



# the "age of information"

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**& the “information revolution”**

**history of information**

January 22, 2015



# administrative matters

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## **wait list**

sign up  
check with departments  
wait/drop

## **class website**

<https://ucberkeley.instructure.com/courses/1281320>

## **Bancroft tour**

sign up on syllabus

## **class reader**

Copy Central, 2576 Bancroft Way

## **class recording**

[ets.berkeley.edu](https://ets.berkeley.edu)

Please sign up for one of the time slots [[hyperlink](#)]:

2/3: Bancroft Library tours at 1-2, 3-4

2/4: Bancroft Library tours at 2-3, 4-5

2/5: Bancroft Library tour at 12-1

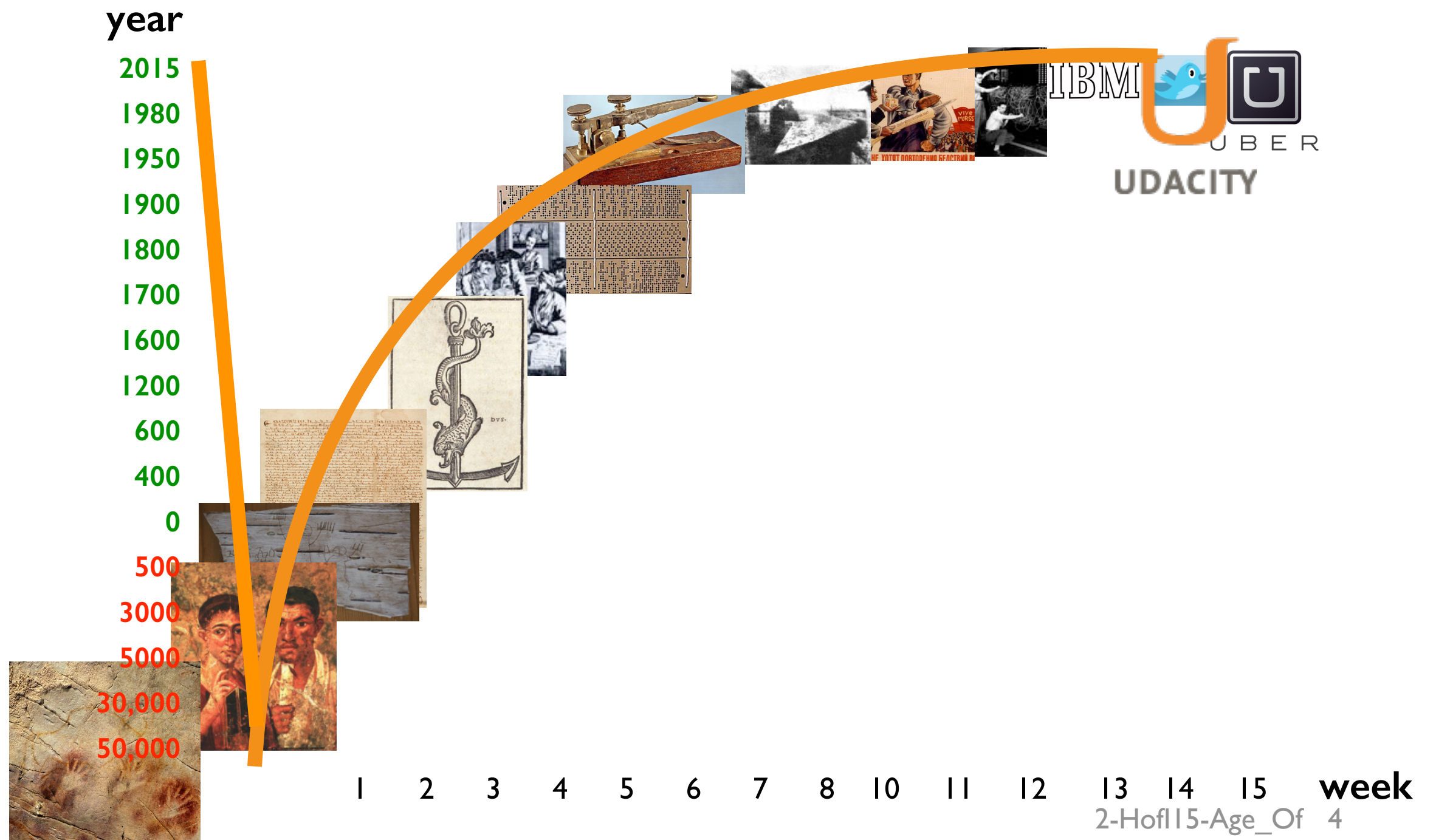
Pick one of the following and write a (very) brief story or anecdote in which it serves as an "information technology," perhaps in conjunction with other things. Try to make your stories ingenious without being completely implausible. Bring your answer to class for discussion (but no need to hand them in).

- a necktie
- a blanket
- a rubber duckie
- a can of beans
- a lemon

"Extra credit" if you manage to use two of these in your story.



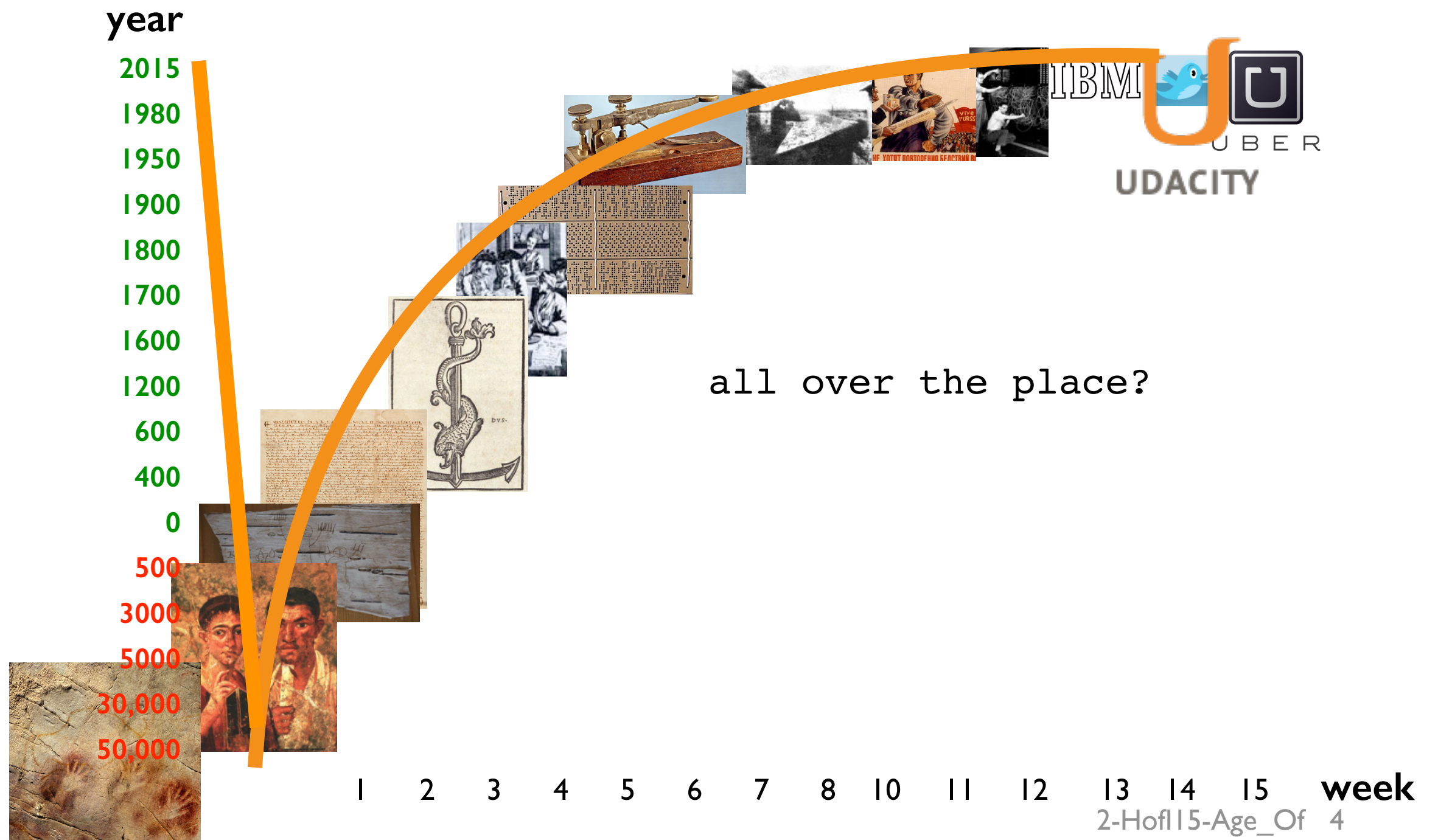
# where are we?







# where are we?





# overview

why history matters

intergenerational revolution

revolution

getting from one age  
to another

what's in an age?

when was that?

the “age of  
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it's the ....?





it's the ....?





it's the ....?







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## IBM Reports

# when was that?

*Fortune July 1977*

## Information: there's growing agreement that it's the name of the age we live in.

Human history has long been described in terms of Ages whose names reflect the stages of development through which mankind has passed: the Stone Age, the Bronze Age, the Iron Age and so on — down to the Industrial Age, which established the foundations of our modern society.

Today, there is growing agreement that we have entered a new era: a post-industrial stage of development in which the ability to put information to use has become critical, not only to the essential production of goods, but to efforts to provide a better life for the individual, as well.

This new era is being referred to with increasing frequency as the Information Age.

### Information in the Information Age

Changes in our perception of information itself — its nature as well as its scope — have accompanied this profound shift of emphasis in our society.

Much has been written about the so-called "information explosion." It has been pointed out, for example, that the number of technical journals published throughout the world today exceeds 100,000, and that the total body of technical information is now doubling every ten years.

At the same time as the volume of information has been increasing dramatically, our understanding of the meaning of the term information itself has also broadened — to encompass a wide variety of timely data relating to "how things really are" across the whole spectrum of human activity.

A heartbeat, for example, can be extremely meaningful information when recorded and analyzed on sophisticated electrocardiogram equipment. So can electrical impulses reflecting the load level in a power network, or numeric digits representing the availability of a seat for you on an airplane — when processed by a modern computer.

These and a wide range of similar types of data are clearly recognized today as information, the kind of information on which we increasingly de-

pend for the growth and health of our economy, the smooth functioning of our institutions — and, even more important, for the quality of our individual lives.

### Information — an inexhaustible resource

Information is one of the few resources not in danger of exhaustion on this shrinking planet. It is unique because the supply is limitless, because it actually becomes more valuable with use and because — when properly managed and applied — it can greatly enhance our use of all our other resources, natural, human and economic.

One reason, of course, that information has proved to be such a dynamic resource is the fact that there exists today a remarkable technological capacity for dealing with it rapidly and effectively.

Through a vast array of electronic tools and techniques, mankind is able to accumulate, organize, store, interpret, retrieve and transmit information on a worldwide scale, in a volume, at a speed, and with an accuracy that would have been impossible barely two decades ago.

It is also a technology that continues to grow and that has proved to be amazingly efficient in economic terms. As advance has followed advance, the cost of processing information has steadily declined. Since the 1950's, the cost of performing 100,000 calculations on an IBM computer has fallen from \$1.26 to less than one cent — and the downward trend continues.

### Putting information to work for people

IBM makes many different products — from computers to copiers — but clearly, the essence of our business is information.

As a company, we are committed to exploring the limits of technology to find better, more imaginative and more productive ways to help put the benefits of this uniquely valuable resource to work for people.

**IBM**



earlier yet

## 50 years and counting

"[New media] does not centralize but decentralize ... In the new ... Age of Information."

Marshall McLuhan,  
*Understanding Media*, 1964



earlier yet

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### 27 Jan: Technological Determinism

#### *Required Reading*

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Read: "Preface to Third Printing" (pp. v-x), and "Introduction" & "The Medium is the Message" (pp. 3-21).





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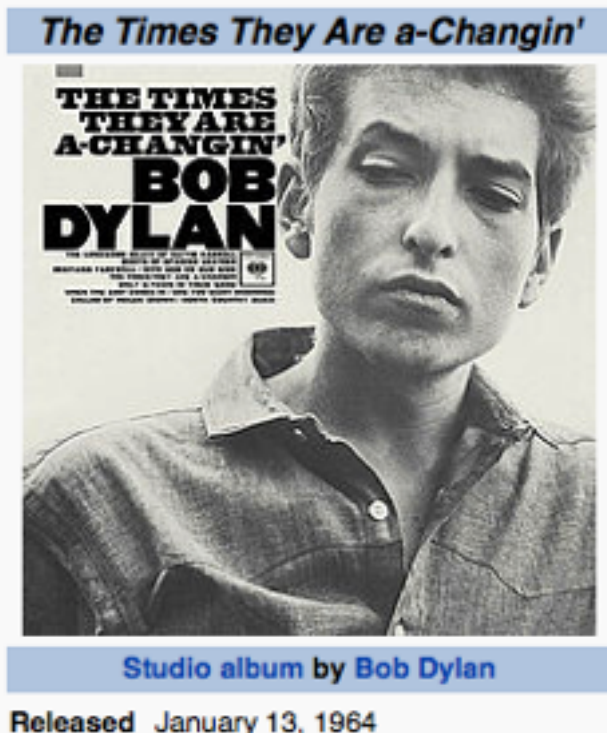
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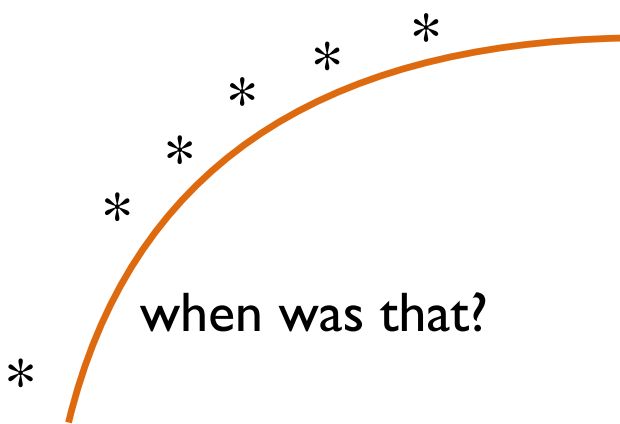
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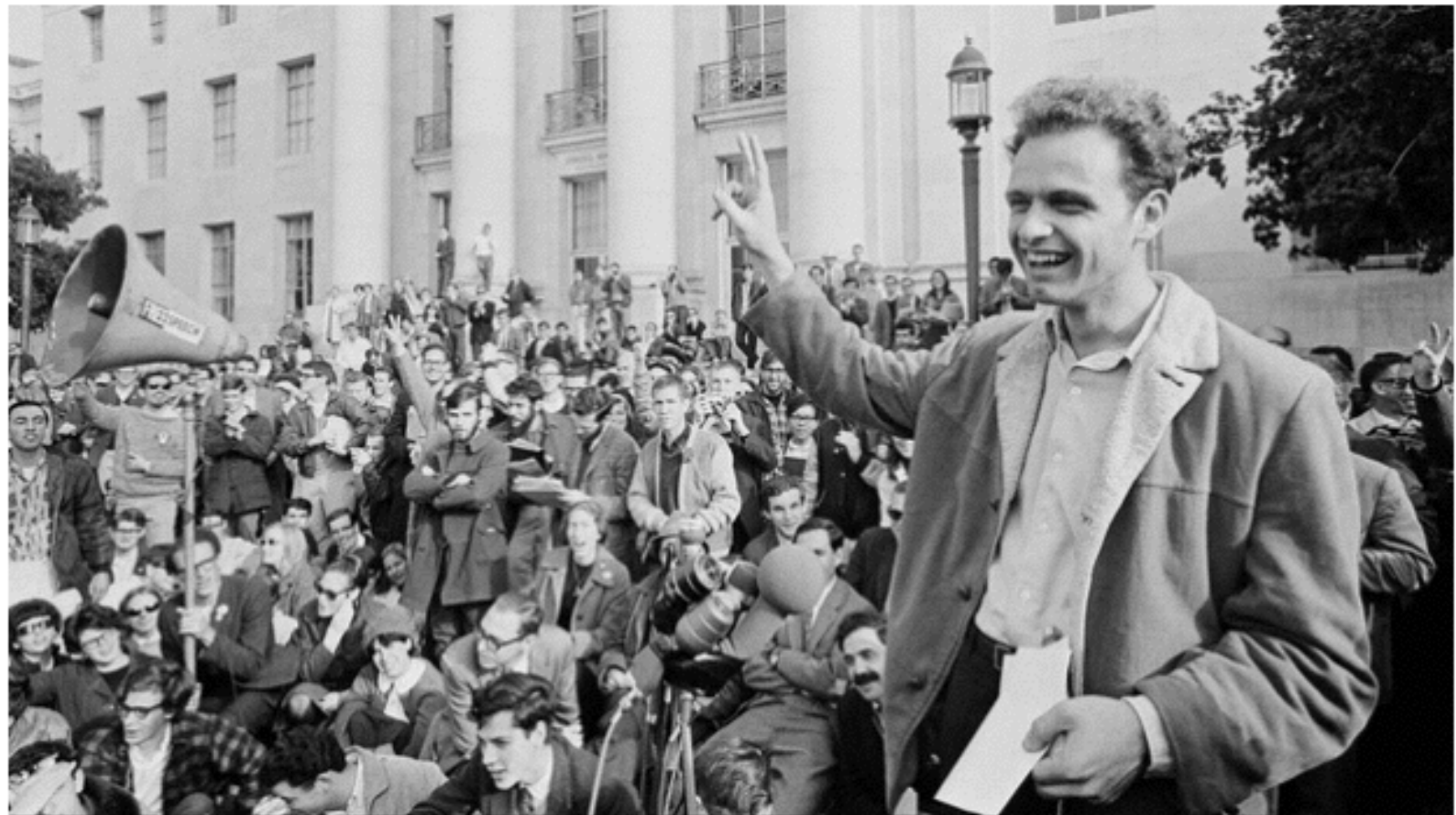


