

# VISUAL INFORMATION: THE USES OF THE IMAGE

July 22, 2009

History of Information – Lecture 8 – Dan Perkel

# Today's Agenda



- Images pre- and post- ... ?
- The many changes of the 19<sup>th</sup> Century
- A brief “comparison” of the rise of two forms of mass media: photography and comics



# Images, pre- and post- [CHOOSE!]

Choices:

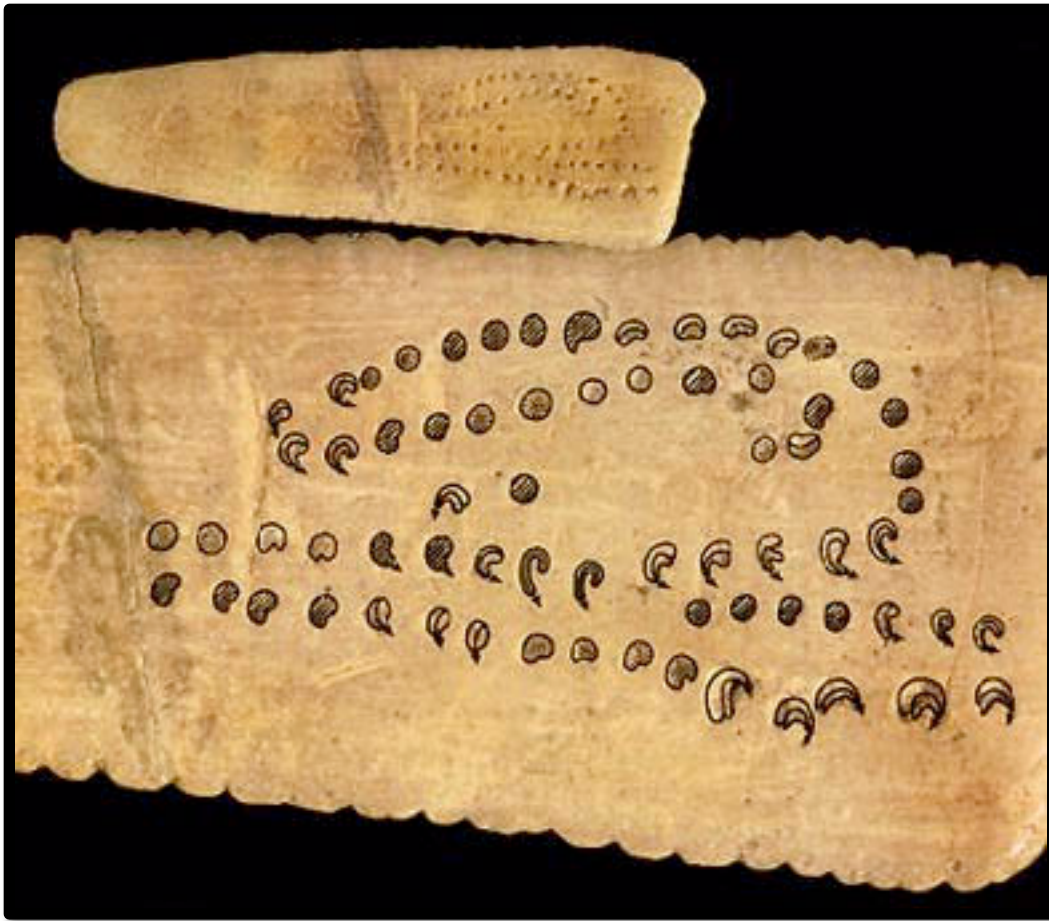
- Print?
- Guttenberg?
- Other?

# Early representational artifacts

4



-From the “Great Hall of Bulls”, Cave Paintings found in Lascaux, France. 15-13,000 B.C.E. (though perhaps even older). Retrieved from: <http://www.culture.gouv.fr/culture/arcnat/lascaux/en/>



Cro-magnon bone tool, perhaps the “earliest known form of notation” that may “mark phases of the moon.” (Marshack, Alexander)

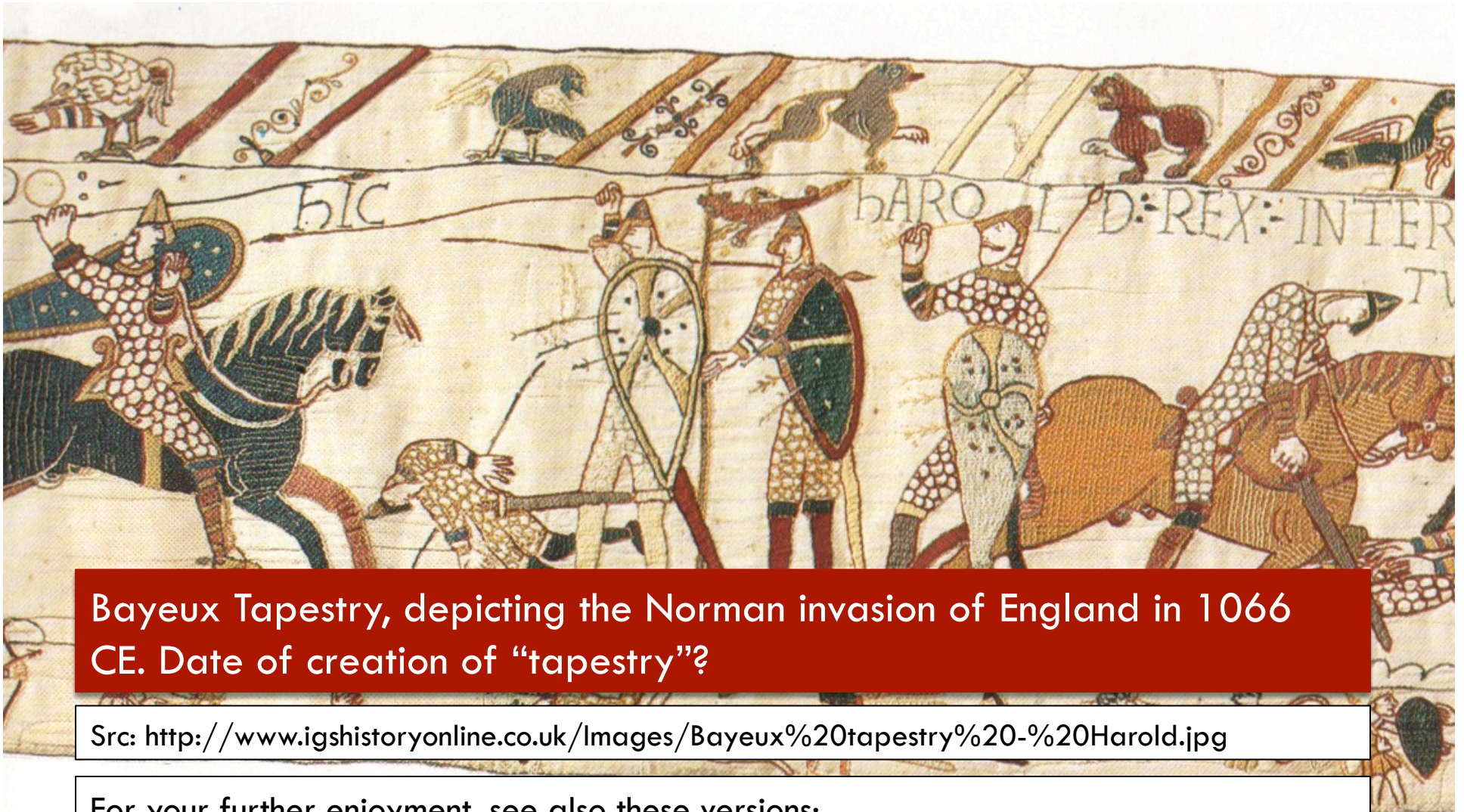
Image retrieved from <http://www.donsmaps.com/cavepaintings2.html>. Src image unknown.

“Images and symbols... were markers of periodic and continuous cultural processes, of rites, and of repetitive myths and stories...”

-Marshack, Alexander. 1999. “The Art and Symbols of Ice Age Man”



## An early (visual) war narrative



Bayeux Tapestry, depicting the Norman invasion of England in 1066 CE. Date of creation of “tapestry”?

