David Graeber: On the Invention of Money – Notes on Sex, Adventure, Monomaniacal Sociopathy and the True Function of Economics

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A Reply to Robert Murphy's 'Have Anthropologists Overturned Menger?

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Last week, Robert F. Murphy published a piece on **the webpage of the Von Mises Institute** responding to some points I made in a **recent interview on Naked Capitalism**, where I mentioned that the standard economic accounts of the emergence of money from barter appears to be wildly wrong. Since this contradicted a position taken by one of the gods of the Austrian pantheon, the 19th century economist Carl Menger, Murphy apparently felt honor-bound to respond.

In a way, Murphy's essay barely merits response. In the interview I'm simply referring to arguments made in my book, 'Debt: The First 5000 Years'. In his response, Murphy didn't even consult the book; in fact he later admitted he was responding at least in part not even to the interview but to an inaccurate summary of my position someone had made in another blog!

We are not, in other words, dealing with a work of scholarship. However, in the blogsphere, the quality or even intention of an argument often doesn't matter. I have to assume Murphy was aware that all he had to do was to write something—anything really—and claim it rebutted me, and the piece would be instantly snatched up by a right-wing echo chamber, mirrored on half a dozen websites and that followers of those websites would then dutifully begin appearing across the web declaring to everyone willing to listen that my work had been rebutted. The fact that I instantly appeared on the Von Mises web page to offer a detailed **response**, and that Murphy has since effectively conceded, writing an elaborate **climb-down** saying that he had no intention to cast doubt on my argument as a whole at all, only to note that I had not definitively disproved Menger's, has done nothing to change this. Indeed, on both US and UK Amazon, I have seen fans of Austrian economics appear to inform potential buyers that I am an economic ignoramus whose work has been entirely discredited.

I am posting this more detailed version of my reply not just to set the record straight, but because the whole question of the origins of money raises other interesting questions—not least, why any modern economist would get so worked up about the question. Let me begin by filling in some background on the

current state of scholarly debate on this question, explain my own position, and show what an actual debate might have been like.

First, the history:

1) Adam Smith first proposed in 'The Wealth of Nations' that as soon as a division of labor appeared in human society, some specializing in hunting, for instance, others making arrowheads, people would begin swapping goods with one another (6 arrowheads for a beaver pelt, for instance.) This habit, though, would logically lead to a problem economists have since dubbed the 'double coincidence of wants' problem—for exchange to be possible, both sides have to have something the other is willing to accept in trade. This was assumed to eventually lead to the people stockpiling items deemed likely to be generally desirable, which would thus become ever more desirable for that reason, and eventually, become money. Barter thus gave birth to money, and money, eventually, to credit.

2) 19th century economists such as Stanley Jevons and Carl Menger [1] kept the basic framework of Smith's argument, but developed hypothetical models of just how money might emerge from such a situation. All assumed that in all communities without money, economic life could only have taken the form of barter. Menger even spoke of members of such communities "taking their goods to market"—presuming marketplaces where a wide variety of products were available but they were simply swapped directly, in whatever way people felt advantageous.

3) Anthropologists gradually fanned out into the world and began directly observing how economies where money was not used (or anyway, not used for everyday transactions) actually worked. What they discovered was an at first bewildering variety of arrangements, ranging from competitive gift-giving to communal stockpiling to places where economic relations centered on neighbors trying to guess each other's dreams. What they never found was any place, anywhere, where economic relations between members of community took the form economists predicted: "I'll give you twenty chickens for that cow." Hence in the definitive anthropological work on the subject, Cambridge anthropology professor Caroline Humphrey concludes, "No example of a barter economy, pure and simple, has ever been described, let alone the emergence from it of money; all available ethnography suggests that there never has been such a thing" [2]

a. Just in way of emphasis: economists thus predicted that all (100%) non-monetary economies would be barter economies. Empirical observation has revealed that the actual number of observable cases—out of thousands studied—is 0%.

b. Similarly, the number of documented marketplaces where people regularly appear to swap goods directly without any reference to a money of account is also zero. If any sociological prediction has ever been empirically refuted, this is it.

4) Economists have for the most part accepted the anthropological findings, if directly confronted with them, but not changed any of the assumptions that generated the false predictions. Meanwhile, all textbooks continue to report the same old sequence: first there was barter, then money, then credit—except instead of actually saying that tribal societies regularly practiced barter, they set it up as an imaginative exercise ("imagine what you would have to do if you didn't have money!" or vaguely imply that anything actual tribal societies did do must have been barter of some kind.

