

Crash Course on Presentation

Richard Newton Young Fellows
&
Design Automation Summer School





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Make a winning presentation

Develop

Deliver

Design

Part 1: Develop Your Presentation

Develop Your Presentation

Audience

Location

Message

Class Practice: Preparation - Audience

Who are they?

Age?

Gender?

Background?

Number?

How much they already know?

Are they there willingly?

Who will be at your presentation?

NO IDEA:

Assume you have a mixed audience

Pick examples with wide appeal

Be careful about the jargon

Your elevator pitch for Tuesday

Who is your audience?

Develop Your Presentation

Audience

Location

Message

Where your presentation will be?

Where is it held?

Formal vs informal

Seating

Heating

Lighting

equipment

Your elevator pitch for Tuesday

Where is your presentation?

Develop Your Presentation

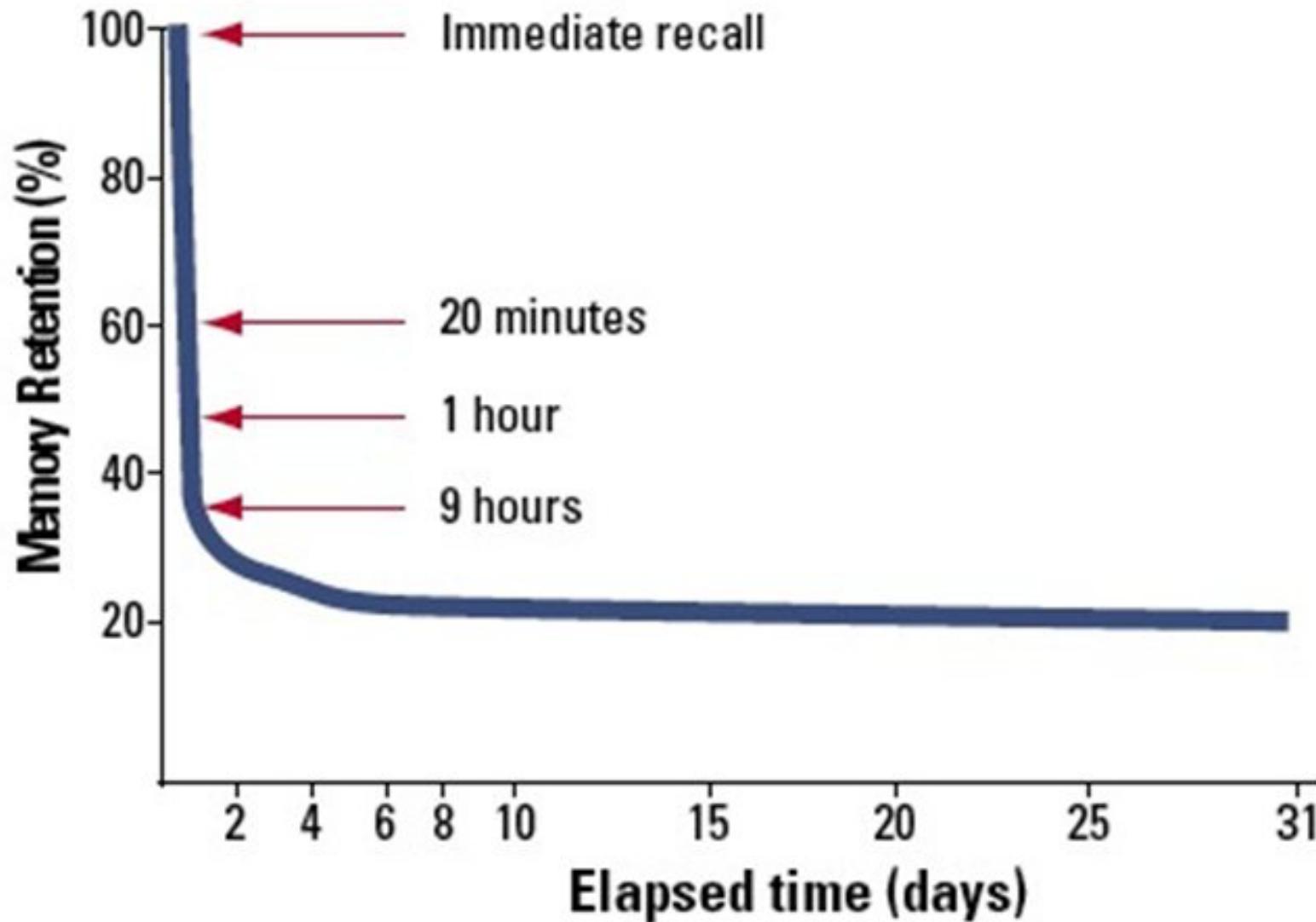
Audience

Location

Message

5 Minute Technical presentation

<http://www.youtube.com/watch?v=jbkSRLYSoho>



Picture from:

<http://jaysoo.ca/2015/06/25/when-learning-attitude-and-approach-matter/>

1

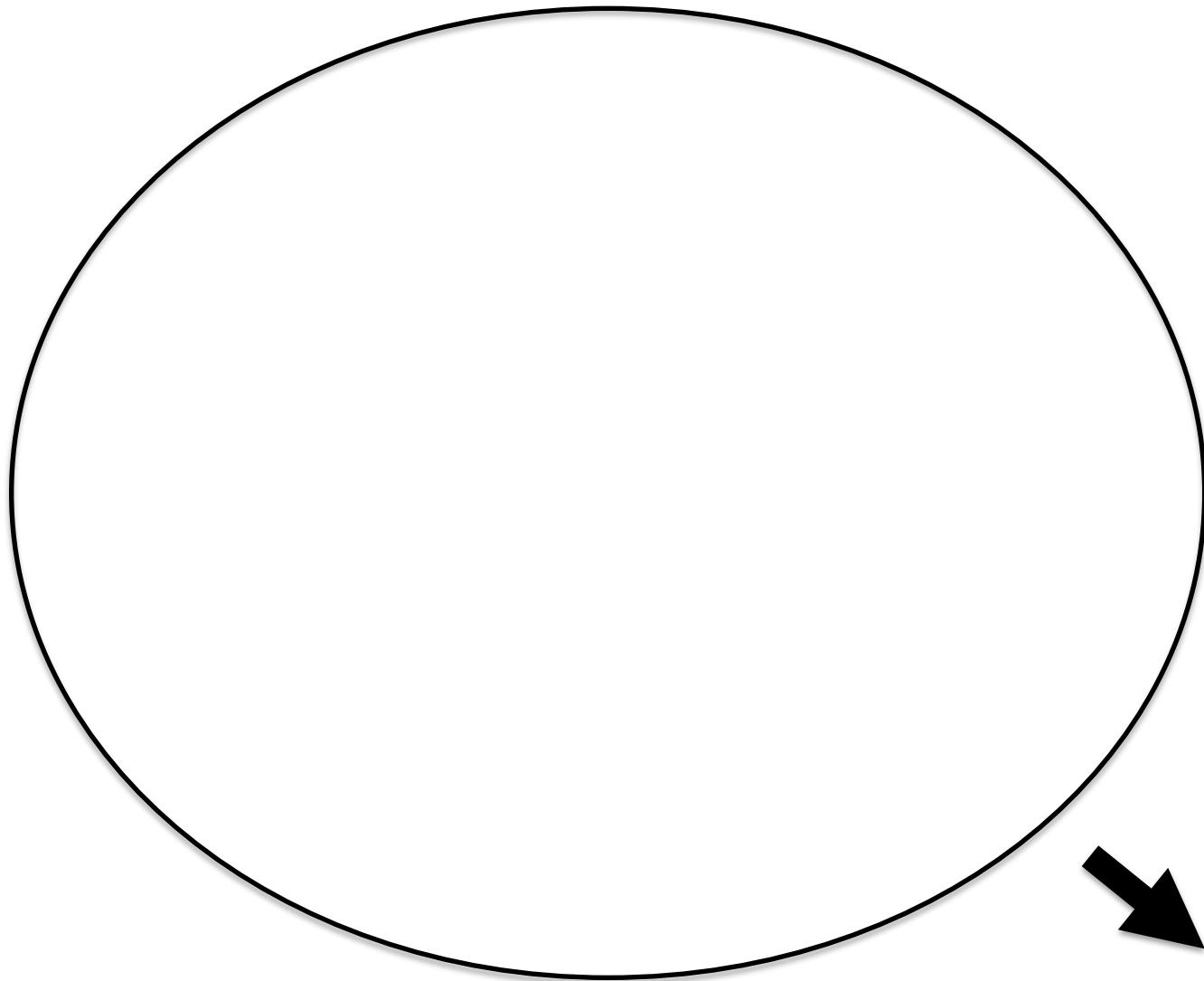
First rule: Have only **one** take home message

Second rule: adhere to the first rule

Main message for Hans Rosling's talk

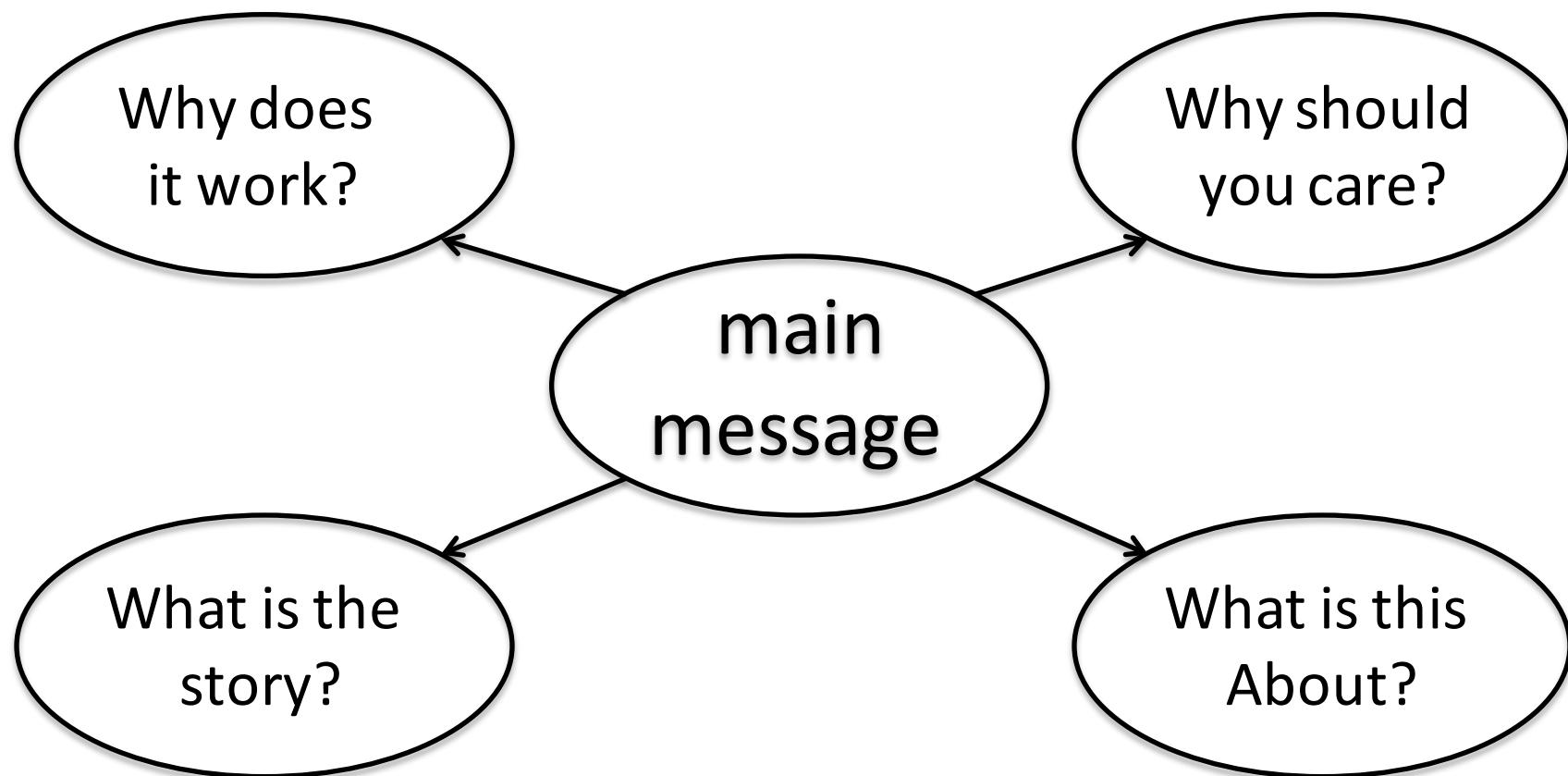
Your elevator pitch for Tuesday

What is your **MAIN** message?



main
message

Your elevator pitch



Your elevator pitch for Tuesday

Make your message more interesting?

Suggestions

Videos, images, props

Case studies, anecdotes

Real Stories, own experience, news

Get the audience to be active

Focus your ideas

What is worth telling?

Why is it important?

Who cares?

What is exciting about it?

What is the headline?

So what?

Tidying up

Which ideas would work?

Which ideas do not work?

Which ones fit together?

What is the best order/location?

Structure your Talk

Beginning:

Tell them what you are going to tell them

Structure your Talk

Beginning:

Set first impressions

Get the audience attention

Introduce yourself

Introduce the topic

Class Practice

Discuss the beginning of Hans Rosling talk

Did he introduce himself?

Did he introduce the presentation?

Did he establish credibility?

How did he get attention?

Structuring your Talk

Beginning – How to Get the Attention:

- A question
- Opening story
- Case study
- An image
- Humor
- Famous quote

Class Practice: Plan the beginning of your pitch

Beginning:

Set first impressions

Get the audience attention

Introduce yourself

Introduce the topic

Structuring your Talk

Middle:

Elaborate on your point

Use examples

Reinforce the take home message

Structuring your Talk

Structuring the middle of your talk:

- Big picture to detail / Specific to general
- Ordered based on priority / Chronologically
- Problem / Solution
- Based on : who (is it targeted at), What (is the message),
When (do you need this), Where (does this work), Why (does
it work), How (does it work)

Class Practice

Discuss the Middle of Hans Rosling talk:

- Did he have main points/headings?
- Did he build the presentation around them?
- Did he link between the points?
- Did he use case studies and examples?

Class Practice:

Plan the middle of your pitch

Middle:

Elaborate on your point

Use examples

Reinforce the take home message

Structuring your Talk

End on a high or memorable point

Do not leave your audience hanging in the air

Structuring your Talk

End:

Narrow down

Focus on main message

Link back to the beginning

Class Practice

Discuss the end of Hans Rosling talk:

- Did he Cue the listeners that the end was coming?
- Did he summarize?
- Did he link back to the beginning?

