WHAT IS A PICTOGRAM?
PICTOGRAM:

A graphic symbol that conveys its meaning through its pictorial resemblance to a physical object
WHAT MAKES A PICTOGRAM SUCCESSFUL?
A case study: The Olympics

1984 Los Angeles Olympics

Designers: Keith Bright and Associates.
Six criteria were isolated as essential to a successful pictogram:

- **Clear communication;** pictograms, by themselves, should be recognizable by people of other nations.
- **Consistency;** the pictograms should be identifiable as a set, through uniform treatment of scale, style and subject.
- **Legibility and practicality;** they should be highly visible, easy to reproduce in any scale and in positive or negative form.
- **Flexibility;** the pictograms should not be dependent upon a border and should work equally well in a positive or negative form.
- **Design distinction;** the pictograms should avoid stylistic fads or a commercial appearance and should imply to a worldwide audience that Los Angeles has a sophisticated, creative culture.
- **Compatibility;** they should be attractive when used with their Los Angeles Olympic design elements and typestyles.

1984
Los Angeles
Olympic Pictograms
1992 Barcelona Olympic Pictograms
2008 Beijing Olympic Pictograms
WHAT MAKES A PICTOGRAM SUCCESSFUL?
A case study: The Olympics

http://www.youtube.com/watch?v=yHWIEU8zqUE&feature=player_detailpage
CRITIQUE

Assignment One:
Personal Pictogram Project

Create 3 pictograms that describe you. Make 5-8 exploratory pencil sketches of each. Choose direction and create in Illustrator or Photoshop. Document sketches and final work on your blog.
How well do your pictograms meet the LA Olympic requirements?

- **Clear communication:** pictograms, by themselves, should be recognizable by people of other nations.

- **Consistency:** the pictograms should be identifiable as a set, through uniform treatment of scale, style and subject.

- **Legibility and practicality:** they should be highly visible, easy to reproduce in any scale and in positive or negative form.

- **Flexibility:** the pictograms should not be dependent upon a border and should work equally well in a positive or negative form.

- **Design distinction:** the pictograms should avoid stylistic fads or a commercial appearance.

- **Compatibility:** they should be attractive when used with their project’s established design elements and typestyles.
A **PICTOGRAM** is information design in its most basic form. It’s visual representation of a noun or verb.

**But what if we want to visually represent statistics, ideas, research, or instructions?** This is when things get a bit more complex...
BUZZ WORDS:

DATA VISUALIZATIONS

INFOGRAPHICS
**How many sexual partners have you had?**

- None: 5%
- 1: 15%
- 2: 10%
- 3-5: 23%
- 6-10: 18%
- 11-20: 12%
- 21-50: 9%
- Over 50: 3%
- Can't remember: 4%

**When did you lose your virginity?**

- Still waiting: 5%
- 20 or older: 13%
- 16 or under: 34%
- 15-16: 17%
- 14 or under: 21%

**How many one night stands?**

- None: 35%
- 1: 19%
- 2: 11%
- 3: 8%
- 4: 5%
- 5: 5%
- 6-10: 8%
- 11-26: 6%
- Can't remember: 5%

**Do you prefer a partner more or less experienced than you are?**

- More: 63%
- Less: 37%

**Current status**

- Married: 29%
- Dating: 39%
- On the market: 32%

**Your level of attractiveness**

- I scare children: 21%
- Average: 78%

**Have you ever been cheated on?**

- Yes: 55%
- No: 45%

**Did you forgive your partner?**

- Yes: 37%
- No: 63%

**Have you cheated with a friend's partner?**

- Yes: 21%
- No: 79%

**Is it better to know you're being betrayed or to be happy and oblivious?**

- Know: 71%
- Happy: 29%
WALMART VS TARGET

Their presence in major cities
Where are the Wikileaks cables from?

The Wikileaks data covers a specific chunk of leaked cables—it's not all cables sent over the period, but rather a selection. These are the top locations the cables were sent from.