So what I said was in no way controversial. When confronted on why economists continue to tell the same story, the usual response is: "Well, it's not like you provide us with another story!" In a way they have a point. The problem is, there's no reason there should be a single story for the origin of money. Here let me lay out my own actual argument:

1) If money is simply a mathematical system whereby one can compare proportional values, to say 1 of these is worth 17 of those, which may or may not also take the form of a circulating medium of exchange, then something along these lines must have emerged in innumerable different circumstances in human history for different reasons. Presumably money as we know it today came about through a long process of convergence.

2) However, there is every reason to believe that barter, and its attendant 'double coincidence of wants' problem, was not one of the circumstances through which money first emerged.

a. The great flaw of the economic model is that it assumed spot transactions. I have arrowheads, you have beaver pelts, if you don't need arrowheads right now, no deal. But even if we presume that neighbors in a small community are exchanging items in some way, why on earth would they limit themselves to spot transactions? If your neighbor doesn't need your arrowheads right now, he probably will at some point in the future, and even if he won't, you're his neighbor—you will undoubtedly have something he wants, or be able to do some sort of favor for him, eventually. But without assuming the spot trade, there's no double coincidence of wants problem, and therefore, no need to invent money.

b. What anthropologists have in fact observed where money is not used is not a system of explicit lending and borrowing, but a very broad system of non-enumerated credits and debts. In most such societies, if a neighbor wants some possession of yours, it usually suffices simply to praise it ("what a magnificent pig!"); the response is to immediately hand it over, accompanied by much insistence that this is a gift and the donor certainly would never want anything in return. In fact, the recipient now owes him a favor. Now, he might well just sit on the favor, since it's nice to have others beholden to you, or he might demand something of an explicitly non-material kind ("you know, my son is in love with your daughter…") He might ask for another pig, or something he considers roughly equivalent in kind. But it's almost impossible to see how any of this would lead to a system whereby it's possible to measure proportional values. After all, even if, as sometimes happens, the party owing one favor heads you off by presenting you with some unwanted present, and one considers it inadequate—a few chickens, for example—one might mock him as a cheapskate, but one is unlikely to feel the need to come up with a

mathematical formula to measure just how cheap you consider him to be. As a result, as Chris Gregory observed, what you ordinarily find in such 'gift economies' is a broad ranking of different types of goods—canoes are roughly the same as heirloom necklaces, both are superior to pigs and whale teeth, which are superior to chickens, etc—but no system whereby you can measure how many pigs equal one canoe. [3]

3) All this is not to say that barter never occurs. It is widely attested in many times and places. But it typically occurs between strangers, people who have no moral relations with one another. There is a reason why in just about all European languages, the words 'truck and barter' originally meant 'to bilk, swindle, or rip off.' [4] Still there is no reason to believe such barter would ever lead to the emergence of money. This is because barter takes three known forms:

a. Barter can take the form of occasional interactions between people never likely to meet each other again. This might involve 'double coincidence of wants' problems but it will not lead to the emergence of a system of money because rare and occasional events won't lead to the emergence of a system of any kind.

b. If there are ongoing trade relations between strangers in moneyless economies, it's because each side knows the other side has some specific product(s) they want to acquire—so there is no 'double coincidence of wants' problem. Rather than leading to people having to create some circulating medium of exchange (money) to facilitate transactions, such trade normally leads to the creation of a system of traditional equivalents relatively insulated from vagaries of supply and demand.

c. Sometimes, barter becomes a widespread mode of interaction when you have people used to using money in everyday transactions who are suddenly forced to carry on without it. This can happen, for instance, because the money supply dries up (Russia in the '90s), or because the people in question have no access to it (prisoners or denizens of POW camps.) This cannot lead to the invention of money because money has already been invented. [5]

So this is the actual argument, which Prof. Murphy could easily have ascertained with a glance at the relevant chapter of the book.

It's easy to see from this that his counter-arguments range from extremely weak to completely irrelevant. Let me take them on in turn, such as they are

• Murphy argues that the fact that there are no documented cases of barter economies doesn't matter, because all that is really required is for there to have been some period of history, however brief, where barter was widespread for money to have emerged. This is about the weakest argument one can possibly make. Remember, economists originally predicted all (100%) non-monetary economies would operate through barter. The actual figure of observable cases is 0%. Economists claim to be scientists. Normally, when a scientist's premises produce such spectacularly non-predictive results, the scientist begins working on a new set of premises. Saying "but can you prove it didn't happen sometime long long ago where there are no records?" is a classic example of special pleading. In fact, I can't prove it didn't. I also

can't prove that money wasn't introduced by little green men from Mars in a similar unknown period of history. Given the weight of the evidence, the burden of proof is on the Murphys of the world to produce some plausible reason why all observable cases of moneyless societies fail to operate the way Menger predicted, and therefore, why we have any reason to believe some unknown age would have been any different; and this, he does not even attempt to do.