Src: <http://www.igshistoryonline.co.uk/Images/Bayeux%20tapestry%20-%20Harold.jpg>

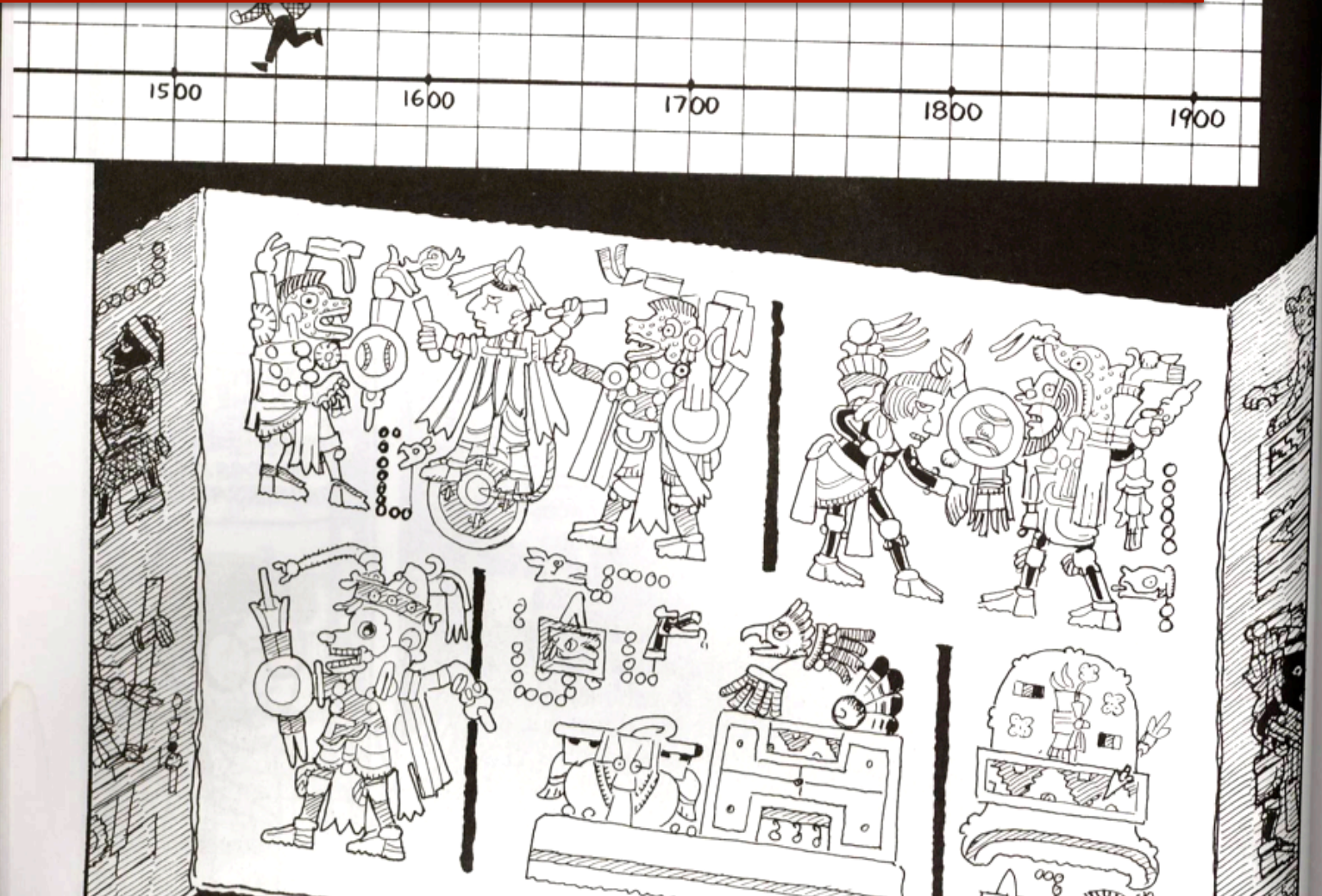
For your further enjoyment, see also these versions:

<http://www.youtube.com/watch?v=bDaB-NNyM8o> (Dramatic score! Animation!)

<http://www.youtube.com/watch?v=XDkhB1a1sW8> (Set to the Buggles?!)



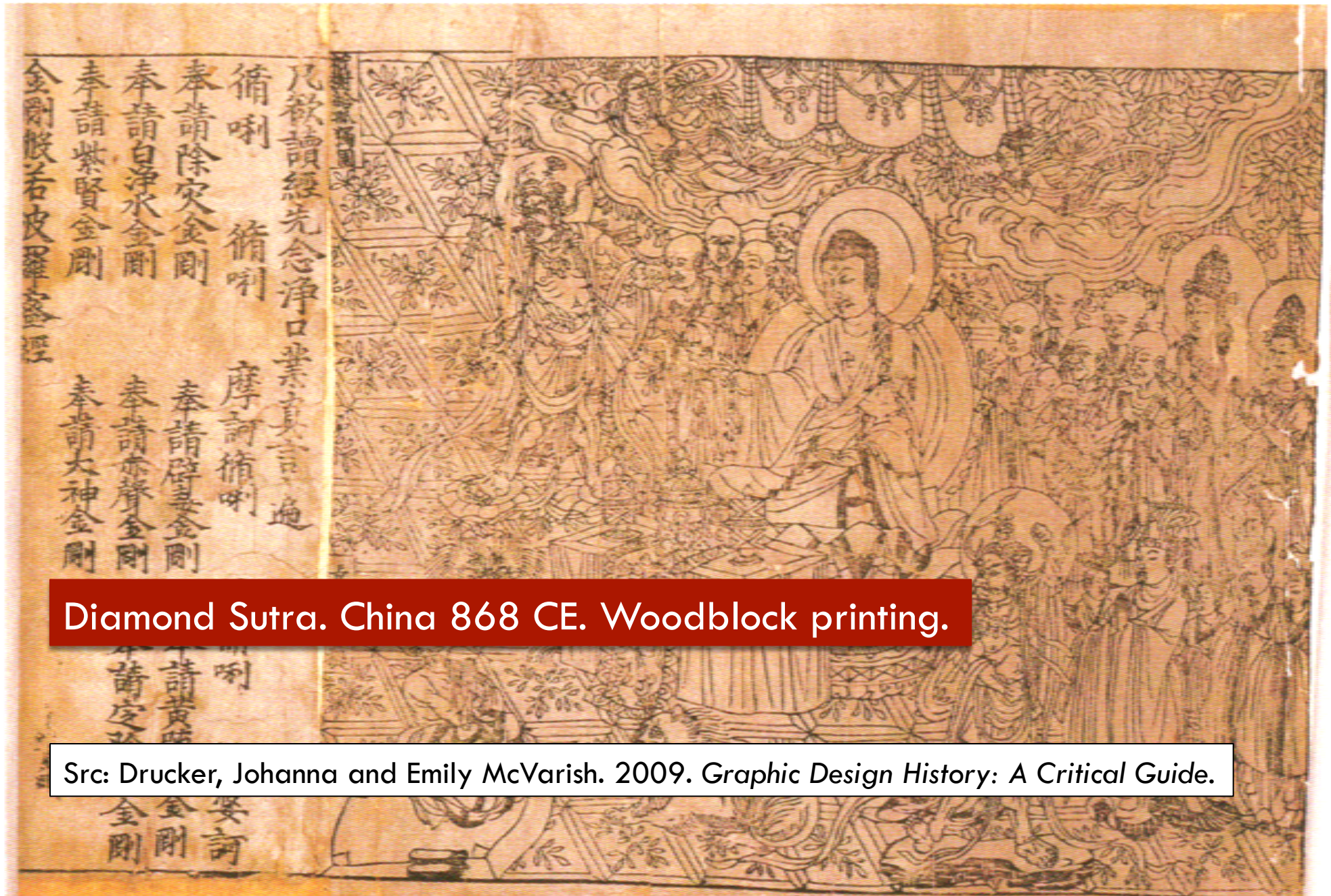
“Tiger’s Claw” manuscript – Another depiction of war and politics, this time from Central America before European colonizers. Picked off by Cortez in 1519...



McCloud, Scott. 1994. Understanding Comics: The Invisible Art. New York: Harper Paperbacks.



