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Fathoming slavery: feudalism, African bondage, globalisation and beyond

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Abstract

Wherever dechristianisation could not have possibly materialised, in those polities which abandoned God to start with, since the Fall to the eschaton, slavery was never substantially execrated, having continued to this day, net of abolitionism, in globalisation. Thence the perduring Arab slave trade over one millenium and the improbability of an end to the Atlantic one absent abolitionism, which would have withal flowed indeed into globalisation. No sooner was Western Europe by contrast dechristianised at heart, in the tares of Protestantism, than the internal slave raids ended together with the tutelage of feudalism.

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MSC codes: 91B60; 91D10; 91F10.

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1. Introduction

1.1 Feudalism and African bondage. Stefano Fenoaltea [2] intriguingly explained feudalism and the Atlantic slave trade as transitory Boserupian mechanisms of exchange between backward and developed areas, of slaves for manufactures, after gold or wherewithal and before foodstuffs, at constant transportation costs. He argued that feudalism ended once Western Europe definitively surpassed the Levant's technology and he counterfactually predicted the natural end of the Atlantic slave trade on account of the said mechanism. Jacques Heers [3] reported that the millenary Arab slave trade accounted for more or less half of the entire flow of African slaves in history; on applying Fenoaltea's [2] explanation to the Arab slave trade one realises that, despite positing non-decreasing transportation costs, the bilateral real wage readjustment generating the replacement of African slaves with foodstuffs never occurred, outlining the Arab slave trade as a counterexample to his model¹. Similarly, slave recruitment from the Levant had existed in Rome too, in spite of transportation costs having been low enough to warrant the exchange of foodstuffs for manufactures instead, however careful and emancipating enslavement might there be.

1.2 Dechristianisation and enslavement. This article thus argues that any form of persistent slavery rests on the absence of dechristianisation, which Western Europe underwent with the rise of Protestantism. Feudalism had emerged as a defence from the internal menace of dechristianisation, principally enacted by means of slavery, but once Protestantism set Western Europe's apostasy foundations Christendom and dechristianisation at once ended and therewith the incentive for slave raids and trades. Anywhere else

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¹Alternatively, rising transportation costs would have had to punctually neutralise the real wage adjustments, invoking further slave raids notwithstanding, but non-decreasing transportation costs themselves conflict with Arab maritime dominion in the Western Indian Ocean over the course of the millenium.

slavery never ended and could never naturally have, Arab and Atlantic slave trade certainly included. Yet, even if the Atlantic slave trade had not ended artificially, in abolitionism, the said real wage readjustment would have generated that wage compression globalisation inflicts upon the West today. Abolitionism is thence inevitably cast under a darker light, of instrumentality, and the Church's appeal for worldwide manumission restituted its due worth, of sole charitable volition.

1.3 Contributions. The contribution of this article is consequently theoretical and analytical. From an analytical perspective Fenoaltea's [2] model is recast in partial equilibrium form, rigorously presenting the full ratiocination of his mechanism and bearing the potential for expansion to a general equilibrium setting, in all of its ductility. In terms of theory dechristianisation is introduced as the model's determining component, as it were reversing Boserupian causality to exogenous demand for slaves in exchange for any tradable; the extended model thereby comprehensively accounts for the rise and fall of feudalism, the two African slave trades and any ultimate dynamic of enslavement since the Fall to the eschaton.

2. Feudalism in the literature

2.1 Pirenne. The origins of feudalism are still actually debated. Henri Pirenne's [4] thunderous watchword was Charlemagne sans Mahomet est inconcevable, ascribing Western Europe's downfall to an interruption of trade, across the Mediterranean basin, driven by the Arabs. Since gold disappeared from Western Europe as of the seventh century, Pirenne [4] posited that the rapid expansion of Islam severed Western Europe from its former colonies to the East and South and therefrom generated an economic plunge within, giving way to a domestic anarchy which would have finally required the succour of feudalism. As appealing as it may sound, Pirenne's [4] thesis errs in that internal trade or gold is insufficient for external trade, namely, internal trade can exist (and gold can circulate) without external trade (i.e. closed, aureate economies can exist): $(T_I \vee G) \not\longrightarrow T_E = (T_I \vee G) \wedge \neg T_E$, where $G \equiv \text{Gold}$, $T_E \equiv \text{External trade}$ and $T_I \equiv \text{Internal trade}$. Gold circulation is correspondingly unnecessary for external or internal trade, as subjectively warranted by the most liquid and informative alternative form of currency (i.e. ultra-national trade persists and tax collection still functions): $(T_E \vee T_I) \not\longrightarrow G = (T_E \vee T_I) \wedge \neg G$, ceteris paribus.

