signifiers without the treasury of either a referent or a fixed standard. (1988, p.20, emphasis added)

This argument is laid out in *The Coiners of Language* (1984). Most important for my work is not the particular claims about literature itself, but the notions of money Goux develops and the interrelationships between philosophy, semiotics, aesthetics and political economy involved in their production and presentation.[20] Bridging the linguistic-semiotic, philosophical and economic, Goux produces an ontological categorization of money based on a series of monetary trinities (1984, pp.33-37).

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[20]As with Rousseau (see Ch.2), if money can easily represent the representational characteristics of art, language and politics it is at least in part because money is already understood through them, and vice-versa. In the quotes above, language lacks a treasury (language understood through a monetary metaphor), but money itself is already understood as a sign, part of a linguistic-semiotic system (money understood through linguistic-semiotic metaphors). This is why, however desirable, it is untenable to police the borders as metaphors are export-imported from one discipline to the other.

Table 3.1. Goux's Registers

Register	*Ideal/Imaginary*	*Symbolic*	*Real*
Function	measure of value	means of circulation	store of value or means of payment
Modality	Archetype	Token	Treasury
Capital I	Ch. 3.1	Ch.3.2	Ch.3.3

The first column is the register of the ideal/imaginary, in which money is primarily a unit of account and adopts the modality of the archetype. The second is the register of the symbolic. In this case the modality is that of the token and the associated monetary function is the medium exchange. Finally, there is the category of the real. Here money is used as a store of value or means of deferred payment and is of the modality of the treasury. *The Coiners of Language* presents the argument that a shift in modalities from the archetype/treasury to the token occurred in both economy and literature. In this process value as a transcendent ideal (archetype), or brute reality (treasury), is abandoned for a world of purely relational symbolic values. The analogues are clear but the causality is not. Unless we assume some sort of economic determinism we are left wondering how these economic and literary changes can be causally related.

The epistemological condition of existence for Goux's narrative is not an economic determinism proper, but rather a determinism of symbolization. The force behind this determinism follows from the conceptualization of each major facet of social life as yet another process of symbolization. Hence his concept of numismatics, usually reserved for the object of coins, takes it aims at economics, politics, philosophy, and religion.

> We may therefore speak of a *logic of the symbolization process*, that is, a logic of the successive forms taken by the exchange of vital activities in all spheres of social organization, a logic pertain to phylogeny as well

as to ontogeny. This logic enables us to conceive *the dialectic of history*. (Goux, 1990, p.24)

The principal concern I have with Goux's conceptualization of history is that it produces a dematerialization narrative concerning money/economy. It is also not a coincidence that it *advances* the orthodox Marxian view of history by replacing the essentialism of production with one of exchange. However, it is dematerialization that I want to flag as problematic. By a dematerialization narrative, I refer to a historical story of money that emphasizes the movement from physical material forms to less material, and ultimately purely imaginary/symbolic, forms. Such a notion is clearly present in Goux's characterization of "the sign of the bank transaction, with its abstraction, dematerialization, and nominalist structure, which defer convertibility to the point where it becomes imaginary,"(ibid., p.130) as well as the argument of *The Coiners*.

From a historical perspective, the problem with these narratives is that the excessive exoticization of new monetary processes as ephemeral involves the excessive reification of of earlier monetary processes as concrete and/or natural. Methodologically and theoretically, such stories accept the categories of RIS as consistent, non-contradictory, and stable. Hence, we could have a monetary economy premised on a truly real/imaginary/symbolic form of money, or imagine that money was at a given time consistently one, and has now completely become an other.

From an overdeterminist perspective, the categories of RIS do not describe stable and distinct categories. Because the various dimensions and aspects of money always overdetermine one another, changes in monetary processes are understood as shifts in the overdetermined articulation of these elements and their conditions of existence, rather than shifts from one type to another. For this reason, even if we accepted a commodity origin of money, a fairly big "if" in my estimation, overdeterminism would still object to the dematerialization story.

To a certain extent, Goux expresses sentiments similar to this overdeterminist critique:

> These distinct registers of the monetary object are interwoven, unraveled, and by turns subordinated to one another according to the prevalent regime of exchange...These three ontological registers can be neither separated nor fused in their principle, but are variously arranged and intertwined in what we mistakenly lump together under the single rubric money. (Goux, 1984, p.89)

While his insistence on the inseparably interwoven or intertwined character of these registers (RIS) is consistent with overdeterminism there are a few elements of his analysis that lead him away from producing an overdeterminist theory or narrative.

First, despite the insistence on their articulation, Goux nonetheless maintains a consistency of these categories or registers. In our reading of Marx, we saw how in each monetary function, we saw money as complex and contradictory. Money as a measure of value is both real, but also imaginary, only to be realized by money as a medium of circulation. This new form of money realizes commodities, but is actually a symbol. Finally, even when money acts as "money," in the form of real money itself, complications arise. Hence, each monetary function, and associated form, presents itself as both real but also as something other. This shows that not only does each function/form/dimension overdetermine the other, but that they are only in themselves the contradictory condensation of this overdetermination. Notice how different Goux's acceptance of measure of value, medium of circulation and money as money as imaginary, symbolic, and real, respectively, is from my emphasis on the difficulty Marx has in making these descriptions.

Second, following from the previous point, if Goux can think of these dimensions as consistent in themselves, he can also imagine their subordination or domination with respect to the others. Therefore, even if each and every monetary system or

process is always interwoven we can think of different systems or processes as being more or less real, imaginary, or symbolic. There is no pure symbolic money, but we can move from dominantly real toward dominantly imaginary/symbolic articulations. However, from an overdeterminist perspective, since money's multiple aspects are constituted through a process of overdetermination, the question is not the degree to which various pre-existing elements influence/cause/determine one another, but rather the character of this overdetermination.

Goux's primary use of psychoanalysis is to translate the figures of symbolization from one domain to another. In doing so we can speak of historical developments spanning political economy, sexualization, and the state. While his understanding of RIS is nuanced and open to overdeterminist interpretation, its usage precludes a true abandonment of the binaries of real and less-real money.

3.3.2 A Simple Outline of the Lacanian RIS

In this section I will present an outline of the three registers Lacan used in his understanding of the psyche. My method of exposition will begin with each register in its most simple form, and then introduce complications. These complications are critical because they are largely what makes this particular conceptualization of the RIS attractive for an overdeterminist theory of money. The reader is asked to keep in mind that some of the initial descriptions are subject to qualifications, revisions or transformations as we proceed.

3.3.2.1 Three Registers

The real is "impossible"(Lacan, 1981, ch.13). The real is the register of the pre-social and pre-symbolic. It is akin to a state of nature. The real, as pre-discursive, can not be expressed or approached through language. This does not imply it is abolished by language. The register of the real corresponds to the concept of need, a purely biological and animalist requirement. Of course, the common reaction to this

notion of a pure need is its impossibility, which is precisely the motivation for Lacan's notion of the real.

The imaginary register is characterized by a notion of wholeness. This is presented in Lacan's mirror stage, in which the still uncoordinated child receives from the mirror an *image* of organic wholeness in the form of a single unified body (ibid., pp.77-78). Whereas the 'I' of the real is an assortment of pure needs, the 'I' of the imaginary is a consistent whole. However, we should note that this whole is dependent on the image of the other. It is in this sense that the register of the imaginary transforms needs into demand. The key attribute of demand, in the Lacanian sense, is that it is addressed to an other. Animalist hunger simply exists. Demand always implies the inclusion of an other who would/could fulfill this demand.

The symbolic is the register of language. Compared to the subjects of the real and imaginary, the symbolic subject is constituted by a network of words, names, and laws. It is for this reason that Lacan has long been understood as the structuralist of psychoanalysis. If this register operates through signifiers, then the logic of the signifier, with its well-known Saussurean arbitrariness and structural determination, can be applied to its study. This subject of the symbolic is no longer a simple organic whole, but a particular *Name Surname* related to various other Names in particular ways. However, detailed such identifications may be they are also unsettling due to the logic of the signifier. Yes, I am *this or that* but what does that really mean? Who am I really?[21] By expressing a demand through language, it becomes a desire - unattainable because it is subject to signifier.

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[21] Our most fundamental identification is perhaps the name. But for the vast majority of individuals there is absolutely nothing personalized in this identification of our person. Growing up, there was almost always another Joe around. Althusser was troubled by being named after his dead uncle. Am I myself (Louis), or just some replacement for another? Yes the name includes us into symbolic network, such as the family, but it also has an alienating effect - Louis was not really Althusser's name; it was the other Althusser's. Of course, uniqueness is no solution for the activity of the signifier. Now that my class rosters include very few students named Joseph, or variants thereof, I can fret about where I fit in.

In a certain sense need, demand, and desire (corresponding to the RIS) all fail in some respect. There comparative failures can help elucidate the differences between these registers. Hypothetically speaking, need could be satisfied. It fails in the sense that once a need is transformed into a demand or desire this simply animalistic satisfaction is no longer available. Once we enter the imaginary/symbolic need is always transformed. The 21st century stock broker may have real needs, but once approached become demand/desire. The imaginary demand fails because nothing in the other can grant us the complete, organic unity of the ideal image. The demand from the other must take the form of language - "there is no demand that does not in some respect pass through the defiles of the signifier" (Lacan, 2006, p.297). Finally, desire can not be satisfied because it takes on a life of its own through language. More precisely, desire is itself this failure of meeting a need or expressing a demand without the subverting influence of the symbolic.

3.3.2.2 Complication I: Before and After the Letter

The first qualification we should address concerns the real. While the simple presentation takes the real as "impossible," this status follows from its pre-social character. It is because the real is pre-symbolic, in particular that which could/would not be symbolized, that it can not be approached after one's inclusion into the social network of symbols. If we were to apply this concept of the real to monetary theory, we would likely produce a dematerialization narrative - we once had real money but with the development of the economy of the signifier such money is unattainable. We see some of this in Goux in the sense that the period where real money was hegemonic preexists the rise of the symbolic. What such an application would miss is the crucial distinction between the real *before* and *after* the letter.

The real, if unapproachable, is not without its own effects. The real is excluded from the chain of signifiers making up our symbolic, but "[t]he chain is unequivocally

determined by what it excludes as by what it includes" (Fink, 1995, p.27). This real, as a presymbolic entity that is excluded, but continues to make itself felt through subverting the *normal* functioning of our symbolically constituted subjective reality (i.e. Freudian slips), bears some resemblance to a real gold commodity money. Remember that Marx spoke of gold's absence during *normal* business operations. Gold money is excluded in the development of symbolic fiat/credit money, but it nonetheless (1) provides the crucial link between money and value and (2) ultimately reappears in the *traumatic* outbreak of crisis.

A key assumption of this conceptualization is the equivalence of the real before symbolization and the real that re-emerges after symbolization. In other words, there is no distinction between the real before and after the letter. However, as Fink argues, Lacan is actually concerned with two different reals:

> The 'first' real, that of trauma and fixation, returns in a sense in the form of a center of gravity around which the symbolic order is condemned to circle without ever being able to hit it. It gives rise to impossibilities within the chain itself...and creates a sort of lump that the chain is forced to skirt. (ibid.,p.28)

The second, or "after the letter," real is this lump. It is excluded from the symbolic because it is in part constituting by the contradictions and tensions in the symbolic itself.

Let us consider an individual with a profound case of writer's block. The individual searches for the singular cause behind the block. What is the real source of this subversion of my normal mental functioning? Eventually the cause (X) is stumbled upon, and the individual's productivity and mood improves dramatically. The realist interpretation of this story is that X causes a problem, but was later identified and dealt with. That treating X (talking about it or coming to terms with it) lead to recovery supports the claim it was the problem. A Lacanian, and overdeterminist,

interpretation would treat such claims with skepticism. It may be the case that X appears as the original real cause to the subject, but this appearance itself is the overdetermined.

This same skepticism is to be applied to monetary phenomena. One of the consequences of the crisis beginning in 2007 was a broad questioning of economic institutions usually taken for granted, including money. A rush to gold, and the associated rise in its price, has been interpreted by some as proof of its reality. Real money was gold. It was excluded from our economies in the rise of symbolic unbacked fiat money, but is now staging a comeback. As the modern world of symbolic fictionalized finance fades away through its disfunction, gold begins to reassert itself as the real form of money.

This story conflates the real before and after the letter. While gold has the same atomic structure as it did in the 18th and 19th centuries, the gold we see advertised on TV today and read about in history books are not the same thing. Among the overdeterminants of this current revival of gold include financially squeezed households trying to trade in jewelry at the mall for some extra cash, television advertisements, a financial crisis in which trillions of dollars of real wealth vanished, popular political resentment of the anything federal (including the Federal Reserve), a lack of a boom industry to invest in, news television shows predicting Weimar Republic or Zimbabwe style inflation in the United States[22], and a flight to quality with incredibly low yields on US bonds, to name just a few. This is not the gold of England 1818.[23] In other words, the supposed return to real money is itself an overdetermined product of our "fictional" monetary-financial system.

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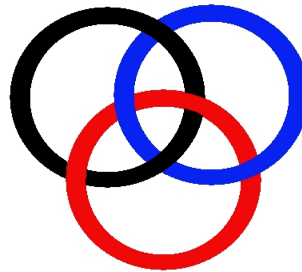
[22]See Peter Schiff on the *Glenn Beck Program* 10/13/2008 (`http://www.youtube.com/watch?v=jB9fuIvksLw`) as well *Fast Money* 12/22/2009 (`http://www.youtube.com/watch?v=1Zh_mjS8bQg`).

[23]Which has its own fascinating and complex overdeterminants.

3.3.2.3 Complication II: The Knot

The second qualification of our RIS scheme involves the relationship between the three. Lacan uses the borromean knot as a topological model for this relationship (1982, Ch.7). The standard borromean ring consists of three independent rings knotted together.

Figure 3.2. Borromean Rings



The tie between any two rings depends on the other (third) ring. No single pair of rings (blue and black, red and black, or blue and red) are connected in themselves. It is only in the totality of relations that this knot is constituted. We can think of the RIS in similar terms. While we may speak of real, imaginary, and symbolic registers or moments, they always exist in mutual overdetermination. Without one, the others fall apart.

3.4 A Marx-Lacan Framework for Monetary Theory

From Marx we receive a theory that links monetary phenomena to value, but contains ambiguities concerning the relationship between money's multiple forms and functions. I have argued that these ambiguities may be domesticated through the production of an essentialist Marxian theory of monetary process grounded in the logic of real gold commodity money. I have also asserted that an alternative Marxian theory, premised on overdetermination, is possible. Such an approach would - despite the seemingly essentialist language of real, imaginary, and symbolic - take these

ambiguities and tensions as a product of the complex and contradictory character of money itself. At the same time, we can not proceed discussing real, imaginary, and symbolic money without specifying a very particular, anti-essentialist understanding of these terms to counter the standard realist view. From Lacan we find such an conceptualization of the RIS.

This final section will produce a simple integration of Marx on money and Lacan on RIS. This specifically overdeterminist approach to money, and with it a conceptualization of commodity versus non-commodity money, will also make more clear the various essentialisms within the Marxian tradition when we turn to that literature in the subsequent chapter.

3.4.1 RIS Money

We will approach this integration through Zizek's Lacanian comparison between imaginary, symbolic, and real relations between opposites (1989, pp.171-172). The parallels to the different relations between money (or the money commodity) and the commodity are instructive, and apparent despite the lack of any textual evidence Zizek had such an application in mind. This serves the support the existence of complementarities between the Lacan on RIS and Marx on money.

Beginning with the imaginary, the relation between opposites is described as "complementary" in that "together they build a harmonious totality; each gives the other what the other lacks - each fills out the lack in the other" (ibid., p.171). Although we've quoted Marx at some length already, another sample shows just how close this Lacanian imaginary is to Marx's analysis of the relationship between commodities and money, in its imaginary form:

> On the one hand, both sides of this opposition are commodities, hence themselves unities of use-value and value. But this unit of differences is expressed at two opposite poles, and at each pole in an opposite way.

> This is the alternating relation between the two poles: the commodity is in reality a use-value; its existence as a value appears only ideally, in its price, through which it is related to the real embodiment of its value, the gold...Inversely, the material of gold ranks only as the materialization of value, as money. It is therefore in reality exchange-value. Its use-value appears only ideally in the series of expressions of relative value within which it confronts all the other commodities as the totality of real embodiments of its utility. (1976, p.199)

In the imaginary measure of value function, money and commodity are both commodities, a unity of use-value and value, but this unity is incomplete. On one hand, the commodity is only ideally an object of value. On the other, money is only ideally a use-value. What is actually possessed by one, is actually lacked by the other. The commodity finds its true value in money, and money, in turn, finds its actual use in the commodity. In being mirrored with the other, through the measure of value function, each is complete, made whole.

Turning to the symbolic, the significant quality of this relation, in line with the logic of the signifier is that it is "differential" - "the identity of each of the moments consists in its difference to the opposite moment...The opposites, the poles of the symbolic relation, each in a way returns to the other its own lack; they are united on the basis of their common lack"(1989, p.171). Unlike the imaginary relationship, the symbolic does not presuppose money shares the commodity status with the objects it relates to. Instead, the relationship is one of difference. The commodity, the unity of use-value and (potential) value is now set against a non-commodity, a signifier of value. Because symbolic money has no value in itself, symbolic values are meaningful only in relation to others, which is precisely how we would imagine the signifier to work. Whereas the imaginary relation links the one to other in an organic wholeness

of their own, the symbolic requires the whole network of signifiers in order to give meaning.

Finally, Zizek describes the real relation as a "as a point of the immediate coincide of the opposite poles: each pole passes immediately into its opposite; each is already in itself its own opposite"(ibid., 172). This notion is present in the very term "money commodity" or "commodity money." We might also think of this as the ideal case where true love runs smoothly - where the realization/actualization of use-value and value is presupposed for each and every commodity (including money). If commodities will always be sold without trouble, each commodity (including the money commodity) is already in itself use-value and value.

In the case of the real, the relationship between money (M) and commodity (C) is, at least ontologically, symmetrical. Practically speaking money has acquired the role as the general equivalent, but theoretically the commodity could have been money, as money could have remained a simple commodity. In the imaginary and symbolic, the relationships between M and C are asymmetric and circular. Imaginary or symbolic money can not, even hypothetically, switch places with the commodities they relate to (asymmetry). Furthermore, each relates to the commodity in a relation of mutual dependence (circularity).

For symbolic money, its value is ultimately determined by the value of commodities. It is purely nominal. To say some C is worth ten symbolic units of money is meaningless without referring to what other commodities ten monetary units could purchase as well. At least in terms of value, symbolic money always defers back onto commodities. However, the value of these commodities is only realized (validated) through its exchange for symbolic money.

The logic of the imaginary money form runs in the opposite direction. Commodities can be valued according to an imaginary amount of value, but this imaginary value depends on actual commodities in order to be realized.

Figure 3.3. RIS, Money, and Value

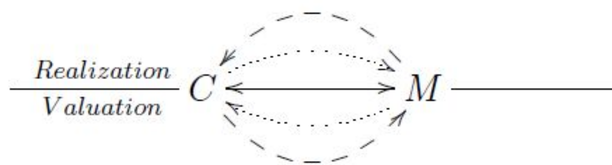


Figure 3.3 attempts to depict these three M-C relations. The upper arrows are to be read as processes of realization (or social validation). The lower arrows are processes of what I'm calling valuation. Valuation should be understood not in terms of the expression of the value but the theoretical determination of value. Dotted arrows (...) represent the imaginary and dashed arrows (- -) the symbolic. The solid line in the middle represents the real money form. The realist interpretation of this relations would posit the real M-C relationship as essential; it would serve as the ground and singular (one-way) condition of existence for money's other (imaginary or symbolic) operations.

From the perspective of overdetermination this real money would itself be overdetermined by the imaginary and symbolic. Its apparent consistency is the product of the interaction of the three. In other words, the three form a borromean knot. If one register is removed the other two fall apart. In this interpretation, we can admit a real money, but we are actually speaking of a real *after the letter*.

Each monetary form and function depends on its others. Marx may insist that the real form of money, the one founding monetary phenomena in general, can be identified. However, wherever we look we are sent elsewhere. Looking at any two rings it is unclear what is holding everything together. *It must be the other ring! The other ring is the essence.* In each instance, we find that the suspected essence is itself dependent. No single ring holds the structure together.

3.4.2 (Non)Commodity Money, After the Letter

It is finally time to address the concept of non-commodity money directly. The difficulty in doing so resides in the fact that there is no simple positive definition of non-commodity money that does not implicitly reference a privileged commodity money. This is apparent in its negative designation. Nonetheless, it is this category of monetary forms, be they products of state or private monetary-financial institutions, that I'm interested in - those deemed other than a commodity, not a commodity, and therefore less-real.