# The oldest printed “book” (scroll)?



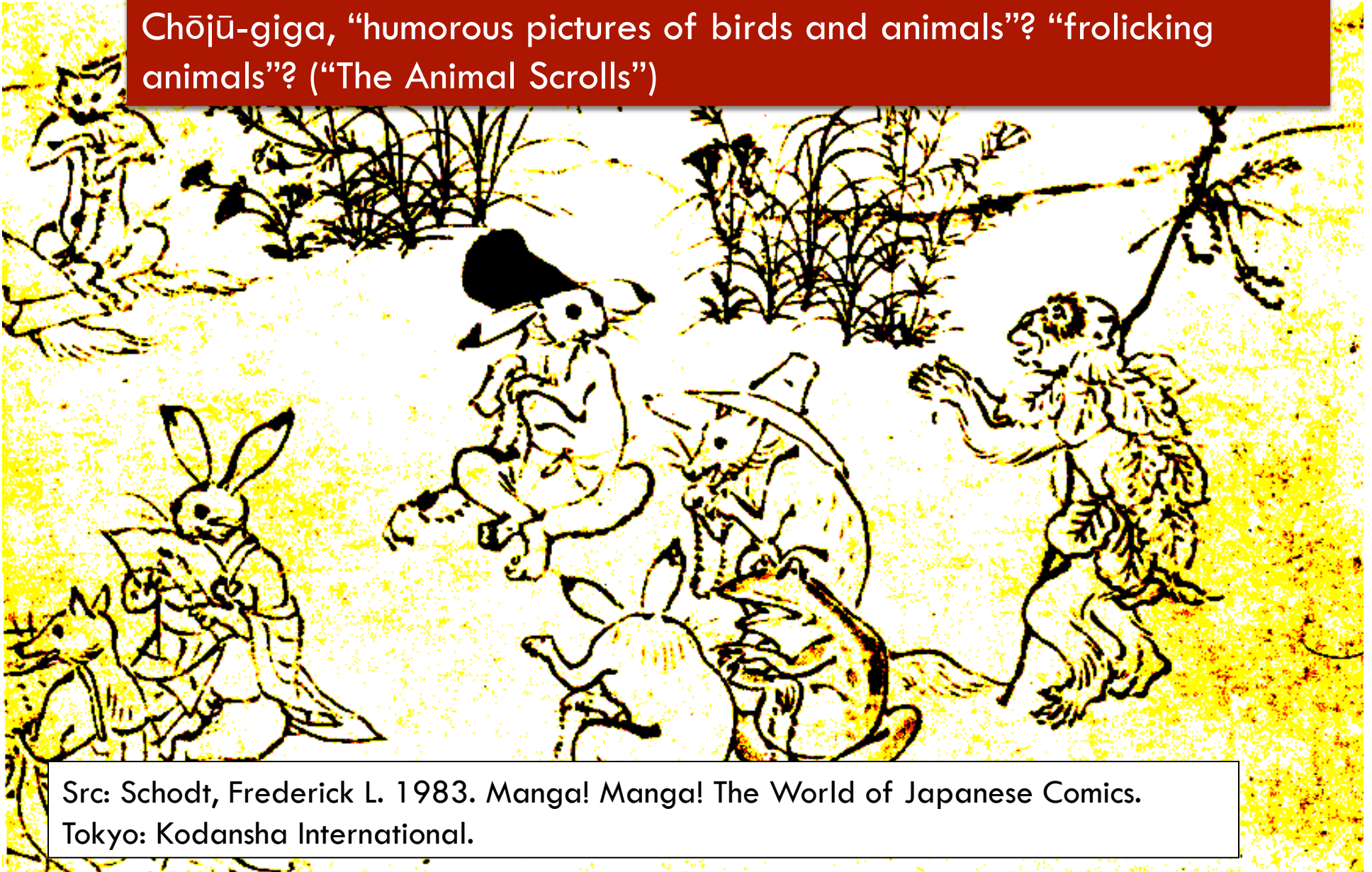
Diamond Sutra. China 868 CE. Woodblock printing.

Src: Drucker, Johanna and Emily McVarish. 2009. *Graphic Design History: A Critical Guide*.



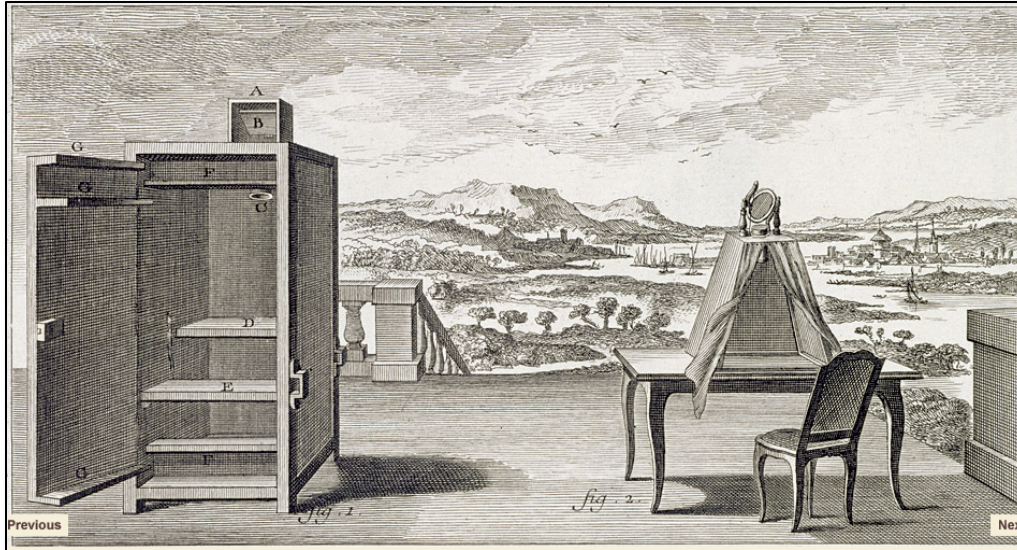
# 11<sup>th</sup> and 12<sup>th</sup> C. Japanese Scrolls

Chōjū-giga, “humorous pictures of birds and animals”? “frolicking animals”? (“The Animal Scrolls”)



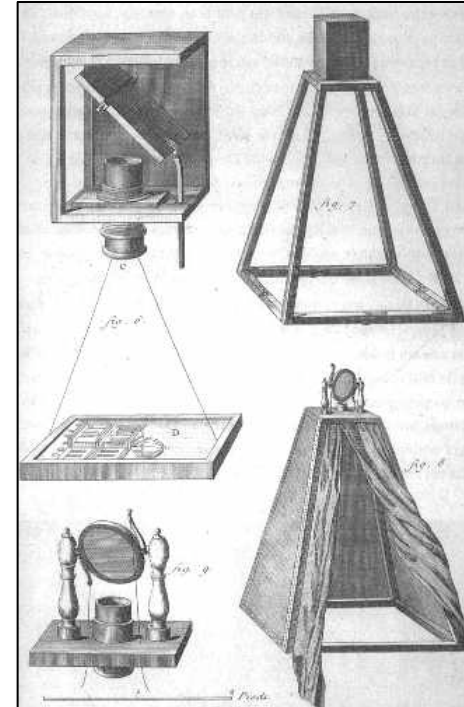
Src: Schodt, Frederick L. 1983. Manga! Manga! The World of Japanese Comics. Tokyo: Kodansha International.

# The camera obscura



(A later Italian version?) Src: [http://www.grouporigin.com/clients/qatarfoundation/chapter2\\_4.htm](http://www.grouporigin.com/clients/qatarfoundation/chapter2_4.htm)

