Focus
your audience's
attention.

Knaflic Chapter 4

What do you notice first?

Preattentive processing occurs without our consciousness at an extremely high speed.

Preattentive attributes determine what information catches our attention.

Can you count the number of 3s?

7563950687473

6586630377576

8603726586802

8465891078830

What about now?

7563**3**95068847**3**

65866**3**0**3**7576

860**3**72658602

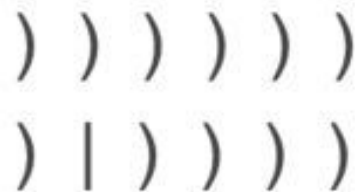846589107830

Orientation

Shape

Line length
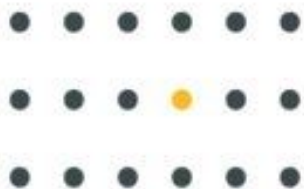
Line width

Size

Curvature

Added marks

Enclosure

Hue

Intensity

Spatial position

Motion

In text

No preattentive attributes

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
You have a great company – keep up the good work!

Bold

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
You have a great company – keep up the good work!

Color

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
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Italics

What are we doing well? Great Products. These products are clearly the best in their class. *Replacement parts are shipped when needed*. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
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Size

What are we doing well? Great Products. These products are the best in their class. Replacement parts are shipped when needed. You sent gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours. You have a great company – keep up the good work!

Separate spatially

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask.

Problems are resolved promptly.

Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours. You have a great company – keep up the good work!

Outline (enclosure)

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
You have a great company – keep up the good work!

Underline (added marks)

What are we doing well? Great Products. These products are clearly the best in their class. Replacement parts are shipped when needed. You sent me gaskets without me having to ask. Problems are resolved promptly. Bev in the billing office was quick to resolve a billing issue I had. General customer service exceeds expectations. The account manager even called to check in after normal business hours.
You have a great company – keep up the good work!

A visual hierarchy of information

What are we doing well?
Themes & example comments

- **Great products**: "These products are clearly the best in class."

- **Replacement parts are shipped when needed**: "You sent me gaskets without me having to ask, and I really needed them, too!"

- **Problems are resolved promptly**: "Bev in the billing office was quick to resolve a billing issue I had."

- **General customer service exceeds expectations**: "The account manager even called after normal business hours. *You have a great company - keep up the good work!*"

Example:

Top 10 Design Concerns
of a Car Manufacturer.

Measured as the number of concerns per 1,000 concerns.

Original graph, no preattentive attributes.

Top 10 design concerns

concerns per 1,000

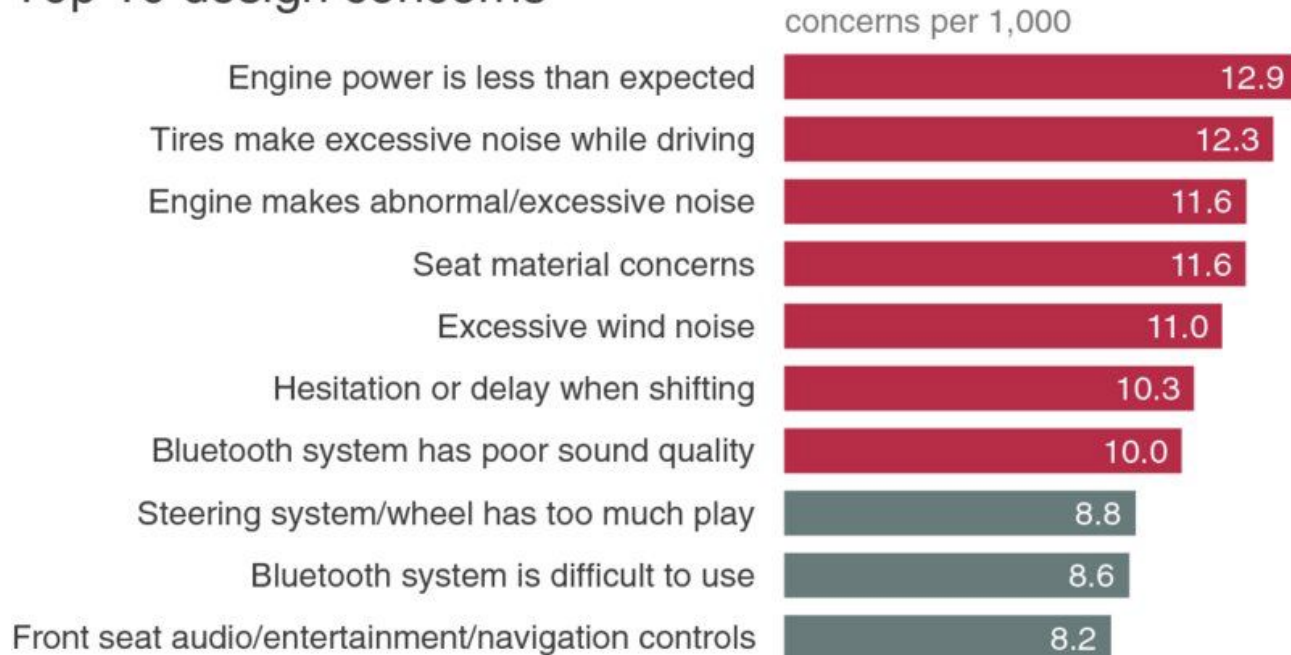|	
Engine power is less than expected	12.9
Tires make excessive noise while driving	12.3
Engine makes abnormal/excessive noise	11.6
Seat material concerns	11.6
Excessive wind noise	11.0
Hesitation or delay when shifting	10.3
Bluetooth system has poor sound quality	10.0
Steering system/wheel has too much play	8.8
Bluetooth system is difficult to use	8.6
Front seat audio/entertainment/navigation controls	8.2

