CONCEPTS, CONTEXTS, CONTESTS

ROY KREITNER*

Ι

INTRODUCTION

In October 2022, the Royal Swedish Academy of Sciences announced its award of the Nobel Prize for Economics to Ben Bernanke, Douglas Diamond, and Philip Dybvig for their work on the theory of banking conducted in the early 1980s. The Academy's scientific background report, entitled "Financial Intermediation," explains that Diamond and Dybvig developed a theoretical model of banks' "critical role in the economy" that Bernanke then combined and supplemented with empirical research.¹ Banks' critical role, according to the Academy, is *intermediation*—the channeling of funds from savers to investors. Their mutually reinforcing findings not only:

offer important insights into the beneficial role that banks play in the economy, but also into how their vulnerabilities can lead to devastating financial crises. The findings have proven extremely valuable for policymakers: the actions taken by central banks and financial regulators around the world in confronting two recent major crises . . . were in large part motivated by the laureates' research.²

Commentary in the blogosphere was quick to note that the models offered a formal account of economic phenomena well-understood for over a century prior to their publication, and also to highlight the irony that intermediation is a limited and misleading description of how banks actually function in modern economies. The models ignore the crucial fact that banks create money rather than channel existing funds to more efficient users. Such commentary suggests that while the model has been influential, its role in financial regulation may have been counterproductive, rather than beneficial, for financial stability.³

The success or failure of formal models in predicting crises or combatting

Copyright © 2024 by Roy Kreitner.

This Article is also available online at http://lcp.law.duke.edu/.

^{*} Professor, Tel Aviv University Faculty of Law. For help in thinking about this piece, I am grateful to Leora Bilsky, Yishai Blank, Hanoch Dagan, Christine Desan, Talia Fisher, David Grewal, Ron Harris, Assaf Likhovski, Yaniv Ron-El, Issi Rosen-Zvi David Schorr, Mickey Zar, and participants at the MPI-TAU Transnational Legal History Workshop, and the faculty seminar at Tel Aviv University Faculty of Law. For research assistance, thanks to Asaf Horowitz.

^{1.} The Royal Swedish Academy of Sciences, *Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2022: Financial Intermediation and the Economy*, 3 (Oct. 10, 2022), https://www.nobelprize.org/uploads/2022/10/advanced-economicsciencesprize2022.pdf [https://perma.cc/8B5C-3UD4] [hereinafter Royal Academy].

^{2.} *Id.*

^{3.} Peter Bofinger, A Noble Award for a 'Popular Misconception', SOCIAL EUROPE (Oct. 17, 2022), https://www.socialeurope.eu/a-noble-award-for-a-popular-misconception [https://perma.cc/GQV9-859B]; Chartbook #160 Kindleberger, Mehrling and that Nobel Prize, ADAM TOOZE (Oct. 14, 2022), https://adamtooze.com/2022/10/14/chartbook-160-kindleberger-mehrling-and-that-nobel-prize/ [https://perma.cc/X6FY-NP7D].

financial instability is an intriguing topic in its own right, but it is not my primary concern here. The reason this particular award is interesting from my perspective lies in the Academy's embrace of the virtue of formality. The report continues:

When the work of Diamond and Dybvig appeared in the early 1980s, the role of financial intermediaries had been discussed for a long time. While economists had pointed to the roles financial intermediaries play, most of this discussion had been informal... By contrast, Diamond and Dybvig's research provided logically consistent mathematical models, where the existence and structure of banks were derived rather than assumed. By providing formal models based on microeconomic foundations, the key assumptions and economic mechanisms were laid bare.⁴

This is a succinct articulation of what we might hope to achieve through the formal analysis of our market institutions or of our economy generally. At the same time, critiques of models like those of Diamond and Dybvig show that they may obscure as much as they reveal.

I return to a discussion of formal models of banking below, but the problematic suggested here is more general. In analyzing social and economic arrangements like markets, as with social institutions generally, two competing impulses are in tension. On the one hand, there is a drive toward parsimonious conceptual analysis. The idea is to abstract away from the complexity of large-scale institutional phenomena in order to capture their mechanisms at the most basic level, ideally the binary interaction of individual agents. As a methodological imperative in economics, this impulse is the very kernel of the Lucas critique that grounds the search for the microfoundations of macroeconomics.⁵ The goal, essentially, is to identify conceptual constructs so fundamental that their workings will replicate themselves in all settings. The conceptual constructs can then be posited to predict the behavior of individuals across settings, aggregating to become institutional arrangements. On the other hand, there exists a competing drive toward rich contextual descriptions of particular institutional arrangements in all their complexity. Analyses of this sort rely on the idea that "historical (spatiotemporal) context dictates meaning."6 Pursued to their logical endpoint, they point to "radical contingency," or to a view of each analyzed institution as singular and thus defying analogy or generalizable claims of causation.⁷

The vectors of each impulse may be summed up in a phrase: Concepts travel, contexts do not. At the logical extreme, each style of analysis threatens to collapse into a caricature. Conceptual reduction will yield only trivial or question-begging conclusions—for example, agents respond to stimuli—while contextual

^{4.} Royal Academy, supra note 2, at 6.

^{5.} See, e.g., Kevin D. Hoover, Reductionism in Economics: Intentionality and Eschatological Justification in the Microfoundations of Macroeconomics, 82 PHIL. SCI. 689, 695 (2015); Kevin D. Hoover, Microfoundations and the Ontology of Macroeconomics, in THE OXFORD HANDBOOK OF PHILOSOPHY OF ECONOMICS 386, 392 (Don Ross & Harold Kindcaid eds., 2009); Kevin D. Hoover, Idealizing Reduction: The Microfoundations of Macroeconomics, 73 ERKENNTNIS 329, 332 (2010) (explaining "the Lucas critique").

^{6.} Christopher Tomlins, *After Critical History: Scope, Scale, Structure*, 8 ANN. REV. L. & SOC. SCI. 31, 35–36 (2012).

^{7.} Id.

contingency yields descriptions akin to maps the size of the kingdom. Such descriptions teach nothing beyond their own particular settings. Thus, no one wants to work at either of the extremes. And yet, their potential and their risks are not quite symmetrical. The idea of conceptual reduction has been a core element of scientific thought since the Enlightenment. The ability to winnow away the noncrucial details is a marker of a particular kind of intelligence and a principal means to overcome illusion and self-interest in analysis. When its statements are reduced to the entailments represented in logical symbols (P>Q), they take on a dazzling glow of truth; its temptations are formidable. In this Article, I will argue that its pitfalls are no less crucial. I mention the most basic problem here in telegraphic form, but the meaning will come through only in the concrete example below. Conceptual analysis must always posit as assumptions certain components of context, including some characteristics of the agents and other basic elements of the analysis. Typically, those assumptions are genuine presuppositions, posited without argument. The analytical danger lies in missing the possibility that elements of the analysis are not actually givens, but rather are the kinds of things created, or even mutually constituted, by the very activity under analysis or by power relations bracketed by the analysis. The problem, then, is not simply that conceptual models fail to track reality, but that they fail to account for the way the models themselves contribute to changes in analyzed activity.

To readers versed in the history of economic thought, these introductory remarks may bring on a sense of déjà vu. They may recall Albert Hirschman's *Against Parsimony*.⁸ More trenchantly, the reader may sense a replay of arguments as old as Karl Marx's critique of Proudhon in *The Poverty of Philosophy*,⁹ continuing through *Capital*¹⁰ and brought out in polemical form in Engels's *Anti-Duhrung*,¹¹ with its insistence that political economy must be a historical science. As will become clear, I am happy to be in the company of those claims. My hope, however, is to articulate something beyond a general appeal to context and history. I will attempt to show that the pitfalls of conceptual abstraction contain a particular and predictable orientation that implicates the role of scientific thought about *law* within *capitalism*. In other words, the argument itself is colored with historical and thematic specificity.