Structuring your Talk

End:

Let your audience know you are coming to an end

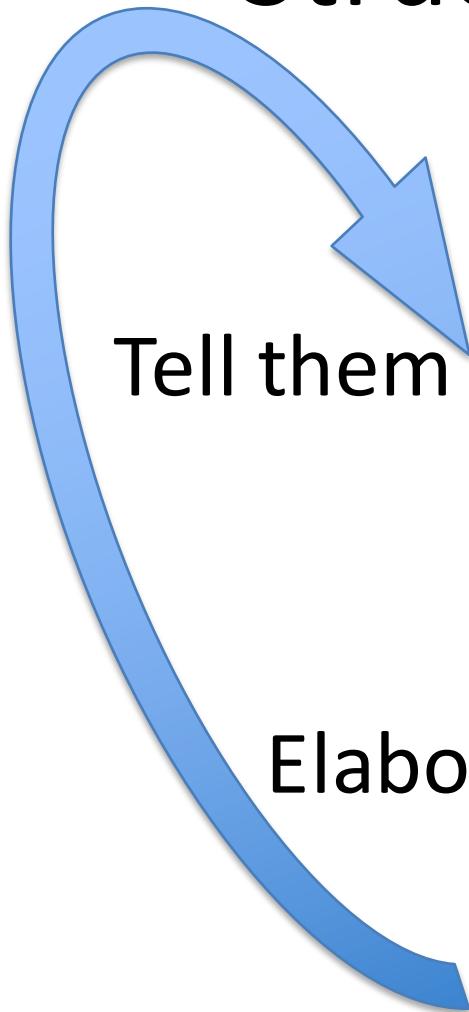
Recap your home message

Point to further information

Provide an opportunity for questions

Link your beginning to your end

Structure Your Thoughts



Beginning

Tell them what you are going to tell them

Middle

Elaborate, give examples, Results

End

Tell them what you told

Final Thoughts on Developing

Make your take away message memorable

Don't be afraid to try new ideas

Have fun

You can learn a lot by criticizing

First and Second rules

1

Part II:

Deliver Your Presentation

DELIVERING

Likability

The way to say it: effect in likability

Words 7%

Non-verbal 38%

Body language 55%

Voice Preparation

https://www.ted.com/talks/julian_treasure_how_to_speak_so_that_people_want_to_listen?language=en

Everyone loves a superhero

"High Power" body language (top row)

vs.

"Low Power" body language (bottom row)

(Images courtesy of Amy Cuddy, Harvard University)



Practicing

Practicing

STEP 1:

Read your presentation

Say it aloud

Deliver it to someone

Check your timing

Class Practice

Practice your elevator pitch

Timeline

Timeline

The day before:

Get organized

Check out the venue, equipment

practice

Timeline

The day of the talk:

Dress

Turn up early

Check the equipment

Microphones

Timeline

Thirty minutes before the talk:

Do a final check on your main points

Repeat your opening lines

Imagine yourself doing well

Go to the washroom if you need to

Drink some water

Take some deep breaths

Timeline

Thirty minutes before the talk:

Do a final check on your main points

Repeat your opening lines

Imagine yourself doing well

Go to the washroom if you need to

Drink some water

Take some deep breaths

Timeline

Five minutes before the talk:

RELAX

Timeline

The talk:

Stand up confidently

Take a few second to arrange your papers

Set the microphone to your level

Take a deep breath

Look at the audience

Smile

Start talking

Eye contact



Picture by: Steve McCurry for National Geographic

Timeline

After the talk:

You survived, relax

Evaluate your performance:

What worked well?

What didn't

What would you change?

Part III:

Designing Your Presentation

TEXT

Text

Research shows that most people cannot read and listen at the same time, so your audience will either read your slide, or listen to you. If you put long sentences in one long a paragraph in your presentation, no one will read it. Words loose their meaning if one cannot read them. If you are reading this at this point start clapping. Otherwise good job listening and next time use no more than eight words in your slides.

Start Clapping

Text

Research shows that most people cannot read and listen at the same time, so your audience will either read your slide, or listen to you. If you put long sentences in one long a paragraph in your presentation, no one will read it. Words loose their meaning if one cannot read them. If you are reading this at this point **start clapping**. Otherwise good job listening and next time use no more than eight words in your slides.

Text

- Research shows that most people cannot read and listen at the same time.
- Your audience will either read your slide, or listen to you.
- If you put long sentences in one long a paragraph in your presentation, no one will read it.
- Words loose their meaning if one cannot read them.
- If you are reading this at this point start clapping.
- Good job listening and next time use no more than eight words in your slides.

DON'T DO THIS TO YOUR AUDIENCE

Text

Do not use more than 8 words in your slides.

Text

Do not use more than 8 words in your slides.

1 2 3 4 5 6 7 8 9 10

Text

Do NOT use more than **8** words

1 2 3 4 5 6 7 8

8

Less

is more

Text

LEGIBILITY IS IMPORTANT

Legibility is important

Legibility is important

Legibility is important

Legibility is important

Legibility is important

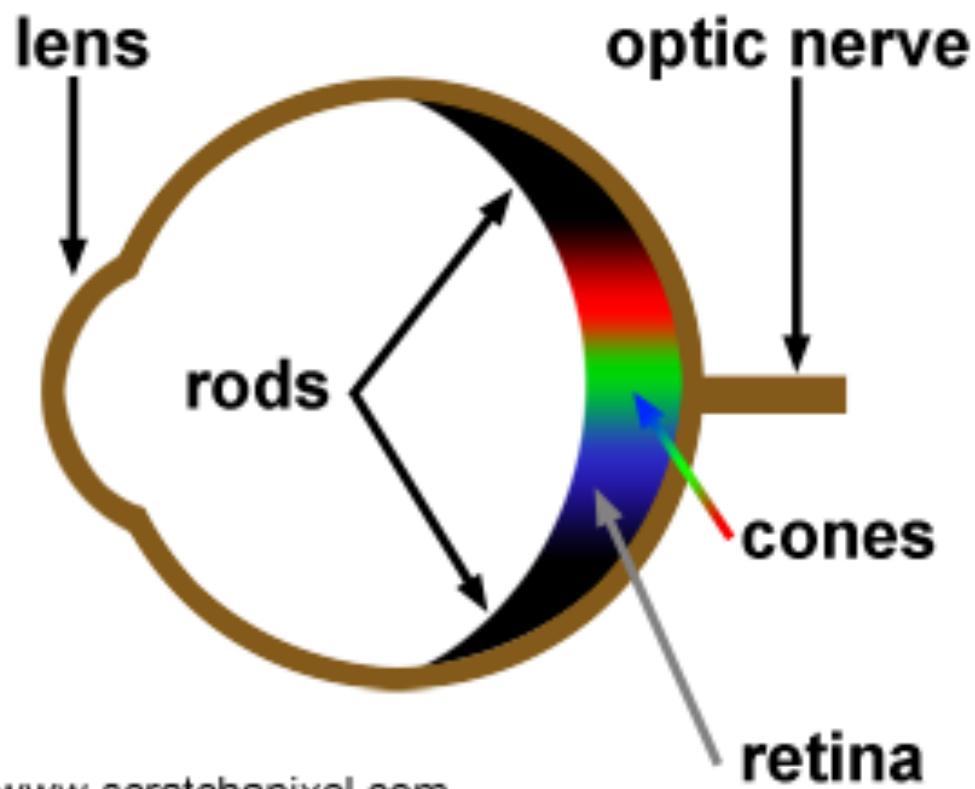
Legibility is important

Text Size

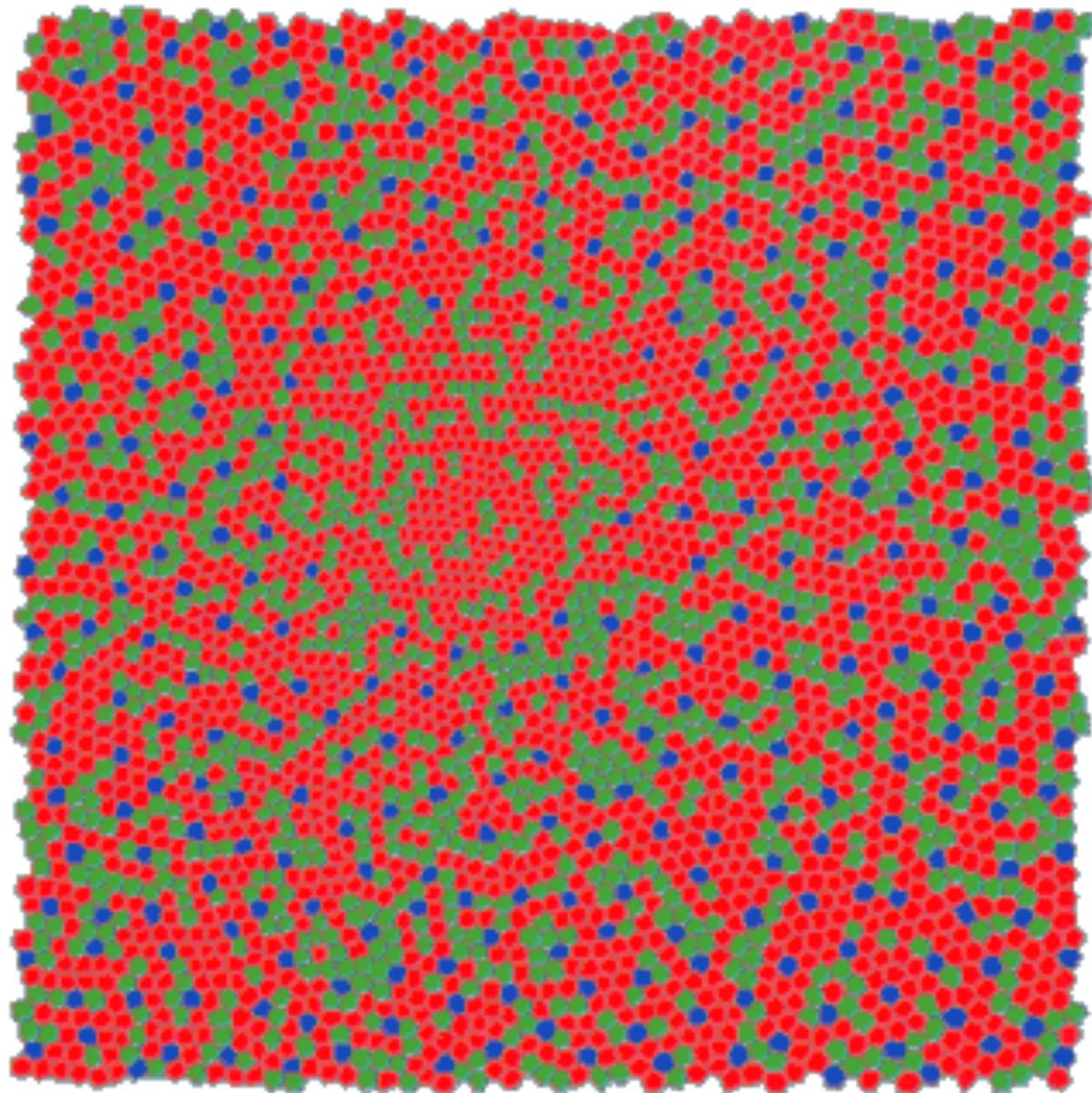
Slide: Font > 24

Posters: readable from 1.5m

COLOR



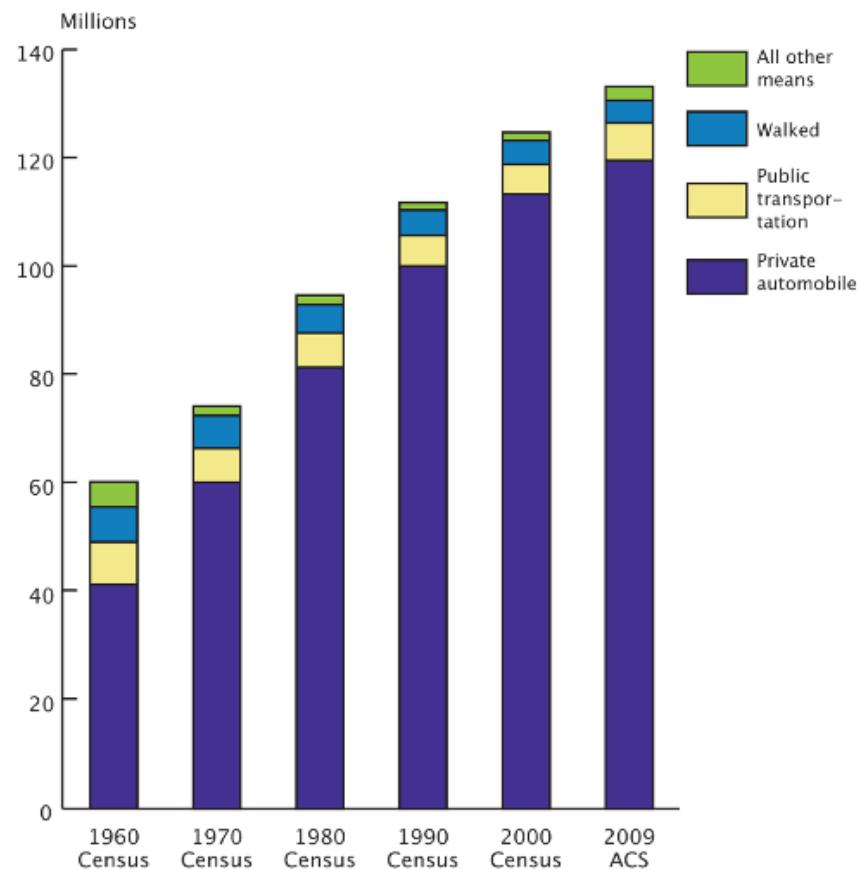
Cone mosaic



Why Use Color?

