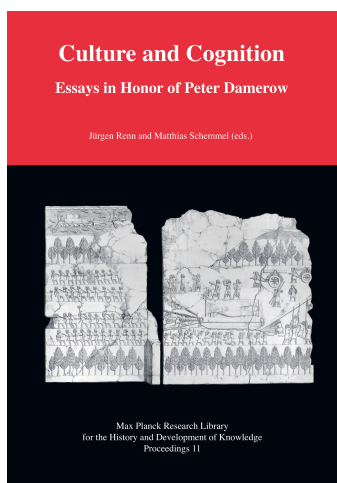


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‘Real Abstraction’ and the Origins of Intellectual Abstraction in Ancient Mesopotamia:
Ancient Economic History as a Key to the Understanding and Evaluation of Marx’s
Labor Theory of Value



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Chapter 6

'Real Abstraction' and the Origins of Intellectual Abstraction in Ancient Mesopotamia: Ancient Economic History as a Key to the Understanding and Evaluation of Marx's Labor Theory of Value

Joachim Schaper

The Problem

The present paper sets out to critically assess the significance of the existence of intellectual abstractions in the society of the neo-Sumerian empire of the Ur III period, and their being rooted in real abstraction, for a reappraisal of Marx's labor theory of value. The term 'real abstraction' refers to abstraction that does not spring from thought but from social being.¹ I see this paper as a *Vorarbeit* for a compendious essay which I hope to publish sooner rather than later and which will contain the fruits of work done in collaboration with Peter Damerow in 2010 and 2011 and further work by myself. What I present in this paper is therefore very much a work in progress and quite tentative.

Peter's reason for agreeing to co-author the essay in question was his view that recent insights into the early Mesopotamian economy had much to offer with regard to a reappraisal of Marx's labor theory of value. My own interest was triggered by my reading of Sohn-Rethel's work on what he called—using a term that was inspired by Marx's theory, but not used by Marx himself—'real abstraction' and its significance for the formulation of a materialist epistemology.² While Peter thought that the concept of 'real abstraction' was a helpful one, he criticized Sohn-Rethel for postulating that real abstraction sprang from the act of commodity exchange, while in fact, Peter thought, it was rooted in labor, that is, in the realm of production and not, as Sohn-Rethel claims, in the realm of circulation.

¹"Das Wesen der Warenabstraktion aber ist, daß sie nicht denkerzeugt ist, ihren Ursprung nicht im Denken der Menschen hat, sondern in ihrem Tun" Sohn-Rethel (1973, 41).

²"Die Abstraktion kommt der Werkstatt der Begriffsbildung gleich, und wenn die Rede von der gesellschaftlichen Seinsbestimmtheit des Bewußtseins einen formgerechten Sinn besitzen soll, so muß ihr eine materialistische Auffassung von der Natur des Abstraktionsprozesses zugrundegelegt werden können. Eine Bewußtseinsbildung aus dem gesellschaftlichen Sein setzt einen Abstraktionsprozeß voraus, der Teil des gesellschaftlichen Seins ist" Sohn-Rethel (1973, 39).

Peter thus pre-empted a criticism of Sohn-Rethel which has been expressed in some of the most recent contributions to the debate on Marx's labor theory of value,³ of which more later.

The Context

As early as 1859, in *Zur Kritik der Politischen Ökonomie* (Marx 1961, 15), Marx invoked Aristotle's treatise *De republica* as the first instance in antiquity of a discussion of the difference between use-value and exchange-value. It was so important to him that he referred to it again in a foundational passage in the first volume of *Capital* (Marx 1962, 50–51). We shall sketch the significance of some of the relevant Mesopotamian sources in order to show that they may well support Marx's reconstruction of the genesis of the concept of value. While Marx's attempt at providing a historical analysis of the development of the concept of value suffered from the lack of availability of historical sources which could have supported his reasoning, we now have documents that are much older than the texts adduced by Marx and betray the existence of value-abstraction and of the concept of exchange-value, as opposed to use-value only, in the late third millennium BCE. In fact, those documents bear witness to the existence of money—not, of course, of precious metal in *coined* form, but of precious metal (silver), in the form of coils and ingots, which gradually established itself as a “universal equivalent.”⁴ Those texts have received attention in the context of research into early Mesopotamian accounting techniques (Nissen, Damerow, and Englund 2004) and the earliest history of mathematics (i.e., Robson 2008). However, their significance for an evaluation of Marx's work on value-theory, and especially of the concept of commodity-abstraction⁵ and its alleged role as the originator of abstract thought, has, to the best of my knowledge, never been explored.

