

PINO TROGU – SAN FRANCISCO STATE UNIVERSITY

THE FOUR-SECOND WINDOW

HOW THE TIME CONSTRAINT OF WORKING MEMORY
AND OTHER PSYCHOLOGICAL PRINCIPLES
DETERMINE THE SUCCESS OF A GRAPHIC DESIGN.

DRS // CUMULUS – OSLO, NORWAY
THE 2ND INTERNATIONAL CONFERENCE
FOR DESIGN EDUCATION RESEARCHERS
16 MAY 2013

[go to last slide](#)

The doctor opened the seals with great care, and there fell out the map of an island, with latitude and longitude, soundings, names of hills, and bays and inlets, and every particular that would be needed to bring a ship to a safe anchorage upon its shores.

— *Robert Louis Stevenson*

CONVENTION

to, or resembling, a conventicle.

con-ven'tion (kŏn-vĕn'shŭn), *n.* [F. or L.; F. *convention*, fr. L. *conventio*. See **CONVENE**.] **1.** Act of convening; specif.: **a** *Obs.* A coming together or meeting. **b** A summoning or meeting of an assembly. **c** *Obs.* Act of summoning before a judge or other official. **d** Union or assemblage; — of things.

2. A body or assembly of persons met for some common purpose; esp., a formal and special or occasional assembly of delegates, representatives, members of an estate or party, or the like, met to accomplish some specific civil, social, political, ecclesiastical, or other important object; as, the *convention* of a political party.

3. Agreement or an agreement; specif., an agreement enforceable in law; a contract; covenant.

4. General agreement or concurrence, as the basis of any custom, opinion, or the like, or as embodied in any accepted standard, method, usage, or the like; hence, arbitrary or inflexible custom; fixed usage; conventionality; as, slaves to *convention*. "There are thousands now Such women, but *convention* beats them down." *Tennyson*.

5. A rule or usage based upon general agreement; a rule or practice generally adhered to; an arbitrary or inflexible rule, form, principle, etc., as in an art; a conventionalism; as, the *conventions* of morality or of everyday life.

A *convention* is essentially a theory of conduct. *W. Lippmann*.

6. Card Playing. A practice to which by general agreement a particular significance is attached.

7. Eng. Hist. An assembly of the Parliament (**Convention Parliament**) held without the king's writ, esp. the assembly of 1660 which restored Charles II to the throne, and that of 1688 which declared the throne to be abdicated by James II.

8. Fine Arts. A representation, or mode of representing, recognized by general practice as a substitute for an imitation of nature, as in arabesques or in the dramatic aside.

9. [*cap.*, with *the*] *F. Hist.* = NATIONAL CONVENTION.

10. Law. **a** *Eng.* Conventional tenure. **b** *Internat. Law.* An agreement between states or sovereigns; as a treaty, or, more usually, an agreement less formal or more specific than a treaty, by which several states arrange for the regulation of matters affecting all of them, as postage, copyright, the conduct of war, etc.

11. Mil. A compact between commanders of armies in respect to military operations.

12. U. S. Hist. & Govt. Any one of various special assemblies either self-convened or met under statutory or other authority. For specific conventions see ALBANY CONVENTION; CONSTITUTION, 6; etc.

Syn. — Assembly, meeting, gathering; usage, custom.

con-ven'tion-al (-ăl; -'l), *adj.* [LL. *conventionalis*.] **1.**

COGNITION

of cognates. See **COGNATE**, *n.*; cf. **MATRIARCHY**.

2. Kindred or blood relations; cognates. *Obs.*

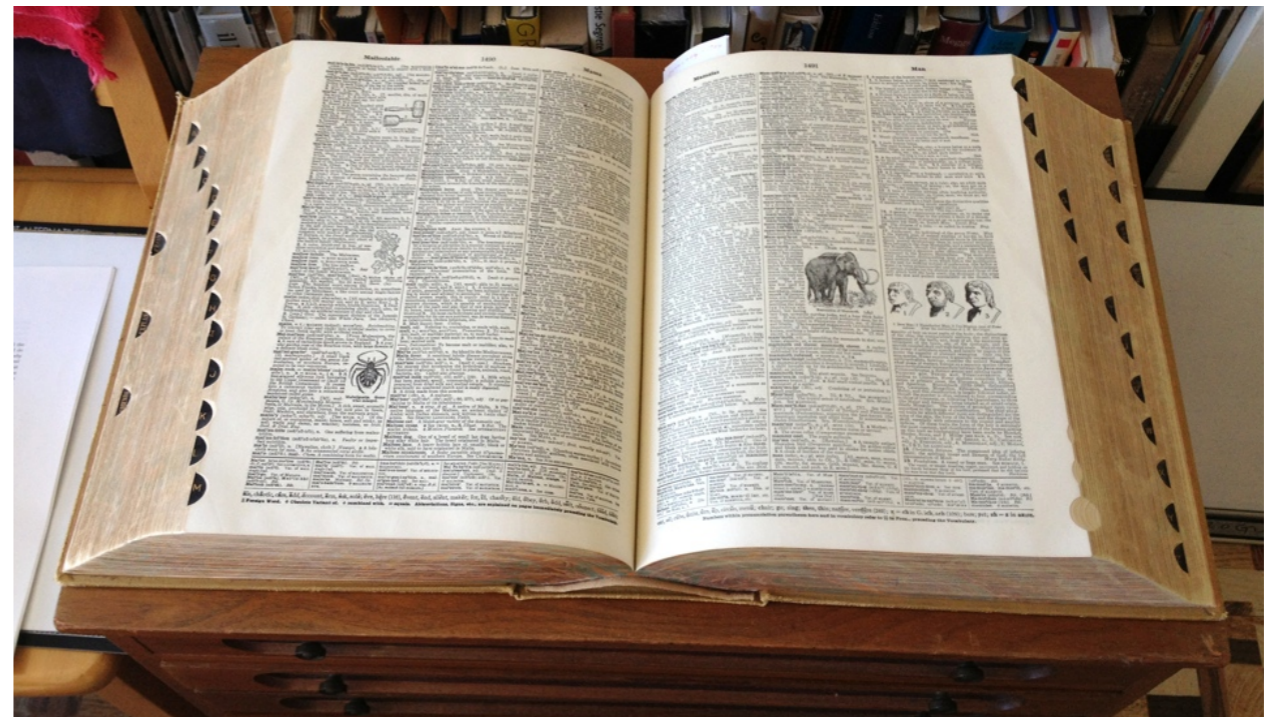
cog-ni'tion (-nĭsh'ŭn), *n.* [L. *cognitio*, fr. *cognoscere*, *cognitum*, to become acquainted with, to know, fr. *co-* + *noscere*, *gnoscere*, to get a knowledge of. See **KNOW**.] **1.** Act or faculty of knowing; knowledge; perception. *Obs.*

2. a The process of knowing; any mental operation by which we become aware of objects of thought or perception; knowledge or the capacity for it. **b** A product of this process, as a perception or notion; as, a priori *cognitions*.

3. Law. **a** *Chiefly Scots Law.* Cognizance or jurisdiction. **b** *Scots Law.* Act or process of cognoscing; judicial examination or trial; adjudication of rights.

cog'ni-tive (kŏg'nĭ-tĭv), *adj.* **1.** Of or pert. to cognition. **2.** Possessing or characterized by cognition.

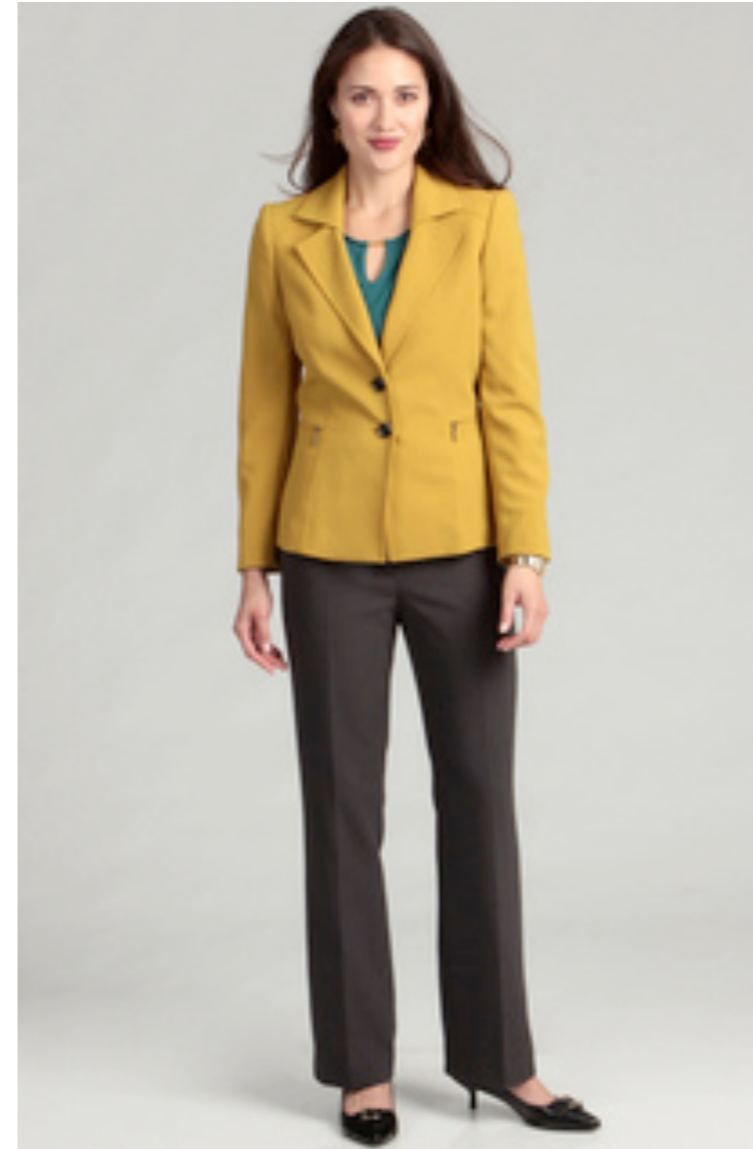
— **cog'ni-tive-ly**, *adv.*

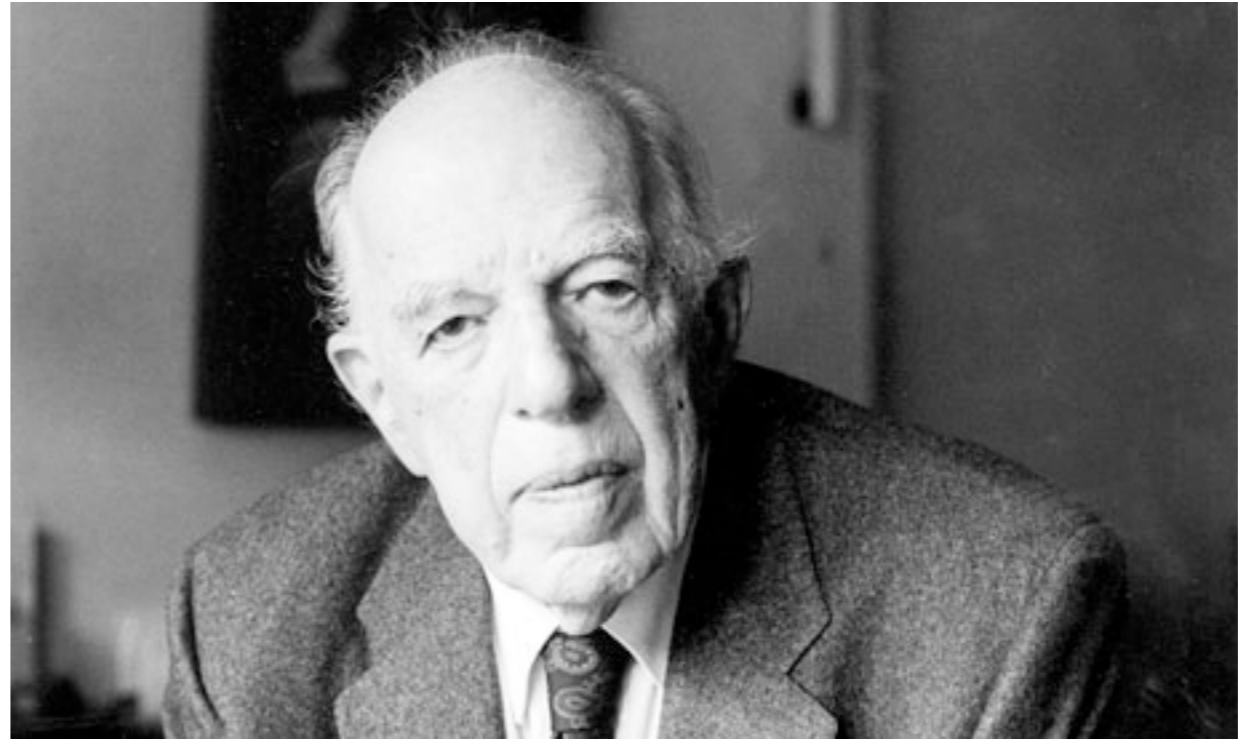


DESIGN RECIPES?