How the Wikileaks cables were classified

Confidential 97,070
Unclassified 75,792
Unclassified/for official use only 58,095
Secret 11,322
Confidential/noforn 4,678
Secret/noforn 4,330

When were the Wikileaks cables sent?
The selection of cables covers a period from the 1960s onwards - but the bulk are from the last ten years

Daniel Hernandez
Tucson, AZ

Daniel Hernandez is a student advocate and political activist from Tucson, Arizona. He currently serves as a Congressional Intern for Congresswoman Gabrielle Giffords and a Director with the Arizona Students’ Association. Born in 1990, Daniel attended public schools in the Sunnyside Unified School District and is earning a Bachelor of Arts in Political Science as a junior at the University of Arizona.

Learn More
In addition to the well known social issues of illiteracy and innumeracy, there also should be such a concept as "immappreciation", meaning insufficient geographical knowledge.

A survey with random American schoolkids let them guess the population and land area of their country. Not entirely unexpected, but still rather unsettling, the majority chose "1-2 billion" and "largest in the world", respectively.

Even with Asian and European college students, geographical estimates were often off by factors of 2-3. This is partly due to the highly distorted nature of the predominantly used mapping projections (such as Mercator).

A particularly extreme example is the worldwide misjudgement of the true size of Africa. This single image tries to embody the massive scale, which is larger than the USA, China, India, Japan and all of Europe...combined!
Let’s Not Get Too Excited...
If the Twitter community was 100 people...

20 dead
(empty accounts)

only 5
with more than 100 followers

50 lazy
not tweeted in the last week

5 loud mouths
creating 75% of the tweets

by Loudmouth David McCandless @mccandlish // informationisbeautiful.net // @infobeautiful // v1.4 Aug 09
source: sysamos.com/insidetwitter/ [via rohitbargava.typepad.com]
Colours In Culture

1. Anger
2. Art/Creativity
3. Authority
4. Bad Luck
5. Balance
6. Beauty
7. Calm
8. Celebration
9. Children
10. Cold
11. Compassion
12. Courage
13. Cowardice
14. Cruelty
15. Danger
16. Death
17. Discordance
18. Deceit
19. Desire
20. Earthly
21. Energy
22. Erotic
23. Eternity
24. Evil
25. Excitement
26. Family
27. Femininity
28. Fertility
29. Flourish
30. Freedom
31. Friendly
32. Fun
33. God
34. Gods
35. Good Luck
36. Gratitude
37. Growth
38. Happiness
39. Healing
40. Healthy
41. Heat
42. Heaven
43. Holiness
44. Illness
45. Insight
46. Intelligence
47. Intuition
48. Religion
49. Jealousy
50. Joy
51. Learning
52. Life
53. Love
54. Loyalty
55. Luxury
56. Marriage
57. Modesty
58. Money
59. Mourning
60. Mystery
61. Nature
62. Passion
63. Peace
64. Penance
65. Power
66. Personal Power
67. Purity
68. Radicalism
69. Rational
70. Reliable
71. Refusal
72. Respect
73. Royalty
74. Self-cultivation
75. Strength
76. Style
77. Success
78. Trouble
79. Truth
80. Trust
81. Unhappiness
82. Virtue
83. Warmth
84. Wisdom

Gray
Yellow
Silver
Gold
Peak Break-Up Times
According to Facebook status updates

David McCandless & Lee Byron
InformationIsBeautiful.net / LeeBryon.com

source: searches for “we broke up because” taken from the infographic ultrabook
The Visual Miscellaneum

http://www.informationisbeautiful.net/2010/peak-break-up-times-on-facebook/
“First it was Facebook. Then it was Twitter. Now, in the face of massive protests in the streets of Cairo and throughout the country, Egypt has pulled the plug on the entire Internet for its citizens. As this chart from Arbor networks shows, Internet traffic mounted steadily in Egypt steadily over several days, then suddenly and precipitously dropped to nil at 5:20 PM EST yesterday.”
You can lurk on Ludlow Street for a day and pretty much figure it out. (For free.)
If you’re into bands with “surfer” themes you have 12+ chances to maybe see one.
Tired of bands with “surfer” themes? Just avoid them!
It is not your fault that you don’t love Cold Cave. It’s O.K.
Don’t be mad at bands who come to your party... Arcade Fire has stacks to count.
Pizza, the Interweb, fantasy basketball and this song. Things I am not mad at!