Leverage color to draw attention.

7 of the top 10 design concerns have 10 or more concerns per 1,000.
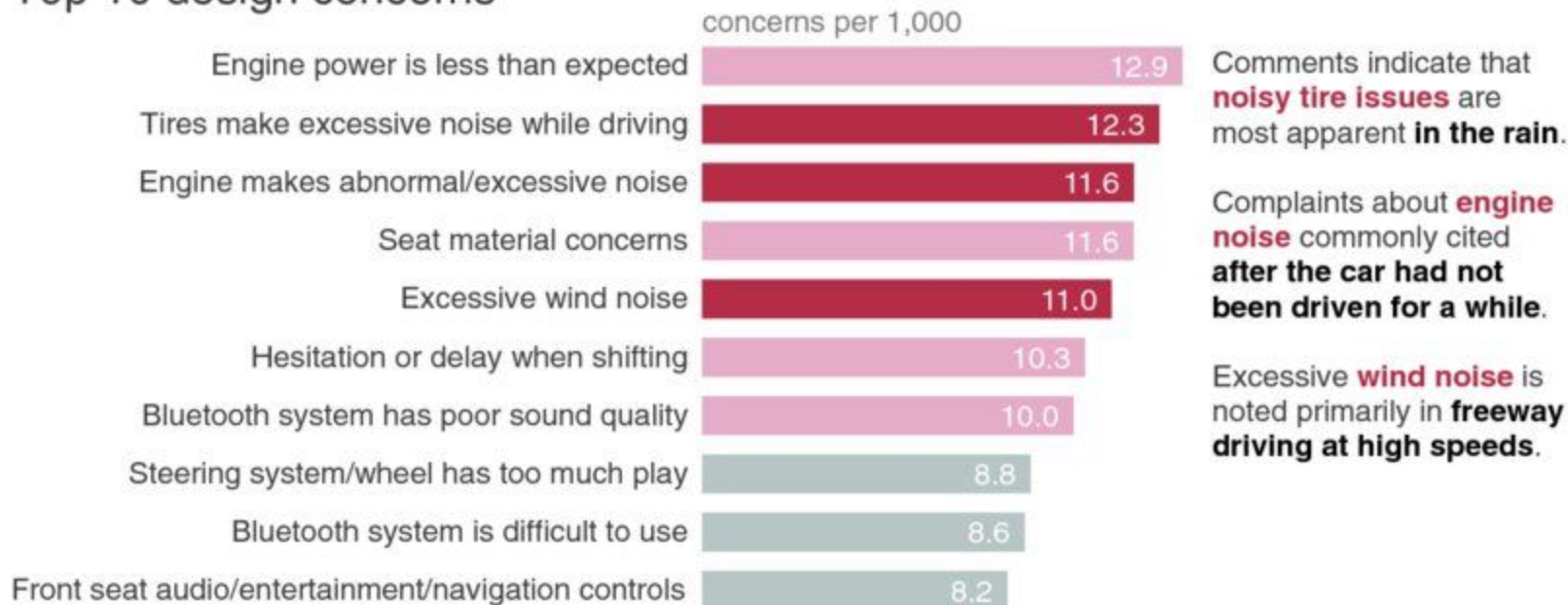Discussion: is this an acceptable default rate?

Top 10 design concerns

concerns per 1,000

Concern	concerns per 1,000
Engine power is less than expected	12.9
Tires make excessive noise while driving	12.3
Engine makes abnormal/excessive noise	11.6
Seat material concerns	11.6
Excessive wind noise	11.0
Hesitation or delay when shifting	10.3
Bluetooth system has poor sound quality	10.0
Steering system/wheel has too much play	8.8
Bluetooth system is difficult to use	8.6
Front seat audio/entertainment/navigation controls	8.2

Create a visual hierarchy of information

Of the top design concerns, three are noise-related.