³Cf. Anselm Jappe (2013) on Sohn-Rethel: “For him, the ‘only’ difference he has with the master resides in the fact that he wants to replace the Marxian concept of ‘commodity abstraction’ with that of ‘exchange abstraction’: for Sohn-Rethel, it is not abstract labor that confers value on products, but their exchange. But in doing so, he diverges from Marx on a very central point. For Sohn-Rethel, the exchange act is abstract because the exchangers have undertaken to renounce temporarily the use of the products. The origin of ‘abstractness’ is therefore the exchanger's ‘abstracting’ from the use they could make of the object in question, and this ‘abstracting’ is a ‘real physical act.’”

⁴On gold as an “allgemeines Äquivalent” and the gradual process of establishing it as such, Marx (1962, 84).

⁵“For Marx, abstract labor invests products with their ‘value-objectivity,’ that is, confers value on them. For Sohn-Rethel, exchange accomplishes this task which is why he advocates the replacement of the Marxian concept of ‘commodity abstraction’ with that of ‘exchange abstraction.’ Unlike Marx, Sohn-Rethel does not deem labor to be the source and substance of the value form” Jappe (2013, 9).

The Genesis of the Concept of Value in Ancient Mesopotamia: Economic Practice, Social Organization, and Intellectual Abstraction in the Ur III Period

The economic texts displaying the bookkeeping techniques of the Ur III period illustrate beautifully how abstraction—including, of course, value-abstraction—develops historically and is *rooted in (a specific form of) social being*. It is helpful in this context to remind oneself of the fact that not all societies produce abstractions, and other contributions in this volume discuss some aspects of such lack of abstraction in some modern non-literate societies, for example, in Amazonia and Papua-New Guinea (see also Damerow 1996, 291–293). I cannot go into any detail here. Suffice it to say for the moment that, by contrast with the aforementioned non-literate societies, Mesopotamia produced a remarkable array of intellectual abstractions. I shall attempt (1) to demonstrate their significance and their being rooted in real abstraction, and thus in social being, and (2) to show that they therefore vindicate Marx's labor theory of value.

The Genesis of the Concept of Value in Mesopotamia

What can we know, then, about the way in which the concept of value evolved in early Mesopotamia? For the purposes of this paper, the most relevant material is found in those administrative texts which (1) keep records of economic activities, (2) establish the debits and credits of key personnel in the economy of Ur III, and (3) document value equivalents operative within the Ur III economy and commodity exchange between it and its neighbors.

Fishery was a centrally important part of the Neo-Sumerian economy, and it is fortunate that the Ur III-period records pertaining to that economic sector have been subjected to a rigorous analysis by Robert Englund (1990). Fishery was a state-regulated activity which generated a significant amount of meticulous documentation. This documentation helps contemporary scholarship not just with regard to understanding that sector of the economy in itself, but affords us insights into the actual productive forces and relations of production that were operative in the Ur III period. This in turn enables us to better understand the nexus between the "totality" of the "relations of production," that is, the "economic structure of society," and the "forms of social consciousness" of that society (Marx 1961, 8–9). And if indeed, as Marx postulates, "[t]he mode of production of material life conditions the general process of social, political and intellectual life," the material which survived in the compendious archives of cities of the Neo-Sumerian

empire⁶ may well enable us to arrive at an understanding of the origins of the 'real abstraction' postulated by Sohn-Rethel.