To escape the extreme abstraction of the questions raised by the tension in methodological impulses, this Article proceeds as follows. Part II describes a mode of theorizing about money and markets that relies on conceptual

^{8.} Albert O. Hirschman, Against Parsimony: Three Easy Ways of Complicating Some Categories of Economic Discourse, 74 AM. ECON. REV. 89 (1984).

^{9.} KARL MARX, THE POVERTY OF PHILOSOPHY (Progress Publishers 1955) (1847), https://www.marxists.org/archive/marx/works/download/pdf/Poverty-Philosophy.pdf [https://perma.cc/H3S9-SVUK]

^{10. 1} KARL MARX, CAPITAL: A CRITIQUE OF POLITICAL ECONOMY (Ben Fowkes trans., 1976) (1867).

^{11.} FRIEDRICH ENGELS, ANTI-DÜHRING, HERR EUGEN DÜHRING'S REVOLUTION IN SCIENCE (Progress Publishers 1947) (1878), https://www.marxists.org/archive/marx/works/1877/anti-duhring/in-dex.htm [https://perma.cc/8MKW-WMGN].

abstraction. Part III describes an alternate mode of theorizing that relies more heavily on historical context. Finally, Part IV concludes by spelling out the stakes of investigating the contest between conceptual and contextual analysis.

Π

CONCEPTUAL REDUCTION: THEORIZING ECONOMY WITHOUT MONEY

This Article opened by pointing anecdotally to possible limitations of Diamond and Dybvig's model of banking. At the end of this Part, I will return to Diamond and Dybvig to explore those limitations in some detail. In the hope of elucidating the most basic maneuvers of conceptual reduction regarding modern economic activity, in particular the role of money in a market economy, that discussion requires a long preface. While it may seem counterintuitive to some readers, orthodox economics does not actually theorize money, so much as it theorizes, by conceptual reduction, its irrelevance. One recurrent articulation of abstracting away from money is the claim of money neutrality, which is the idea that money is simply a garment, or a veil, covering actual economic activity. The abstract core of that activity would be the exchange of real goods, or commodities that have some use beyond their exchangeability. John Stuart Mill gave the idea its classical formulation in his *Principles of Political Economy*, writing that, "There cannot, in short, be intrinsically a more insignificant thing, in the economy of society than money.... [T]he relations of commodities to one another remain unaltered by money."¹² In the hands of quantity theorists after the marginalist revolution, the idea would become an axiom of economic analysis, positing that actual output in the economy is unaffected by the quantity of money in circulation.¹³ Modelling liquidity as a free good in essence claims that the basis of trade exists before and outside of money, so the conceptual attention should be placed on the abstract exchange relation rather than its merely facilitative medium: money. The displacement of money has not gone unnoticed in the economics discipline. One influential author opened a book on the topic by posing it as a puzzle: "The most serious challenge that the existence of money poses to the theorist is this: the best developed model of the economy cannot find room for it."¹⁴

The postulate of money neutrality rests on an initial conceptual reduction, positing that exchange between individual agents is the core activity under analysis. An oft-quoted statement of the position can be found in Karl Menger's 1892 essay *On the Origin of Money*.¹⁵ Menger begins by puzzling over the idea that people would accept otherwise worthless tokens in exchange for useful products, noting that the abundant literature, ranging from the ancients to modern times,

^{12.} JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY 293 (J. Laurence Laughlin ed. 1887).

^{13.} Don Patinkin, *Neutrality of Money*, *in* 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS 639 (John Eatwell et. al. eds., 1987).

^{14.} FRANK HAHN, MONEY AND INFLATION 1 (1983); Hyman P. Minsky, *Frank Hahn's "Money and Inflation": A Review Article*, 6 J. POST KEYNESIAN ECON. 449, 449 (1984).

^{15.} Karl Menger, On the Origin of Money, 2 ECON. J. 239 (1892).

on the issue is unsatisfying.

The problem, which science has here to solve, consists in giving an explanation of a general homogeneous course of action pursued by human beings when engaged in traffic, which, when taken concretely, makes unquestionably for the common interest, and yet which seems to conflict with the nearest and immediate interests of contracting individuals.¹⁶

Noting the deviation from what seem to be individual interests, Menger refers to a long line of explanation according to which a "general convention or legal dispensation" lay at the source of people's willingness to conduct trade in money.¹⁷ Rejecting that line of argument, Menger proceeds to spin out a fable based on the differential saleability of various commodities. In this mythology, developed markets precede the invention of money, and individuals struggle to match supply with need. Slowly, and spontaneously, people begin to realize that some products are more likely than others to be accepted by potential trading partners. Organically, they gravitate toward making transactions in the most saleable commodities until the community settles on one that becomes a universal medium. He sums up the proposition thus:

Putting aside assumptions which are historically unsound, we can only come fully to understand the origin of money by learning to view the establishment of the social procedure, with which we are dealing as the spontaneous outcome, the unpremeditated resultant, of particular, individual efforts of the members of a society, who have little by little worked their way to a discrimination of the different degrees of saleableness in commodities.¹⁸

Menger's text is convenient because it supplies an explicit articulation of a naturalist account of money, an account often adopted in passing in orthodox economics. This requires little more than a mention of the slogan that money is neutral—meaning, it is a veil over fundamental economic activity, which is the exchange of goods and services. The underlying assumption of such naturalist accounts of money is that the fundamental character of exchange is barter, and money is simply a facilitator.¹⁹ As facilitator, its primary role is to reduce the barriers to trade. Sometimes these barriers are expressed colorfully as the double coincidence of wants—for example, the baker has too much bread and would like

JOSEPH SCHUMPETER, HISTORY OF ECONOMIC ANALYSIS 277 (1954).

^{16.} Id. at 240.

^{17.} Id.

^{18.} Id. at 250.

^{19.} Schumpeter's description of *Real Analysis* (which he will then oppose to *Monetary Analysis*) encapsulates these ideas:

Real Analysis proceeds from the principle that all the essential phenomena of economic life are capable of being described in terms of goods and services, of decisions about them, and of relations between them. Money enters the picture only in the modest role of a technical device that has been adopted in order to facilitate transactions [S]o long as it functions normally, it does not affect the economic process, which behaves in the same way as it would in a barter economy: this is essentially what the concept of Neutral Money implies. Thus, money has been called a 'garb' or 'veil' of the things that really matter, to both households or firms in their everyday practice and to the analyst who observes them. Not only *can* it be discarded whenever we are analyzing the fundamental features of the economic process but it *must* be discarded just as a veil must be drawn aside if we are to see the face behind it.

beer, but the brewer has no need for bread; on the other hand, the baker does not need any beef from the butcher who needs bread. Other times, these barriers are expressed as the problem of divisibility—for example, Tom wants tomatoes and Jane is willing to part with hers, but Tom can't trade a part of his cow for the tomatoes without destroying the rest. And still other times, these problems are simply labeled transactions costs. Second, money only facilitates but does not qualitatively change the underlying relation which is posited as interest-maximizing exchange. In other words, in the absence of money, people would behave just as they do in its presence except that they would be limited by the obstacles engendered by that absence. The story of individuals pursuing their self-interest in an incipient market is the ground of an additional proposition: money arises spontaneously among market actors and, thus, the state is extraneous to money's origin and its functioning.²⁰

It is tempting to note that Menger's pretense to science, insofar as he is actually discussing the history of money, is nothing short of laughable. The entire conception of a fully developed barter economy before the introduction of money is completely unfounded and indeed "[n]o example of a barter economy, pure and simple, has ever been described, let alone the emergence from it of money; all available ethnography suggests that there never has been such a thing."²¹ And yet, Menger's methodological orientation poses as a set of ostensibly neutral assumptions: Individuals have private property; produce goods for markets; conduct exchange on the basis of self-interested, purely voluntary interaction; and spontaneously agree on both the monetary material and the unit of account. These assumptions are often the unstated—or stated in passing, as truisms-basis for orthodox economics. Some of the most adamant expressions of theory developed on this basis appear in the work of early marginalist economists, some of whom may have believed that the barter-based story was not just a theoretical heuristic of how money functions, but also a good account of its actual historical origins.²² Faced with the evidence that such systems never existed, current theorists are thus more likely to content themselves with an understanding of the development from barter as a hypothetical construct that may shed light on the underlying nature of money.²³

^{20.} See, e.g., MURRAY N. ROTHBARD, THE CASE AGAINST THE FED (1994); MURRAY N. ROTHBARD, A HISTORY OF MONEY AND BANKING IN THE UNITED STATES (2002).

