

Letter from Newton to the Lords Commissioners of the Treasury, including "Observations upon the state of the coins of gold and silver"

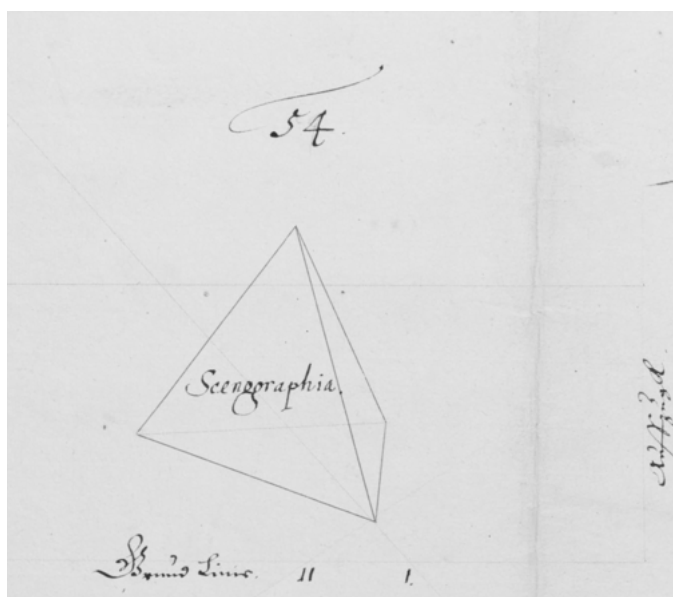
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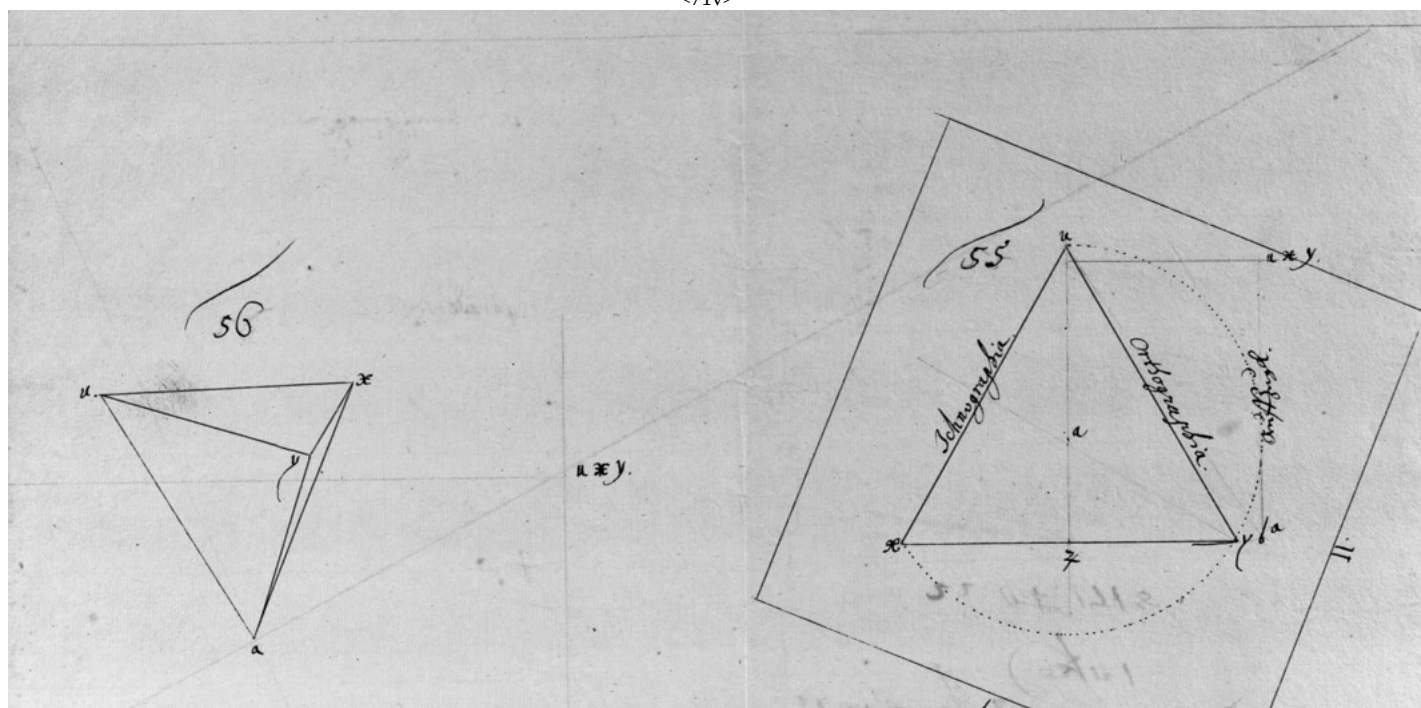
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Sir. Is. Newton. of the
State of the Gold & Silver
Coyns.
22^d. Oct^r. 1718.