• Murphy then goes on to produce a straw man saying that a system where people borrow things from one another and then turn to political authorities to regulate the system would not produce money. True enough, but it seems a bit irrelevant considering (a) I never say people would be "borrowing" from each other in the way he describes, (b) I never attribute any role to political authorities in this process, and (c) rather than saying the informal system of favors I do describe would lead to the invention of money, I explicitly say that it would not.

• He then restates Menger's argument about how money could emerge from barter, an argument that given the weight of evidence so far presented would only be relevant if there was some reason to believe money could not have emerged in any other way. He gives no such reason, other than that he cannot personally imagine money emerging any other way.

• Murphy ends by noting the famous study of how widespread barter between prisoners in POW camps seem to have led to the use of cigarettes as money—an argument which, if he had bothered to read the entire interview, let alone the book, he would have known is actually a confirmation of my argument (see 3c above) and not a refutation.

To be fair, Murphy has one other argument—he adopts the position, first proposed by Karl Marx [!], that money first emerged from barter in the process of international trade. The evidence is as follows: while the first records we have of money are administrative documents from Mesopotamia, in which money is used almost exclusively in keeping accounts within large bureaucratic organizations (Temples and Palaces), the system is based on a fixed equivalence between barley and silver, and that since silver was a trade item, this shows that Mesopotamian merchants must have been using silver as a medium of exchange in spot transactions with long-distance trade partners for that system to then be adopted as a unit of account in administrative transactions within Temples. This merits a bit more of a response—not because it is a particularly cogent argument (it's basically circular: "since money can only have arisen through barter, if silver was money, it must have arisen through barter"), but because it raises some interesting questions about how money actually did emerge.

As I remarked above, occasional, irregular exchange between strangers will not generate a money system—since irregular, occasional exchange will not produce any kind of system. In ancient times, if you do see regular exchange between strangers, it's because there are specific goods that each side knows they want or need. One has to bear in mind that under ancient conditions, long-distance trade was extremely dangerous. You don't cross mountains, deserts, and oceans, risking death in a dozen different ways, so as to show up with a collection of goods you think someone might want, in order to see if they happen to

have something you might want too. You show up because you know there are people who have always wanted woolens and who have always had lapis lazuli. As noted above, logically, what such a situation would lead to is a series of conventional equivalences—so many woolens for so many pieces of lapis lazuli—equivalences which are likely to be maintained despite contingencies of supply and demand, because all parties need to reduce risk in order to be able to continue to the trade at all. And once again, what logic would predict is precisely what we find. Even in periods of human history where money and markets did already exist, merchants often continue to conduct high-risk long distance trade through a system of conventional equivalents, or if money is used, administered prices, between specific commodities they know will be available, or in demand, at certain pre-established locations.

One might of course ask, could not such a system generate something like money of account—that is, the use of one or two relatively desirable commodities to measure the value of other ones, once more items were added to the mix (say, our merchant is making several stops)? The answer is yes. No doubt in certain circumstances, something like this did happen. Of course, it would have meant that money, in such cases, was first created as a means to avoid market mechanisms, and that it was not used mainly as a medium of transactions, but rather, primarily as a means of account. One could even make up an imaginary scenario whereby once you start using one divisible/portable/etc commodity as a means of establishing fixed equivalents between other ones, you could start using it for minor occasional transactions, to measure negotiated prices for spot trade swaps on the side, in a more market-driven way. All that is possible and likely as it did happen now and again—after all, we're dealing with thousands of years here. Likely all sorts of things happened over this long period. However, there is no reason to assume that such a system would produce a concrete medium of exchange regularly used in making these transactions—in fact, given the dangers of ancient trade, insisting that some medium like silver actually be used in all transactions, rather than a credit system, would be completely irrational, since the need to carry around such a money-stuff would make one a far, far, more attractive target to potential thieves. A desert nomad band might not attack a caravan carrying lapis lazuli, especially if the only potential buyers were temples which would probably know all the active merchants and know that you had stolen the stuff (and even if you could trade for them, what are you going to do with a big pile of woolens anyway, you live in a desert?) but they'd definitely go after someone carrying around a universal equivalent. (This is presumably the reason why the great long-distance traders of the Classical World, the Phoenicians, were among the last to adopt coinage—if money was invented as a circulating medium for long-distance trade, they should have been the first.)

