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FROM
BARTER PARADIGM
TO
PROPERTY PARADIGM

FOUR PILLARS OF OCCIDENTAL CIVILIZATION

TWO **JEWISH**

MONOTHEISM

*PROHIBITION
OF INFANTICE
{Sanctity of Life}*

TWO **GREEK**

MONOGAMY

PROPERTY

*THE DECISIVE
DERIVATIVES OF
PROPERTY
ARE **CREDIT, INTEREST,**
AND **MONEY,**
THE SUBJECTS OF THIS
LECTURE.*

A YOUNG STUDENT'S FIRST INQUIRY INTO MONEY MAY WELL BEGIN AT WIKIPEDIA WHERE HE IS LED TO THE ENTRY "MEDIUM OF EXCHANGE".

“A medium of exchange is an intermediary used in trade to avoid the inconveniences of a pure barter system”.

[https://en.wikipedia.org/wiki/Medium_of_exchange; last modified on **9 February 2016**, at 14:30;].

HOW COULD SUCH A STATEMENT BE WRONG IF 76 NOBEL LAUREATES IN ECONOMICS SUBSCRIBE TO IT?

SINCE BARTER EXCHANGE IS EXPLAINED OUT OF HUMAN NATURE THE ECONOMY IS ANALYZED AS SOMETHING UNIVERSAL (LIKE GRAVITY.

Adam Smith's (1723-1790) biological view of property and barter, i.e. of the market, was put forward in 1776. It was meant to explain nearly everything in the realm of economic activity as the outcome of

- “a certain propensity in human nature ...; the propensity to truck, barter and exchange one thing for another. Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that”**

(A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* [1776]. 4th edition 1790. London: Strahan & Cadell. New edition by E. Cannan (1904), reprinted [introduction by M. Lerner]. New York: Modern Library, 1937, p. 13.)

Adam Smith was put to test by Karl Polanyi (1886-1964) in 1944.

“The idea of profit is barred; higgling and haggling is decried; giving freely is acclaimed as a virtue; the supposed ‘*propensity to barter, truck, and exchange*’ [Adam Smith, 1776] does not appear. The economic system is, in effect, a mere function of social organization.”

(Karl Polanyi, *The Great Transformation* (1944), Boston: Beacon Press, 1957, p. 49.)

Yet, Polanyi leaves us in the dark about that non-barter element of “social organization” that might lead to money and markets.

MONEY WAS NOT CREATED TO ALLEVIATE BARTER!

- “Barter, in the strict sense of moneyless market exchange, has never been a quantitatively important or dominant model of transaction in any past or present economic system about which we had hard information. / Moneyless market exchange was not an evolutionary stage [. . .] preceding the arrival of monetary means of market exchange.”
- (Georges B. Dalton, ‘Barter’, *Journal of Economic Issues*, **1982**, vol. 16, pp. 181–190 / 185, 188.)

Can **DEMAND** Explain Economic Activity?

- **Tribesmen** have demand, need huts, canoes, paddles, sleeping mats and cooking utensils!
- **Feudal lords** as well as their **serfs** express the same kind of demand!
- **Communists** have tons of demand!
Yet, all they achieve is production and distribution. Business tools like credit, interest, money, and markets do not emerge.

Gold items of the Neolithic (4500-3300 BCE) that does neither know markets nor money.

[National Museum of Archaeology, Athens; foto G. Heinsohn.]



ACHIEVEMENTS OF MYCENAEAN FEUDALISM (15th c. BCE).

It has – with metallurgy and writing – all the tools for coinage. Yet, there are neither markets nor money. [National Museum of Archaeology, Athens; fotos G. Heinsohn.]

METALLURGY

Gold buttons for precious garments



WRITING

Tablet recording aromatic herbs



**Citadel of pre-monetary, i.e., Bronze
Age Greece:
MYCENAE OF GOLD**



Even **electron** – a natural alloy of gold and silver used for **earliest coins** in Greek Asia Minor – was successfully mastered by Mycenae but did not inspire coinage.

Electron death-mask from Mycenae (15th c. BCE)

[National Museum of Archaeology, Athens; foto G. Heinsohn.]



**Greek feudalism works precious metals and writes in
LINEAR B but lacks markets and money!**

“What can be identified is the activity of the palace; which exacts produce [...] from the king’s subjects, and doles out rations and materials when something has to be done. [...] **There is no suggestion of money, or of any standard by which values might be compared, items just being counted, weighed, or measured as they stand.** Nor is there any direct reference to foreign trade which must have involved some kind of exchange; and we may reasonably suspect that the palace, which controls so much, would control this also.”