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To the Right Honourable the Lords Commissioners of his Majesties Treasury.

May it Please your Lordships

In Obedience to your Order of Reference of Aug: 12:th that I should lay before your Lordships, a State of the Gold & Silver Coyns of this Kingdom in Weight and fineness, and the value of Gold in proportion to Silver, with my Observations and Opinion, & what method may be best for preventing the melting down of the Silver Coyn. I humbly represent, that a pound weight of Gold Eleven Ounces fine, and 1 ounce Alloy is cut into 44½ Guineas, and 1 Pound weight of Silver 11 Ounces « 2 Pennyweight fine & 18 Pennyweight Alloy is cut into 62 Shillings and According to this rate, 1 Pound weight of fine Gold is worth 15 Pounds « 6 Ounces « 17 Pennyweight « 5 Grains of fine Silver, reckoning a Guinea at 1 Pound « 1{ Shilling} « 6{ Pence} in Silver money, but Silver in Bullion exportable is usually worth 2 Pence « or 3 Pence per Ounce more then in Coyn; and if at a medium such Bullion of Standard alloy be valued at 5 Shillings « 4 Pence and 1 Halfpenny per Ounce, 1 Pound weight of fine Gold will be worth but 14 Pounds « 11 Ounces « 12 Pennyweight « 9 Grains of fine Silver in Bullion, & at this rate a Guinea is worth 20 Shillings « 8 Pence, when Ships are lading for the East Indies the demand of Silver for Exportation raises the price to 5 Shillings « 6 Pence or 5 Shillings « 8 Pence per Ounce or above. But I consider not these Extraordinary Cases.

A Spanish Pistole was Coyn'd for 32 Reas, or 4 pieces of 8 Reas each usually call'd Pieces of Eight, is of equal Alloy, & the 16th part of the weight thereof. <72v> A Doppio Moeda of Portugal was Coyn'd for 10 Crusadoes of Silver, and is of equal Alloy, & the 16th part of the weight thereof, Gold is therefore in Spain and Portugal of 16 times more value than Silver of equal weight & Alloy According to the Standard of those Kingdoms, at which rate a Guinea is worth 22 Shillings « 1 Penny. But this high price keeps their Gold at home in good plenty, & carries away the Spanish Silver into all Europe, so that at home they make their payments in Gold, but will not pay in Silver without a Premium. Upon the coming in of a plate Fleet, the premium ceases, or is but small, but as their Silver goes away and becomes Scarce, the premium increases, and is most commonly about 6 per Cent which being abated a Guinea becomes worth about 20 Shillings « 9 Pence in Spain and Portugal.