^{21.} Caroline Humphrey, *Barter and Economic Disintegration*, 20 MAN (NEW SERIES) 48, 48 (1985); *see also infra* note 23.

^{22.} LUDWIG VON MISES, THE THEORY OF MONEY AND CREDIT 32 (H.E. Batson trans., 1971) (1912).

^{23.} For a review of the anthropological and historical literature concluding that barter "has never been a quantitatively important or dominant model of transaction in any past or present economic system about which we have hard information," see George Dalton, *Barter*, 16 J. ECON. ISSUES 181, 185 (1982). And later,

[[]m]oneyless market exchange was not an evolutionary stage in the sense of a dominant mode of transaction preceding the arrival of monetary means of market exchange. Barter occurs very widely in past and present economic systems, but always as minor, infrequent, or emergency transactions employed for special reasons by barterers who know of alternative and more

Importantly, the background assumptions just described do not simply fall away over time, exiting the realm of sophisticated economics. Let us consider again, in somewhat closer detail, Diamond and Dybvig's model of banking that earned them the Nobel Prize.²⁴ The model can be described in straightforward terms. It has three time periods -T0, T1, and T2-and two types of consumers, those who want to consume at T1 and those who want to consume at T2. It also has a single homogeneous consumption good. Every consumer starts at T0 with one unit of the consumption good that the consumer can either loan out for a positive return at T2 or costlessly recall at T1. Consumers are risk averse and do not know their own type at T0, discovering it only at T1. Returns are payable in the same consumption good. Even before fully elaborating the mechanism of banking and the possibility of bank runs, one striking feature stands out: we are about to see a model of banking in which there is *no money*—holdings, loans, and payments are all in the consumption good. Banks' contribution to the system consists in offering a type of insurance contract. Without the existence of the bank, consumers would hope to be of "type 2"—receiving a positive return. The bank offers "type 1" consumers — those who will recall their loan at T1 - a small return, basically acting as an insurance payment for having been unlucky enough to be a type 1. Type 2 consumers thus receive a smaller return than they would without the bank, as some of the return is drawn off to pay out the insurance. However, since all consumers are risk averse, the arrangement is overall welfare enhancing. Intriguingly, the model shows that even though all loans can be recalled without risk or penalty, there is a possibility of bank runs.²⁵

Diamond and Dybvig's model shows that, even in a world with no credit risk, banks could exist, enhance welfare, and still be subject to runs.²⁶ Now, we could

important ways of transacting.

Id. at 188. A historian of money summarized thus: "On one thing the experts on primitive money all agree, and this vital agreement transcends their minor differences. Their common belief backed up by the overwhelming tangible evidence of actual types of primitive moneys from all over the world and from the archaeological, literary and linguistic evidence of the ancient worlds, is that barter was not the main factor in the origins and earliest developments of money." GLYN DAVIES, A HISTORY OF MONEY: FROM ANCIENT TIMES TO THE PRESENT DAY 23 (2002); For a justification of the naturalist narrative as "conjectural history" see Kevin Dowd, *The Invisible Hand and the Evolution of the Monetary System, in* WHAT IS MONEY? 139 (John Smithin ed., 2000); for a mathematical modeling of the plausibility of Menger's story of spontaneous origin, see Peter G. Klein & George Selgin, *Menger's Theory of Money: Some Experimental Evidence, in* WHAT IS MONEY? 217 (John Smithin ed., 2000); and for a thorough review of the literature, and a critique of conjectural history, see MARK PEACOCK, INTRODUCING MONEY 2–9, 22–25 (2013).

^{24.} Douglas W. Diamond & Philip H. Dybvig, Bank Runs, Deposit Insurance, and Liquidity, 91 J. POL. ECON. 401 (1983).

^{25.} Because the bank promises to pay type 1 consumers at T1—before the actual maturity of the loans—if all consumers turn out to be type 1, the bank will not have sufficient resources. If type 2 consumers believe there are too many type 1 consumers, they will rush to recall their loans. Thus, there is a possible equilibrium in which the bank fails.

^{26.} Diamond & Dybvig, *supra* note 24. A naïve reader might be forgiven for wondering whether one needs a mathematical proof for the *possibility* of something whose actual existence is obvious, like a proof that the existing world is among the possible worlds. But that would be a narrow view of how scientific thought might advance, as if only clearly instrumental knowledge were worth pursuing.

ask, with Morgan Ricks, whether this model has anything to teach us about actual banking:

These banks don't augment the supply of credit; the quantity of loans is exactly the same whether or not the banks exist, because all consumption units are lent in either case. Even more noteworthy are the monetary aspects of the model—or, more accurately, their absence. For there is no money in the model. Banks don't hold fractional reserves in the model; there is nothing called money to be held in reserve. Banks have no use for such reserves anyway, since all loans can be risklessly called.²⁷

For my purposes here, however, the question is not the extent to which the model tracks reality or even whether it can be useful for banking regulation. Rather, my concern is with the abstraction itself—in other words, with what disappears in the conceptual reduction built entirely on the aggregation of voluntary, individual transactions?

III

CONTEXTUAL DEPICTION: THEORIZING THE ECONOMY THROUGH MONEY

The alternative mode of theorizing does not abandon the aspiration to develop widely useful conceptual tools. Instead, it eschews reductionism and builds those tools out of a richer contextual starting point as a basis for analytical insight. On some level, one can imagine that such theorizing pursues answers to the same kinds of questions that would have interested Menger: How does money work? How is it created? How does it achieve its capacity to circulate? How does it measure? What kinds of functions can it perform? Crucially, beyond its initial creation as a mechanism, how does it expand? Ultimately, how does money generate different economic and political formations? However, the opening assumptions are different. Rather than beginning with individuals and aggregating from dyadic interaction, this second analysis begins with an observed totality, asking how its interlocking parts interact with and impact on one another, and how they might change over time. The following analysis demonstrates such an alternative route and its attention to context. It will show that thickness of context matters in two crucial dimensions: first, the role of power and law in setting up the basis for market activity, and second, the way individuals are constituted by that very activity, and thus should not be assumed as its basis.²⁸

This mode of analysis begins with an existing society whose central authority figures²⁹ have the power to obligate its members. In the modern era, a polity's

29. The attempt to pitch this description at a high level of generality leads to infelicitous terms, like

^{27.} MORGAN RICKS, THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION 87 (2016).