Src: <http://www.solarnavigator.net/cameras.htm>



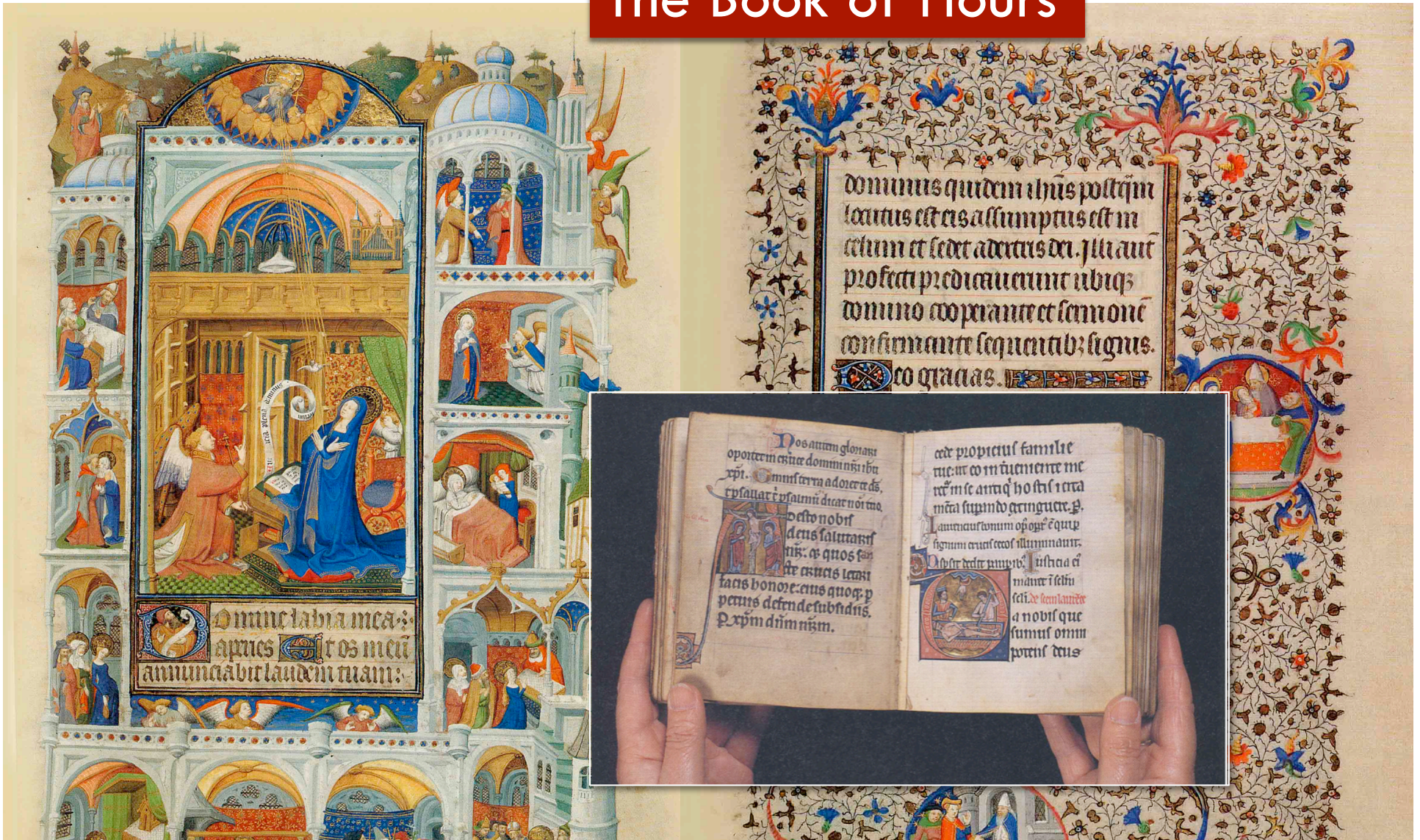
Ali al-Hasan ibn Al-Hasam ibn Al-Hayatham, or "Alhazan" (965 – 1039 CE)

Src: <http://www.ph.utexas.edu/~103n/>



Religion...

## The Book of Hours



Src: Sterponi, Laura. 2008. Reading and meditation in the Middle Ages: Lectio Devina and the Book of Hours. *Text & Talk* 28(5), 667-689.

Commenta la mege marie pueris nout leigneur ihu aut son enter ou temple et s. hinc leucent  
Comment aima marie de la mege le puer ihu au temple pour seoir s. hinc leucent le mege p.



# Natural history and education



Src: Drucker and McVarish. 2009.





“After print”? Or “After Gutenberg”?

McCloud, Scott. 1994.

Earliest printed artifact  
in Europe?



St. Christopher woodblock, 1423  
(color added later)

Note the Asian influence and the  
Christian theme

Src: Drucker and McVarish. 2009.



# “Graphic books of religious instruction”

## Ars Moriendi (“The Art of Dying”) 1450.

“Two languages were in use—one that served an expanding literate population and one that engaged nonliterate readers through visual imagery; each created a community of users.”

Src: Drucker and McVarish. 2009.





## “Sheet Dice”

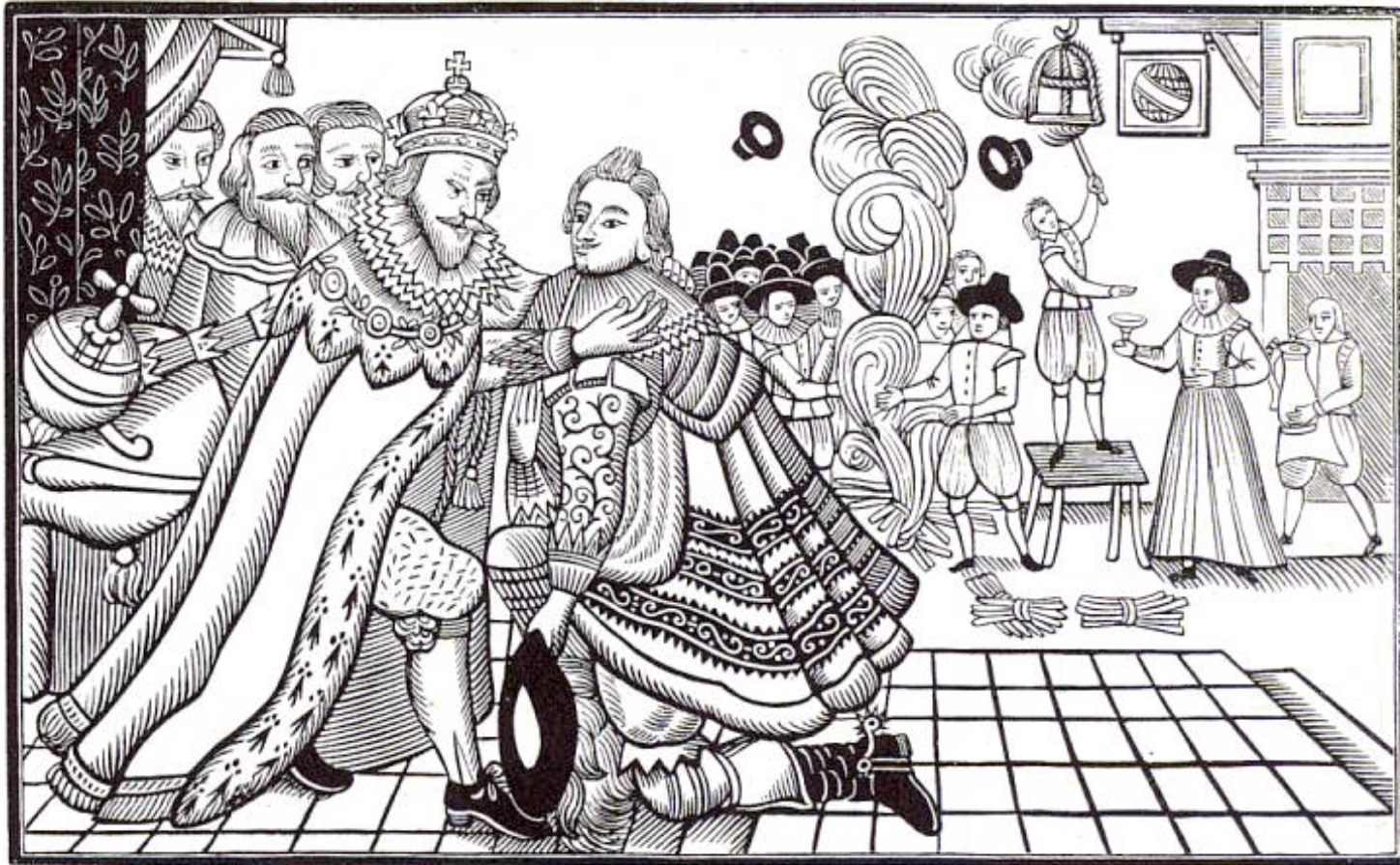
- 1470. Another import from China
- Outlawed amongst workers

Src: Drucker and McVarish. 2009.





Some forms of gambling weren't so problematic



Broadsheet: "The Great Standing Lottery for Virginia." 1615.

Src: Sabin, Roger. 1996. Pioneers. Comic, Comix & Graphic Novels. London, UK:  
Phaidon Press Limited



And the enjoyment of others' vices...



Broadsheet: "Execution Broadsheet." 1623.