The problem with the non-commodity versus commodity money dualism goes beyond the mere privileging of the latter. Because of the complicated relationship between essentialist theories of the economy in general, and money in particular (i.e. the realist dualism and the respective distinction between essential and non-essential monetary forms and functions), these are thick terms, overdetermined with considerable theoretical and methodological baggage.

As we will see in the following chapters, non-commodity money, even when recognized as a valid category of Marxian analysis, has been seen as a problem for value theory. The solution to the problem has typically lead back to commodity money.[24] Certainly, individuals have rejected Marx's theory of commodity money as problematic, but this is typically done as an attack on the Marxian value theory more broadly. Such criticisms further support the notion that there is some harmonious relationship between commodity money and Marxian theory.

If we are to approach non-commodity money, without complicity in this baggage, we need an overdeterminist and thin understanding of both forms of money. As long as commodity money remains unquestionably real and unproblematic, non-commodity money can only be less-real and problematic. This thin definition is remarkably sim-

[24]We will also discuss exceptions to this approach. Foley's (1983) article is an interesting case because it highlights all the deep problems in the commodity money logic.

ple. Commodity money is any monetary object that is the product of a fundamental capitalist class process. Non-commodity money is any monetary object that is not the product of a fundamental class process. We should read object in the broadest of terms.

This conceptualization is thin, but not empty. It is possible for the value of money to be overdetermined by any other economic, political, cultural, or natural process in either case. It is similar to the position taken by Cutler et al. (1978), who define commodity money as money who's "creation ...entails the production of a particular commodity" (p.31). Money that can be created without the constraint of a particular commodity would be non-commodity money (ibid., p.32).

The key difference between the view of Cutler et. al. and myself is that they focus on the link, or lack thereof, between money creation and a commodity, whereas I'm interested in the monetary object itself. In the former view, gold coins and gold-backed paper could both be described as commodity money since the creation of each is directly linked to gold. Both non-backed paper and debased coins may operate as a non-commodity money because they can be created (expanded) without an expansion in gold. My definition would characterize gold coins as commodity money, and paper as non-commodity money, whether their creation is linked to commodity production or not.

The motivation behind this definition has nothing to do with placing some special importance on the money object itself. Rather, I find it difficult to maintain the conceptual distinction between monies whose creation is linked or not-linked to commodity production. Take the case of credit money created by banks at will with no restrictions. In the Cutler et. al. taxonomy this would presumably be non-commodity money, but does it really make sense to think of this as unlinked to commodity production? Overdetermination encourages skepticism toward such a claim, as would basic institutional details concerning credit expansion.

Credit will not be supplied without a demand, and demand for credit is often directly linked to the production or realization of commodities. If credit is extended to a firm in order to engage in production, the increase in money is linked to the increase in commodity production. Of course, fundamental class processes are not the only source of credit demand. A financial institution may demand credit for speculation reasons or to make non-class payments. Some credit expansion is linked to commodity production and some isn't. Once we see that the production of money is overdetermined by its demand, itself overdetermined by both fundamental class process producing commodities and potentially consumers, the linkage between money's creation and the production of a commodity becomes a murky and less useful definition.

The benefit of the thin definition is that it allows us to think of any monetary regime as overdetermined by money's real, imaginary, and symbolic dimensions - provided we think of these terms in a Lacanian sense. This is what Goux proposes to do but moves away from in the attempt to character certain regimes as more real, symbolic, or imaginary. From an overdeterminist perspective, it is not a matter of more or less since any monetary process is constituted by its others. We may still speak of the idea that "a particular type of money is actually more or less real" as a cultural condition of existence in a given conjuncture, but that is an entirely different type of claim.

This thin definition, in tandem with the overdeterminist understanding of the RIS, reverses (and ultimately deconstructs) the binary of commodity and non-commodity money. We may still minimally speak of such a distinction, and consider the complicated effects associated with a monetary object that is (not) produced in a fundamental capitalist class process, but the methodological baggage in which a real form and function of money is asserted is left behind. Instead of tracing back the essence of modern money to a simpler and more directly real gold regime, we use the

apparent complexities of contemporary monetary-financial processes to shed light on the always already overdetermined character of money.

CHAPTER 4

MARXIAN ECONOMICS AND NON-COMMODITY MONEY

4.1 Introduction

Despite money's prominence within Marx's own writings, the topic has been treated in an uneven and irregular fashion in the work of Marxist scholars. For many years the Marxist theory of money, a presumedly Metallist or commodity view of money, was virtually ignored. However, over the last few decades money has become a popular topic of Marxist research. Indeed, Marx's theory of money has gone from being an outdated embarrassment to one of the highlights of the Marxian approach.[1] The earlier hesitancy to deal with money undoubtedly had something to do with the critical role of commodity money in the Marxian tradition combined with the breakdown of the gold standard. Similarly, the emergence of money as popular research topic has been influenced by the gradual acceptance of the compatibility between Marxian economics and non-commodity money. Nonetheless, the problem of precisely how to incorporate non-commodity money continues to be a feature of Marxian monetary research.

Non-commodity forms of money - i.e. fiat or credit - have long been a problem for Marxian economics. In this, Marxian economics is hardly different from other traditions that have their own contradictions, lacunae, and ambiguities in the treatment of

[1] Crotty (1985) argues that money is both central to and a strength of Marx's analysis. In the last few years Marx's theory of money has been the subject of an entire collection (Moseley, 2005a). Contributions on money account for over half of the contributions to volume 1 of Bellofiore's collection of essays on Volume III of *Capital* (1998a).

money. The existence of non-commodity forms of money has troubled Marxian economics in a variety of respects. The conceptual apparatus surrounding value theory, the relationship between money and output,and the development of commodity exchange and money represent a few theoretical cases typically characterized by metallic commodity money assumptions. Relaxing this assumption has produced a two-fold problem. Without gold money, do these concepts and theories fall apart? If not, how are these theories transformed through the inclusion of non-commodity money?

In the previous chapter I produced an overdeterminist critique of the realist dualism dualism based on the tensions in Marx's theoretical work on money.[2] The overdeterminist theory of money this critique produces undermines the hierarchical relationship between money's real, imaginary, and symbolic functions and forms. Here I will show how Marxists have traditionally made sense of the tensions concerning the reality of money in Marx's text. The ambiguity in which an essential real form of money is asserted, but also undermined, is central to the monetary problematic. However, due to the influence of a productivist variant of the realist dualism, it is the former essentialism that has dominated over the various postmodern moments in the formulation of problems (and solutions) surrounding non-commodity forms of money. One consequence of this dualism is the privileging, historically and logically, of commodity money as the *real money* that articulates the less real sphere of exchange to the real realm of production.

This essentialist dualism has overdetermined two general problems created by non-commodity money. In the first case, the realist dualism is in part responsible for the rejection of the compatibility of Marxian theory (or some significant feature

[2]The "realist dualism" is discussed in detail earlier in the dissertation. Due to the reoccurring importance of some conception of the real, I refer to this ontological tendency as the realist dualism. It is not a position on the classical dichotomy or neutrality of money, but rather the broader epistemic conditions of these problems themselves. In other words it does not operate on the level of specifying the relationship between the real and monetary (of which there are multiple approaches), but rather in the distinguishing between a real and a monetary as ontologically distinct in the first place.

such as value) and non-commodity money. This rejection has at least two possible results. Marxian theory may be abandoned in response to the existence of non-commodity forms of money. Alternatively, Marxian theory may be defended and the empirical phenomena described as non-commodity money reinterpreted as something other than money (Germer, 1997, 2005). Secondly, if this compatibility is accepted, the privileging of the real over the monetary may influence the way non-commodity is incorporated into Marxian theory.

This chapter is not meant to be an exhaustive genealogy of the concept of money within Marxian theory. Because money is used as a metonym for both the economy in general, and aspects of the economy (exchange, commensurability, etc.), many nominally *monetary* discussions are beyond the bounds of this chapter. I will primarily focus on texts that engage the theoretical-methodological problems posed by non-commodity. I begin with Hilferding's analysis of the necessity of money and its various forms. Hilferding's monetary theory offers a path for a Marxian theory of non-commodity, but also warns us not to take it. His theory contains ambiguities and tensions. On one hand, he proposes a way to link non-commodity money to value. On the other, the influence of a Marxian realist dualism undermines this link as tenuous (less-real) relative to commodity money.

The discussion of Hilferding allows us to then frame more recent work, beginning in the late 1970s and early 1980s, on Marx and money. In surveying this work I will argue that despite significant theoretical heterogeneity, shared commitments to an essentialist dualism of real (production) and monetary (distribution) impede Marxian attempts to link non-commodity money to value theory. This is of concern because as long as the two are not brought together, the Marxian economist faces a choice - non-commodity money *or* value theory? Indeed, while there are significant exceptions, one tendency in the literature is for (1) those that embrace non-commodity money to abandon value theory for what I call the "Marx as a minor Post-Keynesian" view,

and (2) those that insist on value theory to struggle incorporating non-commodity money.

4.2 Money and Moonlight: Hilferding

Hilferding's *Finanzkapital* (1981), in particular the first part on money and credit, is the classic contribution to Marxian monetary theory. Hilferding interprets Marx's development of commodity money as general equivalent in Volume 1 of *Capital* and theorizes different forms of non-commodity monetary systems.[3] Hilferding begins his discussion with the necessity of money. Money is presented as an inevitable development of commodity exchange and is, at this level of analysis, "like any other commodity" in terms of having value (1981, p.33). Hilferding is quite clear on both of these points and although he goes on to consider forms of non-commodity money it is important to remember that his entry point is the commodity. This tendency to theorize different forms of money as derivative of, or only comprehensible through, a real commodity money dominates much Marxist theory.

Morphologically, there is some similarity between Hilferding's necessity of money given commodity exchange and the evolutionary story told in neoclassical monetary economics texts loosely based on the Mengerian (1892) argument. Both see the economy as governed by a singular logic. For neoclassical economics this logic is individual rationality. When rational individuals exchange with each other money inevitably develops because it makes exchange more efficient. Instead of the character of individual decision making, Hilferding focuses on the logic governing the organization of productive activity within the totality of society. This can take two forms depending on

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[3] Many of Hilferding's positions on money can be found in Marx. Since Hilferding's interpretation, as a theory of money, is my interest here I do not make any attempt to deal with whether his specific arguments are faithful to Marx's original analysis. The reader can find my treatment of Marx himself on money in Chapter 3, but my emphasis is fairly narrow. A broader study of Marx's writings on money is Nelson (1999).

whether it is consciously organized or not. In the former case, we can understand the organization of production through the social entities in charge of regulation. In the latter case, where "production is a private matter," the social organization of production occurs through the "exchange of commodities" (1981, p.27). Here it is important to differentiate between "isolated" acts of exchange that may occur in any society without following any necessary logic and exchange as a "general and established practice" rendered necessary by generalized commodity production. For Hilferding, when exchange is necessary and general it must follow a logic governed by the requirements of social production and reproduction. In this case, exchange becomes "uniform...necessary...and objective" (1981, p.29). Part of the logic of commodity exchange is the isolation of one commodity as the general equivalent - money.

Hilferding's argument concerning the specific origin of money in commodity exchange is both vague and ambiguous. Although entitled "The necessity of money," this initial chapter primarily focuses on the necessity of unplanned but systematic commodity exchange in a capitalist economy. The critical point of how and why money inevitably develops out of this exchange is simply asserted:

> As all commodity producers engage in transactions...there emerges a pattern of numerous exchange equations by which commodities are paired off and their value measure against one another. In the development of this process, commodities gradually come to measure their respective values, with increasing frequency, by a single commodity, this making that commodity a general standard of value. (1981, p.32)

If the rest of the chapter seeks to clarify this point it only adds ambiguity. We are told that this necessity of money "arises from the fact that the social relationship of the producers (in a commodity production economy) is expressed as the price of their products" (1981, p.35). This explanation is very different from the first. In the first, when commodity exchange is generalized money develops. In this case, money

as the unit of account is a precondition of generalized exchange. Hilferding recognizes this tension himself - "While money is thus, on the one hand, a necessary product of commodity exchange, it is, on the other hand, the condition for generalizing the exchange of products of commodities" (1981, p.35). This tension could be resolved through a two-stage story in which money first developes out of an initial stage of commodity exchange and then enables a higher stage of fully generalized exchange. I do not, however, find this a satisfactory way to make sense of Hilderding. First, he does not characterize the unit of account function of money as a development out of the existence of money as this two-stage narrative does. On the contrary, money is made necessary by the need for it to express prices. For Hilferding, money fulfills rather than produces the socially necessary function of a unit of account. Second, it raises a variety of questions concerning the character of this lower stage of commodity exchange that find no answer in Hilferding's analysis. Instead, Hilferding discusses isolated acts of exchange (accidental and irregular and therefore not able to produce a universal equivalent) and uniform generalized exchange (which ultimately supposes a universal equivalent). Finally, it begs the question of how money develops out of this lower stage of commodity exchange. In other words, we are still left with the vague assertion that when people exchange commodities one of these commodities is singled out as the general equivalent.

Ultimately, the best way to make sense of Hilferding is to recognize, as oppose to resolve, this tension. Money (as well as credit and finance) is to be recognized for its importance and influence in a capitalist society against claims that it is a mere veil. At the same time, its character and role is to be explained through the ontologically firm ground of real commodities with value. Tending to both of these goals, within a determinist framework, makes descriptive accounts of the constitution of money (which is at times recognized to be constitutive as well) difficult if not impossible. Instead, the "necessity" of money follows from the logic of a commodity-producing

economy and is not to be identified in any particular social or economic process. Money must develop spontaneously. The alternative would be to locate the origin of money in conscious planning but this must be rejected given Hilferding's view of capitalism. Hilferding's capitalist economy is by definition unable to consciously regulate and organize itself. The "supreme conscious organization" in capitalism is the state, but given the priority of the economy, its role in the creation and management is relatively passive and limited (1981, p.36).

Money is a real commodity with value at this level of analysis, but it not a commodity like any other. Despite the initially passive role of the state, Hilferding recognizes that varying political-economic institutional arrangements (free and suspended coinage, convertibility, etc.) must be taken into account when theorizing money. In doing so Hilferding does not commit Bortkiewicz's error of treating money like a typical commodity with a price of production abstracted from the mediating role of the state.[4] In addition, the money commodity is unique in that it can be replaced by non-commodity tokens in some circumstances.

Although real money is not itself a conscious social product, representations of real money can be produced by the state. And while real money can not be arbitrarily chosen, as it is determined by the economy, the "state can designate any token...as a representative"(1981, p.38). The problem here is that tokens of money may be non-commodities without value. In this case the relative form of value, or the price form given the existence of money (1976, p.163), becomes meaningless. The price, as the relative form of value, expresses the ratio between the value of a commodity and the value of the money commodity. Here the value of the latter can be zero. Nonetheless, money is understood to express or represent the value of commodities. The question is how to understand this expression. In the Marxian tradition there

[4]See Moseley(2005a) for a critique of Bortkiewicz's treatment of the gold industry.

have been two solutions. One possibility is to view non-commodity money as a simple representative of the value of commodity money - typically gold. In this case a ratio of paper money in circulation to some quantity of gold (typically the amount that would have been in circulation). Hilferding's alternative solution is what he calls the "socially necessary value in circulation" (1981, p.47). Instead of linking the *value* of non-commodity money to a particular commodity, it is tied to the total value of commodities in circulation.

Cutler, Hindess, Hirst and Hussain (1978) argue that both of these solutions are inadequate. In their view, there is no real difference between using one commodity and using all commodities. Both solutions calculate value in a way that changes the meaning of value itself along the lines of Smith's command theory of value. There is indeed an important similarity between these two approaches but Cutler et. al. seem to miss it. Formally, given the traditional causality governing prices and money in Marxian literature, these solutions may amount to the same thing. If the aggregate value of commodities in the economy determines the amount of money in circulation in a commodity money regime, Hilferding's position could be restated as - the value of non-commodity money in circulation is determined by the amount of gold that would have been in circulation given the circulation of commodities.[5] This equivalence is implicit in Moseley's (2004) derivation of the "monetary expression of labor" for non-commodity money.[6]

A problem with their critique is that they do not recognize how these solutions may transform the concept of value in Marxian terms, without lapsing into a bour-

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[5]This is a common interpretation of Marx's endogenous theory of money. See, for example, Mollo (1999) and Lavoie (1983).

[6]In general, the monetary expression of labor or value is the amount of currency units representing an hour of abstract labor. This framing of money within value theory is most likely due to Foley (1982) and the development of the new solution to the transformation problem. Kristjanson-Gural (2008) reviews the different approaches to this problem and offers his own. Again, I address this in Chapter 4.

geois notion of value. As formal solutions to the problem of money in Marxian theory they may even understate their similarity given their mathematical equivalence (with typical assumptions). However, as steps towards developing a a theory of money they are distinct. The derivation of the value of non-commodity money through gold maintains a privileged position for commodity money. Non-commodity money is nothing but the representative of a more real (even if now absent) money. The attempt to maintain a link to gold in non-commodity regimes is both (1) methodologically problematic in essentializing "real" commodity money and (2) increasingly impractical to theorize as argued by Foley (1983) given the monetary-financial developments of the 20th Century. Although Hilferding also grounds value in the commodity, in his case commodities in general as opposed to a single money commodity, I see it as theoretically progressive in that it opens up the question of the value of money to the totality of economic relations.

It is important to note that Hilferding himself is skeptical about a "pure paper currency." His solution to the value of such currency is used as an argument against its long run feasibility:

> [I]t also follows that a pure paper currency of this kind cannot meet the demands imposed on a medium of circulation for any extended period of time. Since its value is determined by the value of the circulating commodities, constantly subject to fluctuations, the value of money would also fluctuate constantly, Money would not be a measure of value of commodities; on the contrary, its own value would be measured by the current requirements of circulation...A pure paper currency is, therefore, impossible as a permanent institution because it would subject circulation to constant disturbances. (1981, pp.56-57)

Obviously, the conclusion need not follow Hilferding's premise and it is the premise that is most interesting here. For, although a pure paper money assumes a neutrality

along the lines of the quantity theory (an increase in the supply of paper increases nominal prices) (1981, pp.55-56), the form money takes is non-neutral. In other words, the various processes constituting the production and introduction of money overdetermine other economic processes. At this point, we lack the theoretical tools to seriously theorize this overdetermination. It must suffice to say that Hilferding was hasty in his conclusion that a pure paper money was impossible or necessarily destabilizing. The important point is that it assumes the (over)determination of the economy by the form of money as a problem to be solved.

Again, I want to assert the importance of recognizing the contradictions within the text. Hilferding offers openings, but his analysis is also constricted by the realist dualism. In a flight of lyricism, Hilferding offers us the following metaphor that is worth quoting at length:

> The proof that value is a purely social category is thus supplied by the fact that the value of paper money is determined by the value of the total quantity of commodities in circulation. A mere slip of paper, worthless in itself, but discharging the social task of circulating commodities, thereby acquires a value which is out of all proportion to its negligible value as paper. Just as the moon, long since extinguished, is able to shine only because it receives light from the blazing sun, so paper has a value only because commodities are impregnated with value by social labour. It is therefore a reflection of labour value which converts paper into money just as it is reflected sunlight which enables the moon to shine. The lustre of commodity value is to paper currency what the rays of the sun are to moonlight. (1981, p.40)

In one reading, this is a very crude case of the realist dualism. The moon's light, like money's value, is artificial. It appears to shine but it is really just reflecting the light of the sun. Money appears to have value but it is really just reflecting the value

of commodities. Despite the astronomical metaphors, the framework is reminiscent of the semantic model of the money-economy relationship.[7] Money represents the value of commodities by reflecting these values towards us. In a different possible reading, there is a deconstructive element at play. Money's semantic capacity is not based on its innate properties. In a sense, money's value is performative. There is nothing special about paper that allows it to represent value. On the contrary, the process of reflecting this value gives paper value as money. Even this reading could go in a number of directions. On one hand, this could be interpreted as another example of the superficiality of money compared to the depth of real commodities (the sun is real and the moon is a fake). On the other, an overdeterminist reading of the relationship between commodities and money in the process the reflection/representation would fundamentally alter how we view each.

Despite the doors opened by Hilferding, Marx spent much of the 20th Century understood as the metallist Schumpeter defined him as. Morris (1967) notes the silence on monetary and financial issues since Hilferding and Lenin. Without offering a theory of non-commodity money, he argues that Marx's orientation transcends Cartalism and Metallism, which are "one-sided" and based on, respectively, the "appearances of capitalist production in times of prosperity" and "times of trouble"(1967, p.116).

