Monetary Inclusion and Exclusion

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Abstract

This article explores the relationship between money and the analysis of mechanisms of inclusion and exclusion. Such mechanisms currently follow a logic of plural or multiple inclusion as opposed to assimilation. In a full-grown monetary economy, money and property have emerged as regulative structures for the participation in economic practice. Discussing the approaches of Wallerstein, Baker and Luhmann, a distinction is drawn between center, semi-periphery, and periphery of the economic system. While the money medium includes the general population into the periphery of the economy through consumption, the article shows that the inclusionary mechanism of the center is creditworthiness. Thus, exclusion from the center of the economic system lies not in insolvency, but in exclusion from the possibility of generating solvency from insolvency. It can be demonstrated that in its historical formation the form of credit is organized in a twofold fashion: as an instrument to make profit and to promote social inclusion. Examples for the latter are micro-credits as a global form of inclusion into the economy, which does not bear on the distinction poor/wealthy. The article contributes to a sociological theory of inclusion and exclusion developing a system theoretical framework and to economic sociology by focusing on money (and property) as mechanisms of inclusion and exclusion.

Keywords: money, credit, creditworthiness, inclusion and exclusion, differentiation, sociological theory

1. New Economic Sociology

Within the last decades, economic sociology has developed into one of the most advanced fields of sociological research. This verve may have been triggered by highly visible economic developments on a global scale such as new regimes of property and production and the development of a global financial system (Boltanski and Chiapello 2007; Eichengreen 2008). However, the surge of such research must also be attributed to the introduction and testing of new theories, concepts, and methods. New Economic Sociology – originating in the USA – puts a new spin on the analytical distinction between culture and structure. On the one hand, it takes structural analysis, informed by network and information theory with the key concept of embeddedness, as a point of departure. On the other hand, it adopts concepts from cultural sociology that underscore the social construction and cultural molding of economic phenomena. On the side of cultural sociology, the debate has been vitalized by evidence that culture delimits structures and rationality in that structures are culturally, cognitively, institutionally, and – adding the voice of systems theory – systemically embedded. All these aspects are now accounted for in structural analysis. Oddly, money as a medium of economy is largely overlooked in structural and network theoretical analyses of markets, of pricing through reciprocal relations of observation, of access to jobs, of careers and flows of information – in short, of inclusion phenomena. However, Viviana Zelizer has provided comprehensive studies on the social usage of money from a cultural perspective. Here, concepts such as ‘special monies’ and ‘multiple monies’ show that money is not a neutral substance. Rather, it appears in multifarious culturally molded forms (Beckert 2003, 2006; Granovetter 1974, 1983; Swedberg 2004; White 1981; Zelizer 1993, 1997).

Almost simultaneously, a knowledge-sociologically and empirically oriented sector of the Sociology of Finance has developed, which examines the global financial market and finance organizations with concepts such as performativity, accountability, and calculation. These microsociological studies aim to show how the economic as such is constructed ‘in situ’. They explore models and methods that underlie economic practices and look into the contexts of their fabrication. Whereas Zelizer analyzes money in its diverse modes of usage, money becomes an arbitrary good – the term ‘commodity’ only applied before Neoclassical Economics – in the examination of financial markets by Sociology of Finance. However, this comes at the price of losing sight of the

distinctiveness of the money medium and its significance when it comes to the construction and autonomization of the economic system. Medial aspects of such analyses of economic practices on the financial market focus on the increasing insignificance of personal interaction among traders and their physical absence at the markets in favor of online communication. They demonstrate the significance of models, representation in theories, scriptural and numeric notations for the generation of an economic horizon of meaning that has to be constantly reproduced in practice. Praxeological, situational, and knowledge-based contextual performance is set against structural analysis of network theory (Abolafia 1996; Callon and Muniesa 2005; Callon, Millo and Muniesa 2007; Knorr-Cetina and Bruegger 2002; MacKenzie 2006, 2009).

The results of these studies are not to be disputed here. Rather, they are to be taken as the premise for what follows. However, the blank just highlighted – a missing analysis of money as a medium of the economic system – shall be filled in by the following arguments. Thus, it can be demonstrated that money as a medium is not only the decisive factor for economic participation in factual and temporal terms, but also in social terms:[1] it is especially involved in determining how individuals are included as persons. This raises the question whether and in which fashion an exclusion from the economic realm is even possible under conditions of a full-grown money economy.

Findings in the factual dimension are obvious: the semantics and practices of monetary communication refute the assumption that the modern money economy bears a tendency towards general commodification. The introduction of a money economy has in no way led to an increase in commodification, but rather to a new form of restraint on what can be purchased. In medieval Europe, money was involved in the acquisition of the most diverse 'possessions': offices, salvation, status, states, nobility, academic titles, tax revenue, and political influence. Today, such practice can at best be observed as an illegitimate one and is thus itself an instance of exclusion in the here proposed sense of the term. There are cultural and historical variations which objects are considered "priceless".[2] Hence, aside from cultural and semantic limitations, the imperialism of money comes to a halt at the boundaries of the empires of religion, polity, education, and science in the factual dimension. Socially, however, it strives towards universal inclusion: neither skin color, 'dishonorable profession', gender, age, ethnicity, nor nationality can exclude from the possession and use of money. Conversely, financial

solvency and credit-worthiness alone – as this article tries to show –can grant inclusion into the monetary economy, but not neediness, noble birth, nor righteous faith.

This article argues that as of yet the meaning and functioning of the money medium has been overlooked in recent research in the area of Economic Sociology and Sociology of Finance. The thesis of this paper is that inclusion into monetary economic activity cannot be explained without exploring the usage of the money medium. This includes the mechanisms of money creation. Meanwhile, exclusion in modern economy can be observed as an including exclusion. That means no one can be entirely excluded from the modern economic system, the world-economy. Thus, I will firstly elucidate the concepts of inclusion and exclusion as they shall be applied here. Secondly, I will offer a sociological sketch of the modes of operation of the money medium drawing upon economic insights and historical monetary semantics. Without denying the existence of alternative modes of economic inclusion and exclusion, I shall concentrate on finance as the 'operative core business' of the monetary economy. As can be shown in the following, it proves reasonable to distinguish between center, semi-periphery and periphery in the modern economic system.

2. Inclusion and Exclusion as Structure of the Economic System

An analytics of inclusion and exclusion supplants theories of assimilation and integration. Schematically, one could summarize this development as follows: Theories of assimilation are rendered implausible by an increasingly plural order of inclusion as described by Parsons at the end of the 1960s. Not only does the multiplication of membership roles, in education or politics for instance, with its increasing inattention to ascriptive traits such as heritage, religion, and skin color lead to a plural order of status. It also gives rise to a clear distinction between assimilation and inclusion. As an African American, one can become president of America, as an Indian and member of Jainism religion, CEO of the Deutsche Bank.

> In a pluralistic social structure, membership in an ethnic or religious group does not determine all of the individual's social participations. His occupation, education, employing organization and political affiliation may in varying degrees be independent of his ethnicity or religion. On the whole, the trend of American

development has been toward increasing pluralism in this sense and, hence, increasing looseness in the connections among the components of total social status. This trend has one particular important implication for our purposes, namely, that it is essential to make a clear distinction between *inclusion* and *assimilation* (Parsons 1976:429).