Studio album by Bob Dylan

Released January 13, 1964



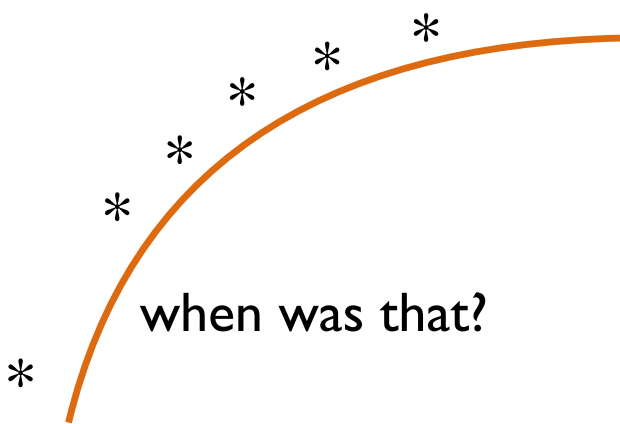
# local change



**Mario Savio, shown here at a victory rally in UC Berkeley's Sproul Plaza on Dec. 9, 1964, was the face of the free speech movement. (AP)**

In 1964, students at the University of California, Berkeley, formed a protest movement to repeal a campus rule banning students from engaging in political activities.





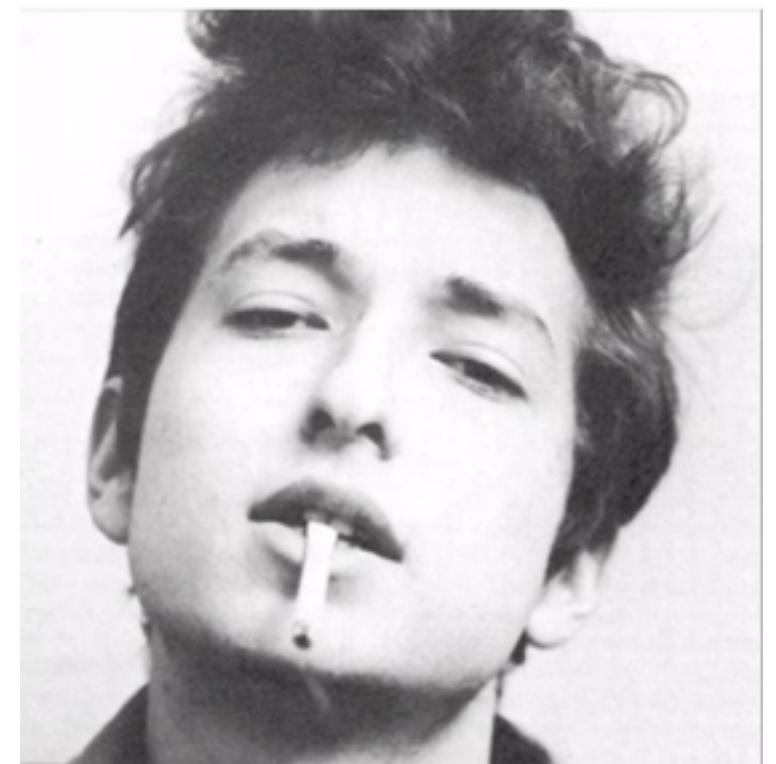
# local change



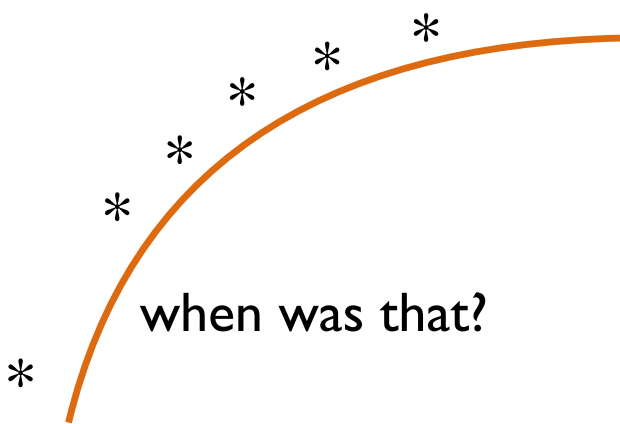
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Information: there's growing agreement that it's the name of the age we live in.

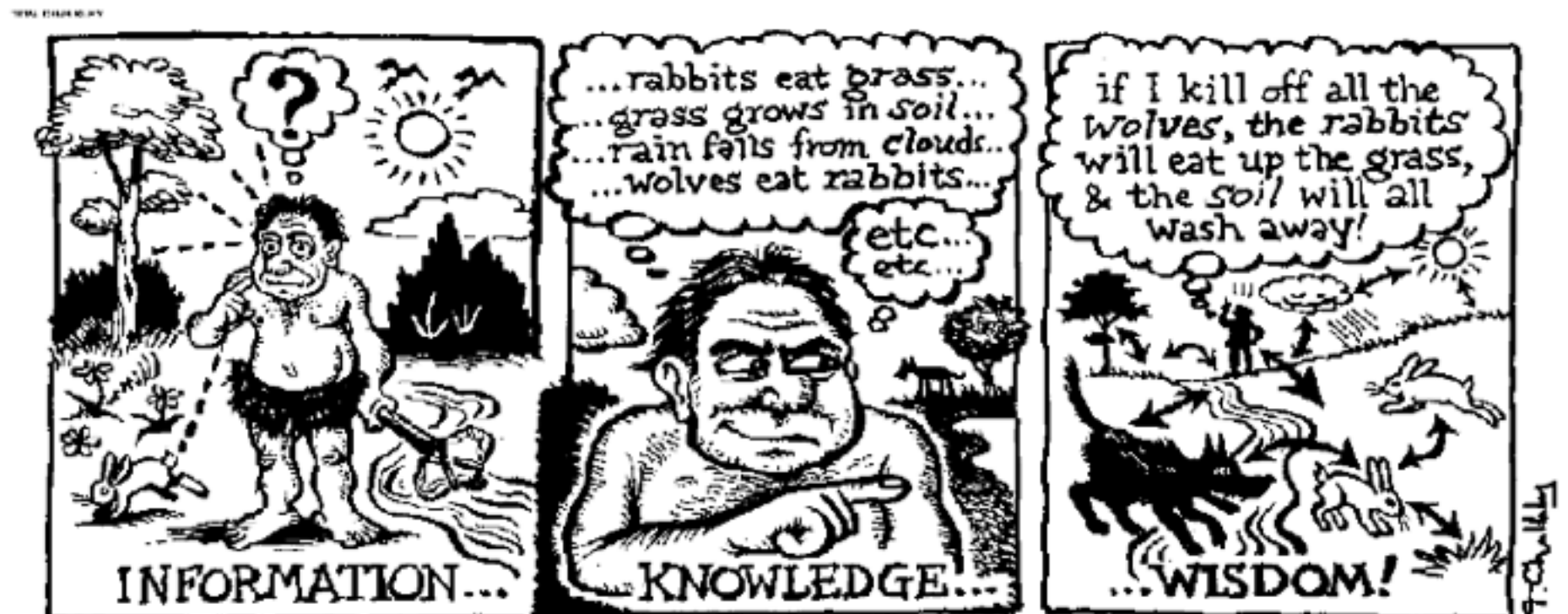
# growing agreement?

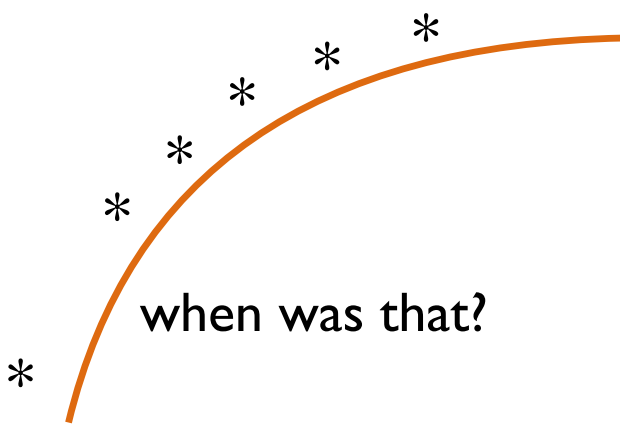






# never a-changin'?



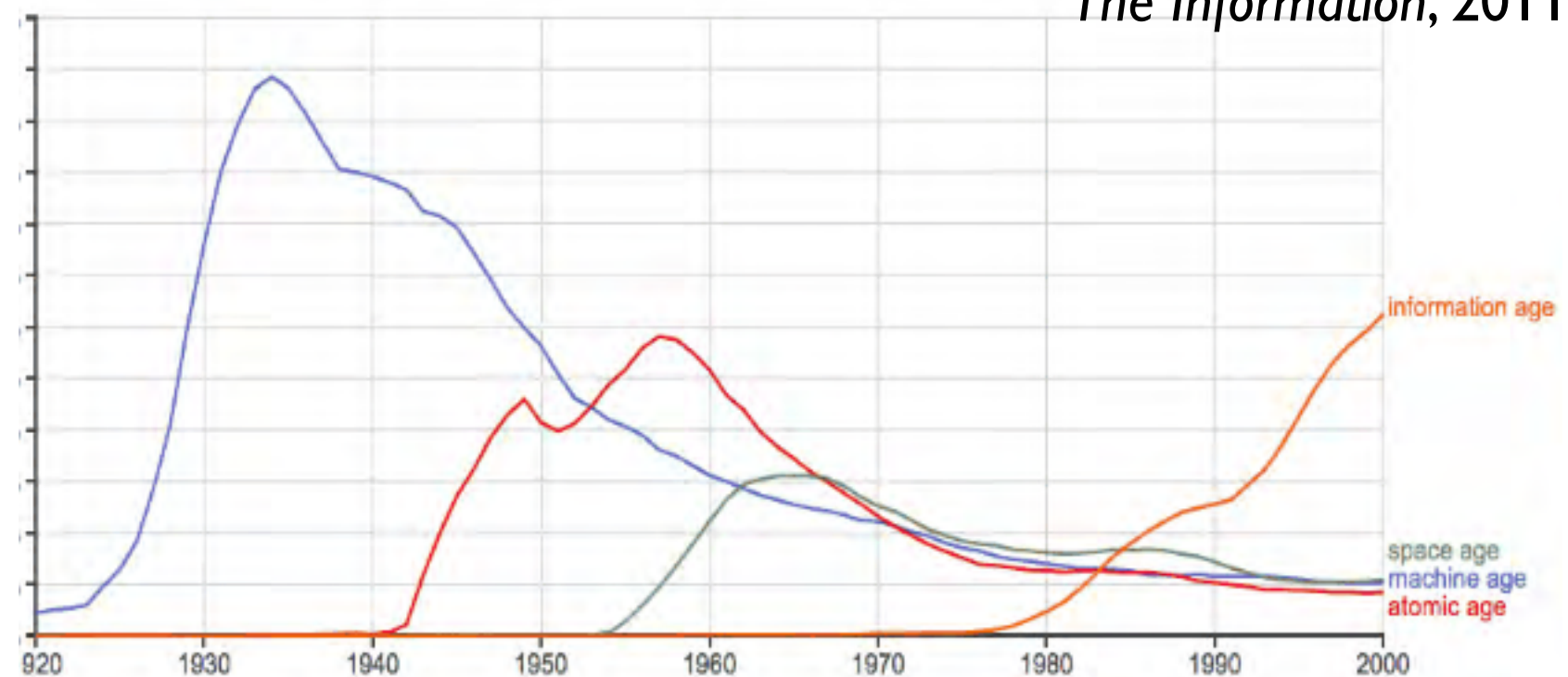


there's growing  
*awareness that ...*

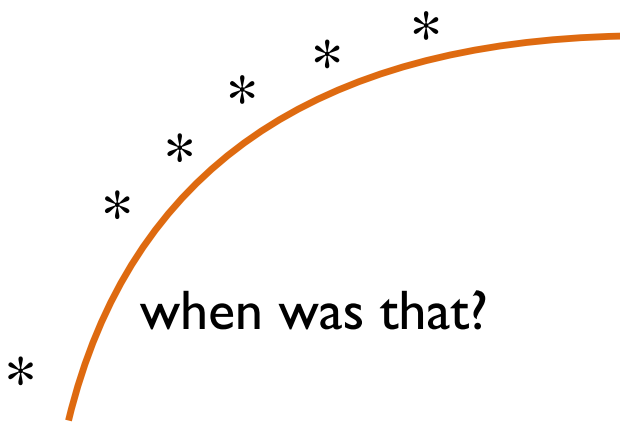
## self-conscious age of information

"In the long run, history is the story of  
information becoming aware of itself."

-- James Gleick,  
*The Information*, 2011







over to you

1. when did people become aware that they lived in an “age of information”?
2. what were the most important innovations of the time and how did they affect this awareness?

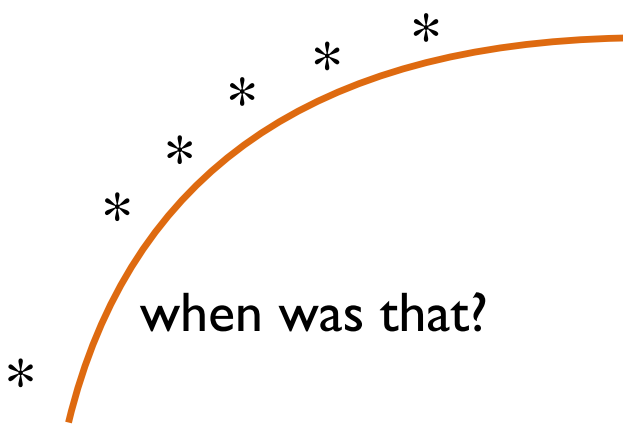
"He shall from time to time give to the Congress  
Information of the State of the Union" - Art 2 Sect 3

when was that?

what did they think?



*the words of the Constitution.*  
The President shall have Power to fill up all Vacancies that may happen during the Absence of the Senate, by granting Commissions which shall expire at the End of their next Session.  
Section. 3. He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.  
Section. 4. The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.



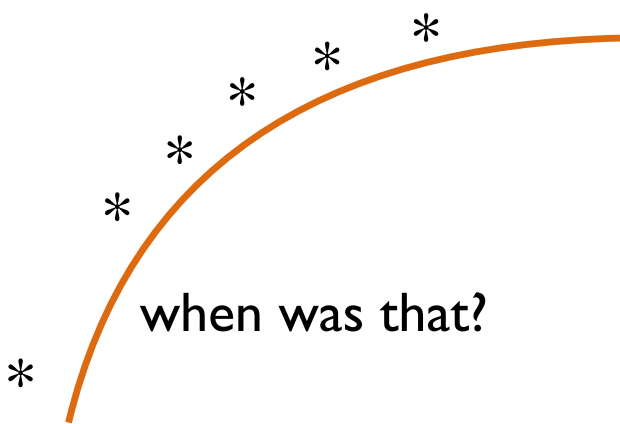
# ahead of his time?