(Anthony Andrewes , *Greek Society*, Harmondsworth: Penguin Books, 1971, p. 29.)

DO WE HAVE TO GIVE UP ON EXPLAINING MONEY?

“Money is a paradoxical entity. Its origin is, like that of language, an enigma in human history.”

(K. Iwai, *Disequilibrium Dynamics: A Theoretical Analysis of Inflation and Unemployment*, New Haven: Yale University Press, 1981, p. 113.)

“The manner in which loans became so mighty a machine is mysterious.”

(C.G. Starr, *The Economic and Social Growth of Early Greece: 800–500 B.C.*, New York: Oxford University Press, 1977, p. 183).

What element of “social organization” is missing in systems that do not generate markets and money?

- **“A claim to the private ownership of special pieces of land within the ‘clan’ [tribal] district is generally not recognized.”**

(R. Thurnwald, *Economics in Primitive Communities*, London: Oxford University Press & International African Institute, **1932**, p. 186.)

What did the Romans know?

Where could money come from if it is not a commodity to facilitate barter exchanges?

Lucretius (99–55 BCE)

- “Later [with the *polis*; i.e. after Mycenaean citadels] came the **invention of property and money** [lit. “gold”], which speedily robbed the strong and handsome of their status”.
- (*De rerum natura*, V: 1113–1114).

There is more than Adam Smith of 1776 in Scottish Economics: James Steuart (1713-1780) of 1767!

“A number of men of property join together in a contract of banking [...]. For this purpose, they form a stock which may consist **indifferently of any species of property. This fund is engaged to all the creditors of the company, as a security for the notes they propose to issue. So soon as confidence is established with the public, they grant credits, or cash accompts, upon good security [also to the public].”**

*(J. Steuart, **An Inquiry into the Principles of Political Oeconomy: Being an Essay on the Science of Domestic Policy in Free Nations** (1767), London: A Millar & T. Cadell. Reprint Düsseldorf: Verlag Wirtschaft und Finanzen, 1993, Books I and II / II, p. 150).*

POSSESSION / OWNERSHIP

POSSESSION IS ETERNAL / NATURAL!

Factual occupation, control or physical use of property.

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OWNERSHIP / PROPERTY IS NOT!

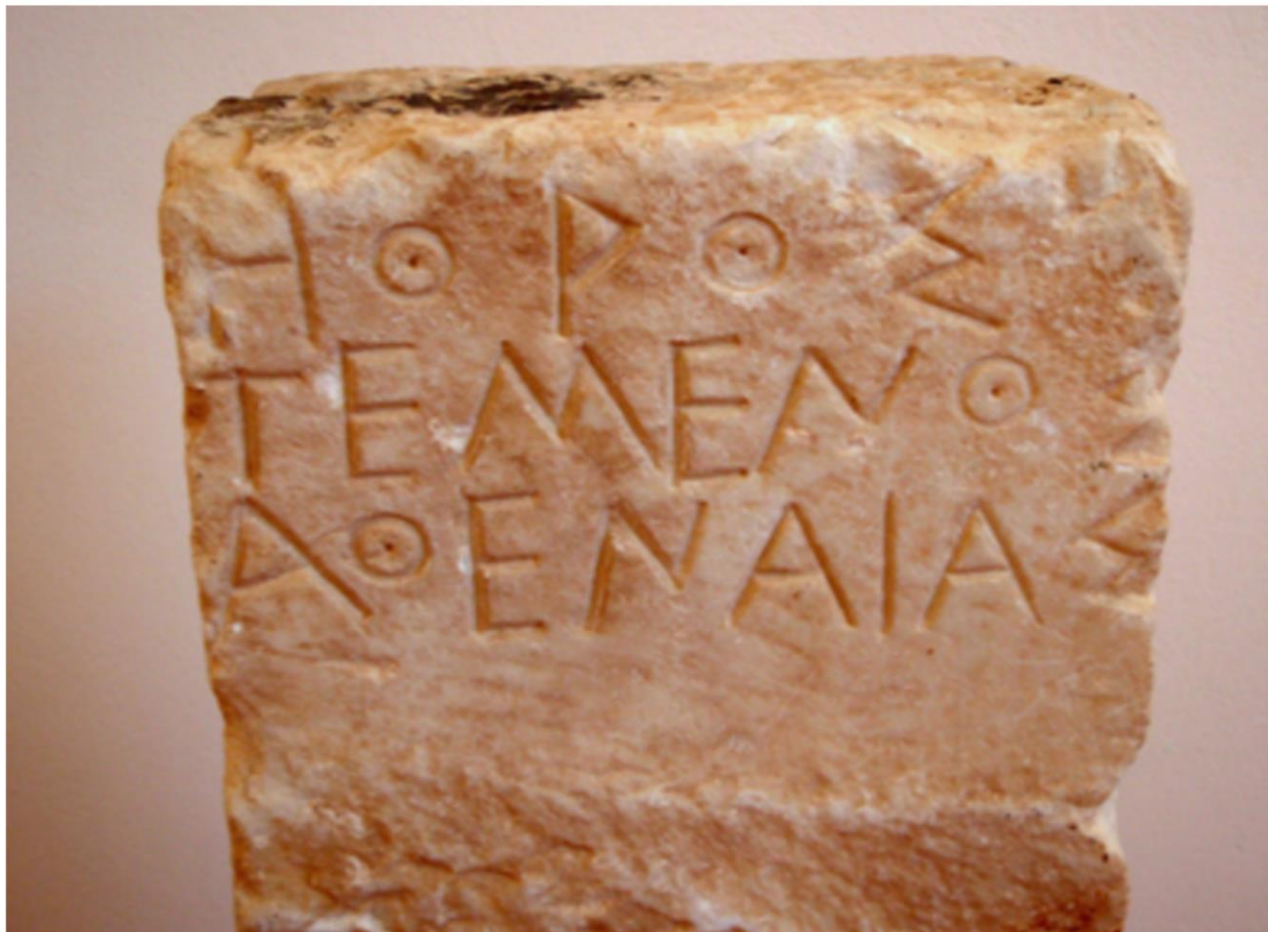
Residue of legal rights in an asset held by a person after other rights – such as possession – have been granted to others. An example is a title to land created through entry in a land titles register.