Luhmann draws upon these insights, but without adopting the notion of normative integration still present in Parsons' work. He assumes that orders of inclusion and exclusion vary historically and relates them to the societal form of differentiation. Parsons conceives of socio-cultural evolution as increase in 'adaptive upgrading', 'differentiation', 'inclusion' and 'value generalization' (Parsons 1971:26). In opposition to this all too linear conception, Luhmann emphasizes the possibility of exclusion, which he sees inextricably tied to the notion of inclusion. Furthermore, he rephrases the problem as a non-directional relation between differentiation and the variable inclusion/exclusion. Thus, modes of differentiation are 'rules for repeating differences of inclusion and exclusion within society, but at the same time they are forms which presuppose that one takes part in differentiation and its rules of inclusion without also being excluded from the such' (Luhmann 1997:622, my translation).

If inclusion/exclusion is a difference internal to society, inclusions *and* exclusions occur within society. Surely, exclusion still refers to an 'exterior' in segmentary societies (killing, banishment, breaking off of contact). As an operation, however, it occurs within society. In stratified societies, inclusion/exclusion increasingly takes on intra-societal forms insofar as exclusion from a stratum, a territory, a congregation, a household means inclusion into another social sphere, at worst harborages such as monasteries, workhouses, dishonorable professions, or other designated positions. Thus, exclusion does not mean exclusion from society, not even in its late medieval and early modern form of an explicit politics of exclusion. Rather, it is a regulatory installation within society that in some cases confers a special status.

The intra-societal status of the difference inclusion/exclusion is even more evident in current world society. As society is presently only conceivable as singular, isolated social spaces no longer exist (Bohn 2009:46; Luhmann 1982:132-33; Stichweh 2000). Thus, there can no longer be an exterior form of sociality. In our present functionally

differentiated society, which is a world society, the problem of inclusion and exclusion structurally takes on an entirely different form according to the theory of Luhmann (1995b, 1997:618ff., passim). It lies in the logic of functional differentiation to grant any member of society access to all functions – as long as it does not go against the logic of the function itself. In stratified societies inclusion is based on heritage and household membership. This applies to slaves and servants, as well. Here, the social position specifies inclusion and, consequently, the individual form of life. However, as this classic pattern of inclusion dissolves, contingent sequences in form of individual careers (in a general sense) begin to inhabit the interface of the individual and society. Professional careers, academic careers, or marital relations are as important as the assumption of functionally specific audience roles. Henceforth, the pluralized or multiple forms of inclusion into the subsystems of society tend to correlate. Yet, they are neither integrated nor convertible into one another. Inclusion into one societal subsystem no longer determines how and to what extent one participates in other functional systems – this is held against all objections by theories of inequality. The implications for the money medium are: possession of money does not predetermine the possession of academic titles, positive or negative credentials, access to intimacy, participation in religious practices, nor the comprehension of art or science.[3]

In contrast to hierarchically organized subsystems, there is neither motive nor legitimacy for exclusion from the perspective of functional subsystems. In modernity, motives for exclusion lie at the level of organizations and, situationally, at the level of interactions. While organizations employ exclusion as the standard and legitimate scenario, general inclusion is an element of the self-description of functional differentiation. There are no apparent reasons to exclude someone from use of money, access to markets, legal capacity, marriage, access to education, or the freedom to choose one's religion. And yet – as I presume – internal debarment and forms of including exclusions can be observed in modern subsystems and thus also in modern economy.

In order to achieve the proclaimed inclusion of everyone into all functional systems, manifold semantic and structural developments are necessary: the emergence of functionally specific audiences, semantics of equality, humanity as well as human rights as comprehensive semantic prerequisites, and the transcription and differentiation of functionally specific semantics. In the case of the economic system such transcriptions

involve the transformation of a semantics of neediness into a general semantics of need that includes the upper classes. Only the poor and indigent are needy, but the rich and wealthy have needs, also (Appleby 1976, 1978; see also Pichler 1983). Finally, functionally specific structures must develop which allow the subsystem to regulate inclusion and exclusion in an autonomous fashion: compulsory schooling for the entire population in the case of the education system, general legal and contractual capacity in the case of the legal system, property and income as a normalized structure in the case of the economic system.

In the beginning, however, the autonomization of the economic system, which proceeds as an increasing separation from political and familial aspects, rests on the property code. The distinction property/non-property does not maintain that only proprietors are included into the economy or even society as the liberal interim semantics of the propertied bourgeoisie and property individualism would have it.

According to the latter, only the proprietor was trusted with responsibility for the general public since he paid taxes; only he was granted a political voice in census suffrage.[4] Inclusion was brought about through the positive value of the distinction. However, much more is implied by the property code: 'with regard to *all* ownable goods *everybody* is either a proprietor or a non-proprietor and third possibilities are excluded' (Luhmann 1988:89, my translation). Property is always exclusive insofar as the ownership by one precludes ownership by anyone else. Commons ownership is, of course, an exceptional case in this regard; here, other communities are excluded from ownership. However, non-proprietors are included into the economy in the respect that they accept the exclusion from concrete ownership by others. Only if non-proprietors were excluded from any possibility of attaining property altogether would they be excluded from the economy.

The primary code of economic activity is and always has been the property code relating to actual material goods – labor and one's own body constituting much discussed exceptions to what was normally understood as property. It was followed by a monetarization of the economy as a secondary coding, by means of which the transferal of property first disencumbered itself of the constraints imposed by natural law. The now monetarized economy also includes labor and realty into the money medium as both

become vendible. Modern property differs from property conceptions of medieval Europe in its money-mediated transferability to others (Pocock 1979).

The secondary coding 'pay/not pay' not only establishes an unusual measure of event-based determination and high 'pulsing' of the system when compared with other systems, but it also provides a pre-condition for an increasing immaterialization. That is to say, it brings forth an economic sphere no longer driven by material value, provisioning and supply, or the transfer of goods. This is evidenced by the increase in immaterial titles and property rights as well as by the exponential growth of the financial sector within the last thirty years. The seemingly infinite increase in financial transactions and their disproportionate relation to the transfer of goods are indicative of said immaterialization: 'The volume of foreign exchange transactions is close to 1,500 trillion dollars a day, which is more than seventy times the daily volume of international trade of goods.[5] Hence, the nexus of payments is not limited to non-material goods such as expertise or patents. It also involves the money medium itself, the reflexivity of which is expressed in modes of payment and forms of trade such as foreign exchange, arbitrage, derivatives, and futures. With an increasing reflexivity of the money medium, economic communication is based less and less on actual, physically existent elements and more and more on elements based purely on promises and expectations. The question of how 'wealth of nations' can be achieved and who is participating in which fashion in such wealth can no longer be answered with recourse to an analysis of 'labor' and its organization as Adam Smith argued. Thus, the issue of inclusion and exclusion in economy cannot be settled by a simple reference to property and the participation in so-called real economy. In the following, I would like to complement my sketch with a few specifications and additional assumptions that shall be the basis for my further argumentation.