It is not until the late 1970s and 1980s that Marxian monetary research gains momentum with an increasing acceptance of the possibility of accommodating non-commodity money within the theory. This break from Marxian economics' commodity money history has not been without complications. First, resistance to the compatibility of non-commodity money and Marxian theory remains despite the historical and theoretical developments of the last few decades. Second, even when the possibility, and even necessity, of various types of non-commodity money is accepted,

[7] See Chapter 2 of this dissertation.

commodity money still often maintains a privileged theoretical position. While these complications are not problems, a priori, I do feel they impede the development of an overdeterminist theory of money.

4.3 Against a Marxian Theory of Non-Commodity Money

As we saw with Cutler et. al. in their critique of Hilferding, debates on money's relationship to the Marxian theoretical tradition is complicated by the various contestations and tensions that exist throughout the broader theory. Because there is not a single reading of Marx's labor theory of value, debates concerning whether this theory holds under conditions of non-commodity money are productive only to the extent that Marxian theory as a whole is considered. It is perhaps for this reason that the rise of Marxian monetary research coincides with the production of various reformulations of value theory "answering" the transformation problem (Lipietz, 1982a; Dumenil, 1983; Wolff et al., 1994). While theoretical work on value and non-commodity money will be dealt with in the next section, I want to start here with arguments that the two are incompatible.

Levine (1983) reads Foley's "On Marx's Theory of Money" (1983) as presenting a fork in the road. Levine's argument is interesting in that it resides somewhere in between rejecting the labor theory of value (as anachronistic due to the demise of commodity money) and reformulating the labor theory of value to take into account non-commodity money. As he frames it, the argument is more the former than the latter - "I attempt to isolate two polar, and decisive, options for the theory of money: one which involves commodity-money and the labor theory of value, and one which does not" (1983, p.20).

For Levine, the second path is the way to proceed on theoretical and historical grounds but it is unclear exactly how far we can follow Marx down this path. The relationship between money and value is fundamentally transformed in this second

option - “under the commodity-money option, money *has* value, while under the second option, money *is* value” (1983, p.26). While Levine does not explicitly rule out developing this second interpretation of money/value within a Marxian framework, he is clear that Marx’s own work is too dominated by a classical vision of commodities and value.

Lavoie (1986) makes a similar argument in terms that more strongly dismisses Marxian theory’s capacity to deal with non-commodity money. Lavoie emphasizes a disconnect between Marx’s specific arguments about the relationship between commodity and non-commodity money (i.e. circulating tokens represent gold) and contemporary economic reality. “It would seem that where paper money is inconvertible to gold and is the only medium of exchange in use, this necessary [according to Marx] connection between the mere token of value and gold is severed” (1986, p.167). For Lavoie, these specific monetary claims can not be pushed aside as Marx’s errors or imperfect foresight. They are *necessary* conclusions given Marx’s labor theory of value. He makes this point through Hilferding’s solution to the value of paper money:

> While Hilferding’s point seems well taken [that the value of paper money can be determined without commodity money] and indeed could be extended to the value of bank deposits and quasi-money, the question arises whether this conclusion is consistent with the labor theory of value, as Marx evidently thought it would *not* be. How is it that a worthless scrap of paper can directly represent value...And if this exception to the objective theory of value is granted, then why cannot gold money itself be analyzed as having exchange value because of its expected purchasing power...rather than because of its labor costs of production? But Hilferding does not consider his objections. His ‘social value in circulation’ hardly appears to be made of the same objective substance in which all

> other costs of production are measured: socially necessary labor hours (1986, p.167).[8]

Lavoie's use of the term "objective substance" is key. The reason Marx can not account for non-commodity money is that it is gold's *objective reality* that allows it to express the objective value embedded in commodities. Paper money, as one form of non-commodity money, is inherently subjective. Subjective expectations of a money's "purchasing power, imparts (subjective) value to it" (1986, p. 167). Lavoie argues that monetary economics must take into account the objective and the subjective. He ties this dualism to the distinction between the short and long run. Objectivity asserts itself in the long run, but in the short run - which must be taken into account - subjective factors are critical.

It should be clear that the objections and concerns of Lavoie and Levine are not insurmountable from an overdeterminist perspective. With respect to the two options put forth by Levine, overdeterminist solutions to the transformation problem seem to offer a specifically Marxian view of value compatible with his second non-commodity path.[9] Similarly, Lavoie's use of the objective-subjective distinction with respect to value is suspect from an overdeterminist perspective (Callari and Amariglio, 1989).

Another line of argument against a Marxian theory of non-commodity money accepts the basic arguments of Lavoie concerning the compatibility between the two - Marxian value theory and non-commodity money - but sides with the former. This position asserts that Marx's theory of money is a commodity theory and that this

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[8]I'm leaving the most provocative point in this passage for later. Lavoie criticizes attempts to incorporate non-commodity money into the labor theory of value for not reflecting back onto the functions of commodity money. I think there is an important truth in this argument. While I disagree with his argument that the labor theory of value requires commodity money, I fully endorse the idea that instead of deriving non-commodity money from real money, our theories of non-commodity money should be used to rethink what we accepted as true about commodity money.

[9]See Roberts (1981) and Wolff, Roberts and Callari (1994). Although this approach does not necessarily use non-commodity money the point I'm making here is that the notion of value developed is not at odds with non-commodity money.

theory is still relevant to contemporary capitalism. Any apparent disjunction between the two is the product of misunderstanding *Capital* or contemporary capitalism.

For Germer (2005), Marx unambiguously has a commodity theory of money. Furthermore, the recognition of symbolic, fiat, credit and imaginary forms of money are not grounds to question Marx's arguments concerning money. As Germer notes, "Marx maintains his conception of money as a commodity - and of gold in its final evolutive form - throughout his entire work, even after the analysis of the complex credit system of capitalism, in Part V, Volume III of *Capital*"(2005, p.23). In this reading of Marx, the partial replacement of gold with symbols is in fact part of the theory of commodity money and is therefore not grounds for questioning Marx's analysis. Consider the following passages from Marx:

> Paper money is a symbol of gold, a symbol of money. Its relation to the values of commodities consists only in this: they find imaginary expression in certain quantities of gold, and the same quantities are symbolically and physically represented by the paper. Only in so far as paper money represents gold, which like all other commodities has value, is it a symbol of value. (1976, p.225)

> The entire history of modern industry shows that metal would be required only to settle international trade and temporary imbalances, if production at home were organized. The suspension of cash payments by the so-called national banks...shows that even now no metal money is needed at home. (1981, p.649)

Read along the lines of Germer's treatment, it seems obvious that (1) Marx was well aware of non-commodity forms of money and (2) this awareness does not negate the necessity of commodity money in some form for some role. In the first passage, Marx recognizes both symbolic and imaginary monetary relations. The efficacy of

each is dependent upon a real gold commodity. Paper can not be money directly. It can only represent value through representing gold. Gold can only be partially replaced. The second quote suggests a different limit to non-commodity forms of money. In this case, paper (even indirectly) can only be money domestically.

For Germer, the limitations to the replacement of gold persist. They are not accidental features of particular periods of capitalism. As such, failure to recognize these limits, and the continued role of gold, lead to a number of problems. First, like Lavoie, he instists a commodity theory of money is necessary given the labor theory of value - "it seems accurate to say that the commodity nature of money is an inevitable consequence of the labor theory of value"(1997, p.53). Second, Germer claims that non-commodity theories of money can not explain periods of significant inflation. Here he seems to be making a point similar to Hilferding that a pure paper money regime is impossible. A measure of value that could act with radical invariance is not a real measure of value. Finally, Germer argues that rejection of Marx's commodity theory of money leads to a number of theoretical conflations. One critical conflation is between the notions of a measure of value and standard of price. Germer argues that "the dollar" and other currencies "are not money"(1997, p.51). They are rather standards of prices. Along the lines of Hilferding's interpretation once again, the standard of price may be arbitrarily set by the state but the measure of value is an objective feature of a commodity. Germer's charge is that this distinction has been forgotten.

Germer also discusses a conflation between Marxian and Keynesian monetary theory. In his view, the abandonment of Marx's theory of money opens the door for a Keynesian or Post-Keynesian theory. Once money has been retheorized/replaced the whole theoretical apparatus may be changed. Germer is worried about the "Keynesian concept of 'monetary economy,' almost replacing Marx's concept of 'capitalist economy'" (1997, pp.55-56). He does not cite examples but Hein (2002) is a good

illustration of this tendency. His outright objection to a commodity theory money of money in Marx concludes with a “Marxian monetary model” in the style of a “basically Kaleckian model” (2002, p.19). Matthews’ defense of Marx in his “The Modern Foundations of Marx’s Monetary Economics” critiques the idea that Marx is a minor post-Ricardian and also emphasizes the “fundamental but often overlooked affinities between Marxian and post-Keynesian traditions”(1996, p.62). While Hein’s modeling exercise and a recognition of overlaps and synergies between these two traditions are not without value, Germer does point to a real danger.[10] Marx shouldn’t be turned into a minor pre-Post-Keynesian in the process of saving him from the minor post-Ricardian status.

A final argument that Marx has a commodity theory of money accepts both (1) the lack of a legitimate commodity money in contemporary capitalism *and* (2) the correctness of Marx’s theory. This position has been put forth by Fleetwood (2000) and Kennedy (2000), both well-aware of the apparent contradiction. Their arguments for the commodity money interpretation of Marx are fairly similar to those previously discussed. It is how they make sense of this contradiction that is most interesting. Fleetwood interprets the disconnect as follows:

> If the analysis set out here is correct and money is a commodity, and if, furthermore, the contemporary capitalist system has abandoned commodity money, then one must at least consider the possibility that the system no longer has a universal equivalent. In other words, whilst the system

[10]Pollin (1994) might be an example of an underappreciation of Marxian and post-Keynesian overlaps. In this case the synergy between the two traditions has to do with their complementarity. Marxian theory adds the ‘role of political forces’ and ‘various factors within the real economy’ (1994, pp.108-109) to the analysis of the financial sector found in post-Keynesian theory, and vice-versa. While there is some truth to this characterization of these two traditions it overlooks the explicitly Marxian literature and theory on money and finance that does exist and in some cases does coincide well with post-Keynesian ideas. Where the two differ is not so much in the emphasis on politics but in the role of the labor theory of value and exploitation. This seems to be what Marxian theories of money and finance have to contribute and it is unclear that these themes can be added onto post-Keynesian approaches.

> still uses something called money, something that appears to be money, this something might not really be money at all. Appearances might be deceptive. (2000, p.189)

Fleetwood suggests a few research questions that arise from this surprising conclusion. A critical concern is to theorize how and why money itself (in its most real form as universal equivalent) would be abandoned in capitalism. Kennedy's contribution is primarily devoted to this question. He too accepts that "money cannot be a mere symbol" (2000) and asks how and with what implications mere symbols appear as money. His argument is that the existence of symbolic money (as money itself, and not simply as a stand-in for gold) is the product of an institutional-ontological shift in capitalism. The main thrust of this position can be made by returning to Hilferding. The commodity nature and origin of money in his presentation is based upon the assumption that production is not planned in capitalist economies. There is a fundamental difference between societies that consciously plan production and those that do so unconsciously through exchange relations. It is the nature of exchange relations, as the ultimate organizers of social production, that produces (1) an objective regularity to exchange and (2) the money-commodity. Kennedy argues that an institutional shift based on increasing "conscious regulation of social labour and money"(2000, p.196) produces an ontological shift regarding the form and content of value as socially necessary labor time. The result is that the money of unorganized market relations (commodity money) is increasingly replaced with the money of social regulation (paper or symbolic money). This move towards regulation has the contradictory effect of destabilizing the economy by undermining the real universal equivalent.

Without going into great detail on the philosophical assumptions underlying these arguments, the importance of the critique of the realist dualism should be clear. In almost all of these positions against a Marxian non-commodity theory of money

the identification of a real monetary form or function is central. Furthermore, this real form and function - typically the metallic gold form as measure of value - is isolated through reference to the real economy. Real money is commodity money with embodied value because the real economy is based on commodities with embodied value. This vision provides its own version of the labor theory of value in which a commodity as money is required to link the real world of commodities to the less real world of monetary prices. In partial defense of the positions taken by Germer and others, they do recognize the multiplicity of monetary forms and are committed to an explicitly Marxian analysis. My primary reservation is that the essentialisms of a real money and real economy needlessly limit the extent to which we can develop Marxian monetary theory. Interestingly, the realist dualism is reproduced in similar fashion in literature that purports to develop Marxian theories of non-commodity money.

4.4 For a Marxian Theory of Non-Commodity Money

Research on the Marxian theory of non-commodity money has often accepted the importance of commodity money. At stake is the specific nature of this importance. Campbell argues that "commodity money is a heuristic assumption"(1997, 106). In her classic *Marx on Money*, de Brunhoff argues that Marx's development of the general equivalent out of commodities is "really a general theory of money, since the form thus analyzed is what gives all money...its principal meaning"(1976, p.25) but also adds that an analysis of all monetary functions must be included to produce a "complete theory of money." In this case, the importance of commodity money is theoretical - it is the appropriate entry point into theorizing non-commodity forms of money. Finally, commodity money is often given historical importance. Lapavitsas is a clear proponent of the compatibility of non-commodity money and Marxian theory - "The intrinsic value of the money commodity is not critical to the rendering of value into price under capitalist conditions; there is no reason why valueless money

could not, in principle, facilitate the process of expressing value into price"(2000a, p.635). Nonetheless, commodity money maintains its importance in that "the function of means of exchange by commodity money indicates the path of development of the form of money, and roots the emergence of symbolic fiat money in commodity money"(2000a, p.635).[11]

For sake of brevity it is useful to group Marxian theories of non-commodity money into three general approaches. Since there are important differences within each approach, as well as overlaps between approaches, these should not be considered schools of monetary theory. I'll refer to the three as the monetary hierarchy, value-form and monetary circuit approaches.

The *hierarchy of money* approach is best characteristized by the work of de Brunhoff (1978), Lipietz (1982a; 1983), Aglietta (1979) and other members of the Regulation school.[12] The principle features include (1) a hierarchical structure of different forms of money and (2) an emphasis on money's role in the social validation of labor. Typically, the monetary hierarchy is structured with private bank credit on the bottom, central bank or state money in the middle, and international money at top. According to de Brunhoff, each level of the hierarchy or pyramid is part of reproducing money as the general equivalent.

The provision of credit to firms by commercial banks complicates the way in which money validates labor. Because the credit is not real commodity money the validation must be understood as antevalidation or pseudo-validation. In the traditional view, the validation of labor is a discrete event that either occurs or does not occur. If a product of labor is sold for a sum of gold commodity money a certain value, equal to the value of the gold, has been realized. In the case of antevalidation, credit is extended to capitalists to engage in productive consumption that may or may

[11]See Lapavitsas (1991) as well.

[12]For a detailed survey see Evans (1997).

not be realized. If realized, the bank is repayed, the credit is canceled and the process of antevalidation-validation proceeds smoothly. If unrealized, the loss is either realized by commercial banks or displaced somewhere else in the monetary hierarchy. Pseudo-validation refers to the case in which central banks validate the expansion of commercial credit. This differs from real validation in that no real values are realized, yet it is more than antevalidation because commercial banks are backed by the central bank and/or state. This pseudo-validation produces the possibility of inflation depending on the amount of actual real value produced.[13]

The monetary hierarchy does not necessarily require a *real* commodity money at top. It is nonetheless a possibility. Such model could just as easily be completed with either a real commodity like gold or a real social power such as the state (Foley, 1983, p.12).[14] Even in the more radical interpretations of the monetary hierarchy - in which symbols of value can come to fill the role of real money at least some of the time - commodity money remains important on historical and/or theoretical grounds. This is in contrast to the other two approaches that are more critical of the significance of commodity money in general.

The *value-form* approach bases their analysis of money on the distinction between value's form and content.[15] Discussing international money in Volume 3 of *Capital*, Marx refers to metallic money as 'the form in which it is not only the form of value but itself equal to the value whose money form it is"(1981, p.584). Typically, proponents of the value-form approach argue that it is form of value that is essential.

[13]There is a subtle but nonetheless important distinction between Lipietz's and others' usage of pseudo-validation. "They use 'psuedo' to mean that the values represented are not really validated. In the situation here, they still are not really validated, but they are treated as if they were, until they come to be...or not"(1983, p.104 fn.15).

[14]Without doubt, theorists like Germer, Kennedy and Fleetwood would argue that the economic influence of the state would be limited in the long run by its capacity to back itself up with real money. On the other side, neo-Chartalists would argue the opposite - commodity money was always already a product of the power of a state (Wray, 1998, Ch.3).

[15]See Reuten (1988; 1995; 2005), Williams (1992; 2000), Arthur (2004; 2005), and Taylor (2004).

Commodity money, money that has both the form and content of value, is "merely contingent" (Reuten, 1995, p.108). As such money can be theorized without reference to commodity money. Contra de Brunhoff, the theory of commodity money is not the general theory of money. This approach shares a concern for the social validation of labor (Reuten, 1988), but following Rubin (1972) places greater emphasis on the "constitution," as opposed to mere realization, of value in exchange. As we saw, strict objective notions of embodied labor value could not make sense of non-commodity money. Here, non-commodity money fits within the labor theory of value since its role is not to mirror a particular quantity of embodied social labor but rather to mark the commodity as demanded.

The *monetary circuit approach* is also influenced by Rubin (Bellofiore, 1989) and overlaps with the value-form literature, but is also shaped significantly by diverse traditions outside of Marxian economics.[16] Not surprisingly, the monetary circuit view of Marx on money is less concerned with interpretations of Marx's own writings. Emphasis is placed on how money in a capitalist economy can *not* be a commodity (Messori, 1997; Graziani, 1997). In a certain sense, the monetary circuit provides a model of capitalist dynamics consistent with a "monetary" interpretation of value.[17]

The circuitist argument follows from the specific way in which the theory of monetary circuit asserts the centrality of real economic time. The economy proceeds in sequential fashion. This is certainly part of the attraction between Marxists and the broader Keynesian-inspired monetary circuit tradition. However, unlike Marx's treatment of the circuits of money, commodity and productive capital (1978, Chs.1-4), theorists of the monetary circuit do identify a starting moment - the point at which the capitalist asks for an extension of credit in order to engage in production.

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[16]For a review of the theoretical foundations of the theory of monetary circuit see Bellofiore (1992) and Bellofiore and Realfonzo (1997).

[17]See Bellofiore (1989) on the concept of a "monetary labor theory of value."

The following summarizes the intimate link between their understanding of capitalist time and capitalist money:

> In a capitalist economy, the function of money is different in that money does not serve to circulate commodities already produced but to permit the initial purchase of labor power that will enable enterprises to proceed to the technical realization of production. When used in this way, money is not required as a permanent acquisition...but only as a temporary loan for the duration of the productive cycle. Once the cycle is completed, the money is recovered in liquid form and can be reimbursed to the financier or reused for a new productive cycle.(Graziani, 1997, p.38)

For circuitists, both the emphasis on real time as sequential and highlighting of the "initial purchase" are critical. In other words, it is not just the sequence but the beginning or entry point of the sequence that drives the theory. Firms make decisions to invest or not invest, funded by bank money that may or may not be advanced given the bank's expectations of profitability and risk. Production may then proceed given the extension of credit. This entry point is essential in a number of respects. In some cases, the differential access to credit from banks - that capitalists have access to credit workers do not - is taken as the key condition of existence for the capitalist-worker relationship (Bellofiore and Realfonzo (1997, p.99)Graziani (2003, p.19)). Furthermore, the choice of sequential entry point has bearing on the nature of money:

> According to this model, money is defined as pure credit; it is a symbol with no intrinsic value...Money cannot be a commodity because the purchase of labor power is logically prior to the production of commodities and therefore also to the production of the money commodity itself.(Bellofiore and Realfonzo, 1997, pp.99-100)

This essentialization of the entrepreneurs' decision to invest or not (and to therefore demand credit or not) is typical of Keynesian discourse, and foreign to Marx's own sequentialist approach. Indeed, Marx is critical of the way each circuit (money, commodity, productive) based theory accounts only for itself without recognizing the others - "[T]he entire circuit is the real unity of its three forms" (1978, p.181). In this sense, there is some truth to each of the circuits. What they lack is the ability to make sense of the others, or to see their own limits.[18] The monetary circuit is based entirely on taking into account its own starting point. Its starting point being unique is the premise of their argument concerning the nature of money. It also has immediate consequences for the determination of its value. Since it is logically a non-commodity, there is none of the Hilferding-type ambiguity. The value of money is what "itself can command" (ibid., p.100).

