

Thursday Feb 26 2009 9:30-5



Quinta-feira

Thursday Feb 26 2009 9:30-5



Quinta-feira Phalguna 7

Thursday Feb 26 2009 9:30-5



Quinta-feira
Phalguna 7
5769 3 adar

Thursday Feb 26 2009 9:30-5



Quinta-feira

Phalguna 7

5769 3 adar

4707 (29th year, 78th cycle)

Thursday

Feb 26

2009

9:30-5

Paul Duguid 203a South Hall

510 643 3894



Quinta-feira Thursday

Phalguna 7

2009 5769 3 adar **9:30-5**

4707 (29th year, 78th cycle)

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Thursday, *n*. and *adv*.

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Information work

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Thursday, n. and adv.

[Originally cognate with or formed similarly to Old Frisian thunresdei, Middle Dutch donnersdach, donderdach (Dutch donderdag), Old High German donarestag (Middle High German donerstac, donrestac, German Donnerstag) < the genitive of the Germanic base of THUNDER n. (used as the name of a god: see note) + the Germanic base of DAY n., originally after post-classical Latin dies Iovis day of (the planet) Jupiter (2nd or 3rd cent.; frequently from

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Information work

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"For the weavers, 'tis common .. to be drunk on Monday, have their headache on Tuesday, and their tools out of order on Wednesday ...[and] perhaps with students."

Hofl09 InfoWork- |



in the news

Lehman Brothers Holdings Inc. (OTC:LEHMQ)

Income Statement | Balance Sheet | Cash Flow

In Millions of USD (except for per share items)

Cash & Equivalents

Additional Paid-In Capital

Treasury Stock - Common

Other Equity, Total

Total Equity

Retained Earnings (Accumulated Deficit)

Total Liabilities & Shareholders' Equity

Short Term Investments

Cash and Short Term Investments	19,544.00	24,133.00	20,029.00
Accounts Receivable - Trade, Net	37,485.00		40,627.00
Receivables - Other	0.000		V 3
Total Receivables, Net	41,721.00	52,399.00	43,277.00
Total Inventory			
Prepaid Expenses			
Other Current Assets, Total		-	9
Total Current Assets	The state of the s		100
Property/Plant/Equipment, Total - Gross	6,975.00	6,756.00	6,299.00
Goodwill, Net		14	3,137.00
Intangibles, Net	4,101.00	4,112.00	990.00
Long Term Investments	563,935,00	695,339.00	614,363.00
Other Long Term Assets, Total		. 4	
Total Assets	639,432.00	786,035.00	691,063.00
Accounts Payable	61,086.00	84,552.00	64,307.00
Accrued Expenses	9,802.00	11.596.00	16,039.00
Notes Payable/Short Term Debt	22,655.00	24,752.00	18,024.00
Current Port. of LT Debt/Capital Leases	20,991.00	18,510.00	16,801.00
Other Current liabilities, Total			2 4 -4-
Total Current Liabilities			
Long Term Debt	128,182.00	128,285,00	123,150.00
Capital Lease Obligations		4	
Total Long Term Debt	128,182.00	128,285.00	123,150.00
Total Debt	171,828.00	171,547.00	157,975.00
Deferred Income Tax			-
Minority Interest			The state of the s
Other Liabilities, Total	370,440.00	493,508.00	430,252.00
Total Liabilities	613,156.00	761,203.00	668,573.00
Redeemable Preferred Stock, Total			2000
Preferred Stock - Non Redeemable, Net	6,993.00	2,993.00	1,095.00
Common Stock, Total	61.00	61,00	61.00

As of 2008-05-31

19,544.00

11,268.00

16,901.00

-4,922.00

-4,025.00

26,276.00

639,432.00

As of 2008-02-29

24,133.00

11,129.00

19,880.00

-5,149.00

-4.082.00

24,832.00

786,035.00

As of 2007-11-30

20,029.00

9,733.00

19,698.00

-5,524.00

-2,573.00

22,490.00 691,063.00

Lehman Brothers Holdings Inc. (OTC:LEHMQ)

Income Statement | Balance Sheet | Cash Flow

Other Equity, Total

Total Liabilities & Shareholders' Equity

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Additional Paid-In Capital	11,268.00	11,129.00	9,733.00
Retained Earnings (Accumulated Deficit)	16,901.00	19,880.00	19,698.00
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639,432.00

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786,035.00

691,063.00



information economy

Solow Paradox

"We see computers everywhere but in the productivity statistics" --Robert Solow, c. 1988



Solow solved?

determinism with lag time?