2.1 Exclusion as Consequence of Inclusion

I presume that the phenomena currently perceived as instances of exclusion are in reality consequences of inclusion as a detailed analysis can show. Even if function systems have no grounds for exclusion, it is precisely a consequence of the proclamation of general inclusion and the attempts to achieve it that these systems bear internal mechanisms of

including exclusion and internal debarment.[6] Thus, the difference between inclusion and exclusion is a structuring principle within the function systems. Bankruptcy resulting from failed investment, bad speculation, or unanticipated economic developments is an obvious example, which, however, is by all means reversible as are most other forms of exclusion – after a fixed period of time.[7] Economic exclusion can be occasioned from outside the economy, as well. A politically motivated expropriation has political grounds, but economic consequences that can be far greater than a mere economic downgrading. It may in fact lead to an exclusion from the centre and the semi-periphery of the economic system. The legal constraint imposed on Jews regarding monetary emigration during National Socialism gives an example of this as do the exchange control regulations of the same era (Stützel 1975:14). Furthermore, a legal fine, ordered within the legal system, can be economically devastating and may lead to an exclusion from salaried employment and even consumption as a whole. Conversely, economic inclusion through 'unmerited assets' as occasioned by a family inheritance can be economically consequential in that it may give rise to revenue which exempts the inheritor from governmental allocations as a source of income.[8]

2.2 Plural or Multiple Economic Inclusion

The plural or multiple orders of inclusion that can be observed in society as a whole also manifest themselves on a structural level in some subsystems. On the basis of a general accessibility to markets and a normalized money usage, income and property have emerged as institutionalized modes of regulating participation in economic communication within a monetarized economy. These structures have their counterpart in multiple roles, positions, and modes of address through which individuals can be economically included as persons: market participants, proprietors of capital and assets, entrepreneurs, jobholders and wage earners, employees of economic organizations, speculators, hedgers, investors, pensioners, depositors, salesmen, addressees for product advertisements, price observers deliberating a decision to make a payment, stock holders, fund participants, currency dealers, insiders, debtors and creditors.

2.3 The Including Operation of the Economic System: Engenderment of Solvency

While an increasing pluralization of inclusion can be observed on a structural and semantic level within the economic system, the operative access rests on one operation defining the boundaries of the system. Inclusion into the operative process of an economic system characterized by a grounding in income and property, by a market structure, and by monetarization necessarily involves – thus my thesis – a normalized use of money and thus the engenderment of solvency, which, as I aim to show, includes creditability as presumed solvency at the center of the economic system.

2.4 Center, Semi-periphery, Periphery

The conception of inclusion through roles of professionals and audience roles bears little plausibility for the economic system. Weber plausibly elaborated the notion of complementary inclusion for the roles of the priests and the laity in the religious sphere. But who is the audience and who is the laity in the economic system? The conceptual asymmetry of producers and consumers, taken from the production paradigm, does not come to proper terms with the multiple inclusions within a developed economy. In my view, a more proper calibration and conceptual structuring of the dynamics of inclusion and exclusion within the economy can be achieved by distinguishing center, semi-periphery, and periphery.

The analytics of center, semi-periphery, and periphery is used in a highly inconsistent fashion within the literature. Wallerstein introduced these concepts in the context of his considerations on the modern world system in order to analyze the relations of inequality and power between the European states as ‘motherlands of capitalism’ and the regions at the periphery of the capitalist world economy. For him, the semi-periphery is constituted by regions that dropped out of the center or advanced from a former status as periphery as a result of geopolitical changes in an expanding world economy; as ‘middle areas’ they play an important part in the balancing of power between center and periphery. Here, the center-periphery difference is conceived as a power-laden dynamic among world regions and, ultimately, as a spatial model (Wallerstein 1974, 1979).

Baker (1992) offers a structure-theoretical conception of the distinction. He distinguishes financial actors according to their placement in the center, periphery, and semi-periphery of the economic system. By means of a statistical analysis of the empirical structure of the financial market he can show that the means of controlling monetary decisions are hardly confined to the banks as the institutional centers of the economy. Rather, as a potent creditor the private sector increasingly takes part in the process of money creation and the engenderment of spending capacity. According to Baker's analysis, this implies that not banks and central banks but private '*nonbank* financial institutions' like financial intermediaries occupy the center in the sense of a decision-making capacity and the imposition of definitions within the economy (Baker 1992:134). What counts as money and what it is worth is essentially determined by its constantly varying usage as Baker contends. According to him, regulation and control of such usage is not necessarily found at the central banks. The distinction of center, semi- periphery, and periphery is presented here as an institutional and structural model.

Finally, Luhmann also makes use of this distinction in a manner significant to our line of argumentation. Other than Wallerstein he conceives of center/periphery not in a spatial sense, but as a form of differentiation within societal subsystems. The concept of semi-periphery is missing in Luhmann's work. One can draw from his considerations that, historically speaking, the subsystems have always developed around institutional, mostly organizational centers. These are the state apparatus for the political system, churches for the religious field, universities for science, the banking system for the economy, and for the legal system courts of law, which are considered a subsystem within the legal system (Luhmann 2004:274 ff.).[9] However, while courts of law are present from the outset of the process of autonomization of the legal system, the surfacing of the banking system constitutes the end of this process for the economy. In the analysis of the present functioning of subsystems, the center/periphery distinction supplants models of hierarchy. Thus, Luhmann illustrates in his analysis of the legal system how the organization of jurisdiction is established as the center of the system along with a prohibition of judiciary denial while contract conclusions and legislation constitute the periphery. The relation of center and periphery is, however, not one of authority. A comparable structure can be found in the economic system. Here, the banking system emerges as center while production, commerce, and consumption belong

to the periphery or semi-periphery of the system.

Neither Wallerstein nor Baker relate the center/periphery-difference to the problem of inclusion and exclusion. Only in bringing the two concepts together, however, does the benefit of my argument become evident. In order to integrate both theoretical perspectives, I shall add a further aspect to the three aforementioned paradigms: the geographical-spatial conception of Wallerstein, the notion of institutional actors positioned according to their power potential as put forth by Baker, and the emergence of organizational centers as part of a differentiation within a subsystem in the theory of Luhmann. The concepts of the money medium as a fundamental evolutionary achievement of an autonomous economy and the engenderment of solvency as inclusionary elementary operation shall serve as the basis for my considerations. Thus, the following argument strictly relates the difference of center, periphery, and semi-periphery to the practices and operations regarding the money medium.

Taking this suggestion as a premise, it follows that inclusion into the center of the monetary economy is realized by all operations concerned with money creation itself. Other than in Classical or Neoclassical Economics, money can no longer be perceived as an invisible 'neutral veil' which envelops real economy driven by production and trade of goods. One can assume for a full-grown economy that its driving forces no longer lie in the demands of households or the supply of goods. Rather, they lie in the financial economy and thus in the money mechanism itself.[10] In various theories, the mechanism of money creation is described as a credit mechanism. I will get back to this point later. If the center of the modern money economy is to be seen not in production but in the financial system, the relation of creditor and debtor can be considered to constitute the fundamental process of inclusion into this center.

Inclusion into the semi-periphery, which can be described as a sphere of production and trade, is achieved through income and propriety as modes of engendering solvency. Specific practices of the semi-periphery comprise: budgeting, management of finances and inclusion into labor as the normalized form of gaining income, but also the competition for market shares through product innovations. Futures and forward contracts as specific forms of trade are also semi-peripheral practices. Their end lies not in consumption or money creation, but in minimizing risks of trade relations, which,

however, – as the crash shows – can– have the unintended effect of maximizing such risks.