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Vicesimus Knox  
1752–1821





## ahead of his time?



Vicesimus Knox  
1752–1821

"But though books are easily procured, yet, even in this age of information, there are thousands in the lower classes that cannot read. Besides, it is a well-known truth, that the same precepts inculcated by a living instructor, adorned by a proper oratory, enforced by a serious and authoritative manner, produce a powerful effect, not to be experienced in solitary retirement."

-- Vicesimus Knox,  
*Essays Moral and Literary*, 1778



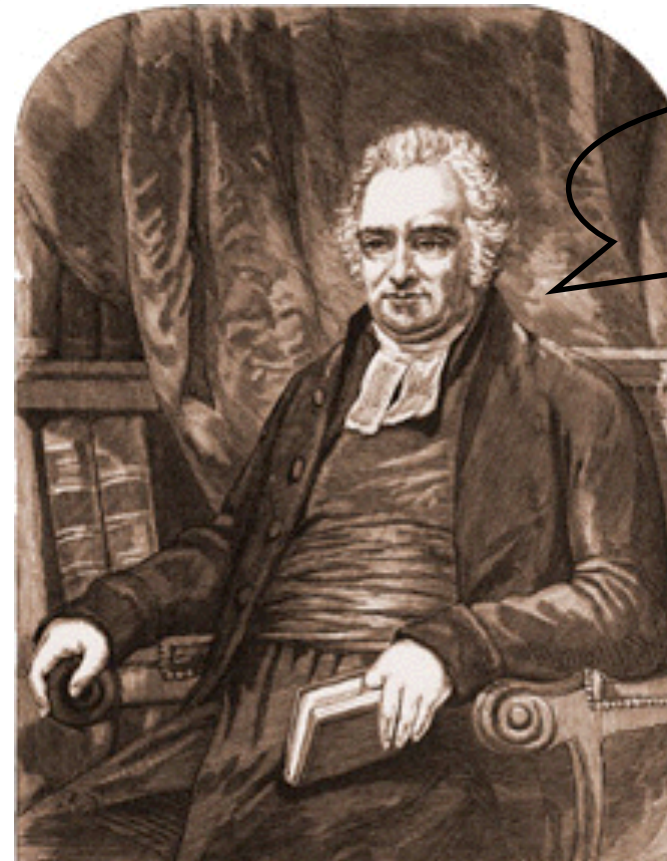
"Wassup, bro?"

2. what were the most important innovations of the time and how did they affect this awareness?

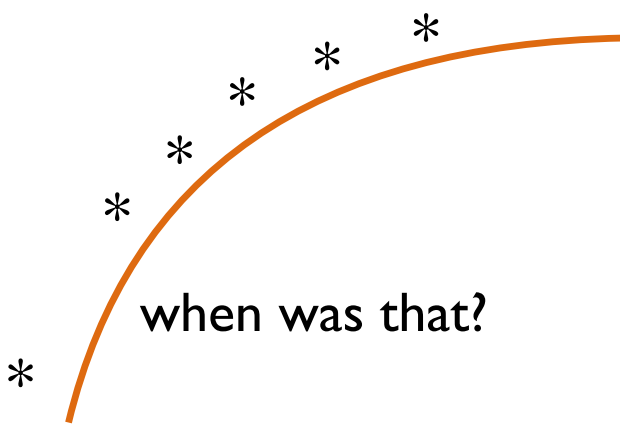
quiet times?

everything's now  
on the internet ...

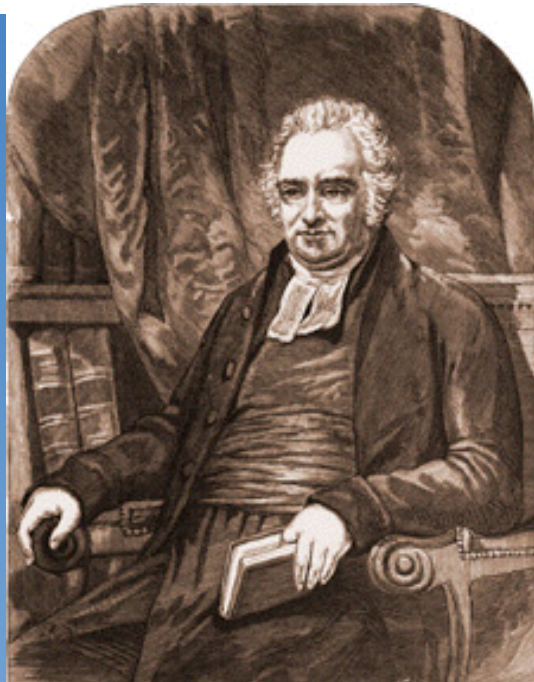
2015  
1980  
1950  
1900  
1800  
1700  
1600  
1200  
600  
400  
0  
500  
3000  
5000  
30,000  
50,000



"N' much"



# what was going on?



## **the emergence of the public sphere**

*newspapers, public opinion*

[coming up, Feb 17]

## **organization of knowledge**

*Chambers, Diderot, Smellie*

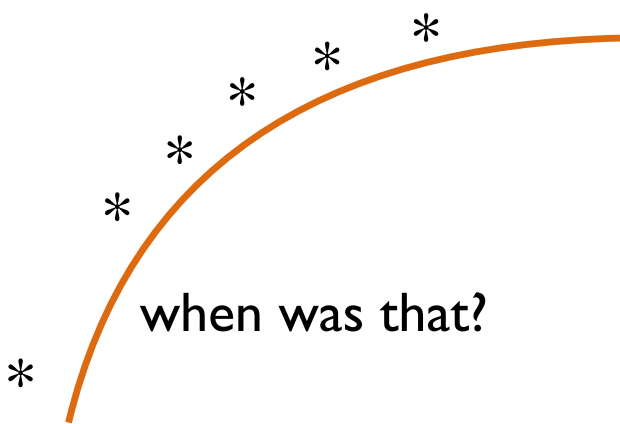
[coming up, Feb 26]

## **advertising, IP**

*Donaldson v. Beckett*

[coming up, March 5, 10]





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[coming up, March 5, 10]

## **revolution**

[coming up, today]



# overview

why history matters

intergenerational revolution

revolution

getting from one age  
to another

what's in an age?

when was that?

the “age of  
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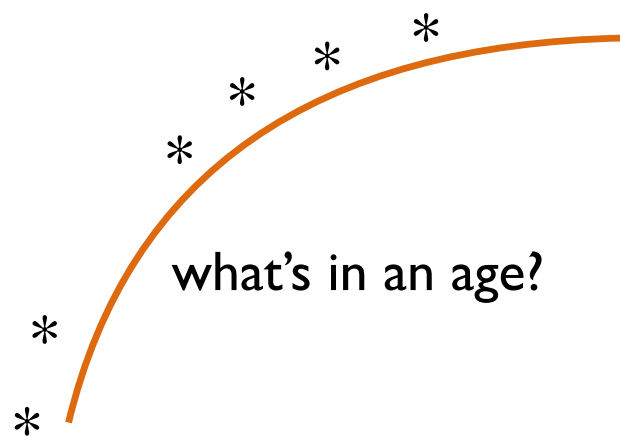
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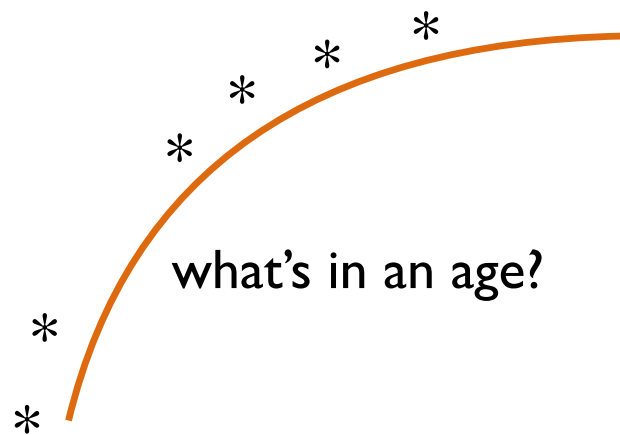


# what's in an age

## ages past

"Human history has long been described in terms of ages ...The Stone Age, the Bronze Age, the Iron Age, and so on"

IBM ad,  
*Fortune* 1977



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## **ages past**

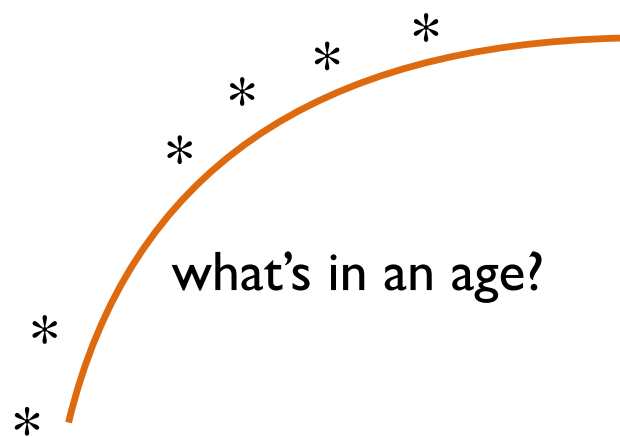
stone

bronze

iron

steel

*plastic*



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stone

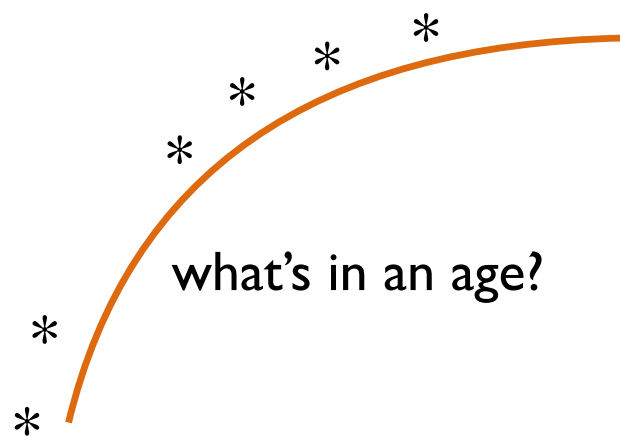
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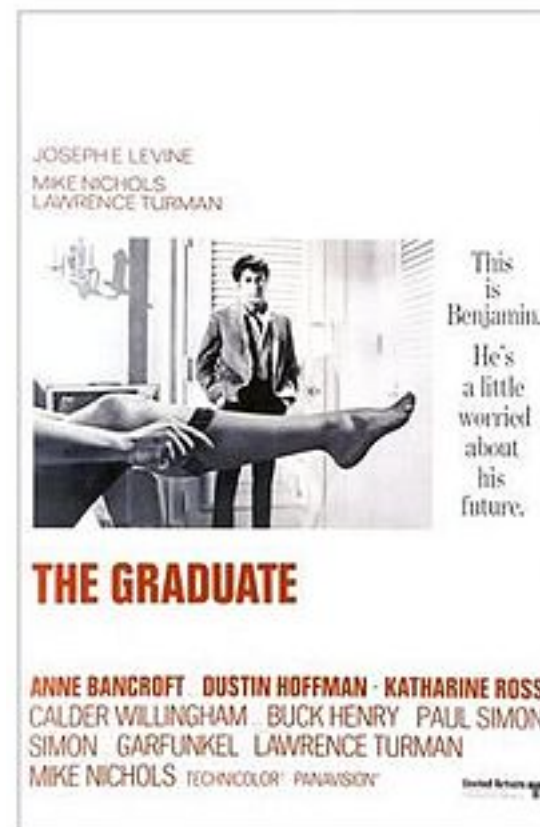


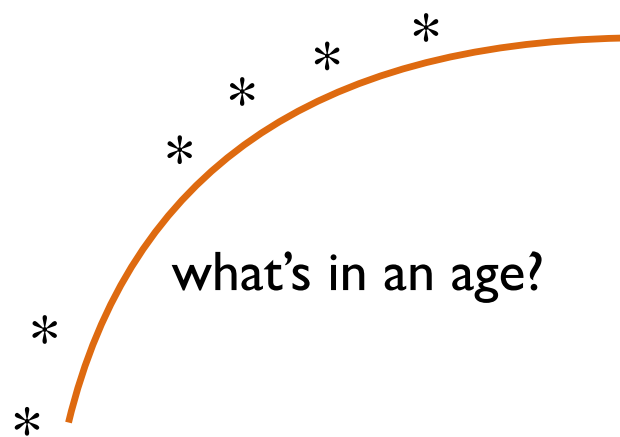
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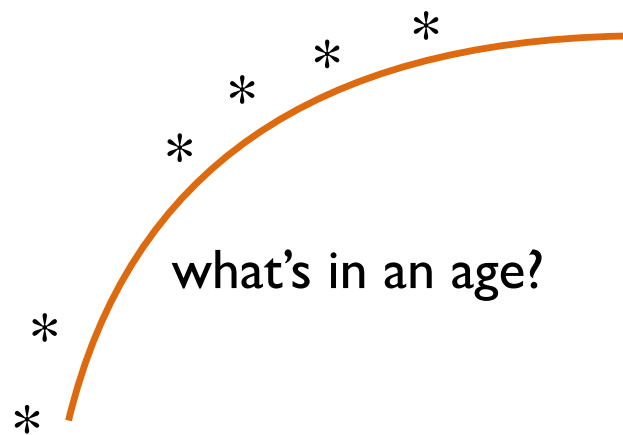
sail