2.2 Anderson. From a marxian viewpoint, Perry Anderson [1] conjectured feudalism as the forerunner of capitalism, featuring technical progress and a class conflict of its own. Yet such is contradictorily dynamic, for in marxism capitalism is uniquely dynamic and alone capable of eliminating the scarcity of resources, otherwise, final communism should have stemmed from feudalism, removing capitalism from historical materialism altogether.

In marxism, more specifically, ancient communism preceded historical slavery, historical slavery preceded feudalism, feudalism preceded capitalism and capitalism will have preceded final communism; even though demand may match the increased supply in reverse Malthusian checks, ever triggering new markets, even though state capitalism may thwart the pain incentives fallen survival needs, actually imploding capitalism, even though resources may be ever scarce, in the sweat of our faces, if feudalism were to have been dynamic, as Anderson [1] and his competers held, then capitalism should not have followed it, thereby destroying historical materialism: $F_D \longrightarrow \neg C = \neg (F_D \land C)$, where $C \equiv \text{Capitalism}$ and $F_D \equiv \text{Dynamic}$ feudalism.

2.3 Raids and gunpowder. Another stance is that of external raids: the barbarian invasions which disbanded Rome weakened a territory devoid of technological counterweights, thus, the attendant insecurity caused the state to wither away. Militarily feebler states and as proportionally backward as Rome, nevertheless, did resist the burden of invasions throughout history (e.g. Mozarabic Spain): $I_{TP} \not \to \neg S = I_{TP} \land S$, where $I_{TP} \equiv$ Techno-potent invasions and $S \equiv$ State. A fourth interpretation treats of the state's fragility in contrast to the impregnability of warlords: but gunpowder, in technological determinism, would have reverted the situation. Gunless Rome, yet, had formerly subdued myriads of fortresses: $\neg G \not \to \neg S = \neg G \land S$, where $G \equiv$ Gunpowder and $S \equiv$ State.

2.4 Fenoaltea. Fenoaltea [2] seemed to have ended the debate: the military pressure at Rome's confines mattered, but the persistent incentives to internally besiege its territories for slaves (razzie) mattered more, unto fealty and feudal protection. Fenoaltea [2] fundamentally posited technological disparity between traders: Western Europe's elites offered slaves to the Levant in exchange for technologically superior goods,

meaningfully foreign. It therefore was not the end of trade with the Levant to have originated feudalism, held Fenoaltea [2], but its precise continuation.

Fenoaltea 2 nevertheless thereby predicted slave trades as both transitory and uncertain. Since the backward areas ultimately demand luxury goods, at constant transportation costs, their gold reserves would be exhausted before trading slaves, extant and new; such would cause bilateral price divergences, through nominal money supplies (i.e. gold) and real wages, and temporary satisfactions of the costs of slavery (i.e. capture, ransom, consignment) by the developed areas. The slave trades would be replaced by exchanges of goods if and only if transportation costs sufficiently decreased or the bilateral divergences in real wages made them prohibitive, trading foodstuffs for manufactures instead. Fenoaltea [2], in fact, attributed the end of feudalism to Western Europe's manufactural growth, due to its ultimately technological victory.

3. Fenoaltea: feudalism and the Atlantic slave trade

3.1 Open economy. Let Fenoaltea's [2] feudal model be formulated as a partial equilibrium one. Nominal exchange rate E is the ratio of domestic currency unit x to foreign currency unit x^* such that both nominal money supplies, domestic M and foreign M^* , are reducible to zero in currency accumulation (i.e. foreign reserves) or substitution, ending their exchange: $x \in M \subset \mathbb{R}_+, x^* \in M^* \subset \mathbb{R}_+, E = \frac{x}{x^*}$ and $x, x^* = 0 \rightarrow \not\exists E$. Both M and M^* are seen as gold. Real exchange rate e is the ratio of x to x^* in real terms (i.e. respectively divided by domestic prices p and foreign prices p^*): $\forall p, p^* \in \mathbb{R}_{++}, e = \frac{xp^*}{x^*p} = \frac{Ep^*}{p}$. Absolute purchasing power parity predisposes the conversion of p^* into p at e: $\frac{x}{x^*} = \frac{p}{p^*} \longrightarrow p = \frac{xp^*}{x^*} = Ep^*$. Demand for private consumption e is met by the supply of output e and imports e im net of exports e and e imports e in e and e imports e in e and e in e and e imports e and e in e and e imports e and e in e and e imports e and e in e and e in e and e imports e and e in e in e and e in e and e in e and e in e and e in e in e and e in e in e and e in e in e in e and e in valued at p; in real terms im are weighted by e:

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D \equiv c = y + im - ex \equiv S
\longrightarrow p \cdot c = p (y + im - ex)
\longrightarrow p \cdot c = p(y - ex) + Ep^* \cdot im
\longrightarrow c = y + e \cdot im - ex
\longrightarrow y = c + ex - e \cdot im;
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the last equation is the national accounting identity devoid of government and firm consumption (i.e. public spending and investment). In Fenoaltea's [2] framework domestic variables are European and foreign ones are Levantine.

3.2 European supply. Fenoaltea [2] instantiated y as European foodstuffs fs and eventually European manufactures mf, im as Levantine manufactures mf^* net of their transportation tr^* (consumed in the Levant) and ex sequentially as M^* , weighted at α_{M^*} , European slaves s, weighted at α_s , both by the negligible transportation cost, an α_{fs} share of fs and eventually an α_{mf} share of mf, both net of a single European transportation cost tr (consumed in Western Europe), weighted at α_{tr} : $\forall \alpha_{M^*} \in (0, M_H^*] \subset$ M^* , $\{\alpha_s, \alpha_{mf}, \alpha_{tr}\} \subset \mathbb{R}_{++}, \alpha_{fs} \in (0, 1)$,

$$c = (fs + mf) + e(mf^* - tr^*) - (\alpha_{M^*}M^* + \alpha_s s + \alpha_{fs}fs + \alpha_{mf}mf - \alpha_{tr}tr)$$

$$\longrightarrow c = (1 - \alpha_{fs})fs + (1 - \alpha_{mf})mf + e(mf^* - tr^*) - (\alpha_{M^*}M^* + \alpha_s s) + \alpha_{tr}tr$$

 $c = (fs + mf) + e(mf^* - tr^*) - (\alpha_{M^*}M^* + \alpha_s s + \alpha_{fs}fs + \alpha_{mf}mf - \alpha_{tr}tr)$ $\rightarrow c = (1 - \alpha_{fs})fs + (1 - \alpha_{mf})mf + e(mf^* - tr^*) - (\alpha_{M^*}M^* + \alpha_s s) + \alpha_{tr}tr.$ $\alpha_{M^*}, \ \alpha_s, \ \alpha_{mf} \ \text{and} \ \alpha_{tr} \ \text{are determined by} \ \alpha_{fs} \ \text{in view of perfect inter-temporal substitution between}$ $ex: \ \frac{\partial c}{\partial M^*} = \frac{\partial c}{\partial s} = \frac{\partial c}{\partial fs} = \frac{\partial c}{\partial mf} = -\frac{\partial c}{\partial tr} \longleftrightarrow \alpha_{M^*} = \alpha_s = \alpha_{fs} = \alpha_{mf} = \alpha_{tr}. \ \text{More specifically,}$ $c, \ y \ \text{and} \ im \ (\text{i.e.} \ fs \ \text{and} \ m^* - tr^*) \ \text{remain fixed and} \ ex \ \text{suitably adjust over time,} \ ceteris \ paribus:$ $\bar{c} = (\bar{f}s + \bar{m}f) + e(\bar{m}f^* - \bar{t}r^*) - (\alpha_{M^*}M^* + \alpha_s s + \alpha_{fs}fs + \alpha_{mf}mf - \alpha_{tr}tr)$. At the rise of feudalism $M^* \ge s > fs - tr > mf = 0$.

3.3 Transportation, slaves and prices. tr^* and tr suitably increase in intrinsic costs (i.e. capital, labour and technology) and a common piracy risk ε_{pr} : $\forall \varepsilon_{pr} \sim \mathcal{N}\left(0, \sigma^2\right), tr^* = f(c_{tr^*}^{+}, \varepsilon_{pr}^{+})$ and $tr = f(c_{tr}^+, \stackrel{+}{\varepsilon}_{pr})$. s decrease in ransom rs^2 and increase in capture cp, consignment cn and e, for depreciations lower their price in the Levant: $s = f(\bar{rs}, c\bar{p}, c\bar{n}, e^{\dagger})$. p increase in European foodstuff real wages w_{fs} and p^* increase in Levantine manufacture real wages $w_{mf^*}^*$ and M^* , raising demand for foreign capital and its return: $p = f(w_{fs}^+)$ and $p^* = f(w_{mf^*}^+, M^*)$.