David, Paul. 1990. 'The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox,' *American Economic Review*, 80(2): 355-361.

"techno-economic regimes formed around general purpose engines"

"regime transition"

"diffusion lags" Hofl09 InfoWork- 4



alternatively

towards an information society?

a long-term, sedimentary process

process of abstraction

time, time keeping money, balancing

towards the information worker?



time is money

the Protestant ethic?

Remember that TIME is Money. He that can earn Ten Shillings a Day by his Labour, and goes abroad, or sits idle one half of that Day, tho' he spends but Sixpence during his Diversion or Idleness, ought not to reckon That the only Expence; he has really spent or rather thrown away Five Shillings besides.



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Benjamin Franklin, Advice to A Young Tradesman Written by An Old One. 1748



the cost of sin: time off for good behavior



Pope Clement V 1260-1314

1309: An indulgence to pardon a year's worth of sin costs one penny. Clement V.





accounting for time

"Fear it Macbeth, 'tis a bell That summons thee to Heaven or to Hell."

"The bell would also remind men of their passing, and of resurrection and judgement."

--Thompson

the final reckoning, the day of account how we spend, save, waste time

"in the name of God and profit"

the long then

c 3100 bce

"Most of what has been written about Stonehenge is nonsense"





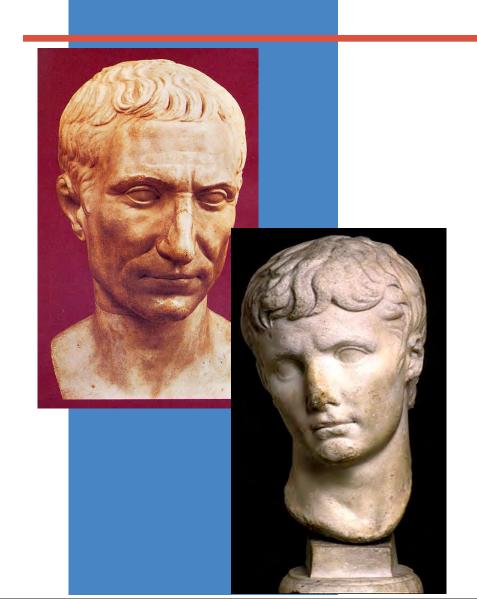
dividing the year

Julius Caesar (100 - 44 bce) Julian Calendar

troublesome equinox 46 bce: 445 days

45 bce: 365-1/4

Augustus (63 bce - 14 ce) **8 bce:** a further course correction



CAP. 5.

Ot Severus receptam Britanniæ partem vallo a cateris diffinacris.

DA pay ýmb huno reontig gagig bingha kham phipanel. mennirchyrre \$ Senenur Carene re pær * f€renica cynner or bane bynig de Lepti hatte re pay reoponteogela gnam Agurvo f he nice onpeng. 7 f harbe reoronzyne zean ber Carene

Nno ab incarnatione Domi-✓ Injectefimo o∂togefimo nono, Severus genere Apher tripolitanus ab oppido Lepti, decimus feptimus ab Augusto imperium adeptus, decem & feptem annis renuit. [Hic natură favus, multis femper bellis laceffipublicam, fed laboriofiffimè re-

marking the years

xir. Victor ergò civilium AD/BC: Dionysius Exiguus (c470-c544) marking from the foundation of Rome