The monetary hierarchy, at least in some presentations, avoids this type of essentialism by insisting on the importance of each level and form of money. The primary limitation of the monetary hierarchy approach is the acceptance of the dematerialization narrative of money. This is a familiar story in which money was once very real and has gradually shed its reality/materiality (from metals to symbols to data on a computer network). The popularity of this narrative across time, that people have again and again dreaded that their unambiguously real money has become a fiction, seems evidence enough to doubt its claim. It is also problematic in terms of my critique of the realist dualism in that the emphasis of the novelty of new dematerialized

[18]As Marx states it:

> "In a constantly rotating orbit, every point is simultaneously a starting-point and a point of return. If we interrupt the rotation, then not every starting point is a point of return. Thus we have seen that not only does every particular circuit (implicitly) presuppose the others, but also that the repetition of the circuit in one form includes the other forms of the circuit" (1978, p.181)

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and fictional forms of money reifies earlier monetary arrangements as exceptionally real and natural.[19]

The value-form approach also eschews any crude essentialization of money, but it fail to provide a systematic anti-essentialist critique of the dematerialization narrative. An exception to this is Williams (2000) who explicitly attacks the naturalization of historical commodity money. It also solves the problem of the value of money through the circuitist essentialization of investment decision. It is not clear how this solution holds once one takes a Marxian view that all circuits of capital (beginning with the commodity, money, and production) should be understand in unity. The lessons gained by isolating one circuit are (unnecessarily) partial.[20]

4.5 Conclusion: Overdeterminism and Non-Commodity Money

Commodity money makes Marxian theory easy in some respects. When the monetary object is a commodity with value, its relationship to other commodities raises few problems. It is also compatible with a productivist view of the economy by providing a link between the real economy of production, technology, and value to the less-real sphere of exchange and prices. The problem of the articulation of ontologically distinct sphere is critical to all economic theories positing a realist dualism.

The ambiguities in Hilferding's account of non-commodity money is a symptom of this methodological problem. A modern new classical macroeconomist has little trouble with non-commodity money, because her "real economy" is not productivist. Instead, the monetary side of the economy is anchored through the expectations of individual "rational" agents. Get rid of these agents or question rationality and things become messy. Hilferding could relax his assumptions about commodity money, but

[19] For a historical critique of the dematerialization narrative see Melitz (1970) and Ingham (2004).

[20] Obviously, any knowledge is necessarily partial. I have used the qualifier unnecessary to highlight that this delimitation forecloses the possibility of integrating the lessons of one circuit with another.

not without hesitation. The solution of having money represent value of commodities provided an alternative link between the real and monetary, but he worried it would not act sufficiently well as an anchor. Still, the possibility of non-commodity money and a possible determination of value exists.

Recent literature on Marxian monetary theory shows similar symptoms when looked at from afar. Some scholars continue to doubt the compatibility non-commodity money and the labor theory of value. As we discussed this could lead to abandoning a theoretical commitment to one or the other. Other scholars have attempted to work out a theory of non-commodity money that is decidedly Marxian. What I have referred to as the hierarchy of money, value-form, and circuitist approaches all open the space for such a theory.

I have made some simple criticisms of these different approaches, but will turn to a more direct limitation in the next chapter. In the discussion of Hilferding, two views on the determination of the value of money were described. One in which money represents gold, and another in which it represents the aggregate of commodities (Hilferding's position). I will argue that despite much advancement on the topic of non-commodity money, Marxian theory falters on this point in two respects. First, even when breaking with the assumption of commodity money as an empirical necessity, it maintains a logical-theoretical privilege that shapes the theory of non-commodity money along essentialist (realist dualism) lines. Second, there is a reliance on valuing money in empirical ex-post terms consistent with the assumptions of value theory with a theorization of this determination. For example, even if we accept Hilferding's technique for calculating the value of money, we are not left with a theorization, or framework, explaining this value.

CHAPTER 5

THEORETICAL GOLDEN FETTERS: THE PERSISTENCE OF COMMODITY MONEY IN MARXIAN POLITICAL ECONOMY

5.1 Introduction: Real Gold Commodity Money

As the previous chapter outlined, the productivist understanding of the real economy has conditioned Marxian approaches to the questions surrounding non-commodity money. In some cases, the empirical possibility of non-commodity money itself is rejected - a rather orthodox position.[1] In others, non-commodity money and Marxian theory are incompatible, with the existence of the former potentially precluding the usefulness of the latter.[2] Instead of this outright rejection Marxian tradition, some have posed a partial compatibility in which aspects of Marxian theory, such as value and exploitation, are left behind. Sometimes this line involves presenting Marx as a precursor of Keynesian and the post-Keynesian tradition. Finally, others have embraced a general compatibility between Marxian theory and contemporary monetary institutions. In other words, the existence of fiat or credit forms of money does nothing to invalidate Marxian concepts related to value and class.

In this chapter I will make a specific argument about the last tendency. Broadly speaking, I endorse this position but it is not without potential problems itself. While

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[1] In Chapter 4 I discuss examples of this position including that of Germer (2005) who argues that non-commodity money is merely apparent with gold maintaining the role of real money. Alternatively, Fleetwood (2000) and Kennedy (2000) maintain an orthodox position concerning the necessity of commodity money by arguing that its absence has led to systematic instability and breakdown - the disappearance of commodity money proving its necessity.

[2] This is one variant of the ever recurring "Marx is obselete" claim.

I have argued that a productivist social ontology has conditioned rejections of non-commodity money, it does not follow that acceptance of a Marxian theory of non-commodity money necessarily represents a break from this ontology. In other words, a productivist ontology may persist within a discourse that embraces fiat and credit money. From an overdeterminist position, explicitly at odds with the realist dualism of which the productivist strand is one variant, this philosophical persistence is of consequence. I will show how attempts to theorize non-commodity money in a Marxian framework are marked by a realist gold commodity money logic. I explain the character of this persistence and its effects. My claim is that the legacy of commodity money, conditioned by the realist dualism, prevents Marxian economics from producing a general theory of money.

Questions over the generality of a theory of money beg the question of what generality means. What is a general theory of money? For de Brunhoff, generality concerns the range of applicability across (monetary) economic systems - "Hence a theory of money applicable to the capitalist system must be subsumed under a theory of money in general, valid for every monetary economy; in other words, a general theory of money" (Brunhoff, 1976, p.19). This approach involves locating the essence of money from which manifold monetary forms and institutions are derived. This is why she argues that we need a monetary theory of credit, and not a credit theory of money. Because credit is understood in the context of a developed capitalist credit banking system, it is particular (to capitalism) and therefore an inappropriate entry point for monetary theory.

My use of the term general moves in the opposite direction, producing a framework in which multiple aspects (forms, functions, etc.) of money are not reduced to a singular essence. In other words, I'm interested in a theory of money that is general in that it addresses the multiplicity of monetary forms, but also overdeterminist in that there is no reduction to a singular monetary essence. In terms of the opposition

between credit theories of money and monetary theories of credit, my approach rejects either attempt to locate the particular essence from which money in general is derived from.

I begin by detailing the way a commodity money logic persists through a discussion of the theoretical relationship between forms of value and forms of money based on the standard interpretation of Marx on money. As we pass through different forms of value/money we move from the case of a pure commodity money - absent even a denomination set by the state - towards the case of a pure non-commodity money - absent any physically present gold:

Simple Commodity ⟶ Metallic Coin with Symbolic Stamp ⟶ Simple Symbol

At each step of the way commodity money recedes from the scene. However, these two absences (of non-commodity elements in the beginning, or of a physical commodity at the end) are not equal. Due to the way we derive these forms, beginning from the original commodity money case, the logic of gold persists even in, or rather through, its absence. Commodity money influences, determines, or causes non-commodity money in a simple, unidirectional fashion. I refer to this as a "real gold commodity money logic" because it incorporates the following features:

1. The measure of value function is the real (essential) function of money.
2. Commodity money (i.e. gold) is the real (essential) form of money.
3. Other forms/functions, understood as symbolic or imaginary, are historically, practically, and theoretically derivative of real forms/functions.
4. The real economy, grounded in production, is considered independent of monetary processes; especially when theorizing the value of non-commodity money.

I then offer a critique of this logic. My critique is informed by overdeterminism but I will also show how the essentialism of the real commodity money logic is problematic even within a determinist perspective. This is because the assumptions involved in theorizing the value of money (in the cases of commodity and non-commodity) are both exceptionally restrictive and at odds with the non-neutrality view of money/finance widely shared by Marxian economists in general.

To make these limitations clear I turn to Marx's analysis of the dynamic consequences of a change in the value of commodity money. This tactic may appear contradictory. Why do I turn to Marx on commodity money in my critique of the derivation of monetary theory from a commodity money entry point? First, I do not argue that Marx's writings with commodity money assumptions are devoid of value. Rather, I argue against the positing of a *real money*, in which value as commodity and value as money are qualitatively and quantitatively identical, from which less-real forms of money can be derived. Furthermore, I use Marx's analysis to show that even in the context of a commodity money regime, the idealized logic of real commodity money breaks down. Even in Volume 1 of *Capital*, the strict determination of the value of money by the *real* value of the money commodity is a medium or long run outcome *dependent* upon symbolic and imaginary monetary functions.

Finally, I turn to theoretical alternatives. The project of developing an overdeterminist Marxian approach to non-commodity money (or money in general) requires a break from the productivist realist dualism, and with it the privileging of commodity money as more real than other forms. This break is not without risks and complications. Part of the reason a gold money logic has persisted in the Marxian tradition is that Marx himself warned against abandoning it. Gold money does play a role in linking questions of money and exchange to questions of class and production. The status of gold money as a commodity itself was exploited both theoretically and rhetorically by Marx in order to bring the object of class to the topic of money. An

overdeterminist Marxian monetary theory abandons the privilege of gold, but it does not abandon the entry point of class.

5.2 Forms of Money/Value

5.2.1 Price Forms, Plural

Marx develops a theory of money alongside a theory of the value-form in Volume 1 of *Capital*. He considers the money-form, or the price form, the most developed form of value. In the money-form, one commodity gains a "socially identified" monopoly as universal expression of value. At this point the relative values of commodities to the money commodity become prices. Simply put:

$$P_i = \frac{L_i}{L_g} \tag{1}$$

We can call this the gold price, with L_i and L_g being the socially necessary abstract labor time required to produce a good i and an ounce of gold, respectively. The units of this form of price are in ounces of gold. This particular form of value, qualified with the term money or price, assumes a form of money (ounces of gold). As we will see, once we change the form that money takes, the logic and units of the price form changes as well. However, we will also see that in the standard Marxian interpretation, this initial form premised on commodity money, plays a privileged role.

Marx immediately recognizes that even metallic commodity money rarely enters the economy without some denomination. When the state stamps coins they are given monetary units, supposedly corresponding to a quantity of embodied metal. In Marx's example, he says that if 2 ounces of gold are £2, anything valued at 2 ounces of gold would also have a price of £2.(Marx, 1976, p.163) More generally:

$$P_i = \frac{L_i}{L_g}\$ \tag{2}$$

I'll refer to this as the commodity money price, where $ represents the denomination for a unit of gold. Because this denomination is in the unit of dollars per ounce, prices are now simply stated in terms of dollars. This form of price becomes arbitrary in that it can be manipulated at will by the state. If the state decides to call a unit of gold by a different name, changing the standard of price, all commodity money prices will change. It would be a mistake however to take this indeterminacy of price as a sign of state power over the economy. It is only because strict gold prices (equation (1) above) are logically prior that these commodity money prices can be manipulated by the state. Changes in the standard of price are neutral with respect to values and the implicit gold prices.

This commodity money price is not much different from the gold price. Indeed, if the state's denomination corresponds to actual weights they may be identical. Even when this is not the case, as was historically common, it is straightforward to think about value and money from a simple Marxian perspective. Money has a real value based on production conditions in the gold industry, and a name declared by the state. Commodities will have a set of gold prices (based on ratios of socially necessary labor times), and a set of commodity money prices that are scaled by the denomination chosen by the state.[3]

At this stage it is unclear how these two forms of price could be used to explain non-commodity money prices. With non-commodity money the problem is not that a nominal value has been given to a quantity of gold (the case of coined commodity

[3]Of course, this matter is only straightforward because we are assuming a particular form of equal exchange that precludes the non-neutrality of the state's denomination. The debate between Lowndes, the British Secretary of the Treasury, and Locke over devaluation during the recoinage of the 1690s is the classic example of the practical and theoretical complexities involved in the relationship between a coin's name and material content. Lowndes (1695), favoring devaluation, privileged the dimension of the symbolic (the state's denomination) over the weight of circulating coins. Locke (1696), opposed to devaluation, promoted a *sound money* policy in which the names given to money are firmly grounded in their actual content. For more on Lowndes, Locke, and other significant contemporaries see McCulloch (1856, 1933), Shaw (1896), Vickers (1959), Horsefield (1960), Li (1963), Blaug (1964), Appleby (1976), Caffentzis (1989), Kleer (2004), and Hoppit (2006).

money). Instead, money itself appears to have no value at all. This leads to a distinction between money's value as money and its value as a commodity.

As Marx later suggests in Volume 3, these two "values" are may coincide but are theoretically distinct. This point is made most clearly in the context of the necessity of commodity money for international trade - "And for this purpose the money must always exist in its hoard form, its metallic embodiment; in the form in which it is not only the form of value but itself equal to the value whose money form it is" (1981, p.584). On one hand we have the value of which money is a form/expression of, and on the other we have money's value itself. The former is what I call value as money, and the latter the value of as the money commodity itself.

First, we should clarify the equality of money's value as money and as commodity in the instance gold or commodity money prices. Consider the case of a gold-based monetary economy that is operating at a given level of use-value output. Given the value of output in prices and the value of output in labor time, the value of money (v_m) is straightforward.[4]

$$v_m \equiv \frac{\sum L_i}{\sum P_i}$$

This is definitional since the value of money is understood as the amount of labor time represented by a unit of money.[5] If a commodity with a SNALT of X, sells for \$2 each dollar expresses the value of a half-hour of labor. Defined this way, this equation is independent of any assumptions concerning the form of money or the

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[4]See Kristjanson-Gural (2008).

[5]Fine et al. (2004) argue that viewing the value of money as definitional is a weakness produced by the "New Interpretation" of the transformation problem. From their perspective the elements of value theory should be proven or derived in some fashion. The New Interpretation fails for being too definitional. While we should avoid presenting definitions as more than they are, my position is that it impossible to avoid definitional concepts themselves. There is no way we can empirically prove, or theoretical derive, the concepts of value theory ex nihilio. The critique of money in the New Interpretation from Fine, Lapavitsas and Saad-Filho will be addressed later.

determination of prices.[6] Now, notice that if prices follow the logic of equation (1) the value of money has to be equal to the value of the money commodity. Substituting the ratio of commodity values to the value of money commodity for prices we get:

$$v_m \equiv \frac{\sum L_i}{\sum P_i} = \frac{\sum L_i}{\sum (L_i/L_g)} = L_g$$

The value of money (how much value money expresses or represents) is equal to the value of the money commodity. A similar result holds given the logic of equation (2), except we also have to account for $ as the state's denomination. However, while the determination of the value of money does not depend on any assumptions, its equivalence with the value of the money commodity certainly does. In other words, the identity expressing the value of money is simply definitional, but its relationship to the value of the money commodity depends on the assumptions implicit in price-form. This is true for both commodity and non-commodity monetary regimes. In the former case, even an economy with commodity money could exhibit a distinction between its value as a commodity and its value as money if prices deviated from equations (1) and (2).[7] In the latter case, even in an economy with fiat or credit money with zero, or negligible value as a commodity, we can still theoretically calculate its value as money.

These two cases pose very different problems for Marxian theory. With commodity money, the inequality of v_m and L_g may be viewed as accidental. With

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[6] I should clarify that the difference between P_i and L_i does not in any way suppose a dichotomous notion of prices and values, but a distinction between units. However, as we will see, the standard theorization of non-commodity money implicitly posits a dualism between logically prior commodity money prices based simply on values and non-commodity prices.

[7] For example, imagine prices differed from the standard price-form by a factor of Θ: $v_m \equiv \frac{\sum L_i}{\sum P_i} = \frac{\sum L_i}{\sum (\Theta * L_i/L_g)} = L_g/\Theta$ Now the value of money differs from the value of the money commodity according to the factor of Θ. I don't want to address the plausibility of such an economy or exactly what it would imply for our theorization of value (in some way this would represent a break from the simple Volume 1 presentation). The key point I want to make here is decoupling of money's value as commodity and as money is contingent upon price form assumptions in the case of commodity money but necessary in the case of non-commodity money.

non-commodity money it is necessary (since L_g would be approximately 0), so an alternative theory of the relationship between the two is unavoidable. One possible path to theorizing non-commodity money is to radically break with the logic of commodity money (and the assumption that L_g determines v_m) . At least part of the reason this has been a rarely chosen direction in the Marxian tradition is that Marx himself attempts to deal with convertible and inconvertible paper money as extensions of the gold price model.

With convertible paper money, gold prices are still logically fundamental. As in the case of commodity money, the state's ability to manipulate prices is dependent upon the already existing set of labor time ratios between goods and gold. In the previous case, the state can directly influence the standard of price. Here, they can decide how much money will circulate. This quantity in circulation (M^S) influences prices given the quantity of gold (G) they are backed by. The idea here is that money in circulation has value because it can be exchanged for real money. This convertible money price is now determined as follows:

$$P_i = \frac{L_i}{L_g} \frac{M^S}{G} \tag{3}$$

Marx suggests that inconvertible paper money operates in a similar fashion. However, instead of representing a quantity of gold actually available for conversion, the gold that circulating paper stands in for is the quantity of gold that *would* circulate in a commodity money system (G*). This final price form can be expressed as follows:

$$P_i = \frac{L_i}{L_g} \frac{M^S}{G^*} \tag{4a}$$

Because G* is determined by aggregate socially necessary labor time of circulating commodities this can also be rewritten (as in Moseley (2004)). In Volume 1 Marx argues that the quantity of gold money in circulation is endogenously determined. Given an output of use-values with socially necessary abstract labor times and the

value of money, we can derive commodity money prices. Then given a velocity of money we can derive the necessary quantity of money. This endogenously determined quantity of circulating gold money is then:

$$G^* = \frac{\sum L_i}{L_g V}$$

Substituting this into 4a gives us 4b.

$$P_i = L_i \frac{M^S V}{\sum L_i} \tag{4b}$$

Given the assumptions we have been making, formulations (4a) and (4b) are quite similar but may represent very different approaches to non-commodity money. In each case the value of money, valueless in itself, is anchored to the real economy. They differ in the anchor. In (4a) the anchor is an empirically absent real commodity money. This solution operates primarily on the level of the imaginary, in that the value of money is grounded in an image/idea - G*. As we saw in Chapter 3, this is an important monetary dimension for Marx. Even in a commodity money regime, the assignment - but not determination - of prices is imaginary in this sense. Solution (4a) prioritizes this element of money, as if in a non-commodity regime the image/idea of a commodity money may still be regulative. Prices are reflections of this image/idea.[8]

The approach taken in (4b) is based on what we would call the symbolic dimension of money. As with the imaginary, the symbolic is a dimension of money Marx mentions frequently. The anchor involved here is primarily symbolic in that money has a value because it *represents* the value of commodities. By exchanging places

[8]While this point is somewhat abstract, forms of imaginary/ideal money are also historically common. Speaking of 7th Century Middle East, Cipolla (1967) notes that, "because the coins that circulated among Moslems and particularly the Persian silver *dirhem* were of very different weights, people began to refer to ideal standard units of account representing fixed weights of gold or silver" (p.19). Similar stories can be told later in Western Europe - "nobody for centuries ever saw a real pound, for the simple, but paradoxical, reason that the pound during the greatest part of its life did not materialize into a real, visible, and touchable coin" (ibid., 38).

with commodities of value in market transactions, the otherwise valueless money in circulation comes to (re)present their value.[9] It is in this sense that (4b) is based on a symbolic (representative) notion of value. In either case we are not speaking of a purely imaginary or symbolic money. Instead, the terms imaginary/symbolic qualify the link between a less-real money in circulation and real commodity money. This real money may not circulate or even physically exist, but it is nonetheless real in the sense of anchoring epiphenomenal forms of money to the economic ground of values.