²If capture, ransom and consignment are regarded as prices then slaves increase in all three; if they are regarded as quantities, as the case hereby, then domestic ransoms decrease the amount of slaves.

As gold flows into the Levant from Western Europe in exchange for manufactures, ceteris paribus, its prices rise and its real exchange rate appreciates therewith, eventually affording the slave cost of Western Europe, by then itself devoid of gold: $e\left(mf^*-tr^*\right) \geq \alpha_{M^*}M^* \longrightarrow e\left(mf^*-tr^*\right) \geq \alpha_s s > M^* = 0.$

- 3.4 Real wages. w_{fs} increase in s such that an expanding slave trade reduces European labour, inflating its marginal product and p, and therefrom decreases e to the point of rendering s prohibitively expensive in the Levant relative to fs, ceteris paribus; $w_{mf^*}^*$ decrease in s, for the expanding volume of Levantine labour on account of the slave trade deflates its marginal product and p^* , depreciating $e^* = \frac{x^*p}{xp^*}$ and thereby rendering s in the Levant all the more expensive, so that fs and eventually mf replace sindeed, ceteris paribus: $w_{fs} = f(s)^+$ and $w_{mf^*}^* = f(s)^-$ such that $e(mf^* - tr^*) \ge \alpha_s s \longrightarrow e(mf^* - tr^*) \ge \alpha_s s \longrightarrow e(mf^* - tr^*) \ge \alpha_s s$, where $mf \ge f s$.
- 3.5 Rise and fall of feudalism. The inter-temporal adjustment of European exports to a demand for Levantine manufactures, which Fenoaltea [2] proposed in order to explain the rise and fall of feudalism, comes to pass, ceteris paribus, as follows.
 - 1) Demand shock for Levantine manufactures: $\frac{\partial c}{\partial m f^*} > 0$.
- 2) Financed through gold (pre-feudalism): $\bar{c} = \bar{fs} + e\left(\bar{mf}^* \bar{tr}^*\right) \alpha_{M^*}M^*$, since $M^* \ge s > fs tr > 0$
- 3) Financed through slaves (rise of feudalism): $\bar{c} = \bar{f}s + e\left(\bar{m}f^* t\bar{r}^*\right) \alpha_s s$, since $s > fs tr > mf = M^* = 0$. Gold in Western Europe has been essentially depleted, invoking the exportation of European slaves: $\bar{c} = \bar{f}s + e\left(\bar{m}f^* - \bar{t}r^*\right) - (\alpha_{M^*}M^* \downarrow + \alpha_s s \uparrow)$, that is, $\frac{\partial c}{\partial M^*} = \frac{\partial c}{\partial s}$, such that $M^* = 0$.
- 4) Financed through foodstuffs (fall of feudalism): $\bar{c} = \bar{f}s + e\left(\bar{mf}^* t\bar{r}^*\right) (\alpha_{fs}fs \alpha_{tr}tr)$, since $fs-tr>mf=s=M^*=0$. The purchase of European slaves has become prohibitive in the Levant and European slaves have thus withered away, invoking the exportation of European foodstuffs; such has been caused by the risen real wages of European foodstuffs and by the fallen ones of Levantine manufactures, through the real exchange rate, or by the fallen transportation costs of European foodstuffs, intrinsically or in piracy: $\bar{c} = \bar{f}s + e\left(\bar{m}f^* - \bar{t}r^*\right) - (\alpha_s s \downarrow + \alpha_{fs} fs \uparrow - \alpha_{tr} tr \downarrow)$, that is, $\frac{\partial c}{\partial s} = \frac{\partial c}{\partial fs} = -\frac{\partial c}{\partial tr}$, such that c = 0
- 5) Financed through manufactures (Great Divergence foundations): $\bar{c} = (\bar{f}s + \bar{m}f) + e(\bar{m}f^* t\bar{r}^*) e(\bar{f}s + \bar{m}f) + e(\bar{m}f^* t\bar{r}^*)$ $(\alpha_{fs}fs + \alpha_{mf}mf - \alpha_{tr}tr)$, since $fs + mf - tr > s = M^* = 0$, where $mf \geq fs$. European manufactures have systematically emerged, siding or exceeding European foodstuffs as exports to the Levant: $\bar{c}=0$ $(\bar{f}s + \bar{mf}) + e(\bar{mf}^* - \bar{tr}^*) - (\alpha_{fs}fs \downarrow + \alpha_{mf}mf \uparrow - \alpha_{tr}tr)$, that is, $\frac{\partial c}{\partial fs} = \frac{\partial c}{\partial mf}$, such that $mf \geq fs$.
- 3.6 Atlantic slave trade. Fenoaltea [2] pictured the Atlantic slave trade almost identically. The demand shock for European manufactures, ceteris paribus, was first financed through African gold and ivory and then through African slaves, with the exception that, although African manufactures did not emerge, the Atlantic slave trade would have counterfactually ended anyway (i.e. even absent abolitionism), not because African foodstuffs would have become predominantly cheaper than slaves, in bilateral real wage readjustment, but in especial view of African emigration to America concomitant to the development of communications for African remittances.