In France a pound weight of fine Gold, is reckon'd worth 15 Pounds weight of fine Silver. In raising and falling the Money, their Kings Edicts have sometimes varied a little, But I do not here consider them. By the Edict of May 1709. a new Pistole was coyn'd for 4 new Lewises and is of equal Alloy, and the 15th part of the weight thereof (except the Errors of their Mint) & by the same Edict, fine Gold is valued at 15 times its weight of fine Silver, and at this rate a Guinea is worth 20 Shillings « 8 Pence and 1 Halfpenny. I consider not here the Confusion made in the Moneys in France by frequent Edicts to send them to the Mint, and give the King a Tax out of them, I consider only the value of Gold and Silver in proportion to one another.

The Ducats of Holland & Hungary & the Empire were lately current in Holland among the common People in their Markets & ordinary Affairs at 5 Guilders in Specie & 5 Stivers, & commonly changed for so much Silver money in 3 Guilder Pieces as Guineas are with us for 21 Shillings « 6 Pence Sterling. at which rate a Guinea is worth 20 Shillings « 7 Pence and 1 Halfpenny.

According to the rates of Gold to Silver in Italy, Germany, Poland, Denmark & Sweden, a Guinea is worth about 20 Shillings & 7 Pence, 6 Pence, 5 Pence or 4 Pence for the proportion varies a little within the Several Governments in those Countries. In Sweden Gold is lowest in proportion to Silver, and this hath made that Kingdom (which formerly was content with Copper money) abound of late with Silver sent thither (I suspect) for Naval Stores.

In the End of King Williams Reign, & the first year of the late Queen, when Foreign Coyns abounded in England, I caus'd a great many of them to be assay'd in the Mint, and found by the Assays, that fine Gold was to fine Silver, in Spain, Portugal, France, Holland, Italy, Germany and the Northern Kingdoms in the proportion above mentioned, Errors of the Mints Excepted.

In China & Japan one pound weight of fine Gold is worth but 9 or 10 Pounds weight of fine Silver, & in East India it may be worth 12. and this low price of Gold in proportion to Silver carries away the Silver from all Europe.

So then by the course of Trade & Exchange between Nation and Nation in all Europe; fine Gold is to fine Silver as 14½ or 15 to one, and a Guinea at the same rate is worth between 20 Shillings « 5 Pence & 20 Shillings « 8 Pence and 1 Halfpenny except in Extraordinary Cases, as when a plate Fleet is just arrived in Spain, or Ships are lading here for the East Indies, which Cases I do not here consider. And it appears by Experience as well as by reason, that Silver flows from those places where its value is lowest in proportion to Gold, as from Spain to all Europe, & from all Europe to East India, China & Japan, and that Gold is not plentiful in those places in which its Value is highest in proportion to Silver, as in Spain and England.

It is the Demand for Exportation which hath rais'd from the price of Exportable Silver about 2 Pence or 3 Pence in the ounce above that of Silver in Coyn, & hath thereby created a temptation to export or Melt down the Silver Coyn, rather than give 2 Pence, or 3 Pence more for Forreign Silver, and the Demand for Exportation arises from the higher price of Silver in other places than in England, in proportion to Gold, that is from the higher price of Gold in England than in other places in proportion to Silver, and therefore maybe diminished by lowering the value of Gold in proportion to Silver. If Gold in England, or Silver in East-India could be brought down so low, as to bear the same proportion to one another in both places, there would be no greater Demand for Silver than <74r> for Gold to be exported to India. And if Gold were lowered only so as to have the same proportion to Silver money in England which it hath to Silver in the rest of Europe, there would be no temptation to Export Silver rather than Gold to any other part of Europe. And to compass this last there seems nothing more requisite, than to take off about 10 Pence or 12 Pence from the Guinea, so that Gold may bear the same Proportion to the Silver money in England which it ought to do by the Course of Trade and Exchange in Europe. But if only 6 Pence were taken off at present, it would diminish the temptation to Export or melt down the Silver Coyn, & by the Effects, would shew hereafter, better than can appear at present, what further reduction would be most convenient for the Publick.