Src: Sabin, Roger. 1996. Pioneers. Comic, Comix & Graphic Novels. London, UK:  
Phaidon Press Limited



## Spreading the news of plague...

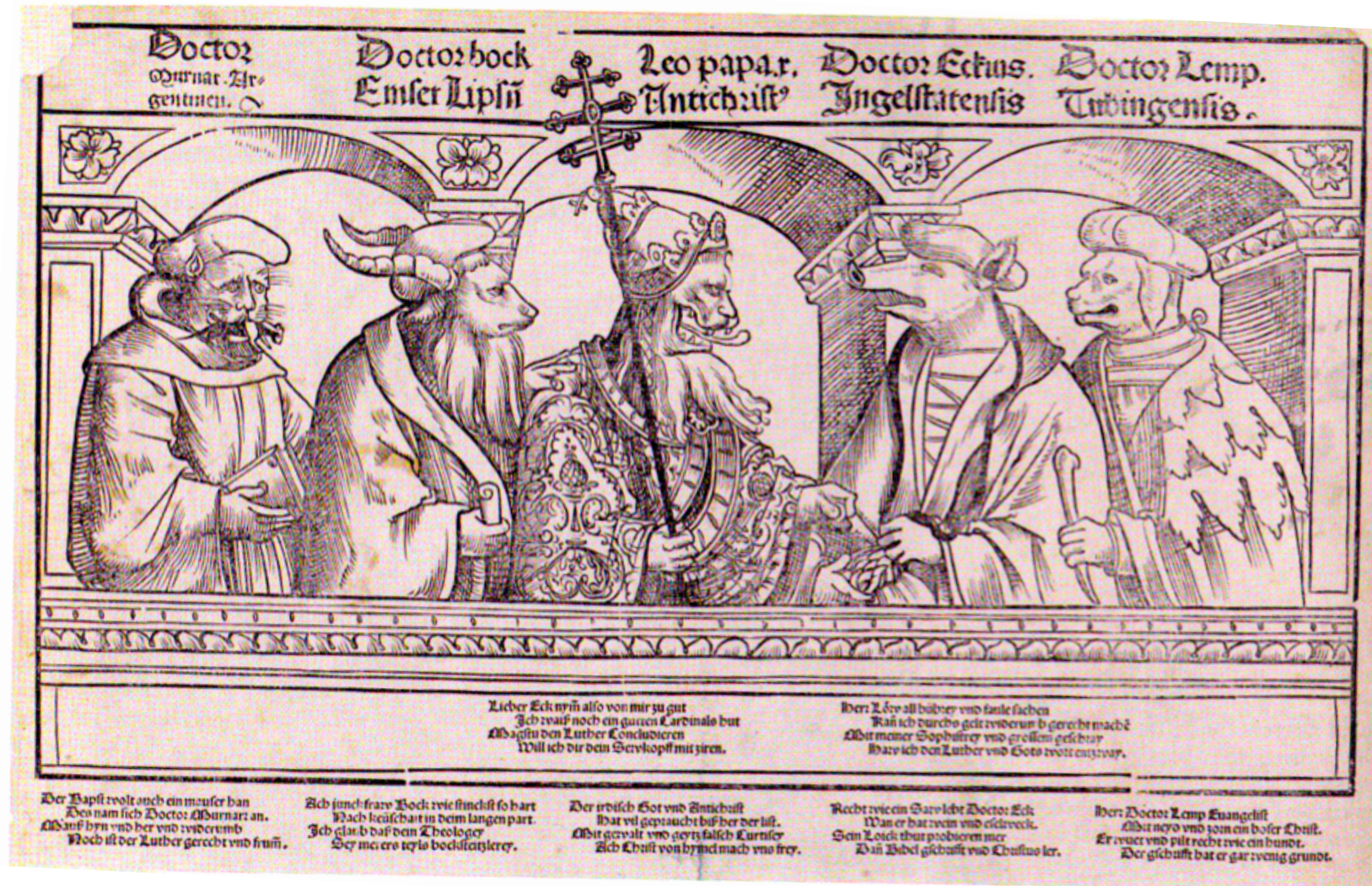


**Broadsheet: Londoners fleeing the plague. 1630.**

Src: Sabin, Roger. 1996. *Pioneers. Comic, Comix & Graphic Novels*. London, UK: Phaidon Press Limited



## Unsettling satire...

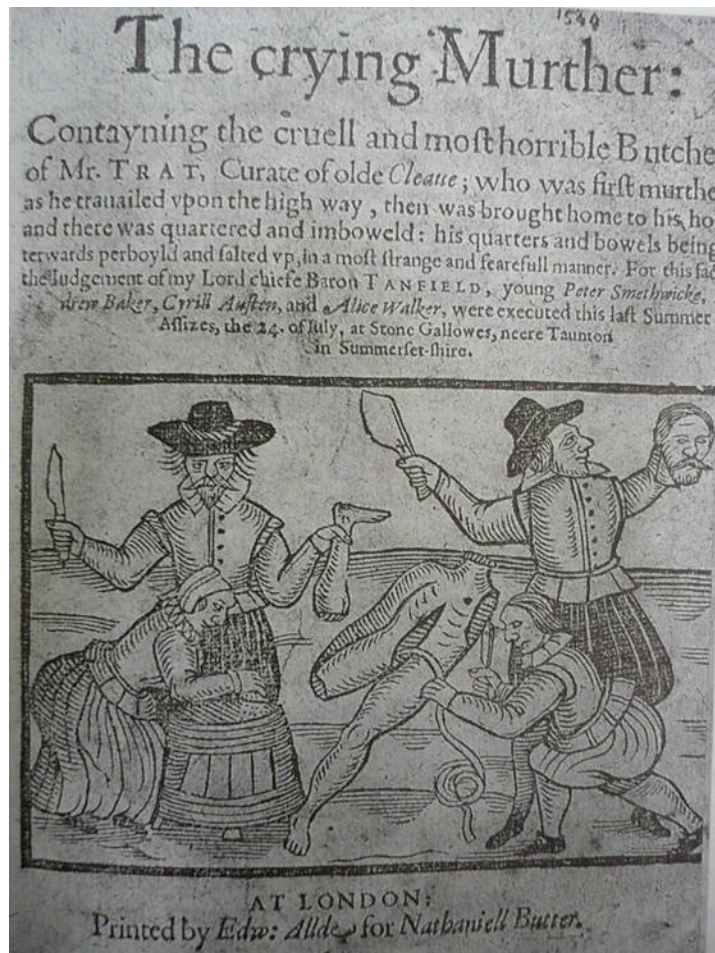


“Broadside satirizing the Pope and enemies of Martin Luther” (1521)  
 Src: Drucker and McVarish. 2009.



# Newsbooks (recap from last time)

- “The crying Murther: Contayning the cruell and most horrible Butcher of Mr. Trat” (1624)



# Newsbooks (recap from last time)



- Often sensationalistic
- Sometimes highly regulated
- About “foreign” news or *Fait divers*

“...acceding to pressure from authorities and to their own rooting and commercial interest, they tend to provide their audiences with a version of what their audiences wanted to hear”

■ *A History of News*. Mitchell Stephens. 1988



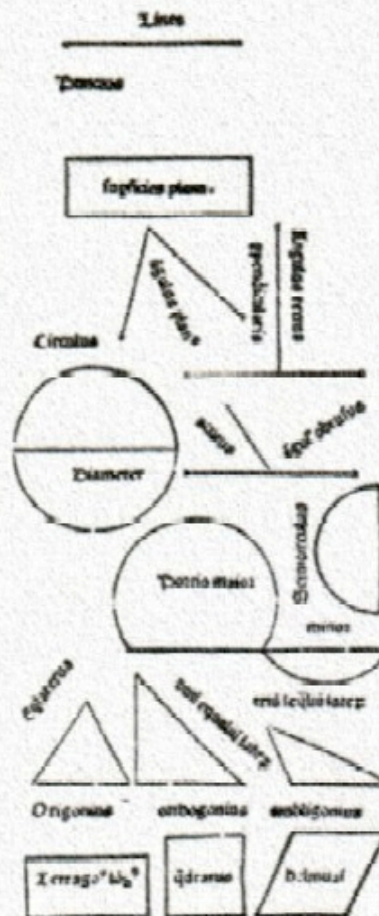
# Mathematics and education

Præclarissimus liber elementorum Euclidis per se  
cassimi: in artem Geometrie incipit quæsoletis lineis