The mechanism is thus formalised. Domestic variables are African and foreign ones are European; Europe is understood as eventually encompassing America. African remittances are denoted rm and their weight α_{rm} is likewise determined by α_{fs} in perfect inter-temporal substitution between ex (i.e. African exports): $\frac{\partial c}{\partial rm} = \frac{\partial c}{\partial M^*} = \frac{\partial c}{\partial s} = \frac{\partial c}{\partial fs} = -\frac{\partial c}{\partial tr} \longleftrightarrow \alpha_{rm} = \alpha_{M^*} = \alpha_s = \alpha_{fs} = \alpha_{tr}$.

1) Demand shock for European manufactures: $\frac{\partial c}{\partial mf^*} > 0$.

- 2) Financed through gold and ivory (pre-Atlantic slave trade): $\bar{c} = \bar{f}s + e\left(\bar{m}f^* \bar{t}r^*\right) \alpha_{M^*}M^*$, since $M^* \geq s > fs - tr > rm = 0.$
- 3) Financed through slaves (start of Atlantic slave trade): $\bar{c} = \bar{f}s + e\left(\bar{m}f^* \bar{t}r^*\right) \alpha_s s$, since $s > fs - tr > rm = M^* = 0$. Gold and ivory in West Africa have been essentially depleted, invoking the

exportation of African slaves: $\bar{c} = \bar{f}s + e\left(\bar{mf}^* - \bar{tr}^*\right) - (\alpha_{M^*}M^* \downarrow + \alpha_s s \uparrow)$, that is, $\frac{\partial c}{\partial M^*} = \frac{\partial c}{\partial s}$, such that $M^* = 0$.

4) Financed through remittances and foodstuffs (counterfactual end of Atlantic slave trade): $\bar{c} = \bar{f}s + e\left(\bar{mf}^* - \bar{tr}^*\right) - (\alpha_{rm}rm + \alpha_{fs}fs - \alpha_{tr}tr)$, since $rm = M^* \geq fs - tr > s = 0$. The purchase of African slaves has become prohibitive in Europe and African slaves have thus withered away, invoking the exportation of African foodstuffs; such has been caused by the risen real wages of African foodstuffs and by the fallen ones of European manufactures, through the real exchange rate, or by the fallen transportation costs of African foodstuffs, intrinsically or in piracy; however, the emergence of telecommunications stimulated African emigration to America so that its remittances might finance, ultimately as European currency, European manufactures in West Africa even more than foodstuffs: $\bar{c} = \bar{f}s + e\left(\bar{mf}^* - \bar{tr}^*\right) - (\alpha_{rm}rm\uparrow + \alpha_s s \downarrow + \alpha_{fs}fs \uparrow - \alpha_{tr}tr \downarrow)$, that is, $\frac{\partial c}{\partial rm} = \frac{\partial c}{\partial s} = \frac{\partial c}{\partial fs} = -\frac{\partial c}{\partial tr}$, such that $rm = M^* > fs$ and s = 0.

4. The Arab slave trade

4.1 Levantine technology. The incentives for slave raids are pertinent, their Boserupian underpinning less so: revisiting the technological history of the Levant is in order. The Near East, crib of civilisation, had been ever forward and as Rome was first attacked and then disbanded, inaugurating the rise of Christendom, the Near East stayed forward. The Golden Age of Islam had inherited its forwardness and only prolonged it, however meritoriously; Christendom had shrunk and the Levant had not been repopulated, but the outgrowths of the Crusades are worth no less than the Reconquista, Constantinople's Fall no more than the Victory at Lepanto: medieval Arab superiority over Europe was not intrinsic.