Means of Transportation: 1960 to 2009

(Workers 16 years and over. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)



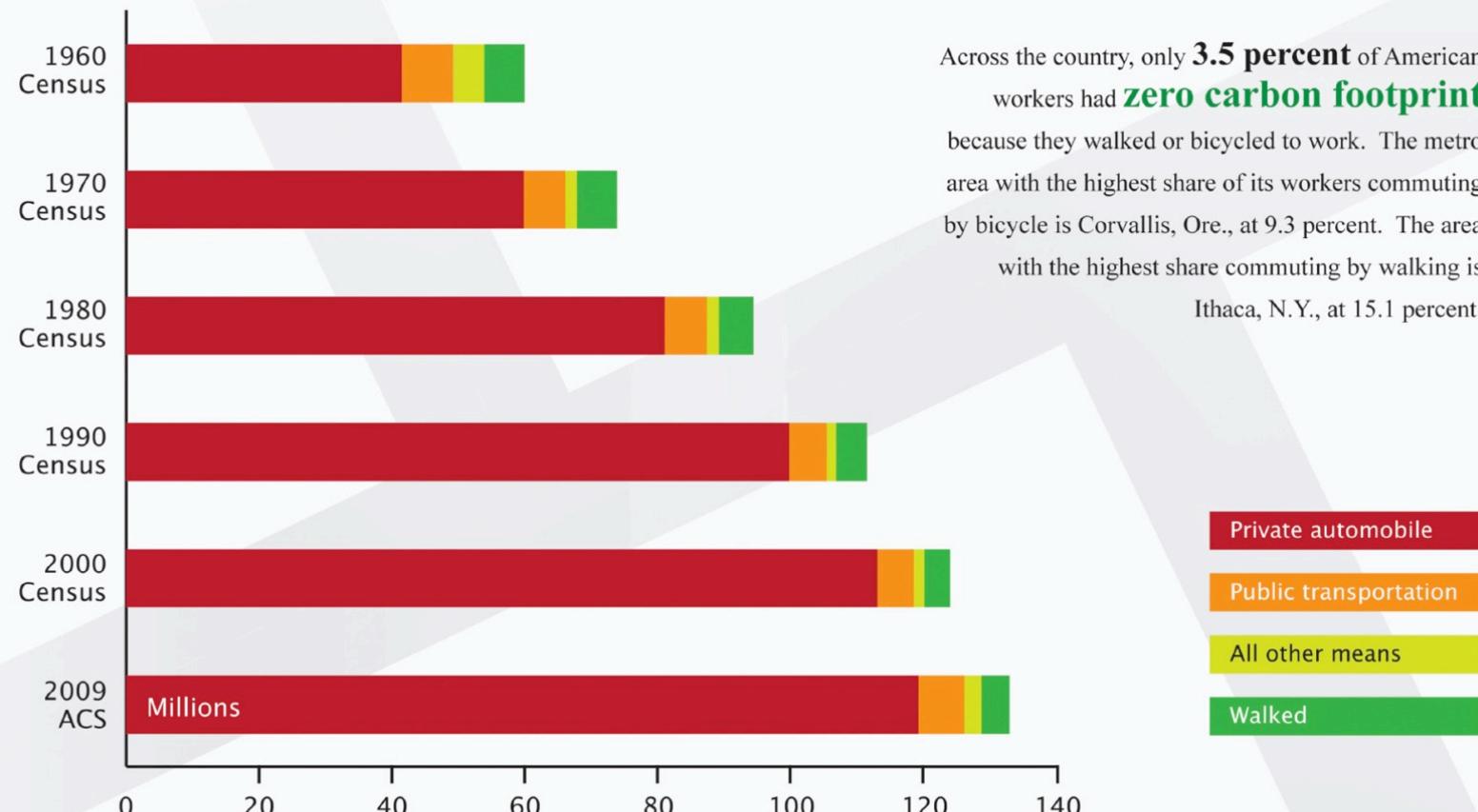
Sources: U.S. Census Bureau, Decennial Census, 1960, 1970, 1980, 1990, 2000; U.S. Census Bureau, American Community Survey, 2009.

Across the country, only 3.5 percent of American workers had zero carbon footprint because they walked or bicycled to work. The metro area with the highest share of its workers commuting by bicycle is Corvallis, Ore., at 9.3 percent. The area with the highest share commuting by walking is Ithaca, N.Y., at 15.1 percent.

Picture from: Irene Rae presentation: Design 101
<http://rene.chargingwombat.com>

Means of Transportation

1960 to 2009

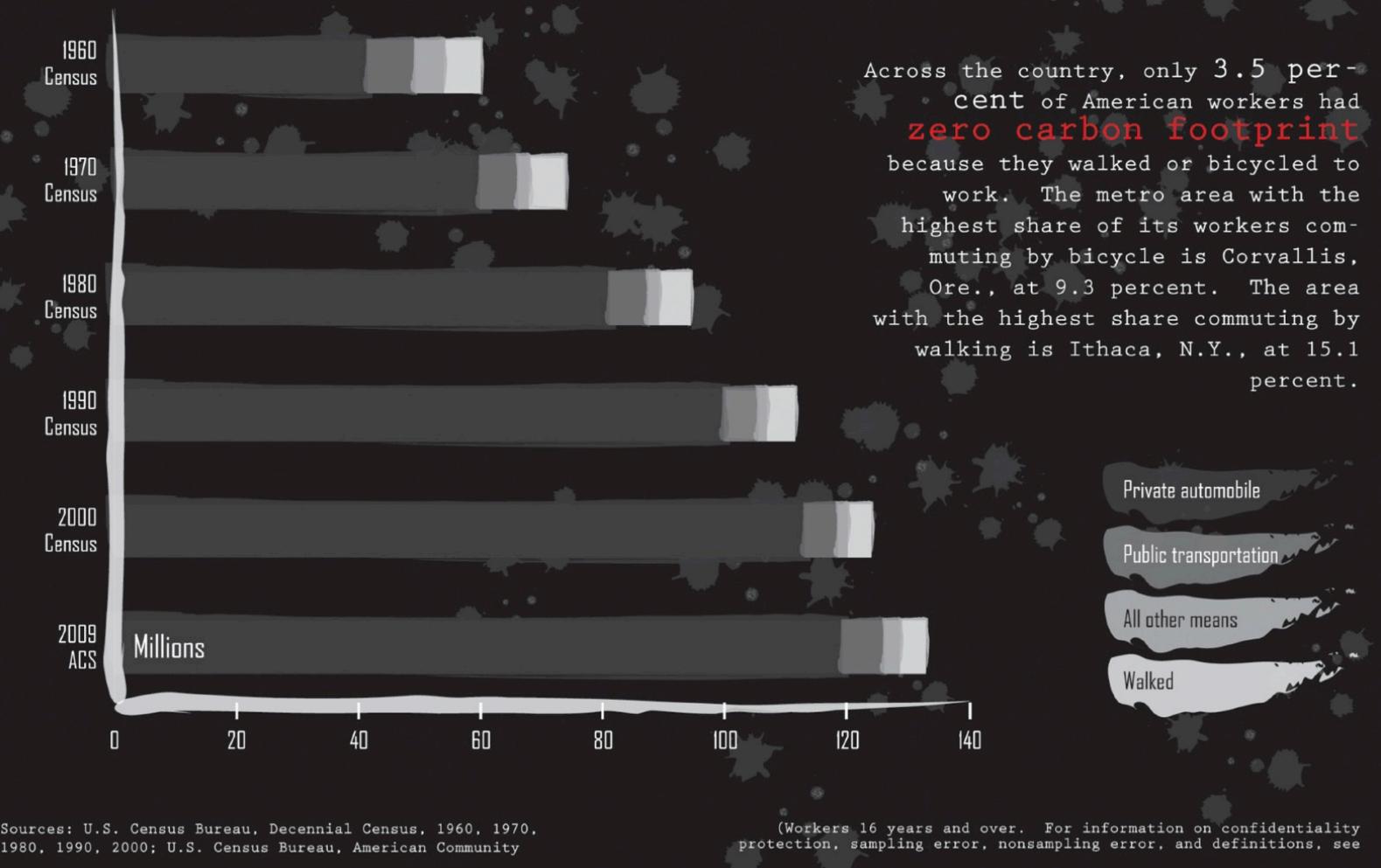


Sources: U.S. Census Bureau, Decennial Census, 1960, 1970, 1980, 1990, 2000; U.S. Census Bureau, American Community Survey, 2009.

(Workers 16 years and over. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)

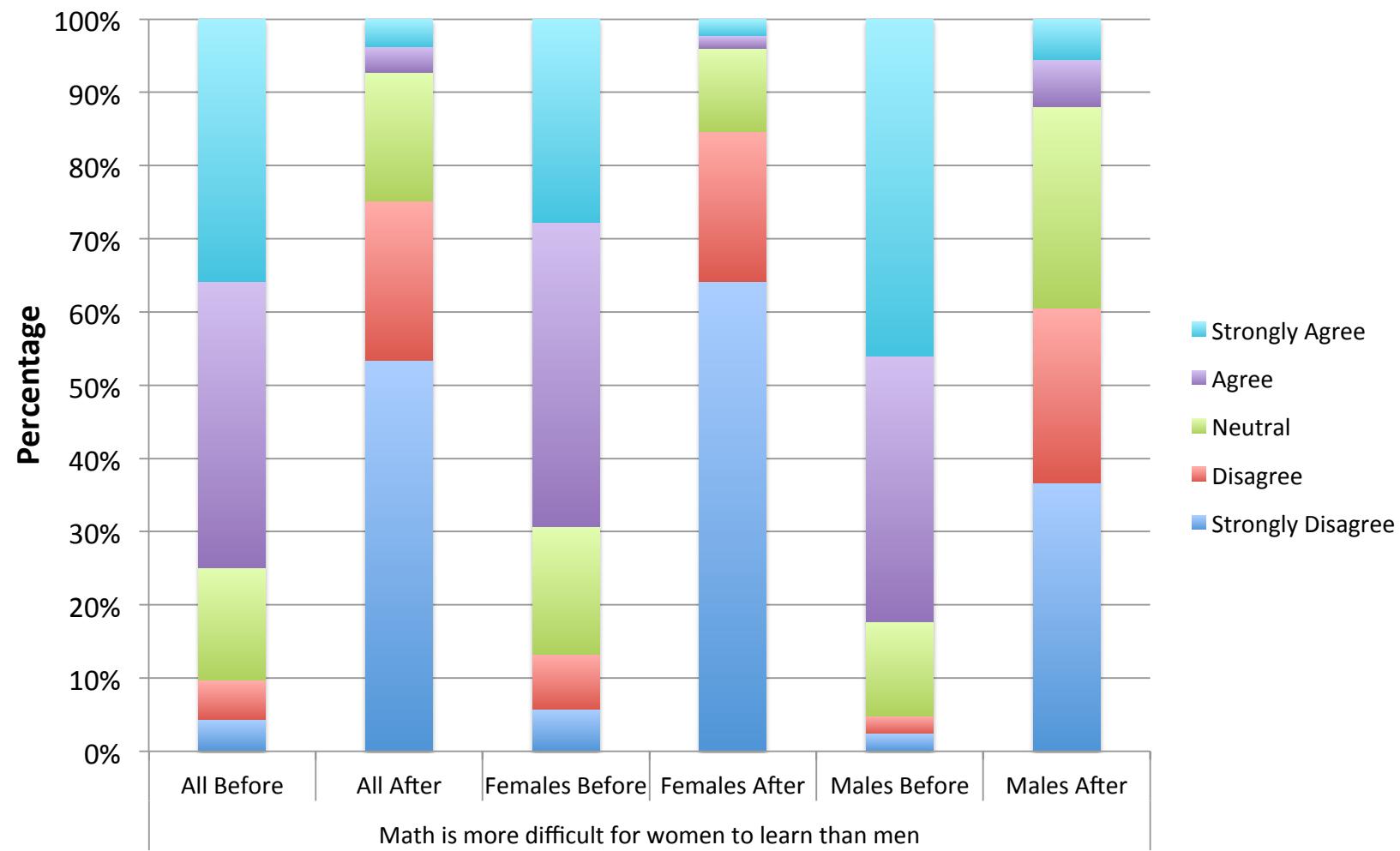
Picture from: Irene Rae presentation: Design 101
<http://rene.chargingwombat.com>

Means of Transportation: 1960 to 2009

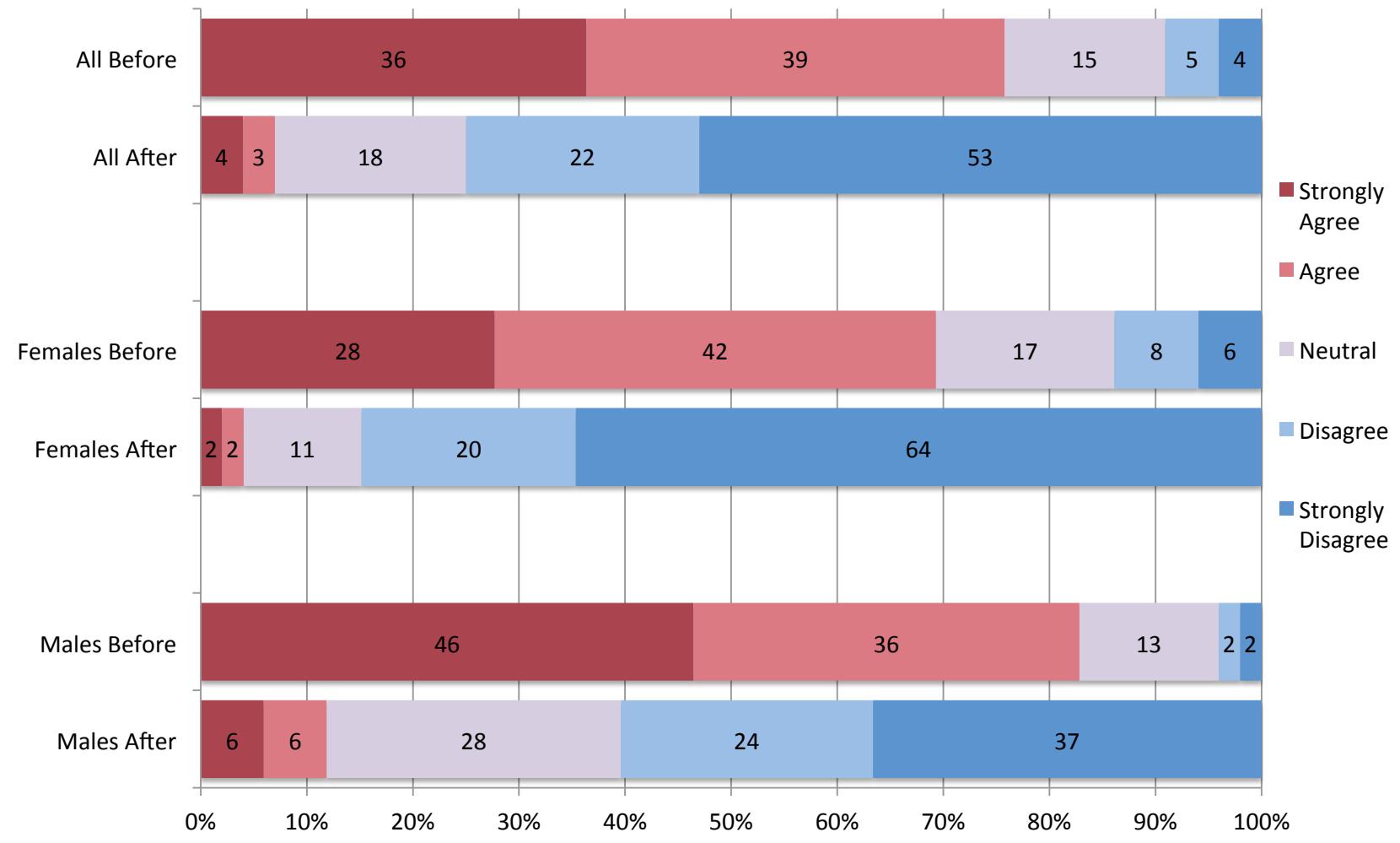


Picture from: Irene Rae presentation: Design 101
<http://rene.chargingwombat.com>

Answer Comparison: Math is more difficult for women to learn than men



"Math is more difficult for women to learn than men."



