REVIEW OF DAWN OF GOLD by Philip Barton

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1. Introduction

In his 2015 book, *Dawn of Gold: The Real Story of Money*, President of the Gold Standard Institute¹, Philip Barton, draws upon the history of the so-called "monetary metals", gold and silver, in order to propose an alternative theory for the origin of money and, ultimately, for its definition as "a known weight and fineness of gold".

In the present essay, we will start by providing an overview of Barton's theory of money and of gold's primacy in markets and civilization. Then, we will describe the historical claims made by the author in defense of his thesis and proceed to a review of the relevant literature, in order to assess the likelihood of his interpretation of historical facts.

The present essay is predominantly historical in scope – its goal is, above all, to survey the literature in order to critically evaluate the historical claims made by the author of the book under review. As such, the author's underlying theory of money and exchange will not be thoroughly criticized and we will not evaluate to what extent he theoretically contributes to the abovementioned debate on the nature and origins of money.

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I wish to express my gratitude to Professor Alberto González García for encouraging me to pursue this investigation and for providing me with initial bibliographical references.

¹ Barton inserts a disclaimer that the views expressed in the book should not be attributed to the Institute. He asserts that "the Institute exists to promote one single issue and nothing else – the unregulated use of Gold and silver as money".

2. Money as gold – introducing Barton's theory

Philip Barton is a proponent of an unfettered gold standard, which he defines as the use of gold as "the only measure of value", with a surrogate role being also allowed for silver.

Barton claims that the secret for understanding gold's prominence as the foremost monetary metal lies in the "stock-to-flow ratio". This ratio compares the amount of mined gold already available in the world as potential supply (including all gold currently in non-monetary form), *i.e.* the gold "stock", with the amount of gold that is mined each year, *i.e.* the "flow". Gold is by far the commodity with the highest ratio, silver being the second. Most other commodities, such as wheat, coffee, oil, etc. are typically consumed within months after being made available. In the case of gold, the amount accumulated by humans for millennia and which for the most part has not been consumed along the ages is very substantial relative to the amount that is mined each year. As such, there is an inherent tendency for stability in the value of gold – it is mostly unaffected by variations in yearly output, which is relatively small compared to the available stock already demanded.

Gold's widely recognized monetary history and its stability of value, ensured by the high stock-to-flow ratio, thus serve as a source for its fundamental demand, giving rise to a kind of self-enforcing virtuous circle developing across human history.

However, what made humans first start to accumulate gold, Barton asks? Gold's high stock-to-flow ratio is explained in great part by the human desire, manifested across history, to hold and hoard gold. Hence, it cannot in itself be considered a sufficient explanation as to why that desire appeared in the first place. As the author puts it:

Gold did not become a store of value because of the stock-to-flow ratio. This reverses cause and effect. Gold gained its high stock-to-flow ratio because it had already attained the status of a store of value. (Barton, 2015, p. 20)

Some other factor must, consequently, have motivated humans to view gold as something worth accumulating and craving for in the first place. Barton proposes that this factor was gold's prominent role as a spiritual and religious symbol in ancient civilizations. Ancient people, from the Americas to Egypt and China, held the Sun as their foremost deity, the center of their civilizations and the most important determinant of their agricultural prosperity and abundance. It was thus a short step for those peoples to start inputting into a metal such as gold the spiritual character of their "Sun God". Gold became the foremost spiritual and religious amulet, only followed by silver, the earthly metal representative of the Moon. (pp. 23-30)

According to the author, the pervasiveness of such appraisal for gold, of such desire for its "spiritual services", is at the bottom of the virtually infinite demand for it, thus making it a different kind of good. Gold becomes money, according to Barton's theory, not because the State said so or because spontaneous market processes led to its ascendancy, but instead because it represents what is dearest to men². Gold's role as a "measure of value" is not merely its market function: gold has a constant marginal utility in the eyes of men and thus it serves as the ultimate ruler with which to measure the value of all other goods. Therefore, according to Barton, it was not the market that promoted gold to the position of money; instead, it was gold itself which made it possible that the very concept of money – and hence extensive, indirect exchange, i.e. the market – was conceivable in the first place. Without gold, humans would have been left without a way to "measure values" and to engage in extensive commerce.