You don’t even need extracurricular stimulants to enjoy this. Put them down.

Twenty bucks says they have Portishead and Massive Attack on their Droids.

Of course I first heard this in the fall in the rain with no umbrella.

Yeah, this was called “UNKLE”, or “DJ Shadow” or “Attica Blues” in 1998.

Please, no more preaching or talking over trip-hop beats. (Forever.)
You have to use certain words very sparingly, but I definitely "love" this. It's "amazing." Do not use "buy" at

"Here's $15 to take a cab. No, you go ahead - I have to walk down 2nd Avenue and sing/dance along to this in principal."

I dare you to find a reason to be mad at this other than "I just don't like it." (Which is fair enough, actually.)

Is verring up rhythm and blues vibes to non-rhythm and blues too easy? Then again, who isn't a rhythm and blues fan?

Flat even "Greenland" is perfect all the way through. Everyone takes a break in between the second and third pizza slice.

Don't worry, this album will be dead to me by New Year's Eve.

They recorded this Jackass 8 covers way before the fact. Give them a break...
You have to use certain words very sparingly, but I definitely “love” this. It's “amazing.” Go out and “buy” it!

Sure, you could read “Moby Dick,” but doing something actually fun sounds better, right? And I bet it sounds exactly like this!

“Here’s $15 to take a cab. No, you go ahead. I have to walk down 2nd Avenue and sing/dance along to this in private!”

I dare you to find a reason to be mad at this other than “I just don’t like it.” (Which is fair enough, actually.)

Is serving up rhythm and blues vibes to non-rhythm and blues fans too easy? Then again, who isn't a rhythm and blues fan?

Not even “Graceland” is perfect all the way through. Everyone takes a break in between the second and third pizza slice.

Don’t worry, this album will be dead to me by New Year’s Eve.

They recorded this Jackson 5 cover way before the fact. Give them a break...

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START OF ALBUM

→ Dirty Projectors’ “ Bitte Orca”
→ Discovery’s “ LP”
→ The Field’s “ Yesterday and Today”
Waiting for The XX

- I’m in! This will be great! Where’s the bar!? Where did you get that slice!?
- Will these drinks transform The XX into Hot Chip? Please?
- As much as they are tired from playing their 14th show, I’m tired of warm beer and waiting.
- All this for Tracy Thorn lite with haircuts and a cooler name?
- Not The Worst Thing Ever, but I bet my TV and my couch aren’t either!
COOL, BUT WHERE DO WE BEGIN?
CHART vs GRAPHS vs DIAGRAMS

- They are all graphical representations of data, in which data is represented by symbols, such as bars in a bar chart or lines in a line graph.
- They give intangible information form.
- They make statistics visible.
- They all embody the idea of adding a visual or spatial element to data that improves our ability to understand what is being presented.

- Sometimes the words chart, graph, and diagram are used interchangeably. But not always.

http://www.chartsgraphsdiagrams.com/
'Chart' is often used to describe simple representations of two-variable data, as in bar charts or pie charts.

http://www.chartsgraphsdiagrams.com/
'Chart' is also used to refer to complex and data-dense displays such as maps.

http://www.chartsgraphsdiagrams.com/
'Graph' tends to be used more in more mathematical settings, with x and y axes, but there are many exceptions.

http://www.chartsgraphsdiagrams.com/
'Diagram' usually implies a symbolic and non-numeric representation of something, but again, there are exceptions.

[Diagram of a network with nodes and connections]

*Never officially dropped from launch price of $500, but price has been lowered by retailers*

GameLife
http://blog.wired.com/games

http://www.chartsgraphsdiagrams.com/
Maps and diagrams aside, there are three basic types of traditional charts and graphs:

- bar chart (aka bar graph)
- pie chart (aka circle graph)
- line graph (aka fever graph)

One of these types will be the appropriate graphic form for almost any numbers you want to display.
• Bar charts are good for side-by-side comparison and spotting trends in a small number of discrete data points (10 or fewer).

• They consist of an axis and a series or labeled horizontal or vertical bars.