Tables

Before

Role	Name	Year of the...	Debut	Number of Fans	Takedown Rate
Face (The Hero)	The Ultimate Warrior	Tiger	May-2011	97320.00	86.2
Face (The Hero)	Hulk Hogan	Oxen	Jan-2008	988551.00	61.978
Face (The Hero)	Macho Man Randy Savage	Monkey	Feb-2008	157618.00	59.29
Face (The Hero)	Hacksaw Jim Duggan	Pig	Mar-2008	30300.00	53.4332
Face (The Hero)	Superfly Jimmy Snuka	Dragon	Mar-2008	12341.00	52.7
Heel (The Bad Guy)	Rowdy Roddy Piper	Rooster	Jun-1968	71645.00	45.4
Heel (The Bad Guy)	The Million Dollar Man Ted DiBiase	Rat	Apr-1975	449342.00	43.7689
Heel (The Bad Guy)	Mr. Perfect Curt Henning	Rat	May-1980	13773.00	38
Heel (The Bad Guy)	Jake the Snake Roberts	Snake	Jul-1975	5609.00	37.99
Jobber (The Unknown)	Brad Smith	Sheep	Aug-2008	1103.00	36.316
Jobber (The Unknown)	Ted Duncan	Sheep	Aug-2008	200.00	33.61
Jobber (The Unknown)	Joey the Uber Nerd Cherdarchuk	Snake	Aug-2008	5.00	21.0196

After

Role	Name	Year of the...	Debut	Thousands of Fans	Takedown Rate
Face (The Hero)	The Ultimate Warrior	Tiger	May-2011	97.3	86.2
	Hulk Hogan	Oxen	Jan-2008	988.6	62.0
	Macho Man Randy Savage	Monkey	Feb-2008	157.6	59.3
	Hacksaw Jim Duggan	Pig	Mar-2008	30.3	53.4
	Superfly Jimmy Snuka	Dragon	Mar-2008	12.3	52.7
Heel (The Bad Guy)	Rowdy Roddy Piper	Rooster	Jun-1968	71.6	45.4
	The Million Dollar Man Ted DiBiase	Rat	Apr-1975	449.3	43.8
	Mr. Perfect Curt Henning	Rat	May-1980	13.8	38.0
	Jake the Snake Roberts	Snake	Jul-1975	5.6	38.0
Jobber (The Unknown)	Brad Smith	Sheep	Aug-2008	1.1	36.3
	Ted Duncan	Sheep	Aug-2008	0.2	33.6
	Joey the Uber Nerd Cherdarchuk	Snake	Aug-2008	0.0	21.0

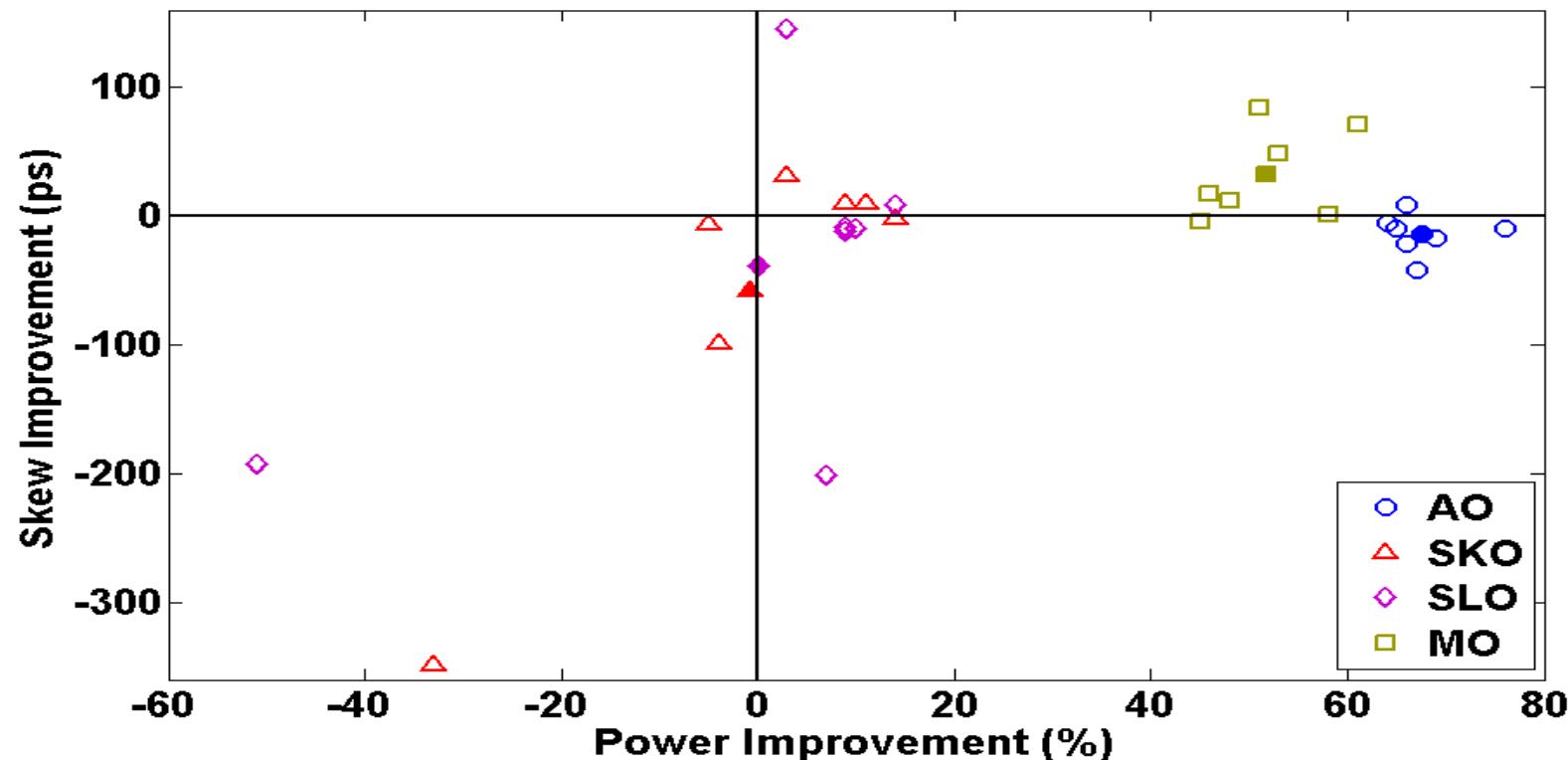
Table 1: How wonderful my work is

Circuit	Skew (s)	Area (m2)	Skew (s)	Ave. Slew (ps)	std Slew (ps)	max Slew (ps)
ispdf11	5.06E-11	5.36E-10	4.46E-11	32.79	8.65	54.50
ispdf12	9.08E-11	5.27E-10	8.4411E-11	32.02	8.75	54.82
ispdf21	5.58E-11	5.41E-10	4.63E-11	33.57	8.75	55.56
ispdf22	3.42E-11	3.20E-10	2.39E-11	32.21	7.84	50.83
ispdf31	2.39E-10	1.18E-09	2.13E-10	32.29	8.56	56.77
ispdf32	1.47E-10	8.95E-10	1.35E-10	32.72	8.88	56.32
ispdfnb1	1.77E-11	1.92E-10	2.48E-11	24.25	5.37	54.09
Ave	9.06E-11	5.98E-10	8.16E-11			

Skew Vs. Power (Discrete)

- Improving power and skew

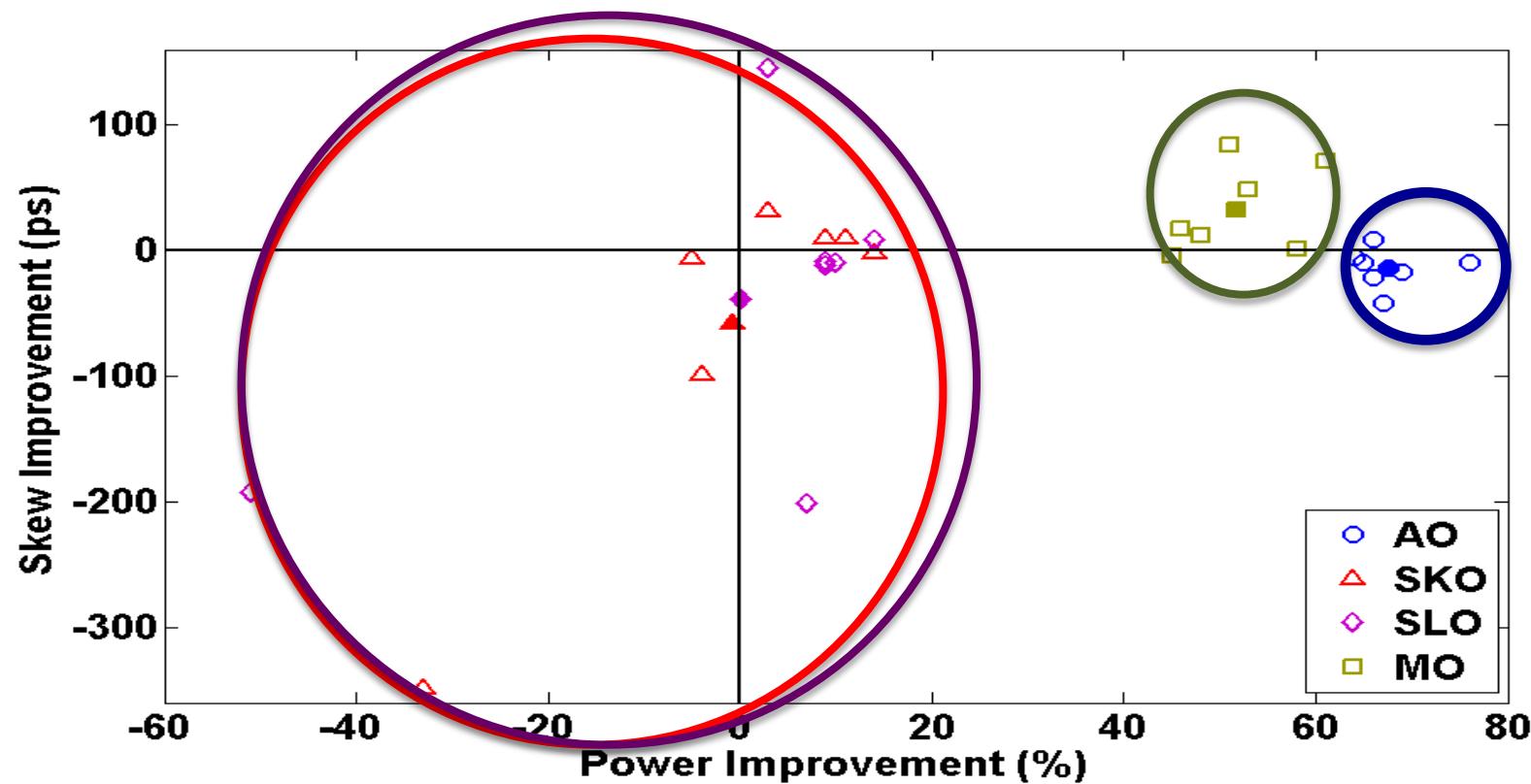
Each marker represents result for one ISPD09 circuit.