^{28.} As should become clear from the ensuing analysis, this does not mean that individual people do not exist prior to market activity. However, without the tools of comparison generated by money prices, they do not compare all goals according to a single metric, which means that they are not capable of managing preferences as comparative bundles of goods. In other words, they cannot be posited as preference satisfaction maximizers until a mechanism of comparative evaluation is sufficiently dominant. *See* Roy Kreitner, *Anti-preferences*, 22 THEORETICAL INQ. L. 299, 316–22 (2021); Christine Desan, *The Key to Value: The Debate over Commensurability in Neoclassical and Credit Approaches to Money*, 83 L. & CONTEMP. PROBS. 1, 4–7, 14–16 (2020).

power to obligate its own members is perhaps the core of sovereignty, but its connection to money is often obscured. The important fact to recognize is that the community, whatever its organizational form, obligates its members *ex ni-hilo*—the subjects of a communally authoritative entity are indebted to it by virtue of its originary power to create that relationship. In other words, the authoritative center of any organized society creates free-standing obligation. In non-monetary societies, we can imagine that the center draws those obligations directly—for example, by requiring religious or military service, labor, or goods. But the center can innovate and demand payment in any given resource of its choosing. Once it singles out a particular resource, even if that resource is otherwise worthless or merely a token, as the mode of extinguishing that free-standing debt, every member of the community has reason to seek that particular resource.³⁰

The power to obligate members of the community, expressed in modern terminology, is the state's power to tax its citizens.³¹ When it singles out a resource, or token, as the mode of settling the original debt, it guarantees a demand for that resource. Further, if it is willing to take the token from anyone who presents it, the token can circulate among members of the community until their taxes are due. The token, whose value in the payment of taxes is standardized by the state, thus becomes a common measure of value—or, in economic parlance, it emerges as the unit of account. It is thus the sovereign power to obligate that undergirds the system of money. Taxes, far from being external to either money or trade, are actually at money's core: Taxes drive money.³²

^{&#}x27;central authority figures'. The idea is that a society has some leader, or ruler, in a position to exert authority – this could be the head(s) of a clan, a local warlord, the chief cleric of a church, a monarch, or 'the state'. In essence, central authority figures are those who can create law, usually including the power to sanction its breach. Because I am most interested in the modern era, I will generally use 'state' or 'center' acknowledging here that such usage does not capture the generality of the argument or its anthropological/ancient-history applications.

^{30.} See Abba P. Lerner, *Money as a Creature of the State*, 37 AM. ECON. REV. 312, 313 (1947), which notes:

The modern state can make anything it chooses generally acceptable as money and thus establish its value quite apart from any connection, even of the most formal kind, with gold or with backing of any kind. It is true that a simple declaration that such and such is money will not do, even if backed by the most convincing constitutional evidence of the state's absolute sovereignty. But if the state is willing to accept the proposed money in payment of taxes and other obligations to itself the trick is done. Everyone who has obligations to the state will be willing to accept the pieces of paper with which he can settle the obligations, and all other people will be willing to accept these pieces of paper because they know that the taxpayers, etc., will accept them in turn.

^{31.} The modern terminology sacrifices generality, because the logic itself captures pre-modern social formations, especially those that do not separate spiritual and temporal authority. But state taxation is the key to establishing and maintaining modern monetary systems, the focus of the example developed here.

^{32.} On the logic of the taxes-drive-money view, see L. RANDALL WRAY, UNDERSTANDING MODERN MONEY 155–75 (1998); Charles A.E. Goodhart, *The Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas*, 14 EUR. J. POL. ECON. 407, 416–18 (1998). For clear real-world examples in the colonial context, see Mathew Forstater, *Taxation and Primitive Accumulation: The Case of Colonial Africa*, 22 RSCH. POL. ECON. 51 (2005).

As Christine Desan has developed this *constitutional theory of money*, money is a tool that allows the center to "mark and mobilize material value" in enlisting contributions from the members of a group.³³ When there is no common measure of value, trade must remain, to a great extent, sporadic. It is impossible to account for relative value across goods, and under those conditions, no one can risk specializing their productive efforts. Indeed, in the absence of common measures of value there will be limited division of labor beyond the command economy. The result of this analysis is dramatic: creating a common measure of value is the underpinning of extensive—or non-sporadic—trade. Philosophers might call this its condition of possibility.

Creating a common measure of value has far-reaching effects for both the state and the members of the community. The state gains a degree of flexibility in how it commands resources that is hard to imagine without money. When a token embodies value, the state can use it to buy what it needs from anyone, well beyond the present or future obligation of that particular member of the community. The existence of money greatly expands the state's capacity to mobilize resources as it chooses, making it a supremely effective mode of governing. The members of the community, meanwhile, experience a change no less dramatic. When the center is committed to receiving its contributions in the form of monetary tokens from anyone holding them, anyone can recognize the token as a standard of value. Thus, the token is useful not only for paying off debts to the center, but crucially for standardizing the value that can be paid within the community for any productive transaction. If we imagine a system in which these tokens are introduced, we can observe that they provide liquidity where there was none before. As a new measure of cash payment, the tokens actually make prices possible. Prices then allow for relative valuation of any goods produced for exchange in the monetized economy. Every step in the process relies on law. The singling out of a resource acceptable for payment of taxes, its establishment as a means of final payment rather than as a promise to supply some other form of value, the definition of the token as well as its initial valuation by managing the relationship between the number of tokens and the level of tax liability, and the determination of the token's general acceptability in canceling debts—all these are legal determinations.

The contrast with standard accounts of the relationship between money and prices is striking. Standard accounts proceed from the assumption that trade just occurs naturally, and then occurs better or more smoothly when money is present as a lubricant. Valuation for standard accounts bypasses money entirely, assuming instead that goods price goods or that exchange is simply barter in an efficient form; money is ostensibly a neutral marker expressing a pre-existing relationship of value. The alternative account shows that the process of money-creation

^{33.} CHRISTINE DESAN, MAKING MONEY: COIN, CURRENCY, AND THE COMING OF CAPITALISM 42 (2014); Christine Desan, *The Constitutional Approach to Money: Monetary Design and the Production of the Modern World, in* MONEY TALKS: EXPLAINING HOW MONEY REALLY WORKS 109 (Viviana Zelizer et. al. eds., 2017).

actually constitutes the price system. The upshot of the analytical picture is striking. Money is a constitutional project for managing the relationships between the center and the members of the polity and among the members of the polity themselves. Prices and the markets they enable arise because of the presence of money rather than the other way around.³⁴ Prices are not simply discovered by traders; they are engineered by the center. The center is the locus of original power of valuation because it is a price maker with regard to the initial flow of money into the system.³⁵ Creating a unit of account takes work, maintaining it requires administrative and political energy, and in modern states, all of that administrative work is pursued through law.

At a high level of abstraction, money presents general inquiries. It is a mistake, however, to assume that abstract analogies point us to the most important aspects of how money works. Instead, the crucial questions about money as a constitutional or governance project will not be about whether or not to have money, but rather about how to have it. In other words, the question is how the system constructs relations among its constituent parts. The impact of money is not captured fully in the binary question of its existence or absence. Money is not just one thing; it is not always and everywhere the same. This is where historical context becomes especially informative. The diversity of historical experiences in engineering money is vast, and the implications of that diversity are enormous. A sufficiently robust analytic of money can only be achieved by overcoming the entrenched tendency to create a false unity.³⁶ One avenue to doing that is by perceiving tectonic shifts in its history. History is, if not indispensable, at least a crucial tool for conceptualizing money; at the same time, the analytical concepts direct our historical attention and generate explanations unavailable without them. Historical context and conceptual analysis need one another.

For a cursory view of the analytic of money, and, through money, of markets, consider two very different modes of monetary organization. Medieval and early modern money in Europe was based primarily on silver coin.³⁷ Sovereigns would set a silver value for the coin they issued and then set up a mechanism for expanding money beyond their direct spending needs. Additional money was injected into circulation by selling coins for silver. People could bring bullion to the mints and receive the bulk of it in return as coins. A given weight of metal would

^{34.} Within that process, any monetary token carries with it (at least) two kinds of value: in a primary sense, the money token is that resource with which to settle a debt to the state—whatever the token is made of, it carries the *fiscal* value of paying taxes. Second, more subtly but with dramatic implications, the token acquires value for its very liquidity as the most tradable resource. Because virtually everyone has a need for the tokens in order to pay taxes, virtually everyone is willing to accept them in trade. As the ultimate liquid asset, the tokens take on a premium for that tradability, a cash or liquidity premium.