5.2.2 If commodities could speak

These price-forms suggest determinations of v_m for alternative monetary regimes. Gold, as the special money commodity, determines the value of money in some form in all but case (4b) in which the value of money is grounded in the value of commodities in general:

$$\begin{aligned} v_m^1 &= L_g \\ v_m^2 &= \frac{L_g}{\$} \\ v_m^3 &= L_g \frac{G}{M^S} \\ v_m^{4a} &= L_g \frac{G^*}{M^S} \\ v_m^{4b} &= \frac{\sum L_i}{M^S V} \end{aligned}$$

Even in this relatively straightforward analysis we see that there are a multiplicity of value-forms corresponding to different forms of money. Different types of money express prices in different fashions, following a slightly different logic. In each case, price *answers* the question of value in a slightly different fashion. The simple gold

[9]The linguistic analogue would be the manner in which the use of a word affords it meaning.

price (1) answer in terms of a quantity of gold. Price *says* that some commodity is worth X ounces of gold. The commodity money price (2) speaks in the terms of the state's name for this quantity of gold. We have a shift in units. Now the price tells us the monetary name for quantity of gold the commodity is worth. The price $X, for example, is simply the name for a quantity of gold with an equivalent SNALT to the commodity.

Moving to the case of convertible paper money (3) we continue to use the state's denomination, but it does not directly reference a quantity of gold. Instead, the price tells us the quantity of notes the commodity is worth based on a rate of conversion. A price of $X now says that the commodity is worth the quantity of gold $X can be converted to. Prices based on the value of money as presented in (4a) operate in a very similar fashion except now this process of conversion operates on an imaginary level. Currency can not actually be converted with gold at a guaranteed rate, the social image/idea that it stands in for a quantity of gold is what allows it to operate as money.

Again, case (4b) is meant to capture the same institutional conditions as (4a) but from a different perspective. In this final case, there is no recourse to gold. Instead the totality of value produced in the economy grounds the value of money. Previously price answered the question of value in relation to gold that was either part of the exchange process, vaulted away, or imagined. Now price answers in relation to the aggregate production of value. Now price tells us how much of the total value produced in the economy a commodity possesses.

What all these forms share in common is that in each case price is a function of socially necessary labor time and the value of money.

$$P_i = L_i \alpha_i \frac{1}{v_m} \tag{5}$$

This equation represents three simple determinants of a commodity's price. These prices are stated in monetary units so we need to include the inverse of the value of money (v_m) as a scalar. Second, price will depend on the socially necessary abstract labor time required to produce a good (L_i). This is insufficient to explain prices, even in the long run or "on average," because there are different pricing regimes. For example, the prices produced through an equalization of the profit rate - prices of production - involve a redistribution of value in which some goods will have lower/higher prices relative to the Volume 1 equal exchange prices. Alternatively, use-values produced in monopolistic industries may be sold above value (Resnick and Wolff, 2006, Ch.10). These deviations are captured by α_i.[10] In the case of simple equal exchange its value is 1. The determination of α is complicated in that it varies according to the pricing regime and the particular commodity. These complications are beyond our concerns here. My interest is merely to note this one dimension through which prices may vary, and I use α as a catchall for all these variations.

Historically, deviations from the Volume 1 theory of price within Marxian theory have been centered around prices of production and the transformation problem. Again, this could be understood in terms of theorizing α. For example, in the case of prices of production, instead of a good being exchanged for its own SNALT, it exchanges for the SNALT that equalizes profit rates across industries. In the case of monopoly, the good exchanges for a greater quantity of SNALT. However, even in a deterministic framework, the monetary expression of value is just as important in the determination of prices. Why then is it (relatively) ignored?

The short answer is that changes in the determination of v_m are understood to be neutral in a number of respects. Real prices, understood in terms of price ratios or

[10] Or, in matrix terms, the $(1 \times n)$ vector of money prices, P, would be the product of a $(1 \times n)$ vector of labor times and a diagonal matrix representing value redistribution, multiplied by the inverse value of money scalar.

value terms, are independent of which of the five equations - corresponding to different forms of money - we choose. The same could be said of other critical variables of the Marxian tradition such as the rates of profit and exploitation. This neutrality is in part an outcome of the persistence of a gold-money logic throughout the different monetary forms. The novelty of the different forms of price is domesticated by a particular logic based on the gold price that runs through the derivation of the value of money in the commodity, convertible, and inconvertible monetary cases.

Another way to think about this neutrality is to note that both L and α are assumed to be independent of the value of money, except in the case of a gold commodity money where the value of money can influence labor values because it is itself a simple labor value (L_g).[11] In other words, once we think of money as something other than a simple commodity produced in the real economy, it becomes secondary. Whereas L on the whole, and/or L_g in particular, help determine the value of money in non-commodity cases, labor values and redistributive processes (i.e. prices of production, monopoly, etc.) are independent of non-commodity money's qualitative form or quantitative value.

That this particular manifestation of the realist dualism is flawed may go without saying. It is uncontroversial, at least largely within the Marxian tradition, to hold that the development of credit, and distributions of surplus value to credit/money creating processes, can influence the scale and scope of production. However, as I will argue in the next section, this interaction - whether understood as deterministic or overdetermined - is bracketed when theorizing the value of money in Marxian terms.

[11]It may also be subject to the equalization of profit process (Kristjanson-Gural, 2008) or monopoly prices.

5.3 Gold, Value, and Output

5.3.1 What makes a monetary theory Marxian?

The insignificance of different determinations of v_m could be understood as a neutrality of the money-form. As we will see, this particular neutrality is closely linked to a neutrality of the quantity of money.[12] This presents a complication for proponents of Marxian theory. On one hand, Marx's approach to the economy is often taken to be superior to traditions that accept a neutrality of money. The endogeneity of money - that G^* is determined by production relations - is sometimes put forth as a more rich and realistic theory of money than the simple exogenous supply of money assumed in the quantity theory of money. On the other hand, this very endogeneity of commodity money, in combination with standard assumptions about non-commodity money, leaves Marxian theory in a very similar place as the quantity theory. Note that in equations (3), (4a), and (4b) the results of an increase in the money supply are identical to the textbook quantity theory case - output stays the same and the aggregate price level increases uniformly.

How then do we maintain the superiority of a Marxian theory of money over theories that produce similar results? Carchedi (1991) and Moseley (2004) offer very similar answers that nicely illustrate the particularity of standard Marxian theory. For our purposes here we can read Moseley's "MELT" as our v_m.

> A change in the quantity of paper money, inasmuch as it is not (de-)hoarded...does affect money prices. However, this effect is not due to

[12]The neutrality of money usually refers to the money supply but there are actually a number of ways in which money may be neutral. First, the existence of money may be neutral. There is no fundamental difference between a monetary and barter economy. Second, the form taken by money may be neutral - commodity, credit, and fiat monetary economies are not fundamentally different. Finally, the standard neutrality of the quantity of money - changes in the amount of money do not influence real variables.(This final neutrality could further be differentiated into claims about the money stock or its rate of growth). These neutralities may be ontological claims and/or methodological approaches. Neoclassical economics tends to insist on the superiority of monetary to barter systems, but nonetheless embraces the first form of neutrality methodologically. The third form of neutrality is often accepted as an ontological claim about the (long run) economy.

> money as a means of circulation but to money as a measure of value, given that the value - purchasing power - of money changes. The difference between the monetary and the Marxist view is not that the latter denies that an increase in the money supply can have an (inflationary) effect on money prices. The difference is that in the Marxist view this effect is due to money as a measure of value, rather than as a means of circulation. This is far from a pedantic point. If, as in the quantity theory, money is simply a means of circulation, money prices are not a symbol of value. This theory, then, severs the link between production of value and money prices. (Carchedi, 1991, p.166)

> However, this extension of Marx's theory is still significantly different from - and superior to - the quantity theory...in important respects: (1) the quantity of money does not determine prices directly, but rather indirectly through the MELT; (2) the necessity of money in a commodity economy is explained; (3) not only is the general price level explained (by the MELT), but individual prices are also explained; and, most importantly, (4) Marx's theory of money also provides the basis for a theory of surplus-value and for a theory of the dynamics of capital accumulation. (Moseley, 2004, pp.9-10)

These passages share my interest in terms of the relevance of value - and by extension surplus value and exploitation - in the context of an economy with non-commodity money. However, they distinguish Marxian economics from the essentialism of the quantity theory through a competing (Marxian) essentialism based on the measure of value function of money. In each case, the link between non-commodity money prices and value depends on the priority of this function. Furthermore, each theorizes the value of non-commodity money along the lines discussed in previous section.

There is a double-sided problem in this approach to the value of money. On one hand, this understanding of value and the primacy of the measure of value function involves an (implicit) undertheorized notion of money as a means of exchange. The exchange role of money is largely assumed away in an essentialist hierarchy of functions. As we will see, this is not only problematic from an overdeterminist perspective but involves a theoretical schizophrenia in which money is neutral (in its quantity with respect to output) when talking about value but non-neutral when discussing crisis.

According to Carchedi and Moseley, money as a means of exchange has no direct influence on prices. Instead, an increase in the quantity of (non-commodity) money will coincide with an increase in prices because of a decrease in the value of money. The inflation is not the product of more money "chasing" the same amount of commodities in the marketplace but rather the effect of money having less value. In terms of the value of money as defined in (4a) or (4b), M^S has increased but G^* or $\sum L_i$ has stayed the same - two ways of saying that output does not change. This assumption is restrictive, but also critical to this prioritization of the measure of value.

Consider the following very basic example where we relax this assumption. Imagine an increase in money, carried out by Friedman's helicopters, creates extra demand that is promptly met by increased output - more use-values and more aggregate value.[13] This is a relaxation of the assumption because money is having a direct effect in the economy in its role as a means of exchange. While this increase in output is far from a necessary consequence, it is also not a completely absurd hypothetical. Therefore, we should expect Marxian monetary theory to make some sense of it.

If the means of exchange function is really secondary, and the measure of value has logical priority, how do we calculate the value of money after this event? We

[13] I do not think the helicopter drop is the best metaphor of monetary policy, but it is a simple example. My point here is to interrogate how this measure of value essentialism would make sense of such a simple phenomena.

need to know the quantity of money and the level of output in value terms (giving us G^* or $\sum L_i$ corresponding the (4a) or (4b) above).[14] The quantity of money has unambiguously increased but we have two options for thinking about the latter. Both lead to theoretical difficulties.

Option 1: It might seem obvious that if we want to talk about the change in the value of money we need to take into account the increase in output. Inserting the value of money (4b) into equation (5), the price for a commodity after the increases in the initial M^S and $\sum L_i$ would be:

$$P_i = L_i \alpha_i \frac{M^S + \Delta M^S}{\sum L_i + \Delta \sum L_i} \tag{6}$$

The ultimate effect on prices depends on the size of the changes. If the percent change in money supply is greater than the percent change in output, prices will rise. If the percent change is the same prices also remain the same. Finally, in the case where production (and purchase of these commodities) increases by a greater percent (remembering we are assuming a fixed velocity just for simplicity) prices must decrease.

This is all very straightforward and doesn't appear to present any immediate theoretical trouble. Given, the assumptions we have made our calculation of the value of money would be consistent with prevailing prices. This is however precisely the problem. The approach *works* but we have used money as a means of exchange in determining the value of money. Remember, that $\Delta \sum L_i$ is the effect of money acting as a means of exchange. This approach undermines the supposed priority of money as a measure of value. This measure of value function can not simple determine money's ability to operate as a means of exchange since we took into account the latter to determine the former.

[14] I am assuming velocity stays fixed at unity for simplicity.

This first option is problematic, despite working, because it doesn't proceed along the lines suggested by Carchedi and Moseley. This doesn't mean that a specifically Marxian approach - in their terms based on the essentialism of the value of money over exchange - couldn't work as well. Perhaps we just have two, equally consistent, but theoretically distinct ways of approaching this question.

Option 2: Because we think money as a means of exchange is secondary to its value we leave its effects aside. This means we need to determine the value of money. Once we have the value of money, we can determine prices and then how money operates as a means of exchange. Because $\Delta \sum L_i$ was a direct consequence of the means of exchange function, it shouldn't go into the determination of money's value and prices.

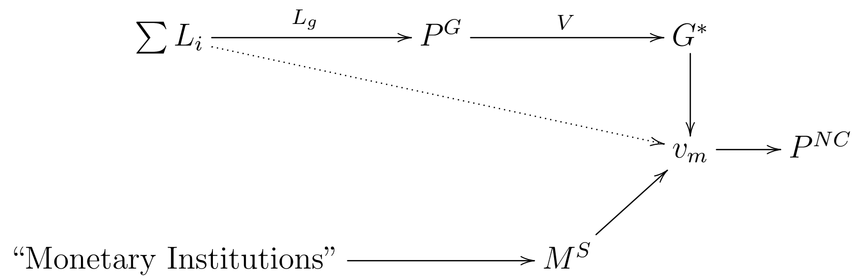
$$P_i = L_i \alpha_i \frac{M^S + \Delta M^S}{\sum L_i} \tag{7}$$

The result is an unambiguous decrease in the value of money, and increase in prices. Or, the change in the value of money has weakened the ability of money to act as a means of exchange. In fact, holding velocity constant, money's value has decreased to the point where $\Delta \sum L_i$ is necessarily zero.[15] Following this logic, we have maintained the priority of value. The problem is that our conclusion is inconsistent with the example. Both the level of prices and output that this approach anticipates do not match. It overstates inflation and completely excludes the increase in output. Along the same lines, this theoretical determination of the value of money is at odds with the ex-post measure that is true by definition.

[15]A constant velocity of money is not a terrible assumption in this case because allowing it to fluctuate would just open further avenues in which money as a means of exchange matters.

If the means of exchange did not matter we could think about changes in M^S and value/price without any assumptions about this function.[16] The previous example makes clear that we can not truly ignore the means of exchange. On the contrary, very specific assumptions must be made - primarily that output is independent of the quantity of the means of exchange! Once this assumption is made we can neutralize money as means of exchange, maintain the priority of gold prices or measure of value function of money, and the theoretical problems exemplified by our example would disappear. This logic is represented in Figure 1.

Figure 5.1. The Priority of Gold Prices in Determining Non-Commodity Money Prices



In this figure, arrows represent causation and therefore elements to the left are logically prior to those to the right. In this simple framework, the object of non-commodity prices (P^{NC}) are ultimately determined by (1) aggregate SNALT based on the quantity of use-values produced and their values on the upper level and (2) the institutional determinants of the non-commodity money supply on the lower level. In Chapter 6 we will talk about these institutional overdeterminants in greater detail because we will be assuming they matter. Here, the key point is that even though they are necessary determinants of prices in the context of non-commodity money, they play the role of a neutral veil with respect value relationships.

[16] For example in the standard neoclassical theory of income distribution the stock of money, and its growth, does not influence real

On the upper level (the real economy) the first thing that happens is that the SNALT of each commodity (L_i) and gold (L_g) determines gold prices (P^G) as we discussed in the previous section. Then, given the velocity of (gold) money we can determine the necessary amount of money in circulation (G^*).

The next step is to determine the value of the non-commodity money (v_m). Remember that because the measure of value function is logically prior to the means of exchange function, we should be able to discuss v_m before we discuss prices. Alternatively, in the quantity theory, money influences prices as a means of exchange which then affects the purchasing power of money. The determination of v_m can proceed along the lines of the necessary amount of circulating gold (G^*) or directly from the aggregate amount of SNALT. The former, corresponding to (4a) from above, is represented by the solid line to v_m. The latter, corresponding to (4b), is represented by the dotted line. Again, although these provide different ways of think about money and value, they are quantitatively identical and share some assumptions. In combination with the supply of money, either of these will determine the value of money. Now, given the value of commodities, one of the entry points in this analysis, the value of money determines (non-commodity money) prices.

To return to our example where an increase in the money supply corresponds to an increase in output, this particular model could handle such a case only if there was no causation between the two. Certainly, nothing precludes the possibility that output might increase for reasons other than an increase in the supply of money. However, this logic does exclude the case where the money supply causes, or overdetermines, the change in output. As we saw, this presents a serious difficulty for this presentation of a Marxian theory of money. With respect to section 5.2, and the different formulations of the value of money, these difficulties do not undermine the equations themselves. As a matter of theory, and yes definition, they may remain "correct." It is the implicit logic and causality governing the relationship between the terms

(output of use-values, output of value, the supply of money, the value of money, etc.) that must be questioned.

To clarify, the problems emphasized here are not motivated by a realist epistemology. My concern is not that an abstract theory fails to completely represent, capture, or mirror the complicated empirical reality of money, output, and prices. It is also not that the priority of the value of money leads us to poor quantitative estimates of inflation. Rather, the problem is that this attempt to outline a specifically Marxian notion of money is founded on an essentialism that has qualitative difficulty theorizing a simple hypothetical case.[17]

Furthermore, I have argued that this hypothetical case where money as means of exchange is not always neutral is reasonable. Of course, an immediate counter to such a claim may be that "reasonable" is a very subjective term, to which one is tempted to begin speaking of how empirically common instances of non-neutrality are. Instead of moving along this empirical direction, the more salient point is that the case where means of exchange non-neutrality is relevant because Marxian theory itself - which assumes it away in the analysis of the value of money - invokes it as reasonable.

A very clear example of this is made by returning to Carchedi's analysis of money. Beginning on the very same page as the passage we quoted above we find a section entitled "Crises and quantity of money," including this passage:

> We have seen that crises follow from: (a) failure to increase the quantity of money; (b) from such an increase which fails to stimulate demand; or (c) from such an increase followed by the sale of all products (means of production and of consumption), on condition that the output of the

[17]From the overdeterminist perspective adopted in this dissertation the essentialism is problematic enough. Nonetheless, I think the broader limitations of this approach are important to recognize.

> next production process remains the same (which means that those extra inputs remain unused).(Carchedi, 1991, p.168)

Without going into the details of the channels here, he is outlining three distinct links between the quantity of money and output. Money matters for aggregate demand, and aggregate demand matters for the realization of output in the economy. However, as we have seen this runs counter to the proposed specification of Marxian monetary theory. This contradiction is a concern to me for reasons other than simple logical consistency. The practical effect of this inconsistency between money-value and money-macroeconomy, is that value is left out of discourse concerning the latter. Value theory persists as an academic-theoretical curiosity, but is left behind for the practical tools of aggregate demand and supply when it comes time for analysis.

The essentialism of the value of money, and the corresponding neutrality of the quantity of money as a means of exchange, falters on a number of levels. On philosophical-methodological grounds it runs counter to the overdeterminist position I've taken. It is also at odds with determinist presentations of Marxian economics. These external and internal problems make this particular attempt to promote a specifically Marxian monetary theory self-undermining. The relevance of the Marxian approach is challenged when we link it to this internally deconstructing essentialism. In other words, by saying Marxian monetary theory has its own unique and important contributions *only* in the case where we accept assumptions Marxists themselves quickly abandon, we are not making a strong case for its relevance.

One possible defense of Marxian monetary theory is that the essentialist real gold commodity logic is a straw man, that no one actually holds such a strict position. To a significant extent this is likely true, but this is actually part of the problem. While it may be difficult to find scholars who believe the supply of non-commodity money can never have an effect as a means of exchange, this strict, difficult to support,

position shapes the Marxian tradition's attempt to theorize the relationship between non-commodity money, value, and output.

5.3.2 Measurement and Theory

Important distinctions should be made between approaching the value of money ex-post/empirically and ex-ante/theoretically. The various equations for the value of money corresponding to different forms of money are, at least within the context of Marxian value theory, true by definition. This is a point on which Fine et al. (2004) criticize the "New Interpretation" (NI) of the transformation problem. Their concern that the value of money, as treated by the NI, is unsatisfactorily theorized is one this dissertation shares. For example, they argue that:

> [T]here is a complex relationship between, on one hand, the value of the money commodity...and, on the other...the value commanded by units of money in exchange. Analyzing the relationship between these two values depends on assumptions made about money's functions and the monetary regime. (ibid., p.8)

In the language we have used in this chapter, the link between the value of the money commodity and what I have called the value of money (the value money expresses in exchange) is never simple without simplifying assumptions about monetary forms and functions. The real gold commodity money logic I have critiqued, is one particular set of such assumptions that allows some in the Marxian tradition to provide a theoretical link between these two values. While I echo Fine et al. (2004) in finding these assumptions to be problematic oversimplifications that impede a serious theorization of non-commodity forms of money, the impetus and consequences of our critiques differ.

For Fine et al. (2004) the problem is with the NI itself. By reducing the value of money to a ratio between values and prices, the complexities involved in the produc-

tion of prices in various monetary regimes are obfuscated. Although I find this latter problem to indeed be the case, it has more to do with the interpretation of the NI than the NI itself.