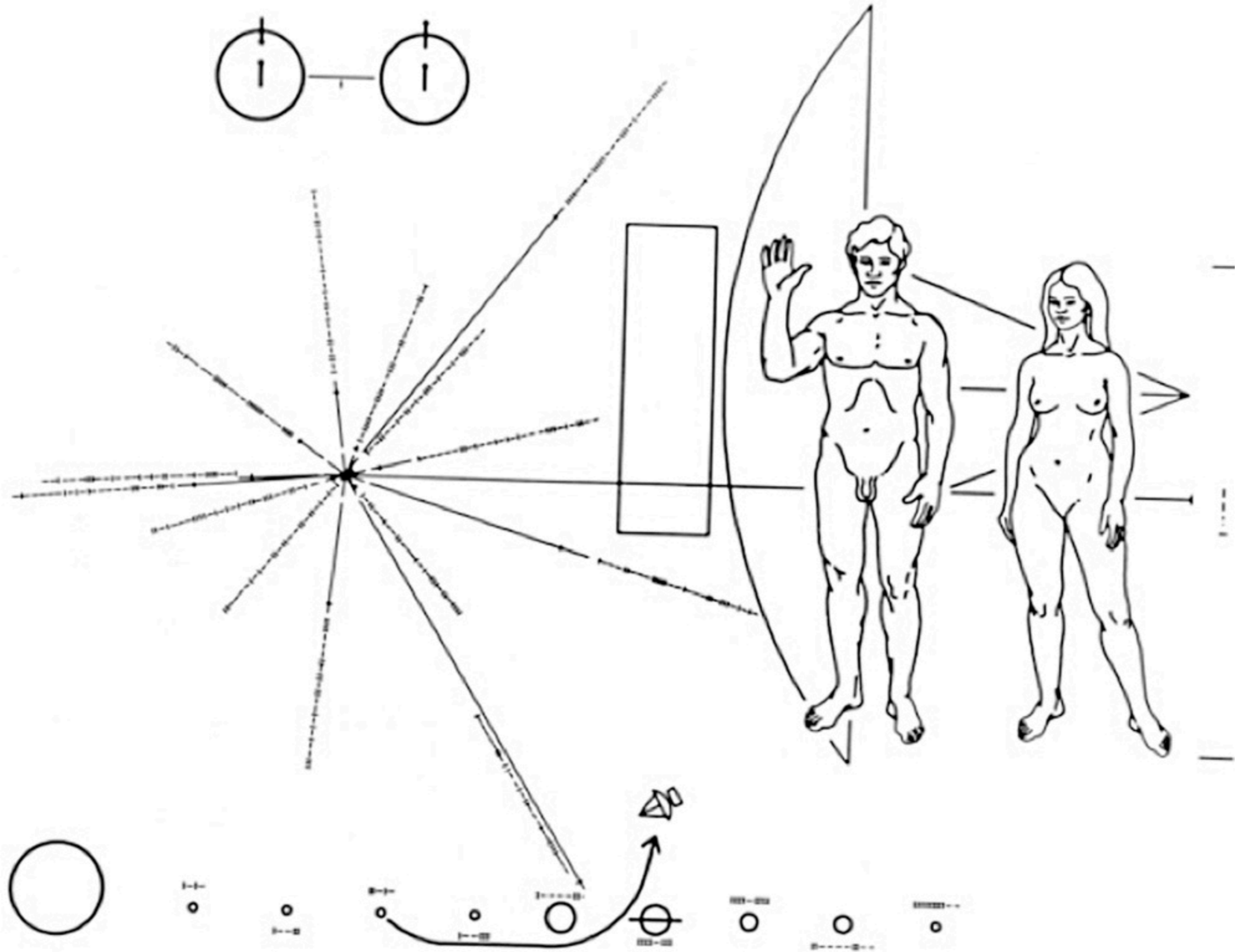


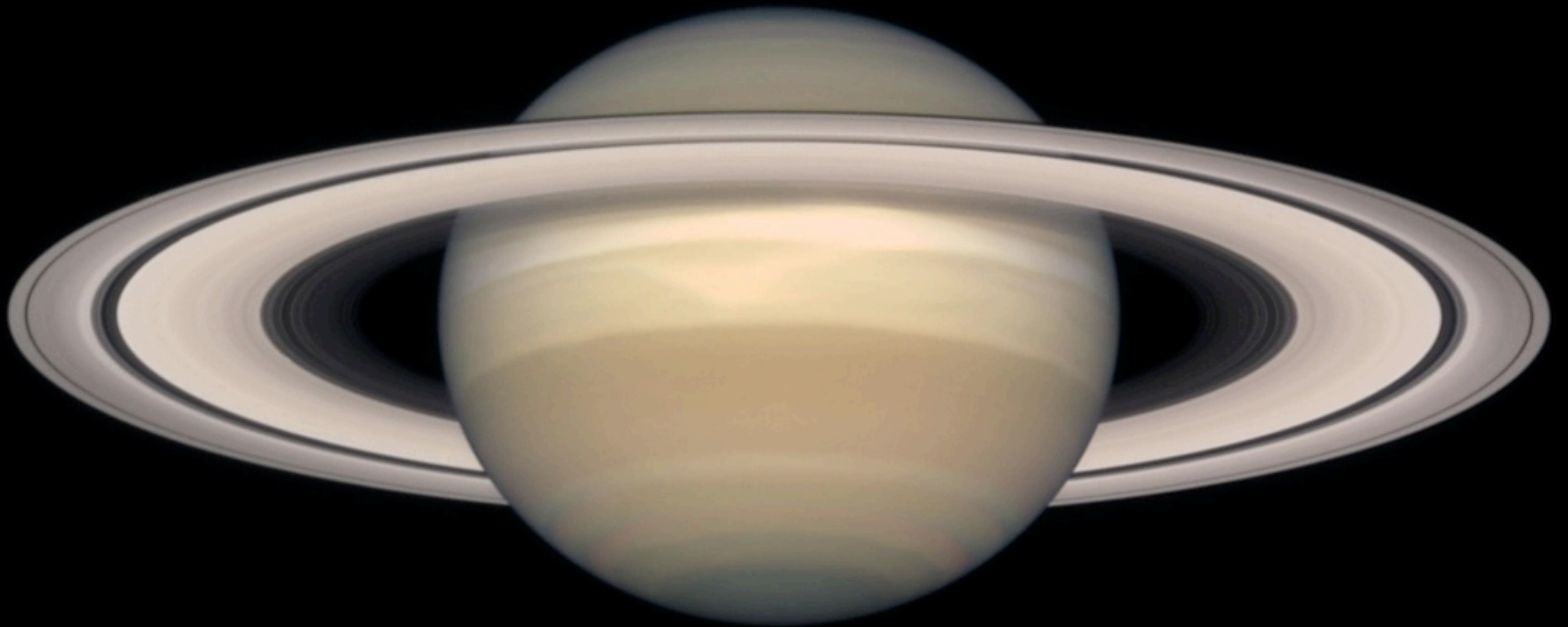






ERNST GOMBRICH
THE IMAGE AND THE EYE, 1982

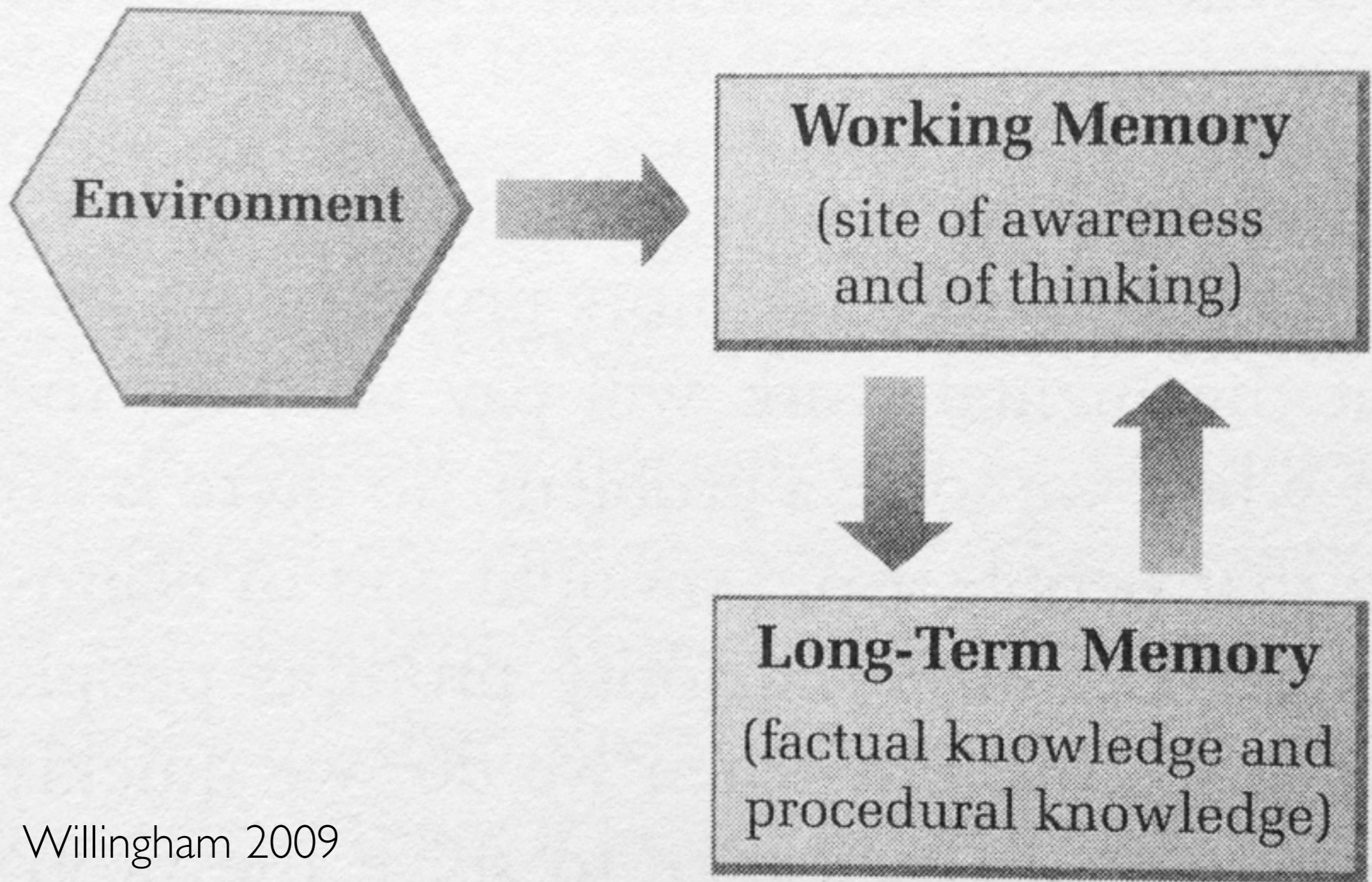




SKILLS & CRAFTS
SPECIFIC
METHODS

THEORIES
GENERAL
PRINCIPLES

WORKING MEMORY



Willingham 2009



FIGURE 6: Just about the simplest model of the mind possible.

WORKING MEMORY



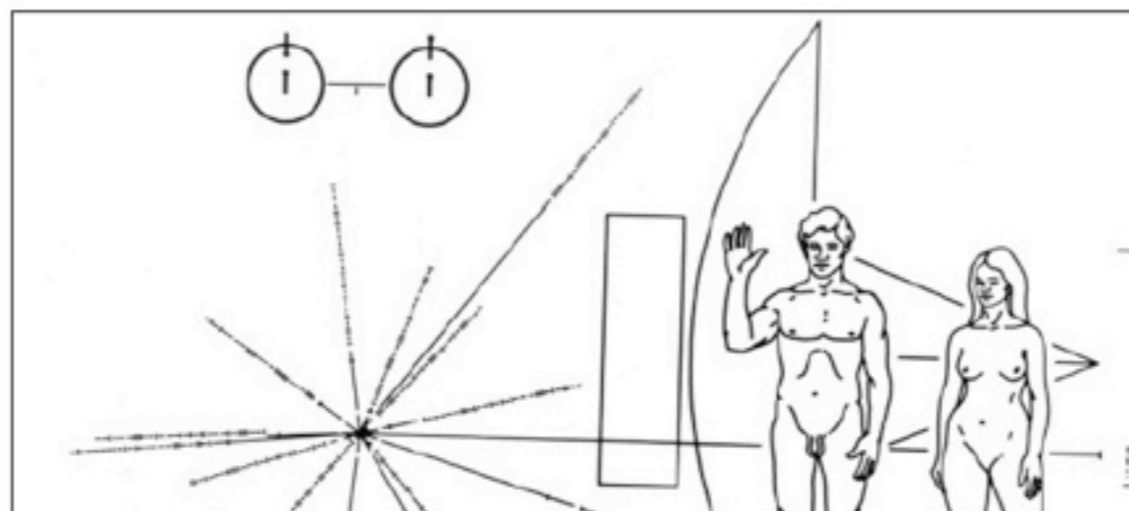
Are there universal principles that determine good graphics? If the question is taken to mean: "Is there a universal practical recipe for creating good graphics," the answer is "no" because of the cultural contingency of any given graphic with respect to any given audience. The visual form of an image is contingent upon its meaning as interpreted by an audience, as the great iconologists (Panofsky, Gombrich, Wind) have shown.

Gombrich, especially, is a useful guide in this paper, because of his profound connection with the history of art. He rejected as groundless the idea that certain forms will appeal to all audiences in all times and places. The visual form of an image is a psychological construct—something that is shaped by our knowledge and expectations.



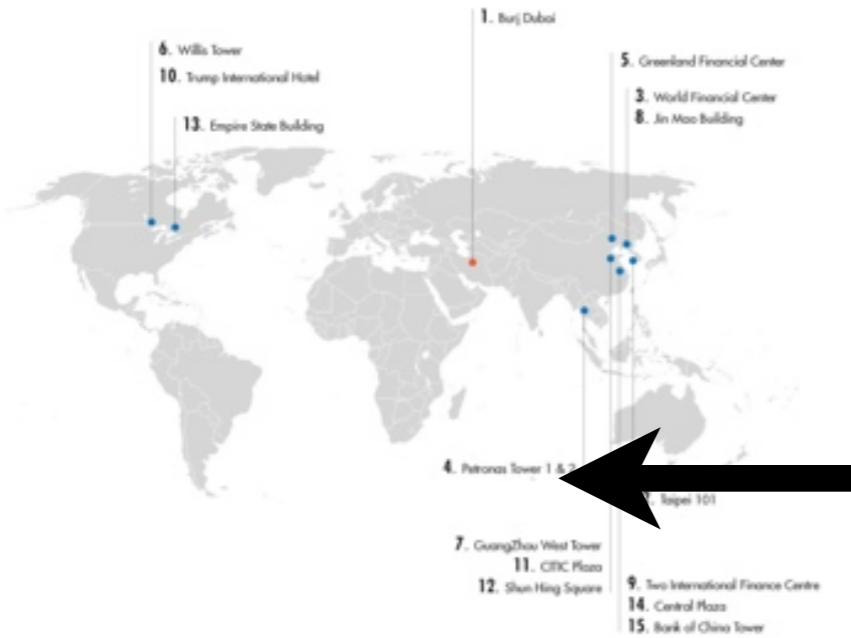
naiveté of the scientists who thought that their spacecraft would communicate something about human civilization for the benefit of beings in outer space who would lack knowledge not only of the represented objects, but also of our conventions of representation (Gombrich 1982, pp. 150-151). For instance, the right side of the woman's face is narrower than her left. What sort of lopsided creature is that?

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Location Map

World Map: wikimedia.org



World's Tallest Building Criteria

Reference: infoplease.com

Criteria for Inclusion on the List of 100 Tallest Buildings by the Council on Tall Buildings and Urban Habitat

This data was gathered and/or supplied by members and representatives of the Council on Tall Buildings and Urban Habitat who represent world leaders in the field of the built environment, including research, industry, and education.

When does a building appear on the list?

When a building is "topped out"—the point of construction when the structure has met its proposed structural top (see height definition below)—the building is officially ranked and is placed on the list.

Height

The height of a building is measured

Rank

Ranking is determined by height to the structural top of the building (see above). If there is a tie, the building with the larger number of stories is ranked higher. If a tie still remains, the building that was completed first is ranked higher. If a tie would still remain, the buildings would be ranked alphabetically.

Year

The year in which construction of the building was officially completed. "UC" stands for Under Construction. For a building that is currently under construction to appear on the list it must be "topped out."

Council on Tall Buildings and Urban Habitat made a compromise. They defined 4 categories for measuring tall buildings:

- ∴ Height to the structural or architectural top
- ∴ Height to the highest occupied floor
- ∴ Height to the top of the roof
- ∴ Height to the top of antennas



smaller (and therefore more precisely) incremental value.

World's Tallest Buildings 2010



Transamerica Pyramid
 853 ft (260m)



Hot Air Balloon
 Height: 67.37 ft (21m)

Adult Male
 5'9 ft (1.75m)

Four Story Building
 66 ft (20m)

Burj Dubai
 2,684 ft (818m)

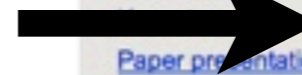


Hot Air Balloon
 Height: 166 ft (50.6m)



Hot Air Balloon
 Height: 166 ft (50.6m)

DRS // CUMULUS Oslo 2013



The 2nd International Conference for
14-17 May 2013, Oslo, Norway



WELCOME TO OSLO !

Welcome to the second international conference for design education researchers held under the joint auspices of the Design Research Society (DRS) and the Cumulus organisation. Following the successful inaugural symposium in Paris in 2011, the conference will be hosted by Oslo and Akershus University College of Applied Sciences. The challenging theme of the conference focusing on design learning for

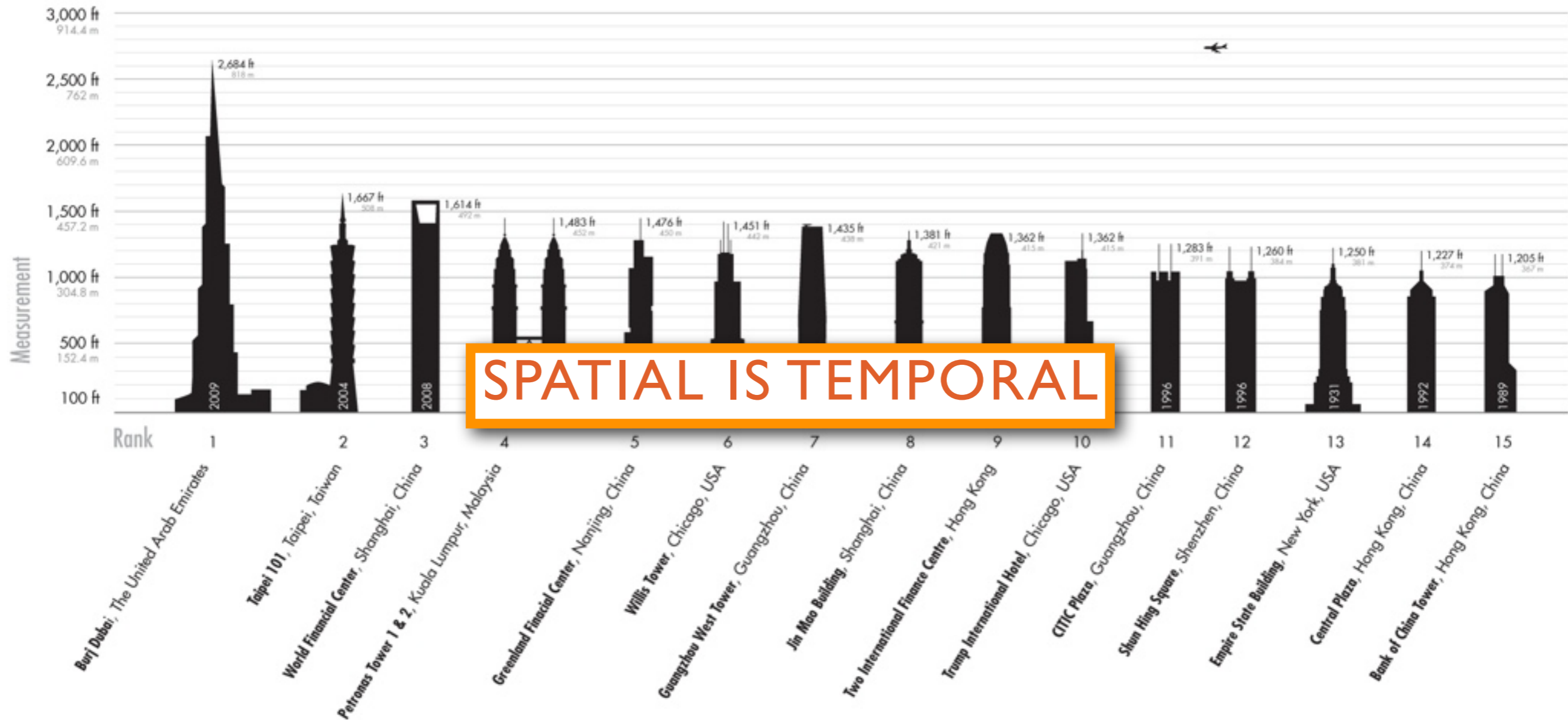
DRS // CUMULUS Oslo 2013



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World's Tallest Buildings 2010



SPATIAL IS TEMPORAL

Location Map

World Map: wikimedia.org

- 6. Willis Tower
- 10. Trump International Hotel
- 13. Empire State Building
- 1. Burj Dubai
- 5. Greenland Financial Center
- 3. World Financial Center
- 8. Jin Mao Building

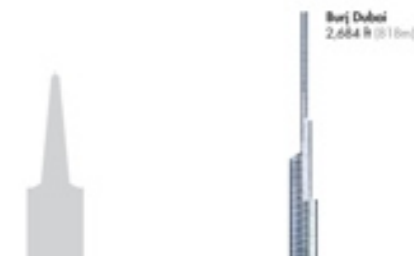
World's Tallest Building Criteria

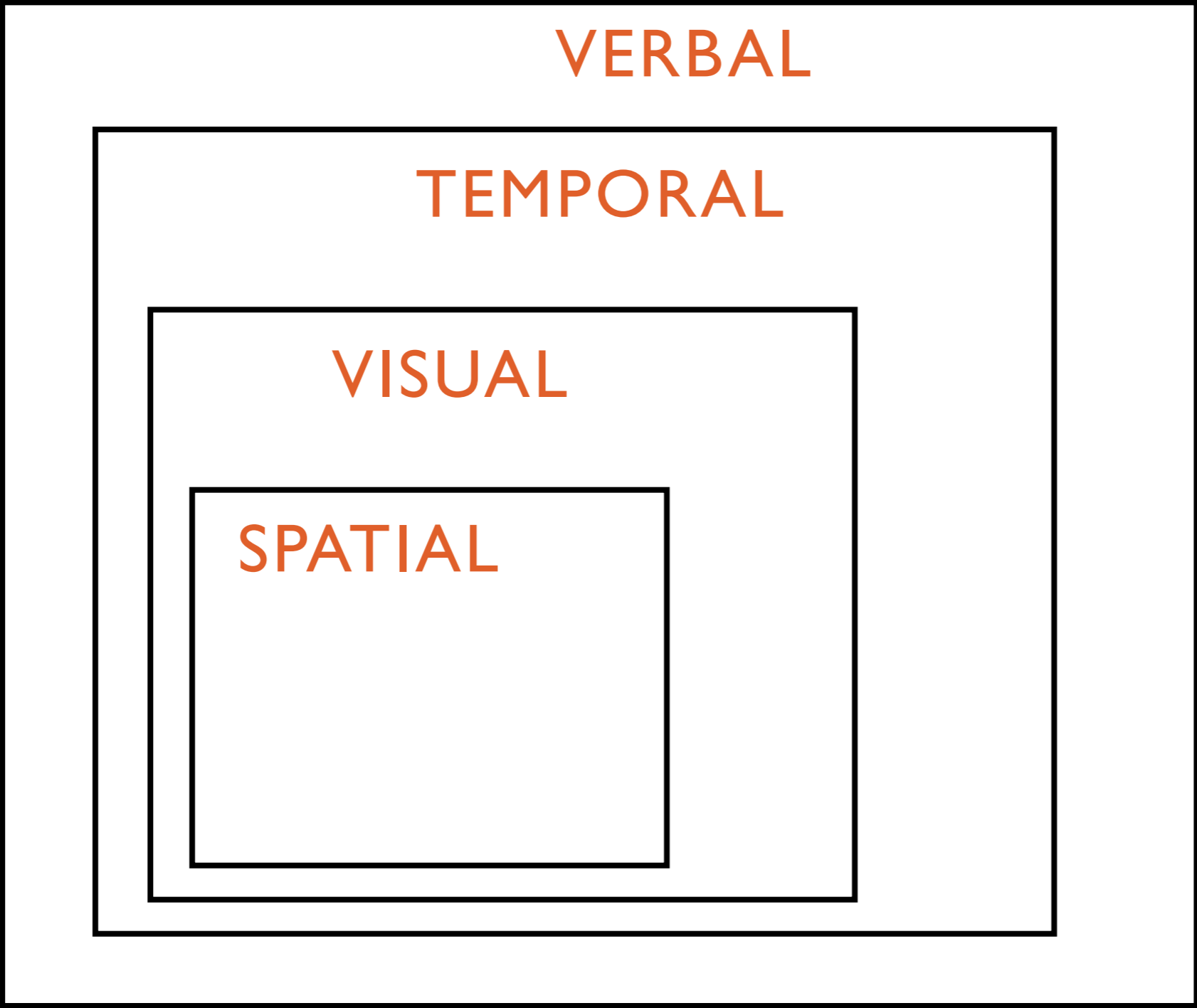
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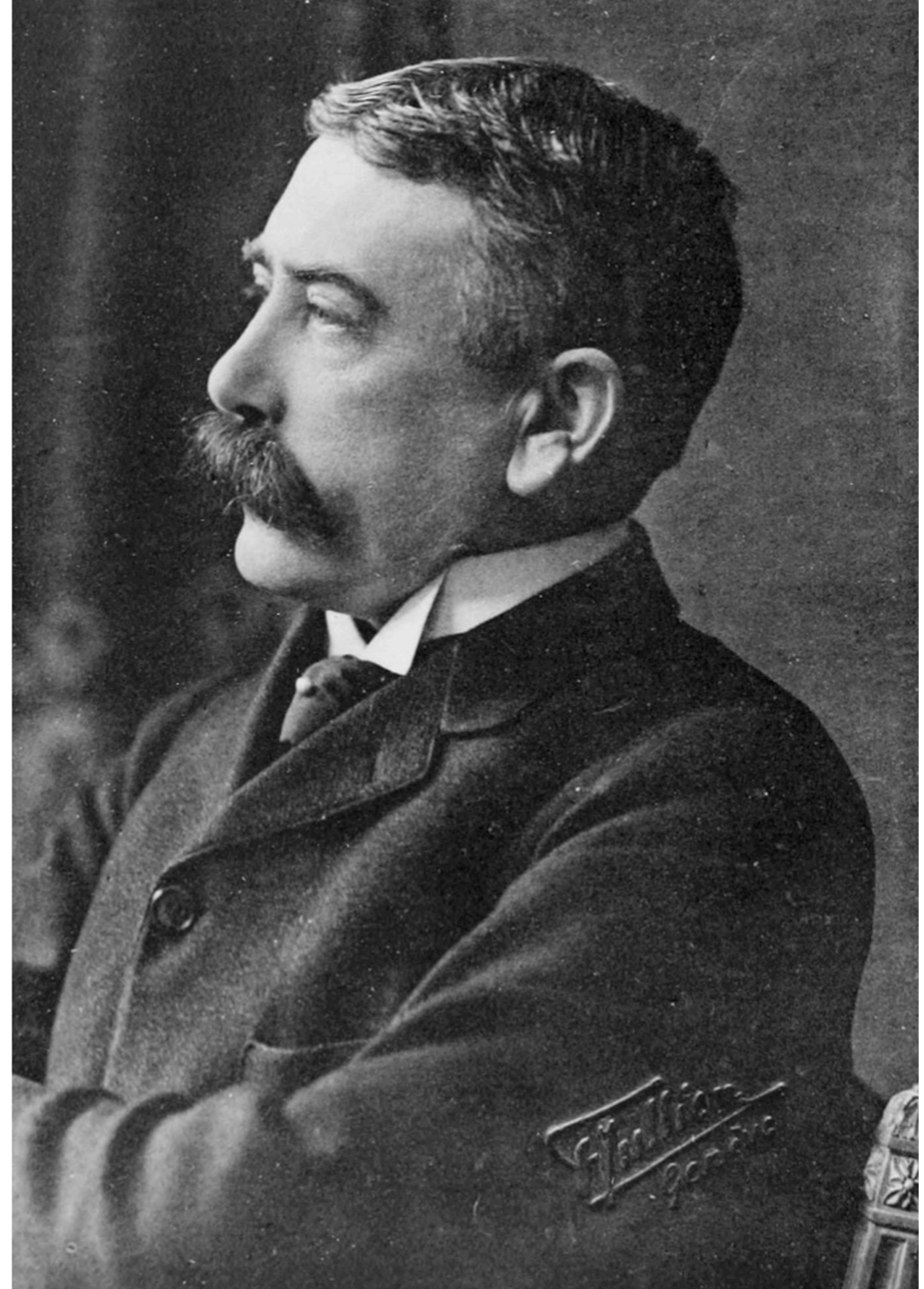
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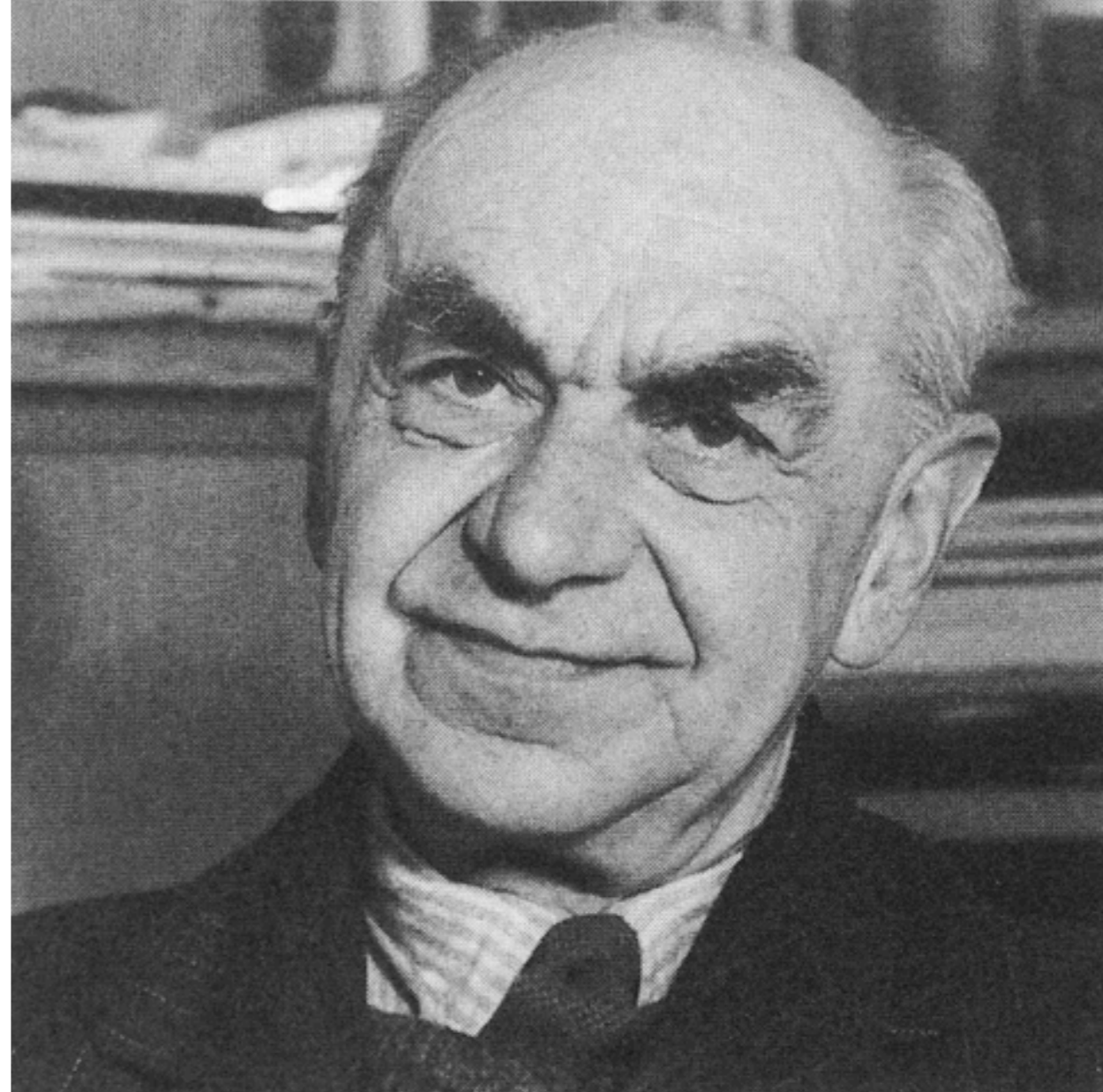