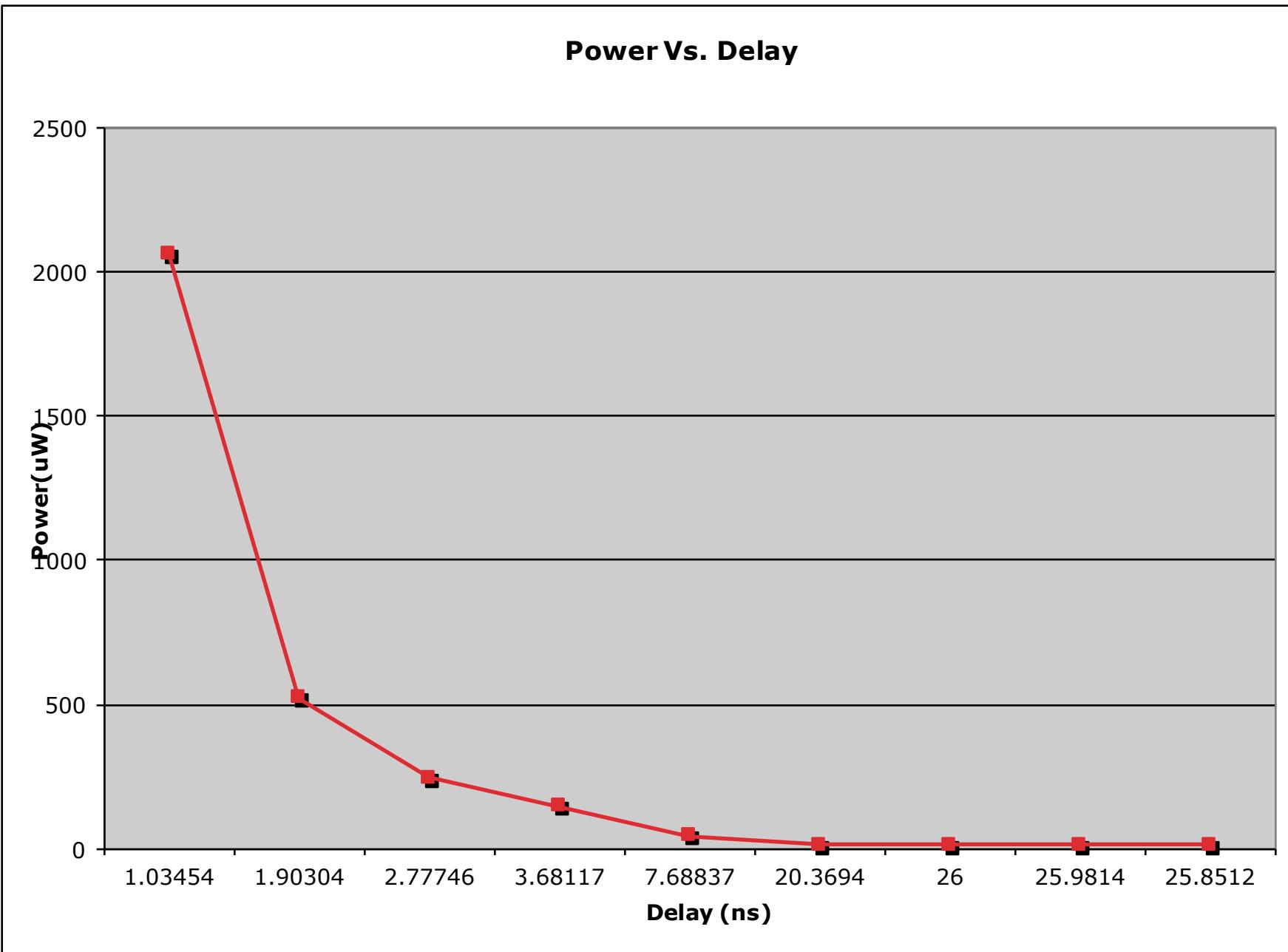


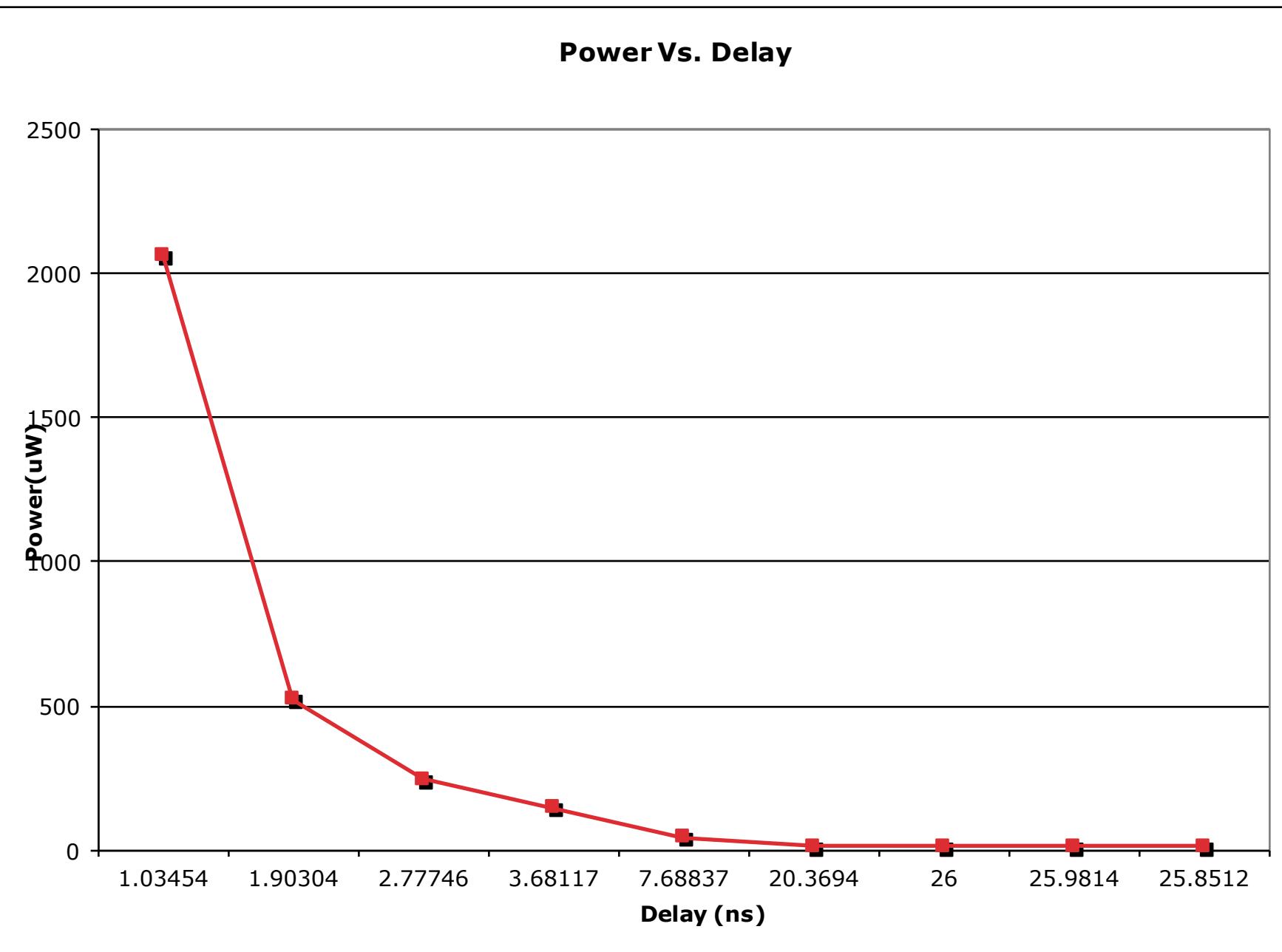
Skew Vs. Power (Discrete)

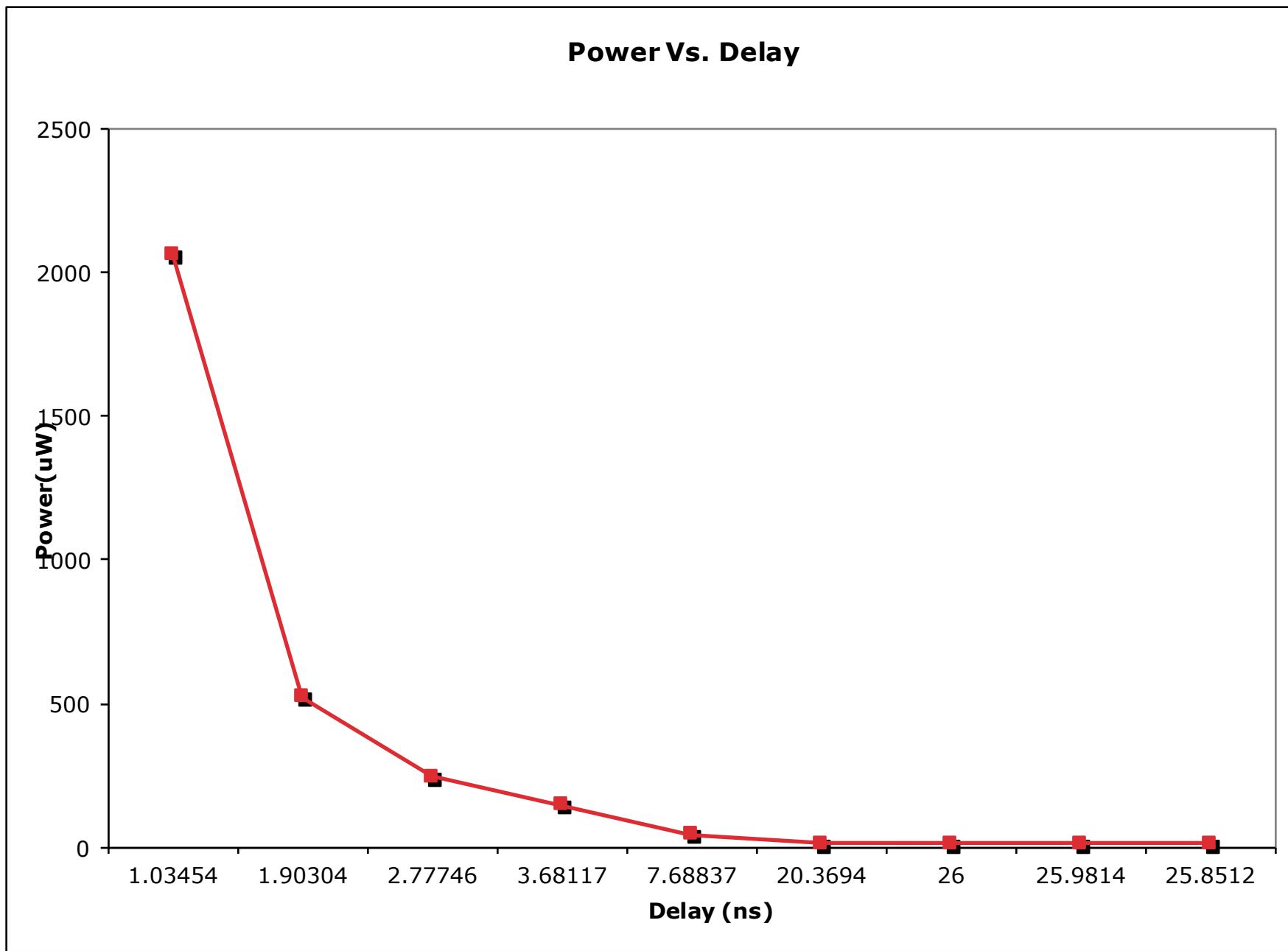
- Power and skew improvement:

Each marker represents result for one ISPD09 circuit.