Venerable Bede 673?-735

populariser: Bede, "On the rekoning of time" Historia Ecclesiastica Gentis Anglorum, 73 I

not quite certain

"The 1118st year AD, the 21st year of Pope Alexander III, the 27th regnal year of King Henry II of the English, the 11th regnal year of King Henry the son of the king, the 18th year that time has passed since the translation of Bishop Gilbert Foliot from Hereford to London, when this inquest was made by Ralf de Diceto, dean of London, in the first year of his deanship,"

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Par par jmb hund reonrig eserg brught, kham phrpanel. mennirchyrre \$ Senenur Carene re pær * f€renica cynner or bane bynig de Lepti hatte re pay reoponteogela gnam Agurvo f he nice onpeng. 7 f harbe reoronzyne zean ber Carene

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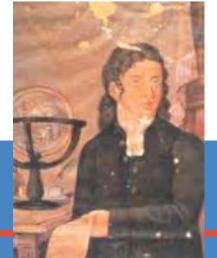


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Luigi Lilio d 1576



Gregory XII
1502-1585

beginning again: computus

New Year

January I or March 25 (ab incarnatione)?

the struggle for Easter

1582: Gregory XIII

recalibrating: leap years & centurial years

cutting time:

Thursday October 4 to Friday October 15



Luigi Lilio d 1576



Gregory XII 1502-1585

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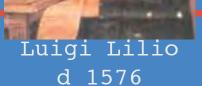
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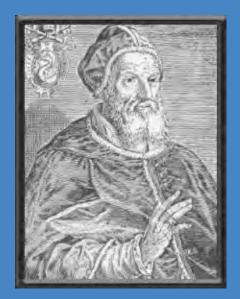
Lilian or Gregorian Calendar

Get an instance of the Calendar class.

Calendar cal = GregorianCalendar.getInstance();

beginning again: computus





Gregory XII 1502-1585

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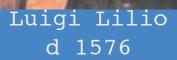
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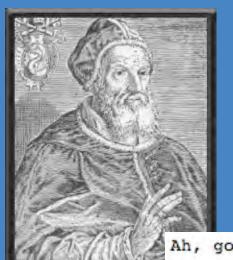
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1502-1585

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Ah, got some light:

if I change

Gregory XI

to

Calendar cal = GregorianCalendar.getInstance();

Lilian or Gregorian Calendar TimeZone.getTimeZone("CEST"), new Locale("DE"));