HERMANN EBBINGHAUS ON MEMORY, 1885



FERDINAND DE SAUSSURE

LINGUISTICS, 1906-11



FREDERIC BARTLETT ON REMEMBERING, 1932



GEORGE A. MILLER
MAGICAL NUMBER SEVEN, 1956



ALAN D. BADDELEY
WORKING MEMORY, 1974

CO-CONSTRUCTION OF MEANING

FORM

CONTENT

FAMILIAR

NEW

CFNINB

CNN FBI

BASEBALL is a game between two teams of 9 players each, under direction of a manager, played on an enclosed field, under jurisdiction of one or more umpires.

The objective of each team is to win by scoring more runs than the opponent. The winner of the game shall be that team which shall have scored, in accordance with these rules, the greater number of runs at the conclusion of a regulation game.

DEFENSIVE POSITIONS



SCORING RUNS

A RUN (or SCORE) is the point scored by an offensive player who advances from batter to runner and touches first, second, third base, and crosses home plate in that order.

Example
A batter hits a ball in play in the left field and makes it to 1st base safely. He now becomes a runner.

The next batter gets walked and moves the lead runner over to 2nd base.

The next batter hits a fly ball into deep right center field that is caught. The lead runner both advances after the ball is caught safely.

The next batter hits a base hit into right field away from the lead runner allowing him to cross home plate and score easily.



AN INNING

An inning is portion of the game within which the teams alternate on offense and defense and there are three putouts or "outs" for each team. Each team's time at bat is a half-inning.

There are 9 innings in a regulation baseball game. If the score is tied at the end of nine innings, "Extra Innings" are played until the final score is decided.

FOUL BALL



A FOUL BALL is a batted ball that settles on foul territory between home and first base, or between home and third base, or that bounds past first or third base on or over foul territory, or that first falls on foul territory beyond first or third base, or that, while on or over foul territory, touches the person of an umpire or

PITCHING

A PITCHER is the fielder designated to deliver the pitch to the batter.

The pitcher's PIVOT FOOT is that foot which is in contact with the pitcher's plate as he delivers the pitch. It can leave the plate after releasing the ball.

A QUICK RETURN pitch is one made with obvious intent to catch a batter off balance. It is an illegal pitch.

A WILD PITCH is one so high, so low, or so wide of the plate that it cannot be handled with ordinary effort by the catcher.

WINDUP POSITION is where the pitcher prepares to throw with both feet facing home plate on the pitcher's plate (usually when runners are not on base).

THE STRETCH POSITION is where the pitcher prepares to throw with one foot on pitcher's plate and his stepping foot extended to home plate (usually when there are runners on base).

A BALK is an illegal act by the pitcher with a runner or runners on base, entitling all runners to advance one base.

Not having 1 foot on the pitcher's plate at the start of his motion.
Not passing at the highest point in the motion (when the knee reaches the highest point).



BASE ON BALLS



A BASE ON BALLS or "walk" is an award of first base granted to a batter who, during his time at bat, receives four pitches outside the strike zone.

HIT BY PITCH: a batter may also be awarded first base if he is hit by a pitch. The batter must attempt to get out of the way of the ball before being hit to be awarded the base. If he does not attempt to move out of the way of the path of the ball and is hit the pitch will be called a ball.

STRIKE OUT



When a batter receives 3 strikes before he:
a) strikes the ball into play
b) is pitched a ball by the pitcher
He is marked as 1 out.

STEALING

A STOLEN BASE occurs when a baserunner successfully advances to the next base while the pitcher is delivering the ball to home plate.

A base-stealing runner must begin running as soon as the pitcher has committed himself to throwing a pitch to home plate, neither sooner nor later. If he begins to run too soon, the pitcher may throw to a base rather than to home—in this case, the runner is "picked off", and will most likely be tagged out.

A LEAD OFF is when the runner takes steps away from the safety of the base to get a head start to steal the next base.

Second base is the base most often stolen. It is also technically the easiest to steal, as it is farthest from home plate and thus a longer throw from the catcher is required to prevent it.



FORCE PLAY

BASEBALL

basic rules & game play

BASEBALL FACIAL HAIR variations & styles

SWEET SPOT BETWEEN FAMILIAR AND NEW

THE STRIKE ZONE



Election Results 2008

President Map

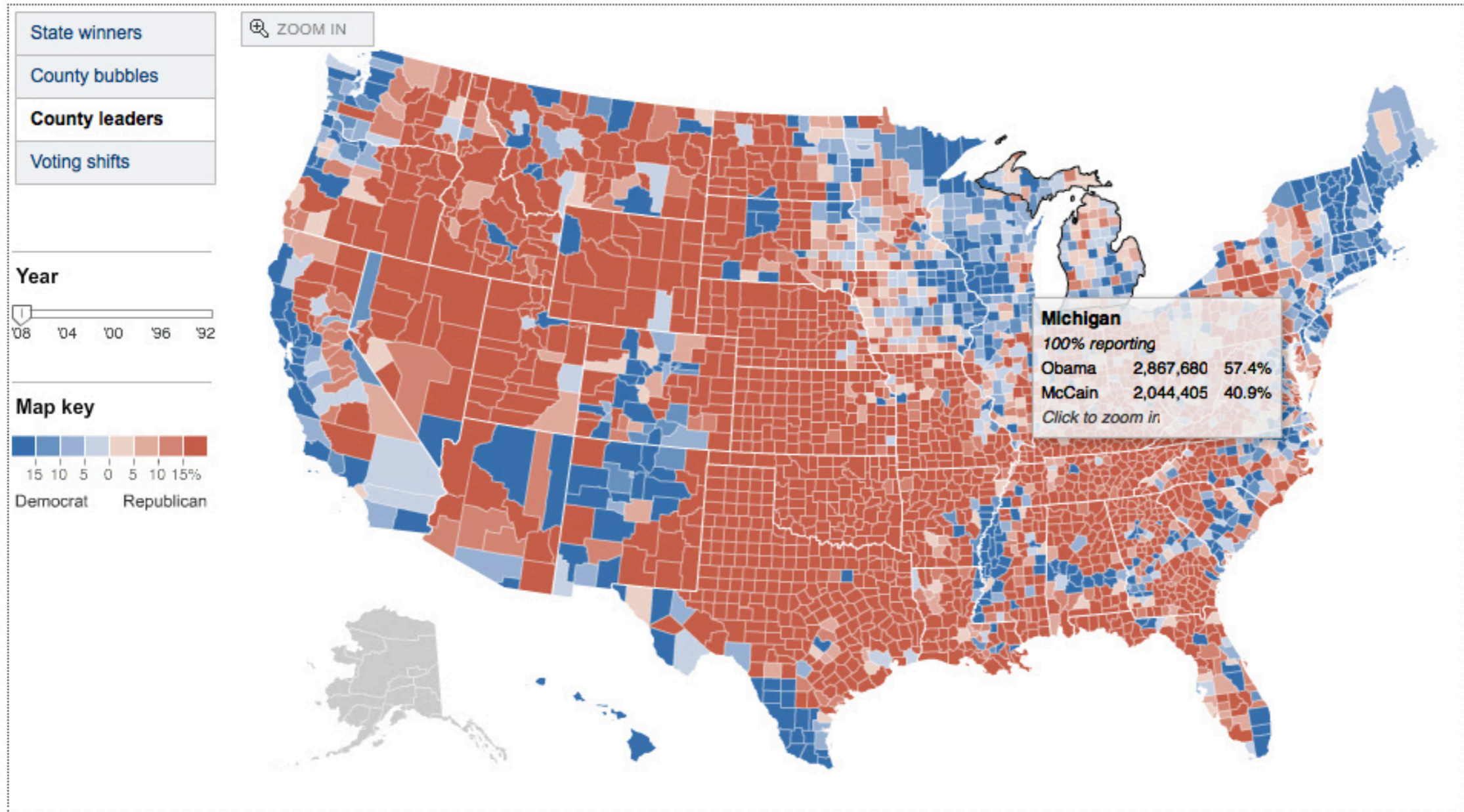
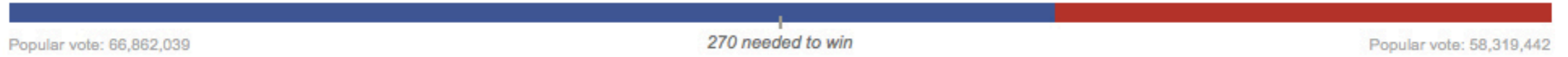
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[Big Board](#) | [Map](#) | [Electoral Explorer](#) | [Obama: Victory Speech](#) | [McCain: Concession Speech](#) | [Exit Polls](#)

365 **Obama**
Electoral Votes
Projected Winner

0
undecided




173 **McCain**
Electoral Votes



* One electoral vote in Nebraska remains undecided. The state allocates its electoral votes on the basis of the results in each Congressional district. Only 569 votes separate John McCain and Barack Obama in unofficial returns from the 2nd District.

The Electoral Map: Key States

By ADAM NAGOURNEY, JEFF ZELENY AND SHAN CARTER
November 4, 2008

-  E-MAIL
-  SHARE
-  FEEDBACK

 Times map
  Your map

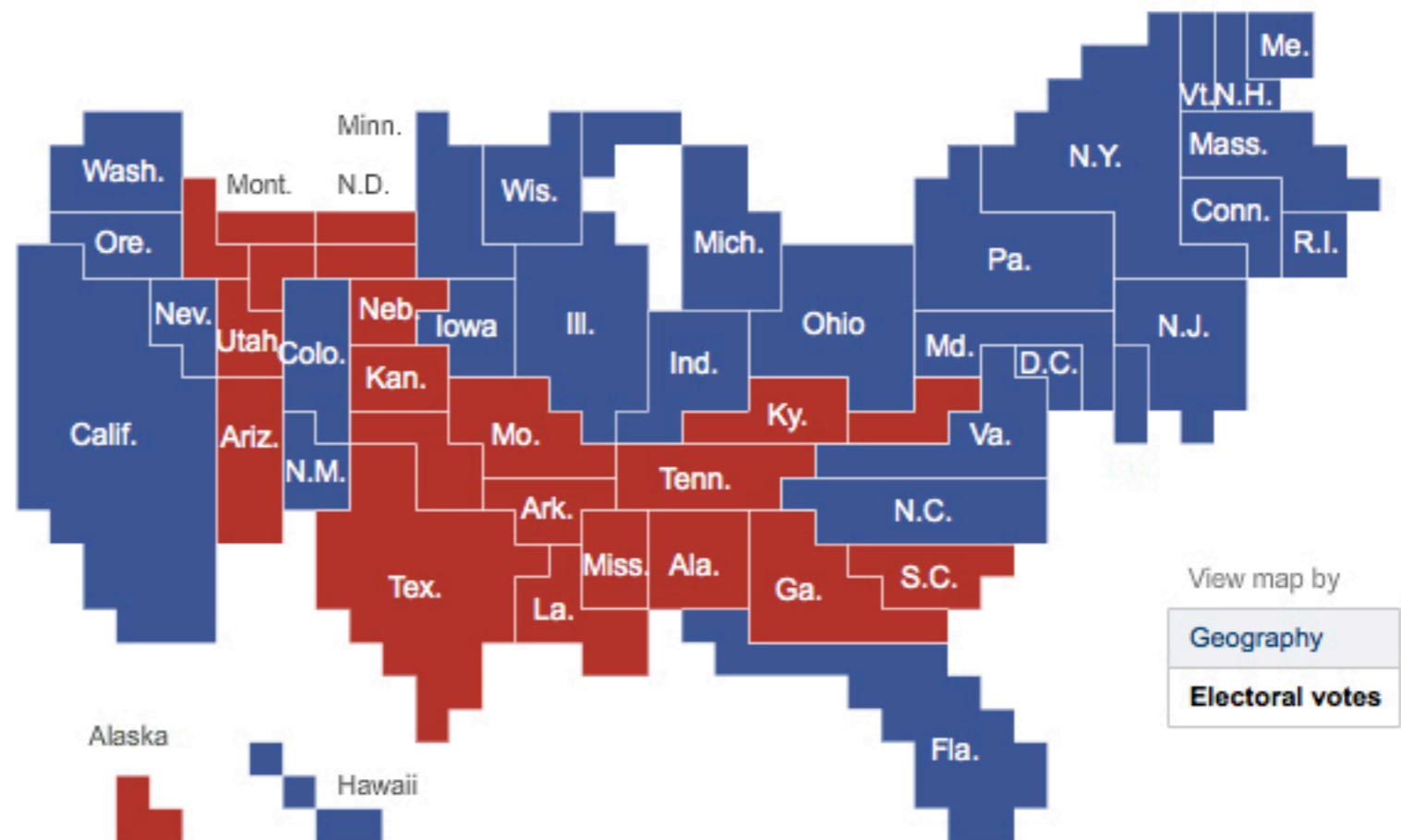
Obama 364 **174 McCain**



Click on a state to make your prediction for the 2008 election or choose a preset below. Your changes will be saved to this computer.

- [Reset map to The Times's ratings](#)
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DESIGN CONVENTIONS (CULTURE)





GENRE & CONTEXT

"All the News
That's Fit to Print"

The New York Times

Late Edition

Today, sunny to partly cloudy, high 84. Tonight, patchy clouds, low 66. Tomorrow, sunny for the most part, remaining comfortable, high 84. Weather map appears on Page A22.

VOL. CLXI . . No. 55,828

© 2012 The New York Times

NEW YORK, TUESDAY, JULY 10, 2012

\$2.50



DADO RUVIC/REUTERS

17 Years After Bosnia Massacre, a Painful Process Goes On

On Wednesday, 520 recently identified victims of the 1995 killings in Srebrenica, in which 8,000 Muslims died, will be reburied.

At Top School, Cheating Voids 70 Pupils' Tests

By AL BAKER

Seventy students were involved in a pattern of smartphone-enabled cheating last month at Stuyvesant High School, New York City officials said Monday, describing an episode that has blemished one of the country's most prestigious public schools.

The cheating involved several state exams and was uncovered after a cellphone was confiscated from a 16-year-old junior during a citywide language exam on June 18, according to a city Department of Education investigation.

Cellphones are not permitted in city schools, and when officials looked into the student's phone, they found a trail of text messages, including photos of test pages, that suggested pupils had been sharing information about state Regents exams while they were taking them.

Sixty-nine students had received the messages and responded to them, the department

Continued on Page A3

A Life-Death Predictor Adds to a Cancer's Strain

By GINA KOLATA

In May 2011, Cassandra Caton, an 18-year-old with honey-colored hair and the soft features of a child, suddenly went blind in her right eye. Five months later, an ophthalmologist noticed something disturbing. A large growth in the back of her eye had ripped her retina, destroying her vision.

He sent her to Washington University in St. Louis, a three-hour drive from her sparsely furnished apartment in the working-class town of Sedalia, Mo.