PERIOD OF THE *POLIS*

“HOROS TEMENOS ATHENAIAS”

[Boundary of the land of *Athena*].

[<https://www.dropbox.com/s/vh7oyitczmf5g0m/Screenshot%202016-02-29%2017.34.33.png?dl=0>]



Where does the *polis* come from?

“It has already been noted that in the Dark Age [c. 1100 to 600 BCE] the community [*polis*] had only a shadowy existence as a political organism. How the shadow acquired substance is a process we cannot trace.”

(M. Finley, *Early Greece, The Bronze and Archaic Ages*, London: Chatto & Windus, 1981, p. 87.)

“The causes of the development of the *polis* are not known”.

(M. Austin, P. Vidal-Naquet, *Gesellschaft und Wirtschaft im alten Griechenland*, München: C.H. Beck, 1984, p. 40.)

“Less clear is the origin of the *polis* system, which historians often claim is to be found in the rugged geography of Greece, with its limited water sources, scattered patches of farmland, and difficult communications”

(D. B. Nagle, S. M. Burstein, *The Ancient World*, New York: Prentice Hall, 2009, p. 45.)

Do we have to give up now?

Yes, if we believe in textbook chronology!

TRANSFORMATION FROM PRE-MONETARY MYCENAEAN FEUDALISM TO THE *POLIS* ACCORDING TO STRATIGRAPHY

600 BCE

Stratum of *polis*. Property is added to possession by revolutionaries against catastrophically weakened feudal lords. Rebellion leaders are remembered as legendary heroes like Theseus (Greece) or Romulus (Italy).

BRIEF PERIOD OF MASSIVE NATURAL DESTRUCTION.

REVOLUTIONS BEGIN AGAINST MYCENAE'S FEUDAL SYSTEM THAT WAS BASED ON POSSESSION ONLY.

700-600 BCE

Last Mycenaean – pre-monetary – stratum ending in catastrophe that flattened many feudal citadels.

INEXPLICABLE TRANSFORMATION FROM PRE-MONETARY MYCENAEAN FEUDALISM TO THE *POLIS* ACCORDING TO TEXTBOOK CHRONOLOGY

600 BCE

Stratum of *polis* with property whose origins must remain enigmatic because they are hidden in **500 yeras of darkness**.

1100-600 BCE

“Dark Age of Greece” prohibits explanation of the rise of the *polis* though the stratum below is contingent with the stratum above. There are no windblown layers between the two strata expected for 500 fallow years.

1100 BCE

Last Mycenaean – pre-monetary – stratum ending in catastrophe. dated by modern Egyptologists *via* names of Egyptian pharaohs found on seals (royal cartouches) excavated in Mycenae.