^{35.} Note the analogy between spontaneity in the origin of money, *see* Menger, *supra* note 16, at 254-55, and in the price system, *see, e.g.*, F.A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 528 (1945), both of which elide the role of collective decision-making in establishing a system of valuation that undergirds exchange.

^{36.} See MICHEL FOUCAULT, THE ARCHEOLOGY OF KNOWLEDGE 25–26 (A.M. Sheridan Smith trans., 1972) (1969) (discussing the methodological problem of false unities).

^{37.} See DESAN, supra note 33, at 58-78.

create a given number of coins—a small portion of that would be retained as a fee, seignorage, by the mint. Coins could be traded for goods while silver bullion had only a limited market among merchants. Thus, people would bring silver to the mints as long as the coins were more valuable than the silver – that is, as long as there indeed existed a cash premium.³⁸ This meant that people who wanted cash paid the sovereign for the privilege of having it. It also meant that a significant portion of the money supply was generated precisely in response to public demand. Since consumption goods were bought only with coin or on credit, the cash premium became the mechanism that configured a market. The public generated the production of coin by paying for it, so long as coin bought the things the public wanted. Again, law is omnipresent in these relations: law determines that coin qualifies as payment by count, rather than weight; it regulates who is permitted to mint and who will be hanged for counterfeiting; it determines that coin definitively settles debt while other media do so only as the product of specific negotiation; and it fixes the ratio at which precious metal can be converted to coin. The state and the members of the community make money and markets at the same time.³⁹

In contrast, we can look at the monetary mechanism ushered in with the establishment of the Bank of England.⁴⁰ The mechanism is similar to the core of modern central banking; once established in England, it spread around the world like a virus. A condensed account highlights its novel process: with the establishment of the Bank, the government takes a large loan. Crucially, the loan is not in coin but in the Bank's own promises to pay in the form of banknotes. The government spends the banknotes into circulation and agrees to accept them as payment for taxes. Therefore, the Bank's promises to pay are significantly better than a private person or corporation's promise to pay as they are backed by the same fiscal value as money: they are the government's obligation, in the sense that the government will accept them as payment for obligations. In essence, the Bank was a new creature – a bank of issue.

This was a new way to produce cash. Before then, the government decided on the core of the money supply, allowing the public to draw on the expansion of circulating credit by paying for it. With the establishment of the Bank, however, the tables were turned. The very core of the money supply would be determined by the interest calculation of lenders: the money supply would be expanded or contracted in response to the calculation of bankers' profits. The government

^{38.} The opposite dynamic could also take hold: if people had little use for coin, they would not try to accumulate enough silver to bring in for minting. If the trading advantages of coin were sufficiently low, they might even melt coin into bullion to trade as a commodity. One can imagine that the cost of such a procedure was not negligible.

^{39.} Within this general framework, different sovereigns pursued different strategies: English monarchs—in response to parliamentary pressure—typically held the value of the penny high by keeping the silver content relatively constant and maintaining high taxes. DESAN, MAKING MONEY, *supra* note 33, at 152–53. Continental sovereigns, particularly in what is now Italy, typically allowed the value of their coin to deteriorate as a mode of accelerating commercial activity—including by relying on debasement to attract silver to the mints. The details are less important than the fact of variation. *Id.* at 159.

^{40.} The account of the Bank of England continues to draw on DESAN, supra note 33.

would contribute to payment for the expansion: its circulating debt was the basis for the expansion of the money supply by the Bank, and it was now—and would remain—interest-bearing. All of this required additional government action, as the government had to persuade its creditors to accept banknotes as cash. The key to that mechanism was accepting the banknote itself in lieu of specie payment for taxes or other obligations. The government effectively made banknotes equal to previously existing government-issued money. Once again, here law plays a key part; the Bank itself is established by law, the acceptability of its notes for taxes is determined by law, and law eventually determines that only those entities regulated as commercial banks can create money by accepting demand deposits.

The implications of this shift were momentous. Broadly drawn, this was the monetary pillar that would institutionalize capitalism. The fundamental innovation was the placement of a bank with a profit motive at the source of money creation.⁴¹ Instead of the traditional acknowledgment that the state itself determines its needs in terms of mobilizing resources, a profit-oriented institution—a specialist in lending to markets—controls the creation of money and the expansion or contraction of its supply. While the ruler's needs were bounded by his imagination for public projects, profit is purely numerical and, in principle, limitless. Enormous expansion would be the order of the day and with it would come enormous profitability for a banking sector effectively subsidized by the public.⁴²

To understand how the new mechanism could be accepted, we must move to the realm of ideas and eventually to the language of science—especially with respect to the shift from political economy to economics as we now know it. The new mechanism for creating money interacted with new and old ideas about value, but it particularly fueled an ideology that distinguished sharply between markets and politics. The specter of bank-created money had the potential to generate significant unease, so the accounts supporting the new system portrayed banks not as creators of money, but rather as merely disbursing substitutes for gold as money, or as making promises to pay. Eventually, banks were portrayed just as intermediaries. The combination of highly managed expandable bank money with the image of a commodity anchor that makes value apolitical would become the centerpiece of the modern monetary imagination.⁴³ As we have seen,

43. See generally, MARY POOVEY, GENRES OF THE CREDIT ECONOMY (2008) (arguing that genres

^{41.} The initial maneuver lay in establishing a single bank of issue. Today, that bank is the central bank, whose notes and reserves are "base money" while commercial banks expand the money supply by lending deposits into existence. Today's commercial banks are not intermediaries, but money creators. *See* Michael McLeay, Amar Radia, & Ryland Thomas, *Money Creation in the Modern Economy*, BANK OF ENGLAND 14, 15 (Mar. 14, 2014), https://www.bankofengland.co.uk/quarterly-bulle-tin/2014/q1/money-creation-in-the-modern-economy [https://perma.cc/47DP-SVY3] (discussing this phenomenon in the case of the Bank of England); L. RANDALL WRAY, MODERN MONEY THEORY, 71–102 (2015); RICKS, *supra* note 27.

^{42.} See generally, SAMUEL KNAFO, THE MAKING OF MODERN FINANCE: LIBERAL GOVERNANCE AND THE GOLD STANDARD (2013) (detailing the historical development of the gold standard as a tool for monetary governance); TIMOTHY ALBORN, ALL THAT GLITTERED: BRITAIN'S MOST PRECIOUS METAL FROM ADAM SMITH TO THE GOLD RUSH (2019) (describing the role of gold in British domestic and foreign governance).

economists were central to this enterprise, modeling the economy as lubricated barter, assuming away any price for liquidity (by positing liquidity as a free good), and neutralizing money except for the very short run. The microfoundations of macroeconomics approach retains that vision up to the present day.

The account of money and banking offered here emphasizes that the center retains a crucial place in the creation and management of a money system. That explanation also shows how a vision of market-led money could gain plausibility, and even become dominant, because market-oriented actors indeed occupy the driver's seat in modern money systems. The belief that the impetus for trade spontaneously generates markets, and that markets in turn call money into existence, is no simple mistake. It is nothing less than an inversion of the relationship among states, money, and markets. In fact, the state still forms the hub of monetary decision-making and retains the authority to move money-making in new directions. And yet, so much of the work of money-production has been privatized that the stories of money's neutrality manage to obscure the role of the center almost entirely. Only, however, until crisis hits and the state is called upon to rescue the private market.⁴⁴

Conceptual analysis, historical context, and the role of scientific inquiry thus coalesce. On the history side, relinquishing nuance, the claim is that the state creates capitalism by largely privatizing and subsidizing the production of money. The mechanism for making money is the key to the emergence of capitalism because it obscures the ties between politics at the center and the instantiation of value in decentralized transactions. Money primarily created by profit-seeking bodies, and established for that purpose, is the conduit to a system of valuation that makes abstract and thus limitless profit its motivational force. This account of how to understand capitalism's emergence tells us a great deal, both positive and negative. On the negative side, capitalism is not a long simmering human yearning, waiting for slow release; it is not a matter of tying the hands of the state to create credible commitments; nor is it the result of a chain reaction based on the development of a particular commodity or of the slow expansion of private merchant activity. On the positive side, it is an event; the event is primarily driven by state actors and engineered and managed through the use of a long series of legal rules that support each stage of change.