And there, Ms. Caton, mother of a 2-year-old daughter, wife of a chicken factory worker, got al-



DILIP VISHWANATH FOR THE NEW YORK TIMES
Cassandra Caton had surgery to remove a cancerous eye.

GENETIC GAMBLE

Last of three articles.

most incomprehensibly bad news. The growth was cancer, a melanoma, and it was so huge it filled her eyeball.

"Am I going to die?" Ms. Caton asked. "Is my baby going to have a mommy in five years?"

It is a question that plagues cancer patients. Doctors try to give survival odds based on a tumor's appearance and size, but often that is just an educated guess.

But Ms. Caton had a new option, something that became possible only in this new genetic age. She could have a genetic test of her tumor that could reveal her prognosis with uncanny precision. The test identifies one of two gene patterns in eye melano-

mas. Almost everyone in Class 1 — roughly half of patients — is cured when the tumor is removed. As for those in Class 2, 70 to 80 percent will die within five years. Their cancers will re-emerge as growths in the liver. For them, there is no cure and no way to slow the disease.

No test has ever been so accurate in predicting cancer outcomes, researchers said.

The data from studies of the test are "unbelievably impressive," said Dr. Michael Birrer, an ovarian cancer specialist at Massachusetts General Hospital. "I would die to have something like that in ovarian cancer."

While for now the ocular melanoma test is in a class by itself, cancer researchers say it is a taste of what may be coming as they continue to investigate the

Continued on Page A13

Bank Scandal Turns Spotlight To Regulators

Widening Inquiry Into Interest-Rate Fixing

By BEN PROTESS and MARK SCOTT

As big banks face the fallout from a global investigation into interest rate manipulation, American and British lawmakers are scrutinizing regulators who failed to take action that might have prevented years of illegal activity.

Politicians in both London and Washington are questioning whether regulators allowed banks to report false rates in the run-up to the 2008 financial crisis and afterward. On Monday, Congress stepped into the fray, requesting information about the role of the Federal Reserve Bank of New York, according to people close to the matter.

The focus on regulators and other financial institutions has intensified in the last two weeks after the British bank Barclays agreed to pay \$450 million to resolve an enforcement case. British and American authorities accused the bank of improperly influencing key interest rates to deflect concerns about its health and bolster profits.

The Barclays settlement is the first action stemming from a broad investigation into how banks set key benchmarks, including the London interbank offered rate, or Libor. The pricing of \$350 trillion of financial products, including credit cards, mortgages and student loans, is pegged to Libor and other such rates.

Authorities around the world are now considering action against more than 10 big banks, including UBS, JPMorgan Chase and Citigroup. The banks also face a raft of civil litigation from municipalities, investors and other financial firms that claim they lost money from the misreporting of rates. These lawsuits could end up costing the banking industry

Continued on Page B6

ROMNEY, AGAIN, OUTDOES OBAMA IN FUND-RAISING

\$35 MILLION GAP IN JUNE

'Super PACs' Linked to Democrats Also Trail Rivals on Right

By NICHOLAS CONFESSORE

In the battle for political cash, President Obama is finding himself in an unaccustomed place during the final months of the 2012 campaign: he is losing.

Mitt Romney and the Republican National Committee easily outraised the formidable Obama money machine for the second month in a row. A nonstop schedule of high-dollar events around the country brought in \$106 million during June to Mr. Obama's \$71 million, giving him and his party four times the cash on hand that it had just three months ago.

Mr. Obama's fund-raising deficit in part reflects how steeply the terrain has shifted since 2008, when many Republican donors embraced the candidate and his campaign raised millions of dollars from Wall Street and other traditionally right-leaning industries. Now those donors are swinging hard back to the Republican Party — and to Mr. Romney, whose promise to curtail regulation and cut taxes has helped draw a torrent of five-figure checks.

In a worrisome development for the Obama campaign, Mr. Romney, who until now has been heavily dependent on donors giving the maximum federal contribution, also showed success in June drawing small donors, a traditional strength of the Obama campaign. Reflecting the intensifying general election matchup with Mr. Obama and conservative anger over the recent Supreme Court decision upholding the president's signature health care law, Mr. Romney raised

Continued on Page A12

A Reality Series Intrudes on Silicon Valley, and Finds It Cringing

By DAVID STREITFELD

SAN FRANCISCO — Silicon Valley is finally getting the treatment once reserved for rowdy



sister Randi is an executive producer of the series has therefore rankled. Ms. Zuckerberg, an executive at Facebook until last summer, declined to be interviewed, but defended her show

New-York Daily Times.

THE NEW-YORK DAILY TIMES... THE NEW-YORK EVENING TIMES... THE NEW-YORK WEEKLY TIMES...

New-York Daily Times.

THE NEWS FROM EUROPE. ARRIVE BY THE EUROPEAN MAIL. AFFAIRS IN ENGLAND. The Election in France—Arrests, &c. APPREHENDED DISTURBANCE IN AUSTRIA. SOUTHERN EUROPE.

The Royal Mail-Steamer Europa arrived at Boston yesterday morning at about a quarter to twelve... By this arrival we have received our number English and French news with expressions, circulation, &c., on Monday, September 18th—the Emperor's day of sailing... The news by this arrival has considerable interest, though it is not of startling importance...

New-York Daily Times.

VOL. L., NO. 1. NEW-YORK, THURSDAY, SEPTEMBER 18, 1851. PRICE ONE CENT.

The state, the very act of the Union in regard to the... President will probably be in the Assembly, which...

The great bulk of the Assembly has fallen to the... The Emperor's day of sailing...

The news by this arrival has considerable interest... The Emperor's day of sailing...

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THE BOARD OF ASSISTANT SURGEONS... THE FOUNDATION IN WASHINGTON SQUARE...

THE BOARD OF ASSISTANT SURGEONS... THE FOUNDATION IN WASHINGTON SQUARE...

THE BOARD OF ASSISTANT SURGEONS... THE FOUNDATION IN WASHINGTON SQUARE...

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THE BOARD OF ASSISTANT SURGEONS... THE FOUNDATION IN WASHINGTON SQUARE...

"All the News
That's Fit to Print"

The New York Times

National Edition

Northern California: Partly sunny in the Bay Area and Central Valley. Turning cloudy; showers arriving along coast north of San Francisco this afternoon. Details, Page B19

VOL. CLVIII . . . No. 54,485

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WEDNESDAY, NOVEMBER 5, 2008

Printed in California

\$1.50

OBAMA

RACIAL BARRIER FALLS IN DECISIVE VICTORY

ONLINE

- The latest state-by-state results: the presidential contest and House, Senate and governors' races.
- The Caucus blog: updates from The Times's political staff.



- Interactive graphics: the electoral map, voter profiles and analysis.
 - Video, audio and photos: reactions from the voters and the campaigns.
- nytimes.com

PRESIDENT-ELECT

THE LONG CAMPAIGN

Journey to the Top

The story of Senator Barack Obama's journey to the pinnacle of American politics is the story of a campaign that was, even in the view of many rivals, almost flawless. After a somewhat lackluster start, Mr. Obama and his team delivered. They developed a strategy to secure the nomination, and stuck with it even after setbacks. PAGE F1

SENATE

NORTH CAROLINA



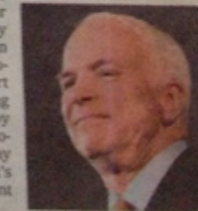
Democrats in Congress Strengthen Grip

By ADAM NAGOURNEY

Barack Hussein Obama was elected the 44th president of the United States on Tuesday, sweeping away the last racial barrier in American politics with ease as the country chose him as its first black chief executive.

The election of Mr. Obama amounted to a national catharsis — a repudiation of a historically unpopular Republican president and his economic and foreign policies, and an embrace of Mr. Obama's call for a change in the direction and the tone of the country. But it was just as much a strikingly symbolic moment in the evolution of the nation's fraught racial history, a breakthrough that would have seemed unthinkable just two years ago.

Mr. Obama, 47, a first-term senator from Illinois, defeated Senator John McCain of Arizona, 72, a former prisoner of war who was making his second bid for the presidency. To the very end, Mr. McCain's campaign was eclipsed by an opponent who was nothing short of a phenomenon, drawing huge crowds epitomized by the tens of thousands of people who turned out Tuesday night to hear Mr. Obama's victory speech in Grant Park in Chicago.



Mr. McCain also fought the headwinds of a relentlessly hostile political environment, weighted down with the baggage left to him by President Bush and an economic collapse that took place in the middle of the general election campaign.

"If there is anyone out there who still doubts that America is a place where all things are possible, who still wonders if the dream of our founders is alive in our time, who still questions the power of our democracy, tonight is your answer," said Mr. Obama, standing in front of a wood lectern on a huge wooden lectern, casting his eyes against a crowd that stretched far into the night.

"It's been a long time coming. But tonight, because of what we did on this date in this election, change has come to America."

"All the News
That's Fit to Print"

The New York Times

NY Times Timeline
A distillation of more than 150 years, 52,000 issues and billions of words drawn from The Times's archives and electronic database.

VOL. CLXI . . . No. 55,817

MONDAY, NOVEMBER 5, 2012

Printed in California

THE HISTORY OF THE NEW YORK TIMES 1851 - 2010

Year 1851

September 18

"We publish today the first issue of the New-York Daily Times, and we intend to issue it every morning (Sundays excepted) for an indefinite number of years to come." The founders are Henry Jarvis Raymond and George Jones.

Year 1852

Henry Jarvis Raymond and George Jones publish a Western edition, The Times of California. It arrives whenever a mail boat makes its journey around Cape Horn. It dies with the rise of California Newspapers.

Year 1854

September 27

The trans-Atlantic steamer Arctic goes down; fewer than 50 survive. The Times beats the herald with an exclusive eyewitness report.

Year 1856

October

The Associated Press is formally organized, with Raymond as a director.

Year 1859

June

During the Italian war for independence, Raymond gets a 10-day jump on the other New York Papers with his eyewitness account of the Battle of Solferino. His wife, in Paris, gets his report onto the last mail boat to New York.

October

The Times publishes extensive reports from the Harper's Ferry Va. about

even bigger fight to come, the Tweed series.

Year 1869

June 18

Raymond dies suddenly. George Jones takes over as a publisher.

Year 1870 - 1871

A series of Times exposés brings down the corrupt Tweed Ring and ends its domination of City Hall.

Reaching out to New York's German residents - 25 percent of the city's population - The Times also prints the articles in a German-language supplement.

Year 1873

E. Remington & Sons starts producing typewriters in the United States.

Year 1876

Alexander Graham Bell invents the telephone. The Times will get its first phone number (number: John 470) in 1886.

Disgusted with the scandals in the Grant Administration, George Jones, now the publisher, moves The Times away from the Republican Party.

November 7

With the Headline "A Doubtful Election", The Times goes it alone and declares that the presidential contest between Rutherford B. Hayes and Samuel J. Tilden is without a victor; the other papers give the election to Tilden. After months, an electoral commission and Congress decide in Hayes's favor.

azine begins, carrying the newspaper's first photographs.

October 10

First issue of The Saturday Review of Books and Art. Within a year it is included in the Sunday paper.

October 25

"All the News That's Fit to Print," coined by Ochs himself after a contest finds no stronger candidate for a slogan, first appears on the editorial page. It moves to Page 1 on February 10, 1897.

December 1

The hyphen is dropped from the nameplate, which now reads "The New York Times."

Year 1897

July 4

The Times publishes 50 halftone photographs of Queen Victoria's Jubilee procession in the magazine. It is a popular and technical triumph.

Year 1898

October 10

In a gamble, Ochs lowers the price of the daily paper to 1 cent. Circulation triples within a year, to 76,000 from 26,000, and advertising revenues soar.

Year 1901

January

The Times starts the new century with two telephones. The reporters themselves own all the typewriters, but most still write their articles in longhand.

Ochs lists products and ser-

Year 1910

May 29

The Times sponsors a daredevil flight from Albany to New York by Glenn Curtiss, resulting in the paper's first Page 1 news photograph.

June 14

First air delivery of The Times, to Philadelphia.

October 16

Walter Wellman sends the first wireless dispatches from a balloon as he tries unsuccessfully to cross the Atlantic.

Year 1912

April 14

Combing through vaguely worded telegraph reports, Van Anda concludes that the Titanic is sinking. The Times is first with the news, and its subsequent coverage is far ahead of the competition.

Summer

Woodrow Wilson, winning the Democratic presidential nomination, says he owes it to an editorial in The Times written by Charles Ransom Miller.

December 16

The first Neediest Cases campaign. At Ochs's suggestion, The Times publishes 100 short, unemotional articles about New Yorkers in need. The first year, 117 contributors send in \$3,630.88. By 2000-01, donations will rise to more than \$8 million; a 9/11 Neediest Fund, formed in the wake of the terrorist attacks, will exceed \$45 million.

Year 1913

wireless receiving station at 43rd Street. Within a few years it will have the world's most extensive wireless news-gathering operation.

June 10

"4 A.M. Airplane Edition." A special edition is sent by plane to Chicago so it can be in the hands of the Republican convention delegates by evening.

July 4

Beginning an Independence Day tradition, The Times publishes a reproduction of the Declaration of Independence.

Year 1921

July 4

In an article in the magazine, Anne O'Hare McCormick (later to be a columnist) writes prophetically that Benito Mussolini will rise to power in Italy.

Year 1925

The 35-millimeter Leica is introduced. Over the next generation, its small size and mobility would revolutionize photo-journalism.

Year 1926

May 1

The first radio photo. Transmitted from London to 43rd Street, it shows a dinner honoring the retiring viceroy of India; it runs at the top of Page 1, under a headline heralding the technological advance.

Year 1927

May 20

"Lindbergh Does It!" Before

Year 1942

February 15

Crossword puzzles begin as a feature of the magazine.

May 18

"The New York Times bids you good-night." The zipper goes dark in compliance with wartime dimout rules.

October 6

The first Fashions of The Times runway show. Within a year what people had been calling the "Times Folly" would become a hit, with thousands seeking tickets.

October 18

Byron Darnton is killed in an accidental bombing off New Guinea — the first of two Times correspondents to die in World War II.

Year 1944

February 1

The Times buys radio station WQXR. It plays mainly classical music and, in keeping with Ochs's distaste for vulgar advertising, accepts no singing commercials. A Times newscast, always introduced with the words "Every hour on the hour," begins on WQXR in 1946.

Year 1945

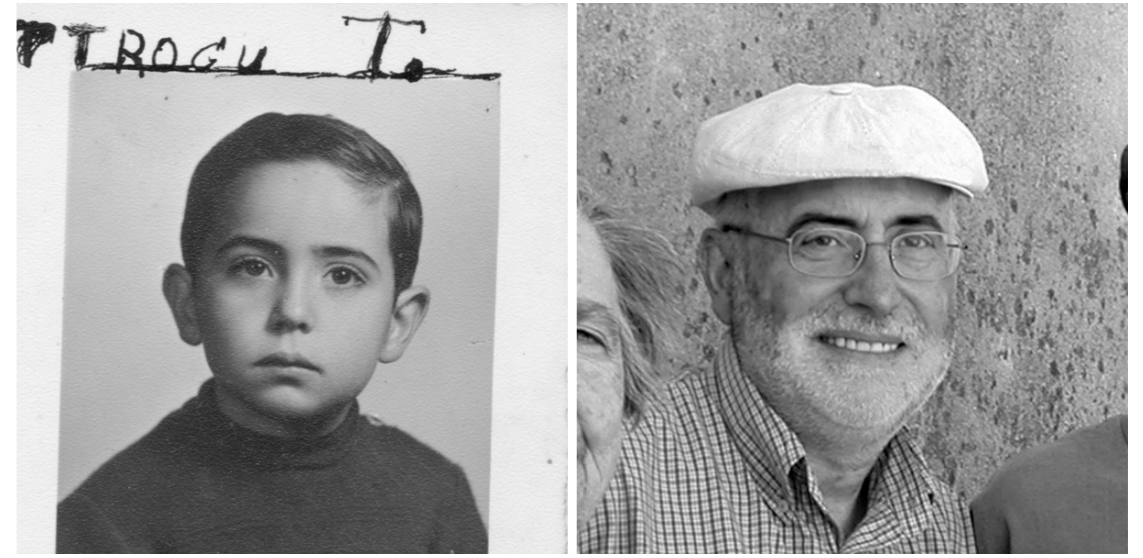
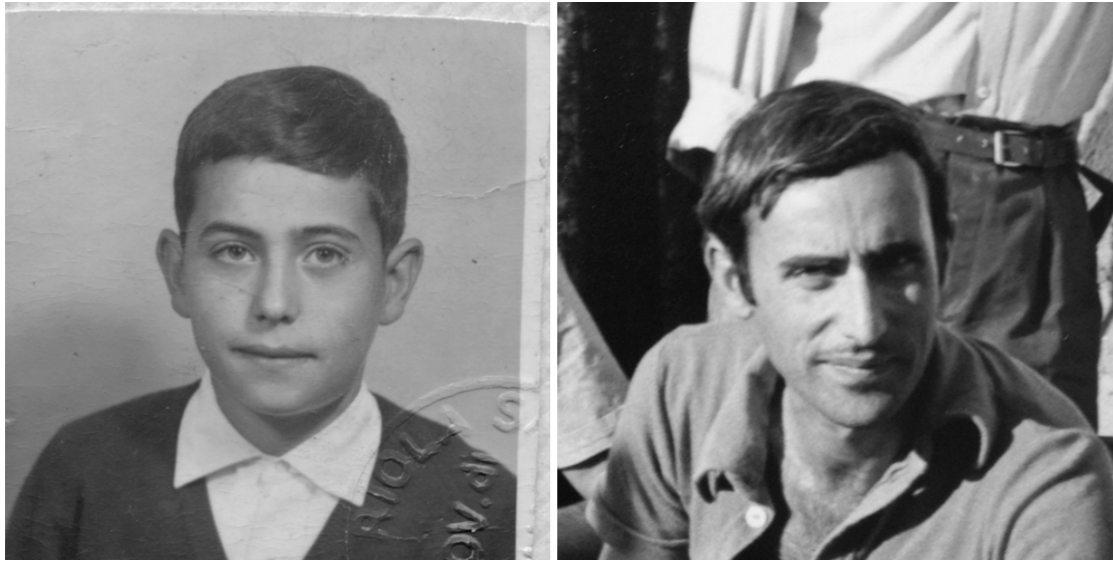
April 30

"Inglorious End of a Dictator." Photographs of the bodies of Mussolini and his mistress, Clara Petacci, are given to a Times reporter in Switzerland and sent to news organizations around the world at no charge.