The NI was a response to the transformation problem literature, and while the value of money played a role in the NI, its determination was not the focal point. This would not excuse theoretical errors, but does explain the types of claims made about money. In particular, the NI sought to demonstrate a logical consistency in the Marxian approach to value and prices, in response to the charge that value theory was inconsistent with prices when profit rates were equalized, or in other possible deviations from the simple value equals price formulation of Volume 1. In this sense, the NI value of money, a simple ratio of prices and value, is simply that value consistent with Marxian value theory. That this value is definitional and tautological is simply the result of the centrality of existence and/or logical consistency concerns raised by the transformation problem.

This is where the ex-post/empirical and ex-ante/theoretical distinction appears. A definitional statement of the value of money is necessary, and perfectly adequate from an ex-post/empirical perspective. In other words, given a set of values, a set of prices, a quantity of money, etc. a value of money consistent with Marxian value theory exists. However, this ex-post definition is not in itself a (ex-ante) theory of its determination which requires an understanding of the relationship between these values.

I do not think this is a point lost on proponents of the NI, and certainly attempts to theorize the value of money have recognized precisely what the NI approach to money does and does not provide. Both Moseley (2004) and Kristjanson-Gural (2008) take exception to the differential treatment of variable and constant capital in the NI, but otherwise accept its adequacy in an ex-post sense. The question is not whether the NI adequately theorizes the determination of the value of money. It certainly does

not, but it is not meant to. The question is the type of theoretical framework we use to produce such a determination consistent the ex-post value of money that follows from Marxian value theory.

As I have argued, this theoretical framework has largely been deterministic and essentialist, following what I have called the real gold commodity money logic. There are various reasons such an essentialism might persist - despite my criticisms and the contradictions I've alluded to - involving specific theoretical concerns and broader methodological positions. The opposition of the essentialism of one theory - such as the quantity theory of money - with a competing essentialism may be taken for granted as if alternative, overdeterminist, critiques were impossible. In this context, the productivist version of the realist dualism present in the Marxian tradition, which in other instances has prevented any notion of non-commodity money, relegates it to a causally weak position with respect to real money/economy.

At a more specific level, this approach is also overdetermined by the particularities of Volume 1. The derivations of the value of money under different monetary regimes and the logic of non-commodity prices presented above all draw on Marx's work. One has an easy time finding comments on money throughout Marx's textual output - from the early to the late as well as the abstract to the concrete. Yet, it is really the first part of Volume 1 where he lays out a sustained, straightforward, and systematic analysis of monetary forms, value, and output.

Without refuting the importance of Volume 1, we should also keep its assumptions in mind. First, we have simple equal exchange. In this context, it is not surprising in the least that the value of money and the value of the money commodity should be so intricately linked. For example, in the sequence C-M-C, both transactions should involve an exchange of equivalents. It follows that in exchanging C for M, or vice-versa, the commodity acting as M should have value. Otherwise, what would it mean for exchanges to be equal? Since this value must be equal to the commodities it can be

exchanged with by assumption, it is also equal to its value as money. Any deviation between money's value as a commodity and as money would either undermine or significantly complicate the concept of equal exchange. In that the equal exchange assumption is used to make clear the determination of surplus value, an extensive analysis of how a break between money's commodity and monetary values transforms the concept of equal exchange would be an unnecessary detour.

Second, output is usually treated as predetermined in Volume 1.[18] These two assumptions directly influence the way we think about money and value, but at the same time, they also recast the priority of the value of the money commodity and the predetermination of output as particular assumptions made for a *particular text* instead of theoretical conclusions about the character of money. The monetary theory we have described so far makes a certain sense in the Volume 1 context, but as we relax assumptions we need to rethink these relationships.

Finally, even when we accept these assumptions and ignore the schizophrenia over money's neutrality, the theory runs into difficulties. In maybe the most clear statement of the priority of value, Marx claims that the value of money is presupposed before exchange. However, when we look at his actual analysis of this process of presupposition we see that even in the case of actual commodity money, this essentialism can not be maintained. We turn this analysis next.

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[18]Output is predetermined in the sense that the realization of all commodities is assumed to take place in the "normal" functioning of capitalism:

> The division of labour converts the product of labour into a commodity, and thereby makes necessary its conversation into money. At the same time, it makes it a matter of chance whether this transubstantiation succeeds or not. Here, however, we have to look at the phenomenon in its pure shape, and must therefore assume it has proceeded normally. (Marx, 1976, p.203)

5.4 Positing/Presupposing The Value of Money

5.4.1 The Process of Equalization

> We have already seen that the sphere of circulation has a gap in it, through which gold (or silver, or the money material in general) enters as a commodity with a given value. Hence, when money begins to functions as a measure of value, when it is used to determined prices, its value is presupposed. (Marx, 1976, p.214)

Marx's notion of the presupposition of value appears to support the priority of value interpretation, in line with what I have called the real commodity money logic. The immediate qualification is that Marx is assuming a commodity money economy. It is sensible to ask whether this priority of the value of money would persist in the case of non-commodity money. As we saw in the previous section, this logic is theoretically suspect. However, an even more forceful attack on this approach exists. Marx's very argument for the presupposition and priority of the measure of value function undermines itself even in the case of commodity money. The logic of real gold commodity money can provide a ground to neither non-commodity money nor itself.

If we follow Marx's understanding of this presupposition of value we see that the measure of value is not an independent essence from which other functions and dimensions of money can be derived from. Instead, the operation of money as a measure of value depends upon these other dimensions. If its value is presupposed prior to its operation as a means of exchange, it must be understood as a Hegelian positing of presuppositions.

> ...its value is presupposed. If that value falls, the fall first shows itself in a change in the prices of those commodities which are directly exchanged with the precious metals at their source. The greater part of all other

> commodities...will continue for a long time to be estimated in terms of the former value...which has now become antiquated and illusory. Nevertheless, one commodity infects another through their common value-relation, so that their prices, expressed in gold or silver, gradually settle down into the proportions determined by their comparative values. This process of equalization is accompanied by a continued increase in the quantity of the precious metals. (ibid., p.214)

The first step in this process is a change in the value of the money commodity, due perhaps to a productivity increase in the gold mining industry. The initial effect is for this decrease in the value of money to increase the prices of commodities that are "directly exchanged with precious metals." At least in this example, this set of commodities does operate according to the priority of the measure of value, although this is because of its position within the network of exchange/circulation. However, other commodities do not change their prices immediately. The unambiguous change in the value of the money commodity does not directly/immediately influence their prices. Ultimately, in the last instance a process of equalization leads to all prices being stated in terms of the new value of money.

By equalization we are referring to a process in which we move to a state in which prices for all commodities are "estimated" according to the same value of money.[19] This process involves two distinct measures of the value of money. Let $v_m(t)$ be the so-called illusory value of money and $L_g(t)$ be the "real" value of money (based on the money commodity) at time t. Equalization implies that any time the two values differ, the former evolves towards the latter. As a simple difference equation:

$$v_m(t) = v_m(t-1) + \Phi(L_g(t) - v_m(t-1))$$

[19] I use the concept of equilibrium with hesitation, and only for lack of a better term here.

where Φ denotes the speed of adjustment (Marx's "infection").

While this process does maintain a certain centrality for the measure of value function - in the long run it determines prices - it also raises a number of problems. First, we must ask ourselves how much faith we have in this long run. The movement from the change in productivity to the overall change in prices involves a sequence of steps involving various class and non-class processes (pricing behavior by merchant capital, distributions from industries producing goods with prices that change relatively slowly to those more "directly exchanged with precious metals," the response of capitalists to movements in the price of inputs and/or output, etc.) happening in time. These steps would involve innumerable contradictions posing possible counter-tendencies to this process. Second, even if we accept the success of this equalization, we see that it depends upon all dimensions of money.

In short, we have two distinct theoretical problems posed by this process of equalization. First, if the process is stunted by contradictions and counter-tendencies (or even amplifications) the measure of value function, ultimately determined by production conditions in the gold industry, fails to assert itself as the unique essence of money. Alternatively, if the process does succeed, and all prices do end up corresponding to the new value of the money commodity, it was not through the measure of value function alone. For now, lets assume the equalization does go smoothly and account for the role of money's various functions.

5.4.2 Overdetermination and Equalization

Marx describes roughly four distinct functions of money. Because the standard of price and measure of value are presented together, and because money as money comprises a variety of specific uses, we could tally these functions up in a few different ways. These functions are money as (1) a measure of value, (2) a standard of price,

(3) a means of circulation, and (4) money. What role do each of these functions play in Marx's process of equalization?

The first function, measure of value, is described implicitly in the discussion of money throughout this chapter. As mentioned above, Marx initially develops the theory of money in *Capital* through the discussion of the forms of value. The "money form of value" is both the most developed form of value and the initial appearance of money.[20] All that money does at this point is provide a singular way of measuring the value of heterogenous commodities. This function is the most explicit in the process of equalization. In fact the very notion of equality used here is understood in terms of this function.

In Marx's example of the presupposition of money's value, it is money acting as a measure of value that begins the process. When the value of money changes (falling in his example), money-prices must change because they function to represent the relationship between the SNALT involved gold production and the production of other commodities. As the value of the former falls, more units of money are required to measure the same quantity of goods. This logic is quite similar to the notion of a Marxian theory of money critiqued in previous sections. However, as we saw, in this case the change in the value of money does not change all prices. In order to adequately describe this process we need to look at money's other functions.

Although closely associated to the measure of value, money as a standard of price is distinct. This distinction is relevant to the process of equalization. In this function, money provides a system of units that possessors of commodities use to price their goods. The standard Marxian view would subsume this function of money to the measure of value in two respects. Qualitatively, money can function as a standard of

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[20]This form is the "most developed" with an important qualification. It presumes a specific type of commodity money and relationship between money's values as commodity/money. As this chapter has shown, considering alternative types of money requires thinking about multiple new money forms of value in the plural. Nonetheless, it is the most developed within the text of *Capital* Vol. 1.

prices because it (or what it represents) has value. Quantitatively, the prices expressed through money are determined by value ratios (between commodities and the money commodity). While our current example does not afford money as a standard of price complete (quantitative or qualitative) autonomy, the relationship between the two functions are complex. For some time sellers of commodities price their goods at odds with the new value of money.

Does this imply the value of the money commodity (or it's measure of value function) is irrelevant? No, but it does show that money as a standard of price matters as well. As such, it contributes to the overdetermined relationship between money, commodities, and prices. Furthermore, the use of money as a standard of price is itself overdetermined. It is not the simple expression of a more essential function. Those that wish to sell commodities are put in position to either demand (or accept) a price. The accepted price may depend on the value of the money commodity, but it would depend on other factors as well. Market structure, degrees of competition, expectations of future prices or costs of production, the strength of demand, adherence to simple mark-up heuristics, and menu costs could all act as possible overdeterminants.[21]

Marx's argument is that ultimately all prices will change to take into account to new value of the money commodity. This assumes that the possible countertendencies or sources of resistance implicit in the overdetermined process of pricing commodities are overcome by the dynamic of equalization. This requires what he refers to as infection. Although he doesn't discuss this concept/metaphor in detail, it certainly must involve money as a means of exchange.

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[21]I would take issue with the role menu costs plays in the broader theory of New Keynesian economics, but nonetheless accept some of the "costs" identified in this literature as overdeterminants of price movements. In that they condition tendencies against price changes, they are relevant to the current discussion.

Money operating as a means of exchange is what allows the particular relationship between the precious metal industry and those that directly exchange with it to influence, and ultimately determine, other market relationships. The very existence of such a problem assumes this importance. Nothing else differs between the two industries other than their exchange proximity to precious metals. As time passes, what Marx accepted could be a long time, economic interactions between those influenced by the new value of gold and others move the behavior of the latter (in what they charge or pay for goods services) in the direction of this new value. Eventually, all prices coincide with the new value.

Finally, turning to the last function, what role does money play *as* money? Here we actually have a number of separate functions including money as a means of payment, hoard (store of value), and international money. The new value of the money commodity would have significant consequences on the performance of each function. When money acts as a means of payment it is used to absolve debts/obligations. A falling value of money would have the familiar distributive effects for debtors and creditors, influencing the value of future subsumed or non-class payments, complicated in this case by the unevenness of inflation throughout the process of equalization. Increasing prices would both diminish the value of hoarded money and perhaps encourage/necessitate dishoarding.

The effect on hoarding or dishoarding is critical for Marx's example since an increase in the quantity of money in circulation is required (given a velocity) for equalization. Even if we accept the characterization of a Marxian monetary theory as viewing changes in the quantity of money as a consequence of the change in the value of money, this change nonetheless remains a necessary condition for the successful reformulation of prices. Some combination of dishoarding, increased velocity, and/or sufficient injections of new money are necessary conditions for the increase in prices.

Finally, the effect on the use of money for international exchange would be contingent on the system of international payments. In a very simple system one could imagine some sort of specie flow dynamic. Whereas the classic specie flow responds to trade imbalances with gold flows and subsequent balance of trade generating price changes, this could work in the opposite direction. Changes in domestic prices, initiated by the new value of money would overdetermine international trade and flows of precious metals. This is all quite speculative and must remain so without very specific assumptions about the institutional arrangement of international trade that are beyond the scope of this discussion.

In short, the persistence of some disequilibrium ($v_m(t) \neq L_g(t)$) implies an overdetermination of the process of equalization. If equalization happens it is conditioned by all of money's functions. Without doubt Marx uses the value of money as an entry point into the dynamics of money, value, and prices but all other functions remain absolutely necessary conditions of existence for this process. The measure of value can only function as an essence provided the cooperation of every other function.

Does the recognition of this dependence require abandoning the essentialist view of Marxian monetary theory? Not necessarily. An essentialist counter to my problematization would likely argue that changes in the value of the money commodity would directly determine other monetary changes. If the equalization of the values of money following a decrease in the value of money required an increase in the quantity of money circulating as a means of exchange, then said decrease itself would automatically cause this increase. But through what channels? This is where the critique made by Fine et al (2004) is pertinent. It is one thing to assert the necessary dynamics required by a value theoretic approach to money. It is another to theorize these dynamics themselves.

5.4.3 Overdetermination without Equalization

As argued in the previous section, equalization involves the cooperation of all of money's roles and functions in a reaching a state where all commodities are priced in terms of the new value of the money commodity. While those intent on maintaining an essentialist Marxian view of money have the important project outlining the necessity of this "cooperation," I approach the *essence's* dependence on its *consequences* from the other direction. What if the presupposition of value is not the presupposition of an essence, but an entry point into an overdetermined process? If so, then the concept of equalization is a bit misleading. If the process of equalization is indeed overdetermined, equalization itself either does not occur or must take a very different meaning.

The key difference between the essentialist and overdeterminist approaches to equalization involve the behavior and effects of money's multiple functions during the period of disequilibrium. In the former, they are governed by necessity. They operate so as to move the economy towards the equilibrium determined uniquely by the new value of the money commodity. In the latter, there is an element of contingency. Because they are not mere expressions of the measure of value function, they too can help in overdetermining the future path of prices (and the economy in general).

While the logic of overdetermination is in no way unique to money, it worth highlighting precisely why and how this overdetermination may work in the monetary case. For both money and non-money commodities, the level of SNALT required for (re)production may be influenced by a multitude of processes. Market prices feed back into costs of production. Market competition influences decisions that impact the pace and direction of technological change. Value (in this sense) is most precisely an economic concept, but is nonetheless constituted by natural, political, and cultural processes as well.

Money has a unique characteristic with respect to (re)production and exchange because it remains in circulation. This point is taken for granted, but has important implications for the determination of its value and the dynamics of this process of equalization.

Suppose for a moment that money deteriorated rapidly. A whole host of problems would arise, leading to the likely breakdown in such a monetary economy, because money should have some degree of durability. Let us ignore those problem for a moment, and reflect on how this would influence Marx's equalization story. Any firm or household that wanted money must get it from the precious metal industry itself, or an industry in direct exchange with them. The link between the conditions of production in the precious metal industry and one's capacity to acquire gold would be direct, as it is with most commodities. Yet, this is not a reasonable monetary economy, since the lack of durability would make the monetary object unsuitable.

With a suitable monetary object (be it metallic, paper, digital), circulation allows one to attain money independent of precious metal production. Whereas the reproduction of non-money commodities for society to use is determined by SNALT, the "reproduction" of a stock of money is determined by SNALT, the use of previously produced money as a means of exchanged, the imaginary use of money as a standard of price, hoarding or dishoarding, and other monetary processes.

Commodities enter into circuits of capital from fundamental class processes. Money enters into circuits of capital from fundamental (in the case of commodity money) and subsumed and non-class processes related to spending, the state, and finance.

Imagine an economy after a fall in the value of gold, but before the process of equalization has completed. A gap exists between the SNALT of the money commodity and the actual (although now "illusory") value of money. At this period, what necessitates equalization? If subsumed and non-class economic processes re-

circulate, and ultimately, supply sufficient money, the illusory value of money may have a stronger influence on prices/value than the new true value based on SNALT.

We might think of this in terms of what Patnaik calls “propertyism” (2009). Patnaik’s argument is that the history of monetary thought is dominated by a debate between monetarists and propertyists. Patnaik defines monetarists as those who think “that the value of money in the short run is determined by the demand and supply of it” (2009, p.15). Propertyists view the determination of money’s value as “external” to supply and demand (2009, p.9).

Marx and Keynes are read as the two great propertyists, with competing ideas as to how the value of money is determined outside of its supply and demand (2009, pp.161-165). For Marx, it is the value of gold. For Keynes, it is the stickyness of wages. The Marx argument should be familiar at this point. On Keynes, the idea is that the value of money can be fixed because there is at least one commodity (labor power) whose money-price is not fluctuating.

My argument about the overdetermination of the value of money does not fit neatly into Patnaik’s opposition of monetarism and propertyism. It does, however bear some resemblance to a position between Patnaik’s Marx and Keynes. While the fundamental class process matters (as in his interpretation of Marx), other economic processes matter as well and fixed prices help (over)determine the value of money (as in his interpretation of Keynes). At the same time, there is no real compromise position. Or, if there is one, this is not it. Because I argue all processes may constitute the value of money, it does not make sense to insist on the exteriority of the value of money.

5.5 Conclusion: Money in General

What I have deemed the real gold commodity money logic is neither a basis for understanding commodity nor non-commodity monetary economies. I have argued

that its application is both (1) problematically essentialist from an overdeterminist position as well as (2) undertheorized from an essentialist one. I have not attempted to make a critique of Marx's analysis, which contains important insights and is appropriate given the specifications assumptions he was operating under. This is a critique of its interpretation and application.

To use the language of Wolff and Resnick (Wolff and Resnick, 1987), the problem is not so much the entry point of commodity money, but the essentialist logic. Taken as an essence, commodity money leads us to the real gold commodity money logic, with its corresponding productivist view of the economy. As an entry point, Marx's views on commodity money serve to advance the following lessons:

1. Money is complex and contradictory.
2. The contradictions of money and the contradictions of the commodity/economy must be understood together.
3. The way in which money is introduced into the economy, institutions of production and allocation, has important consequences.
4. A Marxian analysis of these consequences is distinguished by the entry point of class/value.

The assumption of commodity money in *Capital* allows Marx to make these points about money in a straightforward manner, without complicating the task of explaining the concept of (surplus) value. Assumptions like equal exchange are not claims about capitalist economies, but simplifications meant to isolate the concept of surplus. Introducing the possibility that money may have no value, problematizes the claim that a circuit comprised of $C - M - C'$ includes two incidences of equal exchange. Would we not have two occasions of unequal exchange, where the subject of this circuit is first cheated and then cheater? This problematization is a needless

distraction within the context of Volume 1. It involves either a radical departure from equal exchange (the ubiquity of something for nothing) or a radical rethinking of the value of money.

This problem is unnecessary within that context, but also critical for a theory of money in general. The real gold commodity logic is one response to this problem that grounds the potentially troubling consequences of non-commodity money in the more familiar commodity form. While I have criticized this view, it does not imply that discussions of gold or commodity money are devoid of value. From an essentialist perspective, there may be productive work left in theorizing (as opposed to assuming) the priority of money as a measure of value.

Kristjanson-Gural (Kristjanson-Gural, 2008) offers a theorization of commodity money in an economy governed by prices of production. Despite the role of commodity money, the anti-essentialist methodology places this paper outside of the real gold commodity logic. It is not an essentialism of gold. Nor is it an abandonment of gold as theoretically important. How exactly does it fit within the space of Marxian monetary essentialism and my critique?