**P**unctus est cuius pars non est. **L**inea est  
longitudo sine latitudine cuius quidam ex-  
tremitates sunt duo puncta. **L**inea recta  
est ab uno puncto ad aliud brevissima exten-  
sio in extremitates suas utriusque eorum reci-  
piens. **S**uperficies est quæ longitudinem et lati-  
tudinem continet: cuius termini quidam sunt lineæ.  
**S**uperficies plana est ab una linea ad al-  
iam extensionem in extremitates suas recipiens.  
**A**ngulus planus est duarum linearum al-  
ternis partibus: quarum expansio est super super-  
ficiem applicationemque non directam. **Q**uando autem angulum præterit due  
lineæ recte rectilineus angulus nominatur. **A**ngulus recta linea super rectam  
iterum duorumque anguli utrobique fuerit æquales: eorum uterque rectus erit.  
**L**ineæque lineæ superpositas et cui superposita perpendicularis vocatur. **A**n-  
gulus vero qui recto maior est obtusus dicitur. **A**ngulus vero minor re-  
cto acutus appellatur. **T**erminus est quo quicunqueq; terminus est. **F**igura  
est quæ terminis terminatur. **C**irculus est figura plana una quæcumque li-  
nea præterea: quæ circumferentia nominatur: in cuius medio punctum est: a quo omnes  
lineæ recte ad circumferentiam exiunt sibi invicem sunt æquales. **E**t hic  
quidam punctum centrum circuli dicitur. **D**iameter circuli est linea recta que  
super eam centrum præteriens extremitatesque suas circumferentiæ applicans  
circulum in duo media dividit. **S**emicirculus est figura plana dia-  
metro circuli et medietate circumferentiæ præterita. **P**ortio circuli  
est figura plana recta linea et parte circumferentiæ præterita: semicircu-  
lo quidam aut maior aut minor. **R**ectilineæ figure sunt quæ rectis li-  
neis continentur quarum quedam trilateræ quæ tribus rectis lineis: quedam  
quadrilateræ quæ quatuor rectis lineis. quedam multilateræ que pluribus  
que quatuor rectis lineis continentur. **F**igurarum trilaterarum: alia  
est triangulus binis tria latera equalia. Alia triangulus duo binæ  
equalia latera. Alia triangulus tria unequalium laterum. **D**icitur iterum  
alia est orthogonum: unum in rectum angulum habens. Alia est an-  
gulum aliquem obtusum angulum habens. Alia est exagonum  
in qua tres anguli sunt acuti. **F**igurarum autem quadrilaterarum  
Alia est quadratum quod est equilaterum atque rectangulum. Alia est  
tetragonum longum: quæ est figura rectangula: sed equilatera non est.  
Alia est belnuayim: que est equilatera: sed rectangula non est.

De principiis per se notis: et primo de defini-  
tionibus eandem.



Src: <http://www.artlex.com/ArtLex/ij/incunabulum.html>

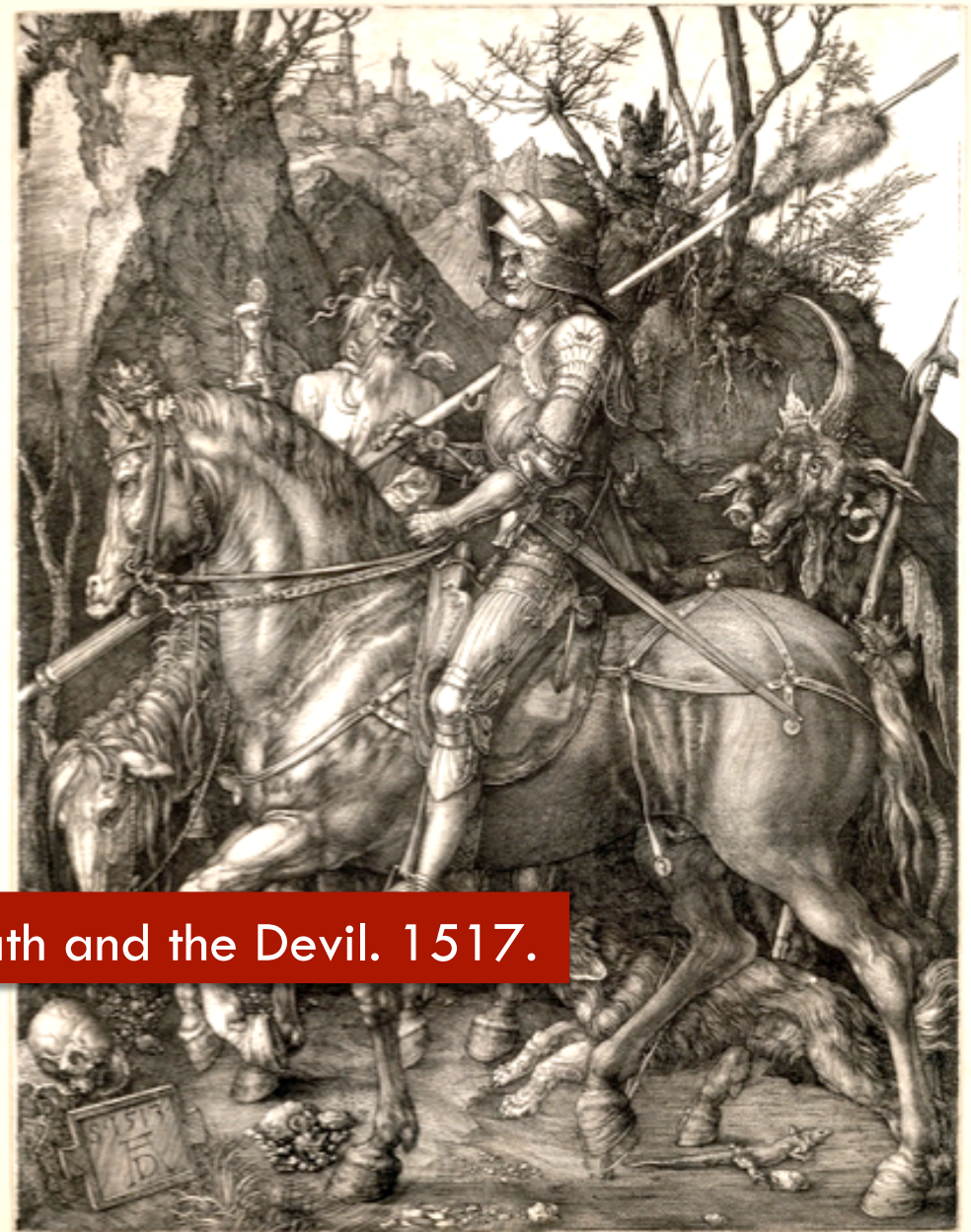




Mappemonde a l'usage du Roy. Par Guillaume Delisle, Premier Geographe de S.M.  
Amsterdam, Chez Jean Covens et Corneille Mortier, Geographes. J. Condet (1742?)  
Src: <http://www.davidrumsey.com>



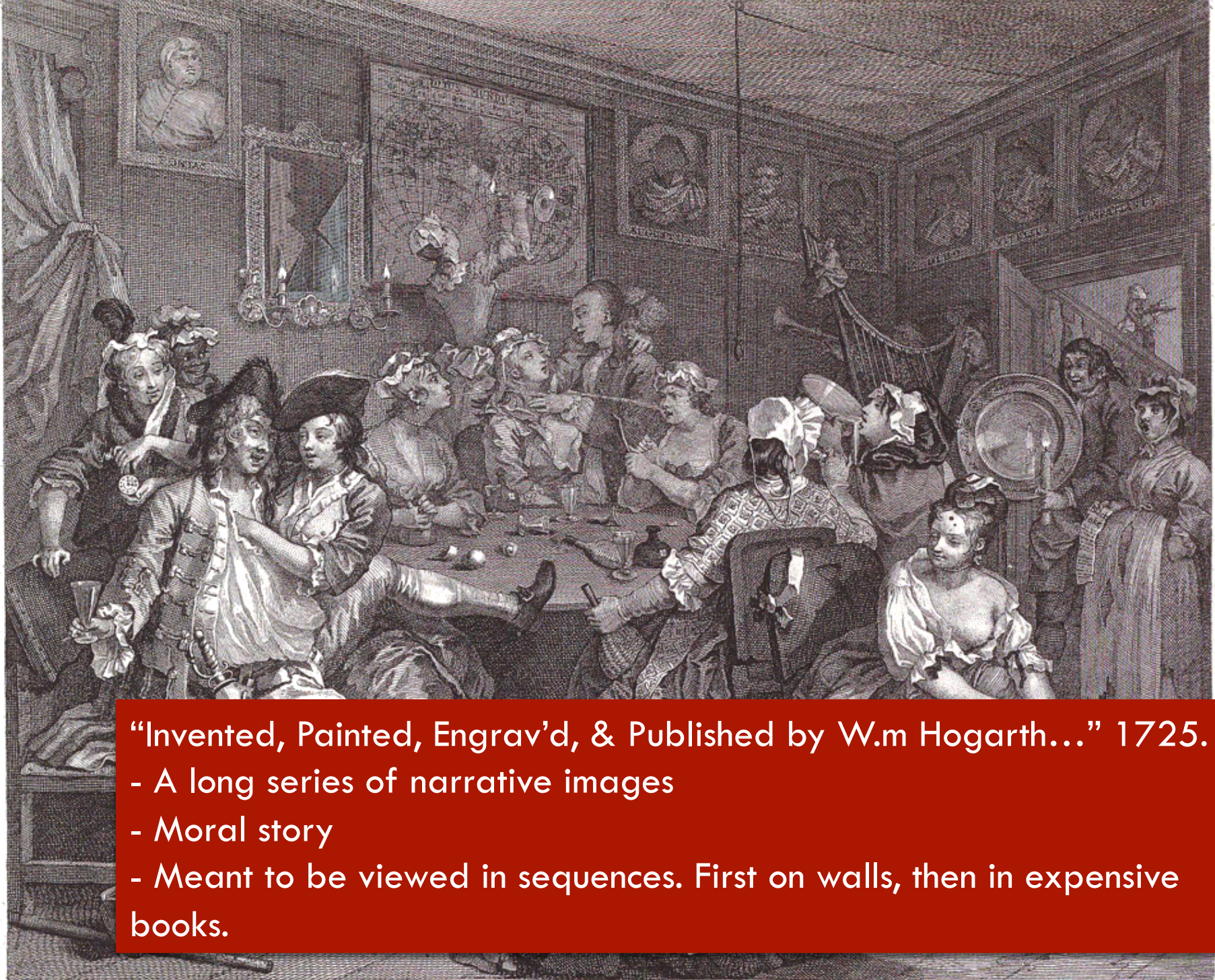
Expensive, and  
higher quality, new  
forms of engraving



Dürer, Albrecht. Knight, Death and the Devil. 1517.