Finally, the periphery of the modern economic system can be described as the sphere of consumption. Money can be traded, but it cannot be consumed. Here the objective is to supply the general population with goods and services. Typical practices of the periphery rest on an earmarking of funds from outside the system.[11] Public expenditure also belongs to the periphery of the economic system. It finds its way back into the economic cycle through consumption but is not earned by inclusion of its recipients into the semi-periphery. Recipients of state allocations, who receive goods or vouchers for goods instead of money, are excluded from the periphery of the economy. Such recipients are excluded in the sense of an including exclusion which, in this case, may also be conceived as an excluding inclusion. This operation includes into the stream of goods but not into the stream of money, as it excludes from that which is constitutive of the money medium: the freedom of choice regarding goods, the type of market, the time of expenditure, and the profitable decision not to expend.

A center cannot operate without a semi-periphery or periphery just as a periphery and semi-periphery cannot exist without a center. Hence, no difference in rank or in societal relevance is postulated here. Rather, one can presume a circular networking of the operations of the different spheres. I will return to this point. For the economic system, this means that the money creation of the center is closely tied to the semi-periphery, provided that the particular credit loans serve investments or the purchase of property. Likewise, payments within the sphere of consumption presuppose the engenderment of solvency. One can thus reason with regard to the inclusion of persons into the money mechanism that usually inclusion into both semi-periphery and periphery necessarily follows from an inclusion into the center, while the opposite does not hold. While ‘external arenas’ would have to be conceived as excluded regions of the world economy within the theory of Wallerstein (1974:350), I argue that gradable exclusion and inclusion into the money medium is the primary measure of participation and internal debarment in modern economy. Such a graduation does not translate to a scale from ‘wealthy’ to ‘poor’. The decisive variables are not wealth and poverty. Rather, one could pointedly phrase it as follows: Only those who expose their lives to the risk of bankruptcy are included into the monetary economy; those who do so with recourse to a

credit loan are included into the center.

The following considerations focus on inclusion and exclusion within the center of the economic system and thus on practices concerned with money creation itself. This necessitates a more thorough analysis of the money mechanism itself and of the relevance of specific forms of credit to a theory of inclusion.

3. Creditworthiness as Principle of Inclusion and Exclusion within the Center of the Economy

3.1 The Money Medium

Uncertainty, risk and unpredictability under conditions of scarcity can be seen as the fundamental problems of modern economic practice. The mechanism of trust counters the problem of uncertainty and risk in monetary communication. In modern economy, this implies trust in systems and their institutions (Guseva and Rona-Tas 2001; Luhmann 1979). With the acceptance of money, I trust in a functioning world economy, i.e. I trust that I can use this money again as a means of payment anywhere in the world for any purpose at any time on any market in any currency. A gain in temporal, factual and social freedom is generally attributed to the money medium.[12] The problem of unpredictability in the sense of an uncertainty of future expectations is countered by the money function of linking the present with the future. Therein lies the most important feature of the money medium for Keynes, who had already jettisoned the exchange paradigm: 'The importance of money essentially flows from its being a link between the present and the future' (Keynes 1936:293). Classic functions attributed to money time and time again comprise the store of value, means of payment, unit of account, and measurement of value. These conceptions have in common that they overlook the essential feature of the money medium.

Money shall be conceived here as a symbolically generalized medium of communication (cf. Luhmann 1988:chap. 7). It serves as an institutionalized means of payment that makes expectations of payment possible. Only in this fashion can it at the same time bridge the differences between alter and ego constitutive of social situations.

It does so through its symbolic form to which both alter and ego can relate in an integrated manner. The history of the money symbol is often portrayed as the history of its 'denaturing' (Bloch [1936] 1954). The distribution of money bills by the bank of England in 1696, the conference of Bretton Woods, and the termination of the gold standard for the Fed-Dollar by the American government in the nineteen hundred and seventies can be seen as dramatic events and important stages in this process. In England a shortage of mintage enacted by parliament facilitated the acceptance of the first money bills as forms of payment. More important in this regard, however, was the fact that the bills' credit-worthiness was based on the entire unspecified tax revenue of the English crown (Carruthers 1996; Hutter 1993). The dissociation of money value from the gold standard – naturally, at no point in time had all the money in circulation actually been covered by gold – marked the endpoint of this development insofar as money value was thereafter no longer determined by an external standard, but by exchange relations with other currencies. However, it is not the increasing dissolution from natural standards by the symbolic character of money itself that is uncovered by sociological analysis. Such a naturalized interpretation must be ruled out in light of the fact that the valuation and selection of gold or, just as well, cowrie shells, follow social conventions themselves. Thus, from the very outset money must be conceived as a symbol in the sense that it is without intrinsic value and generalizable, i.e. available for multifarious, culturally determined uses. The cultural and individual forming of the money medium's precise purpose does not contradict its fungibility, in the sense of legal and economic transferability, nor its social universality; rather, the latter constitute precisely the preconditions for the ability of the money medium to take on different forms; the aforementioned theory of Zelizer would have to be corrected accordingly. Hence, even if the symbolic form of the money medium is not new (after Bretton Woods), the (self-) description of the medium as a self-referential one, gaining its dynamic stability through constant reference to itself, does take on a new quality.

Scarcity of money is a prerequisite for its self-stabilization; after all, due to its now obvious artificiality and mere symbolic features, it might just as well be produced at will. Hence, the institutionalization of money as means of payment must go along with an institutionalization of scarcity. However, the means of inducing scarcity available to a society are scarce themselves (Hahn 1987). For the modern money medium, scarcity is achieved through the institutionalization of a two-tiered banking system (state central

banks and private commercial banks) as of the 19th century. Thus, money is no longer bound to the form of cash or share divisions, but comprises bank money, checkbook money, book money, letters of credit and all its derivatives; furthermore, it is self-generating through the mechanism of credits and bonds of debt. The continuous monetary flow can now only be described as a concatenation of reciprocal promises of payment.

What are the consequences of money as a fungible symbolic medium, with payment promises as its dominant mode of operation within the economic center, for inclusion and exclusion into this center? If one is to conceive of this center neither as trade in money, as a finance-sociological perspective would, nor as bank and central bank organizations but as all operations concerned with money creation – as this article suggests – it is recommendable to take a closer look at the mechanisms of money creation itself.

3.2 Money Creation from Credit and Creditworthiness as Mechanism of Inclusion and Exclusion

The notion that money is created from credit can be found in manifold variants within economic theory. I shall follow considerations of Monetary Keynesianism, Property Economics and the theorem of the creation of check book money by Samuelson in order to apply their insights to an analysis of inclusion and exclusion within the center of the economic system. The thesis of Monetary Keynesianism can be summed up as follows: money is not credit, but money is generated by credit. Not acts of exchange, so the argument, but debt relations lie at the heart of the money function (Riese 1998). Along with this genealogical proposition goes the more systematic notion that money creation rests on a relation between creditor and debtor, in which the central bank assumes the position of the creditor – so far without credit risk. According to Monetary Keynesianism, money is a credit from the central bank and thus every payment becomes a debenture in search for a new debtor. This notion refers to payments with central bank money, which releases banks as well as persons from the burden of constantly giving proof of ‘personal’ creditability. However, it does not inform us about the question relevant to inclusion theory, i.e. how persons or organizations acquire such credit for which they are looking of a new debtor. Property Economics complements these general

considerations on the engenderment of solvency with the notion that the genesis of money and the ongoing process of money creation can be explained by its giving promise of awarding property (Carruthers and Ariovich 2004; Heinsohn and Steiger 2006; Beckert 2016).