steam

jet

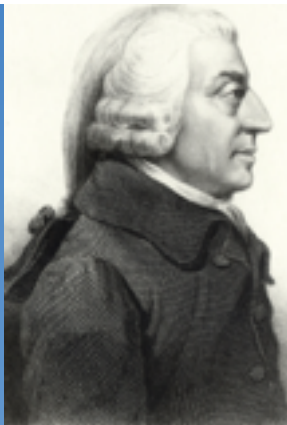
nuclear/atomic

space

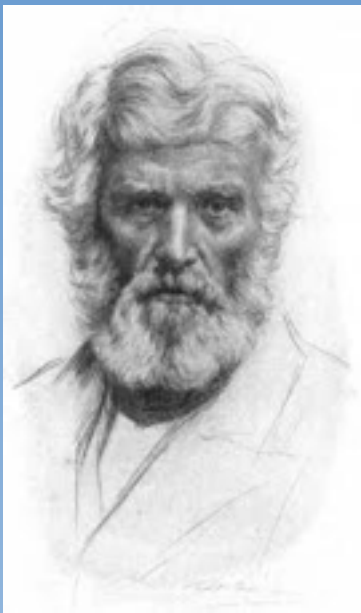


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## ages past

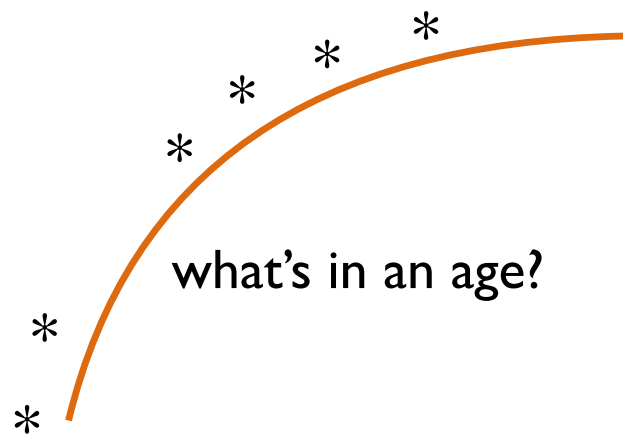


Adam Smith  
1723–1790

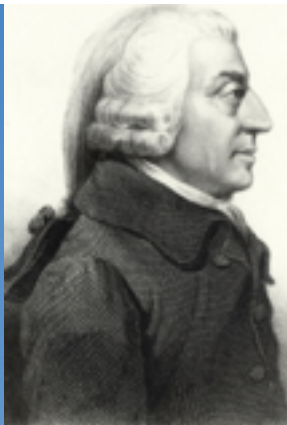


Thomas Carlyle  
1795–1881

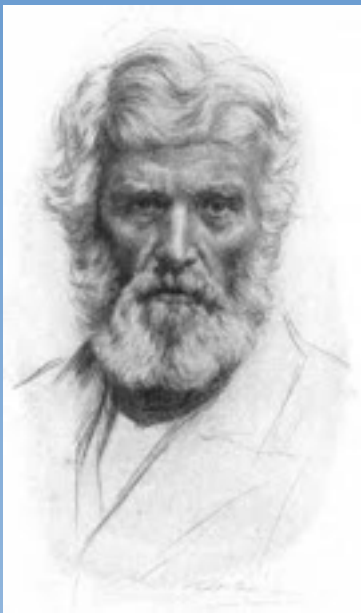




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## ages past

hunter-gatherer

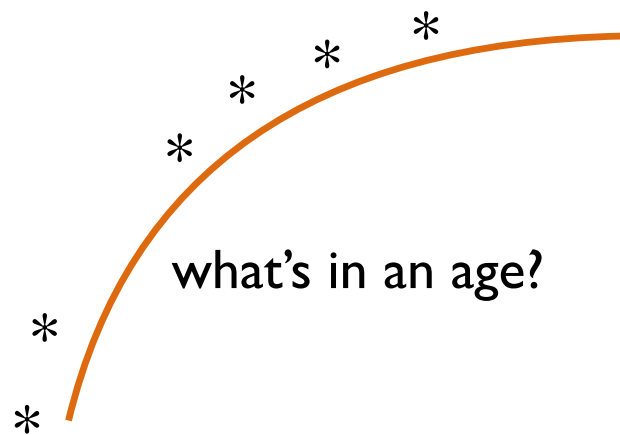
husbandry

manufacturing

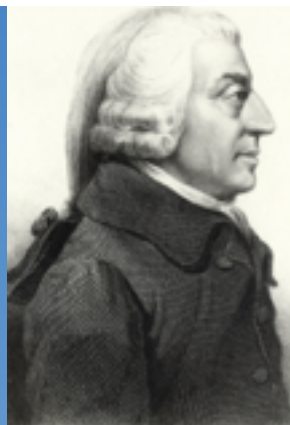
commerce

A. Smith,

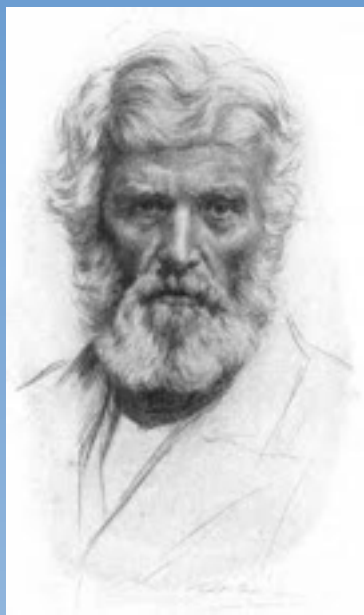
*Wealth of Nations*, 1776



# what's in an age



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Thomas Carlyle  
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## ages past

hunter-gatherer

husbandry

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commerce

A. Smith,  
*Wealth of Nations*, 1776

"Not an Heroical,  
Devotional,  
Philosophical, or  
Moral Age, but above  
all others the  
Mechanical Age.

It is the  
**Age of Machinery."**

– Thomas Carlyle,  
*"Sign of the Times"* 1829



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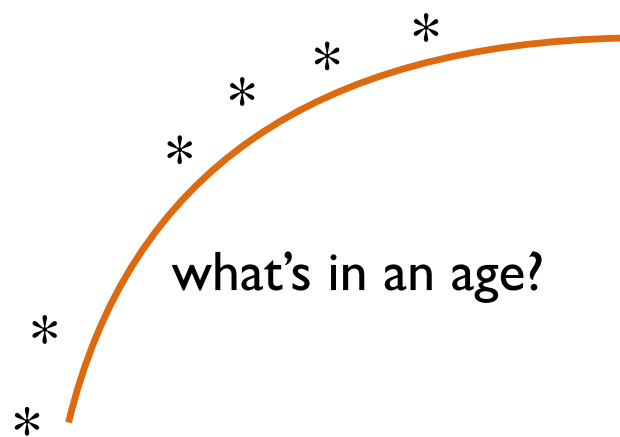
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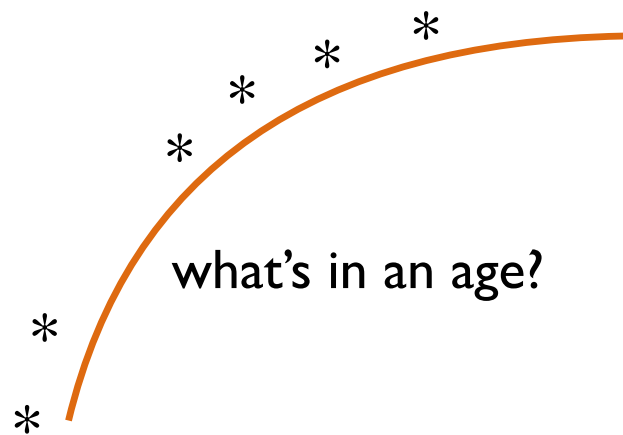
# how change happens

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**first wave**

**second wave**

**third wave**



# how change happens

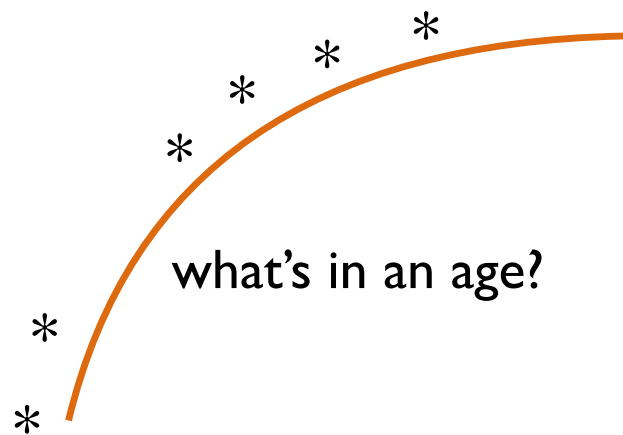
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## **first wave**

*agrarian revolution*

## **second wave**

## **third wave**



# how change happens

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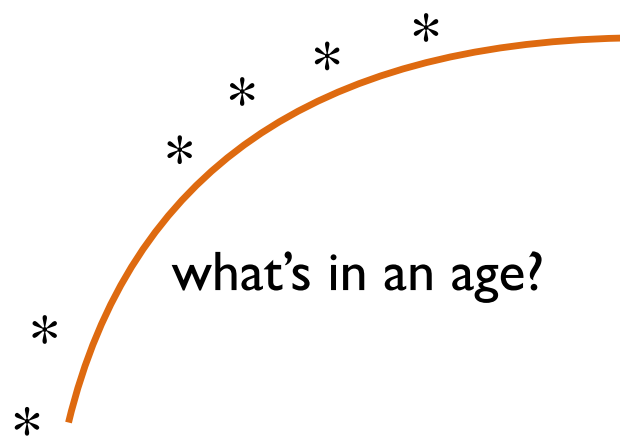
*agrarian revolution*

## **second wave**

*industrial revolution*

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# how change happens

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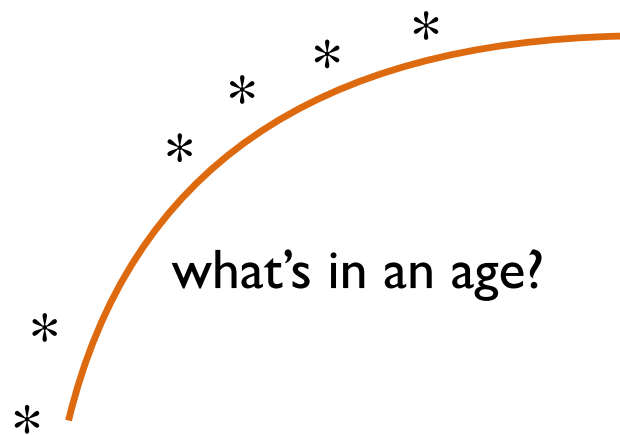
*agrarian revolution*

## **second wave**

*industrial revolution*

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# how change happens

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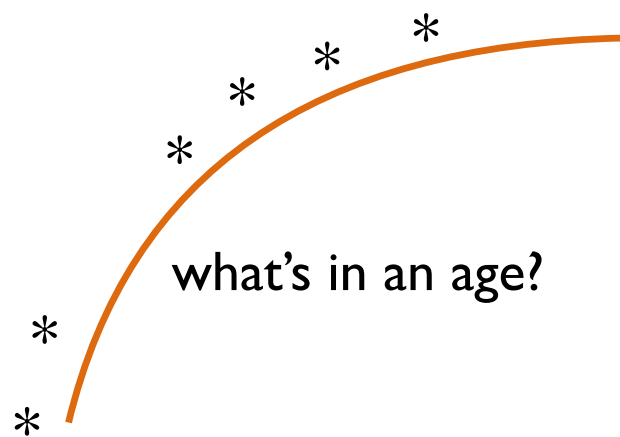
## **second wave**

*industrial revolution*

## **third wave**

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Alvin Toffler,  
— *The Third Wave*, 1980



# how change happens

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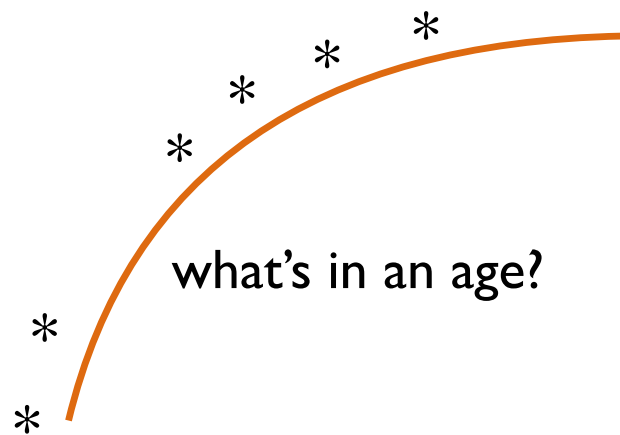
*industrial revolution*

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## **fourth revolution?**

Alvin Toffler,  
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# how change happens

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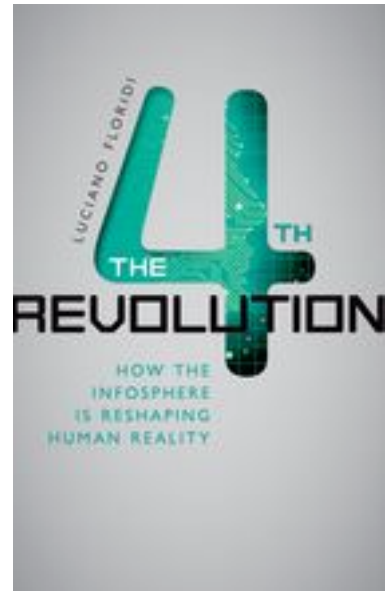
## **second wave**

*industrial revolution*

## **third wave**

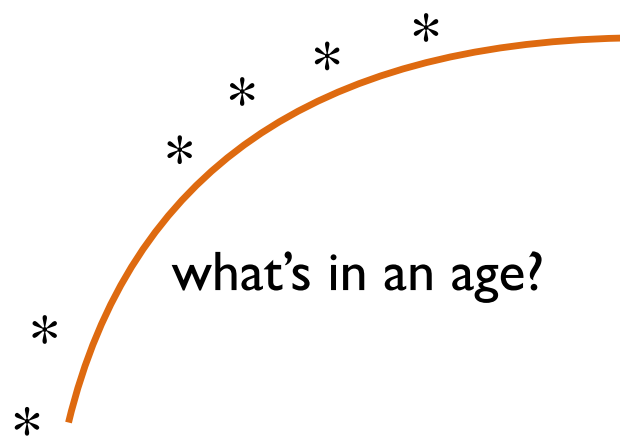
*information revolution*

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Alvin Toffler,  
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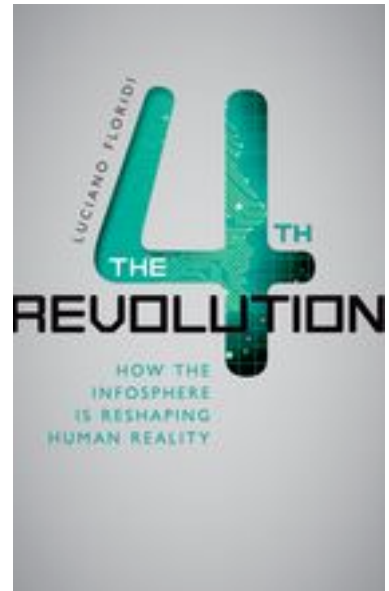
*industrial revolution*

## **third wave**

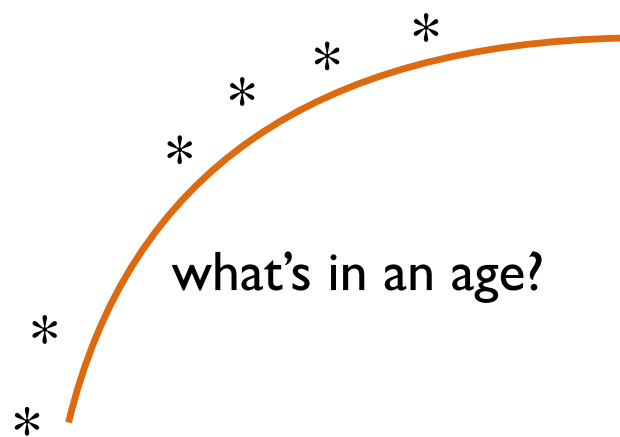
*information revolution*

Alvin Toffler,  
— *The Third Wave*, 1980

## **fourth revolution?**



Luciano Floridi  
— *The Fourth Revolution*, 2014



# how change happens

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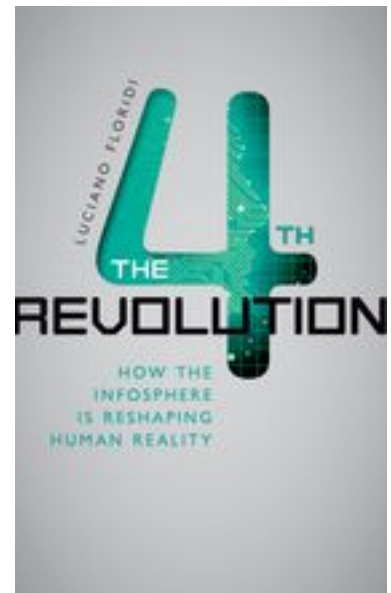
## **third wave**

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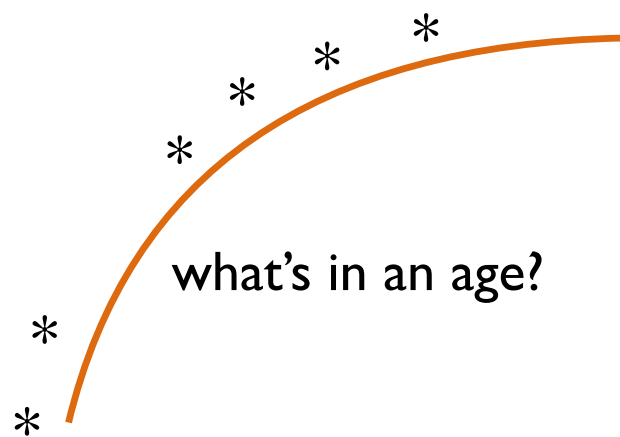
Alvin Toffler,  
— *The Third Wave*, 1980

## **fourth revolution?**

Copernicus



Luciano Floridi  
— *The Fourth Revolution*, 2014



# how change happens

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*agrarian revolution*

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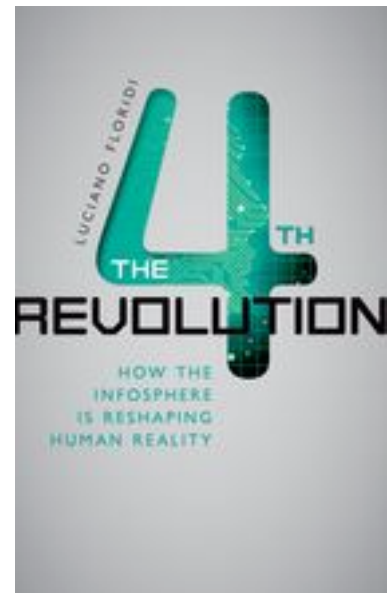
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Alvin Toffler,  
— *The Third Wave*, 1980