William L. Laurence, a science reporter, is drafted by the government to write







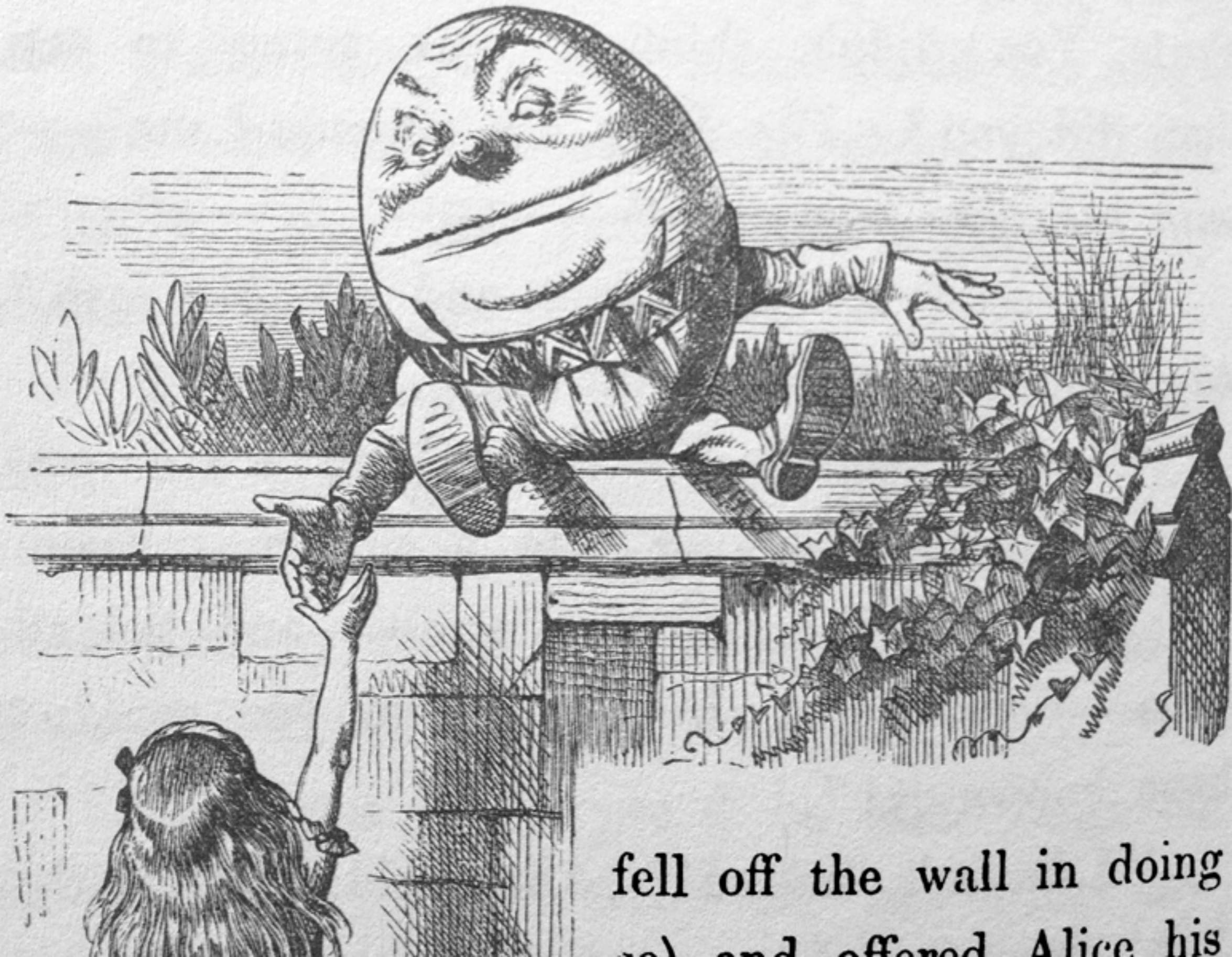
SAN FRANCISCO



YOU ARE HERE.

**DALY CITY
HALF MOON BAY
MILBRAE**

\$4.95



fell off the wall in doing
and offered Alice his

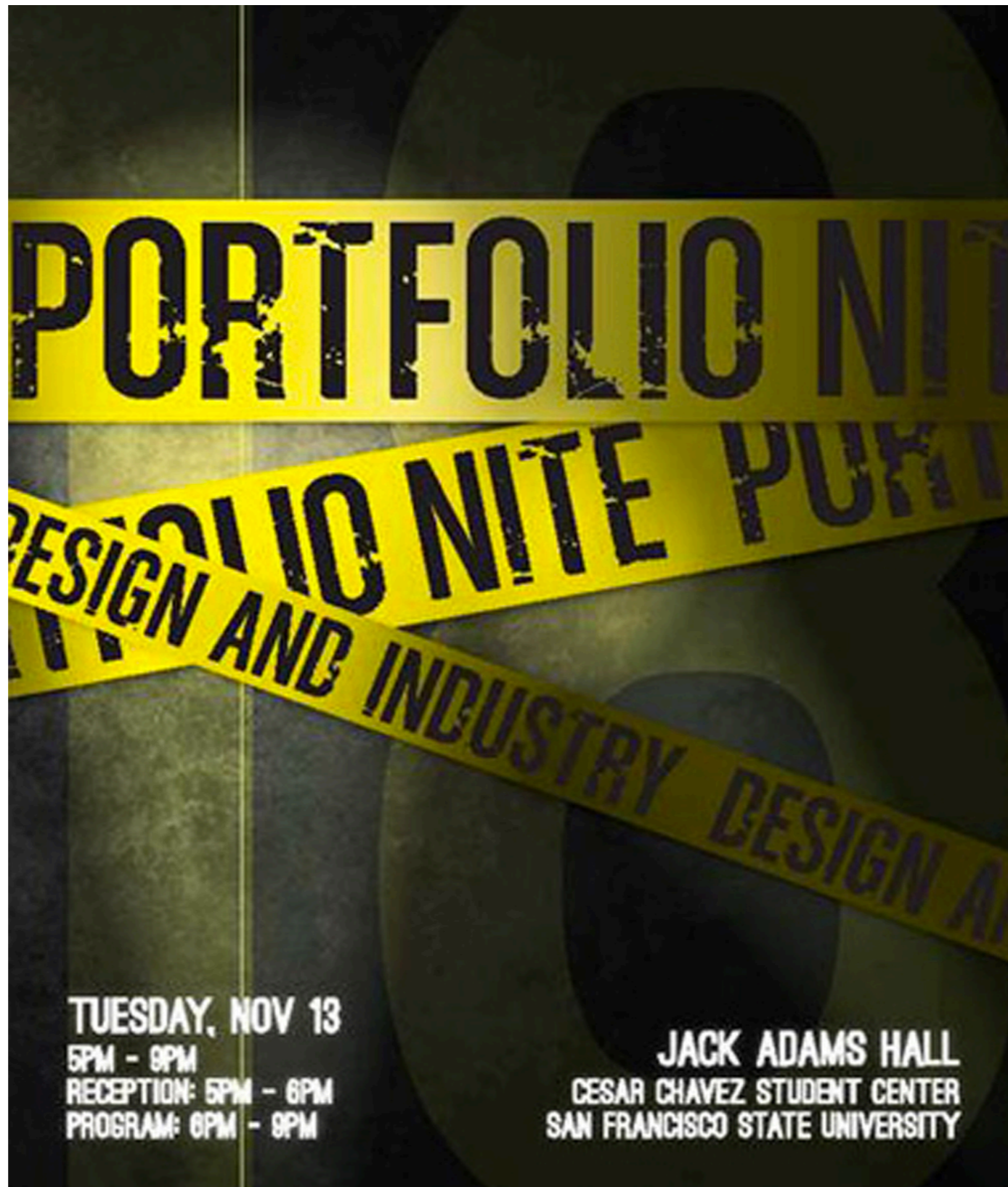
down argument," " Alice objected.

"When *I* use a word," Humpty Dumpty said in rather a scornful tone, "it means just what I choose it to mean——neither more nor less."

"The question is," said Alice, "whether you *can* make words mean so many different things."

"The question is," said Humpty Dumpty, "which is to be master——that's all."

Alice was too much puzzled to say anything, so after a minute Humpty Dumpty began again. "They've a temper, some of them——



INFERENCE





"All the News
That's Fit to Print"

The New York Times

Late Edition

Today, sunny to partly cloudy, high 84. Tonight, patchy clouds, low 66. Tomorrow, sunny for the most part, remaining comfortable, high 84. Weather map appears on Page A22.

VOL. CLXI . . No. 55,828

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NEW YORK, TUESDAY, JULY 10, 2012

\$2.50



DADO RUVIC/REUTERS

17 Years After Bosnia Massacre, a Painful Process Goes On

On Wednesday, 520 recently identified victims of the 1995 killings in Srebrenica, in which 8,000 Muslims died, will be reburied.

At Top School, Cheating Voids 70 Pupils' Tests

By AL BAKER

Seventy students were involved in a pattern of smart-phone-enabled cheating last month at Stuyvesant High School, New York City officials said Monday, describing an episode that has blemished one of the country's most prestigious public schools.

The cheating involved several state exams and was uncovered after a cellphone was confiscated from a 16-year-old junior during a citywide language exam on June 18, according to a city Department of Education investigation.

Cellphones are not permitted in city schools, and when officials looked into the student's phone, they found a trail of text messages, including photos of test pages, that suggested pupils had been sharing information about state Regents exams while they were taking them.

Sixty-nine students had received the messages and responded to them, the department

Continued on Page A3

A Life-Death Predictor Adds to a Cancer's Strain

By GINA KOLATA

In May 2011, Cassandra Caton, an 18-year-old with honey-colored hair and the soft features of a child, suddenly went blind in her right eye. Five months later, an ophthalmologist noticed something disturbing. A large growth in the back of her eye had ripped her retina, destroying her vision.

He sent her to Washington University in St. Louis, a three-hour drive from her sparsely furnished apartment in the working-class town of Sedalia, Mo.

And there, Ms. Caton, mother of a 2-year-old daughter, wife of a chicken factory worker, got al-



DILIP VISHWANATH FOR THE NEW YORK TIMES

Cassandra Caton had surgery to remove a cancerous eye.

GENETIC GAMBLE

Last of three articles.

most incomprehensibly bad news. The growth was cancer, a melanoma, and it was so huge it filled her eyeball.

"Am I going to die?" Ms. Caton asked. "Is my baby going to have a mommy in five years?"

It is a question that plagues cancer patients. Doctors try to give survival odds based on a tumor's appearance and size, but often that is just an educated guess.

But Ms. Caton had a new option, something that became possible only in this new genetic age. She could have a genetic test of her tumor that could reveal her prognosis with uncanny precision. The test identifies one of two gene patterns in eye melano-

mas. Almost everyone in Class 1 — roughly half of patients — is cured when the tumor is removed. As for those in Class 2, 70 to 80 percent will die within five years. Their cancers will re-emerge as growths in the liver. For them, there is no cure and no way to slow the disease.

No test has ever been so accurate in predicting cancer outcomes, researchers said.

The data from studies of the test are "unbelievably impressive," said Dr. Michael Birrer, an ovarian cancer specialist at Massachusetts General Hospital. "I would die to have something like that in ovarian cancer."

While for now the ocular melanoma test is in a class by itself, cancer researchers say it is a taste of what may be coming as they continue to investigate the

Continued on Page A13

Bank Scandal Turns Spotlight To Regulators

Widening Inquiry Into Interest-Rate Fixing

By BEN PROTESS and MARK SCOTT

As big banks face the fallout from a global investigation into interest rate manipulation, American and British lawmakers are scrutinizing regulators who failed to take action that might have prevented years of illegal activity.

Politicians in both London and Washington are questioning whether regulators allowed banks to report false rates in the run-up to the 2008 financial crisis and afterward. On Monday, Congress stepped into the fray, requesting information about the role of the Federal Reserve Bank of New York, according to people close to the matter.

The focus on regulators and other financial institutions has intensified in the last two weeks after the British bank Barclays agreed to pay \$450 million to resolve an enforcement case. British and American authorities accused the bank of improperly influencing key interest rates to deflect concerns about its health and bolster profits.

The Barclays settlement is the first action stemming from a broad investigation into how banks set key benchmarks, including the London interbank offered rate, or Libor. The pricing of \$350 trillion of financial products, including credit cards, mortgages and student loans, is pegged to Libor and other such rates.

Authorities around the world are now considering action against more than 10 big banks, including UBS, JPMorgan Chase and Citigroup. The banks also face a raft of civil litigation from municipalities, investors and other financial firms that claim they lost money from the misreporting of rates. These lawsuits could end up costing the banking industry

Continued on Page B6

ROMNEY, AGAIN, OUTDOES OBAMA IN FUND-RAISING

\$35 MILLION GAP IN JUNE

'Super PACs' Linked to Democrats Also Trail Rivals on Right

By NICHOLAS CONFESSORE

In the battle for political cash, President Obama is finding himself in an unaccustomed place during the final months of the 2012 campaign: he is losing.

Mitt Romney and the Republican National Committee easily outraised the formidable Obama money machine for the second month in a row. A nonstop schedule of high-dollar events around the country brought in \$106 million during June to Mr. Obama's \$71 million, giving him and his party four times the cash on hand that it had just three months ago.

Mr. Obama's fund-raising deficit in part reflects how steeply the terrain has shifted since 2008, when many Republican donors embraced the candidate and his campaign raised millions of dollars from Wall Street and other traditionally right-leaning industries. Now those donors are swinging hard back to the Republican Party — and to Mr. Romney, whose promise to curtail regulation and cut taxes has helped draw a torrent of five-figure checks.

In a worrisome development for the Obama campaign, Mr. Romney, who until now has been heavily dependent on donors giving the maximum federal contribution, also showed success in June drawing small donors, a traditional strength of the Obama campaign. Reflecting the intensifying general election matchup with Mr. Obama and conservative anger over the recent Supreme Court decision upholding the president's signature health care law, Mr. Romney raised

Continued on Page A12

A Reality Series Intrudes on Silicon Valley, and Finds It Cringing

By DAVID STREITFELD

SAN FRANCISCO — Silicon Valley is finally getting the treatment once reserved for rowdy



sister Randi is an executive producer of the series has therefore rankled. Ms. Zuckerberg, an executive at Facebook until last summer, declined to be interviewed, but defended her show

ANNOTATION LAYER

"All the News
That's Fit to Print"

The New York Times

National Edition

Northern California: Low clouds and fog along the coast. Sunny otherwise. Highs 60s coast to 90s Central Valley. Clouds and fog coast to night. Weather map, Page B8.

VOL. CLXII . . . No. 55,898 +

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TUESDAY, SEPTEMBER 18, 2012

Printed in California

\$2.50



CHIP SOMMERVILLE/GETTY IMAGES

On Constitutional Anniversary, 215 New Americans
Mirna Mumm of Lebanon and 214 others became citizens Monday in Washington, 225 years after the Constitution was signed.

ISRAELI DIPLOMAT IS MAN IN MIDDLE

Dispute Heightens Role
of U.S.-Born Consul

By ELISABETH BUMILLER

WASHINGTON — With Prime Minister Benjamin Netanyahu of Israel engaged in an unusually public dispute with the Obama administration over Iran, Mr. Netanyahu's man in Washington, Michael B. Oren, has been working rooms all over town.

He has run up to Capitol Hill for damage control. He has spent hours with reporters making Israel's case against



As Chicago Strike Goes On, the Mayor Digs In

By MONICA DAVEY

CHICAGO — As the president of the Chicago Teachers Union emerged from a meeting of her union delegates on Sunday night to announce that, no, school would not be starting up again and that, no, the delegates were not ready to sign off on what had seemed like a deal, Mayor Rahm Emanuel watched her on a television in City Hall.

If the rest of the city was stunned to learn that the teachers' strike was not over, Mr. Emanuel appeared disappointed but relatively calm, those with him said, having already gamed out just such a possibility with his aides. Not long after, he issued a statement that, in trademark

tough-guy form, offered not even a passing whiff of conciliation: he accused the union of using children as pawns, and said he was going to court — an option he had checked on weeks ago, just in case, and one he carried out first thing Monday morning.

While hundreds of thousands of Chicago children have begun a second week with no classes, Mr. Emanuel has placed himself firmly in the center of the standoff. He has been the loudest, pushiest voice for longer school days and tougher teacher evaluations, and he now finds himself as the target of fury in the picket lines around the city, where some teachers wear buttons showing a line drawn through Mr. Emanuel's face and others carry signs that demand, "What's Rahm With

You?"

The risks, politically, are enormous. Much depends on what happens Tuesday, when the union's delegates meet to again consider a deal their negotiators, including Karen Lewis, the union president, reached with negotiators from the Chicago Public Schools. But few have as much stake in what comes next — a quick reopening of schools by Wednesday or a far longer, grimmer battle — as Mr. Emanuel.

"This is the first issue that's gone out of control for Rahm," said Don Rose, a longtime political strategist in Chicago. "And it's the first issue where he's really coming up on the wrong side of the polls. He made this personal.

Continued on Page A15

Limits Placed On Immigrants In Health Law

Young People Left Out
of Overhaul Benefits

By ROBERT PEAR

WASHINGTON — The White House has ruled that young immigrants who will be allowed to stay in the United States as part of a new federal policy will not be eligible for health insurance coverage under President Obama's health care overhaul.

The decision — disclosed last month, to little notice — has infuriated many advocates for Hispanic Americans and immigrants. They say the restrictions are at odds with Mr. Obama's recent praise of the young immigrants.

In June, the president announced that hundreds of thousands of illegal immigrants who came to the United States as children, attended school here and met other requirements would be allowed to remain in the country without fear of deportation.

Immigrants granted such relief would ordinarily meet the definition of "lawfully present" residents, making them eligible for government subsidies to buy private insurance, a central part of the new health care law. But the administration issued a rule in late August that specifically excluded the young immigrants from the definition of "lawfully present."

At the same time, in a letter to state health officials, the administration said that young immigrants granted a reprieve from deportation "shall not be eligible" for Medicaid or the Children's Health Insurance Program. Administration officials said they viewed the immigration initiative and health coverage as separate matters.

Kathleen Sebelius, the secretary of health and human services, said in the Federal Register that the reasons offered for the immigration initiative "do not pertain to eligibility for Medicaid," the children's health program or federal subsidies for buying private health insurance.

Nick Papas, a White House spokesman, said the deferred-de-

IN CAR COUNTRY, OBAMA TRUMPETS CHINA TRADE CASE

CITES UNFAIR EXPORTS

Announcement in Ohio
Shows Political Clout
of Incumbency

By MARK LANDLER

CINCINNATI — In a vivid display of the powers of incumbency, President Obama on Monday filed a broad new trade case against China at the World Trade Organization, announcing the action in this industrial battleground where Mitt Romney has pressed his argument that the president has not done enough to protect American workers.

Administration officials said that the W.T.O. case, which charges China with unfairly subsidizing exports of cars and auto parts, was months in the making. But the timing, eight weeks before the election and days after Mr. Romney had renewed his attacks on Mr. Obama for his trade policy toward China, gives it potent political resonance.

On a day in which security and trade policy were inextricably mixed with the presidential campaign, the Chinese government, hours after word of the American action began circulating in Beijing, announced that it was filing its own W.T.O. case, alleging unfairness in how the United States calculates the penalty tariffs in anti-subsidy cases.

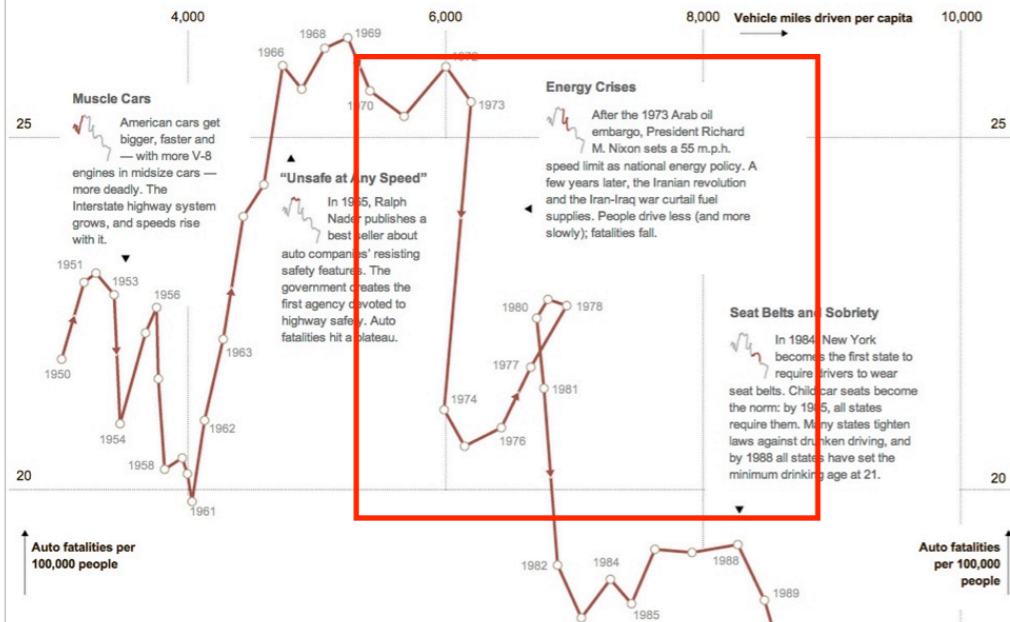
The timing appeared to be coincidental. But an announcement earlier in the day that the United States and Japan had reached a major agreement to deploy a second advanced missile-defense radar on Japanese territory prompted immediate criticism in China. [Page A8.]

Speaking to supporters in a state heavily dependent on the auto industry, Mr. Obama drew an explicit link between China's trade policies and the economic travails of voters in this closely contested region. By giving its exporters \$1 billion in illegal subsidies from 2009 to 2011, the ad-

One Day, Growing Spare Parts Inside the Body

Published: September 17, 2012

FACEBOOK TWITTER GOOGLE+ E-MAIL SHARE



Driving Safety, in Fits and Starts

AMERICANS drive a staggering number of miles — close to three trillion every year, according to the government. (That is half a light-year, or 120 million trips around the world.) And although traffic accidents remain a major public safety problem, the biggest killer of people ages 5 to 34, vehicle travel is far safer than it was a few decades ago.