I get better results:

```
B. n° 529.

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En foi de quoi, les Plénipotentiaires respectifs ont signé le leurs armes.

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fighting back

Orthodox & Protestants unchanged Feb 1/12; Feb 1 [OS] 1694/5

1752: Anglo-American course correction "give us back our eleven days"

revolution

year I again [1792] Vendémiaire, Brumiare, Frimiare, Nivôse, Pluviôse, Ventose, Germinal, Floréal, Prairial, Messidor, Thermidor, Fructidor



dividing the day



the holy hours

"seven times a day I praise Thee" Psalms 119: 64

Benedictine rule

matins, prime, tierce, sext none, vespers, compline



dividing the day

accordian hours

"are there not twelve hours in the day?"

John 6.6.

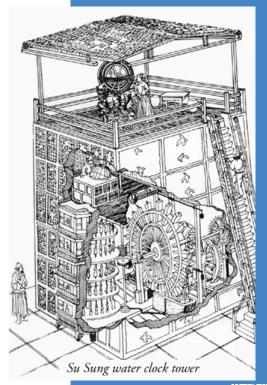
equal hours

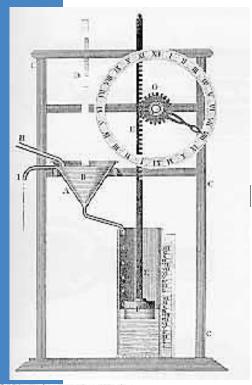
1330 (Germany)

1370 (England)



and the technology: automata



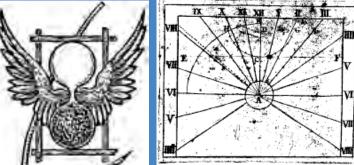


3500 bce: sundials

400 bce: Egyptian water clocks

700 ce: hourglasses

1086: Su Sung's water tower



I 668: Joseph Moxon, Mechanick Dyalling



modum dentata, quæ una motione coasta, Clocks, and some other Automata, might versando faciunt effectus, varietaresque me leve their beginning there; or that Clock-

tionum : in quibus moventur Sigilla, ver work (which had long been buried in tuntur Metæ, calculi aut Tona projiciuntur, polivion) might be revived there. But

Derham, The Artificial Clock Maker, 1696

automata



Richard of Wallingford 1292-1336

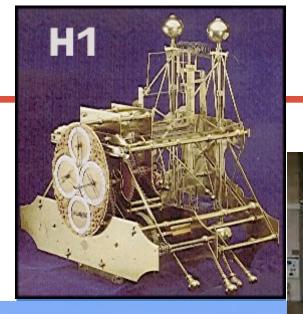
1300: mechanical clocks Richard of Wallingford celestial instruments & St Albans' clock

1656: Huygens pendulum clock "Mr Hugens does expressly say, He was the inventor, and that if Galilaeo ever thought of any such thing, he never brought it to perfection," Derham

1660: Hooke & the spring watch

"The first Inventer herof was that ingenious and learned member of our Royal-Society, Dr. Hook, who contrived various ways of regulation," Derham





global technology

1761: Harrison's nautical clock

c1850: telegraph time

1852: Greenwich mean time

1883: US standard time

1884: Meridian Conference, DC

1911: France: Cassini Meridian

1967: US govt preempts "civil time"



"standard time was not adopted primarily to bring order to the chaos of railroad timetables. Indeed, the railroads did not need standard time for their operations" --Bartky, "The Adoption of Standard Time"

train time

ABOUT NEW YORK

A Watch Shop Offers a Look Back in Time

By JIM DWYER
That sheet Repolarly 24, 2005

The clocks are tolling. They chime and ring. It is near the end of a work day at Falt Watch Service and Repair, a little nook of a place on the third floor of <u>Grand Central Terminal</u>, a space it has occupied for most of the last century.

In the arc of that history, we find Tom Carroll, the owner, packing boxes: The business is closing at the end of the week. From a drawer, Mr. Carroll pulls out a handful of blue cards. On them, you glimpse the story of time, handwritten in ink.

"All the railroad watches had to be inspected regularly and certified," Mr. Carroll, 44, says.

Time — and the keeping of time — were the merciless godheads of the railroads, both as a business concern and as a matter of life and death. The major railroad companies were the driving force for standardized time in the 19th century. Once a month, railroad employees had to present their watches for testing. In New York, they could come to a business owned by Raymond C. Falt, certified inspector.

Here, for instance, is a card dated June 6, 1965, that describes a watch owned by C. E. Sunnekalb, a brakeman with the Harlem Division of the New York Central Railroad. The requirements: "A reliable railroad grade watch is one of 16 size, 1 jewels or better, lever set and adjusted to five positions, which will run within a gain or loss of 30 seconds per week in use





times

by 1800,

"recorded time
(one suspects)
belonged in the
mid-[18th]
century still
to the gentry,
the masters,
the farmers,
and the
tradesmen"
Thompson

absolute time

"Absolute, true, and mathematical time, of itself, and from its own nature, flows equably without relation to anything external."