In a full-grown monetary economy the credit mechanism, which lies beneath the money mechanism, thus takes on two forms: the form of credit inherent to the payment function (Monetary Keynesianism) and the form of a credit that rests on the difference between property and possession. In the latter form, money fulfills a twofold purpose: it is in possession of a debtor as well as of a creditor both of whom waive their rights of disposal for the moment. Thus, money creation is the result of an award for property to which the creditor is entitled while the debtor is using it. In the context of money creation among banks, Samuelson (1998:570) analyzed this mechanism very closely under the title of multiple creation of checkbook money: All bank deposits beyond the minimum reserve established by the central bank are thus involved in a process of money creation. Through an iterative concatenation of creditor-debtor-relations mediated by banks further check book money is – hopefully – created.[13] The first form of debt relation describes the inclusion into the monetary economy of all those involved in payments. It rests on a fictitious, anonymous creditor-debtor-relation characteristic of any payment within the center, the semi-periphery, or the periphery of the economic system. The actual creditability of the persons involved is of no relevance here. The second form is concerned with the collateral of the debtor, which triggers this process of a never-ending creditor-debtor-relation in the first place. Through a repersonalizing of the creditor-debtor-relation depersonalized by the money medium, which necessitates a proof of personal creditability, the person is included into the center of the monetary economy.

These money-related insights have been scarcely considered in sociology.[14] However, they are of great import to the question of inclusion into the center of the economic system if this inclusion essentially rests on the money medium. If credit- based money creation is what lies at the center of the economic system, inclusion into this center is accomplished through a specific form of engenderment of solvency that has its basis in creditability. Thus, inclusion into the center of the monetary economy takes the form of an engenderment of solvency that produces new solvency after insolvency has come about. It has been frequently noted that this process involves time. Credit relations

always carry a time limit, which, however, is largely put into perspective within inter-bank transactions with their considerations of credit-worthiness, solvency checks, and interest rate risks.[15] However, the much-neglected social dimension is of equal importance to the inclusion into the money medium and the center of the economy with its logic of money creation – i.e. the freedom of choice regarding debtors and the possibility of changing debtors. Hence, if inclusion into the center of a fully monetarized economy rests on creditability, it is precisely this inclusion into the process of money creation that distinguishes the center from the modes of inclusion within the periphery and semi-periphery. Inclusion into the center of the monetary economy cannot be assessed by the volume of financial assets, but only by creditor- debtor-relations. The irresolvable tie of center and semi-periphery is illustrated by the fact that an affiliation with an organization that distributes company shares among its employees is an important collateral for the inclusion into the center by way of creditability.[16]

Thus, exclusion from the center of the economic system lies not in insolvency, but in exclusion from the possibility of generating solvency from insolvency. Not owning a credit card is an example of such an exclusion.[17] On the side of inclusion, the example of Native Americans comes to mind who put themselves at risk of bankruptcy in converting from a subsistence economy to a farming subsidized by government loans which have to be paid back. Finally, we are currently witnessing countless bank insolvencies that lead to exclusion or temporary including exclusion. The latter is an enhanced form of welfare in which debts are municipalized and the actual creditor-debtor relation suspended. Furthermore, we are seeing a new wave of inclusion into the center of the economic system through a global increase in the – economically rather profitable – institutionalization of micro-credits and in global campaigns to improve financial literacy launched by the World Bank since 2010.[18]

3.3 Forms of credit

The various forms of credit include and exclude in multiple ways, and their historical formation can be traced back to very different motives that also account for the present heterogeneity of credit formats. While the structuring principle of money lies precisely in its trait of not giving the prospective of reciprocity in the sense of an equal trade-off or contractual obligation between persons, credit re-personalizes the degrees of freedom

within monetary communication. While money as a generalized medium of communication is applicable to anything that has a price, credit reintroduces particularity in determining what it is to be used for. Credits are brought into being through an obligation of one person to another, whether a legal person such as a bank, an insurance company or a corporation, or a natural person. They specify the sum, the term of the loan, the conditions of interest, and they establish a relation between a creditor and a debtor (Carruthers 2005; Mennicken 2000). Hence, the universalism of the money medium is re-particularized in the credit format, and its characteristic indifference towards the persons involved is re-personalized. Credit forms are forms of debt; they establish expectations of payment directed towards persons and at least formally enforced by legal sanctions. However, the more they gain in free transferability, assignability and fungibility the more they tend to resemble money.[19]

At first sight, inclusion into the economic system through creditability followed a pattern of increasing formalization, anonymity, and internationality. Early forms of credit rested on networks; in the 19th century, attempts were made to meet this problem with 'insider landing' or the investigation into the 'character' of the debtor; self-descriptions of debtors also catered to this stereotype. The network-based informal inclusion into the economic system through creditability had the advantage that debt could be collected by means of legal and social sanctions (Lamoreaux 1994; Padgett 2007). Current forms of credit have long turned away from inquiries into personal qualities of debtors and have developed procedures such as accounting standards, permanent auditing, interbanking information sharing, disclosure obligations, or automated credit scoring techniques based on some statistic algorithm or point systems set up in advance by experts in order to "rationalize" the absorption of risk in the global interrelation of debentures.[20] A number of financial scandals and crises show that the flip side of money creation from credit is money loss. The most recent example is the subprime- mortgage crisis which emanated from the American real estate sector in the summer of 2007. These crises also give evidence of the fact that continuous staccatos of expert ratings do not protect from destabilization or misinterpretation – particularly as they frequently operate according to the principle of 'undoing calculation' as micro-sociological studies show.[21]

Detailed analysis of the relevance of credits for inclusion shows that the credit

system maintains a bipolar structure. Early forms of a credit system already established a secondary form of credit assignment pursuing religious, charitable or philanthropic ends, which is still effective today. Institutions such as the monte di pietà during the renaissance committed themselves to protecting the poor from the usuries – the diábolon of credit – which flourished in the cracks of the credit system. Charitable and philanthropic organizations soon followed; they contributed to the generation of income through loans to the needy and thus included them into the newly formed income-based economy.[22] This tradition continues in the assignment of micro-credits by the Grameen Bank located in rural Bangladesh. Interestingly, it is responsible for a global wave of inclusion that picks up and modifies the network- and group-based credit practice of early credit organizations.[23]

Hence, the significance of the credit system – including its genesis – for inclusion and exclusion into the economy cannot be reduced to a dual cycle of the economic system that carries insolvency on a different channel than solvency. The observation of Monetary Keynesianism, which shifts the focus from assets to liabilities because that is where money creation takes place, does not suffice either. Credits also recruit participants as players in the center of the economic field by including or excluding individuals as persons as well as legal persons through the attribution of competence of selection, liability, and accountability.