The other problem is that there is no reason to believe that such a mechanism—which would presumably only be used by that tiny proportion of the population who engaged in long distance trade, and who tended to treat such matters as specialized knowledge to be guarded from outsiders—could possibly create a money system used in everyday transactions within a society or any evidence that it might have done so.

The actual evidence is that in Mesopotamia—the first case we know anything about—these more widespread pricing systems in fact emerged as a side-effect of non-state bureaucracies. Again, non-state bureaucracies are a phenomenon that no economic model would even have anticipated existing. It's off

the map of economic theory. But look at the historical record and there they are. Sumerian Temples (and even many of the early Palace complexes that imitated them) were not states, did not extract taxes or maintain a monopoly of force, but did contain thousands of people engaged in agriculture, industry, fishing, and herding, people who had to be fed and provisioned, their inputs and outputs measured. All evidence that exists points to money emerging as a series of fixed equivalent between silver—the stuff used to measure fixed equivalents in long distance trade, and conveniently stockpiled in the temples themselves where it was used to make images of gods, etc.—and grain, the stuff used to pay the most important rations from temple stockpiles to its workers. Hence, as economist and Naked Capitalism contributor Michael Hudson has so brilliantly demonstrated [6], a silver shekel was fixed as the amount of silver equivalent to the numbers of bushels of barley that could provide two meals a day for a temple worker over the course of a month. Obviously such a ration system would be of no interest to a merchant.

So even if some sort of rough system of fixed equivalences, measured by silver, might have emerged in the process of trade (note again: not a system of actual silver currency emerging from barter), it was the Temple bureaucracies that actually had some reason to extend the system from a unit used to compare the value of a limited number of rare items traded long distance, used almost exclusively by members of the political or administrative elite, to something that could be used to compare the values of everyday items. The development of local markets within cities, in turn, came as a side effect of these systems, and all evidence shows they too operated primarily through credit. For instance, Sumerians, though they had the technological means to do so, never produced scales accurate enough to weigh out the tiny amounts of silver that would have been required to buy a single cask of beer, or a woolen tunic, or a hammer—the clearest indication that even once money did exist, it was not used as a medium of exchange for minor transactions, but rather as a means of keeping track of transactions made on credit.

In many times and places, one sees a similar arrangement: two sorts of money, one, a common long-distance trade item, the other, a common subsistence item—cattle, grain—that's stockpiled, but never traded. Still, Temple bureaucracies and their ilk are something of a rarity. In their absence, how else might a system of pricing, of proportional equivalents between the values of any and all objects, potentially arise? Here again, anthropology and history both provide one compelling answer, one that again, falls off the radar of just about all economists who have ever written on the subject. That is: legal systems.

If someone makes an inadequate return you will merely mock him as a cheapskate. If you do so when he is drunk and he responds by poking your eye out, you are much more likely to demand exact compensation. And that is, again, exactly what we find. Anthropology is full of examples of societies without markets or money, but with elaborate systems of penalties for various forms of injuries or slights. And it is when someone has killed your brother, or severed your finger, that one is most likely to stickle, and say, "The law says 27 heifers of the finest quality and if they're not of the finest quality, this means war!" It's also the situation where there is most likely to be a need to establish proportional values: if the culprit does not have heifers, but wishes to substitute silver plates, the victim is very likely to insist that the equivalent be exact. (There is a reason the word 'pay' comes from a root that means 'to pacify'.)

Again, unlike the economists' version, this is not hypothetical. This is a description of what actually happens—and not only in the ethnographic record, but the historical one as well. The numismatist Phillip Grierson long ago pointed to the existence of such elaborate systems of equivalents in the Barbarian Law Codes of early Medieval Europe. [7]For example, Welsh and Irish codes contain extremely detailed price schedules where in the Welsh case, the exact value of every object likely to be found in someone's house were worked out in painstaking detail, from cooking utensils to floorboards—despite the fact that there appear to have been, at the time, no markets where any such items could be bought and sold. The pricing system existed solely for the payment of damages and compensation—partly material, but particularly for insults to people's honor, since the precise value of each man's personal dignity could also be precisely quantified in monetary terms. One can't help but wonder how classical economic theory would account for such a situation. Did the ancient Welsh and Irish invent money through barter at some point in the distant past, and then, having invented it, kept the money, but stopped buying and selling things to one another entirely?