Like Marx's presupposition of value, Kristjanson-Gural's argument highlights the lessons (1-4) listed above. His argument is not that prices of production applied to the gold industry provides the key to understanding the value of money in some alternative institutional arrangement. On the contrary, it illustrates how (1) the overdetermination of price and value can frame the value of money and (2) how this relationship is itself overdetermined by exchange (simple equal exchange versus prices of production). As he puts it:

> I also provide a critique of the accepted view that the value and exchange value of commodity money are only relevant to the determination of the monetary expression of value at the initial stages of Marxs analysis when commodities are assumed to exchange at their values. (p.259)

In other words, relaxing the assumption of equal exchange transforms the relationship between the value of commodity money and its capacity to express value, but it does not destroy it. At this point, I accept the argument but must make two qualifications. First, Kristjanson-Gural shows how exchange relations can overdetermine this relationship (between L_g and v_m) but does not accept the possibility of overdetermination between the terms. How the value of commodity money specifically influences its expression of value may change, but the causality appears to run in one direction.

Second, the lessons of his exercise do not provide any particular grounds for thinking about the value of non-commodity money. They do not provide a basis for the value of non-commodity money. Taking prices of production in the gold industry into account would not fundamentally alter the real gold commodity logic, and therefore the criticisms I have made would remain.

I present these as qualifications, as opposed to criticisms, because the paper does not explicitly make claims contrary to my positions on these issues. While there may be an implicit endorsement of a one-way causality, it may be an artifact of the task at hand. When trying to show how X can influence Y under some set of conditions, it is sufficient to show only that one direction. On the second point, the matter (much like in the case of Marx's presupposition of value) is one of interpretation. Using his argument to provide a ground for the value of non-commodity money would place one close to the real gold commodity logic. Reading it as an attempt to theorize a particular form of money, illustrating general lessons of the nature of money, would place it much closer to my critique.

CHAPTER 6

CONCLUSION: NON-COMMODITY MONEY AND CLASS ANALYSIS

6.1 Introduction: Reviewing the Questions and Answers

As described in the introductory chapter, there are three related questions for a Marxian theory of money. First, what is the relationship between the different forms and functions of money? Second, how is the value of money determined under different institutional arrangements characterized by distinct forms of money? Finally, how do we understand the causal relationships governing the behavior of the terms in the equation of exchange?

In a world with commodity money and Volume 1 assumptions, these questions do not (seem to) pose problems. In Chapter 3, I argued that Marx's Volume 1 account of simple commodity money is anything but simple, containing tensions and contradictions. Nonetheless, historically it has been the topic of non-commodity money that made the difficulties inherent in answering these three questions most clear. Chapters 4 and 5 surveyed and critiqued responses to these questions in the non-commodity money context.

The previous chapter looks at one type of solution to these problems, which I call the real gold commodity money logic, in detail. My argument was that this approach is inadequate from an overdeterminist Marxian perspective because it is grounded in an essentialization of gold. It solves the problem of money's forms of functions by prioritizing commodity money over other forms, and the measure of value over other functions. It then uses this logic to answer the remaining questions concerning value, money, prices, and output.

In this chapter I will offer an alternative Marxian monetary framework. In the first section, I will tie together threads from throughout the dissertation to produce a concise statement of the methodological orientation of this framework. Next, I will situate these monetary problems with a Marxian theory of class. Remaining sections will use this theory to provide an overdeterminist Marxian framework for thinking about money, output, and value.

6.2 The Real-Imaginary-Symbolic, Monetary Functions, and Monetary Forms

My overdeterminist alternative for Marxian monetary theory is based on three related pillars. The three do not neatly map onto the questions presented in this introduction. Rather, each directly answers one of the following specific questions. If we think about money as real, imaginary, and/or symbolic, how do we make sense of these terms? How do we think about the functions of money? What is the relationship between (non)commodity money and the broader economy?

My reading of Marx on money, and sketch of a Marx-Lacan framework for monetary theory, is a response to the first two questions.[1] As this dissertation is critical of attempts to understand the economy as having real and less-real moments (the realist dualism), what is to be done with Marx's distinction between real, imaginary, and symbolic forms/functions of money? I argued that his usage of these terms was marked by tensions bordering on contradiction, but that these difficulties should be read as positive theoretical contributions. What do I mean by this?

Marx repeatedly insists on the priority of real money, but the necessity of this insistence betrays its tenuousness. At times real money appears dependent on the symbolic/imaginary. At others, the latter appear to be even more real/fundamental.

[1] See Chapter 3.

While my critique of the realist dualism might suggest completely abandoning the language of real-imaginary-symbolic, or championing the symbolic/imaginary over the real, either move would be a mistake. The latter would merely reverse the real versus symbolic/imaginary dualism. A simple reversal would solve the problems of productivism, leaving us with the problems of exchangism, to then be solved by yet another reversal back to productivism, and so on and so on.

Completely abandoning the realist language is attractive, but presumes we can meaningfully speak about the monetary processes without categories similar to real, imaginary, and symbolic. As I argued in chapter 3, this is difficult. We err in accepting descriptions of the gold standard as actually more real than today's institutions. However, we also err in ignoring the role this image of a real money plays in constituting monetary practices. At the other extreme, virtual currencies enabling exchange in massively multiplayer online games are not actually fake.[2] They are as real - although not always as valuable or widely circulating - as any other currency, accepted in some domains and not in others. Nonetheless, we would be foolish to abstract from the fact that they are constituted in our real social world as *fake* or play money. The cultural and political senses in which these currencies are marked as fake help overdetermine them.

In short, the language of the real-imaginary-symbolic (RIS) is misleading and unsustainable, but also necessary for an understanding of money. This is why I read Marx's tension-laden treatment of these categories as a positive component of his theory of money. A deconstructive orientation to these terms recognizes both their impossibility and necessity. It is in this sense that Lacan is helpful. While a more sustained and thorough Lacanian analysis of money may be fruitful, my use has

[2]A classic in the literature on the economics of massively multiplayer games and virtual worlds is Castronova (2006). Dibbell (2007) is written for a popular audience, but is an insightful account based on first-hand experience in the "gold-farming" industry.

been fairly instrumental. The Lacanian understanding of the RIS captures what is distinctive and important about these three registers, while undermining the common essentialism of such language.

In Chapter 3, I introduced the key distance between the Lacanian RIS and essentialist versions as two complications, or qualifications. The first complication is the distinction between the real before and after the letter. The real which we experience as pre-symbolic (before the letter), is constituted by the symbolic itself (it is after the letter). The second complication is the borromean ring type nature of the RIS. All three registers mutually constitute one another and the relationship between any two (i.e. the relationship between real and symbolic money) is dependent on the third. Whereas competing traditions in monetary thought differ in how they organize the hierarchy of money's real, symbolic, and imaginary dimensions, a Lacanian approach undermines the possibility of any ranking.

The Lacanian RIS leads us to an anti-essentialist reading of Marx on the functions of money. It is difficult to resist labeling monetary functions as real, imaginary, and symbolic. But once we think seriously about these categories, and monetary functions, the distinctions are just as difficult to maintain. Marx introduces the measure of value function as both real-material and essential. Despite insistence on its grounding in the real commodity of gold, and its conditions of production, in practice the measure of value appeals only to an ideal image of real gold. Marx then has to introduce a supposedly less essential function of money, the means of circulation, in order to realize the gold of the imagination. If actual gold circulated, this might unproblematically ground the imaginary, in the real, but as Marx points out it is typical for symbolic non-commodity money to fill this role. Real commodity money is replaced by a "semblance" in a "natural and spontaneous process"(1976, p.222).

Like the registers of the RIS, the functions of money do not form a hierarchy. That being said, it is without doubt that Marx did insist on the real priority of money as a measure of value. My argument is that this real function should be understood in "after the letter" terms. The tensions and contradictions in Marx's analysis of money reflect this complexity. I am agnostic about Marx's own *personal* views, which are beyond the bounds of this dissertation. Obviously, with respect to chronology, Marx could not have Lacan in mind. I think it is possible he might very much resist my argument about the measure of value being the real function of money only through the mutual constitution of the real, symbolic, and imaginary without any ontological priority between them. But Marx, the person, is not my interest. I'm more concerned with productive readings of Marx's text.

When the essentialist hierarchies of the RIS and monetary functions are accepted, a particular theory of money follows. Real money, a commodity with value itself, naturally fulfills the essential function of money. Less essential functions and forms of money are understood as derivative. A general theory of money begins with the essences from which these epiphenomena arise. Rejecting these hierarchies reframes the project of a general theory of money. Instead of derivations, we must think in terms of mutual constitution and overdetermination.

I do not read Marx's analysis of commodity money as a general theory itself, from which non-commodity money as its other could be derived. It serves as a simplification that fit with the assumptions of Volume 1 concerning equal exchange. I have also argued that commodity money allowed Marx to clearly put forth a number of points that are relevant for a more general theory of money. First, as a unity of exchange and use-value itself, commodity money made it easy to link the contradictions apparent in monetary economies to the contradictions less visible in the economy and capitalism. Second, as a product of a fundamentalist class process, commodity money also provided a direct link between money and class. These points do not depend on

commodity money. Indeed, one could read Marx on utopian/alternative monetary schemes (Saad-Filho, 1993) as a direct critique of the idea that these contradictions could be transcended through monetary reform.

A general Marxian theory of money uses these insights concerning money, contradiction, and economy through the entry point of class. I argue for a thin definition of non-commodity money that does not privilege some historical or theoretical concept of real metallic money. Money is always a complexity, constitued by multiple processes distributed across natural, economic, cultural, and political processes. At some points the monetary object is the product of a class process. At others it is not. That difference matters, but has no bearing on which arrangement is more real or fundamental. Non-commodity money is no more a theoretical problem than commodity money. It is a mistake to frame a commodity money economy as a natural consistent system, and then ask by what miraculous institutional arrangements could metals be replaced by mere symbols. In general, regardless of the character of the hegemonic monetary form, it is only through a miracle of institutions and processes that money can act as money. A Marxian theory approaches this complexity through the entry point of class.

As a quick example, consider the importance of trust. It is often pointed out that our modern inherently valueless money has value only because people believe it has value. We often associate belief with trust, and etymologically link credit to credibility. The result of this train of thought is that if modern money is inherently anything, it is inherently social. Despite the kernel of truth here, this is a deeply misleading story. Were there ever economies in which trust didn't matter? Is trust anymore social than distrust? If processes related to trust are important for non-commodity money, it is only because they are important for money in general.

6.3 Class and Non-Class Processes in a Monetary Economy

Money has multiple functions and can take multiple forms. These forms and functions are distributed amongst different social processes. At different times and places, the specific constellation of these processes will differ. This is true when money takes a non-commodity form, as a state-issued token or bank created digital credit. It is also true when the monetary object is a material product of a class process (a commodity) or gathered from the beach. This section will develop a framework for thinking about these processes that constitute money in Marxian class analytic terms. After discussing some monetary conditions of existence in terms of the circuits of capital, I will begin with a quick class-based sketch of a very simple economy with commodity money. I will then outline the class analytic framework for an economy with non-commodity money.

6.3.1 Monetary Conditions of Existence

We will begin with Marx's well-known circuits of capital. In the circuit of money capital (Marx, 1978, Ch.1), the three stages may be represented as

$$M \to C ... P ... C' \to M'$$

The fundamental class process begins with money (M) that is used to purchase means of production (C). The next step is the period of production (P) resulting in a greater value of commodities (C'). Finally, these newly produced commodities are sold for a sum of money (M'), greater than the original value. The difference between the two ($M' - M$) being surplus value realized by the capitalist.

Already money plays multiple roles. As capital it begins the process of value production or expansion. In two instances its role as a means of circulation is critical. At first, it allows the capitalist without means of production to attain them. At the end, it allows output to be sold and (surplus value) to be realized. It also acts as a unit of account or measure/standard of value. It is not by accident that Marx begins with

the monetary circuit, as the difference between M' and M accounts for the increase in value in simple quantitative terms. As Marx reminds us, this difference is "only the result of the realization of C'" (ibid., p130). Nonetheless, it is more apparent when expressed in monetary terms.

The circuit of money capital is a useful way of thinking about an individual class process, or the dynamics of a capitalist economy. In the hands of a creative thinker, it can be used to introduce the conditions of existence of such a process and the contradictions and crises it may produce. Still, it is a one-sided portrayal, lending itself to a particular view of the economy, and of money. Marx associated a worldview premised on the monetary circuit with mercantilism (ibid., pp.141-142). A good economy begins with money and ends up with more money. The production of commodities and their distribution are means to this end. Although money implicitly plays multiple roles, the monetary circuit present money as an end in itself and therefore valuable.

A broader understanding of the complexity of a capitalist economy is made possible by consider the other circuits of capital. Marx represents the productive circuit of capital as

$$P...C' \rightarrow M' \rightarrow C'...P$$

As with the monetary circuit, the circuit of productive capital provides insights. It illustrates the concept of reproduction in simple or expanded scale. A capitalist economy is one in which production in one period paves the way for production in the next. It is not about money or commodities (in themselves) alone. The role of money here is quite different. Marx describes it as "evanescent," and its role is "simply to mediate...the commodity product...with its own elements of production" in order to allow reproduction (ibid., pp.152-153). This simple role does suggest complications. Does reproduction involve expansion? If so, does this involve accumulating/hoarding a quantity of money until the costs of expansion can be met? If so, what does the

money *do* in the meantime? Although Marx ultimately brackets these concerns, due to his focus on the fundamentalist class process, it illustrates the importance of subsumed (or non-class) financial processes.

As with the monetary circuit, this productive capital circuit is one-sided and (taken alone) misleading. For Marx, as mercantilism is to the money capital, classical economics is to the productive capital. The meager role of money then makes sense. As a critique of mercantilism, classical economics reversed the roles of money-production. Instead of producing for money, a good economy is one in which money allows for expanded production. Money used for other purposes is a waste.

The final circuit of capital is that of commodity capital.

$$C' \rightarrow M' \rightarrow C...P...C'$$

In the previous circuit, money was a means to the end of production. Now money is a means to the end of the circulation of commodities. I should emphasize that there is a difference between money acting as a "medium/means of circulation" and as a "means to the end of circulation." The former describes a role money plays. The latter, asserts an essence to the economy with respect to which money finds its role.

As with the others, this circuit has a certain sense to it. Money for the sake of money, or production for the sake of production, can be thought of as pointless - an economy of Sisyphus. In this case, the point of the economy is commodities. Marx associates this circuit with Quesnay, but with the benefit of time's passing we can also associate this with neoclassical economics. If classical economics subsumed money to the objective ground of technology and production, neoclassical economics subsumes it to the subjective realm of utility and the consumption of commodities.

Again, the sense of this circuit is one-sided. It is possible that an individual worker engages in productive activity to receive a sum of money valuable only in so far it can be exchanged for use-values. We could problematize this story, but let us accept

for the sake of argument this utility oriented teleological behavior. It would still be a mistake, and one-sided, to simply reduce the economy itself to this teleology.[3]

Keeping the importance of each circuit in mind, let us return to the circuit of money capital and consider it's monetary conditions of existence. In the first stage of this process, capitalists purchases means of production and labor power. First, capitalists must have a quantity of money available to them. We can not assume its existence. In part, this will depend on success realizing surplus value in previous periods. It will also be conditioned by changes in the value of money. If the value of money falls between realizing surplus value and beginning the next production period, it may be difficult to begin production. Similar problems could occur if the value of money stays roughly the same, but substantial changes in the value of an important means of production occur.

In short, money must exist, be available to capitalists, and fulfill certain conditions of stability in value. These three conditions are overdetermined by natural, economic, cultural, and political processes. Depending on the arrangement it may be difficult and costly for capitalists to preserve these conditions.

American farmers of the 19th Century, although not always capitalists, required similar conditions of existence. The difficulty of doing so under the gold standard is well known. Because of the nature of agriculture, farmers were often dependent on banks to advance them sufficient money to begin production. Subsumed payments to banks were required in the form of interest payments. The size of these payments was dependent upon changes in the value of money and agricultural output. If deflation occurred, as it did often in such a system, the size of the subsumed payment could increase dramatically, requiring all of the farmer's surplus, leading to bankruptcy. What economists would all "well-developed" financial markets could assist farmers

[3]The immortal representative agent methodology is the most extreme example of such a reduction.

through derivative products that could be used to hedge this risk. Of course, payments would then have to be paid to agents providing risk-hedging opportunities.

Another condition implicit in this first stage is that money must be generally accepted, so that other capitalists will provide means of production and workers will provide their labor power, in exchange for it. When we speak of money as a general equivalent, we assume its general acceptance, but in practice different monies have different degrees of acceptance. All money is general, but some are more general than others. Producing a generally accepted currency may be costly. Political and cultural processes producing, legitimizing, or enforcing a particular money may funded directly through taxes or indirectly through seignorage.

Modern monetary theorists, who advance a chartalist view of money are fond of linking the value of money to taxes.[4] One way to make workers work for money, is to charge a tax payable only in money. In this way, money becomes valuable (people are willing to exchange labor or products for it). The revenue from this tax may be used for any purpose. Suppose the tax went to build roads. We could think of the tax as a distribution to the state allowing roads. This wouldn't be incorrect, but it would miss the point that in this case the tax payment also helps produce the general acceptability of the currency.

6.3.2 A Simple Class Analysis of a Commodity Money Economy

We will first consider an economy with gold as money, operating in the fashion of Marx's example of the presupposition of the value of money. In Chapter 5, I argued that this example, nominally asserting the absolute priority of commodity money and the measure of value function, actually undermined the real gold commodity money logic. I return to this case in the same spirit. The point is not to provide a firm

[4]See, for example, Wray (1998, pp.54-61).

ground for theorizing the complexities of non-commodity money, but rather to show how complex money always already is.

In Marx's example we have multiple industries that can be separated as follows. First, an industry that produces the money commodity. Assume this is the gold industry. Second, an industry closely connect to the gold industry in terms of exchange. It is most sensible to think of this as a producer of means of production used in the gold industry, and possibly others. Finally, we have all other industries only indirectly related to the gold industry, in terms of exchanges. This final group would be heterogenous in terms of the extent of the distance between the industry and gold production, but nothing much is added by creating more and more subsets.

Marx does not explicitly describe the industry closest to gold production as a supplier of capital goods. His actual language refers to "those commodities which are directly exchanged with the precious metals at their source" (1976, p.214). We could imagine some producers of consumption goods fitting in here as well. For example, local producers of food or clothing may sell commodities to workers employed in the gold industry. This would raise interesting questions about the wages of these workers, but also complicate matters. As we will see, even an overdeterminist analysis of this very simple commodity money economy provides a very limited framework. It is not worth complicating it too much. We will think of the industry directly related as a producer of means of production, and the others as producers of commodities for consumption.

Marx does not give specific details on the workings of this economy, so they must be inferred. The monetary circuit associated with the gold industry would be as follows

$$M \rightarrow C...P...M'.$$

This process begins with a quantity of money used to purchase means of production (from the industry it directly exchanges with) and labor power. It ends when

the production process yields additional money. At period t we can express the value of output in gold (g) as

$$c_t^g + v_t^g + s_t^g = W_t^g.$$

Given simple equal exchange, a strict relationship between output in the gold industry and growth in value terms in the economy must hold. Based on the standard equation of exchange

$$M_t V_t = W_t.$$

Because we are assuming equal exchange, with prices strictly governed by labor time ratios ($P_i = L_i/L_g$), the right side (W_t) is simply the total value of non-money commodities. As usual, V is the velocity of money. Manipulating the equation to show the relationship between growth rates in these terms we find

$$\frac{\dot{M}}{M} = \frac{\dot{W}}{W} - \frac{\dot{V}}{V}$$

where dot-terms are time derivatives. The change in the money supply is comprised of two elements. First, the production of money in the gold industry. Second, the extent to which previously circulating money leaves circulation (depreciation or hoarding) and stored money enters circulation (dishoarding). This is not to say that $\dot{M}$ is not overdetermined. Rather, the overdetermination must involve changes in these terms. It is a relationship of identity and not causality. Representing the net effect of depreciation and (dis)hoarding as D

$$\frac{W^g + D}{M} = \frac{\dot{W}}{W} - \frac{\dot{V}}{V}.$$

If we read this equation from an overdeterminist perspective, we see that the dynamics of output in general, output in the gold industry, and hoarding are intertwined. This is not to say hoarding (broadly understood) is only important to

an overdeterminist.[5] The nature of this importance varies between essentialist and overdeterminist analyses. Note that this net effect of hoarding will be influenced by both subsumed and non-class processes distributed across firms, households, and financial institutions.[6] How would the real gold commodity money logic deal with hoarding? The most obvious approach would be to endogenize D, making it strictly determined by relationships in the real economy of production. An overdeterminist analysis would recognize mutual determination between all of these processes.