Robert Englund has drawn attention, in his study on Ur III fisheries, to the key function of the *dam-gàr*, probably best translated as "commercial agent" (thus Diakonoff) or "Tauschagent" ("exchange agent," thus Englund). Contrary to the view expressed by Powell, and following Diakonoff and Englund, the *dam-gàr* was most likely a state agent (Englund 1990, 17–18). His office was twofold: "internally," he would exchange surplus goods within the context of the Ur III economy, and "externally," it was his task to exchange surplus goods produced in his own society against surplus goods produced in neighboring societies, that is, he acted as a long-distance trader. He can be correctly described as an official who—as part of his service to a state that operated a planned economy⁷—conducted exchange operations on the periphery of that economy, exchange operations which established an ever-growing system of value equivalencies. From the point of view of the labor theory of value, the *dam-gàr* is fascinating, for it is—according to Marx—precisely at the periphery of pre-capitalist societies that exchange first becomes significant: it is at the periphery that commodities are first exchanged, and it is from the periphery that commodity-exchange then enters the mainstream of the economies of the participating social formations and slowly transforms them: "Der Warenaustausch beginnt, wo die Gemeinwesen enden, an den Punkten ihres Kontakts mit fremden Gemeinwesen oder Gliedern fremder Gemeinwesen. Sobald Dinge aber einmal im auswärtigen, so werden sie auch rückschlagend im innern Gemeinleben zu Waren" (Marx 1962, 102). The economy of Ur III illustrates precisely this point: Neumann has rightly pointed out that the long-distance trade carried out by the *dam-gàr* officials accelerated the acceptance of silver as the standard equivalent and ultimately had a subversive effect on the economic system of the Ur III period, in the sense that it slowly transformed the economic organization of the Neo-Sumerian empire.⁸

Long-distance trade—through quantifying goods and establishing value equivalents across an ever-growing range of goods, thus turning them into commodities⁹—thus had a significant effect on the development of the system of value-equivalencies and, concurrently, on the refinement of arithmetic,

⁶E.g., in Girsu and Umma.

⁷The Ur III state was characterized by an economic system that has correctly been described as a planned economy (Planwirtschaft) by Hans Nissen (2012, 88–89) and others.

⁸"Während das Silber in der Praxis des zentralisierten Wirtschaftslebens der Ur III-Zeit offenbar nur eine untergeordnete Rolle gespielt hat, scheint dagegen der Fernhandel dieser Zeit die Durchsetzung des Silbers als allgemeines Äquivalent beschleunigt zu haben. Dadurch förderte die Ausweitung des Ur III-Handels letzten Endes eine Entwicklung, die gegen die bestehende Organisation der Produktion gerichtet war" Neumann (1979).

⁹See Marx's general description of this process in *Zur Kritik der politischen Ökonomie*, Marx (1961, 35–36).

especially fractional arithmetic. What Marx pointed out in general terms for pre-capitalist societies is illustrated in great detail by the bookkeeping of the Ur III period: “The gradual extension of barter [Erweiterung des Tauschhandels], the growing number of exchange transactions [Austausche], and the increasing variety of commodities bartered lead, therefore, to the further development of the commodity as exchange value [Tauschwert], stimulate the formation of money and consequently have a disintegrating effect on direct barter” (Marx 1961, 36). The dam-gār transactions and their effect on the Ur III economy also show that a concept of value equivalencies was probably first established through more or less random exchange activities on the margins of the state’s planned economy. It was then adopted and refined by that economy, thus establishing a system of equivalencies which helped to integrate the diverse modes of production within the state and thus to make it more efficient both inwardly, with regard to its planning, and outwardly, with regard to its exchange relations with other states and with private individuals, *while also having the long-term subversive effect mentioned earlier.*

Bob Englund has recently marshaled new arguments (Englund 2012, 121–152) to demonstrate that, during the Ur III period, labor-time was not only integrated into the “overall system of equivalencies” (Englund 2012, 127), but that *labor* actually became a *commodity* (Englund 2012, 127)—which, to put it mildly, one would not assume to be possible in a pre-capitalist social formation.¹⁰ The textual evidence needs further investigation, but, as Englund has demonstrated in his 1990 book, the “work day” certainly was a key feature of the system of value equivalencies in Ur III (Englund 2012, 79–90).