In the last year of King William, the Dollars of Scotland worth about 4 Shillings « 6 Pence halfpenny, were put away in the North of England for 5 Shillings and at this price began to flow in upon us, I gave Notice thereof to Lords Commissioners of the Treasury, and they ordered the Collectors of Taxes to forbear taking them, & thereby put a Stop to the Mischief.

At the same time the Lewidors of France, which were worth but 17 Shillings « 3 Farthings apiece, passed in England at 17 Shillings « 6 Pence.

I gave Notice thereof to the Lords Commissioners of the Treasury & his late Majesty put out a proclamation that they should go but at 17 Shillings <74v> And thereupon they came to the mint, and 1400000£ were Coynd out of them. And if the Advantage of 5 Pence and 1 Farthing in a Lewidore sufficed at that time to bring into England so great a quantity of French money, and the Advantage of 3 farthings in a Lewidore to bring it to the mint, the Advantage of 9 Pence and 1 Halfpenny in a Guinea or above, may have been Sufficient to bring the great quantity of Gold which hath been Coyn'd in the Last 15 Years without any Forreign Silver.

Some years ago the Portugal Moydore were received in the West of England at 28 Shillings apiece, upon Notice from the Mint that they were worth only about 27 Shillings « 7 Pence. the Lords Commissioners of the Treasury ordered their Receivers of Taxes to take them at no more than 27 Shillings « 6 Pence. Afterwards many Gentlemen in the West sent up to the Treasury a Petition that the Receivers might take them again at 28 Shillings, and promised to get Return for this money at that rate, alledging, that when they went at 28 Shillings, their Country was full of Gold, which they wanted very much, but the Commissioners of the Treasury considering that at 28 Shillings, the Nation would loose 5 Pence apiece, rejected the Petition. And if an Advantage to the Merchant of 5 Pence in 28 Shillings did pour that Money in upon us, much more hath an Advantage to the Merchant of 9 Pence and 1 Halfpenny in a Guinea or above been able to bring into the Mint great Quantities of Gold without any Forreign Silver, and may be able to do it still, till the Cause be removed.

If things be let alone till Silver money be a little Scarce, the Gold will fall off itself, For People are already backward to give Silver for Gold, and will in a little time refuse to make payment in Silver without a premium as they do in Spain, and this premium will be an abatement in the value of the Gold, and so the Question is, whether Gold shall be lowered by the Government, or let it alone till it falls of itself for the want of Silver money

It may be said that there are great Quantities of Silver in Plate, and if the Plate were coyn'd there would no want of Silver money, But I reckon Silver is safer from exportation in the form of Plate, than in the form of money, because of the greater value of Silver and fashion together, and therefore I am not for coyning the plate till the temptation to Export the Silver Money (which is a profit of 2 Pence, or 3 Pence an Ounce) be diminished, for as often as Men are necessitated to send away Money for answering Debts abroad there will be a temptation to send away Silver rather than Gold, because of the profit, which is almost 4 per Cent, and for the same reason Forreigners will choose to send hither their Gold rather than their Silver

All of which is most humbly Submitted to your
Lordships great Wisdom

Mint office
21st Sep.^r 1717

Isaac Newton

Observations upon the State of the Coyns of Gold and Silver

Observation 1. Standard Gold before 6 Pence was taken from the Guinea, was worth 3 Pounds « 19 Shillings « 9 Pence and 1 Farthing per ounce at the mint, and by taking 6 Pence from the Guinea became worth 3 Pounds « 17 Shillings « 11 Pence per ounce, and Standard Silver is there worth 5 Shillings « 2 Pence per ounce, but the demand for Exportation hath raised both Species above the price at the mint, and thereby hath carried out all the Forreign Silver for many years, & began to carry out some of the Forreign Gold the last November, & therefore rais'd the price of Gold for Exportation above the mint price before the 6 Pence was taken from the Guinea, But it never rais'd it to above 4 Pounds « 00 Shillings « 6 Pence per ounce, nor kept it long at that price, for in March last, Forreign Gold fell down to 3 Pounds « 19 Shillings « 6 Pence and in April to 3 Pounds « 19 Shillings « 0 Pence, & in May to 3 Pounds « 18 Shillings « 6 Pence, all which was below the old Mint price, & therefore the price of Forreign Gold for Exportation was rais'd the last Winter by some other Cause, than the taking 6 Pence from the Guinea, and the price of Gold for Exportation to Forreign Markets having been ever since March below the old Mint price, that price was certainly too high.