Several factors appear to account for the sharp decline in fatalities. Technology (like anti-lock brakes and air bags) and road behavior (like wearing seat belts and driving sober) have both improved greatly since 1950.

Americans almost always drive more each year than the previous one — at least until recently, when the recession curtailed road habits. And the auto fatality rate has been decreasing since the 1960s, when cars with massive engines carried their unbuckled passengers on primarily two-lane roads.

The safety data is usually charted as

deaths per miles traveled. But what happens when the metrics are teased apart, and familiar data is charted in an unfamiliar way? Plotting the two most important variables against each other — miles traveled versus deaths per 100,000 population — yields a pattern that looks like a plateau followed by a steep drop. It evokes the theory of punctuated equilibrium, proposed by the paleontologists Stephen Jay Gould and Niles Eldredge, which suggests that instead of continuous gradual evolution, change occurs abruptly after periods of virtual standstill.

“You see fatalities drop after a breakthrough in new technologies or behaviors, and then plateau until the next one,” said David L. Strickland, administrator of the National Highway Traffic Safety Administration. “It takes time for new safety technologies to work their way into the whole fleet of cars on the road.”

Air Bags and S.U.V.’s

By the 1990s, new technology like antilock brakes reduces accidents, and air bags make them less deadly. But Americans also fall in love with high-riding S.U.V.’s, which tend to flip over and to endanger smaller vehicles.

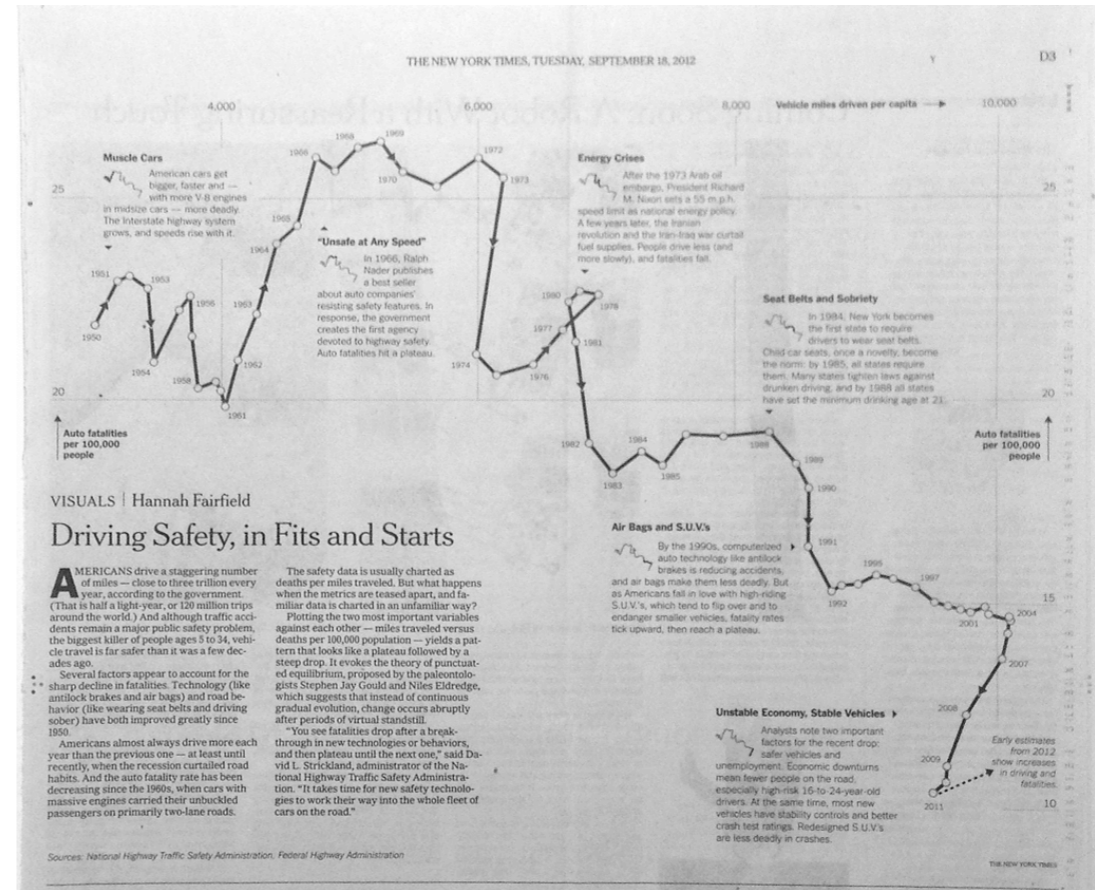
Unstable Economy, Stable Vehicles

Analysts note two important factors since 2004: safer vehicles and unemployment. Economic downturns mean fewer people on the road, especially high-risk 16-to-24-year-old drivers. Also, most new vehicles have stability controls and better crash test ratings. Redesignated S.U.V.’s are less deadly in crashes.

By HANNAH FAIRFIELD | Send Feedback

Sources: National Highway Traffic Safety Administration; Federal Highway Administration

A chart with the Visuals article on Tuesday about a sharp decline in the rate of highway fatalities, misstated the year Ralph Nader’s book “Unsafe at Any Speed” was published. The book came out in 1965, not in 1966.



VISUALS | Hannah Fairfield Driving Safety, in Fits and Starts

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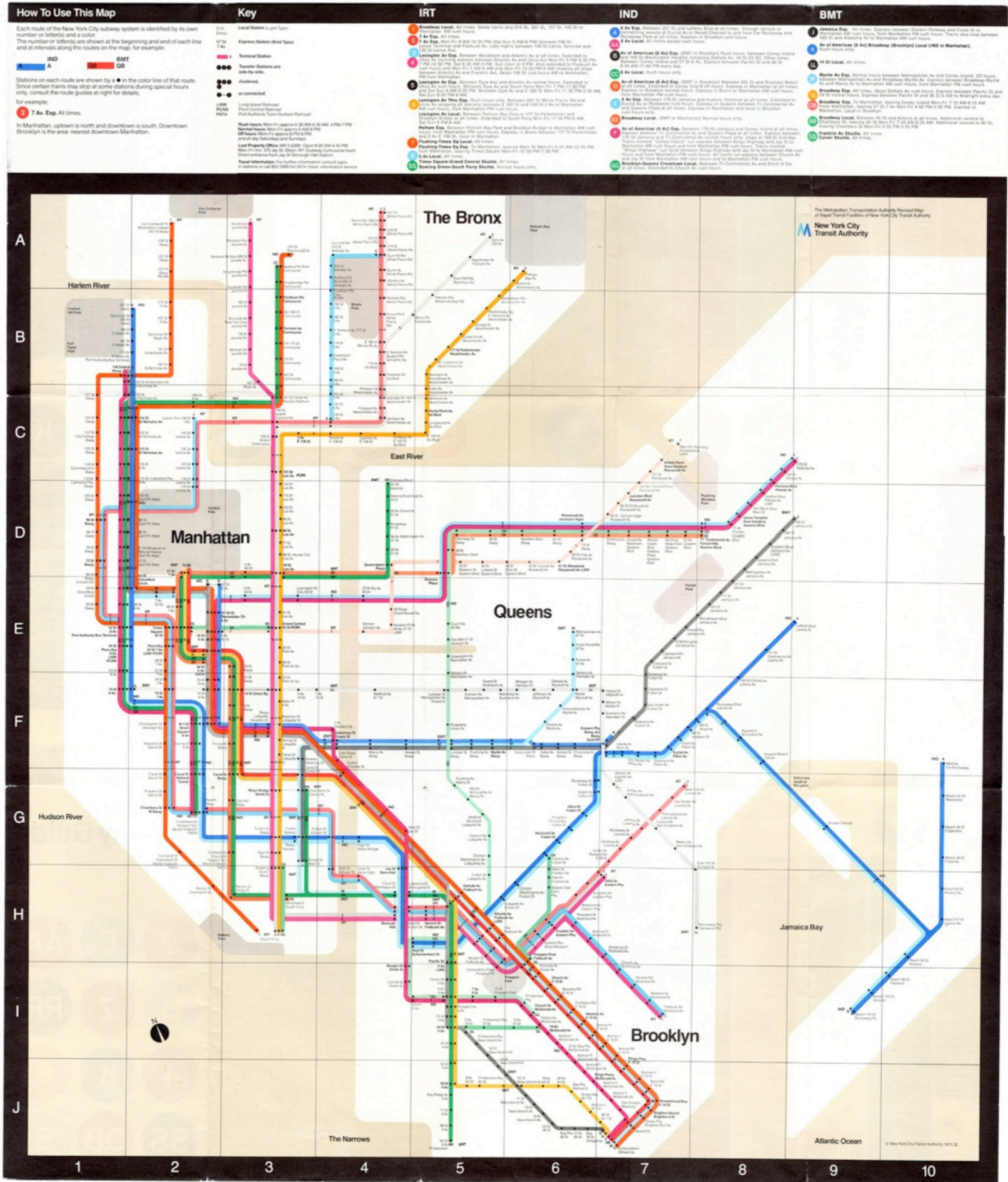
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Sources: National Highway Traffic Safety Administration; Federal Highway Administration

AD HOC DESIGN











MUNI powell station

www.sfmta.com or
311 for Muni info.



APPROXIMATE ARRIVALS		
	outbound	inbound
J	3 min	1 min
K	11 min	
L	0 min	8 min
M	2 min	0 min
N	1 min	3 min
T		3 min

Last Update: 08:27:12 AM

SFMTA | Municipal Transportation Agency





SFO International Airport

4:06 PM

updated 4:00 PM



Departing To	Airline	Flight	Time	Status	Gate	Info
Los Angeles (LAX)	 UNITED	566	4:17 PM	On Time	70	>
Sacramento (SMF)	SkyWest Airlines	5470	4:17 PM	Delayed		>
Washington (IAD)	 UNITED	378	4:17 PM	On Time	75	>
San Diego (SAN)	 america	958	4:20 PM	On Time		>
North Bend (OTH)	SkyWest Airlines	5349	4:23 PM	On Time		>
Oklahoma City (OKC)	SkyWest Airlines	6240	4:25 PM	On Time	77B	>



Departures

Arrivals

Sort



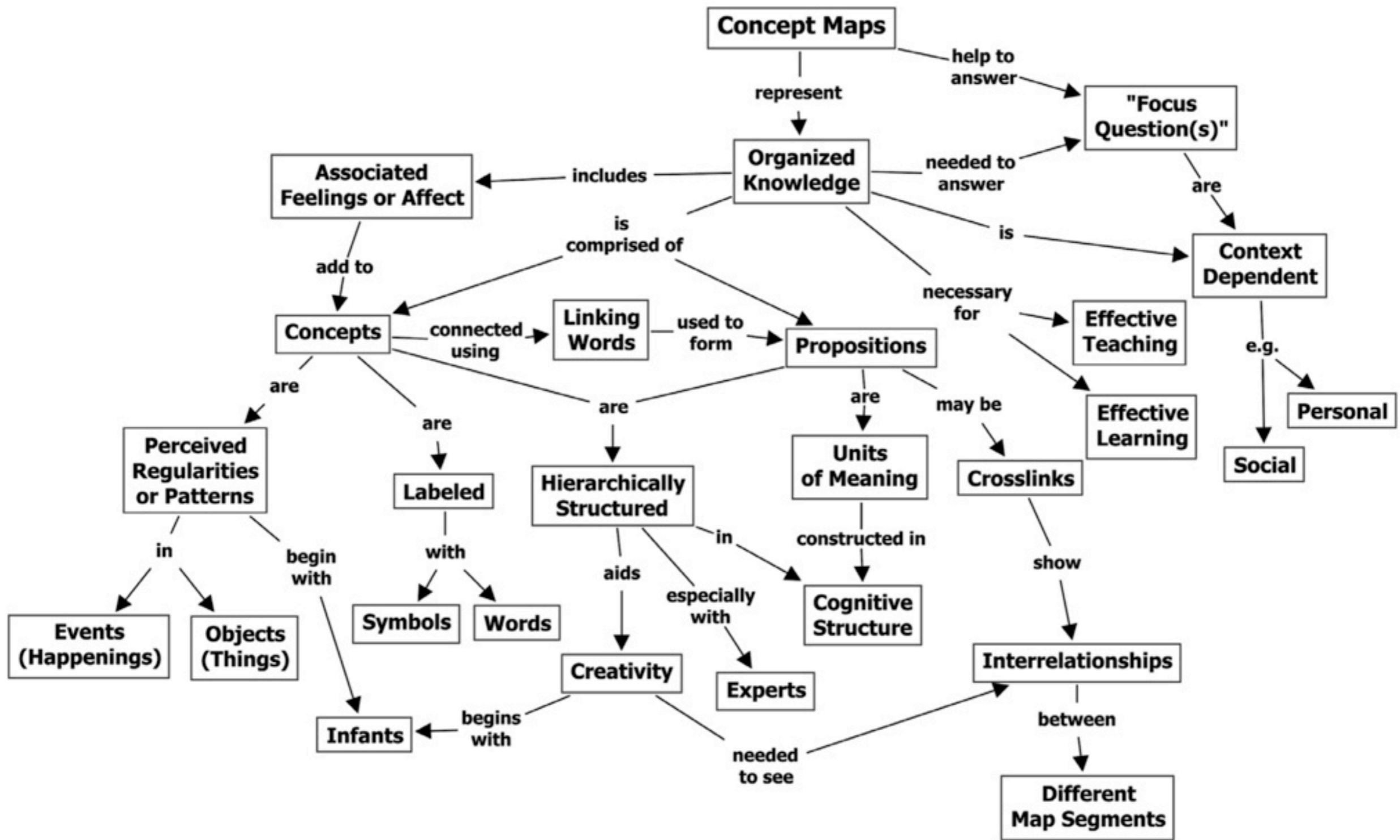
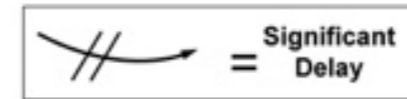


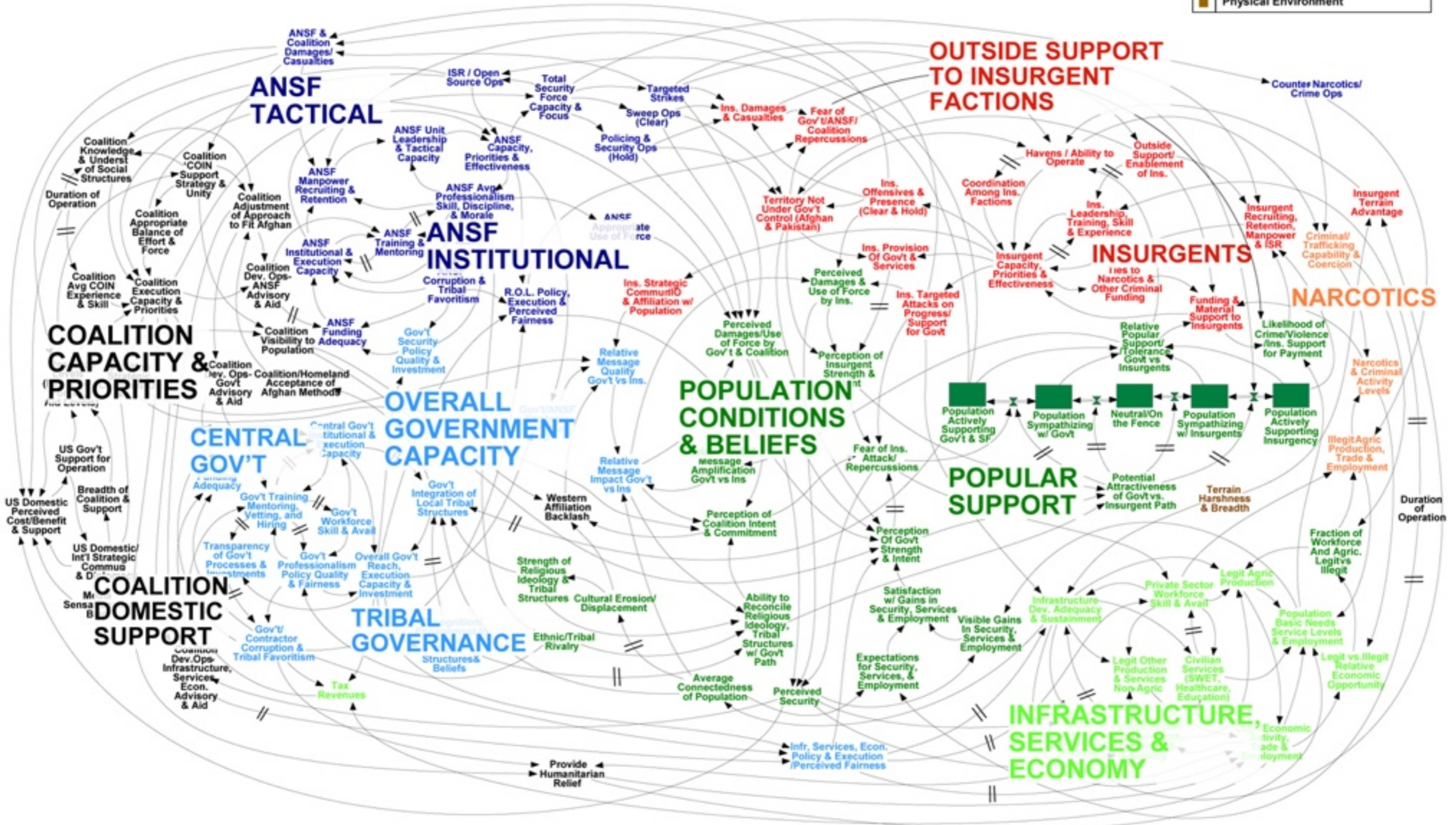
Figure 1. A concept map showing the key features of concept maps. Concept maps tend to be read progressing from the top downward.