Notes

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[1] I use the concept of meaning-dimensions in the sense of Luhmann (1995a:74) '… we must clarify the decomposition of the *abstractum* "meaning". This can be done with the help of the concept "meaning dimensions". We can thereby abandon the concept of the subject. This does not imply the domination of the fact dimension, although the latter will not be negated by a subject set in opposition to it. Instead, we view factual references as merely one of several dimensions of meaning. These references are not set against a subject, but, if meaning is complex enough, they must adapt themselves to complicated interdependencies with temporal and social meaning references.'

[2] For the Middle Ages see (Wood 2002:chap. 3), for present negotiations on pricing "priceless" nature see Fourcade (2011), pricing singularities Karpik (2010).

[3] Several American studies on elite universities provide empirical evidence for the very limited

convertibility and compensability of money and talent. For a study dealing with semantic shifts regarding the concept of 'merit' and the inclusion into elite universities, see Karabel (2006).

[4] Liberalism saw a political solution of the problem of property in the state, cf. (Locke [1680] 2008:350-351) 'The great and *chief* end, therefore, of Men's uniting into Commonwealths, and putting themselves under Government, *is the Preservation of their Property*.'

[5] Schularick and Taylor (2012); Goldfinger (2000:72; 2002) considers this development as a 'shift from tangible to intangible Economy'. The share of trade in goods in all monetary transactions is currently estimated at 5 percent; see also Bryan and Rafferty (2007), who discuss the significance of an increasing immaterialization of the economy for the money concept – without reaching a convincing conclusion. Hilferdinger coined the concept 'finance market capitalism' for a description of similar developments. For a recent study in the field of Sociology of Finance cf. MacKenzie (2009a), who speaks of a virtualization of money focussing on derivatives.

[6] Studies which substantiate this relationship exist for the educational system (Bourdieu et al. 1999) and the spatial segregation of the ghetto poor in the USA (Wilson 1996).

[7] Cf. Bohn (2009), with regard to reversibility of exclusion.

[8] Beckert (2008: chap. 3) can show that changes in inheritance customs also reflect and modify societal movements of inclusion and exclusion.

[9] The center/periphery distinction gained increasing importance for the analysis of the subsystems themselves in the later work of Luhmann (2004: chap. 7). In the earlier work, the distinction is used in a historical perspective with regard to pre-modern societies as a whole.

[10] In his considerations on the essence of money Schumpeter ([1929] 2008:218) already pointed to its 'autonomy that pays no heed to changes in the corpus of commodities and is meaningless from this perspective' (my translation). He thus concluded that the unit of account is, strictly speaking, independent of any association with a good's value.

[11] Since the 19th century, consumption has carried feminine connotations. Evidence is given by Zola (1883). In the context of my argumentation, it is interesting to find that 19th century semantics aimed to confine the emerging practice of financial speculation to the center and thus to prevent a temptation of the periphery (female consumption), cf. (Stäheli 2013:chap 6 and 7).

[12] What Simmel ([1900] 1989:375-482, passim) had in mind was primarily the social dimension in a sense of an individual gain in freedom as a result of differentiation.

[13] This process is maintained by the banks' concern regarding idle money and excessive reserves.

[14] Parsons (1971:26) did take this insight of more recent economics into account and used it as an objection against zero-sum theorems regarding the power medium. However, he did not relate it to the problem of inclusion. 'The same dollars', thus Parsons (1969:384), 'come to do "double duty", to be treated as possessions by the depositors, who retain their property rights, and also by the banker who preempts the rights to loan them, as if they were "his". In any case there is a corresponding net addition to the circulating medium, measured by the quantity of new bank deposits created by the loans outstanding.'

[15] Wolfgang Stützel (1983b:33) posits that in inter-bank transactions, strategies for coping with liquidity risks could be changed from solvency checks to assessments of creditability. Not the time limit of lending

and borrowing is key to coping with such risks but rather the banks' reciprocal credit-worthiness in inter-bank transactions. The current economic crisis is a case in point.

[16] Ingham (2004a:chap. 6-7, 150; 2004b) concludes from the increasing importance of creditability in the economy that the fundamental economic divide is no longer to be seen between the poor and the wealthy or within relations of production, but rather between debtors and creditors.

[17] For a detailed and very instructive comparative study of institutional arrangements that Russian and American banks apply to evaluate the creditworthiness of prospective credit card holders, see Guseva and Rona-Tas 2001; for structural differences of the American and Russian credit card markets see Guseva 2005; for the emergence of the credit card market in post-communist Russia see Guseva 2008.

[18] Yunus (2003, 2007). In November 2010 the World Bank launched a global program on financial literacy and distributed loans to national governments to help set up financial education programs and improve financial literacy. See e.g. (http://go.worldbank.org), see as well as a general consumer education site financed by the European Commission: (http://www.dolceta.org).

[19] A detailed analysis of the credit system would show that events decisive in the regard of assignable loans occurred in the 17th century (for the British case Carruthers 1996:chap 5) and then again at the end of the 20th century. From an American Perspective see Carruthers and Ariovich (2010:chap. 4 and 5); Carruthers (2010).

[20] Not so in post-communist transitional economies as the Russian inclusion into the well established international credit card market since 1991 demonstrates. It follows models of "payroll" and solves the uncertainty problem through „two-stage embeddedness" which, as Guseva (2008) points out, simplifies pre-screaning and monitoring of creditors: relations of the bank to the enterprise and of the enterprise to its workers, channel information and facilitate control. For a comparative study see Rona-Tas and Guseva (2014).

[21] For an excellent analysis of the exclusion effects of credit scoring in the subprime crises by creating new risc categories of "mortgager" cf. Folkers (2013), who demonstrates how autoimmunization follows the distinction normal/anormal. For the calculating tool of "scorecards" for selecting and managing consumers of credit, cf. Poon (2007). For an application of the calculative perspective to the case of the evaluation of Greece's government debt cf. Wansleben (2011). For a very convincing new approach to managing uncertainty in consumer landing based on the model of distributed cognition and a comparative study in Central and Eastern Europe cf. Rona-Tas and Guseva 2013. For undoing calculation cf. Kalthoff (2007). For the new faith in auditing cf. Power (1997).

[22] It is known that many of the savings banks founded in the 19th century were not oriented towards profit of the creditor, but towards protection of the debtor. Woolcock (1999) analyzes the success and failure of many urban and rural, historic and current micro-credit companies (Ireland, Bangladesh etc.).

[23] See Sengupta and Aubuchon (2008) for an overview. Another interesting fact is the high percentage of women among the debtors: 95 percent. Research with a more microeconomic and sociological orientation has a special focus on the phenomenon of the group-based credit system and on the evaluation of successful und unsuccessful cases (Anthony 2005; Woolcock 1999). Questions of inclusion with relevance to world economy are merely – if at all – reflected in terms of the programmatic phrase 'fight

poverty' (cf. Ananya 2010; Yunus 2003, 2007).

References

Abolafia, M. 1996. *Making Markets: Opportunism and Restraint on Wall Street*. Cambridge, MA: Harvard University Press.

Ananya, R. 2010. *Poverty Capital: Microfinance and the Making of Development.* New York: Routledge.

Anthony, D. 2005. Cooperation in Microcredit Borrowing Groups: Identity, Sanctions, and Reciprocity in the Production of Collective Goods. *American Sociological Review* 70: 496-515.

Appleby, J.O. 1976. Theology and Theory: The Tension between Political and Economical Liberalism in Seventeenth-Century England. *American Historical Review* 81: 499-515.