And this is why, after having started the book by stating that "the definition of money is 'a store of stable value" (p. xiii), the author concludes that because "Gold is the only store of stable value and therefore the only measure of value", money must be defined as "a known weight and fineness of Gold." (p. 50)

3. Egyptian gold and money – how it happened, according to Barton

In order to prove his case regarding the origins of money as gold, Barton takes us to the economy of the Ancient Egypt. More

 $^{^2}$ As the author characteristically puts it, "money's origin had nothing to do with the exchange of goods in the marketplace." (p. 12)

specifically, he draws our attention to the changes taking place at the beginnings of the Egyptian New Kingdom (c. 1550-1069 BCE).

Up to then, according to Barton, market exchanges, when they occurred, were inefficiently set up, being based mainly on "crude credit and barter". Gold was the ownership of Pharaohs and other high officials and was hoarded for its sacred value. The tombs of Egyptian kings were full of gold amulets and some of their luxurious golden sarcophagi have for long been prominent in Western culture as one of the main symbols of this ancient civilization (as in the case of Tutankhamun, for instance). However, as hinted before, this craving for gold on one's resting place should not be interpreted as per the modern conceptualizations of gold as luxury and adornment, Barton believes. Just as the dead were supposed to be given food and drink even after their parting³ (so that they could nourish themselves in the afterlife), Barton notes that tomb gold also performed such spiritual services. Namely, since gold was the earthly symbol of the Sun God, a tomb filled with gold should serve as proof of the dead person's religious pursuits in life. A gold-filled tomb was the best "invitation card" to the afterlife a Pharaoh could hope for.

As an example of the equivalence between gold and the Sun, Barton remarks that "in Ancient Egypt and China, a circle with a point at its centre was the symbol for both the Sun and Gold." (p. 25)

Regarding the general economy in the Ancient Egypt, Barton adopts the redistribution and centralization narrative⁴. He claims that:

The whole economy was in the rigid grip of the Pharaoh and his court and administrators. They controlled the complete structure of society, from trade to land and resources. Commerce among the people was restricted to barter. Outside the ruling class, people possessed neither gold nor silver. The divine metals were not seen outside the court and had no monetary significance at either end of the huge wealth divide. (p. 33)

³ Cf. for instance, Olson (2001), p. 216.

⁴ See section 4.1. below.

Even though he proceeds to admit that "this is not to suggest that there was no gold at all in private hands prior to 1500 BC", his point is that "up to that point, Gold had not transitioned to the marketplace – it had no commercial value". (pp. 33, 36)

So, what happened circa 1500 BCE that motivated this change? How and why did gold jump from the hoards to the marketplace?

The beginnings of the New Kingdom marked the pinnacle of Egyptian territorial expansion. One of the most important landmarks of that period was the conquest of the neighbouring province of Nubia around 1500 BCE. Nubia was known for its vast gold mines, which the Egyptians then managed to control for some centuries. The access to this substantial source of gold certainly contributed to Egypt's further expansion and regional prominence. Among other things, the Nubian gold was a means for the Egyptian State to trade with other neighbouring powers.

Barton, however, does not view this use of gold as a means for interregional trade as the key to Egypt's prominence and development during the New Kingdom. In his view, gold's most important development in Egypt was instead the start of its circulation within Egyptian borders during that period⁵. The surge in Nubian gold mining meant that now there was more gold to be granted as a gift and privilege among the Egyptian officials, which, in a sort of trickle-down fashion, then started to be used in market exchanges. Another important source of gold dispersion among the population and further circulation in the markets was the phenomenon of tomb robbing, which peaked around that time, according to Barton⁶. Since more gold was now available for afterlife rituals in tombs and burying places, tomb robbing started to be seen as too much of a temptation, including for the workers themselves, who had built the tombs and pyramids and thus knew how to avoid the different obstacles. Furthermore, it is also very likely that some of the workers and officials working at the mines managed to "skim off" some gold for themselves along the way.