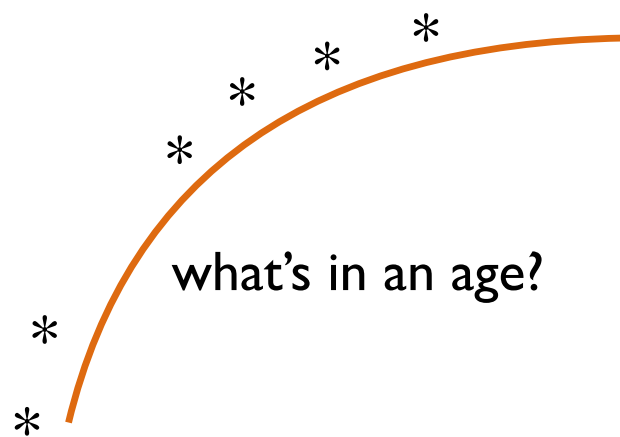
## **fourth revolution?**

Copernicus

Darwin



Luciano Floridi  
— *The Fourth Revolution*, 2014



# how change happens

## **first wave**

*agrarian revolution*

## **second wave**

*industrial revolution*

## **third wave**

*information revolution*

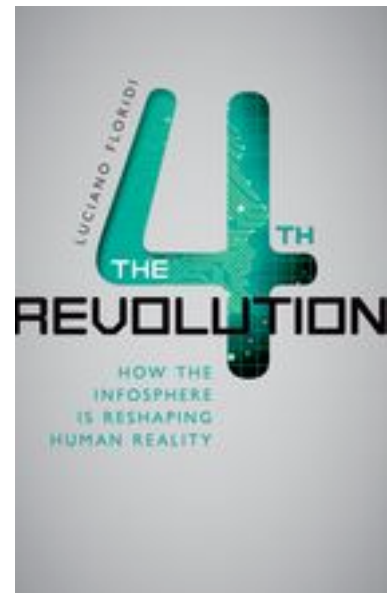
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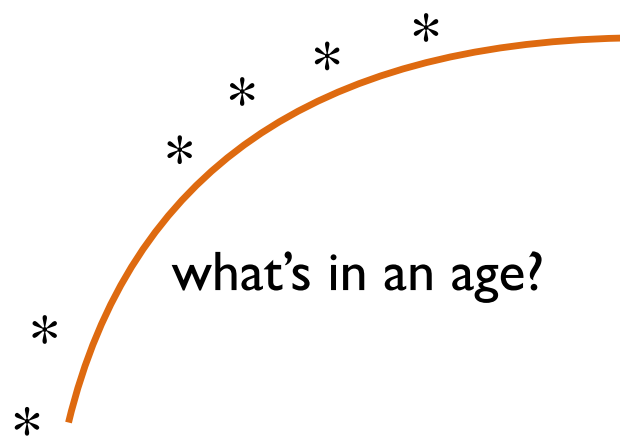
Darwin

Freud



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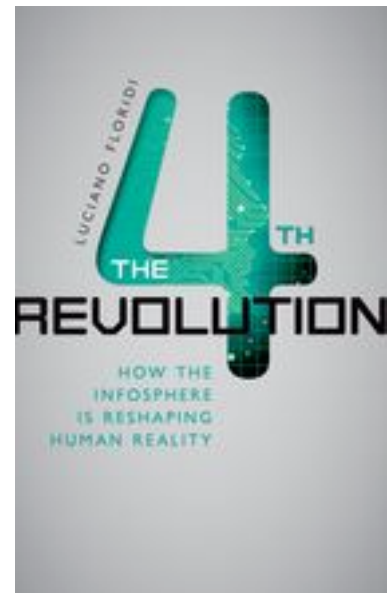
## fourth revolution?

Copernicus

Darwin

Freud

Turing



Luciano Floridi  
— *The Fourth Revolution*, 2014



# transformation



"The day the universe changed"

James Burke, *Printing Transforms Knowledge*  
BBC 1986 [UC Media Center]

coming up:  
"Print  
revolution"  
10 Feb



# new needs

---

"[I]n order to satisfy the new needs for information and education, more books, ...and soon newspapers were required."

Lucien Febvre & Henri-Jean Martin

*The Coming of the Book, 1984*





## new needs

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Lucien Febvre & Henri-Jean Martin

*The Coming of the Book, 1984*







# evolutionary needs?

---

"The need for readily available information, which had been steadily rising, was accelerated by the advent of Christianity ..."

"The need to find information more rapidly than is possible in a papyrus-roll-form book initiated the development of the Greco-Roman codex in the second century ..."

-- Frederick Kilgour,  
*The Evolution of the Book*, 1998



# evolutionary response?

---

"Printed books evolved into  
better-designed packages of information."

-- Paul Grendel,  
*Cambridge History of  
Renaissance Philosophy* 1988



# cause or effect?

---

"glittering proof that a new information age was dawning in Europe, fuelled by the power of the printed word."

--Stephen Fry,  
*The Machine That Made Us. BBC 2008*

[veoh.com]

[youtube]

[library]



# overview

does technology drive history?

why history matters

intergenerational revolution

**revolution**

getting from one age  
to another

what's in an age?

when was that?

the “age of  
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# overview

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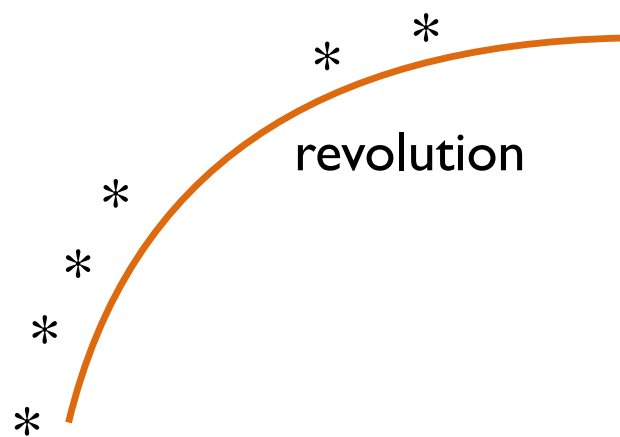
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# revolution

**what does it  
look like?**





# what does it look like?



John Evelyn  
1620–1706

## an English perspective:

- going round in circles: 1640-1660

## gaining direction? "Glorious Revolution" (1688)

"The Popists in offices lay down their  
Commissions and flie: **it looks like a  
Revolution.**"

-- John Evelyn, *Diary*, 1688

## coming round again:

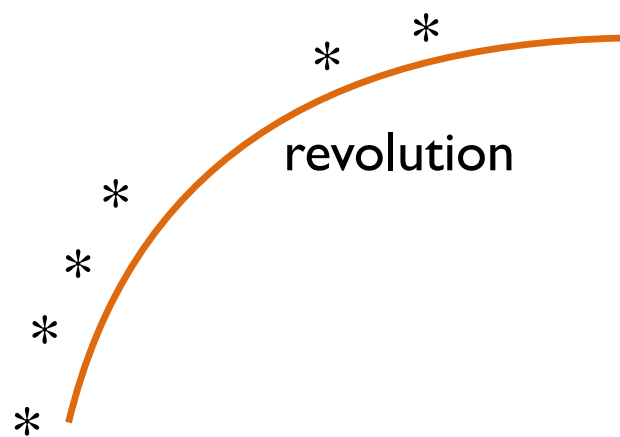
"a Pope/is summoned in, to crown an emperor ...  
the dog/Returning to his vomit ..."

--William Wordsworth, *Prelude*, 1805

2-Hof115-Age\_Of 32



William Wordsworth  
1770–1850



# round and round

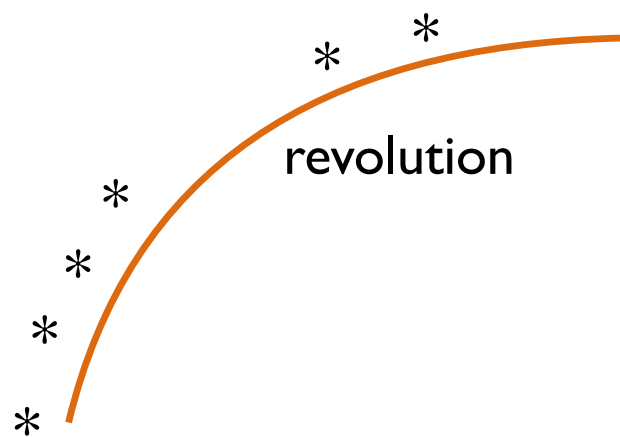


Ibn Khaldun  
1332–1406

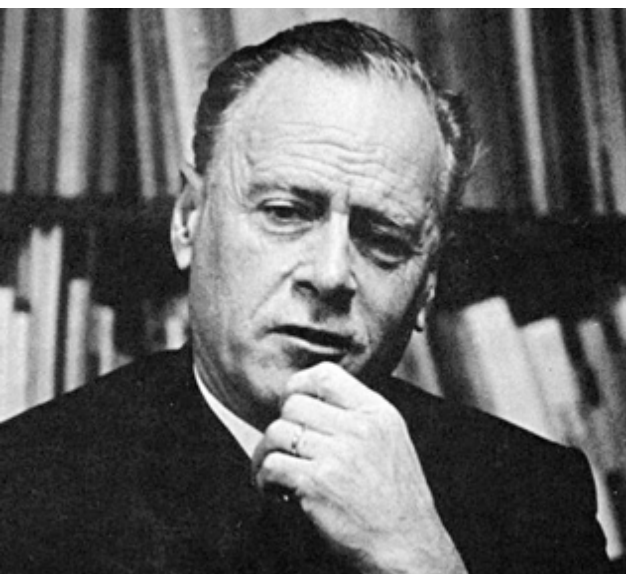
“Ibn Khaldun, the great fourteenth century north African sociologist developed a cyclical theory of Islam ... alternation between the city and the desert whereby warrior desert nomads sweep in on the decadent cities ... But they in turn become lax and decadent, and new conquest sweeps in from the desert.”

Michael Mann,  
*Sources of Social Power* vol 4, 2013





# still circling?

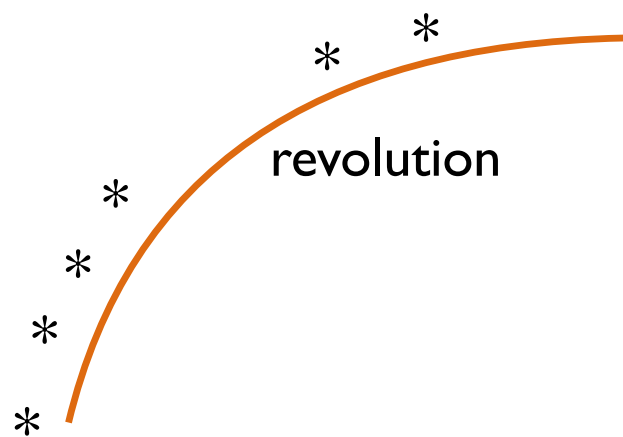


Marshall McLuhan  
1911-1980

new media "creates ... depth of involvement ...  
and human association that our preceding  
mechanical technology has destroyed.

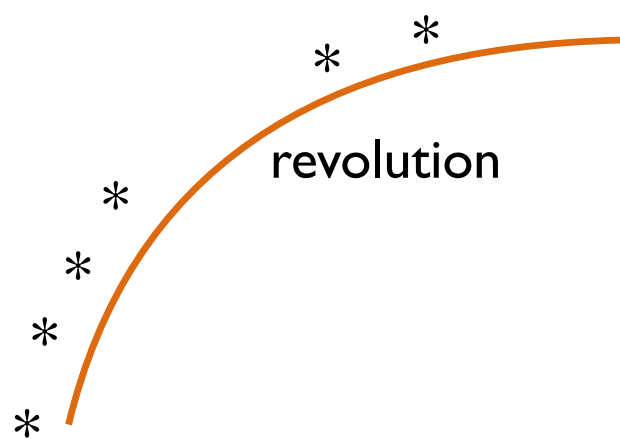
"... the causes of things begin to emerge to  
awareness again ... We return to the  
inclusive form ..."

McLuhan, *Understanding Media*, 1964

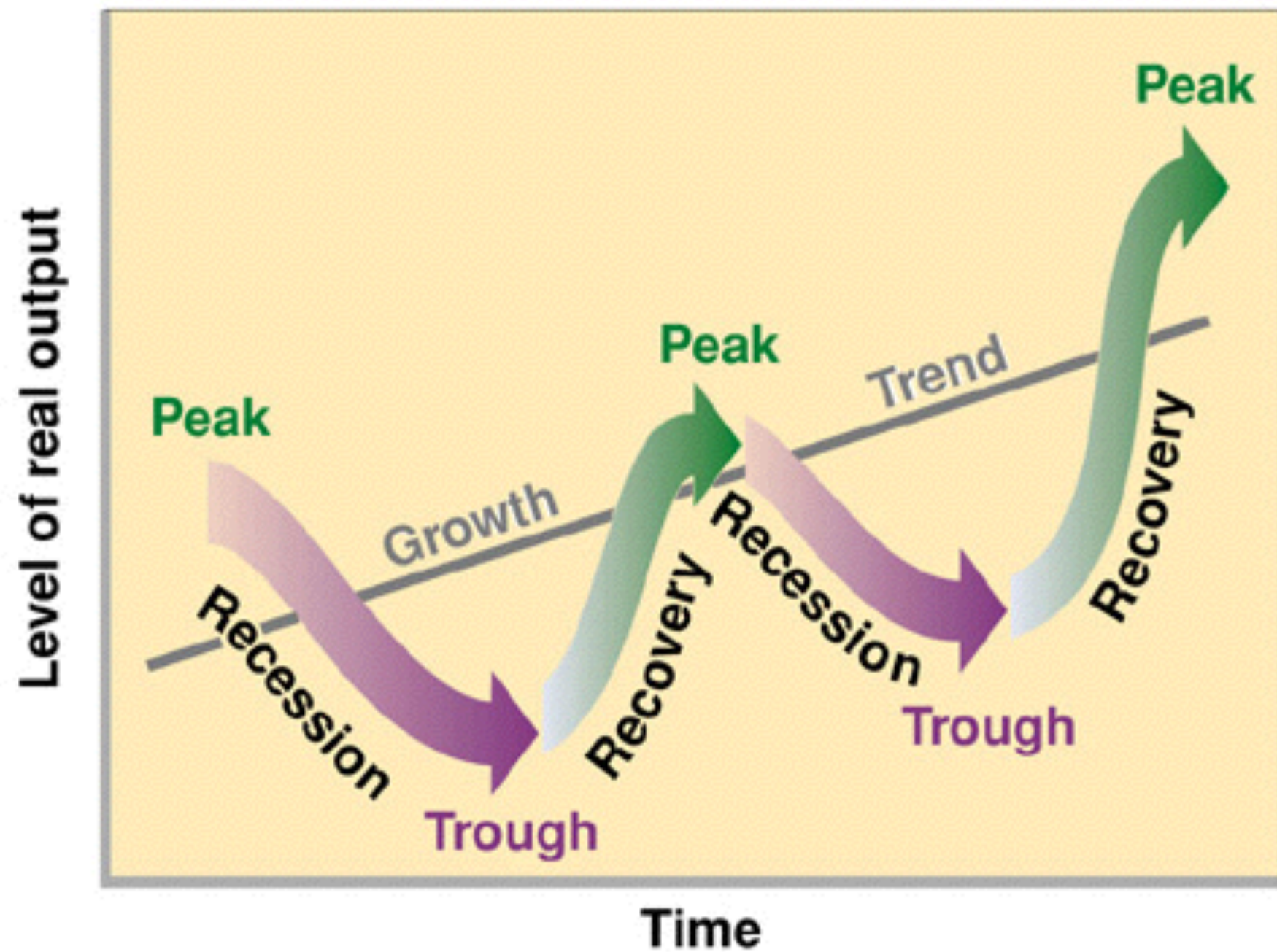


still?





still?