Novak & Gowin 1984

Afghanistan Stability / COIN Dynamics



- Population/Popular Support
- Infrastructure, Economy, & Services
- Government
- Afghanistan Security Forces
- Insurgents
- Crime and Narcotics
- Coalition Forces & Actions
- Physical Environment



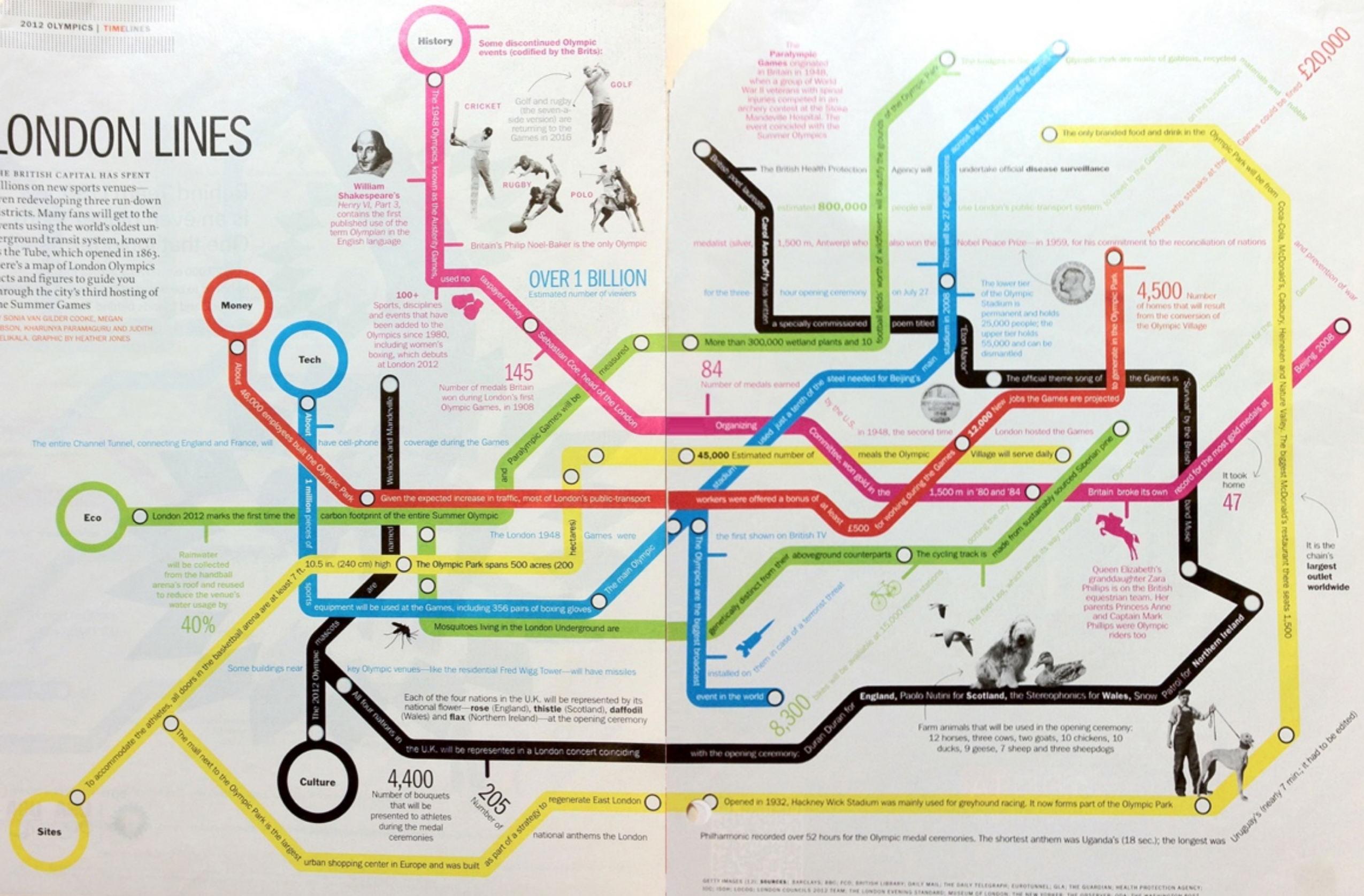
WORKING DRAFT - V3



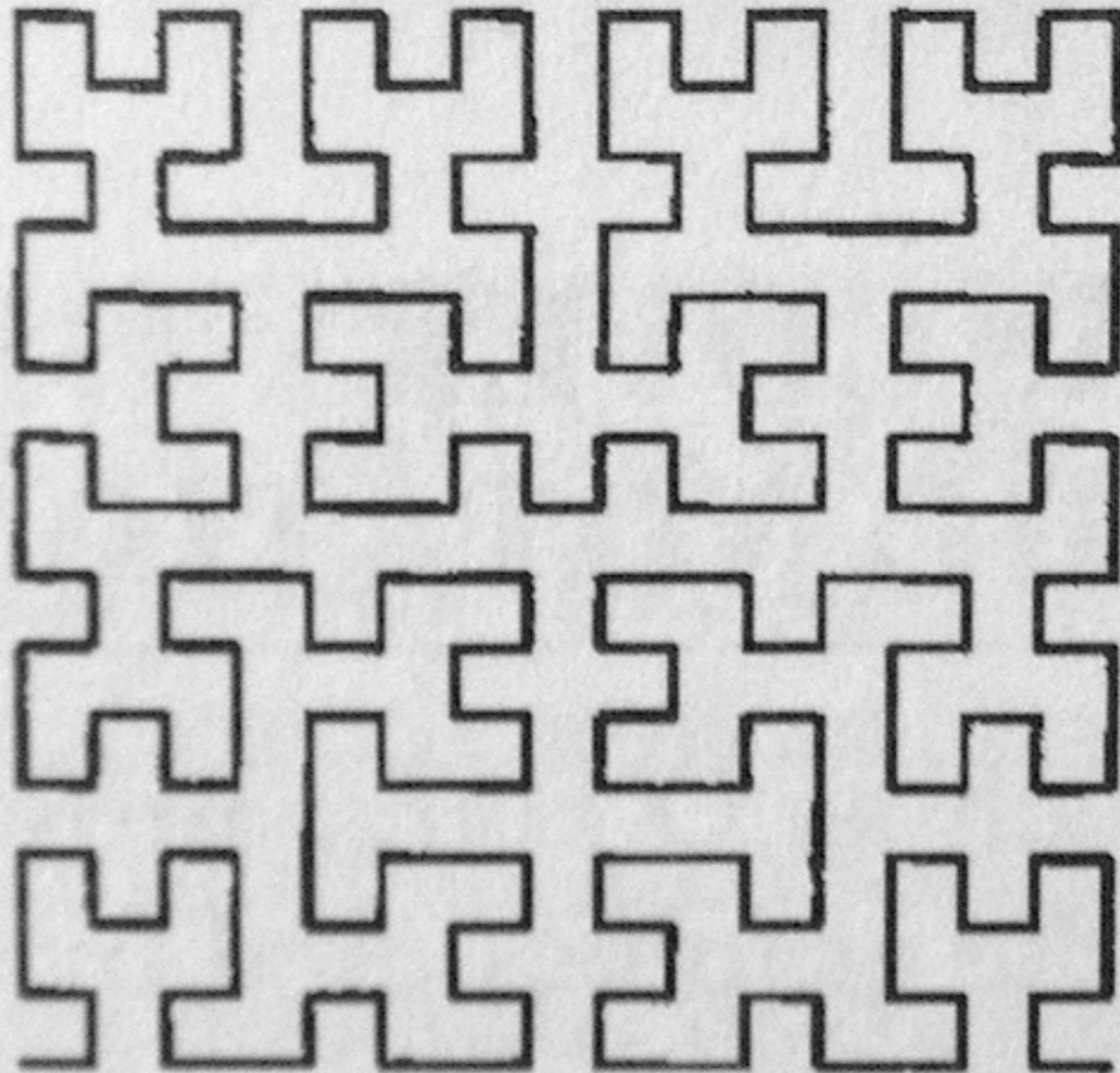
LONDON LINES

THE BRITISH CAPITAL HAS SPENT billions on new sports venues—even redeveloping three run-down districts. Many fans will get to the events using the world's oldest underground transit system, known as the Tube, which opened in 1863. Here's a map of London Olympics facts and figures to guide you through the city's third hosting of the Summer Games

BY SONIA VAN GILDER COOKE, MEGAN GIBSON, KHARUNYA PARAMAGURU AND JUDITH WELIKALA. GRAPHIC BY HEATHER JONES



GETTY IMAGES (2); SOURCES: BARCLAYS; BBC; FCB; BRITISH LIBRARY; DAILY MAIL; THE DAILY TELEGRAPH; EURO-TUNNEL; GLA; THE GUARDIAN; HEALTH PROTECTION AGENCY; HPC; IBM; LONDON; LONDON COUNCILS 2012 TEAM; THE LONDON EVENING STANDARD; MUSEUM OF LONDON; THE NEW YORKER; THE OBSERVER; OGA; THE WASHINGTON POST



TRIVIA GAMES

Everything else you need to know about London 2012

PEOPLE

U.S. archer **KHATUNA LORR**, 38, taught actress Jennifer Lawrence how to shoot arrows for her role in *The Hunger Games*.

This weight lifter **PRAPHADEE JARONRATTANASIRAWOON**, 28, changed her name from Chanpin Kantabin in 2007 on the advice of a fortune teller, who told her the new name would bring her good luck. She won gold in Beijing.

ORIANA COLSONTEA, 37, is the only female gymnast to have competed in five Olympic Games, and she did so on three different teams: one made up of former Soviet republics in 1992; Uzbekistan in 1996, 2000 and 2004; and Germany in 2008. London will be her sixth Olympics.

When 15-year-old Mexican diver and London 2012 medal hopeful **CHRISSINA MENDOZA** travels to a competition, she brings along the diving suit of her friend and teammate Diana Diaz, who was killed in a car accident last year.

Haitian triple jumper **SAMYR LANE** roomed with Facebook founder Mark Zuckerberg at Harvard and holds a law degree from Georgetown. He has a job waiting for him at a New York City law firm when he retires from competitive sports.

Australian runner **JANA PITMAN-BANKLSON** had her breast implants removed to improve her chances for London 2012—but a foot injury prevented her from making the Olympic team.

By William Lee Adams, Sonia van Gilder Cooke, Megan Gibson, Khananya Paramaguru and Judith Weikala
Graphic and Illustrations by Heather Jones

STATS

10

Age of the youngest Olympian ever, Greek gymnast **Dimitrios Loundras**. He won bronze at Athens 1896.

72

Age of the oldest Olympian, Swedish shooter **Oscar Swahn**, who won silver at Antwerp 1920 and silver at Paris 1924. She weighed 65 lb. (29 kg).

71

Age of Japanese equestrian **Hiroshi Hoketsu**, who will be the oldest competitor this year. His first Olympics was Tokyo 1964.

Married shooters **RUSSELL AND LARRY MARK** were furious when the Australian Olympic Committee told them they couldn't room together in the Olympic Village in London; Russell claimed they were being discriminated against as heterosexuals because same-sex couples wouldn't be prevented from rooming together in the gender-segregated housing. They spent much of the flight there cuddling.



ROMANCE

Canadian sprinter **AUSTIN RUSSELL** and his fiancée **JANISKA HEIDER**, a hurdler and Canadian teammate, plan to wed in October, after they compete in London.



150,000

Number of condoms provided in the Olympic Village (up 50% from the 100,000 made available at Beijing 2008).

Olympic athletes and coaches from outside the E.U. have **RESTRICTED VISAS** that forbid them to marry or form civil partnerships while on British soil during the Games.

LEXICON

Eggbeater: A vigorous leg movement used in treading water by synchronized swimmers and water polo players.

Penhold: A type of paddle grip in table tennis; the handle is gripped with two fingers.

Bow ball: A rubber ball attached to the bow of a rowing shell to prevent injury in the event of a collision.

Bunny hop: A maneuver in BMX racing when a rider lifts both wheels off the ground at once.

Base: The square Mack from Mack to which the face of an archery target is attached.

Coffee: An obstacle encountered by a horse and rider on a typical equestrian cross-country course.

At London 1948, which became known as the Austerity Games because Britain was still recovering from World War II, whole meat was eaten by some athletes since it wasn't rationed by the government. The U.S. Olympic team shipped 5,000 steaks, 2,500 lamb chops and 2,500 lb. (1,135 kg) of ham to London for its athletes. The French team brought its own wine.

Athletes have been warned by U.K. Anti-Doping to avoid eating liver, as it could show up in tests as the anabolic agent clenbuterol, a banned substance.

800

Number of chefs cooking for the athletes in the Olympic Village.

14 million

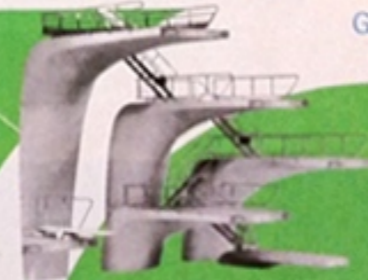
Meals the London Organizing Committee of the Olympic Games (LOCOG) will serve at 40 locations during the Olympic and Paralympic competitions.

LOCOG has mandated that all bananas, tea, coffee, chocolate and sugar used during the Games be Fair Trade Certified.

Eggs must be free range, and any chicken on the menu must come from birds that are given room to roam, shelter and natural light when inside.

All fish must come from sustainable stock or have been caught using sustainable practices.

GEAR



The **diving platforms** at the London Aquatics Centre were designed by architect Zaha Hadid. Instead of having conventional support columns, Hadid's platforms consist of a single piece of smooth, curved concrete.

Partly sighted **Paralympic swimmers** are required to wear blackened goggles to compete against completely blind swimmers.

In early versions of **water polo**, players rode on floating barrels and struck the ball with sticks. The resemblance to the equestrian sport inspired its name, which stuck even as the sport evolved.

An Olympic **badminton** shuttlecock weighs from 0.17 oz. to 0.19 oz. (4.74 g to 5.50 g). Its 16 feathers are plucked from the left wing of a goose.

FOOD

To feed the nearly 15,000 Olympic and Paralympic athletes staying at the Olympic Village, the kitchens will be stocked with:

- 232 tons of potatoes
- more than 82 tons of seafood
- more than 100 tons of meat
- 158,000 pints (75,000 L) of milk
- 19 tons of eggs
- 21 tons of cheese
- more than 330 tons of fruit and vegetables

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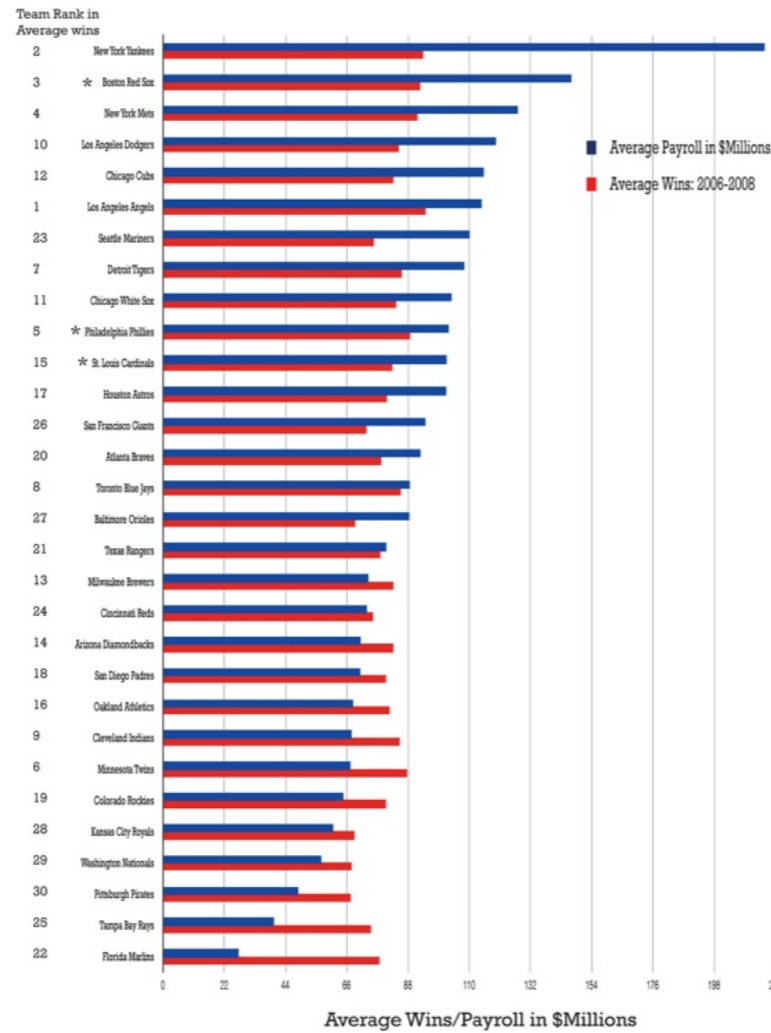
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THEORY & PRACTICE: TWO EXAMPLES

Money Ball

Wins Salary 2006-2008

MLB Playoffs 2006



MLB Playoffs 2007



MLB Playoffs 2008



"With the money I'm making, I should be playing two positions."
 — Pete Rose [said in 1977]



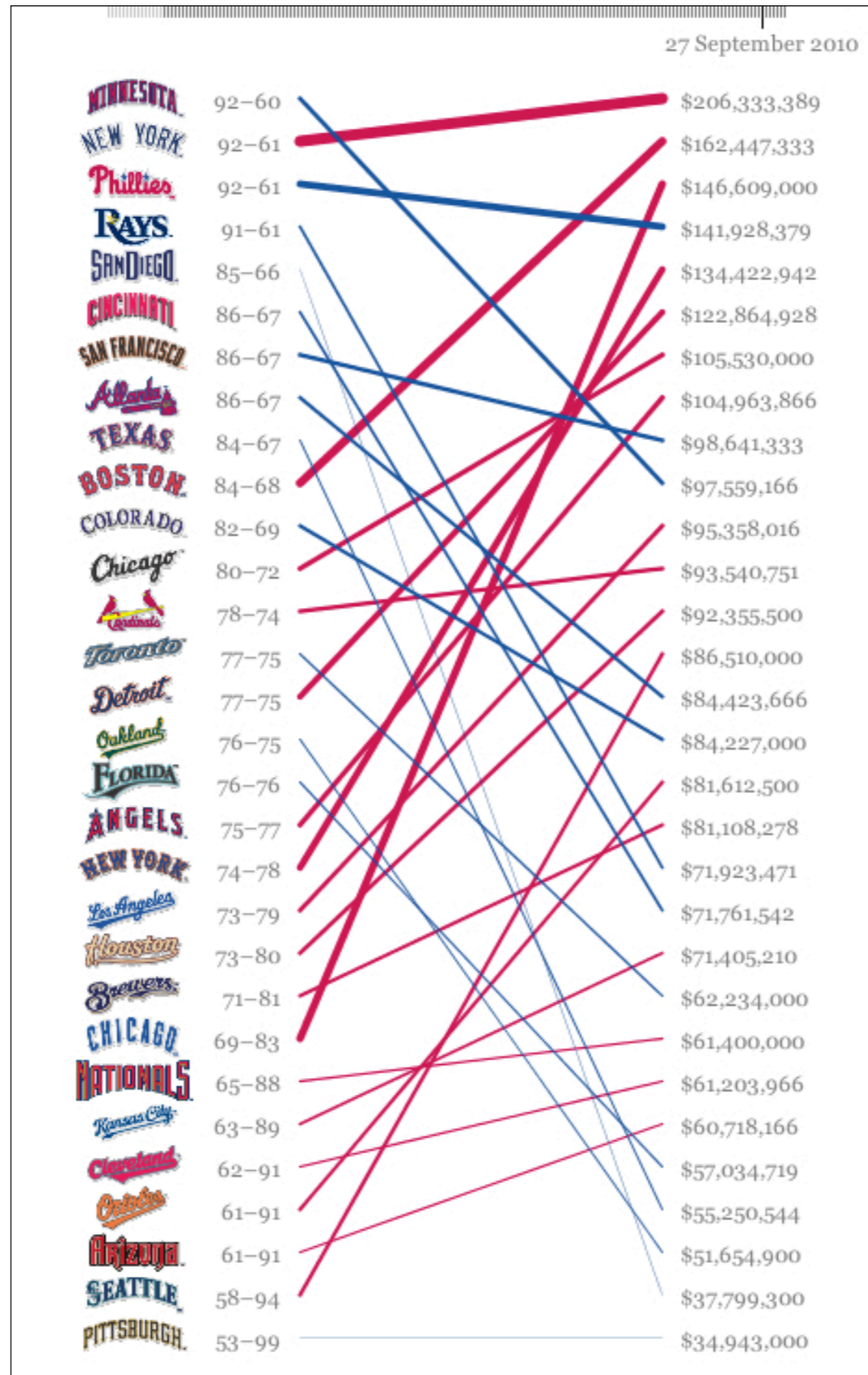
Money Ball

Wins Vs. Salary



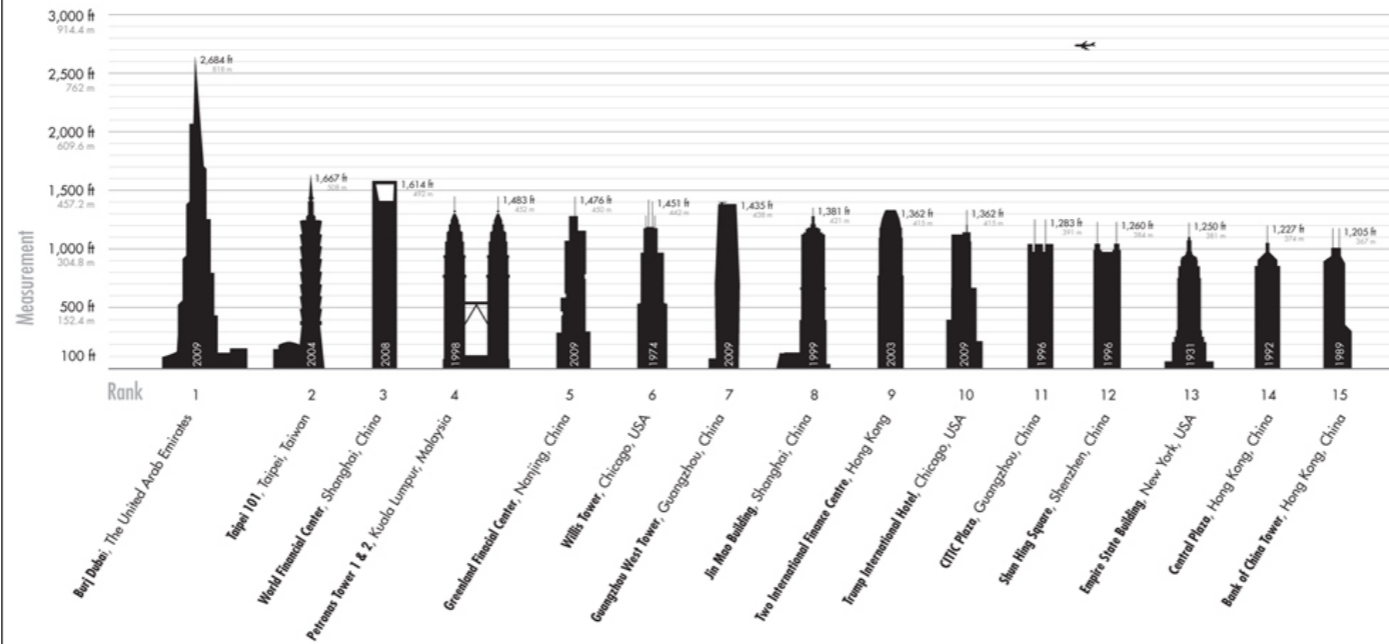
- Every team to win a championship in 2006 - 2008 had an average payroll above 100 million a year.
- The Seattle Mariners got the worst bang for their buck with their average spending over 110 million each year while averaging under 76 wins per year.
- The Minnesota Twins got the best bang for their buck, averaging over 87 wins per year while spending under \$68 million.
- Every year from 2006 to 2008 a team who's payroll was in the bottom ten made it to the playoffs. But only once did one of these teams make it to the final round of the playoffs.
- The New York Yankees outspend every other team by massive amounts every year. This has paid off with 27 World Series Championships, more than doubling the runner up St. Louis Cardinals who have 10.
- The Cleveland Indians spent less than \$68 million while averaging 85 wins per year.
- All top five teams averaged over 100 million spent each year.
- The LA Angels averaged over 94 wins.