The Church, moreover, was not a veneer of obscurantism, as Enlightenment lore savours to portray, but a bastion of science, in its traditions, hagiography and institutions (e.g. monasteries, scholasticism, *Alma Mater Studiorum*), having predisposed the technological victory which Europe would have achieved.

4.2 Arab counterexample. If the technological difference between Rome and Byzantium was so stark, then, why had the Boserupian slave trade not yet begun? Fenoaltea's [2] model suggests low transportation costs as the answer: under Rome's hegemony Mediterranean waters were risk free and goods were thus exchanged for goods at nominal wage parity, strengthening the humaner trait its slavery notoriously featured; yet slavery did there exist.

If African emancipation in America would have come to pass withal, why did the millenary slave trades of the Arabs across the Sahara desert, East Africa and the Western Indian Ocean, which to Heers [3] constituted about half of the historical African flow, not cease, as forecast by the model? If transportation costs stayed non-decreasing, why did real wages, at least those of the Africans, not sufficiently adjust to end the slave trade? Fenoaltea's [2] analysis is appealing (and my education amply owes him), but it could suffer a counterexample after all.

4.3 Protestantism. The finger seems best pointed at the Ancient Foe. The Church had vanquished Rome and, far from having jettisoned its glories and those of other pagan civilisations, kept on fronting all its enemies, from without and within, in its distinct blend of charitable rigour and magnanimity, fulfilling the Great Commission, qua sole beacon of world hope: the loathing for it generated the gold hoarding and slave raids proper to the "Dark Ages", internally, leeching, but come the "Reformation" ceased feudalism and therewith the era of Christendom.

5. Feudalism revisited

5.1 Dechristianisation and apostasy. A transversally consistent explanation of the rise and fall of feudalism, namely, one whose formalisation is ductile enough to accommodate those other historical occurrences otherwise figuring as counterexamples, consequently corrects Fenoaltea's [2] model as follows. Dechristianisation dc is introduced as increasing in s and apostasy a and s themselves are adjusted to decrease in dc: $dc = f(\stackrel{+}{s}, \stackrel{+}{a})$ and $s = f(\stackrel{-}{rs}, \stackrel{+}{cp}, \stackrel{+}{cn}, \stackrel{+}{dc})$. The logic is twofold: as slaves increase Christendom is mined to the point of rupture, thereby ending the very slave trade; yet, said rupture can also be achieved via apostasy, maybe ending the slave raids sooner than the raids themselves, the objective

being certainly dechristianisation, not the end of slavery, and therefrom slavery's smoother and greater continuation.

- 5.2 Vitrine of European gold and slaves. In contrast to Fenoaltea [2]'s Boserupian outlook, the demand for Levantine manufactures is consequential, reversing causality, as an expedient for the simultaneous accumulation and sale of gold and slaves on the substantial road to European dechristianisation; comparably, the exportation of European foodstuffs and potential manufactures is only accidental. Counterfactually, had it not been Levantine manufactures one predicts that any other import would have carried out the trade, purposely stimulated through the presentation of gold and slaves to the Levant, ever welcomed on account of fallen human nature.
- 1) Rise of feudalism: $\bar{c} = (\bar{f}s + \bar{m}f) + e(mf^* \uparrow -\bar{t}r^*) (\alpha_{M^*}M^* \uparrow + \alpha_s s \uparrow + \alpha_{fs}fs \uparrow + \alpha_{mf}mf \uparrow -\alpha_{tr}tr \downarrow)$ such that $\frac{\partial c}{\partial mf^*} + (\frac{\partial c}{\partial M^*} + \frac{\partial c}{\partial s} + \frac{\partial c}{\partial fs} + \frac{\partial c}{\partial mf} \frac{\partial c}{\partial tr}) = 0$, where $\frac{\partial c}{\partial mf^*} > 0$ and $(\frac{\partial c}{\partial M^*} + \frac{\partial c}{\partial s} + \frac{\partial c}{\partial fs} + \frac{\partial c}{\partial mf} \frac{\partial c}{\partial tr}) < 0$. European gold and slaves are hoarded and traded in accidental exchange and consequential demand for Levantine manufactures, with European foodstuffs and potential manufactures acting as mere complements.
- 2) Institutionalisation of feudalism. While European gold may be depleted and foodstuffs and manufactures certainly not ever actual³, the slave trade systematically persists, as an intergenerational institution and feudalism as a Catholic defence therefrom, inasmuch as the slave raids net of bilateral real wage readjustments exceed dechristianisation's impact thereon: $\frac{\partial c}{\partial M^*}$ is such that eventually $M^* = 0$ and fs = mf = 0 at any transient point in time throughout feudalism, but $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} \frac{\partial s}{\partial rs} \frac{\partial s}{\partial e}\right) + \left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) > 0$, where $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} \frac{\partial s}{\partial rs} \frac{\partial s}{\partial e}\right) > 0$ and $\left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) < 0$, so $\bar{c} = (\bar{f}s + \bar{m}f) + e\left(\bar{m}f^* \bar{t}r^*\right) (\alpha_s s + \alpha_{fs} f s + \alpha_{mf} m f \alpha_{tr} t r)$.
- 3) Fall of feudalism. The slave trade and feudalism naturally ended when and only when dechristianisation (i.e. slave trade and especially Protestantism) impacted the slave trade more than slave raids: $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} \frac{\partial s}{\partial rs} \frac{\partial s}{\partial e}\right) + \left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) < 0 \text{ such that } s = 0, \text{ gold remerged, } M^* > 0, \text{ and manufactures were developed, } mf > 0, \text{ so } \bar{c} = (\bar{f}s + \bar{m}f) + e\left(\bar{m}f^* \bar{t}r^*\right) (\alpha_{M^*}M^* + \alpha_{fs}fs + \alpha_{mf}mf \alpha_{tr}tr).$