⁵ As Barton mentions, "it was not until the Nubian mines started disgorging their huge reserves, that Gold became widely distributed." (p. 31)

⁶ Barton refers to Nicholas Reeves's studies on tomb robbing, but with no reference.

According to Barton, all these events promoted a kind of virtuous logic whereby the more gold was used as money in the market, the more it was sought after and "recycled" from the tombs, skimmed off from the mine by workers and officials, and "dishoarded" by those lucky to already have it in their possession, which further added to its market demand, thus enabling the extensive development of markets and civilization during the New Kingdom.

Faced with such powerful, self-reinforcing logic, Barton concludes that "it was the exit of Gold (and silver) from the hoards that led to the zenith of Egyptian wealth and influence" (p. 36), while introducing mankind to the one and true money: "there was nothing gradual about it".

This is a very convincing theory, indeed. But is it corroborated by the facts?

4. The "golden big-bang" – a critical review of historical evidence

Having thoroughly described Barton's definition of money and historical argument, we shall now try to assess whether his historical claims in fact correspond to the general literature on the topic of Ancient Egypt's economy⁸.

The first thing which should be noted in this regard is that bibliographical references are virtually absent from Barton's book. This being a non-academic work, the author admits he has decided to "avoid too many footnotes", since "the Internet enables anyone to check what is stated" (Barton, 2015: xiv). With respect to Ancient Egyptian themes, there is a mention of Rainer Stadelmann, former First Director of the German Archaeology Institute in Cairo, regarding the spiritual importance of gold for the pharaohs, albeit with no concrete bibliographical reference. Nicholas Reeves's

⁷ Barton goes as far as claiming that "the circulation of Gold beginning around 1500 BC was the 'big bang' of social evolution." (p. 37)

⁸ It should nevertheless be noted that Barton's book is not mainly intended for an academic audience and the topics covered go much beyond Ancient Egyptian monetary history.

studies on the subject of tomb robbing are also mentioned, again with no direct bibliographical reference. As such, we shall survey the literature with no particular benchmark.

4.1. Theories of Ancient Egyptian economy

In order to determine the accuracy of some of Barton's claims, we must endeavor to study the economy of the Ancient Egypt, a civilization which, despite having its ups and downs, survived across different millennia. This fact alone should advise the student to take care not to consider Ancient Egypt as a single monolithic era in human history⁹. Furthermore, its distance to our times and the comparatively less developed methods of historical report certainly add to the difficulties of accurately assessing ancient Egyptian economic institutions, relations and practices. Understandably, the lack of precise sources of information and the inevitably gradual uncovering and digging up of Egyptian secrets have led many historians across the following millennia to resort to conjecture in order to understand and explain Ancient Egyptian history. It is no surprise that, without decent information sources and faced with a civilization so distant from our own in many of its practices, the question arose whether the Ancient Egyptian man had the same conception of economic matters as we do today, i.e. whether he experienced any "economic motive" at all. That very essential condition of modern human existence being called into question, it then seems plausible to inquire whether what we understand as "markets" also existed and functioned at that time, since it seems unconceivable that markets could emerge without the implicit existence of an economic motive in its agents.

In brief, two main perspectives arose regarding this problem: one of them, the so-called "substantivist" or "primitivist" perspective, was mainly inspired by the work of Karl Polanyi (1886-1964) and saw Egyptian economic organization as "mainly redistributive – that is, dominated by taxation and tributes" (Haring, 2009).