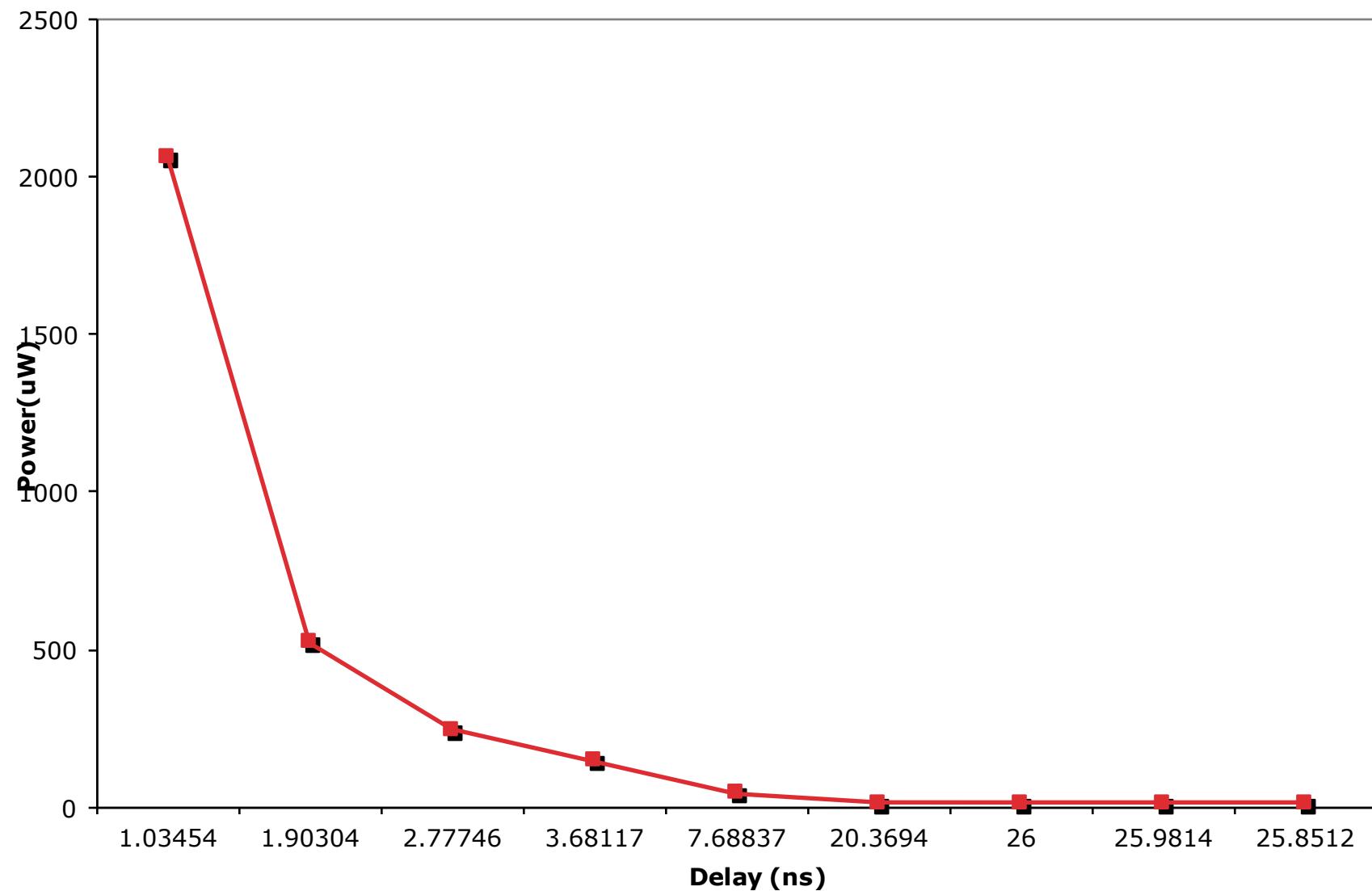




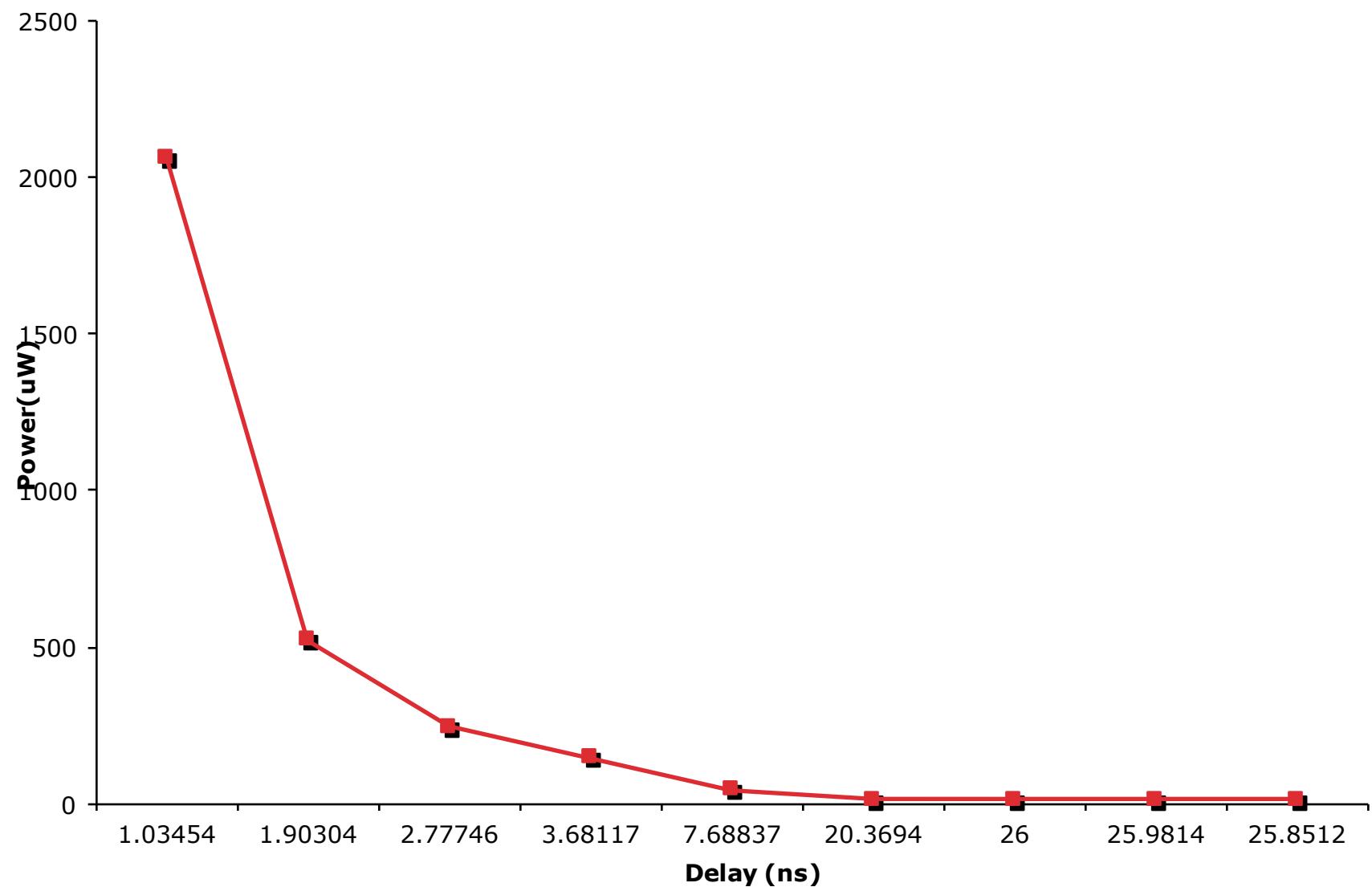




Power Vs. Delay



Power Vs. Delay



Power(uW)

2,500

2,000

1,500

1,000

500

0

Can you reduce power and delay?

Delay (ns)

1

2

3

4

8

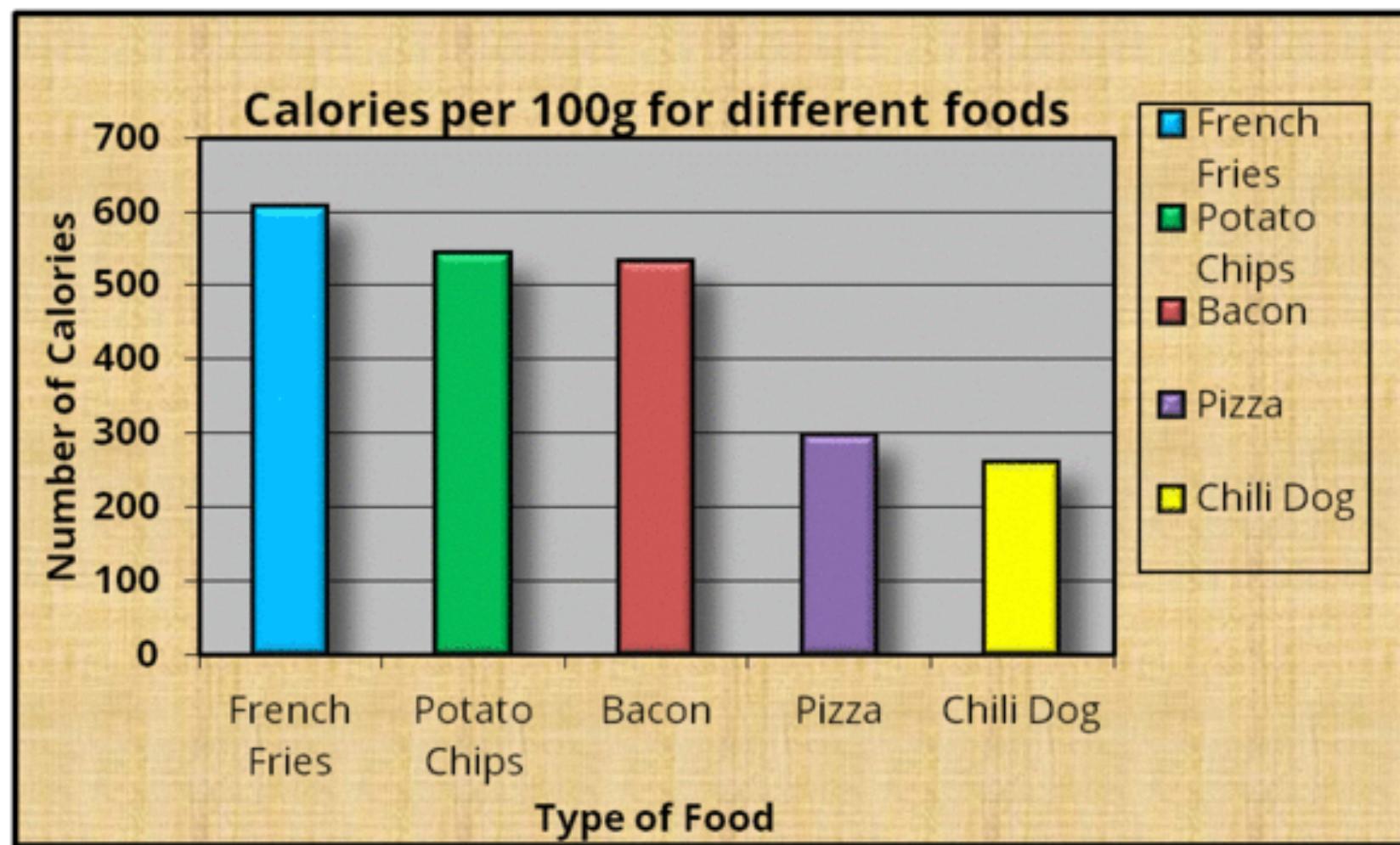
20

26

26

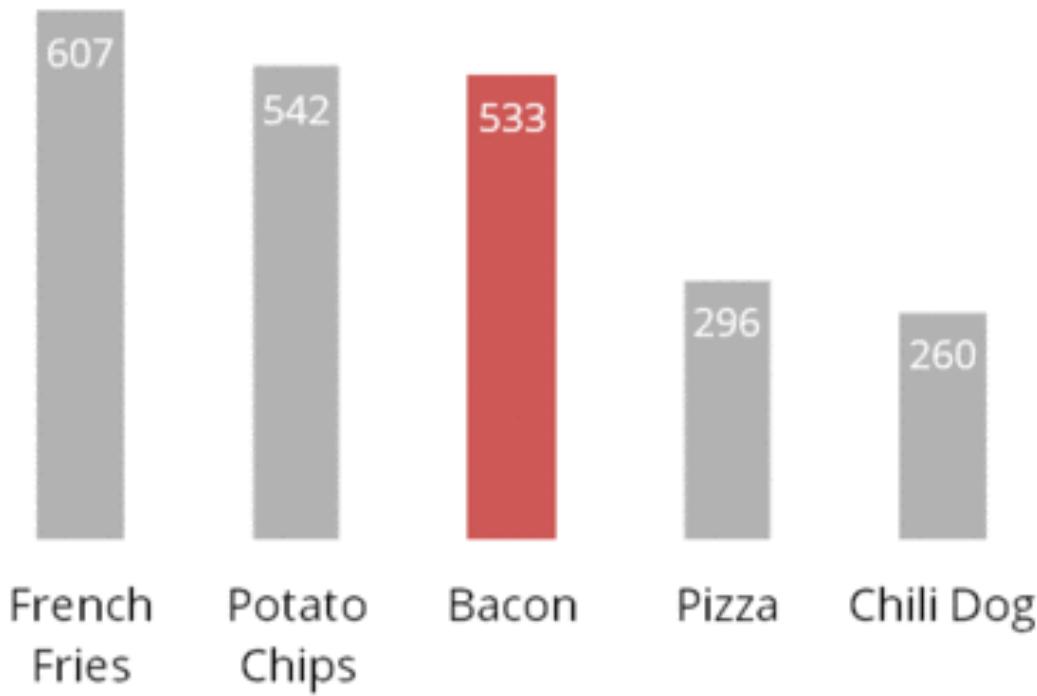
26

Before



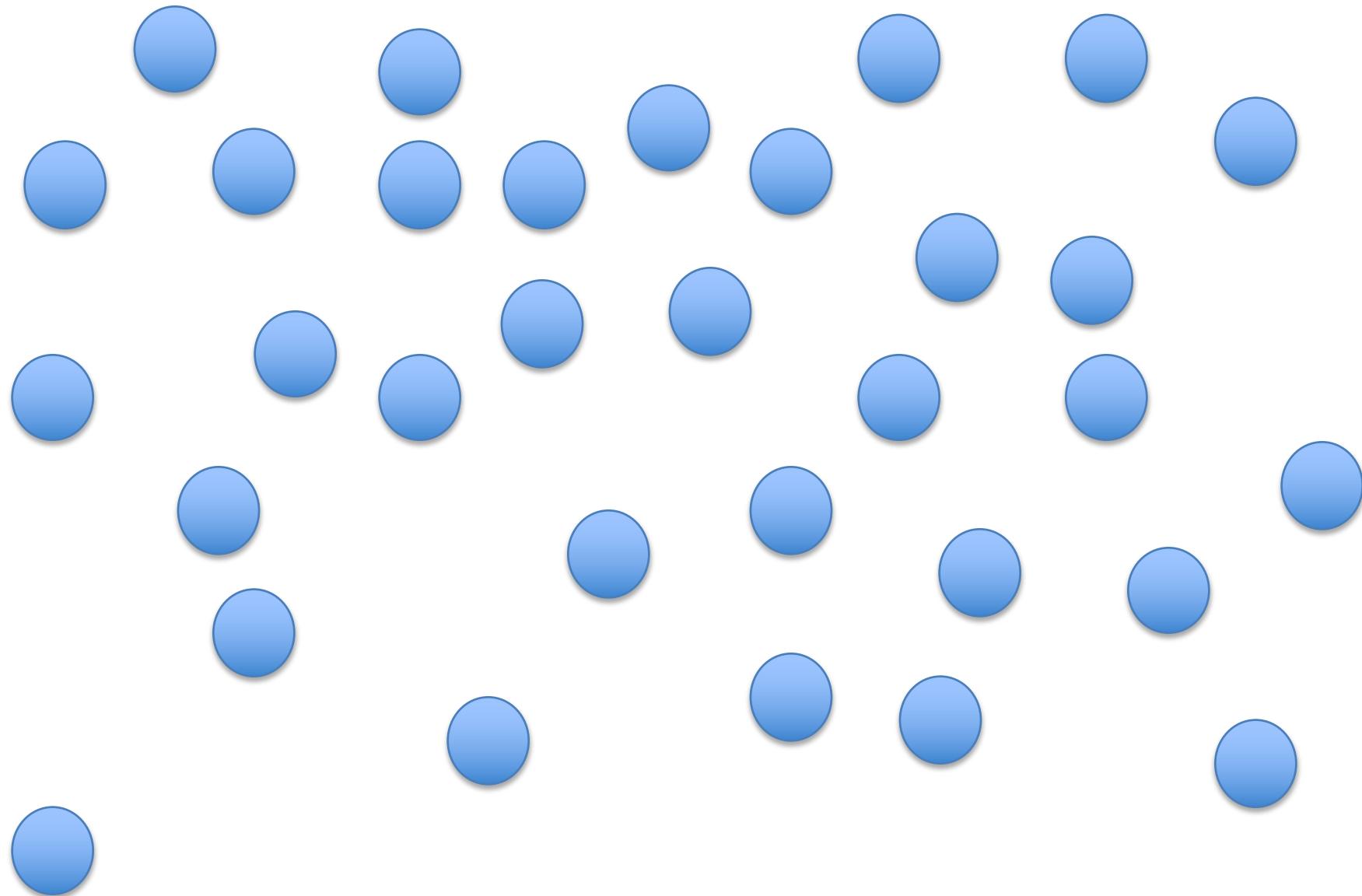
After

Calories per 100g

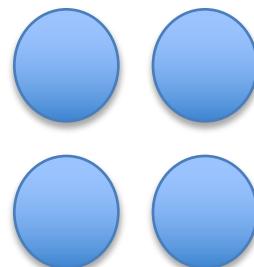
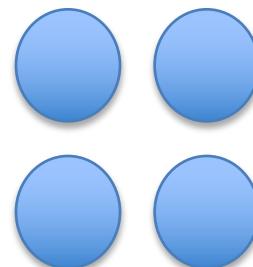
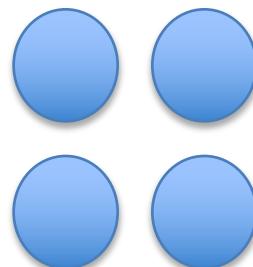
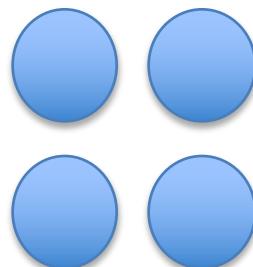
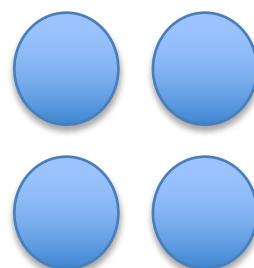
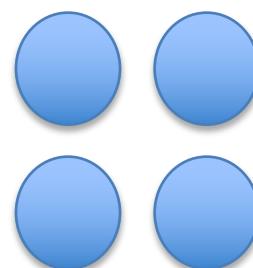
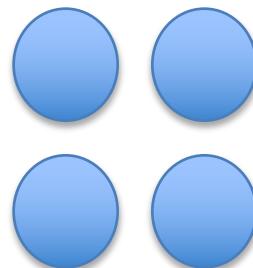
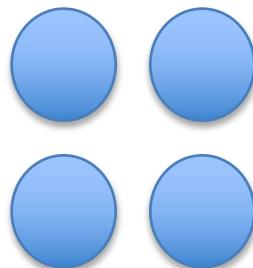


Grouping

How many circles are there?