Isaac Newton, Principia Mathematica, 1687

mundane time

"looking upon her Watch, I accidentally discovered the Figure of a Coronet on the back Part of it."

--Addison, Spectator 8, March 1711

う

time control

bell tolling

1335, Amiens start of work, lunch, end of the day controlled by bell rung by the city
--decree of Phillip VI

1664 "that as many as might live within the sound might be thereby induced to a timely going to rest in the evening, and early arising in the morning to the labours and duties of their several callings"

Hofl09_InfoWork- 21



Laurence Sterne, 1713-1768

time stamp

Pray dear, quoth my mother, have you not forgot to wind up the clock? --- Good G--! cried my father ... Did ever woman, since the creation of the world, interrupt a man with such a silly question? --Laurence Sterne, Tristram Shandy, 1759

"No modest lady dares to mention a word about winding up a clock ... Nay, the common expression of street-walkers is, "Sir, will you have your clock wound up"

--The Clockmaker's Outcry against the Author ...



fields to factories

"England's was the first industrial revolution, and there were not Cadillacs, steel mills, or television sets to serve as demonstrations as to the object of the operation"

Thompson

task orienting to time orienting

"the industrial revolution demanded a greater synchronization of labour"

"a vigorous and licensed popular culture had evolved, which the propagandists of discipline regarded with dismay"

Wedgwood ... "the first recorded system of clocking-in"

schools "a spectacle or order and regularity"... "they are become more tractable

"fight, not against time, but about it"

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controul



William Wordsworth
1770-1850

The Guide, the Wardens of our faculties

And Stewards of our labour, watchful men

And skilful in the usury of time,

Sages, who in their prescience would controul

All accidents, and to the very road

Which they have fashion'd would confine us down

Like engines.





Geoffrey Chaucer 1340-1400

"January 1st
[1668]. Up, and
all morning in my
chamber making up
some accounts
against this
beginning of the
new year."

Pepys

accounting for time

work and leisure

How longe tyme wol ye rekene and caste

Youre somme, and your bookes, and your thynges?

The devel have part on all swich rekenynge

Geoffrey Chaucer, The Shipman's Tale

"What can there great and noble be expected from him whose attention is ever fixed upon balancing his books, and watching over his expenses?"

Joseph Addison, Spectator

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"If modern economic rationalism is like a clock someone must be there to wind it up."

determinism again?

[is it true that]
"Scientific
bookkeeping was
causal, or at
least a
predisposing
factor in the
emergence and
development of
capitalism?"
Basil Yamey, 1949

Max Weber (1864-1920)

"a rationalistic capitalistic establishment ... one with capital accounting, that is, an establishment which determines its income yielding power by calculation according to the methods of modern bookkeeping and the striking of a balance"

Werner Sombart (1863-1941)

"abstraction of profit [leads to] economic calculation ... systemic organization ... depersonalization."



from accounts to accounting

THREE STAGES:

Record keeping

"if a man has
given on deposit
without elders or
contract ...[if]
they contest it,
there shall be no
claim" --Hammurabi

Bookkeeping

Accounting

Edwards

Sumerian tablets

Roman

adversaria, codex accepti et dispensi, liber rationum

monastic cartularies

"providing a legal history of the transactions"

12th century pipe rolls

merchant accounts, double entry

money lending; discount; interest

the bottom line



the Italian method



1211: proto double entry, Florence

c 1340: double entry in Genoa

1366: The Merchant of Prato (Francesco di Marco Datini)
"Arabic" numerals

1494: Luca Pacioli Summa de Arithmetica



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time's echo?

accounting as a means of control?