 $^{^9}$ As is usually noted, Queen Cleopatra (69 – 30 BCE) lived closer in time to the founding of Pizza Hut (1958) than to the building of the Giza pyramids (c. 2580 – c. 2560 BCE).

According to this perspective, the ancient Egyptian man lacked the abstract, individualistic moving force characteristic of more modern civilizations and so modern economic theory and institutional analysis should not be seen as universally applicable. Substantivist historians view ancient economies as just another dimension of the whole social organization of those periods, being ruled by a centralized authority with little room for private economic initiative¹⁰.

Of a contrary tendency, the so-called "formalist" perspective has been gaining reputation in the recent decades, mainly due to the work of David Warburton and Barry Kemp (Kemp, 2018; Warburton, 1998). This perspective draws on wide evidence of wealth seeking and accumulation as well as market exchange in Ancient Egypt, in order to show that the "economic motive" was indeed present in ancient men and that a centralized redistribution system could not, by itself, have sufficiently provided for the needs of Ancient Egyptian population¹¹.

4.2. Egyptian economy and money

Based on the above, one would be ill-advised to imply, as Barton seems to do, that the ancient Egyptian economy was merely an extension of pharaonic/administrative orders before the alleged ascendancy of gold as money around 1500 BCE. The truth is that markets have been recorded since early on and the economy was based on a complex relation between the State, the temples and the private sector¹².

Furthermore, it is also a mistake to describe Ancient Egyptian commerce as merely 'barter'. Even though a common medium of exchange seems to only have emerged during the first millennium BCE, the exchange of commodities in Ancient Egypt was conducted through a complex procedure which, according to Ben Haring (2009),

¹⁰ For a discussion of the substantivist perspective, see Johnsen (2017), pp. 74-78.

¹¹ For a discussion of the formalist perspective, see Johnsen (2017), pp. 74-82. Of course, as Austrian economists will notice, this is quite consistent with the Misesian theorem of the impossibility of economic calculation in socialist, centralized economies.

¹² Cf. Haring (2009) and Warburton (2013a and 2013b).

can "best be characterized as money-barter - that is, barter with reference to fixed units of value." Also, according to the same author. even though prices could be expressed in any commodity, "by far the most common were units of grain, copper, and silver". Brian Muhs (2016, p. 113) concurs, explaining that, in the New Kingdom, the metal serving as a measure of value "was most often silver, frequently copper, and very rarely gold." In fact, the general literature is conspicuous for its lack of focus in gold as serving as a measure of value. Perhaps most importantly, and as implied above when we stated that money as a medium of exchange only became a predominant phenomenon by the beginning of the first millennium BCE, monetary metals such as gold and silver were instead conspicuous for their absence in market transactions during the New Kingdom – serving only as reference benchmarks in the abovementioned "money-barter" procedure. As explained by Muhs, "gold and silver were occasionally used as stores of value, but presumably they were too valuable or too rare to use as media of exchange in the majority of transactions" during this period.

Thus, we have to conclude that, based on the available evidence, Barton is mistaken in: a) focusing on gold as a prevalent medium of exchange (or even measure of value) during the New Kingdom, since other metals took precedence over it instead; and b) implying that such a monetary "big-bang" took place almost instantaneously, since, as we have seen, a long time passed before "money-barter" transactions finally led to indirect monetary exchange¹³.

4.3. Nubia and foreign trade

In any case, it is a fact that, around the beginning of the New Kingdom, the province of Nubia was made part of Ancient Egypt. As

¹³ It may also be interesting to note that the Biblical account both of the Israelite exodus from Egypt and of the founding of the Israelite nation also seems to cast some doubt upon Barton's historical narrative, for the Israelites are depicted as having "asked the Egyptians for articles [both] of silver and gold" (Ex. 12:35) and as having a complex market-based and government-tax-based monetary system centered on silver, cf. Guzelian (2018), pp. 228-230. I thank an anonymous referee for this helpful insight.