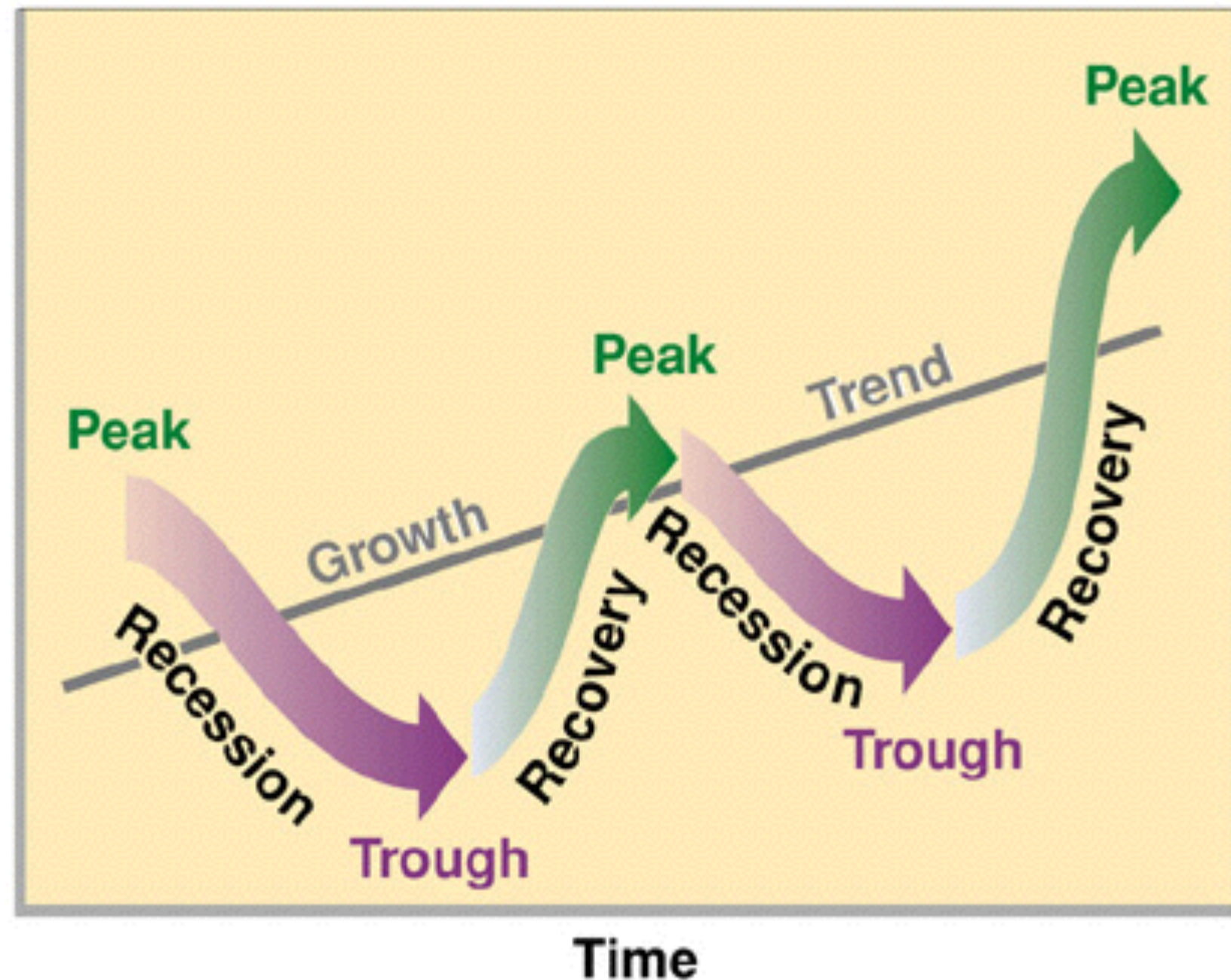


# Report says richest 1% will control most wealth by 2016

Kim Hjelmgaard, USA TODAY

5:23 p.m. EST January 19, 2015

Level of real output





revolution

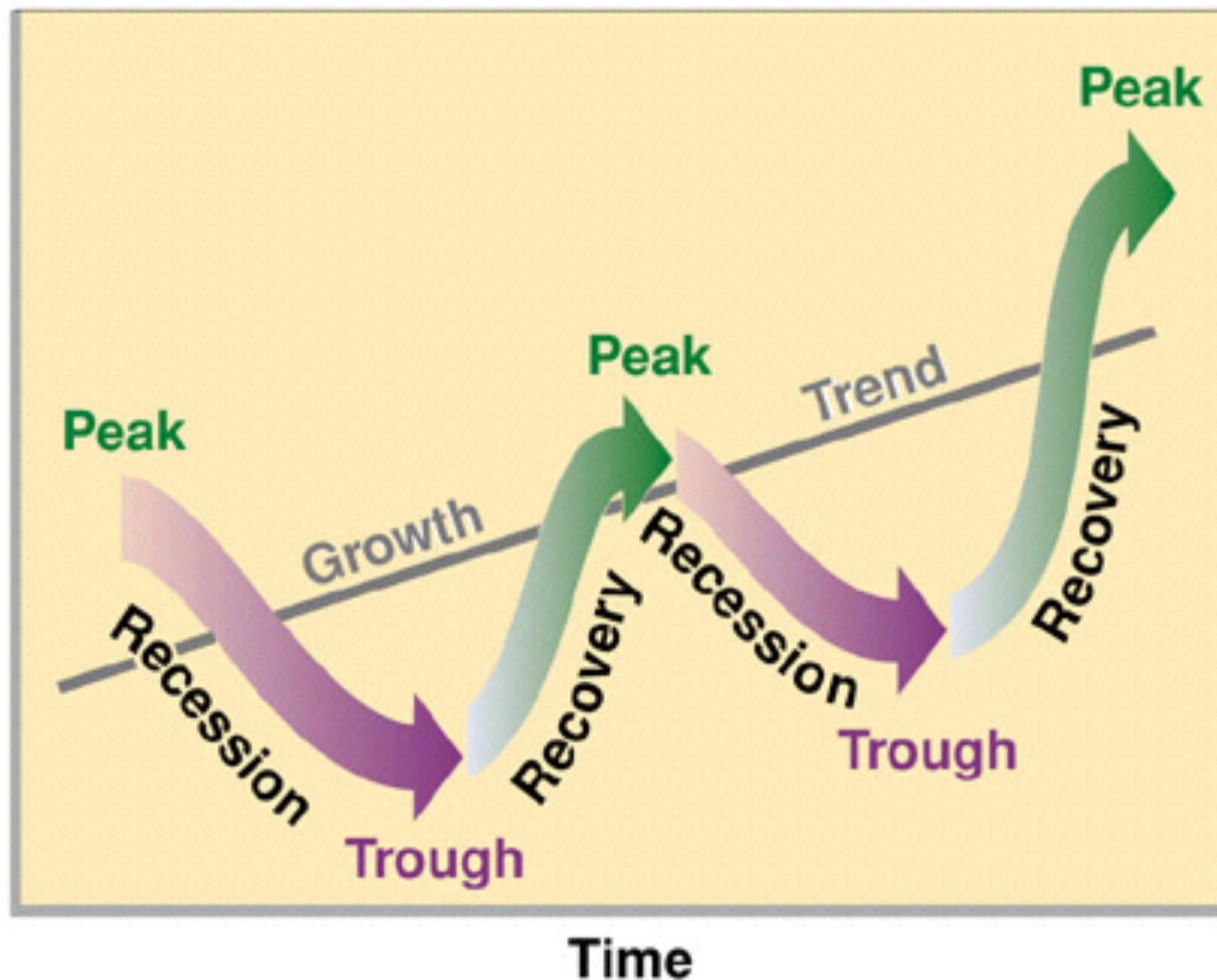
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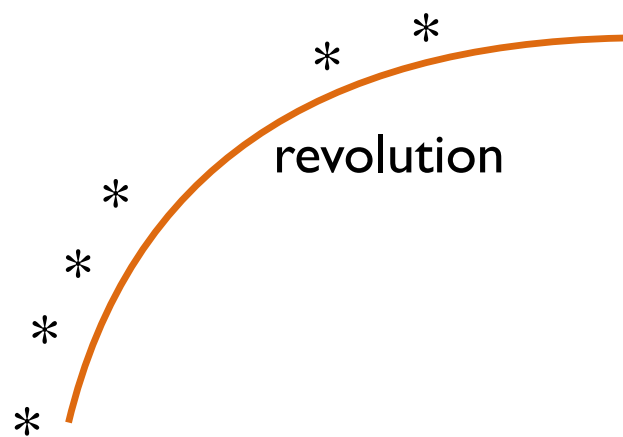
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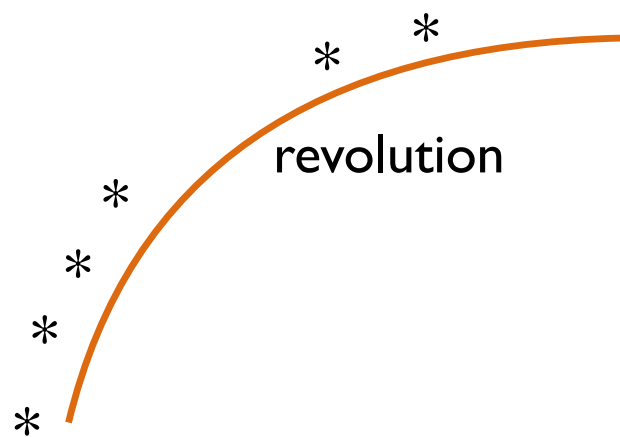
"not since the gilded age"

Level of real output





does it looke *alike*?



# does it looke *alike*?

**all much the same?**

English

American

French

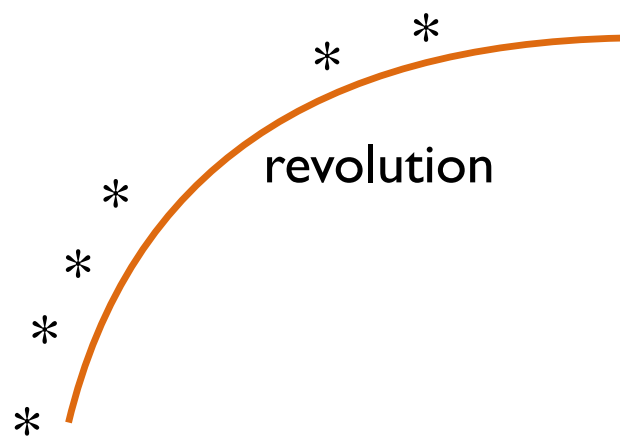
Haitian

Russian

Iranian

Tunisian/Egyptian/Syrian ...

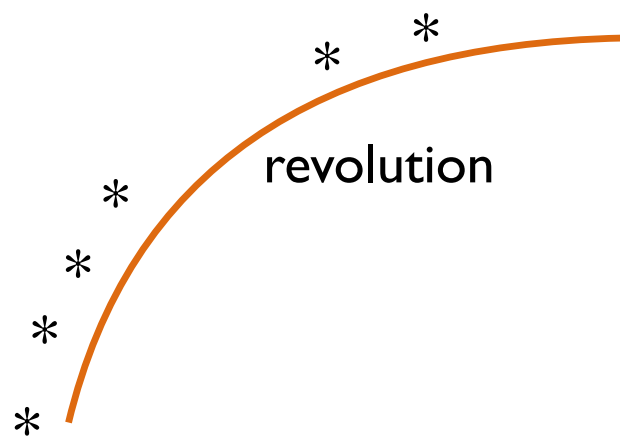




# which does it look like?

"The global communication revolution can be the first revolution in history that has no losers."

C. Michael Armstrong,  
CEO, AT&T

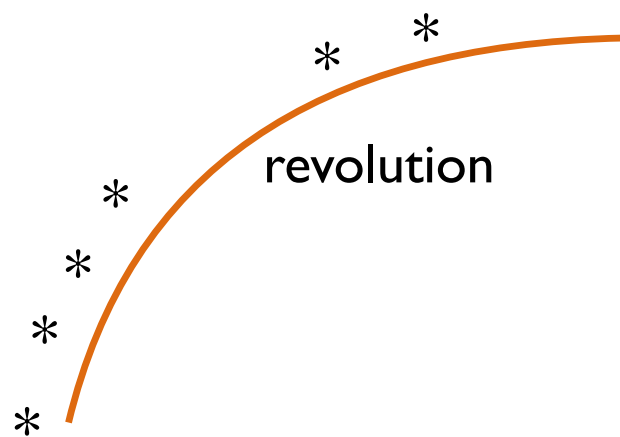


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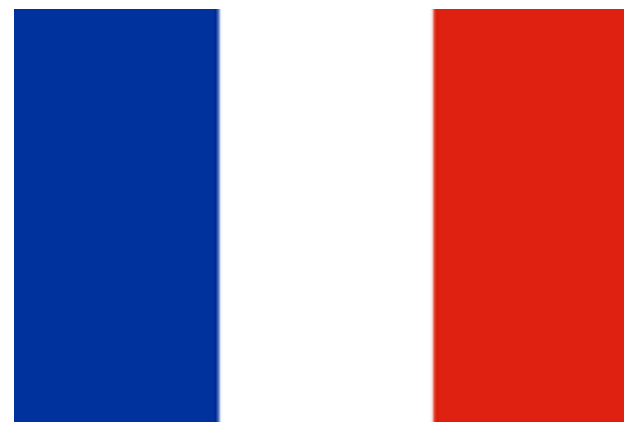


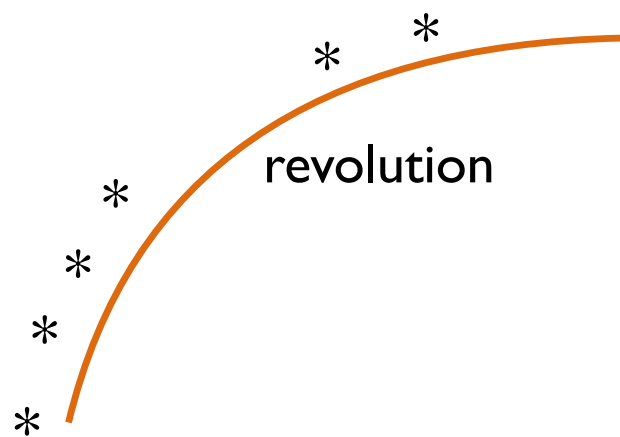


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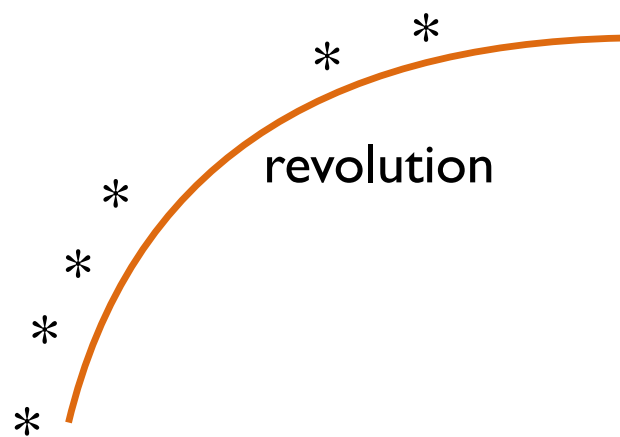


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--Jacques Ellul,  
*Autopsie de la Revolution, 1969*

# permanent revolution?

## PREFACE

*R*évoltes, révolutions, émeutes, rébellions, émotions, guerres civiles, coups d'État, l'histoire entière en est tissée<sup>1</sup>. La vie de l'homme en est faite. Non point accident mais constante, non

1. L'histoire en est tissée... Prenons quelques exemples : le XVII<sup>e</sup> siècle : 1601 à 1610, « le temps des troubles » série de révoltes en Russie; 1610, révolte des Sikhs; 1620-1630, révolte chinoise contre les Mings; 1631, soulèvement de Dijon et d'Aix-en-Provence; 1635, soulèvement de Bordeaux; 1636, révolte des Croquants; 1637, révolte d'Awa Kousa au Japon; 1639, révolte des Nu-pieds; 1640 à 1644, révoltes contre les Mings, aboutissant à la chute de la dynastie; 1640, révolte de la Catalogne contre l'Espagne qui ne s'achève qu'en 1652; et la même année, 1640, débute aussi la révolution du Portugal, qui restera, latente ou explosive, permanente jusqu'en 1668; 1641, année de troubles très généralisés, révoltes paysannes en Irlande, Suisse, Allemagne, Russie; 1643, révolte du Rouergue; 1645, révolte de Montpellier; 1647, révolte de Masaniello à Naples, contre le vice-roi espagnol, pendant un an; 1648 est également une année forte pour les révolutions : révolution d'Angleterre commencée en 1640 mais qui se développe de 1648 à 1653 tout particulièrement, et dont on a dit qu'elle était peut-être « la première grande révolution bourgeoise des temps modernes »; la Fronde en France, de 1648 à 1652; l'insurrection d'Ukraine, de 1648 à 1654; les émeutes populaires en Russie, dans cette même année, à Moscou, Koslov, Tomsk, etc.; la révolte hindouiste des Mahrattes contre les envahisseurs mongols, toujours en 1648; en 1649, la révolte de Moscou qui reprend; 1650, émeute de Novgorod et coup d'État de Guillaume de Hollande; 1653, guerre paysanne de Suisse; 1662, révolte du Boulonnais, révolte de Moscou pour un problème monétaire; 1664-1670, la grande rébellion d'Audijos; 1670-1671, la grande révolte de Stenka Razin et le soulèvement paysan de Bohême;

point trouble mais mouvement apporté dans le cours paresseux de l'histoire.