Two successive stages of the same upheaval were distributed over two different periods separated by 500 years.

- The *polis* with – with property, “sale, loan and credit” is not the “product of Indo-European tribal organisation, but as a social system growing out of the **ruins** of an ‘Oriental despotism’.”

(S. Humphreys, *Anthropology and the Greeks*, London et al.: Routledge & Kegan Paul, 1978, pp. 73 /68 f.)

Out of the ruins of feudalism/despotism!

- **“That end [of Mycenaean feudalism] was more abrupt than most breakdowns of past civilizations. From Thessaly in the north to Laconia and Messenia in the south, at least a dozen fortresses and palace-complexes smashed. / There is no dispute about the magnitude of the catastrophe in Greece.”**

(M. Finley, *Early Greece: The Bronze and Archaic Ages*, London: Chatto & Windus, 1981, pp. 57f. / 61.)

What do we know of the MEN in the post-catastrophic *polis*?

There are “Free men” and “Rural freeholders.”

“Economic activity, it should be recalled, was essentially carried on by free men.”

“Money did provide a mode of translating immovable assets into reckoning assets.”

C. G. Starr, ‘Economic and Social Conditions in the Greek World’, in: *The Cambridge Ancient History. Second Edition. Volume III. Part 3: The Expansion of the Greek World, Eight to Sixth Centuries B.C.*, Cambridge: Cambridge University Press, 1982, pp. 417–441; 418/431/431.

Contract relations (ownership society)
replace **command relations** (Mycenaean feudalism),
and even **blood relations** (tribal communities)

Hesiod: *WORKS AND DAYS* [verse 370]

"Let the wage promised to a friend be fixed;
even with your brother smile

-- and **get a witness**;

for trust and mistrust, alike ruin men".

ROMA QUADRATA:

Why does *haeredium* become the earliest Latin term for ownership?

•VARRO: DE RE RUSTICA (I: 10)

•“Two iugera form a *HAEREDIUM*, from the fact that this amount was said to have been first allotted to each citizen by Romulus, as the amount that could be transmitted by will.”

THE REVOLUTIONARY CREATORS OF THE POLIS DID NOT KNOW THAT CREDIT, PRICE AND INTEREST WOULD HAVE TO FOLLOW SOON.

The founding heroes of *polis* (Greece) and *civitas* (Rome) who divide the estates and eliminate the feudal lords -- to create Theseus' "state without King" or Romulus' *Roma quadrata* -- face unprecedented challenges. After the first harvest, co-revolutionaries advantaged by a more favourable lots have sufficient supplies in their granaries while others can barely maintain their existence. Moreover, the fellow-citizens under threat can no longer obtain help on the basis of blood relationship *à la* tribe or rations for serfs *à la* feudalism.

- However, they still have their allotment of land. One of them *requests credit* from a more successful rural freeholder *by offering a part of his land as collateral* (Latin *praedium*=plot of land) By simultaneously employing his land's (*eternal*) possessional aspect (ploughing, sowing, and harvesting the *physical* soil), and pledging it as (*innovative*) security he cannot help but discover the *non-physical* title to it. **THIS IS THE DISCOVERY OF PROPERTY.**

- To calm the creditor's uneasiness for loosing access to the (*immaterial*) security his grain would yield him during the credit's time-span the debtor offers him a *material* compensation. **THIS IS THE RATE OF INTEREST ENFORCING GROWTH.**

- To formulate the credit-contract the creditor must quantify the amount of land his debtor has to turn over in case of not fulfilling it. **THIS IS THE FIRST PRICE.**

WHAT IS MONEY IF IT IS NOT A STANDARD-GOOD TO ALLEVIATE BARTER? A CLAIM TO PROPERTY TO MOVE FROM CREDIT IN KIND TO NOMINAL/MONETARY CREDIT!

Aes signatum (“stamped pound“ **weighing 2 to 8 Roman pounds of 327 g**)

ROMAN 5th/4th c. BCE *AES SIGNATUM*
(full coin and small change)

(http://la.wikipedia.org/wiki/Fasciculus:Aes_Signatum_C_des_M.jpg)



(http://it.wikipedia.org/wiki/File:Lingotto_Bitalemi.JPG)



FROM GRAIN LOANS TO LOANS OF MONEY.

Money is a claim against the creditor's property that loses its freedom when it is encumbered to back money!

This is the loss that must be compensated by interest.