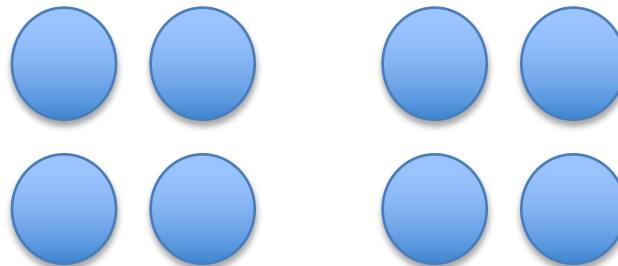


And now?

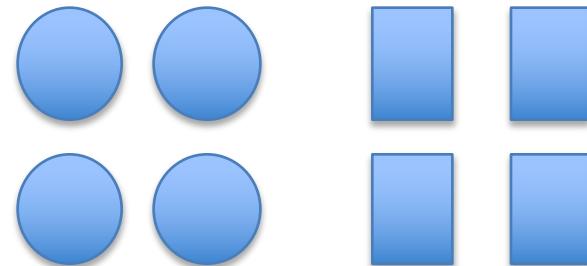


Grouping

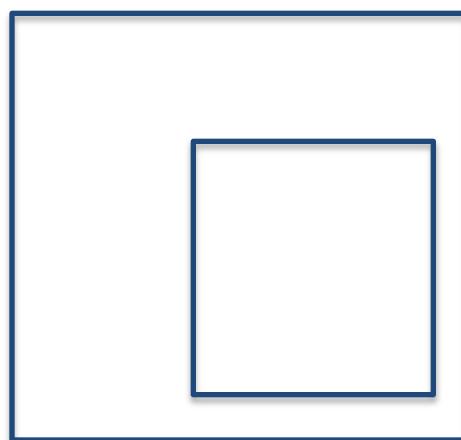
Proximity



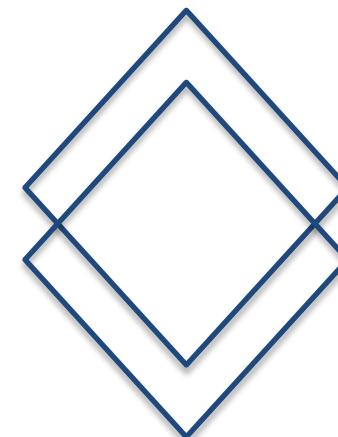
Similarity



area

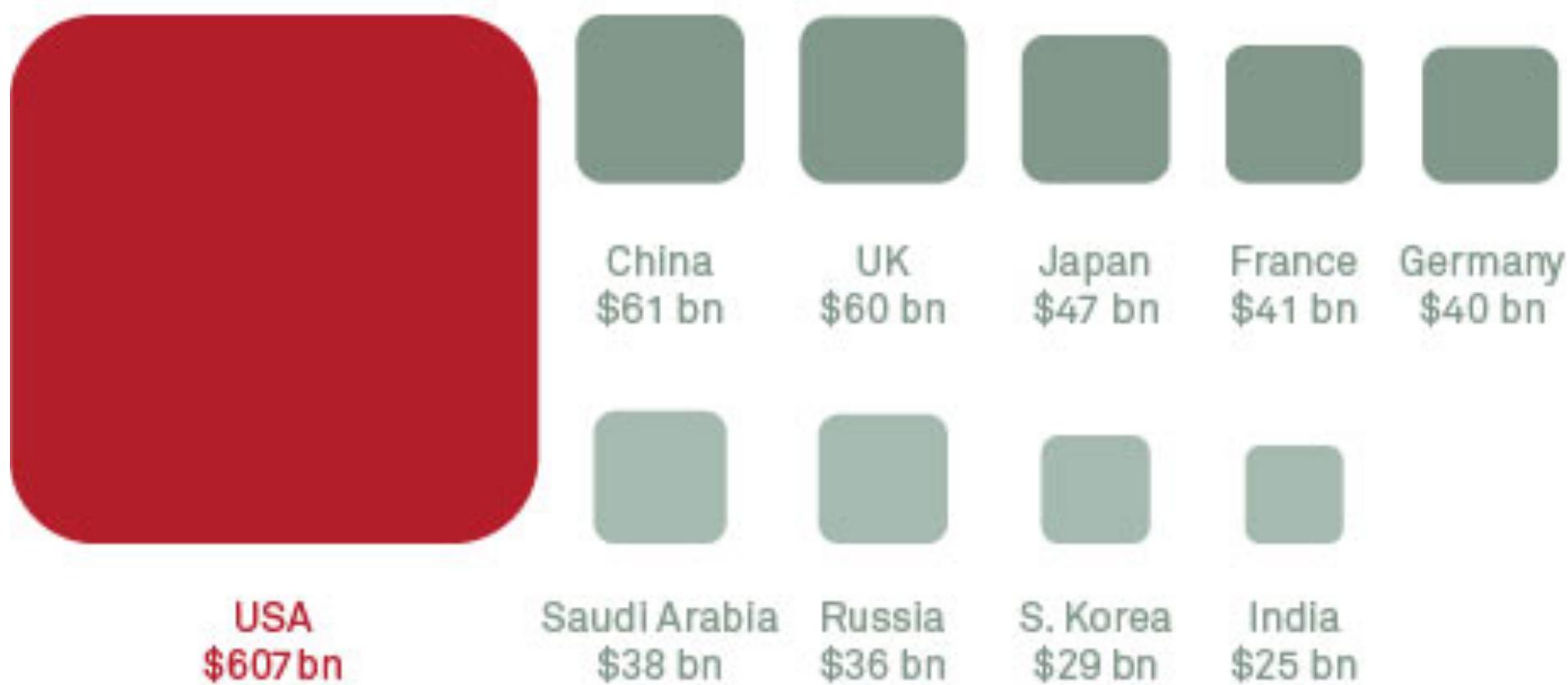


Symmetry



War Chests

Who has the biggest military budget per year?



The US Military Budget

In context



US military budget
2008

InformationIsBeautiful.net

Per year source: UN, Datablog, milexdata.sipri.org 2008

Informationisbeautifulnet

Grouping

The US Military Budget

In context



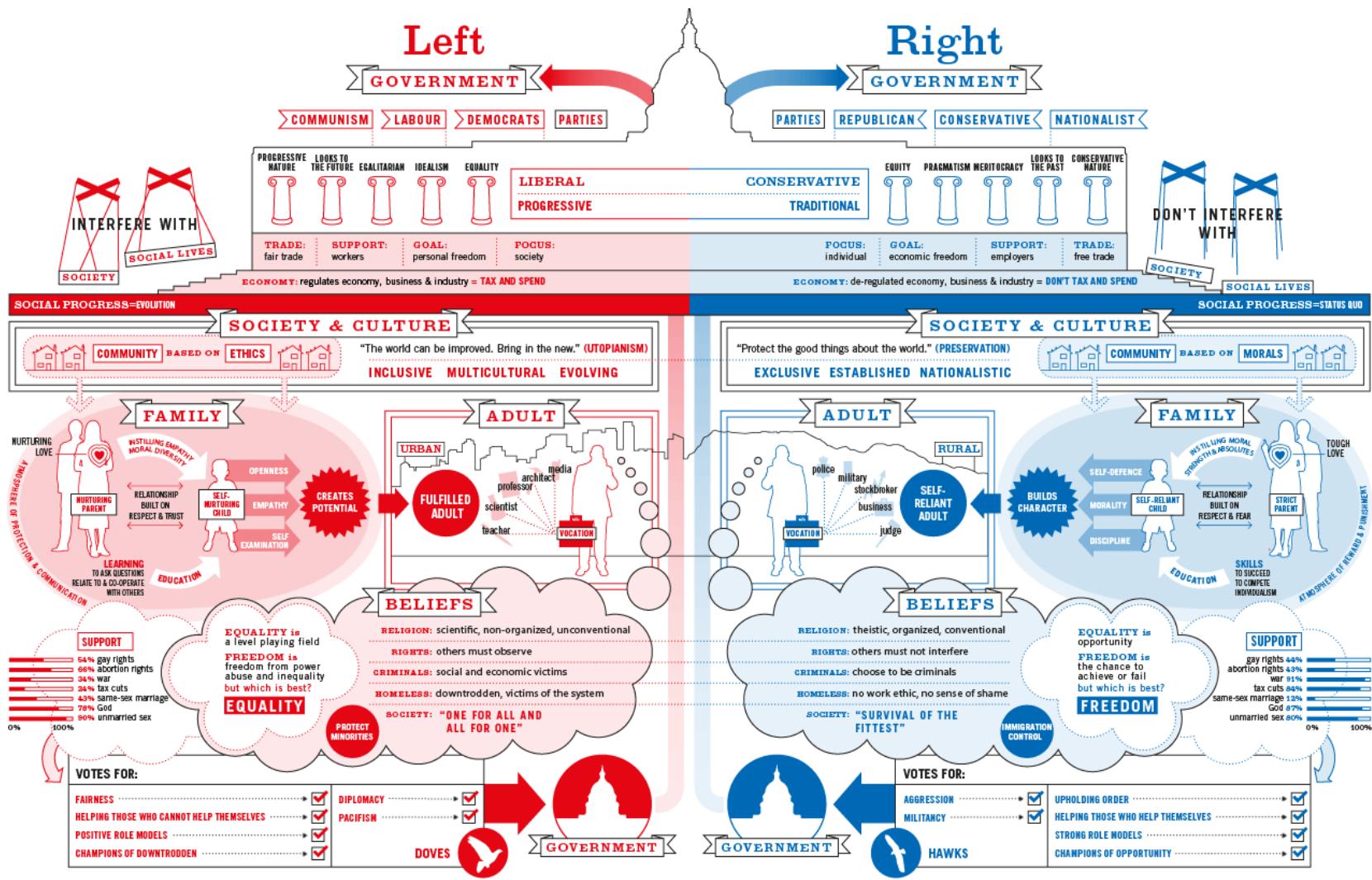
US military budget
2008



Africa's total debt
(external & private)



UK budget deficit



CREATIVE CREDIT

David McCandless & Stefanie Posavec // v1.2 // Dec 2010
InformationisBeautiful.net / ItsBeenReal.co.uk

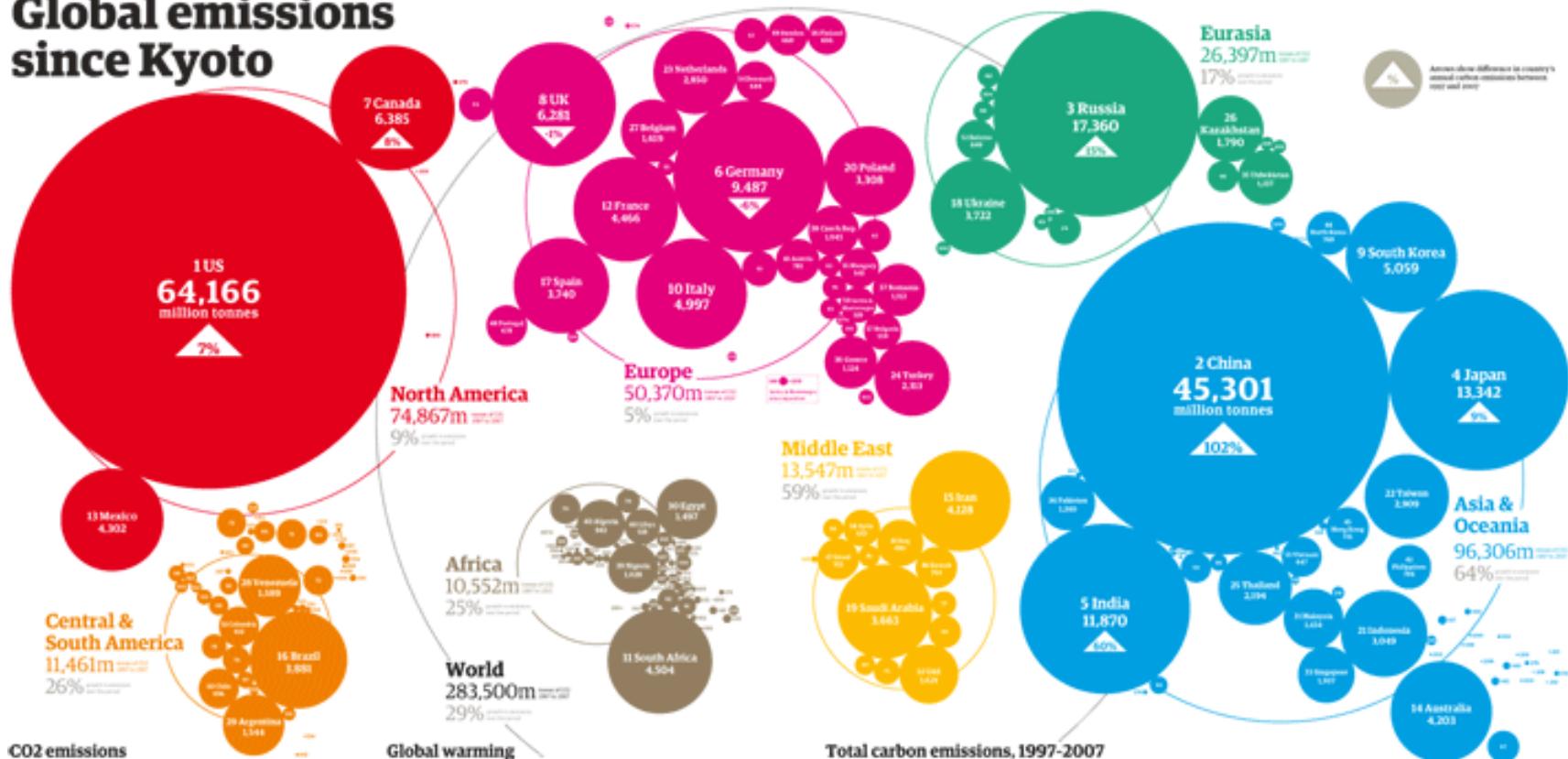
INEVITABLE CAPITALIST AGENDA
from the new infographic book of visual explorations
The Visual Miscellaneum

Informationisbeautiful.net

Grouping - symmetry

Grouping

Global emissions since Kyoto



The key issues at Copenhagen

1 Cut carbon in rich world

Developed nations saw a cut of 25.4% by 2009, but needed another 15% by 2010 to meet their promise to cut 30% by 2012. Developed countries have agreed to cut 15% by 2020. Rich countries will still need an average of 0.15% per person, or have a responsibility to make deeper cuts.