6. The African slave trades and globalisation

- 6.1 Arab slave trade. Once again, then: why did real wages, at least those of the Africans, not sufficiently adjust to end the Arab slave trade? Because the dechristianisation element there present, if only net of the African real wage rise indeed, could have never by definition been sufficiently formal, nay, material, to offset the slave raids. Behold.
- 1) Rise of Arab slave trade: $\bar{c} = \bar{f}s + e\left(mf^* \uparrow -\bar{t}r^*\right) (\alpha_{M^*}M^* \uparrow + \alpha_s s \uparrow + \alpha_{fs}fs \uparrow -\alpha_{tr}tr \downarrow)$ such that $\frac{\partial c}{\partial mf^*} + \left(\frac{\partial c}{\partial M^*} + \frac{\partial c}{\partial s} + \frac{\partial c}{\partial fs} \frac{\partial c}{\partial tr}\right) = 0$, where $\frac{\partial c}{\partial mf^*} > 0$ and $\left(\frac{\partial c}{\partial M^*} + \frac{\partial c}{\partial s} + \frac{\partial c}{\partial fs} \frac{\partial c}{\partial tr}\right) < 0$. African gold and slaves are hoarded and traded in exchange for Arab manufactures, with African foodstuffs acting as mere complements.

In the High Middle Ages, African slaves were causally demanded as soldiers and labourers on expanding Arab plantations (i.e. Zanj) and thus exchanged for Arab manufactures; by the nineteenth century they were mostly recruited as servants or trustees, approaching Romanic emancipation in careful activities (e.g. agriculture, water and desert transportation, domestic animals, navigation, custody, laundry, construction, shop assistance, cooking).

2) Institutionalisation of Arab slave trade. While African gold may be depleted and foodstuffs not ever actual, the Arab slave trade systematically persists, as an intergenerational institution and such rebellions as the Zanj as a defence therefrom⁴, inasmuch as the slave raids (e.g. Swahili) net of bilateral real wage readjustments be not confronted with dechristianisation, inherently absent: $\frac{\partial c}{\partial M^*}$ is such that $M^* = 0$ eventually and fs = 0 at any transient point in time throughout the Arab slave trade, but dc = 0

³They are although not subject to depletion, for, however to lsome, subsistence would have been ubiquitous and industriousness always supports innovation.

⁴They are crucially regressive, unlike *Catholic* feudalism.

and
$$s = f(\bar{rs}, cp^+, cn^+, e^+)$$
 such that in $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} - \frac{\partial s}{\partial rs} - \frac{\partial s}{\partial e}\right) + \left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) > 0$ it is observed that $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} - \frac{\partial s}{\partial rs} - \frac{\partial s}{\partial e}\right) > 0$ perdurably and $\left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) = 0$, so $\bar{c} = \bar{f}s + e\left(\bar{mf}^* - \bar{tr}^*\right) - (\alpha_s s + \alpha_{fs} f s - \alpha_{tr} tr)$.