On the conceptual or analytical side, the upshot here is that many of the commonplaces of socio-economic thinking are upside down: The conventional story starts with trade, which then makes money, and then adds political actors as parasites whose best role is to collect minimum taxes to support a neutral

of media in eighteenth and nineteenth century mediated British understanding of the emerging credit system); ARIE ARNON, MONETARY THEORY AND POLICY FROM HUME AND SMITH TO WICKSELL (2010) (surveying the emergence of central banking in mainstream thought).

^{44.} See, e.g., Christine Desan, *How to Spend a Trillion Dollars: Our Monetary Hardwiring, Why it Matters, and What We Should Do About it* (Harvard Public Law Working Paper No. 22-04, 2022) (arguing in favor of democratizing the monetary system); Robert C. Hockett, *Bailouts, Buy-Ins, and Ballyhoo*, 52 CHALLENGE 36 (2009) (arguing in favor of administering the Troubled Asset Relief Program [TARP] through the Federal Housing Administration [FHA], Fannie Mae, and Freddie Mac).

infrastructure, such as courts or roads. In other words, trade makes money and taxes fund the small bit of public work needed to allow trade. The analysis here goes the other way round: Taxes drive money; money makes markets. The striking shorthand would be that *taxes make markets*.

Crucially, by shifting ideas about what can and cannot be achieved, analysis itself has held a central historical role. The chain connecting money, taxes, and trade is a narrative about governing a collective. Taxes and trade are instrumental to mobilizing resources in particular ways. Those ways determine possibilities for the community: they structure its imagination, and they route its politics even as they themselves are results of those politics. More than simply enriching each register by looking at them together, the combination reveals a structure open to manipulation and even transformation at a host of junctions. Law determines not only the point of origin in money creation, but also directs its initial pathways.⁴⁵ There are countless ways to create a system that introduces new money and manages its circulation. Those monetary mechanisms rely on and intervene in the core political task of valuation at every turn. There is perhaps no activity that could be farther from neutral. When economists develop a concept like money neutrality, they perform the act of imagining a world with a different distribution of powers than the world they observe. But the work of imagination is not sterile. Neutral money theories are not describing an existing world, but rather contributing to one that might exist; economics, -like all scholarship, -is a performance art. Money neutrality is not simply an unattainable ideal akin to the way physics imagines a frictionless plane, useful for modeling even if nonexistent in practice. In fact, neutrality is a veil over the continuously changing possibilities for governments and individuals.

History, of course, is not the only source of relevant context. Learning from context is in a sense learning from difference, so comparison along the temporal axis is only one avenue of examination. Comparison across space—or even across hypothetical constructs—could potentially be just as informative. One aspect of the analysis above requires a supplemental form of contextual thinking, namely, a sociological investigation of the effects of a money economy on the individuals who live in it. For that, we can turn to early examples of sociological theorizing. As with the account presented above highlighting the role of law and thus of political power, the following analysis shows how the individual of current conceptual analysis arises through the very processes that create markets.

Standard accounts of money often provide a list of functions that money serves: medium of exchange, measure of value, store of value, and standard of deferred payments.⁴⁶ When grouped together in this fashion, it becomes clear that

^{45.} Consider the difference between a government that prints money, spending it into existence on direct governmental needs—so that political considerations on how to spend are explicit—as opposed to a government that authorizes money creation by a profit-oriented bank, from which it borrows at interest in order to spend.

^{46.} See SCHUMPETER, supra note 19, at 1087. Other accounts collapse the standard of deferred payments into a combination of the standard of deferred payment and the medium of exchange; "measure of value" is what chartalists call unit of account, or in Keynes' terminology, money-of-account. See

the functionality involved is envisioned in narrowly economic terms. The heuristic for conceptualizing money through these functions is to introduce money into an already existing, fully-formed society—that is, to imagine economic activity exactly as it exists with only one difference: the absence of money. The preferences of all the actors are held constant, the background political conditions are imagined as identical to those that exist with money; individual subjects produce for markets with the only difference being greater friction in exchange, and the institutional structures in a modern economy are conjured—though, perhaps, in primitive form.

In contrast, a sociological investigation of the functions of money concentrates on the ways that money, as a total institution, rearranges relationships among individuals and groups and creates new social structures. Money is examined as one of the preconditions of the modern economy rather than as a disposable feature. A rich example of this type of analysis may be found in Georg Simmel's Philosophy of Money⁴⁷ regarding the seemingly contradictory process through which money heightens individuality and at the same time consolidates centralization. The claim regarding individualization is familiar: Whereas in a pre-money economy, relations of obligation are built on dependency and linked to particular personalities, a money economy allows for depersonalized and fungible obligations that grant the obligor a much wider degree of choice or individual freedom. Consider a spectrum of relations: On one pole, obligation is completely encompassing, entitling the right-holder to demand service directly from the person obliged-functionally, slavery. At some intermediate point on the spectrum, the right holder may demand a specific product of labor-say, a proportion of some agricultural yield or a fixed amount of wheat or cattle, akin to the relationship between a feudal lord and serf. At the other pole of the spectrum, the right-holder demands only a sum of money, or a tax rather than payment in kind. Movement along this spectrum erodes direct personal dependency and expands the menu of choices open to the obligor, at least abstractly. The slave has no choice and his entire personality is subject to the will of the master; the serf is obligated to grow wheat, but once his quota is filled he may pursue other projects. Finally, the obligor faced with a tax may choose any method of acquiring money to be accepted in payment.48

At the same time, the impersonal money economy implies a far greater degree of *interdependence* within society at large. The familiar part of this claim rests simply on the division of labor: the complexity of needs and the

ARTHUR NUSSBAUM, MONEY IN THE LAW: NATIONAL AND INTERNATIONAL 11–22 (Rev. ed. 1950); F.A. MANN, THE LEGAL ASPECT OF MONEY 43–53 (5th ed. 1992) (discussion of the essential function of money as a unit of account).

^{47.} GEORG SIMMEL, THE PHILOSOPHY OF MONEY 283–91 (David Frisby ed., Tom Bottomore & David Frisby trans., 3d ed. 2004) (1907).