Src: [http://www.britishmuseum.org/join\\_in/using\\_digital\\_images/using\\_digital\\_images.aspx?image=ps099783.jpg](http://www.britishmuseum.org/join_in/using_digital_images/using_digital_images.aspx?image=ps099783.jpg)





“Invented, Painted, Engrav’d, & Published by W.m Hogarth...” 1725.

- A long series of narrative images
- Moral story
- Meant to be viewed in sequences. First on walls, then in expensive books.

*O, Vanity of youthfull Blood,  
So by Misuse to poison good:  
Woman, formid for Social Love,  
Fairest gift of Powers above:*

*Source of every Household Blessing,  
All Charms in Innocence possessing,  
But turn'd to Vice, all Plagues above,  
Foe to thy Being, Foe to Love:*

*Gift Divine to outward Viewing,  
Ablest Moulder of Ruins!  
And Thou, no less of gift divine,  
Sweet Poison of Misused Wine:*

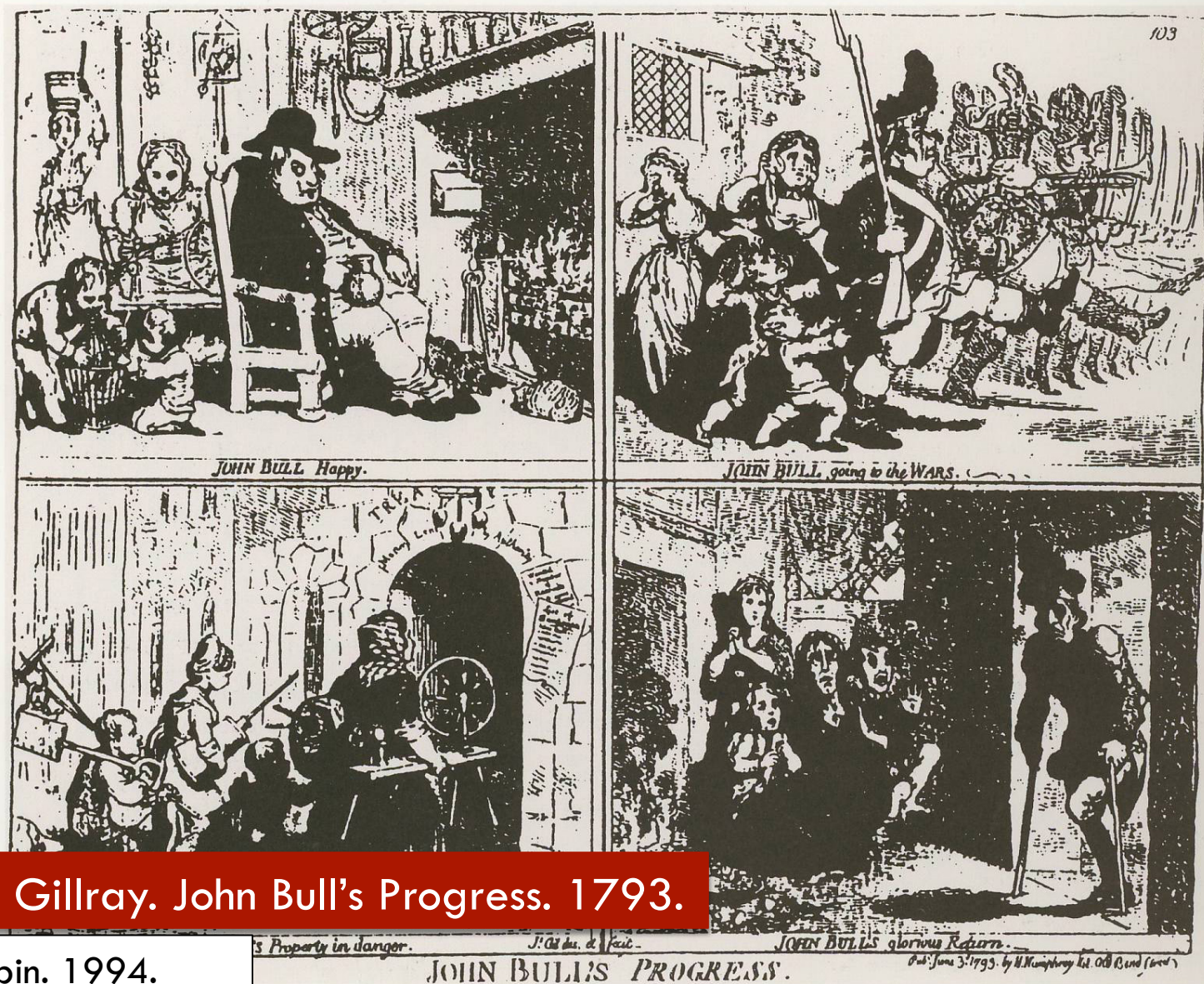
*With Freedom led to every  
And secret Chamber of Vice,  
Dost Thou thy friendly Hope  
And show thy riotous gang of way,  
And revel there with wild Excess!*

*Invented, Painted, Engrav'd, & Publish'd by W.<sup>m</sup> Hogarth June 27. 1735. according to Act of Parliament.*

Src: Sabin. 1994.



# 18<sup>th</sup> Century (visual) anti-war narrative



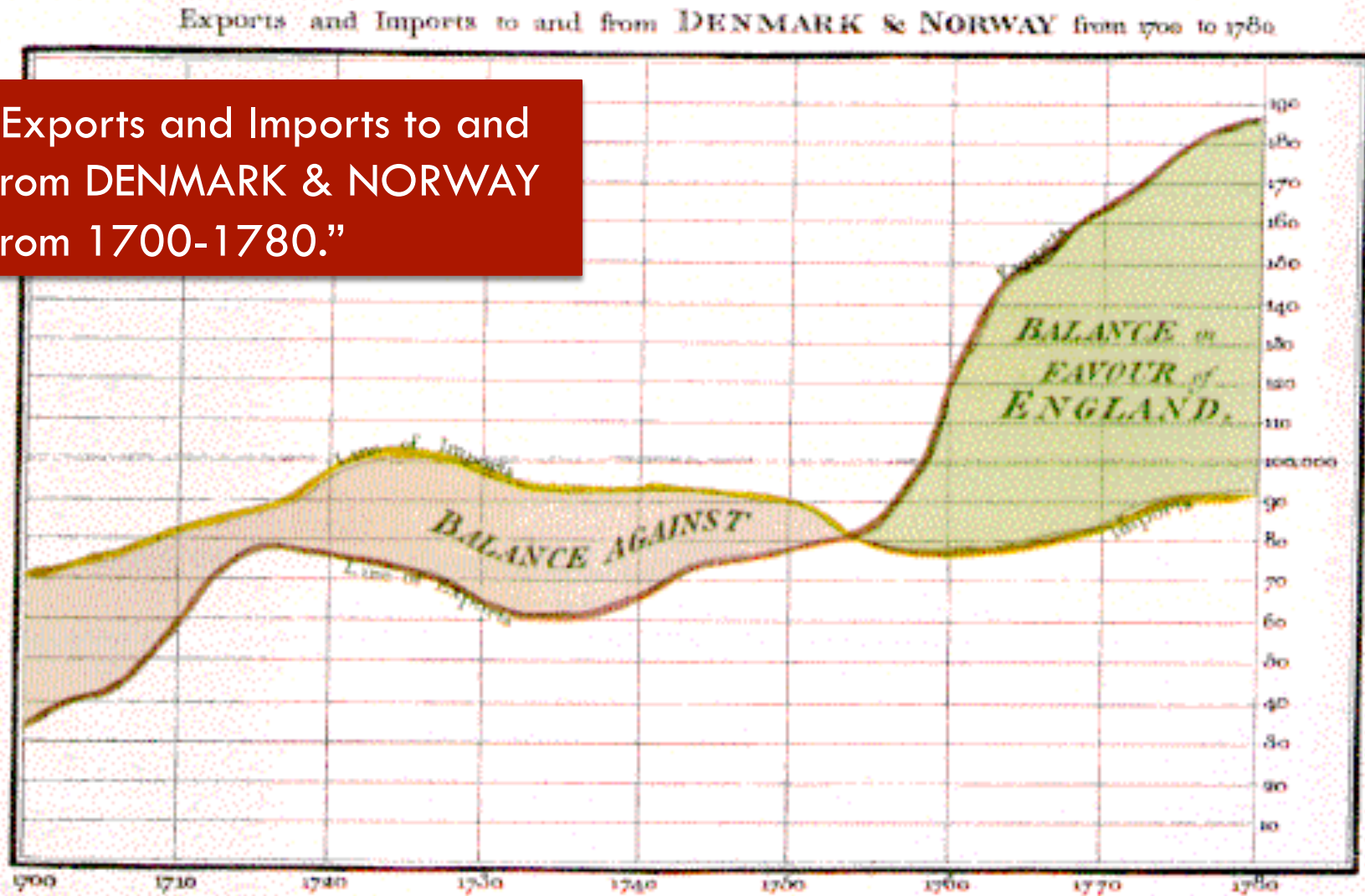
James Gillray. John Bull's Progress. 1793.