"In Great Britain during the fourteenth, fifteenth, and sixteenth centuries the estates of the nobility were producing such large incomes that experts were required to prevent theft and the withholding of funds from the landlord."

--Edwards

or accounting for profit?

"to give the trader without delay information as to his assets and liabilities"

--Peragallo, Origin of Double Entry

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entry

"On this day, we have (or I have) bought from Filippo de Ruffoni of Brescia, twenty pieces of white Bresciani cloth. They are stored in Stefano Tagliapietra's vault and are of so many arm lengths apiece, as agreed upon. They cost twelve ducats each and are marked with a certain number. Mention if the cloth is made of triple warpcord, four to five arm lengths square, wide or narrow, fine or medium, whether Bergamene, Vicenzan, Veronese, Paudan, Florentine, or Manuan. State whether the transaction was made entirely for cash, or part only for cash and part on time. State when the balance is due "

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BEAUTY !

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BEAUTY !

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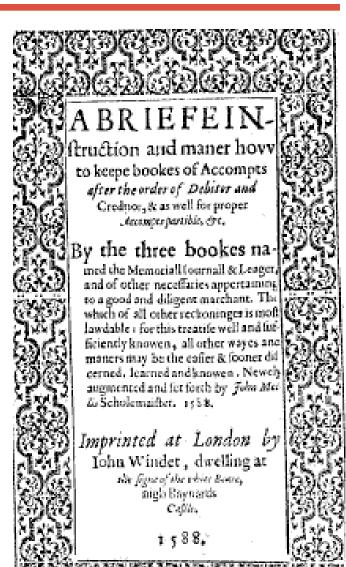
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		[Sun State]						
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		Utilities:Water						
5/27/06	EFT	Phone Company				47.62		1,339.27
		Utilities:Telephone						10000
							Hofl09 I	ntoVVork-3

abstraction





the books

"after the form of Venice"

"the three principall bookes"

memorial journal ledger

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memorial

"in which a merchant writes all his daily business"

19

October 9th, bought two pipes of wine @ £30 each from Joseph Smith, paid £20 cash with balance to be paid January 1.

27

October 30, sent two pipes of wine to England for sale there; cost £10.

30

November I, sold two pipes of wine to B&H @ Hofl09 InfoWork- £50 ea.



journal

"This Journal ought to bee signed and marked with the same marks or letter as the memorial. And also the leaves numbered."

Cheft oz money is Debitoz (02 oweth) to focke belonging to mee M. N. and is for pounds, thillings, and pence, fo many, et. 02 buckets lomany, ec expressing the name, number and balue as appeareth in fuch a leafe, or folio of your Innen. tory, ac amounting to the fumme li. s. d of 1.00. 00 g. 00 d. Kings and Jewels, fet and bnlet, waying oz, graines, c. oweth to flock, and specifying every thing by it felfe tc.as appeareth in fuch a leafe or folio of the Inuentory amounting to the fumme of li. s. v. li. s. v

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Journal

October 9

- 19. Wine owes cash £20 for deposit on two pipes of wine bought of **Joseph Smith**
 - 19. Wine owes Joseph Smith £40 for balance of two pipes of wine bought October 9.

October 30th, wine owes transport £10 for carriage of two pipes of wine to England.

November 20, B&H owes wine £100 for two pipes of wine sold them.



ledger

"every one parcell that is sette
in your Journall ought to bee made
 two parcels in your ledger."

wine account

39	to cash	20	19	from B&H	100
11	to Joseph Smith	40			
27	to transport	10			
		70			100
	To profit & loss	30			2.6



ledger

"every one parcell that is sette
in your Journall ought to bee made
 two parcels in your ledger."

wine account

39	to cash	20	19	from B&H	100
11	to Joseph Smith	40			
27	to transport	10			
		70			100
	To profit & loss	30			2.6



ledger

"every one parcell that is sette in your Journall ought to bee made two parcels in your ledger."

wine account

39	to cash	20	19	from B&H	100
11	II to Joseph Smith				
27	to transport	10			
		70			100
	To profit & loss	30			2.6



double entry

Joseph Smith

			19	for 2 pipes of wine	60
39	from cash	40			
	from wine	60			60



accounting for accounting

interlinked accounts

a debit in one set is a credit in another linking money and merchandize

proto hypertext?

balancing the books



spreading the numbers

"In the past seven centuries bookkeeping has done more to shape the perceptions of more bright minds than any single innovation in philosophy or science. While a few people pondered the words of René Descartes and Immanuel Kant, millions of others of yeasty and industrious inclination wrote entries in neat books and then rationalized teh world to fit their books."