• Note the bar length or height—the greater the length or height, the greater the value.

• There are a variety of bar charts that you can create, including vertical, horizontal, grouped, stacked, and overlapped versions of each.

http://code.google.com/apis/chart/docs/gallery/bar_charts.html
VERTICAL BAR CHART

Figure 1. Number of police officers in Crimeville, 1993 to 2001

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/bargraph-diagrammeabarres/5214818-eng.htm#a1
DOUBLE BAR CHART

Figure 2. Internet use at Redwood Secondary School, by sex, 1995 to 2002

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/bargraph-diagrammeabarres/5214818-eng.htm#a1
Figure 3. Number of students at Diversity College who are immigrants, by last country of permanent residence

- Australia
- Brazil
- China
- France
- Korea
- United States

Number of immigrants
DOUBLE HORIZONTAL BAR CHART

Figure 4. Drug use by 15-year-old students in Jamie's school, by gender

Figure 5. Preferred snack choices of students at Hillary's high school

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/bargraph-diagrammeabarres/5214818-eng.htm#a1
IMPROPER USE OF BAR CHART

Figure 6. Car types produced in Global City, January

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/bargraph-diagrammeabarres/5214818-eng.htm#a1
BAR CHART GUIDELINES

You should keep the following guidelines in mind when creating your own bar graphs:

• Make bars and columns wider than the space between them.

• Do not allow grid lines to pass through columns or bars.

• Use a single font type on a graph. Try to maintain a consistent font style from graph to graph in a single presentation or document. Simple sans-serif fonts are preferable.

• Order your shade pattern from darkest to lightest on stacked bar graphs.

• Avoid garish colors or patterns.

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/bargraph-diagrammeabarres/5214818-eng.htm#a1
LINE GRAPH

- Line graphs compare two variables: one is plotted along the x-axis (horizontal) and the other along the y-axis (vertical). The y-axis in a line graph usually indicates quantity (e.g., dollars, litres) or percentage, while the horizontal x-axis often measures units of time. As a result, the line graph is often viewed as a time series graph.

- It shows related information by drawing a continuous line between all the points on a grid.

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/lineaire/5214824-eng.htm
LINE GRAPH
PLOTTING A TREND OVER TIME

Figure 1. Labour force participation in Andrew's high school

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/line-lineaire/5214824-eng.htm
LINE GRAPH
COMPARING TWO RELATED VARIABLES

Figure 2. Average number of dollars donated at Evergreen High School, by age of donor

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/lineaire/5214824-eng.htm
LINE GRAPH
USE CORRECT SCALE

Figure 3. Number of guilty crime offenders, Grishamville

Figure 4. Number of guilty crime offenders, Grishamville

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/lineaire/5214824-eng.htm
MULTIPLE LINE GRAPHS

Figure 5. Cell phone use in Anytowne, 1996 to 2002

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/lineaire/5214824-eng.htm
PIE CHART

• This type of chart is a circle divided into a series of segments. Each segment represents a particular category. The area of each segment is the same proportion of a circle as the category is of the total data set.

• Pie charts usually show the component parts of a whole. Often you will see a segment of the drawing separated from the rest of the pie in order to emphasize an important piece of information.

• A pie chart uses percentages to compare information. Percentages are used because they are the easiest way to represent a whole. The whole is equal to 100%.

http://www.statcan.gc.ca/edu/power-pouvoir/ch9/lineaire/5214824-eng.htm
A pie chart is constructed by converting the share of each component into a percentage of 360 degrees.
Despite its popularity, pie charts should be used sparingly for two reasons. First, they are best used for displaying statistical information when there are no more than six components only—otherwise, the resulting picture will be too complex to understand.

Second, pie charts are not useful when the values of each component are similar because it is difficult to see the differences between slice sizes.

Creating a Circle Graph

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http://www.youtube.com/my_playlists?p=A5145F5D129355A4
http://www.youtube.com/watch?v=S3yRRP6F-mo
http://www.youtube.com/watch?v=ort1sdmSH9w
http://www.youtube.com/watch?v=KqcJxYmhlg
http://www.youtube.com/watch?v=RwOIr1OE0