The persistence of the barter myth is curious. It originally goes back to Adam Smith. Other elements of Smith's argument have long since been abandoned by mainstream economists—the labor theory of value being only the most famous example. Why in this one case are there so many desperately trying to concoct imaginary times and places where something like this must have happened, despite the overwhelming evidence that it did not?

It seems to me because it goes back precisely to this notion of rationality that Adam Smith too embraced: that human beings are rational, calculating exchangers seeking material advantage, and that therefore it is possible to construct a scientific field that studies such behavior. The problem is that the real world seems to contradict this assumption at every turn. Thus we find that in actual villages, rather than thinking only about getting the best deal in swapping one material good for another with their neighbors, people are much more interested in who they love, who they hate, who they want to bail out of difficulties, who they want to embarrass and humiliate, etc.—not to mention the need to head off feuds.
Even when strangers met and barter did ensue, people often had a lot more on their minds than getting the largest possible number of arrowheads in exchange for the smallest number of shells. Let me end, then, by giving a couple examples from the book, of actual, documented cases of 'primitive barter'—one of the occasional, one of the more established fixed-equivalent type.

The first example is from the Amazonian Nambikwara, as described in an early essay by the famous French anthropologist Claude Levi-Strauss. This was a simple society without much in the way of division of labor, organized into small bands that traditionally numbered at best a hundred people each. Occasionally if one band spots the cooking fires of another in their vicinity, they will send emissaries to negotiate a meeting for purposes of trade. If the offer is accepted, they will first hide their women and children in the forest, then invite the men of other band to visit camp. Each band has a chief and once everyone has been assembled, each chief gives a formal speech praising the other party and belittling his own; everyone puts aside their weapons to sing and dance together—though the dance is one that mimics military confrontation. Then, individuals from each side approach each other to trade:

If an individual wants an object he extols it by saying how fine it is. If a man values an object and wants much in exchange for it, instead of saying that it is very valuable he says that it is worthless, thus showing his desire to keep it. 'This axe is no good, it is very old, it is very dull', he will say... [8]

In the end, each "snatches the object out of the other's hand"—and if one side does so too early, fights may ensue.

The whole business concludes with a great feast at which the women reappear, but this too can lead to problems, since amidst the music and good cheer, there is ample opportunity for seductions (remember, these are people who normally live in groups that contain only perhaps a dozen members of the opposite sex of around the same age of themselves. The chance to meet others is pretty thrilling.) This sometimes led to jealous quarrels. Occasionally, men would get killed, and to head off this descending into outright warfare, the usual solution was to have the killer adopt the name of the victim, which would also give him the responsibility for caring for his wife and children.

The second example is the Gunwinngu of West Arnhem land in Australia, famous for entertaining neighbors in rituals of ceremonial barter called the *dzamalag*. Here the threat of actual violence seems much more distant. The region is also united by both a complex marriage system and local specialization, each group producing their own trade product that they barter with the others.

In the 1940s, an anthropologist, Ronald Berndt, described one *dzamalag* ritual, where one group in possession of imported cloth swapped their wares with another, noted for the manufacture of serrated spears. Here too it begins as strangers, after initial negotiations, are invited to the hosts' camp, and the men begin singing and dancing, in this case accompanied by a didjeridu. Women from the hosts' side then come, pick out one of the men, give him a piece of cloth, and then start punching him and pulling off his clothes, finally dragging him off to the surrounding bush to have sex, while he feigns reluctance, whereon the man gives her a small gift of beads or tobacco. Gradually, all the women select partners, their husbands urging them on, whereupon the women from the other side start the process in reverse, re-obtaining many of the beads and tobacco obtained by their own husbands. The entire ceremony culminates as the visitors' men-folk perform a coordinated dance, pretending to threaten their hosts with the spears, but finally, instead, handing the spears over to the hosts' womenfolk, declaring: "We do not need to spear you, since we already have!" [9]

In other words, the Gunwinngu manage to take all the most thrilling elements in the Nambikwara encounters—the threat of violence, the opportunity for sexual intrigue—and turn it into an entertaining game (one that, the ethnographer remarks, is considered enormous fun for everyone involved). In such a situation, one would have to assume obtaining the optimal cloth-for-spears ratio is the last thing on most participants' minds. (And anyway, they seem to operate on traditional fixed equivalences.)