Just one quick remark about the Ur III economy in terms of the periodization of pre-capitalist social formations: it can be seen as a characteristic example of the second of the phases postulated by Marx, since it was “based” on a “communal system” that, as Marx puts it, “prevents the labour of an individual from becoming private labour and his product the private product of a separate individ-

¹⁰With regard to texts about bala-services, Englund says: “Weder Maekawa 1988 noch Sharlach 2004 (noch, soweit feststellbar, Studevent-Hickman 2006) haben sich mit den Konsequenzen für unser Verständnis der neusumerischen Verwaltung auseinandergesetzt, die sich aus der Einbettung der bala-Dienstleistungsverpflichtungen in das allgemeingültige neusumerische Abrechnungssystem ergeben. Insbesondere scheint diese Einbettung die These einer übergreifenden Gültigkeit von der Hauptstadt Ur auferlegter Verpflichtungen in den jeweiligen Provinzarchiven zu verdeutlichen. M. E. konnten Silberlohnäquivalenzen dazu dienen, die nach Arbeiterklassen unterschiedlich gewerteten Arbeitseinsätze in leicht verwendbare Silbermengen zu konvertieren, denen letztendlich die uns noch fehlenden bala-Abrechnungen [sic] der Reichskanzlei zugrundeliegen” Englund (2012, 131). This would indicate that value-equivalencies were established between, on the one hand, quantities of labor done by each of the respective types of workers and, on the other hand, specific quantities of silver, thus also establishing value equivalencies between quantities of labor done by one category of workers and quantities of labor done by another type of worker.

ual; it causes individual labour to appear rather as the direct function of a member of the social organization" (MECW 29, 275).

Marx's Labor Theory of Value Against the Background of the Ur III Texts

Historians have rightly asked the fundamental question whether Marx's theory of value can be applied to pre-capitalist social formations in the first place—*"ob also der Wert schon in gewisser Weise als regulierendes Subjekt hinter dem Rücken der Beteiligten wirken kan[n], ohne jedoch als 'automatisches Subjekt', als Kapital entwickelt zu sein,"* as Rudolf Walter Müller rightly asks (Müller 1981, 109–117). Some have answered the question in the affirmative, and rightly so: as Marx pointed out, for commodities to be exchanged according to their values, the economic formation in which the exchange takes place need not have reached the stage of capitalist development.¹¹ Marx postulates not only the theoretical but also the historical precedence of commodity values (*Warenwerte*) over production prices (*Produktionspreise*).¹²

In the neo-Sumerian texts one can detect traces of the beginnings of commodity-production. This observation does not contradict Marx: In pre-capitalist social formations, it is not just farmers and craftsmen who can, by virtue of being owners of means of production, produce commodities, that is, goods produced directly for the purpose of exchange. Marx explicitly mentions slavery and serfdom as conditions under which goods can be produced as commodities (Marx 1964, 187), and the Ur III economy is an example of just that: several modes of production under the roof of one society, with dependent laborers of various kinds producing goods as commodities.

In the economy of Ur III we have an example of the transition from barter to commodity exchange,¹³ exactly along the lines of Marx's sketch of that crucial period in pre-capitalist social formations when "direct barter" (*unmittelbarer Tauschhandel*) gives way to the "formation of money" (*Geldbildung*),¹⁴ that is,

¹¹"Der Austausch von Waren zu ihren Werten, oder annähernd zu ihren Werten, erfordert also eine viel niedrigere Stufe als der Austausch zu Produktionspreisen, wozu eine bestimmte Höhe kapitalistischer Entwicklung notwendig ist" Marx (1964, 186). Müller (1981, 109) rightly stresses this important point.