27 September 2010



Fry 2010

World's Tallest Buildings 2010



Location Map



World's Tallest Building Criteria

Reference: wikipedia.com

Criteria for Inclusion on the List of 100 Tallest Buildings by the Council on Tall Buildings and Urban Habitat

This data was gathered and/or supplied by members and representatives of the Council on Tall Buildings and Urban Habitat who represent world leaders in the field of the built environment, including research, industry, and education.

What defines a building (as opposed to a tower)?

A "building" is considered to be a structure that is designed for residential, business, or manufacturing purposes. An essential characteristic of a building is that it has floors. Note that towers are NOT included in the list. Although a number of tall buildings on this list have "tower" in their name—the famous Petronas Towers, for example—none are technically towers.

When does a building appear on the list?

When a building is "topped out", the point of construction when the structure has met its proposed structural top (see height definition below)—the building is officially ranked and is placed on the list.

Height

The height of a building is measured from the sidewalk level of the main entrance to the structural top of the building. This includes spires, but does not include television antennas, radio antennas, or flag poles. Height is listed in both meters and feet and is rounded to the nearest integer. This is the official criterion used by the Council in determining ranking. In many cases, the height of a building is supplied to the Council using only one unit of measure (either feet or meters). Based on the exact value of the unit supplied, the other unit's value is mathematically calculated, then rounded to the nearest integer. The final determinant in ranking a building's height is the footage—not meters—because of footage's smaller (and therefore more precise) incremental value.

Rank

Ranking is determined by height to the structural top of the building (see above). If there is a tie, the building with the larger number of stories is ranked higher. If a tie still remains, the building that was completed first is ranked higher. If a tie would still remain, the buildings would be ranked alphabetically.

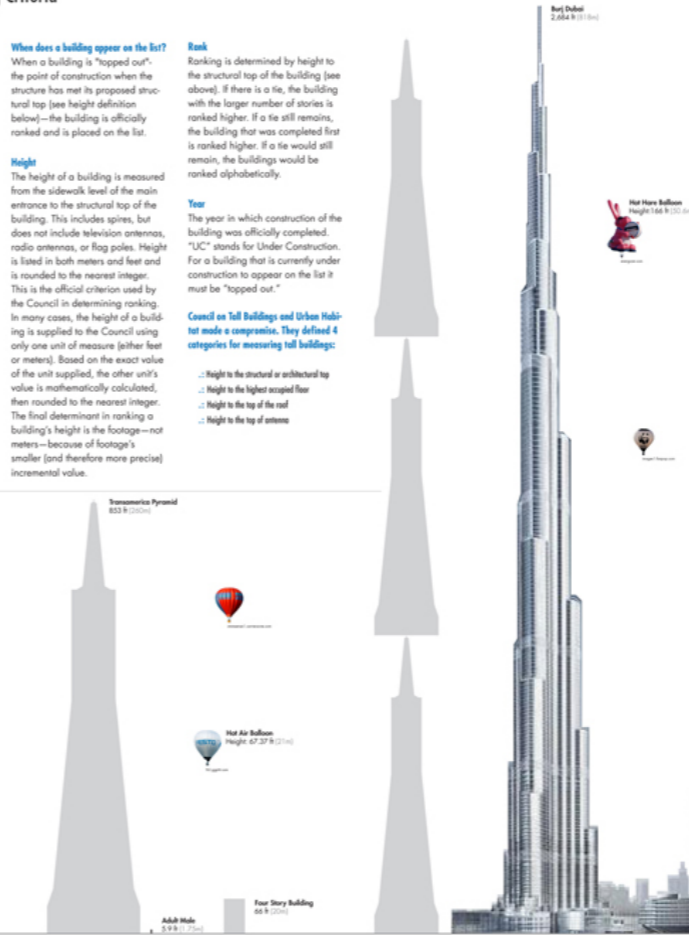
Year

The year in which construction of the building was officially completed. "UC" stands for Under Construction. For a building that is currently under construction to appear on the list it must be "topped out."

Council on Tall Buildings and Urban Habitat made a compromise. They defined 4 categories for measuring tall buildings:

- Height to the structural or architectural top
- Height to the highest occupied floor
- Height to the top of the roof
- Height to the top of antenna

World's Tallest Buildings 2010

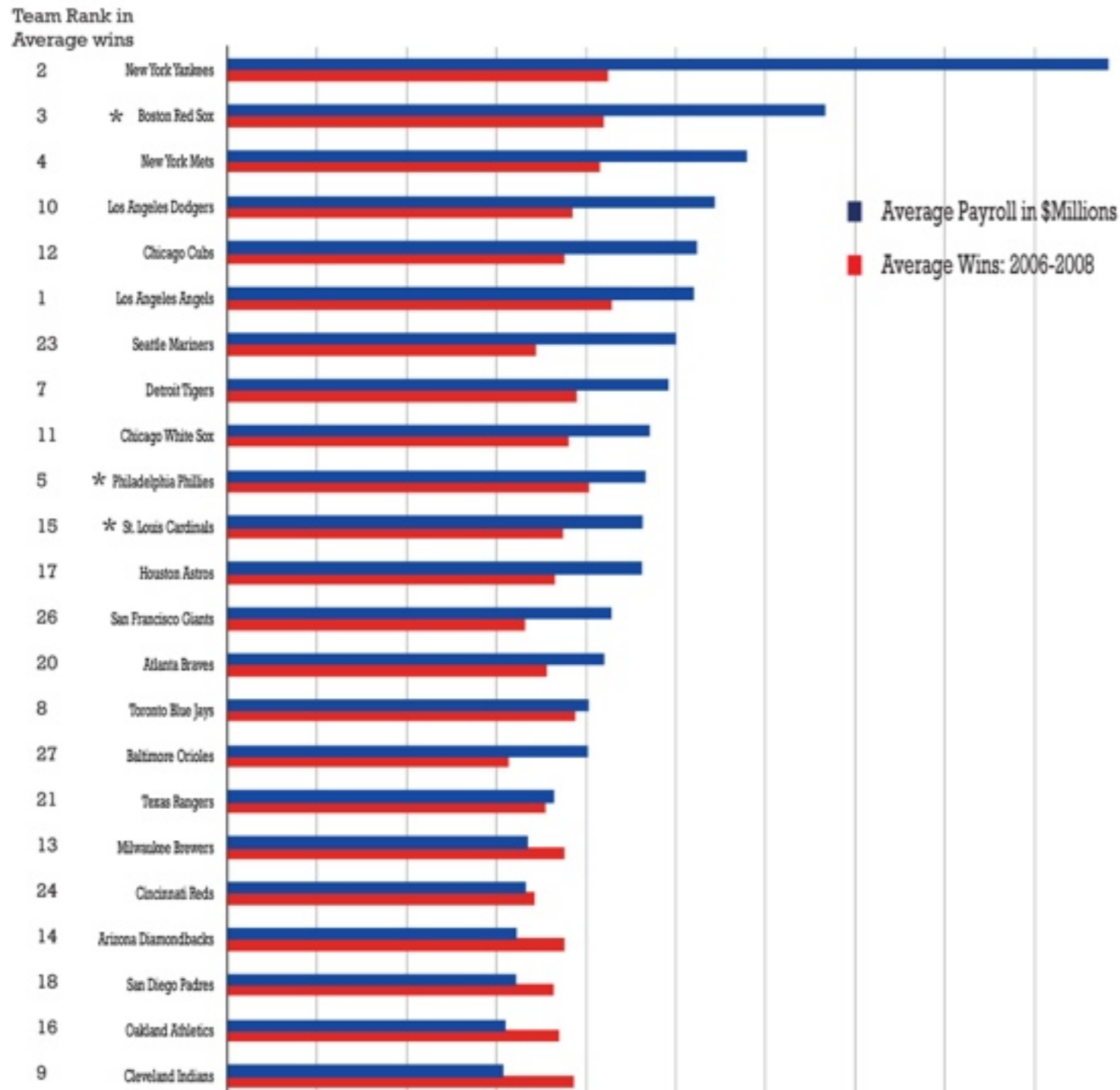


Case Study No. 10 | Designed by Hejazi Inc. | December 2009 | Poster Size: 32" x 48" | 240 023 Information Design | Sustainable Poster Design | Design and Industry Department | San Francisco State University

Money Ball



Wins Salary 2006-2008



MLB Playoffs 2006

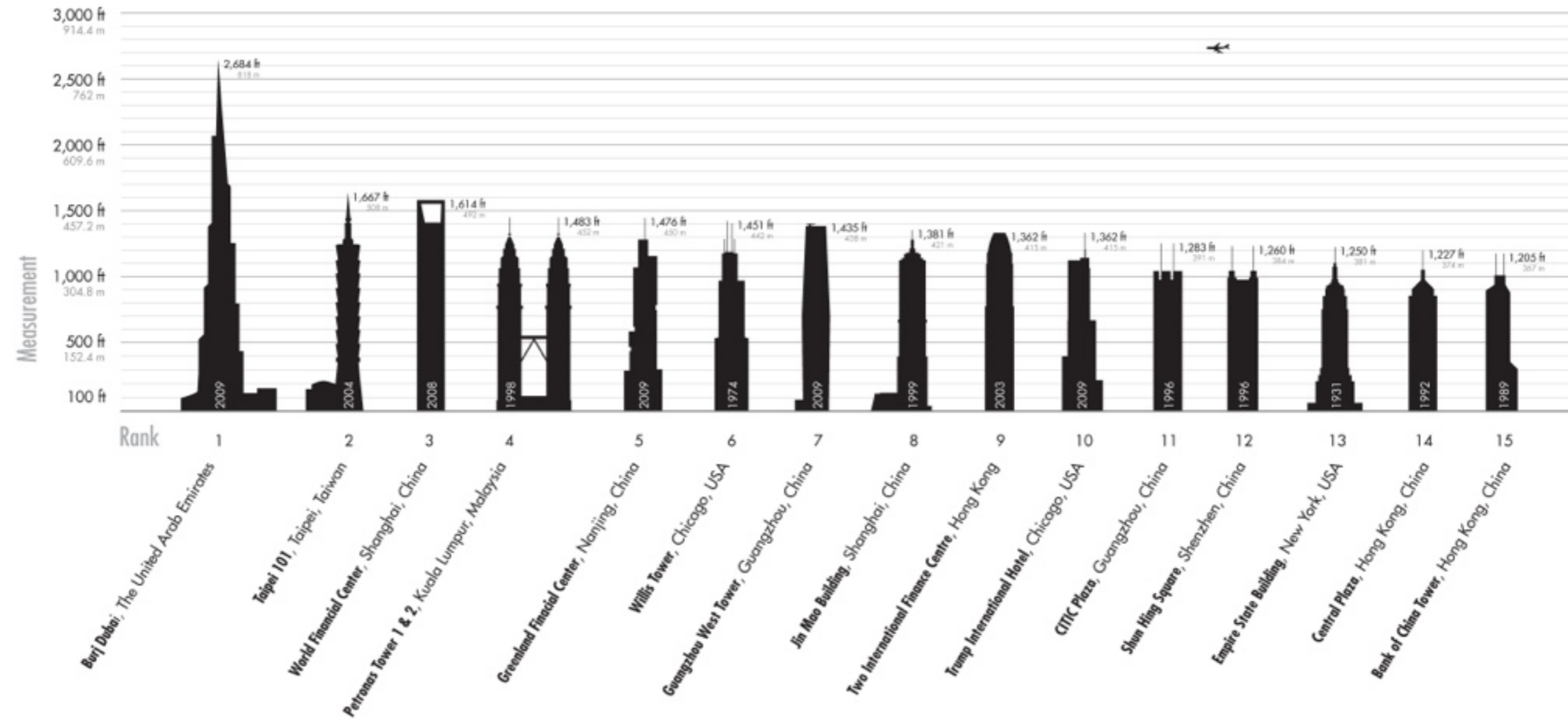


MLB Playoffs 2007



MLB Playoffs 2008

World's Tallest Buildings 2010



Location Map

World Map: wikimedia.org

6. Willis Tower

1. Burj Dubai

World's Tallest Building Criteria

Reference: infoplease.com

Criteria for Inclusion on the List of 100 Tallest Buildings by the Council on Tall Buildings and Urban Habitat

When does a building appear on the list? When a building is "topped out" - the point of construction when the

Rank Ranking is determined by height to the structural top of the building (see

Burj Dubai
2,684 ft (818m)

Location Map

World Map: wikipedia.org



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Rank

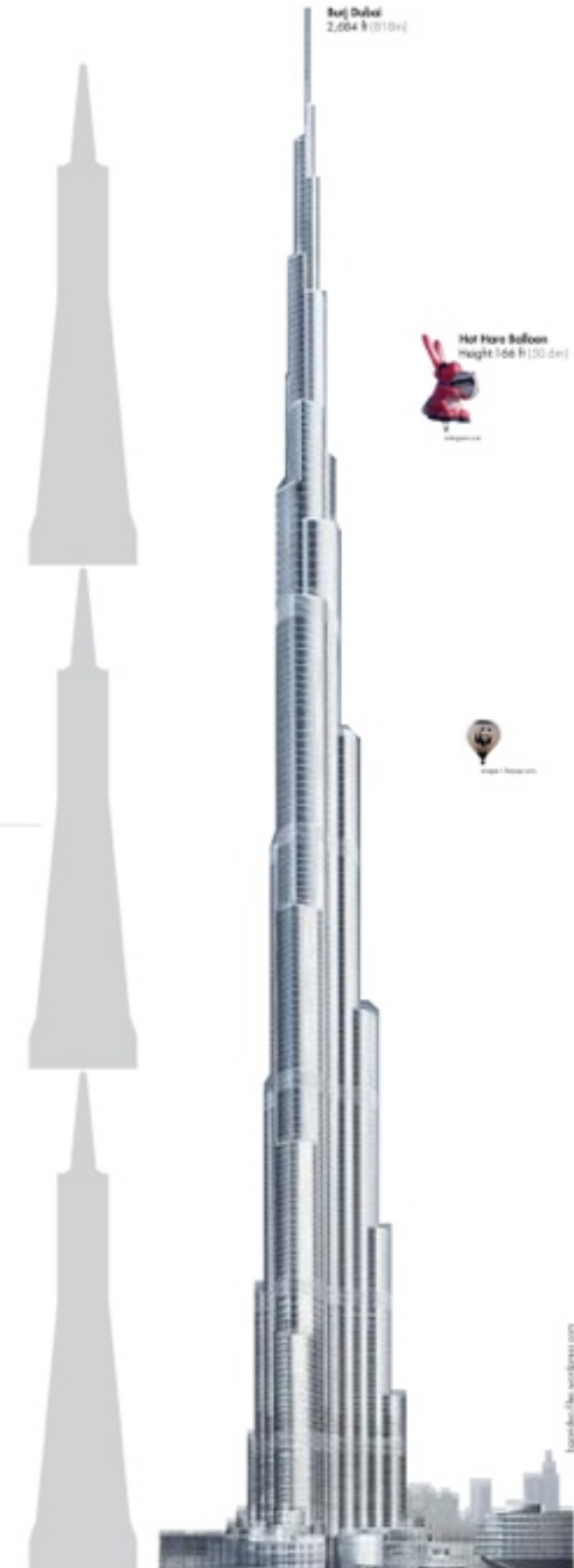
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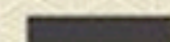
World's Tallest Buildings 2010



JACQUES BERTIN

Semiology of Graphics

diagrams
networks
maps





JACQUES BERTIN

SEMIOLOGY OF GRAPHICS 1967



DANIEL WILLINGHAM

K-12 EDUCATION 2012

CONVENTION

SKILLS & CRAFTS

SPECIFIC

METHODS

THEORIES

GENERAL

PRINCIPLES

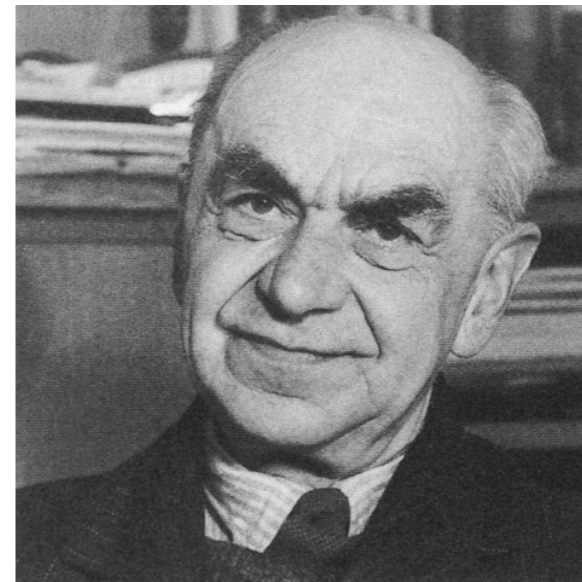
COGNITION



HERMANN EBBINGHAUS
ON MEMORY, 1885



FERDINAND DE SAUSSURE
LINGUISTICS, 1906-11



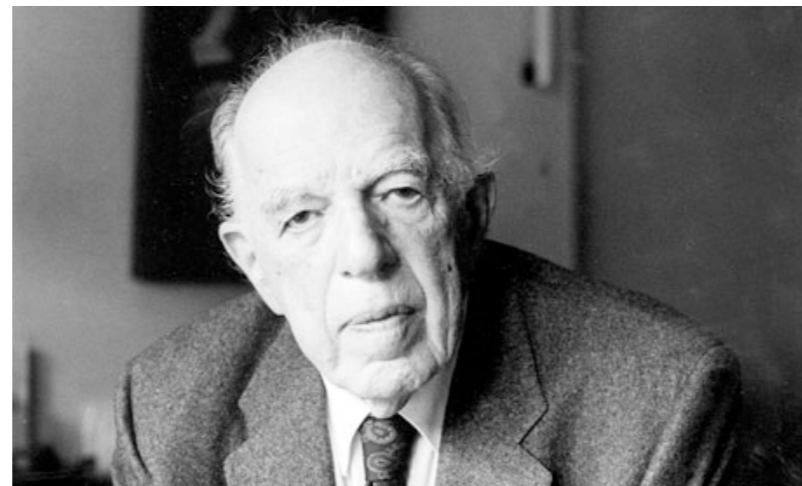
FREDERIC BARTLETT
ON REMEMBERING, 1932



GEORGE A. MILLER
MAGICAL NUMBER SEVEN, 1956



ALAN D. BADDELEY
WORKING MEMORY, 1974



ERNST GOMBRICH
THE IMAGE AND THE EYE, 1982



DANIEL WILLINGHAM
K-12 EDUCATION, 2012

LINKS

PINO TROGU — SAN FRANCISCO STATE UNIVERSITY

THE FOUR-SECOND WINDOW

PDF of slides and handout

trogu.com/Documents/conference/2013_drs_cumulus_oslo

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