Alfred Crosby, The Measure of Reality



information workers



telling times and counting coins rise of numeracy

bottom up?

Graunt: shopkeeper's arithmetic

Pepys

"Up by five o'clock... Comes Mr. Cooper, mate of the Royal Charles, of whom I intend to learn mathematiques... Up by four o'clock and at my multiplication-table hard"

July 4 & 9, 1662

Hofl09_InfoWork- 40



balancing nations

Treaty of Utrecht, 1713
War of the Spanish Succession

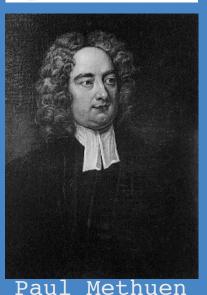
the commercial treaty free trade with France

the balance of trade mercantilism and national interest



science, statistics & the public sphere





1672-1757

rousing the wool interest

Mercator (Daniel Defoe)

VS

British Merchant (Paul Methuen)



search for statistics

THE JULY & G. Q.

BRITISH

MERCHANT;

OR,

Commerce Preserv'd.

IN THREE VOLUMES.

By Mr. CHARLES KING,

Chamber-keeper to the Treasury, and late of London Merchant.

LONDON:

To fum up all, if we pay to France yearly,

For their Wines For their Brandies For their Linen For their Paper For their Silks	450000 70000 600000 30000
--	------------------------------------

1650000

200000

1450000

And they take from us in
Lead, Tin, Leather, Allum
Conneras Coale Horn Diagon
Gr. and Plantation-Goods, rol
the Value of

Great Britain loses by the Balance of that Trade yearly

Charles Davenant
An Essay upon the Probable
Methods of Making a
People Gainers in the
Ballance of Trade 1699

VS

Paul Methuen



balancing acts



David Hume 1711-1776

"apprehension of the wrong balance of trade, appears of such a nature, that it discovers itself wherever one is out of humour with the ministry, or is in low spirits."

David Hume,

"Of the Balance of Trade," 1752

)

out of spirits?

Total Trade (Goods)

tries	1,300.5		(Year-to-Date)	Trade
	1,300.3	2,100.4	3,400.9	100.0%
Countries	891.5	1,524.4	2,415.8	71.0%
	261.4	335.6	596.9	17.6%
	71.5	337.8	409.2	12.0%
	151.5	215.9	367.5	10.8%
	66.6	139.2	205.8	6.1%
of Germany	54.7	97.6	152.3	4.5%
	53.8	58.6	112.4	3.3%
	34.8	48.1	82.9	2.4%
	29.2	44.0	73.2	2.2%
	12.5	54.8	67.3	2.0%
	12.6	51.4	64.0	1.9%
	32.9	30.5	63.4	1.9%
	25.3	36.3	61.6	1.8%
	40.2	21.1	61.4	1.8%
	15.5	36.1	51.6	1.5%
	29.0	17.4	46.4	1.4%
		25.3 40.2 15.5	25.3 36.3 40.2 21.1 15.5 36.1	25.3 36.3 61.6 40.2 21.1 61.4 15.5 36.1 51.6



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FORTUNE MAGAZINE Power Play by Nina Easton

Column Avenive

Obama: NAFTA not so bad after all

The Democratic nominee, in an interview with Fortune, says he wants free trade "to work for all people." HOT DOCUMENT : PRIMARY SOURCES EXPOSED AND EXPLAINED.

By Nina Easton, Washington editor LAST UPDATED: JUNE 18, 2008; 3:00 PM EDT

Canada's Obama NAFTA Memo

HOT DOCUMENT: ENTRIES

By Bonnie Goldstein

Posted Tuesday, March 4, 2008, at 5:36 PM ET

Renegotiating NAFTA on hold, Obama s

Michael D. Shear, Washington Post Friday, February 20, 2009

(02-20) 04:00 PST Ottawa - --

President Obama on Thursday warned against a "sti global economic recession and said his election-year Agreement on behalf of unions and environmentalis

On Feb. 9 Austan Goolsbee, the senior economic adviser to Barack Obama's presidential campaign, had a meet Georges Rioux, consul general for the Canadian government. The two men met in Chicago, where Rioux mainta office for the states of Illinois, Missouri, and Wisconsin and where Goolsbee teaches economics at the University (Slate readers may also remember Goolsbee as a prietime "Dismal Science" columnist.) Afterward, Joseph DeM consulate staff member, wrote an enthusiastic summary (see below and the following two pages) for Canadian Michael Wilson. In the memo, DeMora praised Goolsbee's "intellectual prowess ... approachability, curiosity and enthusiasm" and alerted Wilson that the Obama brain-truster "appeared genuinely ... impressed by the magni economic relationship between the United States and Canada (see below). 46



in sum

time is money

technological developments

social agreements

standards and interdependencies