Klemm *et al.* (2001, p. 653) point out, "approximately between the reigns of Thutmosis I (1504-1492 BCE) and Amenophis IV (1351-1334 BCE), Nubia was conquered and incorporated into the Egyptian NK [New Kingdom] empire." The same authors, in agreement with Barton, explain that the name Nubia is probably derived from *'nub'*, the ancient Egyptian word for gold, and that gold production probably increased during that time.

Such new sources of gold were then mostly likely used in Egyptian trade with foreign powers, as some authors report that gold was one of the main exported commodities in Ancient Egypt¹⁴. This indeed serves at least as a partial explanation for the increased prominence and prosperity of the Egyptian empire during part of the New Kingdom age.

4.4. The Sun-God and tomb robbery

It is also a widely acknowledged fact that both the Sun and gold were considered to have divine and spiritual significance in ancient Egyptian culture and religion. But was it true that both had the same hieroglyphic symbol? The evidence seems to deny such assertion.

This is the hieroglyph Barton refers to in his book as being the symbol for both the Sun and gold:



Figure 1 – Ancient Egyptian symbol for Sun¹⁵

¹⁴ Cf., for instance, Markowitz et al. (2001), p. 34.

¹⁵ Barton (2015), p. 25. For confirmation, see Budge (1920), p. 417.

Although there is certainly evidence that can make us accept such symbol as the Sun symbol, relevant sources seem to be consistent in that gold was instead represented by the following one:



Figure 2 – Ancient Egyptian symbol for gold¹⁶

With respect to tomb robbery, it is true that Nicholas Reeves's study (1984, pp. 296-97) is consistent with the view that the late New Kingdom was a period with a relatively high number of occurrences and that precious metals were among the most desired loot. Joshua Mark (2017a) also concurs that nearby populations and tomb workers were among the most probable culprits of such robberies. However, far from referring to a supposed increase in the desire for money in commercial activities as the reason for such events, both sources relate them to periods of scarce supplies or political upheaval. Thus, Reeves (1984, p. 302) concludes that:

Systematic and large-scale tomb robbery in the Valley of the Kings seems, therefore, to have been a comparatively rare phenomenon, confined to those periods of Egypt's history when the central and local administration was weak or occupied with more pressing matters. Petty pilfering during or shortly after the burial, or occasioned by the accidental discovery of old tombs during the course of work in the Valley, was on the other hand probably common at all periods.

In our opinion, this presents a final difficulty for Barton's thesis. If the gold inflows and supposed market circulation starting during the New Kingdom represented such a "big-bang" for economic prosperity in Ancient Egypt, how come the empire start declining towards political instability during the so-called

¹⁶ See, for instance, Budge (1920), p. 353.

Ramesside period (1292-1069 BCE) and actually end up disintegrating into the Third Intermediate Period just some centuries after such an allegedly unprecedented social development? This, Barton does not mention and certainly does not explain.

5. Conclusions

Having both described Philip Barton's thesis regarding the emergence of gold as money in the New Kingdom period of Ancient Egypt and critically assessed its accuracy based on the relevant literature on the topic, we must conclude that the author's thesis and historical report is not consistent with the findings and interpretations of the generality of historians. In fact, in our research, we have not found any historian who corroborates Barton's most controversial claims.

Market exchange did occur before the New Kingdom with recourse to a more sophisticated procedure than simple barter, and although gold was indeed used as a measure of value in private transactions, it was far from being the most commonly used one and certainly not the most common medium of exchange. This situation was not altered even when money exchange became more widespread in later periods, since the most commonly used monetary metal seems to have been silver.

Barton's enthusiastic account also misrepresents the level of social prosperity and harmony during the period, by ignoring that the most relevant instances of tomb robbery in fact coincided with periods of lack of supplies and political instability, which poses a further question mark to the thesis that the supposed ascendancy of gold money was an unprecedented social blessing. Despite telling an interesting and indeed original story, Barton thus fails to keep his claims from contradicting actual history.

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