2 Cut carbon in developing world

Developing nations have grown emissions such as China and India are surging, yet these nations have small carbon footprints. In 2009 they were asked to commit to a target for 2012. What really now needs to happen is that they will be allowed to pollute for a while longer as they respond to climate change.

3 Pay the price for climate change

Developing nations want to continue growing, but are asking developing countries to pollute the atmosphere. It will also cost a lot for developing countries to build infrastructure to deal with climate change. In 2009 they were asked to allow developed countries to expect a higher level of emissions. In truth, countries will be expected to cut as the talks move forward.

4 Keep tabs on funds and emissions

Developing nations want to continue growing, but are asking developing countries to pollute the atmosphere. It will also cost a lot for developing countries to build infrastructure to deal with climate change. In 2009 they were asked to allow developed countries to expect a higher level of emissions. In truth, countries will be expected to cut as the talks move forward.

5 Slow the spread of deforestation

Developing nations want to continue growing, but are asking developing countries to pollute the atmosphere. It will also cost a lot for developing countries to build infrastructure to deal with climate change. In 2009 they were asked to allow developed countries to expect a higher level of emissions. In truth, countries will be expected to cut as the talks move forward.

6 Clean technology

Developing nations want to continue growing, but are asking developing countries to pollute the atmosphere. It will also cost a lot for developing countries to build infrastructure to deal with climate change. In 2009 they were asked to allow developed countries to expect a higher level of emissions. In truth, countries will be expected to cut as the talks move forward.

Checklist of success

- Both发达国家和发展中国家承诺减排量增加至1990年的30%或更多。
- Developing countries commit to cutting down their emissions by 15-20% by 2012.
- Rich countries commit to funding poorer countries, and share their technology, to help them grow.
- Poor countries commit to funding poorer countries, and share their money.
- Developed countries deliver cash to developing nations, investing the money in clean energy.
- Developed countries deliver a legally binding commitment to the deployment of clean technologies.

Chance of success: High

Chance of success: Good

Chance of success: Low

Chance of success: Fair

The summit in numbers

15,000

Number of delegates expected to attend official Copenhagen summit.

40,500

Number of carbon credits available for verification by three delegations while at the summit.

700,000

Cost of a tonne of trading sustainable bonds held in Copenhagen, paid by the French government to offset those emissions.

\$62m+

Expenditure on a Danish government of shaping the event.

65%

Minimum proportion of food and drink companies to disclose what will be required.

SOURCE: INSTITUTE FOR CLIMATE CHANGE

FOCUS

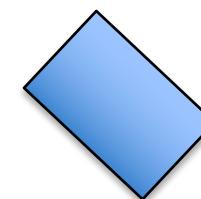
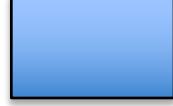
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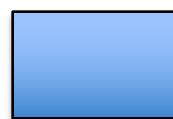
Pupil Constriction

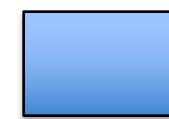
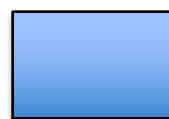


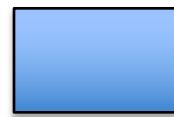
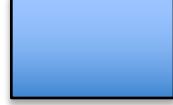
Pop Out effect

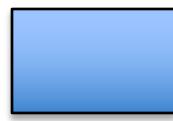
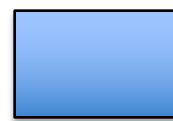
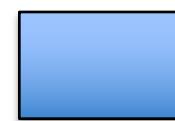
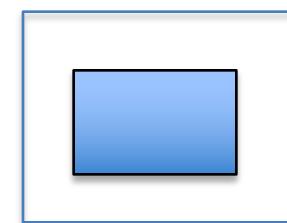
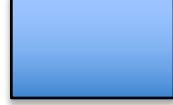
Shout out the location of the figure that you see first.

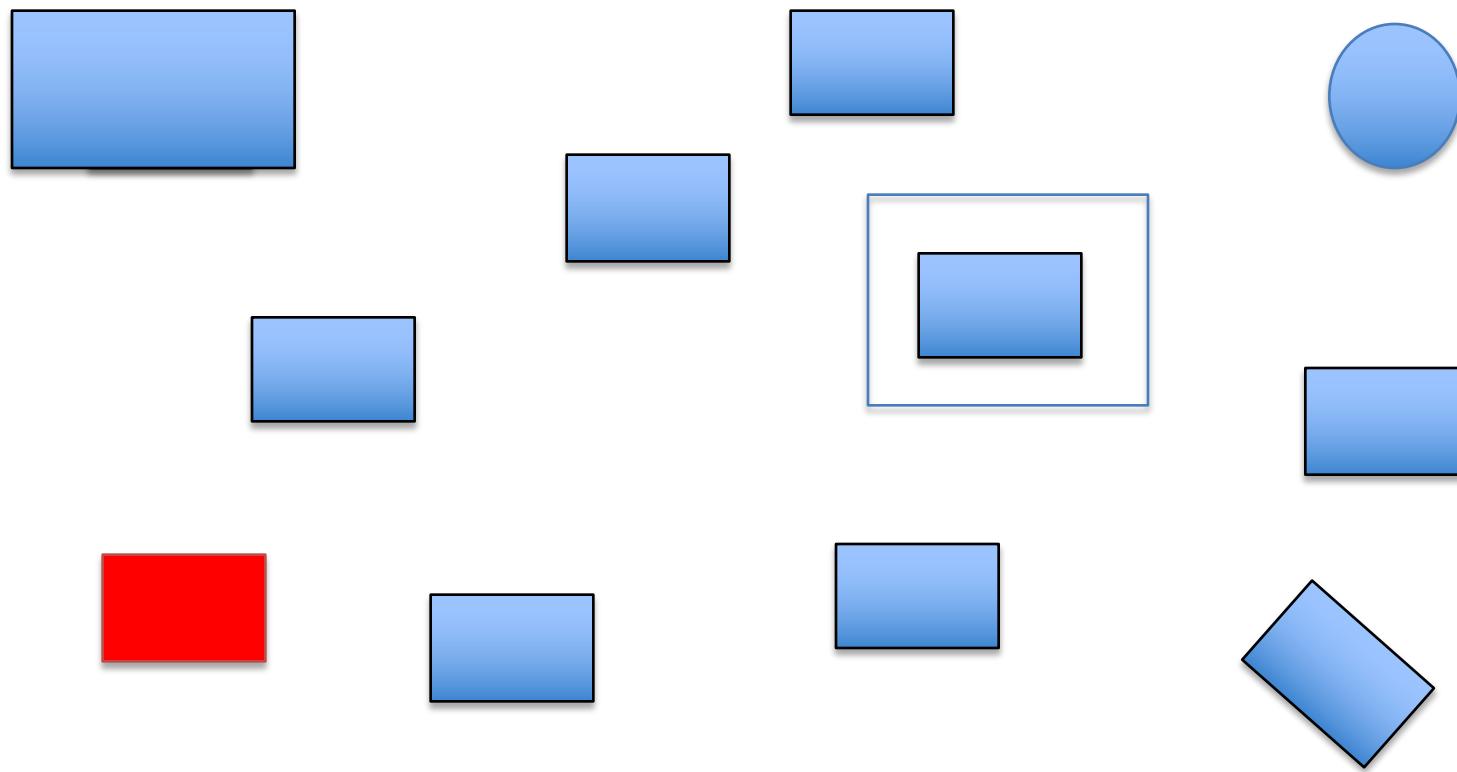












Hierarchy

brings more focus

Hierarchy - Location



Hierarchy - size

The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



Hierarchy – size

The word cloud illustrates various research topics in distributed systems, including:

- Computing**: Multitenant, Record, CAM, Zephyr, Hadoop.
- Transactional**: Top-k, Parallelizing, Management, LP Elements, Frequency, based, Answering, Scalability, G-Store.
- Elasticity**: Self, Managing, Infrastructure.
- Network**: Weighted, Services, Integrating.
- Store**: Nothing, Flash, just, Anonimos.
- Streams**: Multiple, MD-HBase Architectures, Shared, Towards.
- Data**: Wine, Thread, Counting, Aware, Manager.
- Elastic**: Access, Multi, CoTS Cooperation.
- Database**: Social, Platforms.
- Cloud**: New, Multicore, Integrated, Conscious, ElasTraS, Queries.
- Graphs**: Autonomic, Hyder, Autonomy, Approach, Ricardo.
- Migration**: Current, State, Future, Efficient, Big, Live, Framework, key, Driving, Frequent, Bottles, Infrastructures.

Hierarchy –contrast

G K N P C A F J K E E C A N L S N
E F D A B E X M W L G Z D P G H
Y T S Z V B X P O U T D F J S C N I
Q O U Z L E U J G F L N X Q W P
O F A G H K S R E P W N A K L C
L F J W M N S O P Y G H Q A L M

Hierarchy – contrast

G K N P C A F J K E E C A N L S N
E F D A B E X M W L G Z D P G H
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Q O U Z L E U J G F L N X Q W P
O F A G H K S R E P W N A K L C
L F J W M N S O P Y G H Q A L M

FLOW







ARE WE OVER THE WORST?

Even if experts are still debating about the kind of recovery - V or U or W shaped, they are unanimous that the world has seen the worst of economic contraction.

1 Global economy to resume growth in 2010



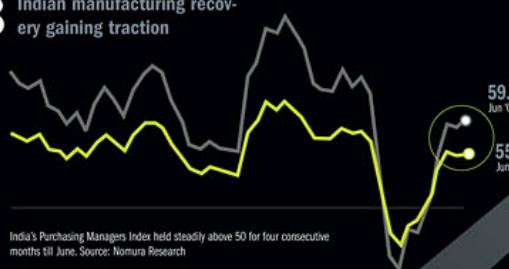
IMF expects global economy to contract by 1.4% in 2009 and emerge out of recession in 2010.

2 India to clock 6% plus growth in 2010



After growing at slower pace in 2009, IMF forecasts India to resume 6% plus growth in 2010.

3 Indian manufacturing recovery gaining traction



India's Purchasing Managers Index held steadily above 50 for four consecutive months till June. Source: Nomura Research

22% is the jump in July car exports
31% is the rise in July car sales

356% is the hike in weekly seat capacity into India
1200 rupees is the rise in income per flight seat

4 Indians are Taking to the Skies Again

The number of domestic air passengers has gone up nearly 30% over the last four quarters, beginning July 2008.
Source: DGCA

5 Exports steadily picking-up



Even though at slower pace, Indian exports are steadily rising. Source: PIB; GoI. In Rs Crore



6 Expectations of early recovery led to a rally in equity markets

Morgan Stanley estimates more upside than downside risk to the Sensex.

7 Profits grow at a healthier 18.7% in Q1 '09-10

22.8%

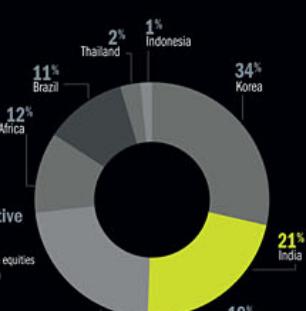
18.7%

8 Automobile sales are steadily picking up

Easy availability of vehicle financing helped auto firms register higher sales growth since Jan-2009. Source: Deutsche Bank Research

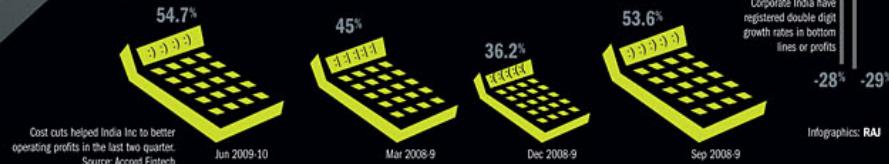
\$2.3 bn is what FII's invested in July
31% is the rise in Sensex in 3 mths

54% is the 3 mth gain in BSE Smallcap Index



9 India most attractive after Korea
FII's invested \$7.3 billion in Indian equities so far this year. Source: JP Morgan

10 India Inc's operating profits margins back to Sep 2008 levels



Cost cuts helped India Inc to better operating profits in the last two quarters.
Source: Accord Fintech

Corporate India have registered double digit growth rates in bottom lines or profits
-28%
-29%

Infographics: RAJ

economy

ARE WE OVER THE WORST?

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22%
is the jump in July car exports

31%
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5 Exports steadily picking-up

69,630
Mar '08

73,132
Jul '08

50,289
Nov '08
61,217
Jun '09

Even though at slower pace, Indian exports are steadily rising. Source: PBI; Govt. In Rs Crore

Even if experts are still debating about the kind of recovery - V or U or W shaped, they are unanimous that the world has seen the worst of economic contraction.

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4 India

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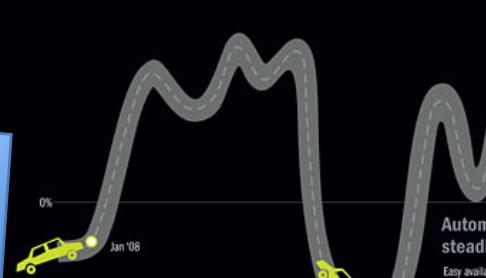
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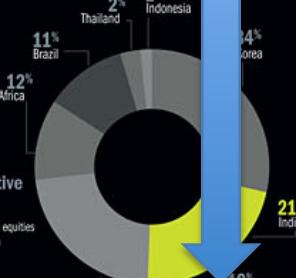


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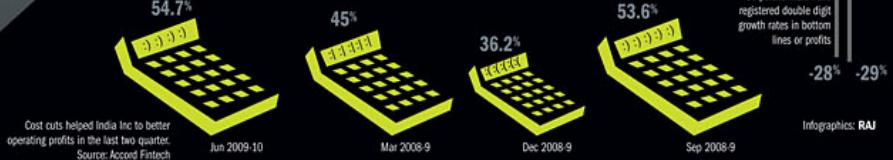
5%
is the gain in BSE S&P 500 Index



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Cost cuts helped India Inc to better operating profits in the last two quarters.
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Infographics: RAJ

TEXT
COLOR
RESULTS
FOCUS
FLOW

Final Thoughts

1

“It usually takes more than three weeks
to prepare a good impromptu speech”,

Mark Twain

Sources - Graphics

- Informationisbeautiful.net
- <http://www.infographicdesignteam.com>
- <http://datavisualization.ch>

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second edition
- <http://datascienceguide.github.io/exploratory-data-analysis>