Il n'y a pas un exceptionnel de la révolution opposé à un normal ou à une règle de la vie des peuples, des pouvoirs, des civilisations. Ne nous contentons pas des schémas historiques qui nous parlent de 1649, de 1785, de 1917 : alors, scrutant les événements d'un peu plus près, voici que nous constatons dans les faits cette permanence de la révolution parmi les hommes. Il est vain de chercher une division entre des périodes calmes et des périodes troublées. La révolution est moins la locomotive que l'un des éléments de la chaîne invisible du tissu des civilisations.

Mais nous nous trouvons immédiatement arrêté par un souci formel de définition. Que disons-nous au travers de ce mot révolution? Qu'entendra l'autre dans ces quatre syllabes? « Le devoir de tout chrétien est d'être révolutionnaire », proclama Camilo

1673 à 1681, le soulèvement considérable du nord-est de la Chine; 1675, nouvelle année d'abondance : révoltes dites du papier timbré en Bretagne et à Bordeaux, accroissement des rébellions sikhs et mahrattes, et aussitôt après la révolte religieuse des Camisards; 1679, la révolution d'Irlande.

Prenons une autre période : de 1770 à 1850. Là encore nous constatons émeutes, rébellions, révoltes, révolutions dans le monde entier. 1768, révolution démocratique de Genève; 1770 à 1783, la révolution américaine, à la suite de sa guerre contre la Grande-Bretagne; 1772, révolution royale en Suède; 1780 à 1783, révoltes multiples en Angleterre et en Irlande, grande révolte des Indiens du Pérou; 1781, insurrection de Nouvelle-Grenade, révolution à Fribourg, et de nouveau à Genève en 1782; 1783 à 1787, révolution aux Provinces-Unies avec diverses orientations; 1787-1790, révolution des Pays-Bas autrichiens; 1788-1794, révolte de Guyane, révolution polonaise; 1789, début de la révolution française, démocratisation du régime en Suède; 1791, révolution polonaise; 1792, reprise de la révolution belge et révolution rhénane, révolte généralisée dans les Antilles; 1794, émeutes en Irlande; 1795, révolution en Hollande et à Genève, émeutes à Londres, Birmingham, etc., à Constantinople, à Smyrne; 1796, révolution dans les États italiens; 1797, mutinerie des flottes anglaises; 1798, révolution en Suisse et en Irlande; 1799, révolte des îles Ioniennes et de Malte; 1810, révolution des colonies espagnoles qui s'achèvera par la reconnaissance de leur indépendance en 1825; et de 1810 également à 1829, guerre pour l'indépendance des peuples balkaniques; 1820, révolution d'Italie, et d'Espagne; 1821, révolution grecque, et 1830, grande flambée révolutionnaire en France, en Belgique, en Pologne... en attendant 1848.



--Jacques Ellul,  
*Autopsie de la Revolution, 1969*

# permanent revolution?

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- 1639 France: Nu-pieds
- 1640-44 China: against the Ming
- 1640 Spain: Catalonia
- 1640-88 Portugal (against Spain)
- 1641 Ireland, Switzerland, Germany, Russia
- 1643 France: Rouergue
- 1645 France: Montpellier
- 1647 Italy: Naples (against Spain)
- 1648-54 England
- 1648 France: Fronde
- 1648-54 Ukraine, Moscow, Koslov, Tomsk; Maharatta (Hindus against Mongols)
- 1649 Russia: Moscow
- 1650 Russia: Novgorod; Holland
- 1653 Switzerland
- 1653 Russia: Moscow
- 1664-70 France: Audijos
- 1670-71 Russia/Azerbaijan: Stenka Razin; Bohemia
- 1673-81 China
- 1675 France: Brittany, Bourdeaux, Camisards; India: Sikhs,
- 1679 Ireland



# overview

why history matters

intergenerational revolution

revolution

getting from one age  
to another

what's in an age?

when was that?

the “age of  
information”





# overview

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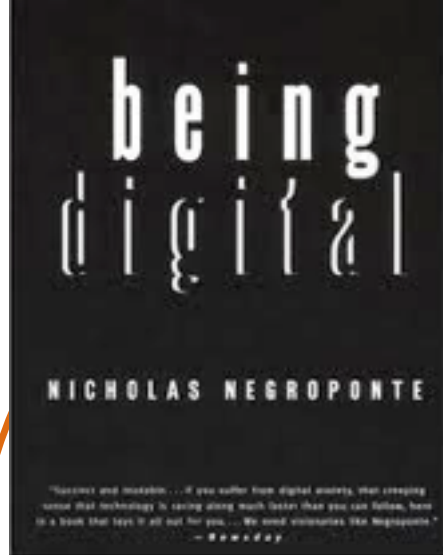
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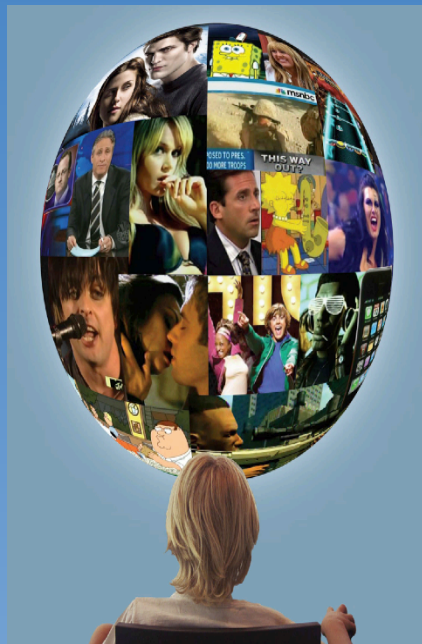


# short durée?

## digital natives

"Today's students think and process information fundamentally differently, and these differences...run much deeper than most educators would like to have it."

--Edith Ackermann,  
"Anthropology of Digital Natives" 2008







# The Children of Cyberspace: Old Fogies by Their 20s

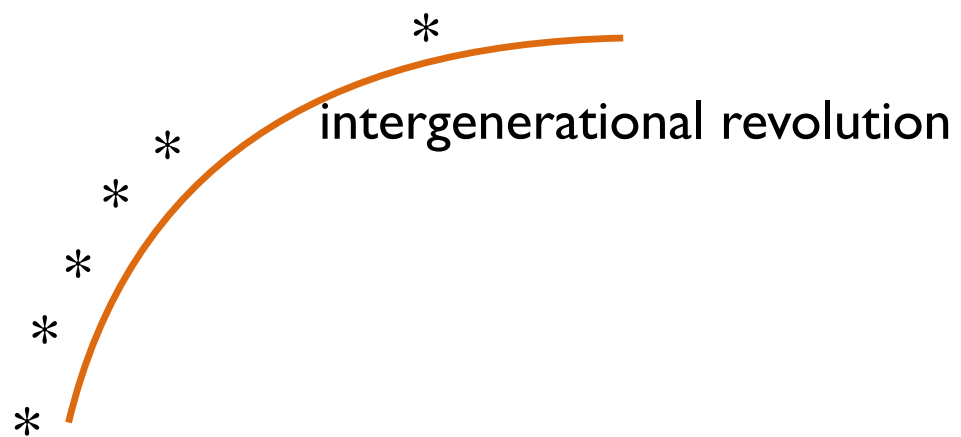
By BRAD STONE

Published: January 9, 2010

## newly new

---

"I've begun to think that my daughter's generation will also be utterly unlike those that preceded it. Researchers ... theorize that the ever-accelerating pace of technological change may be minting a series of mini-generation gaps. ... 'People two, three or four years apart are having completely different experiences with technology,' said Lee Rainie, director of the Pew Research Center's Internet and American Life Project. 'College students scratch their heads at what their high school siblings are doing, and they scratch their heads at their younger siblings. It has sped up generational differences.' "



# permanent revolution?

**children of the depression**

**baby boomers**

**generation x**

**generation y**

**generation  $m^1$**

**generation  $m^2$**

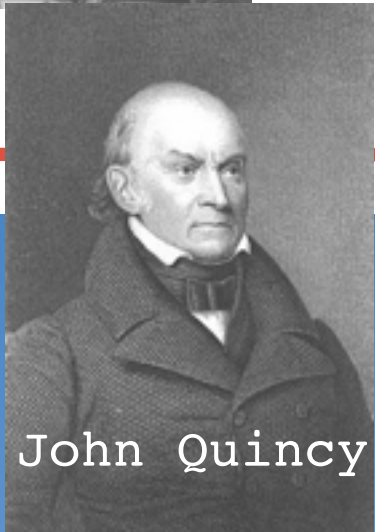
**... generation  $m^n$**



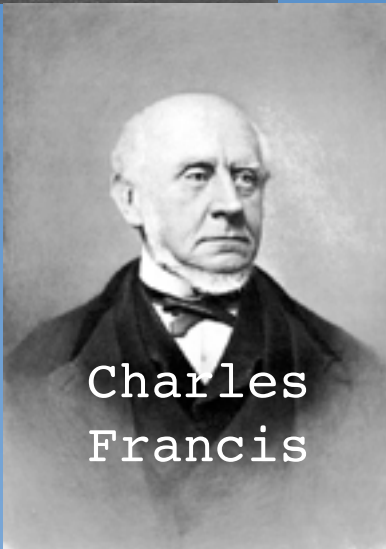
John

intergenerational revolution

# looking back —the Adams family



John Quincy



Charles  
Francis



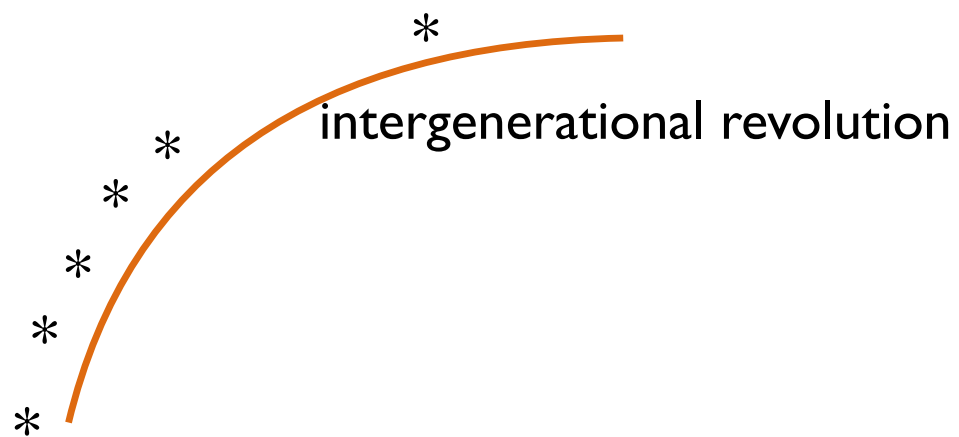
Henry  
Adams

1838–1918

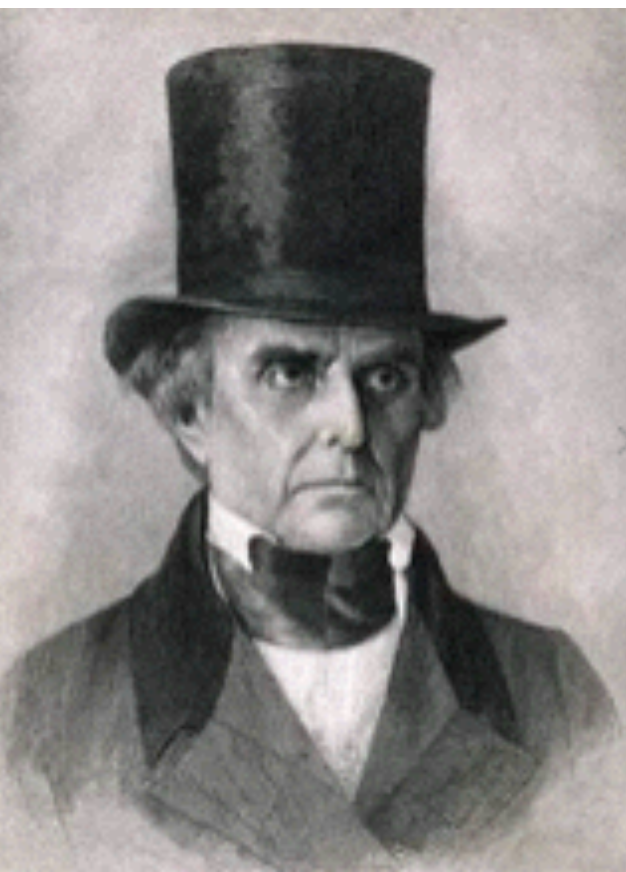
"Only on looking back ... at his own figure in 1854, and pondering on the needs of the twentieth century, he wondered whether, on the whole, the boy of 1854 stood nearer to the thought of 1904, or to that of the year 1 ... in essentials, the American boy of 1854 stood nearer to the year 1 ... Before the boy was six years old he had seen four impossibilities made actual--the ocean-steamer, the railway, the electric telegraph, and the Daguerreotype."

--Henry Adams,  
*The Education of Henry Adams* [1905]

2-Hof115-Age\_Of 43



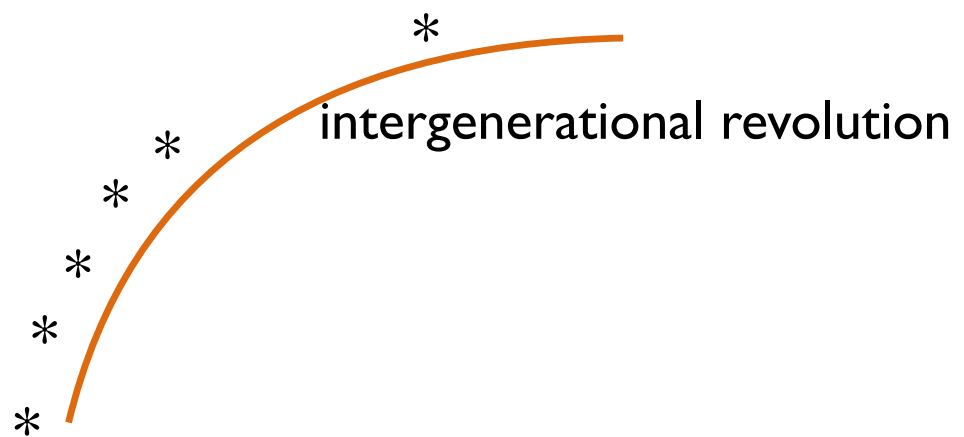
# 1854, or was it 1847?