¹²"Abgesehen von der Beherrschung der Preise und der Preisbewegung durch das Wertgesetz, ist es also durchaus sachgemäß, die Werte der Waren nicht nur theoretisch, sondern historisch als das prius der Produktionspreise zu betrachten" Marx (1964, 186).

¹³"Die besonderen Gebrauchswerte, die im Tauschhandel zwischen verschiedenen Gemeinwesen Waren werden, wie Sklave, Vieh, Metalle, bilden daher meist das erste Geld innerhalb der Gemeinwesen selbst. Wir haben gesehen, wie sich der Tauschwert einer Ware in umso höherem Grade als Tauschwert darstellt, je länger die Reihe seiner Äquivalenzen oder je größer die Sphäre des Austausches für die Ware ist" Marx (1961, 36).

¹⁴MECW 29, 291 = MEW 13, 36.

in the case of Ur III, to the establishment of silver as the standard equivalent. In Ur III society this also led, as I have pointed out, to the flourishing of fractional arithmetic, given the need for the divisibility of value-equivalents in the practice of commodity exchange;¹⁵ indeed, the development of fractional arithmetic received a strong impulse from the introduction of silver as the standard equivalent (Damerow 1981, 82).

This in turn ties in with the fact that Ur III society also came up with the notion of a "work-day" to measure labor, to correlate it with numerous commodities (including the money commodity, i.e., silver) (Englund 2012, *passim*), and thus to establish more value-equivalencies in order to increasingly facilitate the processes of economic administration. The notion of the work-day was thus an attempt at standardizing labor: a truly astonishing abstraction at such an early point in recorded history, although—and this is very important—the notion of abstract labor could not possibly have occurred to the Mesopotamian administrators, for the same reason that it could not have occurred to Aristotle: "Daß aber in der Form der Warenwerte alle Arbeiten als gleiche menschliche Arbeit und daher als gleichgeltend ausgedrückt sind, konnte Aristoteles nicht aus der Wertform selbst herauslesen, weil die griechische Gesellschaft auf der Sklavenarbeit beruhte, daher die Ungleichheit der Menschen und ihrer Arbeitskräfte zur Naturbasis hatte" (Marx 1962, 74);¹⁶ that is, in a society based, or mainly based, on slave-labor or other kinds of dependent labor, the notion of the equality of all forms of labor simply could not arise. Nevertheless, the Ur III administrators understood that labor in some sense contributed to the establishment of value, which is demonstrated by the fact that labor-time was included in debit/credit calculations, as Englund has demonstrated.¹⁷

While Sohn-Rethel was right when he arrived at the result that "*abstraction precedes thought*" (Toscano 2008, 281), it is also true that Marx had already described and analyzed real abstraction, although he did not call it that (cf. MEW 23, 88). Real abstraction was generated much earlier than Sohn-Rethel thought:

¹⁵Silver has all the key properties required of a commodity that is to serve as a universal equivalent: "unlimited divisibility, homogeneity of its parts and uniform quality of all units of the commodity" (MECW 29, 290 = MEW 13, 35).

¹⁶"M. E. konnten Silberlohnäquivalenzen dazu dienen, die nach Arbeiterklassen unterschiedlich gewerteten Arbeitseinsätze in leicht verwendbare Silbermengen zu konvertieren, denen letztendlich die uns noch fehlenden bala-Abrechnungen [sic] der Reichskanzlei zugrundelagen" Englund (2012, 131, cf. above). The point is that different categories of workers had different values assigned to their labor, according to their respective categories. The notion that one might treat labor just like, say, silver and thus see it as being characterized by "unlimited divisibility, homogeneity of its parts and uniform quality of all [its] units" (MECW 29, 290 = MEW 13, 35) simply did not occur to the Sumerian administrators, and could not have occurred to them, precisely because of the society in which they were situated.