Observation. 2^d. The price of Gold for Exportation depends upon our Debts abroad and answers to the Course of Exchange, when the Exchange is lowest, the price of Forreign Gold is highest, & on the Contrary, & thence the Coynage of Gold hath of late years been Greater or less, accordingly as the Course of Exchange hath been Lower or higher. In the year 1713 the Course of Exchange & the Coynage grew high together. In the years 1714 & 1715 the Exchange was highest, it being <76r> (for instance) with Amsterdam from 36: Shillings to 37 Shillings, & then the Coynage was greatest; In the year 1716, the Exchange was only from 35 Shillings to 36 Shillings with Amsterdam & proportionally with other places, and the Coynage abated accordingly. In the year 1717 the Exchange with Amsterdam was only from 34 Shillings to 35 Shillings « 2 Pence, & the Coynage abated to one half of what it had been 2 or 3 years before, and in this present year the Exchange hath been only from 33 Shillings « 10 Pence to 34 Shillings « 10 Pence till within this fortnight, & this low Course of Exchange, together with the discouragement of the Coynage of Gold, by the taking 6 Pence from the Guinea, hath carried out almost all the Gold imported, & thereby hath had the same good Effect for paying our debts abroad in Gold and preserving our Silver, which the Bill propos'd last Sessions of Parliament would have had if it had pass'd into an Act for Stopping the Coynage of Gold, whence those Debts arose is difficult to understand without more skill in Trade than I can pretend to, But considering that a good part of the Gold imported in the years 1713—14—15 & 16 was in French money and Ducats, I suspect that after the war with France was at an End, great Quantities of Gold were sent hither to pay for Stocks until the Interest of Stocks was lowered by Act of Parliament; and since the discouragement some Forreigners have been drawing their Moneys back with the Interest of their Stocks. & some Gold this year hath been sent to the Mint in France, & some Merchants are newly broke

Observation 3^d. The Course of Exchange was as low in November last before the 6 Pence was taken from the Guinea, as was afterward in February last, and both times was at the lowest, being (with Amsterdam) at 33 Shillings « 10 Pence & therefore the lowness of the Exchange last winter arose not from the taking 6 Pence from the Guinea; but from the Debts we had abroad before the 6 Pence was taken off, which Debts if the coynage of Gold had not been discouraged by taking 6 Pence from the Guinea might have remain'd unpaid untill they could have been paid in Silver with more Advantage to private persons.

Observation 4. By the payment of our Debts abroad in Gold, the demand for Exportation hath abated ever since February last, and the Exchange hath risen gradually to 35 Shillings. & Gold hath fallen down gradually to the mint price, & hath begun to come to the mint again, so that within a fortnight so much Gold hath come to the mint as will make above 75000 Pounds, where I gather, that whenever the Exchange with Amsterdam is above 35 Shillings. it will bring gold to the Mint, and would have brought gold to the Mint in the years 1713, 14—15 & 1716, and part of 1717 although the 6 Pence had been taken off before, the Exchange in all these years being with Amsterdam above 35 Shillings & for the most part above 36 Shillings, and therefore in all the Gold then coyn'd which was above 5 Millions, the Nation would have saved 6 Pence per Guinea, had the 6 Pence been taken off before.