- **Aes grave** = 327,45 grams (1 pound weighing one pound as the grain in the loan in kind)
- **As** = 40, 10, or 12 g (innovative nominal pound [**token**])
- **Uncia** = 1/12 of an As (fraction of a token pound)

Weight reduction (from 327 to 12 grams) is seen by most economic historians as devaluation. Yet, it is not. It is merely the logical evolution of nominal money whose intrinsic value becomes irrelevant because it is backed by property of the creditor. The latter keeps all his possession but promises the holder of nominal money to redeem it, i.e., hand over possession + property simultaneously.

OWNERSHIP PREMIUM / RATE OF INTEREST

- **OWNERSHIP PREMIUM**

- **Premium on property that is neither burdened nor hypothecated, i.e. that is unencumbered and free.**

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- **INTEREST**

- **Compensation for the loss of ownership premium. In a money-creating creditor-debtor contract the rate of interest compensates the loss of ownership premium experienced by the creditor (typically a note-issuing bank), who has to reserve or set aside property assets to back the note issue.**

MONEY

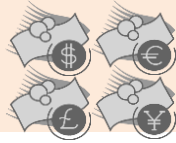
Nominalized claim over a property asset created in a creditor-debtor contract. Examples are bank notes and deposits created by private note-issuing banks or central bank notes and deposits. Deposits created by commercial banks are not money but claims to central bank money.

The MARKET (=sales contract) is the child of the credit contract.

The market is an entity that becomes necessary *uno actu* with the money-creating **credit contract and allows for the acquisition of **sales contracts** over commodities that provide the means to refund debts.**

The market is not found in possession-based command and tribal systems that do not have the credit contracts based on property pledged as collateral (to secure credit) or employed for backing (to secure the money note) for whose fulfilment markets are derived.

THE ECONOMIC SYSTEM



**NOTE-ISSUING
CENTRAL BANK**
bank capital



**COMMERCIAL
BANK**
bank capital, bank assets



**ENTERPRISE/
ENTREPRENEUR**
production assets



WORKER
human assets

**OWNERSHIP
ASPECT**
(activated through
burdening and
hypothecation)

>**non-physical** title
>ownership premium
lost when capital is set
aside (burdened) to back
the creation of money
>Lost ownership is
offset by **interest** received from commercial
banks
>Capital and assets can
be sold and are subject
to debt enforcement
actions

>**non-physical** title
>ownership premium is lost when
assets are hypothecated (or transferred in repurchase agreements)
and capital is set aside to obtain
central bank notes
>lost ownership-premium is
offset by **interest** received from
loans to non-bank enterprises
>ongoing income stream from
assets used as collateral for
central bank loans
>capital and assets can be sold
and are subject to debt
enforcement actions

>**non-physical** title
>ownership premium lost
when hypothecated to
obtain bank loans for
investment in production
assets and wage labor
>assets can be sold and are
subject to debt enforcement
actions

>**freedom=self-ownership** 1
is **non-physical** too but
cannot be burdened, sold or
subject to debt enforcement
actions
>right to hire out labour per
time-unit to gain interest-free
and collateral-free wage
money

**POSSESSORY
ASPECT**
(activated
through physical
use and control)

> if **tangible** property,
can be used simul-
taneously with activa-
tion of ownership aspect

>if **tangible** property, can
be used simultaneously with
activation of ownership
aspect

>**physically** deployed in
income-generating
production activities (to
refund **debt** and **interest**)
>defends competitive posi-
tion by technical progress

>wage **labor-deployed** in
production to generate
income to repay loan with
interest
> defends competitive posi-
tion through qualification

Because most economists only know possession – frequently mislabeled as “property” (lower part in previous slide) – but are not aware of property they are in no position to analyze an economy, i.e. business operations. They are thrown back to mere production systems (tribes; feudal estates; beehives etc.). **Yet, the field of economics is not the field of soil but the legal title to it!**

- "The most serious challenge that the existence of money poses to the theorist is this: the best developed model [*Debreu-Walras general equilibrium*] of the economy **cannot find room for it.**"

(Frank Horace HAHN [co-developer of general equilibrium theory], *Money and Inflation*, Oxford: Basil Blackwell, 1982, p. 1.)

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- "We do have very elaborate macro-economic models. They just suffer from one disadvantage. They **do not include the financial sector.**"

(Peter BOFINGER [member of Germany's Five Economic Sages], "Interview", in *Frankfurter Allgemeine Sonntagszeitung*, 17 May 2009, p. 35.)