¹⁷Cf. Englund, *Ur III-Fischerei*, 1990, 78–90, on TCL 5, 5670.

not in seventh-century Greece, but in late third-millennium Mesopotamia. While he was right in drawing attention to 'real abstraction,' he mistakenly traced it back to the realm of circulation instead of that of production.¹⁸

References

- Damerow, Peter (1981). Vorläufige Bemerkungen über das Verhältnis rechen-didaktischer Prinzipien zur Frühgeschichte der Arithmetik. *Mathematica didactica* 4(3):131–153.
- (1996). *Abstraction and Representation: Essays on the Cultural Evolution of Thinking*. Boston Studies in the Philosophy of Science 175. Dordrecht, Boston, London: Kluwer Academic Publishers.
- Englund, Robert K. (1990). *Organisation und Verwaltung der Ur III-Fischerei*. *BBVO* 10:6–9.
- (2012). Versilberte Arbeit: Äquivalenzenfestsetzung in der Ur-III-Zeit. In: *Wissenskultur im Alten Orient: Weltanschauung, Wissenschaften, Techniken, Technologien. 4. Internationales Colloquium der Deutschen Orient-Gesellschaft 20.–22. Februar 2002*. Ed. by H. Neumann. Münster, Wiesbaden: Harrassowitz, 121–152.
- Jappe, Anselm (2013). Sohn-Rethel and the Origin of 'Real Abstraction': A Critique of Production or a Critique of Circulation? *Historical Materialism* 21:3–14.
- Maekawa, Kazuya (1988). New Texts on the Collective Labor Service of the érin-people of Ur III Girsu. *ASJ* 10:37–94.
- Marx, Karl (1961). *Zur Kritik der Politischen Ökonomie*. *MEW* 13. Berlin: Dietz, 3–160.
- (1962). *Das Kapital: Kritik der politischen Ökonomie*. Band I: Der Produktionsprozeß des Kapitals. Berlin: Dietz.
- (1964). *Das Kapital: Kritik der politischen Ökonomie*. Ed. by Friedrich Engels. Band III: Der Gesamtprozeß der kapitalistischen Produktion. Berlin: Dietz.
- Müller, Rudolf Walter (1981). *Geld und Geist: Zur Entstehungsgeschichte von Identitätsbewußtsein und Rationalität seit der Antike*. Frankfurt, New York: Campus Verlag.
- Neumann, H. (1979). Handel und Händler in der Zeit der III. Dynastie von Ur. *Altorientalische Forschungen* 6(41):15–67.
- Nissen, Hans J. (2012). *Geschichte Alt Vorderasiens*. Oldenbourg Grundriss der Geschichte 25. München, Oldenburg.
- Nissen, Hans J., Peter Damerow, and Robert K. Englund (2004). *Informationsverarbeitung vor 5000 Jahren: Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient*. Hildesheim, Berlin: Franzbecker, Max-Planck-Institut für Bildungsforschung.
- Robson, Eleanor (2008). *Mathematics in Ancient Iraq: A Social History*. Princeton, Oxford: Princeton University Press.
- Sharlach, Tonia M. (2004). *Provincial Taxation and the Ur III State*. Cuneiform Monographs 26. Leiden: Brill/Styx.
- Sohn-Rethel, Alfred (1973). *Geistige und körperliche Arbeit: Zur Theorie der gesellschaftlichen Synthesis*. Frankfurt a.M.: Suhrkamp.
- Studevent-Hickman, Benjamin (2006). *The Organization of Manual Labor in Ur III Babylonia*. PhD thesis. Cambridge, MA: Harvard University.
- Toscano, Alberto (2008). The Open Secret of Real Abstraction. *Rethinking Marxism* 20:273–287.

¹⁸With regard to this point, Jappe (2013) is right; with regard to some of the details of Sohn-Rethel's argumentation, he is mistaken.