One way to remove the influence of D is to assume the total quantity of money depreciates each period. In other words, if $D = -M$, substitution into the previous equation and making time explicit gives us

$$W_t^g = M_{t-1} + (\frac{\dot{W}}{W} - \frac{\dot{V}}{V})M_{t-1}.$$

In each period, the amount of money produced is equal to the amount of money produced last period plus the money required to satisfy additional growth in value terms. It is important to note that changes in the velocity of money still matter, and that these will be conditioned by processes outside of production as well. More importantly, we should consider how absurd the assumption that the entire stock of money deteriorates each period is. While this has been a very abstract monetary economy - without coinage, minting or credit - it was in some sense still a monetary economy. However, once we treat gold as fully leaving the sphere of circulation, we move from a crude commodity money economy to a simple barter economy.[7]

[5]For example, see Lapavitsas (2000b).

[6]This is a very simple and abstract hypothetical economy so we are speaking of financial institutions very broadly. In this case, maybe it is just precious metals stored at a temple. The principle point is that this net effect will be overdetermined by many different processes located outside of the "real" economy of capitalist production.

[7]A money that ceases to circulate is no longer money, unless it is fulfilling some other monetary function. For example, perhaps it operates as "ghost money," providing a unit of account without actually existing in a physical form. But going in this direction just takes us further from the idealized economy where the value of money is simply determined by conditions of production.

For an economy with a medium of circulation it will generally be the case that $D \neq -M$. This implies that the reproduction of money for circulation involves both production (W^g) and non-production (the economic processes behind (D)). Of course, the production of any commodity is overdetermined by processes of exchange. The example of money goes further. Because it is not consumed, and deteriorates only gradually, the conditions of its reproduction are immediately distributed among multiple class, subsumed, and non-class processes. At one extreme, if D is sufficiently large, given the velocity of money, the quantity of money required to circulate one period's output might be available independent of any production.

This extreme example need not hold for the general point to be made. If we approach the value of money and commodities similarly, we end up in very different places. If we think about money in terms of costs/conditions of reproduction, these conditions are immediately located in both production and exchange. Technological improvements in the gold industry decrease the costs of reproducing gold (in terms of SNALT), and lower the value of money. Similarly, technological and institutional improvements in monetary-financial processes may decrease the costs of accessing hoarded gold, also lowering the value of money. In the first case, we have a change located in the fundamental class process producing gold. In the second case, we have a change in a subsumed class (or non-class) process involved the distribution and circulation of money.

It is a mistake to confuse production and circulation. The conditions under which an apple is produced are distinct from its distribution. Production and distribution overdetermine one another but are distinct. A money commodity is different. The confusion concerning the money commodity is to treat its production and distribution as distinct. Theoretically, producing gold and distributing gold do have differences, but not in terms of whether they reproduce a quantity of money for circulation.

In order for someone to consume an apple, the appropriate socially necessary abstract labor time must be devoted to apple production. Multiple subsumed and non-class processes may influence this process. The apple may be passed from one party to the next, influencing prices and distributing value between producers, merchants, and consumers. Because one does not consume money as one does an apple, a different logic applies. In order for someone to get money, the appropriate socially necessary abstract labor time must be devoted to gold production, or, one can attain money by selling a different commodity, or, from institutions that redistribute money from one person to another. Because money is not consumed, or is "consumed" over and over again, these acts of distribution are also acts of reproduction.

Returning to our simple commodity money economy, the value of money and its quantity will be determined by multiple processes. What is happening in the fundamental class process producing gold? Are households hoarding money or dishoarding money? At what rate does the money supply deteriorate from wear? Also, note that the influx of money from new production is mediated by the means of production industry. While the gold industry must purchase means of production, any firm looking to sell output may turn to both producers of new money and holdings of previously produced money.

It is possible that the means of production industry would have market power they could use to influence the price they charge gold producers. If the hoarding, deterioration, or export of gold created a shortage of money it is possible that this relationship may be reversed, or the means of production industry (directly exchanging with gold producers) could gain power with respect to producers of consumption goods.

A more concrete analysis of historical instances of commodity money would also have to take into account the mint. A class analysis of the history of minting would be fascinating, but we do want to turn to explicitly non-commodity money. In sum-

mation of this section on commodity money, the (re)production of money required to secure the conditions of existence for capitalist accumulation directly involves both class and non-class processes. When Marx says that "circulation sweats money from every pore" (1976, p.208), he recognizes that the relationship between production and circulation is unique for the money commodity. The totality of monetary processes (and forms) distributed across multiple processes overdetermine the cost of reproduction for money.

6.3.3 A Simple Class Analysis of a Non-Commodity Money Economy

6.3.3.1 Class, Bank, and State Flows

Our class analytic framework of non-commodity will consider both state and credit money. Although stylized and simplified, we will have a US-style monetary system in mind, focusing on four different sites: (1) the fundamental class process, (2) private banking/financial process, (3) a central bank, and (4) the state.

Allowing for subsumed and non-class revenue, the fundamental class process has the following flow of revenue and distributions

$$SV_f + SCR_f + NCR_f = \sum SC_f + \sum X_f + \sum Y_f$$

where SV is surplus value, SCR is subsumed class revenue, NCR is non-class revenue, and the terms on the right represent distributions required for the conditions of existence of these revenue flows, respectively.

Our private bank will not be the site of a fundamental class process. This is not a necessary assumption. In the absence of surplus value realization, its revenues and distributions are

$$SCR_{pb} + NCR_{pb} = \sum X_{pb} + \sum Y_{pb}$$

In the case of the fundamental class process, the specific payments are contingent upon the industry in question. There is not much we can say in general about these

payments. It is, however, worth specifying the payments involved for the private banking industry. Subsumed class revenue (SCR) would be determined by interest payments received from fundamental class processes. Non-class revenue (NCR) would include interest on loans made to consumers, the state, or other subsumed class processes (including banks). It could also include capital gains made by selling financial assets, interest on reserves held at the central bank, dividend payments from a central bank, and various fees on customers.

In order to access and manage the funds required to gain SCR banks may have to pay depositors, firms, and the central bank ($\sum X_{pb}$). The same would apply for receiving NCR ($\sum Y_{pb}$). Our private banks can create money by extending credit. In other words, we are not treating money/credit as exogenous, but the extension of credit may incur costs. In a fractional reserve system, the capacity/costs of expanding credit will be influenced by the behavior of the central bank.

The key difference between the private bank and a central bank is the ability to generate money at will.

$$SCR_{cb} + NCR_{cb} + NCR^{M}_{cb} = \sum X_{cb} + \sum Y_{cb} + \sum Y^{M}_{cb}$$

By including subsumed class payments we are assuming the central bank may lend money to a state that is involved in a fundamental class process. Otherwise this term will be zero. Non-class revenue would include interest on loans, as well as any capital gains. The final term on the revenue side represents the central banks ability to create money. It is difficult to distinguish between which central bank distributions (X, Y) are associated with each revenue stream. The cost associated with the privileges of being the central bank (in general), include supporting the state and private banking system. It is useful to distinguish between (1) dividend payments to private banks and/or distributions to the state and (2) the "distributions" associated with the ability to create money. These distributions (Y^{M}_{cb}) are coincident with the generation of money (NCR^{M}_{cb}). This is revenue that is created in its distribution.

For example, when the central bank purchases assets from private banks, it produces money. However, this money is immediately credited to the account of the private bank. Alternatively, the central bank may create money by crediting the account of the state. Again, the generation of money and it's initial distribution (in the system of accounts) occur simultaneously.

Finally, we will consider the state. The revenues and expenditures will be

$$SCR_s + NCR_s + D = \sum E_s + \sum T_s + i_s$$

where the first two terms include tax revenue and third (D) the issue of debt required to make up the difference between spending and revenue.[8] State spending includes expenditures on goods, services, and investment (E), transfer payments (T), and interest payments (i) on debt.

6.3.3.2 Class Analysis of the Value of Endogenous Money

In the previous chapter we discussed a few different representations of the value of money. In the non-commodity money context, the value of money is given by:

$$v_m = \frac{W}{M^S V}$$

We could derive this from the equation of exchange in the previous section by dividing through by the quantity of monetary units.[9] While I criticized certain interpretations of this relationship, it is not inherently essentialist. The problem was in assuming the priority of W. If the total value of commodities is independent of the quantity of money and its velocity, changes in the supply of money immediately change its

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[8] We could read "required" in a limited institutionally-mandated sense. It is possible for the state to spend without borrowing, assuming the central bank accommodates by creating money. We will assume the state always borrows, but that this debt may then be monetized in the future.

[9] Money in the equation of exchange in the previous section was treated in value terms. Here M^S is a quantity of money and v_m is the value per unit.

value. An overdeterminist interpretation would consider how each of these terms constitutes/determines the others.

The relationship between money's value, the value of output, the supply of money, and its velocity will be determined by the complex relationship between various sites including fundamental class processes, private banks, the central bank, the state, and households.

It is useful to begin the analysis of these relationships in a simplified fashion. It is typical in textbook economics to treat the supply of money as exogenous, and understand monetary policy as a helicopter drop. In that fashion, we might ask how an increase in the supply of money would influence the production of use-values, the production of value, the velocity of money, and its value. Instead, we will begin our analysis with the monetary circuit in the spirit of Graziani (1997; 2003) or "endogenous money" (Lavoie, 2003). The basic idea is to amend the standard Marxian circuit of money capital by treating the original sum of money as credit advanced from the banking system. The circuit ends when this loan is repaid.

We begin with an endogenous monetary circuit story because it is a good first approximation of the concrete institutional arrangements of modern banking. That being said, I am not adopting this story as a theory of money in itself. From an overdeterminist perspective, money is obviously endogenous, because everything is endogenous. The qualifier endogenous is redundant, unless we assume some exogenous economic variables. This is precisely what the monetary circuit story does by essentializing a starting point - the capitalist's decision to borrow/invest.[10] As with Marx's circuits, any particular circuit (monetary, productive, commodity) contains insights, but is also one-sided when not view as part of a greater totality.

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[10]See Part 4 of Chapter 4 for more on this critique.

The capitalist begins production by borrowing a sum of money, $M = c + v$, consistent with the desired level of constant and variable capital. Where does this money come from? For simplicity, we can imagine for now, that central bank accommodates demand for reserves (in the form of a loan to the private bank) that the private bank uses to credit the account of the capitalist. From this account, the capitalist pays for both wages and constant capital. After production the capitalist realizes surplus by selling output for a sum of money (M') greater than M.

Repayment to the bank comes from M'. But, where does this M' come from? Although it is determined by the level of surplus value, the money to realize it must come from somewhere? Part of it can come from workers who use their wages to purchase final goods. Part of it can come from suppliers of constant capital. Yet, in this simple case this would not be sufficient to realize a surplus. It must come from elsewhere. On the aggregate, the expansion in value requires additional money (Kotz, 1991).[11] If there is no prexisting stock of money or credit, extra demand (purchasing power) must be generated in some fashion. Banks could extend more credit to firms/consumers to realize the extra value.

The state could purchase finished output as well. This could be financed in various ways. If a stock of non-circulating money exists in the economy, the state could sell bonds and use the proceeds to purchase commodities. The state could also borrow from the central bank, which has the power to create money. Alternatively, state spending could take the form of transfer payments. Again, money could be drawn out of non-circulating hoards or created by the central bank, but in this case the purchasing power is distributed to households that can then purchase commodities.

Expectations of final demand, as well as the actual success in realizing surplus value, will influence capitalist decision to invest, and therefore borrow. This de-

[11] The alternative to more money or credit is velocity, but this too would be the product of processes within the monetary-financial system.

cision will overdetermine the level of output. The financial relationships between firms, banks, central banks, the state, and households overdetermine these expectations/realizations, as well as the quantity of money and the associated costs in terms of subsumed and non-class payments in receiving it.

The value of money (v_m) in this economy is distinct from both the quantity theoretic and standard Marxian accounts. In the classic quantity theory story, an exogenous increase in the amount of money "chasing goods" boosts prices up. The essence of the inflation process (a fall in the value of money) is money as a means of exchange. In the Marxian story (see Chapter 5), an exogenous stock of value relates to an exogenous stock of non-commodity money. The amount of ideal value each unit of money symbolically represents determines the value of money (and therefore changes in the price level), prior to exchange.

In this overdetermined economy, output, value, and money/credit are all linked through the complex relationships between class, subsumed, and non-class processes. Let us imagine an example of a fall in the value of money. We will consider how it would be interpreted in quantity theory, standard Marxian, and overdeterminist Marxian terms.

If the value of money is falling, the combined growth rates of the money supply and the velocity of money will be greater than the rate of increase in the total value of commodities. From a quantity theory perspective, this is more money chasing the same amount of goods. Money acting as a means of exchange pulls prices up through some bidding process. The standard Marxian story is similar in the sense that the level of output (now in explicitly value-theoretic terms) is treated as independent of the supply of non-commodity money. This level of output presupposes an ideal quantity of real (commodity) money that would be required given the value of precious metals. Because this ideal money supply is constant, an increase in the actual non-commodity supply of money decreases the amount of value each symbolic token represents.

From an overdeterminist Marxian perspective, the primary question concerns the concrete circumstances instances in which money supply (or money supply and velocity growth) was expanded faster than the value of output. This would depend on the relationship between all of the previously discussed economic processes. One example would be class struggle over the value of wages and profits. As workers try to win higher wages, and capitalists maintain profits by increasing prices, demand for money increases which may (or may not) be provided by the financial system. In this case, the increase in the supply of money is overdetermined by the fundamental class process, but not in such a way that it would lead to more output.

This is not a novel explanation of inflation, nor uniquely overdeterminist.[12] The overdeterminist point I am making is that a Marxian theory of money is not one that privileges the measure of value function. The complicated relationships between class processes, banks, and the state involve all functions of money, overdetermining its value.

It is important to note that the value of money will also overdetermine these processes. It is not simply an outcome of other processes, without its own overdetermining effects. Changes in the value of money change the value of predetermined (fixed) subsumed and non-class payments throughout the economy, and influence the arrangement of future payments. Since the monetary value of some distributions are set in advance, the value of these distributions will be overdetermined by the value of money. This also means that struggles over the monetary value of future payments may be influenced by expectations of the value of money. The neoclassical treatment of this phenomenon assumes that changes in expected inflation influence nominal contracts such that real values remain unchanged. We can not rule out this neutrality outcome, but it is not in any way a rule and it is not my suggestion here.

[12]For example, see Kotz(1982; 1987) and Saad-Filho(2000).

The point is not that nominal contracts fluctuate to keep real flows equal, but rather that expectations of the value of money motivate and influence people in the struggle over these flows.

This example assumes that an increased demand for money, driven by a struggle over value in capitalist class processes, was accommodated by the financial system. However, it would be a mistake to treat finance as simply passive. On one hand, conditions in finance can influence the attractiveness of credit. Banks just as actively make pitches for new borrowers, as they do for new depositors. Central banks also engage in policies to make money/credit generation easier at times. On the other hand, the financial system may eventually fail to accommodate a demand for credit.

One aspect of modern business cycles is that increased interest rates (generated by a combination of private and central bank activities) prior to recessions increase the value of future distributions of surplus associated with money creation. Unless the state steps in to demand output, the value of commodities that would have been purchased by credit-dependent firms (buying constant capital) and consumers (buying durable consumption goods) is not realized. The combination of a fall in surplus realization and potential increases in subsumed interest payments, lead to bankruptcies for some and cutbacks in production for others.

6.3.4 Extensions

There are a number of extensions to this basic theoretical framework that would be immediately fruitful. First, distinctions between stocks and flows become important. It is easier for those working in the class analytic tradition to think in terms of flows. We are used to thinking about the overdetermined and contradictory relationship between flows to and from a particular economic site. However, stocks matter as well. This is particularly true for financial institutions. A related concern is maturity. At any given time a financial institution has a series of possible flows (as revenue or as

costs) distributed across time. This is not necessarily, unique to financial institutions, but it is certainly quite critical for their operation.

Fictitious capital is also important. Although I haven't used this term explicitly, it does play a role in the story about non-commodity money as deficit spending and exchanges of money for assets in the banking system involve either the creation or (re)distribution of fictitious capital. Still, because monetary processes are so intimately related to the overall financial system, more work needs to be done linking the Marxian theory of money to the broader theory of finance and fictitious capital.

A related issue is the phenomena of bubbles. One consequences of the overdeterminist analysis of the value of money (as opposed to the quantity theory or orthodox Marxian theory), is that there is no reason to assume that credit/money generation will create even (neutral) inflation. This implies the possibility of uneven lagged processes of price adjustment (the presupposition of the value of money story). Taken to an extreme, money/credit driven changes in prices could, based on concrete institutional circumstances, largely influence only an individual market, creating a bubble. This is *part* of the story of the 90s stock market boom, and the housing bubble. Emphasis is placed on "part" because unlike Austrian accounts, the Marxian theory does not identify monetary policy as a unique or essential cause of bubbles. The generation of a housing bubble was contingent upon all the other concrete circumstances.

6.4 Money, Contradiction, and Crisis

This dissertation has engaged with monetary theory - both orthodox and heterodox - on a number of different levels. The principle focus has been on the particular topic of the theorization of non-commodity money in a Marxian or class analytic framework. However, this focus has informed, and been informed by, a more general concern about how we think about a monetary economy. What do we mean when we distinguish between the real and monetary? How do different ways of motivating

this distinction overdetermine our economic theory? How can we deconstruct this opposition, in favor of a more complex (non-dualist) economic materialism?

These can be deeply abstract questions, but they are at the heart of much academic and popular economic discourse. Why did the United States experience a great recession and why has the recovery been (to be very generous) so modest? Economist or non-economist, it is hard to avoid that question, and equally difficult to answer without making assumptions about the relationship between the real economy (Main Street) and money/finance (Wall Street).

I have argued that there is a close link between the way we answer that macro-methodological question and the narrow (and potentially academic) Marxian analysis of non-commodity money. What I have called the realist dualism posits an ontological distinction between the real and the monetary. Each sphere is consistent on its own, but the relationship between the two may be one of harmony or dissonance. This general orientation is held by many competing economic traditions.

For example, a traditional Keynesian would argue that economic harmony requires numerous regulations on money/finance in order to coerce consistency with the real economy. Many neoclassical economists would make the opposite case. Restrictions on money/finance prevent it from adapting to the needs of the real economy, creating inefficiency. The difference between these two positions is significant, but it is also noteworthy that they accept the same problematic. There is a set of (de)regulations and/or institutional arrangements that will produce harmony instead of dissonance. Any contradition/crisis in the economy is the result of this incompatibility.

The theory of money proceeds in a similar fashion. Different forms of money create different links between the real and the monetary. The true, real, or optimal form of money is that which most adequately links, or anchors, the monetary to the real. Again, this could go in many different directions. In some cases, a deeply naturalized or crudely materialistic understanding of the real economy may render

precious metals as the only appropriate monetary candidate. In modern orthodox macroeconomics, where the real economy is the province of hyper-rational representative agents, optimal money is that which is managed by a rational central bank guided by a true model of the economy.

Productivist Marxian theory has difficulty with non-commodity money because it breaks the link between the real economy of production-commodity-value and its monetary representation. If we think of the economy as an overdetermined totality, instead of a duality, this problem disappears. Furthermore, the contradictions between distinct spheres is internalized as the contradictions of a capitalist economy. In my reading, this is the key lesson of Marx on commodity money. It is a lesson just as relevant to a non-commodity money economy, because these contradictions are internal to capitalism, independent of the form of money.

Like the classical tradition it was influenced by, orthodox Marxian political economy has a tendency to downplay the significance of the monetary. Crises that appear to be monetary are said to have some more fundamental cause (i.e. rising organic composition of capital). In a certain respect, I am making a similar critique. Where Keynesian economists see a contradiction between the real and monetary, I insist on the internalization of this contradiction - *do not scapegoat finance for the instability of capitalism*. However, the similarity with more orthodox Marxian critique is superficial. If the standard productivist line internalizes the crisis in the fundamental class process because it is essential/interior with respect to an external monetary system, my internalization is motivated by a lack of any such exteriority. There is no other separate monetary-financial sphere.

Money and finance matter. They help overdetermine other moments of the economic totality. The particular concrete manifestation of a crisis can be shaped by monetary and financial arrangements. Nonetheless, a Marxian analysis of money and crisis resists the typical externalization of contradiction (i.e. scapegoating). It insists

on the link between complex concrete empirical manifestations of crisis on one-hand, and the elementary contradiction between use-values and value on the other.

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