Appleby, J.O. 1978. *Economic Thought and Ideology in Seventeenth-Century England.* Princeton, NJ: Princeton University Press.

Baker, W.E. 1992. What Is Money? In *Incorporate Relations,* ed. M.S. Mizruchi and M. Schwartz, 109-44. Cambridge: Cambridge University Press.

Beckert, J. 2003. Economic Sociology and Embeddedness: How shall we Conceptualize Economic Action? *Journal of Economic Issues* 37: 769-87.

Beckert, J. 2006. Interpenetration Versus Embeddedness: The Premature Dismissal of Talcott Parsons in the New Economic Sociology, *American Journal of Economics and Sociology* 65: 161-88.

Beckert, J. 2008. Inherited Wealth. Princeton, NJ: Princeton University Press.

Beckert, J. 2016. Imagined Futures. Fictional Expectations and Capitalistic Dynamics. Cambridge Mass: Harvard University Press.

Bloch, M. [1936] 1954. *Esquisse d´une histoire monétaire de l´Europe.* Paris: Armand Colin.

Bohn, C. 2006a. Une société mondiale. Les concepts sociaux de Bourdieu et Luhmann. In *PierreBourdieu, théorie et pratique. Perspectives franco-allemandes*, ed. H.P. Müller and Y. Sintomer, 101-27. Paris: La Découverte.

Bohn, C. 2006b. *Inklusion, Exklusion und die Person*. Konstanz: UVK.

Bohn, C. 2009. Inclusion and Exclusion: Theories and Findings. In *Inclusion/Exclusion: Strangers and Poor People from the Classical Antiquity to the Present Days*, ed. A. Gestrich and L. Raphael, 35-53. London and Frankfurt am Main: Lang.

Boltanski, L., and E. Chiapello 2007. *The New Spirit of Capitalism*. London: Verso.

Bourdieu, P., et al. 1999. *The Weight of the World: Social Suffering in Contemporary Society*. Stanford, California: Stanford University Press.

Bryan, D., and M. Rafferty. 2007. Financial Derivatives and the Theory of Money. *Economy and Society* 36: 134-58.

Callon, M., and F. Muniesa. 2005. Economic Markets as Calculative Collective Devices. *Organization Studies* 26: 1229-50.

Callon, M., Y. Millo and F. Muniesa, eds. 2007. *Market Devices*. The Sociological Review. Oxford: Basil Blackwell.

Carruthers, B.G. 1996. *City of Capital: Politics and Markets in the English Financial Revolution*. Princeton, NJ: Princeton University Press.

Carruthers, B.G. 2005. The Sociology of Money and Credit. In *The Handbook of Economic Sociology*. ed. N.J. Smelser and R. Swedberg, 355-78, 2nd ed. Princeton, NJ: Princeton University.

Carruthers, B.G. 2010. The Meaning of Money: A sociological Perspective. *Theoretical Inquiries in Law* 11: 51-74.

Carruthers, B.G., and L. Ariovich. 2004. The Sociology of Property Rights. *Annual Review of Sociology* 30: 23-46.

Carruthers, B.G., and L. Ariovich 2010. *Money and Credit: A Sociological Approach*. Cambridge: Polity Press.

Castel, R. 1995. Les pièges de l'exclusion. *Lien social et politique* – RIAC 34:13-21.

Eichengreen, B.J. 2008. *Globalizing capital. A history of the international monetary system*. Princeton: Princeton University Press.

Fligstein, N., and D. McAdam 2012. *A Theory of Fields*, Oxford: Oxford University Press.

Folkers, A. 2013. Von der Ironie der Normalisierung zur Autoimmunität. Der Subprime Mortgager und die Finanzkrise, in: *Soziale Systeme*, 19 (1): 85-109.

Fourcade, M. 2011. Cents and Sensibility: Economic Value and the Nature of 'Nature'. *American Journal of Sociology* 116, no. 6: 1721-77.

Goldfinger, Ch. 2000. Intangible Economy and Financial Markets, *Communications & Strategies* 40: 59-89.

Goldfinger, Ch. 2002. Intangible Economy and Electronic Money. In *The Future of Money,* ed. The Organisation for Economic Co-Operation and Development, 87-122. Paris: OECD Publications.

Granovetter, M. 1974. *Getting a Job: A Study of Contacts and Careers*. Cambridge, MA: Harvard University Press.

Granovetter, M. 1983. The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory* 1: 203-33.

Guseva, A., and A. Rona-Tas 2001. Uncertainty, Risk and Trust: Russian and American Credit Card Markets Compared. *American Sociological Review* 66(5): 623-646.

Guseva, A. 2005. Building New Markets: A Comparison between Russian and American Credit Card Markets. *Socio-Economic Review* 3: 437-466.

Guseva, A. 2008. *Into the Red: The Birth of the Credit Card Market in Postcommunist Russia*, Stanford, Calif.: Stanford University Press.

Hahn, A. 1987. Soziologische Aspekte der Knappheit. In *Soziologie des wirtschaftlichen Handelns,* ed. K. Heinemann. Opladen: Westdeutscher Verlag. Kölner Zeitschrift für Soziologie und Sozialpsychologie, Sonderheft 28: 119-132.

Heinsohn, G., and O. Steiger. 2006. *Eigentumsökonomik*. Marburg: Metropolis-Verlag.

Hutter, M. 1993. The Emergence of Bank Notes in 17th Century England: A Case Study of a Communication Theory of Economic Change. *Sociologia Internationalis* 31: 23-41.

Ingham, G. 2004a. *The Nature of Money.* Cambridge: Polity Press.

Ingham, G. 2004b. The Emergence of Capitalist Credit Money. In *Credit and State Theories of Money:*

The Contribution of A. Mitchell Innes, ed. R. Wray, 173-223. Cheltenham: Edward Elgar.

Kalthoff, H. 2000. The Inventory of Firms: How Banks Analyze Risk in Central Europe. In *Ökonomie und Gesellschaft. Facts and Figures. Economic Representations and Practices*, Jahrbuch 16, ed. H. Kalthoff, R. Rottenburg, and H.J. Wagner, 59-87. Marburg: Metropolis.

Karabel, J. 2006. *The Chosen. The Hidden History of Admission and Exclusion at Harvard, Yale and Princeton*. Boston, MA and New York, NY: Houghton Mifflin Company.

Karpik, L. [2007] 2010. *Valuing the Unique. The Economics of Singularities.* Princeton: Princeton University Press.

Keynes, J.M. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.

Knorr-Cetina, K., and U. Bruegger 2002. Global Microstructures: The Virtual Societies of Financial Markets. *American Journal of Sociology* 107: 905-50.

Knorr-Cetina, K., and A. Preda, eds. 2005. *The Sociology of Financial Markets*. Oxford: Oxford University Press.

Lamoreaux, N. 1994. *Insider Lending: Banks, Personal Connection and Economic Development in New England*. Cambridge: Cambridge University Press.

Locke, J. [1680] 2008. *Two Treatises of Government*. Cambridge: Cambridge University Press.

Luhmann N. 1977. The Differentiation of Society. *Canadian Journal of Sociology* 2 (1): 29-53.

Luhmann, N. 1979. *Trust and Power*. Chichester, NY: Wiley

Luhmann, N. 1982. The World Society as a Social System. *International Journal of General Systems* 8: 131-138.