^{48.} See *id*. (discussing movement along this spectrum and the role of capital payment). Simmel emphasizes the fact that while individual freedom may grow, nothing guarantees that the obligations become less onerous: "There is no necessary connection between liberty and increased well-being which is usually automatically presupposed by wishes, theories and agitations." *Id.* at 300.

specialization of abilities make the modern individual dependent on the smooth functioning of hosts of similarly specialized individuals. At the same time:

[W]e are remarkably independent of every *specific* member of this society, because his significance for us has been transferred to the one-sided objectivity of his contribution, which can be just as easily produced by any number of other people with different personalities with whom we are connected only by an interest that can be completely expressed in money terms.⁴⁹

But Simmel's added attention to money's role in forging dependence on society is worth noting. In a pre-money economy, a particular bilateral trade is limited to the two people engaged in it. Once money is introduced into exchange, however, the situation is fundamentally different. Each exchange is then mediated by the community at large because only the promise of acceptance of money by the community grants the money value. Thus, a condition for the functioning of money exchange is faith in the state that issues money and guarantees its value.⁵⁰ So, on the one hand, money is decentralizing or individualizing in that many economic decisions that were concentrated in the hands of rights holders are dispersed among the obligated. On the other hand, however, money-based exchange is centralizing because it inserts the community into each and every exchange as a mediator of value.⁵¹

Sociological accounts like Simmel's exhibit a clear sensitivity to the way that relations between groups and individuals are transformed by money. But they also go beyond that, showing how money conditions the very constitution of individuals, groups, and most certainly markets. When the use of money becomes sufficiently widespread, it changes the ways people plan, think of acquisition, and are limited—or not limited—by time and space. The most important consequences of the use of money are dependent on money's most basic feature: the possibility of monetary calculation or, in Max Weber's terms, "the possibility of assigning money values to all goods and services which in any way might enter into transactions of purchase and sale." It is difficult to exaggerate the importance of the shift to capital accounting that money engenders. Weber shows that monetary calculation allows for the evaluation of goods beyond their immediate usefulness; it is money that injects the possibility of systematic comparison, allowing agents to consider not only consumption, but also productive capacities. Crucially, money comparison allows agents to consider all future opportunities for gain:

including... possible utility to an indefinite number of other persons who can be

^{49.} Id. at 298.

^{50.} This is most obvious when paper money is not backed by metal, but it is true of money backed by metal as well, particularly because the people engaged in trade never weigh the metal themselves. Simmel insists that "there is no doubt that metallic money is also a promise and that it differs from the cheque only with respect to the size of the group which vouches for its being accepted." *Id.* at 177 (discussing the sociological perspective).

^{51.} On the complex ways that such mediation occurs in practice and includes struggles among groups for power over the unit of account, see generally MARIE-THERESE BOYER-XAMBEU, GHISLAIN DELEPLACE, & LUCIEN GILLARD, PRIVATE MONEY AND PUBLIC CURRENCIES: THE 16TH CENTURY CHALLENGE (Azizeh Azodi trans., 1994).

brought into the comparison insofar as they are potential buyers of the powers of control and disposal of the present owner. Where money calculations have become typical, this defines the 'market situation' of the good in question.⁵²

Thus, whereas calculation in kind is geared primarily toward consumption and entails unsolvable problems of comparison with their corresponding lack of formal rationality, "money is the most 'perfect' means of economic calculation. That is, it is formally the most rational means of orienting economic activity."⁵³ Departing from the traditional orientation toward consumption, monetary calculation emancipates the individual and, primarily, the firm—thus allowing a reorientation toward profitability. But such a reorientation, for Weber at least, has no romantic connotations. Instead, the rationality of capital accounting "presupposes the *battle of man with man.*"⁵⁴

[T]he formal rationality of money calculation is dependent on certain quite specific substantive conditions. Those which are of a particular sociological importance for present purposes are the following: (1) Market struggle of economic units which are at least relatively autonomous. Money prices are the product of conflicts of interest and of compromises; they thus result from power constellations. Money is not a mere "voucher for unspecified utilities," which could be altered at will without any fundamental effect on the character of the price system as a struggle of man against man. "Money" is, rather, primarily a weapon in this struggle, and prices are expressions of the struggle; they are instruments of calculation only as estimated quantifications of relative chances in this struggle of interests.⁵⁵

We should read these sociological insights as broadly as they are formulated in Weber's and Simmel's texts. The widespread use of money changes everything. It is the foundation of the profit seeking firm as we know it—it reorganizes production according to new principles, shifting entire sectors of production into profit-making; it reorients the distribution of goods according to the battle of prices and, with it, all the institutions of authority that held sway beforehand; it inserts the community into every exchange, even as it decentralizes particularistic economic decisions; and finally, it changes the way individuals and groups conceive of themselves, instilling the calculating attitude without which market society would have no meaning. Simmel's summation is instructive: "The ideal of numerical calculability has been made possible in practical, and perhaps even in intellectual, life only through the money economy. Viewed from this standpoint, the institution of money appears as the intensification and sublimation of the economic sphere in general."⁵⁶

To sum up, a theorization of money through a contextual depiction differed from conceptual reduction along several lines. First, it began methodologically by observing a totality and decomposing it into constituent parts. The attempt is thus to understand how a totalizing framework works as an institution. One might even quip that the attempt is something like looking for the macrofoundations of

^{52.} MAX WEBER, 1 ECONOMY AND SOCIETY 81 (Guenther Roth & Claus Wittich eds., 1978).

^{53.} Id. at 86.

^{54.} Id. at 93.

^{55.} *Id.* at 107–08.

^{56.} SIMMEL, supra note 48, at 445.

micro-analysis. Second, it highlighted the role of law and power in creating and maintaining the structures that undergird the market economy. Finally, it pointed to the ways the individuals of modern times were in some sense created by the monetary markets that we take for granted as a background to economic activity.

IV

CONCLUSION

Given time and space, a similar comparison of the competing impulses toward conceptual abstraction or toward contextual depiction could be extended to additional market institutions beyond money. The most important extension would be to labor. Conceptual reduction animates the economic analysis of labor and employment law, positing workers as agents who maximize preferences. That analysis clearly has a great deal of influence and yields workable models for explaining and predicting the labor market. At the same time, it assumes the individuality of workers and the individuality of their goals. It ignores the fact that the development of the law of labor was crucially involved both in constituting the individuality of workers and wresting from them a different vision of how work could be organized -a vision that challenged the relationship between independence and wage work. At stake as recently as the late nineteenth century were the questions of whether labor is a commodity and whether workers should be conceived as formally equal market players freely consenting to sell their labor power. Such a conceptualization granted legitimacy to an arrangement of obvious substantive inequality, and its eventual establishment was rife with struggle, often violent struggle.⁵⁷ It is enough to note the existence of such additional examples of the dynamic at hand in passing.⁵⁸ The reason to mention such examples here is to emphasize that while money may be the most crucial site for the contest between concepts and context, my overarching focus is not primarily about money, but about the contest itself.

By way of conclusion, then, it seems worthwhile to attempt some crystallization of the stakes of the contest between concept and context. It may be easiest to proceed by beginning with a statement of what this Article is not attempting to do. I am not trying to suggest that scholars should not pursue conceptual analyses, including such analyses that rely on extreme abstraction or conceptual reduction to posit basic elements of a model. I have no illusions that this Article

^{57.} See, e.g., CHRISTOPHER TOMLINS, THE STATE AND THE UNIONS (1985) (surveying attitudes of policymakers towards labor during the development of modern American labor law during the late 19th and early 20th centuries); WILLIAM E. FORBATH, LAW AND THE SHAPING OF THE AMERICAN LABOR MOVEMENT (1991) (examining how struggles with courts and the legal order helped the American labor movement carve an identity distinct from European counterparts).

^{58.} After labor, the obvious next candidate for analysis would be the business corporation. Models of the corporate form ask primarily why such a form might be efficient—offering answers ranging from solutions to the agency problem to the reduction of transactions costs—while contextual analyses point instead to the radical difference between an orientation toward productive efficiency and an orientation toward profit, which is indifferent toward productive efficiency or to the increase of welfare. *See, e.g.*, THORSTEIN VEBLEN, THEORY OF BUSINESS ENTERPRISE (1904).

will impact the work, say, of any economist researching the microfoundations of macroeconomics. The Article actually has no ambition in that direction at all.⁵⁹ Likewise, I have no claim regarding the optimal mix of conceptual reduction and contextual analysis that would make for ideal research regarding markets or any other social institution. In that sense, this Article does little or nothing to ground a particular methodological imperative—despite my belief that political economy must indeed be an historical science. Instead, what I am trying to show through the comparison is that the contest over how science will describe and analyze market institutions impacts and influences those very institutions. The contest itself has a history, and its history within capitalism, in particular, merits attention.