Daniel Webster  
1782–1852

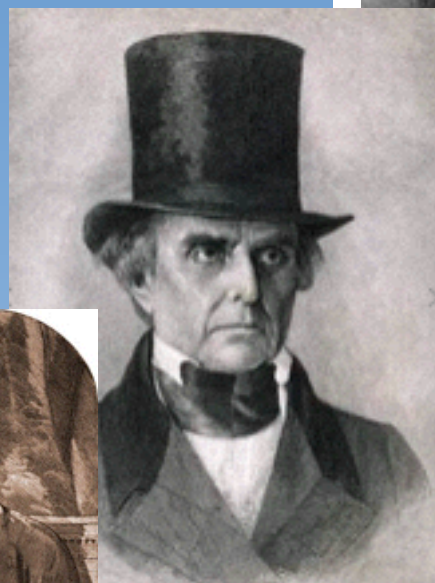
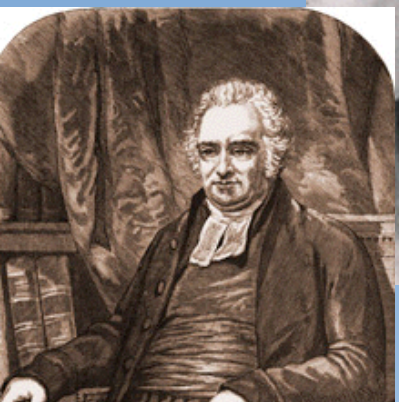
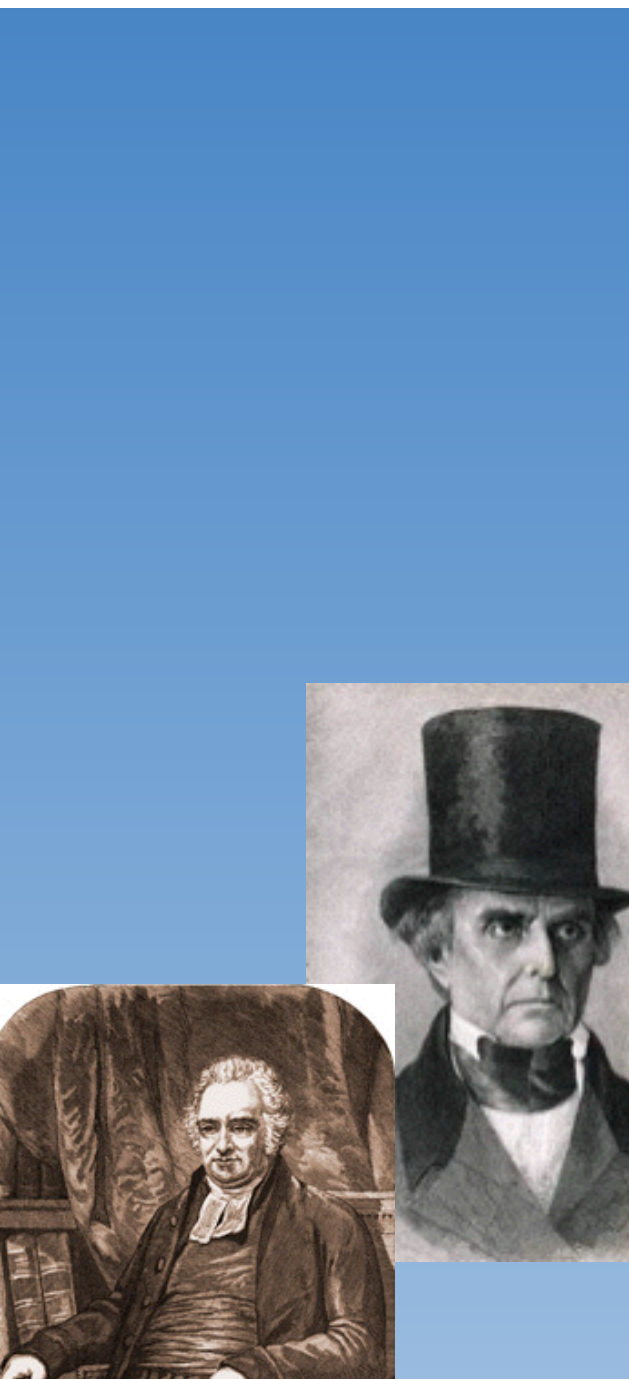
“the age is remarkable for scientific research. ... The ancients saw nothing like it. The moderns have seen nothing like it till the present generation. We see the ocean navigated and the solid land traversed by steam power, and intelligence communicated by electricity. Truly this is a miraculous era.”

—Daniel Webster, “*Dedication of the Northern Railroad*,” 1847.



**who's wrong?**

**and what's odd?**







# overview

---

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intergenerational revolution

revolution

getting from one age  
to another

what's in an age?

when was that?

the “age of  
information”



# overview

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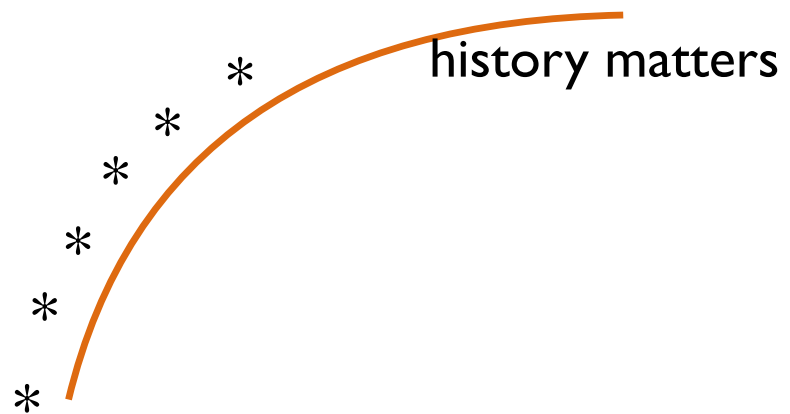
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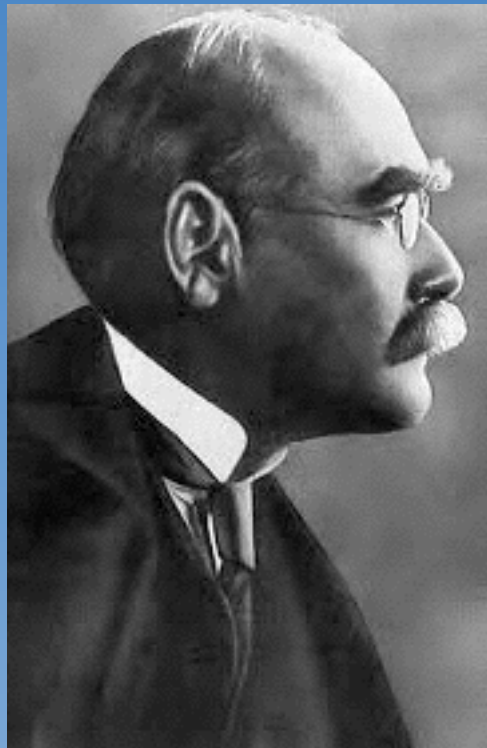
the “age of  
information”



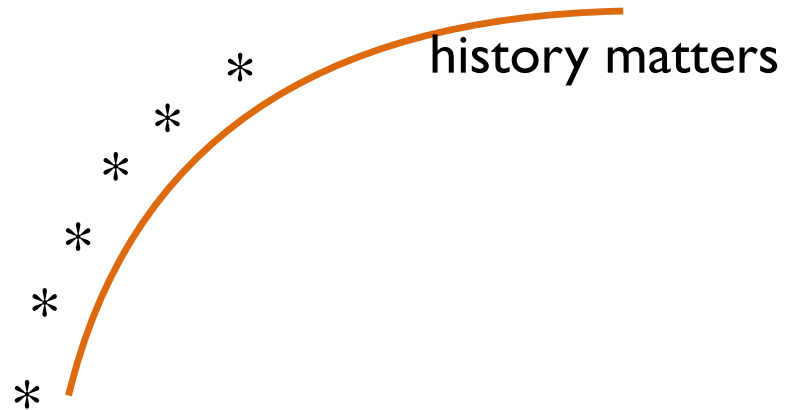
# looking back to find ourselves

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**the same? different? better? worse?**  
**how would we know?**



Rudyard Kipling  
1865–1936



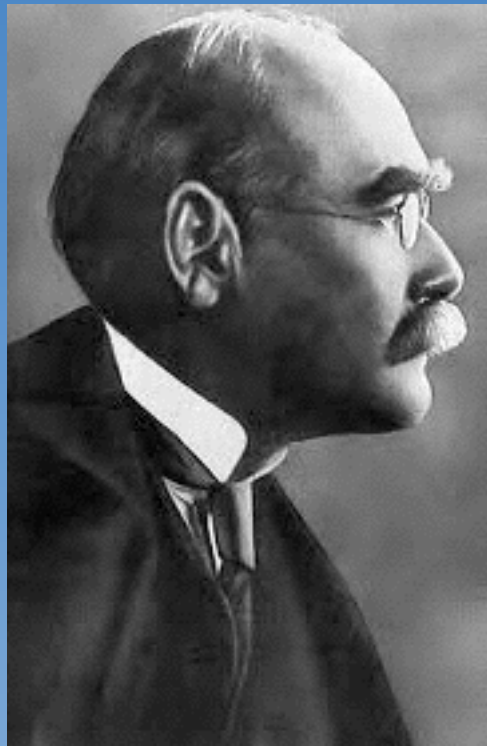
# looking back to find ourselves

**the same? different? better? worse?**  
**how would we know?**

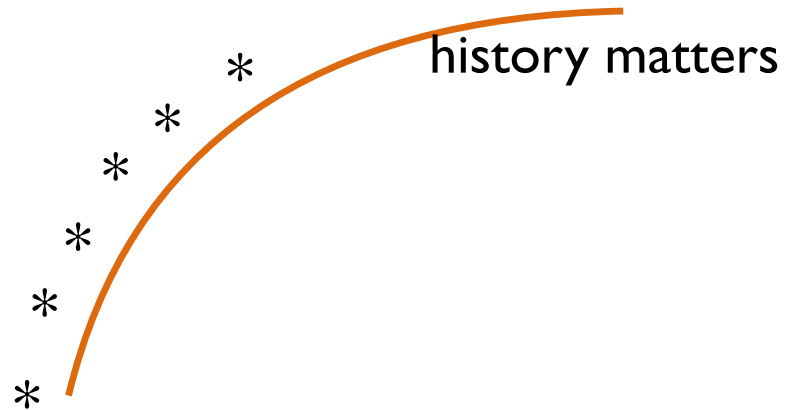
"What should they know of England  
Who only England know?"

-- Rudyard Kipling

*"The English Flag," 1899*



Rudyard Kipling  
1865–1936



# looking back to find ourselves

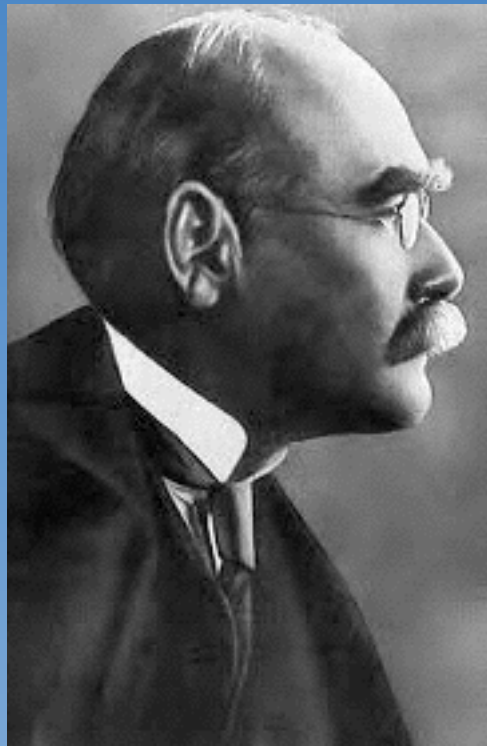
**the same? different? better? worse?  
how would we know?**

"What should they know of England  
Who only England know?"

-- Rudyard Kipling

*"The English Flag," 1899*

**what should we know of our "age"  
who . . .?**



Rudyard Kipling  
1865–1936





# dangerous pastime?

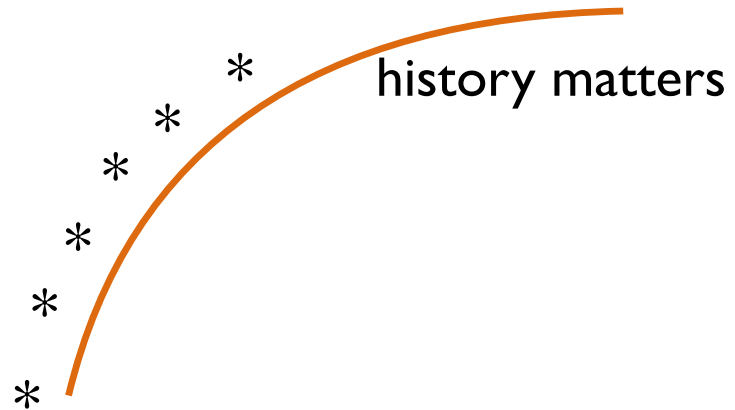
"Mao urged the emulation of ... an emperor [Qin Shi Huang] who had advocated eliminating anyone who used history to criticise the present. .... [Huang] 'buried 460 scholars but we buried 46,000.'"

James C. Scott, "Tyranny of the Ladle," 2012

**hence**

*talk of revolution, transformation, rupture, coupure, 2.0*





# and a challenging pastime?

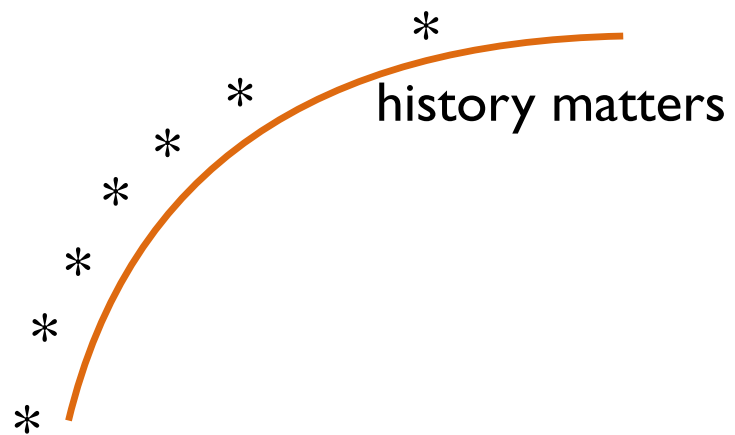
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## like learning cricket?

"The past is a foreign country.  
They do things differently there."

--L.P. Hartley,  
*The Go-Between*, 1953





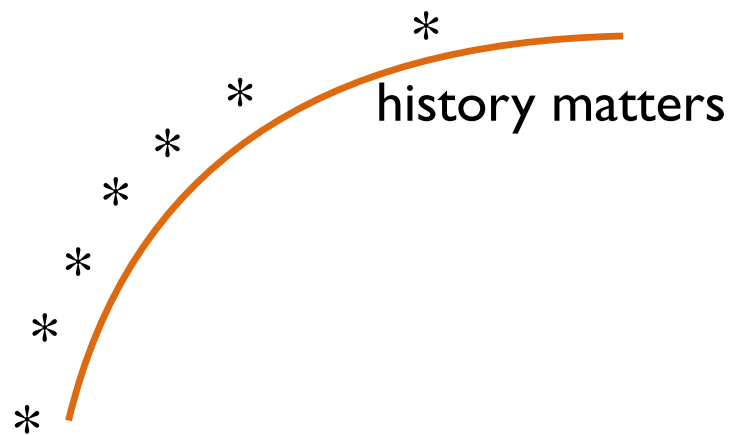
# central themes

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## **beyond presentism**

"The real, central theme of history is not what happened, but what people felt about it when it was happening"

-- George M. Young,  
*Victorian England: Portrait of an Age*, 1960



# central themes

## **beyond presentism**

"The real, central theme of history is not what happened, but what people felt about it when it was happening"

-- George M. Young,  
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Plato  
Trithemius  
Erasmus  
Sprat  
Addison  
Steele  
Knox  
Johnson  
Harrison  
Morse  
Babbage  
Lovelace  
Bell  
Marshall  
Bush  
Riefenstahl  
Capra



# coming up: what's the role of tech?

"Wired's  
patron saint"



Stanford,  
California  
& Cambridge,  
England

1973

## tech change — 50 years on

WEEK 2

### 27 Jan: Technological Determinism

#### *Required Reading*

McLuhan, Marshall. 1964. *Understanding Media*. New York: McGraw-Hill.

*Read:* "Preface to Third Printing" (pp. v-x), and "Introduction" & "The Medium is the Message" (pp. 3-21).

*Source:* Course reader

Williams, Raymond. 1974. *Television and Cultural Form*. New York: Schocken Books.

*Read:* Chapter 1, introduction and sections a & b, pp. 9-19; & chapter 5, section c, pp. 126-128.

*Source:* Course reader





Why TV in 1960s and 70s? "Television has now been a ... service for a whole generation" — Williams

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**due via bspace 5 pm Sunday Jan 24**

- answer the questions
- provide citations
- proofread your answer

## assignment

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McLuhan writes that "any technology gradually creates a totally new human environment" [vi] and "any child can list the effects" [vii] of new technologies, which are "irresistible and unavoidable." Williams argues that such a list would be "superficial" [1] or even "ludicrous" [121]. Choose any technology from a list a child might make today, discuss its assumed effects, and use it to argue either for McLuhan or for Williams.