Luhmann, N. 1988. *Die Wirtschaft der Gesellschaft*. Frankfurt am Main: Suhrkamp.

Luhmann, N. 1989. Am Anfang war kein Unrecht. In *Gesellschaftsstruktur und Semantik*, vol. 3, 11-64. Frankfurt am Main: Suhrkamp.

Luhmann, N. 1995a. *Social Systems*. Stanford, CA: Stanford University Press. (Orig.: 1984. *Soziale Systeme.* Frankfurt am Main: Suhrkamp.)

Luhmann, N. 1995b. Inklusion und Exklusion. In *Soziologische Aufklärung*, vol. 6, 237-265. Opladen: Westdeutscher Verlag.

Luhmann, N. 1997. *Die Gesellschaft der Gesellschaft,* 2 vols. Frankfurt am Main: Suhrkamp.

Luhmann, N. 2004. *Law as a Social System*. Oxford: Oxford University Press. (Orig.: 1993. *Das Recht der Gesellschaft*. Frankfurt am Main: Suhrkamp.)

MacKenzie, D. 2009. *Material Markets*, New York: Oxford University Press.

MacKenzie, D. 2009a. Derivatives: The Production of Virtuality. In *Material Markets*, 63-84. New York, NY: Oxford University Press.

MacKenzie, D. 2006. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge, London: MIT Press.

Mennicken, A. 2000. Figuring Trust: The Social Organization of Credit Relations. In *Ökonomie und Gesellschaft. Facts and Figures. Economic Representations and Practices*, Jahrbuch 16, ed. H. Kalthoff, R. Rottenburg and H.J. Wagner, 35-58. Marburg: Metropolis.

Moretti, Franco/Dominique Pestre, Bankspeak. The Language of World Bank Reports, in: *New Left Review*, No 92, 2015, S. 75-99.

Padgett, J.F., and P.D. McLean 2011. Economic Credit in Renaissance Florence. *The Journal of Modern History* 83(1): 1-47.

Parsons, T. [1963] 1969. On the Concept of Political Power. In *Politics and Social Structure*, ed. T. Parsons, 352-404. New York, NY: Free Press.

Parsons, T. [1965] 1976. Full Citizenship for the Negro American? In *Sociological Theory and Modern Society*, ed. T. Parsons, 422-65. New York, NY: Free Press.

Parsons, T. 1971. *The System of Modern Societies*. Englewood Cliffs, NJ: Prentice-Hall.

Pichler, J.W. 1983. *Necessitas: Ein Element des mittelalterlichen und neuzeitlichen Rechts*. Berlin: Duncker & Humblot.

Pocock, J.- G.A. 1979. The Mobility of Property and the Rise of Eighteenth-Century Sociology. In *Theories of Property: Aristotle to the Present*, ed. A. Parel and Th. Flanagan, 141-66. Ontario, Canada: Waterloo.

Poon, M. 2007. Scorecards as devices for consumer credit: the case of Fair, Isaac & Company Incorporated. In *Market Devices,* ed. M. Callon, Y. Millo and F. Muniesa, 284-307. Sociological Review Monographs. Oxford: Basil Blackwell.

Power, M. 1997. *The Audit Society: Rituals of Verification*. Oxford: Oxford University Press.

Riese, H. 1998. Geld: das letzte Rätsel der Nationalökonomie. In *Rätsel Geld,* ed. W. Schelkle and M. Nitsch, 45-63, 2nd ed. Marburg: Metropolis.

Rona-Tas, A., and A. Guseva 2013. Information and consumer credit in Central and Eastern Europe, *Journal of Comparative Economics* 41: 420-435.

Samuelson, P.A., and W.D. Nordhaus 1998. *Economics*, 16th ed. Hamburg: McGraw-Hill Book Company.

Schularick, M., and A. M. Taylor 2012. Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870-2008. *American Economic Review*, 102(2): 1029-1061.

Schumpeter, J.A. [1929] 2008. *Das Wesen des Geldes*. Göttingen: Vandenhoeck & Ruprecht. (Engl.: 2014. *Treatise on Money.* Aalten: Wordbridge Publishing.)

Sengupta, R., and C.P. Aubuchon 2008. The Microfinance Revolution: An Overview. *Federal Reserve Bank of St. Louis Review* 90: 9-30.

Simmel, G. [1907] 1989. *Philosophie des Geldes*. GSG 6, Frankfurt am Main: Suhrkamp. (Engl.: 2007. *The Philosophy of Money*. Abingdon/New York: Routledge.)

Stäheli, U. 2013. *Spectacular Speculation: Thrills, the Economy and Popular Discourse*. Stanford, Calif.: Stanford University Press.

Stichweh, R. 2000. *Die Weltgesellschaft*. Frankfurt/M.: Suhrkamp.

Stützel, W. 1975. *Über unsere Währungsverfassung.* Walter Eucken Institut, Vorträge und Aufsätze, vol. 56. Tübingen: Mohr Siebeck.

Stützel, W. 1983a. *Bankpolitik heute und morgen: Ein Gutachten,* 3. ed. Frankfurt am Main: Fritz Knapp.

Stützel, W. 1983b. *Über unsere Währungsverhältnisse. Zehn Jahre Floating: Verheißung und Erfahrung.* Walter Eucken Institut, Vorträge und Aufsätze, vol. 91. Tübingen: Mohr Siebeck.

Swedberg, R. 2004. What Has Been Accomplished in New Economic Sociology and Where Is It Heading? *Archives Européennes de Sociologie* 45: 317-330.

Wallerstein, I. 1974. *The Modern World-System 1: Studies in Social Discontinuity*. New York, NY: Academic Press.

Wallerstein, I. 1979. *The Capitalist World-Economy*. Cambridge: Cambridge University Press.

Wansleben, L. 2011. Wie wird bewertbar, ob ein Staat zu viele Schulden hat? Finanzexperten und ihr Bewertungswissen in der griechischen Schuldenkriese. *Berliner Journal für Soziologie* 21: 495-519.

White, H.C. 1981. Where Do Markets Come from? *American Journal of Sociology* 87: 517-547.

Wilson, W.J. 1996. *When Work Disappears: The World of the New Urban Poor*. New York, NY: Knopf.

Wood, D. 2002. *Medieval Economic Thought*. Cambridge: Cambridge University Press.

Woolcock. M.-J.V. 1999. Learning from Failures in Microfinance: What Unsuccessful Cases Tell Us about How Group-Based Programs Work. *American Journal of Economics & Sociology* 58: 17-42.

Yunus, M. 2003. *Banker to the Poor: Micro-Lending and the Battle against World Poverty*, New York: Public Affairs.

Yunus, M. 2007. Credit for the Poor. *Harvard International Review* 29: 20-24.

Zelizer, V.A. 1993. Making Multiple Moneys. In *Explorations in Economic Sociology,* ed. R. Swedberg, 193-212. New York, NY: Russel Sage.

Zelizer, V.A. 1997. *The Social Meaning of Money: Pin Money, Paychecks, Poor Relief, and Other Currencies*. Princeton, NJ: Princeton University Press.

Zola, E. 1883. *Au Bonheur des dames*. Paris: G. Charpentier. (Engl.: 1995. The Ladies' Paradise, New York: Oxford University Press).