Economists always ask us to 'imagine' how things must have worked before the advent of money. What such examples bring home more than anything else is just how limited their imaginations really are.

When one is dealing with a world unfamiliar with money and markets, even on those rare occasions when strangers did meet explicitly in order to exchange goods, they are rarely thinking exclusively about the value of the goods. This not only demonstrates that the Homo Oeconomicus which lies at the basis of all the theorems and equations that purports to render economics a science, is not only an almost impossibly boring person—basically, a monomaniacal sociopath who can wander through an orgy thinking only about marginal rates of return—but that what economists are basically doing in telling the myth of barter, is taking a kind of behavior that is only really possible after the invention of money and markets and then projecting it backwards as the purported reason for the invention of money and markets themselves. Logically, this makes about as much sense as saying that the game of chess was invented to allow people to fulfill a pre-existing desire to checkmate their opponent's king.

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At this point, it's easier to understand why economists feel so defensive about challenges to the Myth of Barter, and why they keep telling the same old story even though most of them know it isn't true. If what they are really describing is not how we 'naturally' behave but rather how we are taught to behave by the market—well who, nowadays, is doing most of the actual teaching? Primarily, economists. The question of barter cuts to the heart of not only what an economy is—most economists still insist that an economy is essentially a vast barter system, with money a mere tool (a position all the more peculiar now that the majority of economic transactions in the world have come to consist of playing around with money in one form or another) [10]—but also, the very status of economics: is it a science that describes of how humans actually behave, or prescriptive, a way of informing them how they should? (Remember, sciences generate hypothesis about the world that can be tested against the evidence and changed or abandoned if they don't prove to predict what's empirically there.)

Or is economics instead a technique of operating within a world that economists themselves have largely created? Or is it, as it appears for so many of the Austrians, a kind of faith, a revealed Truth embodied in the words of great prophets (such as Von Mises) who must, by definition be correct, and whose theories must be defended whatever empirical reality throws at them—even to the extent of generating imaginary unknown periods of history where something like what was originally described 'must have' taken place?

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[2] Humphrey, Caroline, "Barter and Economic Disintegration." Man 1985 v.20: 48. Other anthropologists have gone even further, for instance Anne Chapman, "Barter as a Universal Mode of Exchange." L'Homme 1980 v22 (3): 33-83), argues that if pure barter is to be defined as only about the things, and not about the people, it's not clear that it has ever existed—as the cases cited at the end of this essay indeed illustrate.

[3] Gregory, Chris, Gifts and Commodities. New York: Academic Press (1982): pp. 48-49. On gift economies, the classic text is Mauss, Marcel, Essai sur le don. Forme et raison de l'échange dans les sociétés archaïques." Annee sociologique, 1924 no. 1 (series 2):30-186. On spheres on exchange in general see Bohannan, Paul "Some Principles of Exchange and Investment among the Tiv," American Anthropologist 1955 v57:60-67; Barth, Frederick, "Economic Spheres in Darfur." Themes in Economic Anthropology, ASA Monographs (London, Tavistock) 1969 no. 6, pp. 149-174; cf Munn, Nancy, The Fame

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[4] Servet, Jean-Michel, 1994 "La fable du troc," numero spécial de la revue XVIIIe siècle, Economie et politique, n°26: 103-115

[5] The classic work on the economics of POW camps, whence this argument derives, is Radford, R. A., "The Economic Organization of a POW Camp." Economica 1945 v.12 (48): 189-201. There is an excellent critique of the assumptions underlying it in Ingham, Geoffrey, "Further Reflections on the Ontology of Money," Economy and Society 2006 v 36 (2): 264-65, which notes among other things the obvious point that the entire camp environment was created and maintained by a bureaucratic organization that supplied all actual necessities—food, shelter, etc—through administrative distribution.

[6] Hudson, Michael,"The Development of Money-of-Account in Sumer's Temples." In Creating Economic Order: Record-Keeping, Standardization and the Development of Accounting in the Ancient Near East (Michael Hudson and Cornelia Wunsch, editors, 2004), pp. 303-329. Baltimore: CDL Press.

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[9] Berndt, Ronald M., "Ceremonial Exchange in Western Arnhem Land." Southwestern Journal of Anthropology 1951 v.7 (2): 156-176.

[10] See for instance Dillard, Dudley, "The Barter Illusion in Classical and Neoclassical Economics", Eastern Economic Journal 1988v14 (4):299-318.