The upshot of the analysis, presented somewhat vulgarly, would go something like this: Reductive conceptual analysis presents its underlying assumptions as uncontroversial, neutral basic elements. One preliminary challenge presented by contextual analysis is that the actual agents involved are unlike those assumed in conceptual models. In and of itself—as a piece of internal criticism, if you will that critique only becomes important if it can be shown that the difference between the assumptions and the reality is relevant for what the models attempt to explain or predict.⁶⁰ However, that framing assumes there is no feedback between the model and the reality it purports to describe. The type of contextual analysis I have pointed to above, however, goes a step farther. It suggests, in general terms, that an adequate analytic account of market institutions cannot rest on an assumption of pre-existing individual agents because those agents are in fact constituted by markets. Concretely, people become calculating individuals by living in an environment in which most things can be priced and compared.⁶¹ Understanding the elements of a particular historical market situation as mutually constitutive requires analysis that travels back and forth from some totality to some vision of its constituent parts.

Things get more complicated still when we consider the history of the particular kind of scientific conceptual reduction of modern market institutions. The reason for the additional complication is the specific character of conceptual reduction or abstraction, alongside the specific character of capitalism as a social system. As far as conceptual reduction is concerned, likening market actors to freely choosing, individually oriented agents obscures the roles of the state, of law, and of additional modes of wielding power in generating the framework within which agents can act. The very tools that create the conditions for choice,

^{59.} Of course, within economics there is always discussion about what the best kinds of models might be, and to what extent particular animating assumptions should be adopted or relaxed. Despite not being an economist, I am perfectly willing to take sides in those debates. I am not agnostic as to how economics, sociology, or legal research of market institutions is performed. But my particular opinions on what kind of research is most worthwhile, while not hidden in this Article, are not its main point.

^{60.} That type of challenge may or may not be successful, and it may be internal to a particular discipline, just the way behavioral economics stems from economics by relaxing certain restrictive assumptions, especially regarding rationality.

^{61.} See Desan, supra note 28, at 21.

the mode of valuation itself, fall out of the analysis. Crucially, agents constituted with an orientation towards consumption and agents constituted towards increasing value are posited as equally situated. In fact, conceptual reduction yields an odd tension. On the one hand, the naturalism of the heuristic posits all agents as if they seek consumption goods—goods price goods, market exchange is barter covered by a veil of money. Recall, for instance, Diamond and Dybvig's model, with its single consumption good and its singular motivation of consuming the good when ready.

On the other hand, agents are assumed to be preference-maximizers where all utility packages are priced, so in essence they seek unlimited growth of value – in other words, money. The market is modeled as if goods buy goods, intermediated by money. In Diamond and Dybvig's terms, the consumption good is loaned: The deposit, or promise to repay, plays the role of money but doesn't even require naming. Then, it is repaid in kind with a slight increase, geared toward present consumption. In Marxian terms, C-M-C: when the commodity, or consumption good is returned, it is consumed, and thus falls out of circulation. The resulting image is that of a market of human individuals who conduct exchange to increase the satisfaction of wants. At the same time, however, agents are conceived of solely as maximizers of homogeneous value, which is only a quantity, that is, in principle, limitless. Again, in Marxian terms: M-C-M. The goal of such exchange is simply the increase of value.⁶² The satisfaction of wants-the consumption of a particular good-becomes the intermediating operation or the means. In other words, capital has become the subject in market exchange while people, with their particular wants, have become its object.⁶³ Critically, the effect of the heuristic—in contradistinction to its explicit motivation—is precisely to obscure this inversion. For Diamond and Dybvig, the model of banking never mentions that the banks themselves never consume the consumption good. Their orientation, motivation, or desire for pure numerical increase, in principle unlimited, remains unstated.

Thus, scientific reduction in the analysis of markets has an extremely pointed orientation. By presenting market interaction as purely voluntary choice among equals, it provides a framework that lends legitimacy—and, perhaps, even a sense of necessity to a system whose connection to the actual satisfaction of human wants is, at best, indeterminate. The focus on voluntariness and convention obscures actual politics and authority, naturalizing the latter—in essence, turning into apology. The specific reason this obscurity is so important for capitalism is that capitalism is a mode of social organization that veils the role of power and collective decision making (shorthand: politics) that undergird the distribution of risks and rewards.⁶⁴ Of course, capitalism resorts to overt violence at many stages,

^{62.} MARX, supra n. 10 at 253.

^{63.} Martha Campbell, *The Objectivity of Value Versus the Idea of Habitual Action, reprinted in* THE CONSTITUTION OF CAPITAL 63, 70, 82, 86 (Riccardo Bellofiore & Nicola Taylor eds., 2004).

^{64.} For an articulate and most adamant version of such claims, see F.A. HAYEK, The Mirage of Social Justice, in 2 L., LEGIS. & LIBERTY 107 (1977) (arguing that the risks and rewards of the market are

particularly formative phases, but overall expands and thrives with force lurking in the background, rather than front and center. It relies primarily on being perceived as legitimate both by those who benefit from the structure of the market and by those who suffer. The conceptual apparatus that builds that legitimacy is a fundamental part of what allows capitalism to work. In that sense, capitalism needs the science—not only economic science, but also legal science, sociology, and philosophy—that lends credence to its normative arrangements. Capitalism itself has a stake in the analytical solidity of its grounding concepts—not primarily because of their instrumental usefulness, but as the ground for legitimacy.

Of course, the charge that scientific inquiry might occupy a legitimating role for a social system is not new. In fact, it has been perhaps most trenchantly hurled at history as a discipline for at least a century and a half.⁶⁵ More recently, a leading historian of empire wrote, "This is a book about how the historical discipline helped make empire-by making it ethically thinkable-and how empire made and remade the historical discipline."66 That book tells the story of how agents of British imperialism could, in good faith, believe in imperialism's promised progress and thus turn a blind eye to its violence and exploitation. But such charges have been geared primarily at scientific production with close and overt ties to normative discourse. My goal here has been to examine how a similar legitimating dynamic infects more abstract inquiry whose own framework is ostensibly analytic and conceptual rather than normative. The uncomfortable conclusion is that there is no easy escape from such a predicament, whether for historians, legal scholars, or economists. Understanding requires abstraction and conceptualization: They are not optional but necessary for thought. At the same time, conceptual abstraction may be implicated in propping up some of the very structures that ought to be subjected to deep normative suspicion. And self-suspicion is never fun.

Yet it is not completely joyless or devoid of reward. There is no truly firm ground to which the scholar can escape the methodological biases that condition thought within her discipline. Such biases are rampant where context is thick for example, in comparative law, history, or anthropology. The goal here has been to show that they are also powerful within the processes of conceptual abstraction whose primary goal is to produce analytical clarity free of bias. Any particular disciplinary engagement is susceptible to a sort of tunnel vision or, alternatively, toward creating an ideological blanket—a veil. At times, however, in combination and mutual critique, our disciplinary perspectives potentially create a web, or a net, connecting insights and yet allowing for extended vision. There will always remain holes, perhaps holes through which to see what a thicker weave might have obscured. Indeed, a net is not a security blanket. To paraphrase

spontaneous and the products of chance, without any collective guiding hand).

^{65.} FRIEDRICH NIETZSCHE, ON THE USES AND DISADVANTAGES OF HISTORY FOR LIFE (1874) *reprinted in* UNTIMELY MEDITATIONS 57 (Daniel Breazeale ed., R.J. Hollingdale trans., 1997).

^{66.} PRIYA SATIA, TIME'S MONSTER: HOW HISTORY MAKES HISTORY 6 (2020).

Holmes: Certainty is an illusion, repose is not our destiny.⁶⁷ The task of analyzing our social institutions is entwined with the task of designing them, and thus with the challenge of seeing how our relations create what we posit as the inert backdrop for our interactions.