3) Fall of Arab slave trade. The Arab slave trade and the regressive resistances do not naturally end if and only if dechristianisation, inherently absent, cannot overcome the slave raids; it thus ended when and only when slavery was outlawed (i.e. twentieth century): s=0 and gold remerged, $M^*>0$, so $\bar{c}=(\bar{f}s+\bar{m}f)+e(\bar{m}f^*-\bar{t}r^*)-(\alpha_{M^*}M^*+\alpha_{fs}fs-\alpha_{tr}tr)$.

6.2 Atlantic slave trade counterfactual. The counterfactual by which the bilateral readjustment in real wages concomitant to the technological development of communications permitting African remittances would have eventually ended the Atlantic slave trade with the Americas is to be accordingly revised: lacking there a purpose for dechristianisation in the first place, West Africa having barely embraced Catholicism to date, net of Vatican Council II, the lower bound on the slave recruitment population conveyed by Fenoaltea [2] would have been simply broken through by continuing to raid neighbouring territories and originating a breeding mechanism fit to provide therefor, precisely as the blacks were treated in pre-emancipation America⁵.

Formally: Boserupianly exhausted gold and ivory, $M^* = 0$, dc = 0 and $s = f(\bar{r}s, cp, cn, e)$ such that in $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} - \frac{\partial s}{\partial r} - \frac{\partial s}{\partial e}\right) + \left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) > 0$ it is observed that $\left(\frac{\partial s}{\partial cp} + \frac{\partial s}{\partial cn} - \frac{\partial s}{\partial rs} - \frac{\partial s}{\partial e}\right) > 0$ perdurably and $\left(\frac{\partial s}{\partial dc} \frac{\partial dc}{\partial s} + \frac{\partial s}{\partial dc} \frac{\partial dc}{\partial a}\right) = 0$, so $\bar{c} = \bar{f}s + e\left(\bar{m}f^* - \bar{t}r^*\right) - \alpha_s s$.

6.3 Globalisation. Yet, even if said counterfactual were conceded the real wage conditions the African emigration would have generated would have been nobbut those contradistinguishing today's (no longer) stealthily erosive globalisation, evermore transversally across whites, yellows and blacks, at once uncovering historical abolitionism as only instrumental for slavery's smoother and greater continuation⁶ and doing justice to the Church's lone call for worldwide manumission.

The synthesis, howbeit, is in this key double implication: no dechristianisation, because no Christendom, if and only if slavery persistence, unto globalising immigration, wage compression and living standard annihilation (formally, $\neg D \longleftrightarrow S_P$, where $D \equiv \text{Dechristianisation}$ and $S \equiv \text{Persistent slavery}$).

7. Conclusion

The rise of feudalism was driven by the necessity for protection from the inward threat of dechristianisation, deployed through sieges and enslavement, generating many feats still palpable today; once that dechristianisation came to pass in Protestantism's convergence towards the Apostasy both the threat of enslavement and of the Arab and Turk world vanished from Europe and the latter, as then typified, almost from the very Earth⁷.

Whenever dechristianisation have not been sufficiently in place slavery existed and persisted, so that those civilisations never Catholic consistently failed and would have failed to interrupt it (e.g. Arab and Atlantic slave trade). In Catholic civilisation dechristianisation was by contrast wholly meaningful in all its preternatural evil and permitted slavery to end thereby, as a crucially transitory phenomenon, albeit, for Christendom's demise meant dechristianisation's victory and attendant disappearance and therefrom slavery's irreversible return, withal amid the Hour of Darkness, *Passio Ecclesiae Dei*.

References

⁵To some extent they still are, if only by yet operating nothing at all for their true emancipation, in and out of America, having yea demonised colonialism's normatively civilising intent, to drag that which remains of bygone Catholic Europe down to their cultural and physical enslavement and beyond.

⁶Worldwide, again, in the especially definitive suppression of Catholic Europe and of its cultural extensions and offshoots.
⁷Europe meanwhile became post-Christian, modernistic, globalised, and said world coincidentally remerged, dealing it perhaps its deathblow, in the seeming inauguration of the Man of Sin's 1260 day, 42 week or 3.5 year reign. Yea, in that land one time Messianic, meaningfully Christian, slavery was to be uniquely proscribed: whence deliverance from spiritual slavery should have been first believed and announced corporeal slavery became the dechristianising hole of its fallen captivity, unto the miracle and marvel of its eschatological conversion.

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