Src: Sabin. 1994.



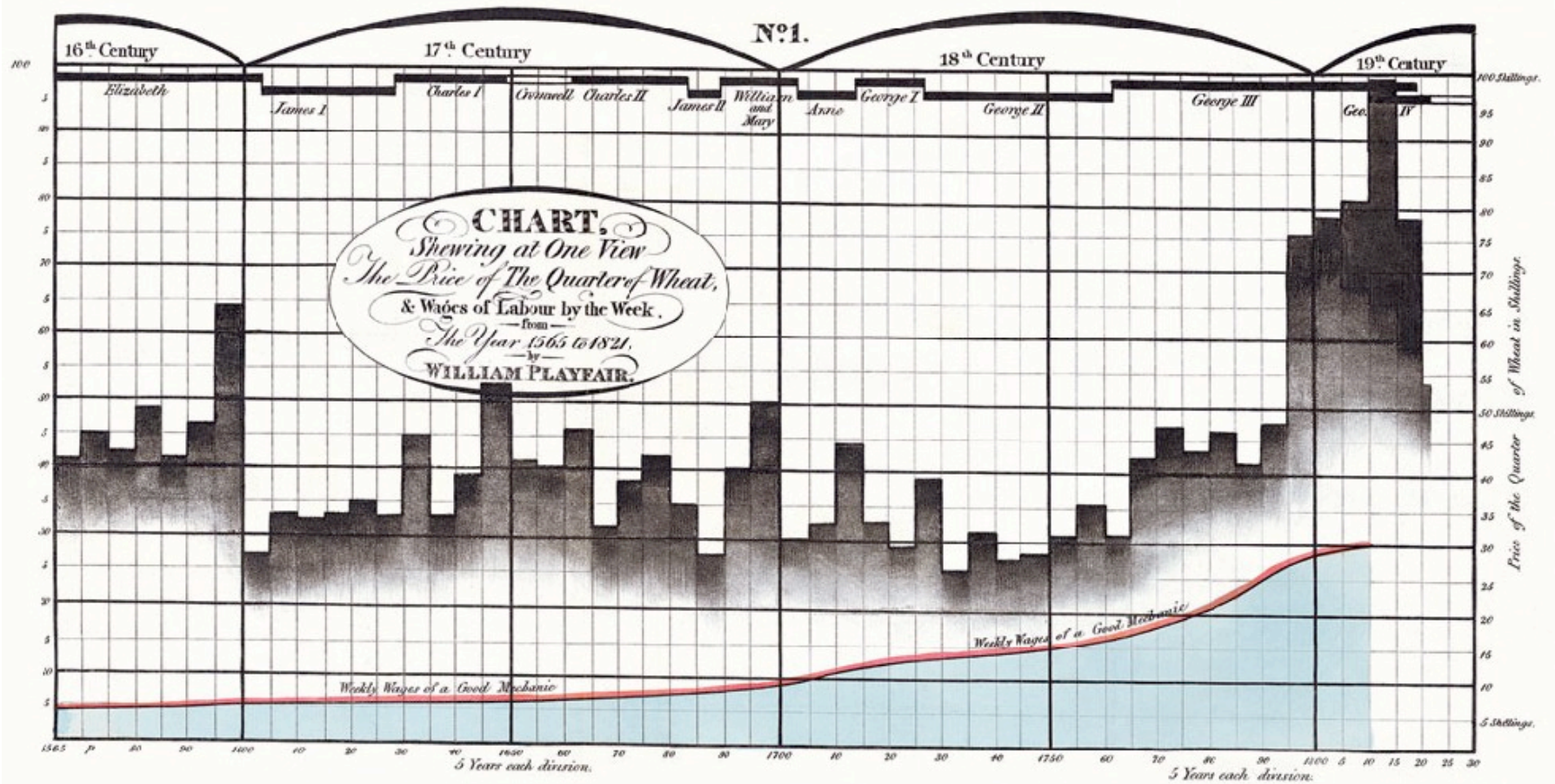
## Visualization of “social data”

“Exports and Imports to and from DENMARK & NORWAY from 1700-1780.”



From William Playfair's Commercial and Political Atlas and his Statistical Breviary. 1796.  
Img src: [http://en.wikipedia.org/wiki/William\\_Playfair](http://en.wikipedia.org/wiki/William_Playfair)

# Visualization of social data



William Playfair. 1821. "CHART . Shewing at One View The Rise of the Quarter of Wheat & Wages of Labour by the Week. The Years 1565-1821"

# A few things overlooked thus far...

- Developments in cartography
- Illustrated histories
- Rising popularity of book illustrations
  - And development of aquatint around 1789
- Check out: Holston, Kenneth R, (curator). 1996. The Illustrated Book, 1780-1830: selected from the collection of Harris N. Hollin. Department of Special Collections of the University of Pennsylvania Library.
  - <http://www.library.upenn.edu/exhibits/rbm/hollin/index.html>

## Pre- and post- Gutenberg... what changes?

- Woodblock printing? Precedes Gutenberg and is a mainstay of image reproduction technology until the 19<sup>th</sup> C.
  - ▣ But increased separation of text and images (is this progress?)
- Genres seem remarkably stable (broadsheets an exception?)
- Broadsheets... are they newspapers?



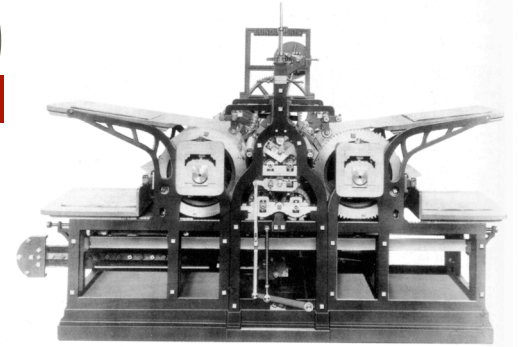
# And then a few things happen

(Or: The rise of mass image circulation in the 19<sup>th</sup> Century )

# A few technical improvements in printing (recap from last time)

- 1796 Lithographic printing\*
- ~1810 steam press
- 1833 rotary press
- 1839 electricity is used to run a printing press
- 1891: Large press prints and folds 90,000 4-page papers an hour.
- 1903 offset press\*
- 1907 screen printing

**US daily readership: 3.5 million in 1880->  
33 million 1920**





# In-class group project



- I'll be dividing you up into 8 groups of 6 people per group
- You are going to create a visual representation—aid by text—of how technical, social, institutional, and culture changes relate to one another as described by Drucker and McVarish



# Ways of breaking this down



## Technical developments:

- Lithography and then chromolithography
- The Daguerrotype
- The steam press
- Linotype and monotype machines
- Photolithography
- Halftone printing

## Forms and genres of media- Newspapers

- Illustrated papers
- Magazines
- Illustrated books
- Scientific publications
- Posters
- The comic strip

# Ways of breaking this down



## Institutions and social categories:

- “The Press” / The Newspaper
- Romanticism and Industrialism
- Fine art, graphic art, commercial art, mass art
- The working class vs. the middle class

## Practices

- Journalism
- Graphic journalism
- Advertising
- Commercial/graphic art
- Publishing
- Scientific inquiry