Observation 5. The Demand for Exportation hath ever since the 6 Pence was taken from the Guinea, rais'd the price of Silver about 3 times more than the price of Gold, & sometimes 4 or 5 times more or above, & therefore the temptation to Export Gold moneys hath all this year been 3 times less than the temptation to Export Silver moneys, And if this temptation hath not this year sensibly diminished the quantity of our Silver moneys, it hath much less carried out our Gold moneys, And all, or almost all the Gold which hath been Exported this year hath been in Forreign Bullion, and by consequence the Nation hath lost little or Nothing by the Exportation, because the Bullion being Forreign went out at the same price it came in at, Forreigners or their Agents who here receive Guineas in payments, will lose about 3 Pence per Guinea Exporting them, besides the danger they run by breaking the Law, there hath been above 110,000 Pounds Imported in Gold to be coyn'd since Christmas, and the 6 Pence per Guinea sav'd in all this Coynage will recompence abundantly the loss of 6 Pence per Guinea in all the Guineas Exported by Forreigners, and therefore there is nothing in the Objection, that in making payment to Forreigners in Guineas we lose 6 Pence per Guinea, for we get the 6 Pence again in receiving back all the Guineas which they do not Export.

Observation 6th. Since the Demand of Silver for Exportation hath all this year been 3 times greater than that of Gold, no Gold would have been exported this year, had it not been for the want of Forreign Silver, and the Exportation thereof, hath prevented the Exportation of the same value of Forreign Silver as fast as it could have been procured for paying Debts abroad, & in the mean time hath saved the Interest of the Debts paid off.

Observation 7th. And this Exportation hath been a further Advantage to the Nation by raising the Course of Exchange from 33 Shillings « 10 Pence to 35, for when the Exchange is low the Nation looseth by it so much as it is under the par, and if the Debts which have been paid in Gold, had continued till they could have been paid in Silver, they would have caused the Exchange to Continue low.

Observation 8th. And to restore the 6 Pence to the Guinea, would be to lose these Advantages, & to give more by above 9 Pence in the Guinea for all the Gold which shall be imported hereafter, than it is worth in Forreign Markets, & to receive the corrupt Trade of Exporting Silver to buy Gold abroad, and Importing Gold to buy Silver at home.

Oct^r. 22^d. 1718

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An Account of the Gold and Silver Moneys coyn'd yearly from
Christmas 1699 to Christmas 1717. by weight

Years	Gold					Silver					Value in Money
	lb	oz	dw ^t	gr		lb	oz	dw ^t	gr		
1700	2701	" 4	" 14	" 11		4805	" 10	" 6	" 16		
1701	26742	" —	" —	" —		37477	" —	" —	" —		
1702	3642	" —	" —	" —		114	" 6	" —	" —		
1703	34	" 2	" —	" —		718	" 6	" —	" —		
1704	—	" —	" —	" —		4007	" —	" —	" —		
1705	104	, —	, —	, —		429	, 7	, 15	, —		
1706	537	, —	, —	, —		932	, —	, —	, —		
1707	607	, —	, —	, —		1174	, —	, —	, —		The whole weight of the Gold money coyn'd in these 18 years after the rate of 44½ Guineas to the pound weight Troy, amount unto 7,762,783 Guineas And the weight of all the Silver Moneys after the rate of 3 [£] 2 ^s to the pound w ^t Troy amounts unto 354,458 [£] 18 ^s 5 ^d
1708	1010	, —	, —	, —		3751	, —	, —	, —		
1709	2468	, —	, —	, —		25423	, —	, —	, —		
1710	3716	, —	, —	, —		817	, —	, —	, —		
1711	9324	, —	, —	, —		24768	, —	, —	, —		
1712	2855	, —	, —	, —		1784	, 6	, —	, —		
1713	13137	, —	, —	, —		2333	, —	, —	, —		
1714	29526	, —	, —	, —		1566	, —	, —	, —		
1715	39090	, —	, —	, —		1643	, —	, —	, —		
1716	23765	, —	, —	, —		1650	, —	, —	, —		
1717	15186	, —	, —	, —		948	, —	, —	, —		
	174444	" 6	" 14	" 11		114341	" 6	" 1	" 16		