Top 10 design concerns

concerns per 1,000

Concern	Value
Engine power is less than expected	12.9
Tires make excessive noise while driving	12.3
Engine makes abnormal/excessive noise	11.6
Seat material concerns	11.6
Excessive wind noise	11.0
Hesitation or delay when shifting	10.3
Bluetooth system has poor sound quality	10.0
Steering system/wheel has too much play	8.8
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Comments indicate that **noisy tire issues** are most apparent **in the rain**.

Complaints about **engine noise** commonly cited **after the car had not been driven for a while**.

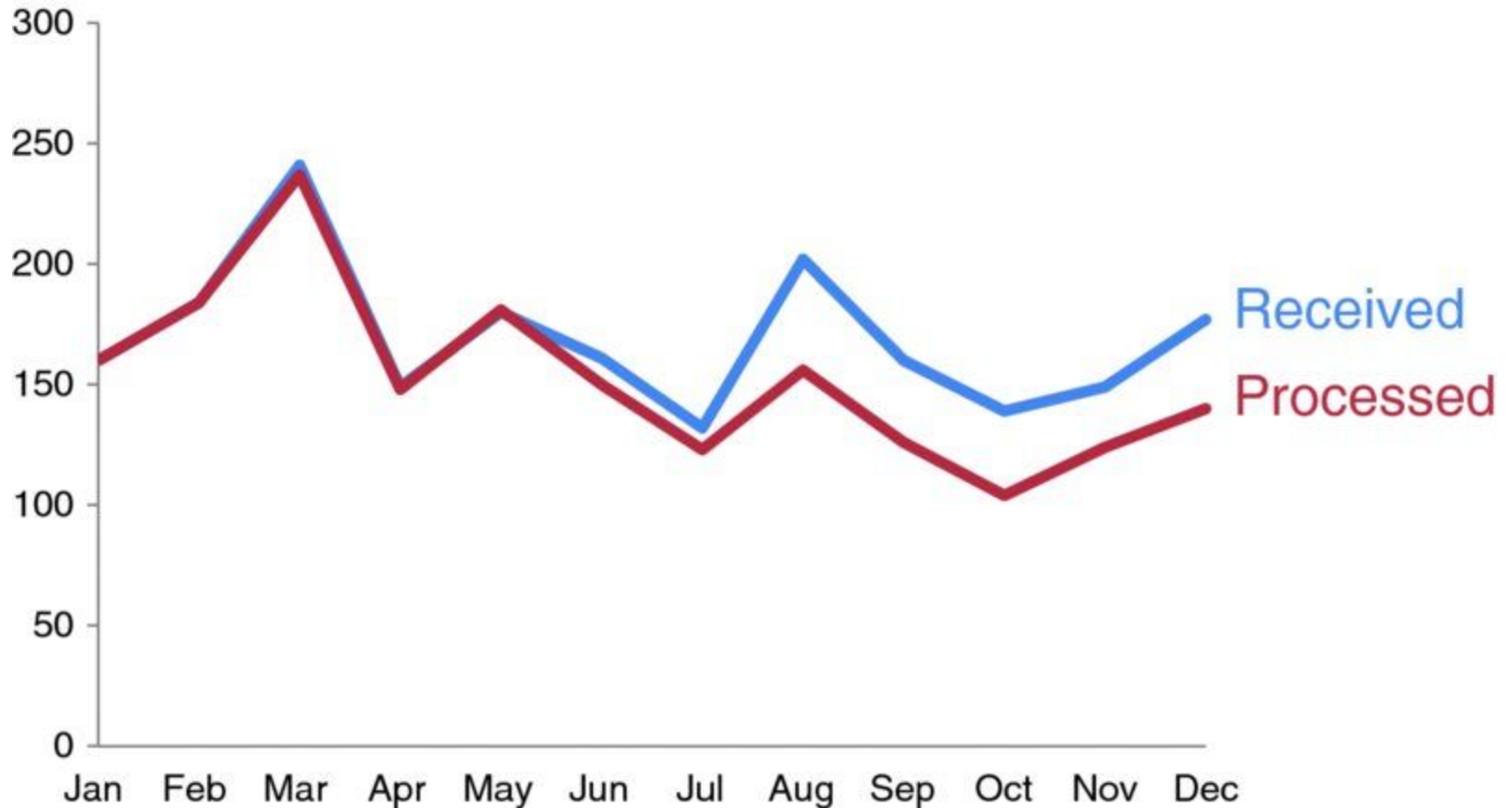Excessive **wind noise** is noted primarily in **freeway driving at high speeds**.

Example:
IT Tickets

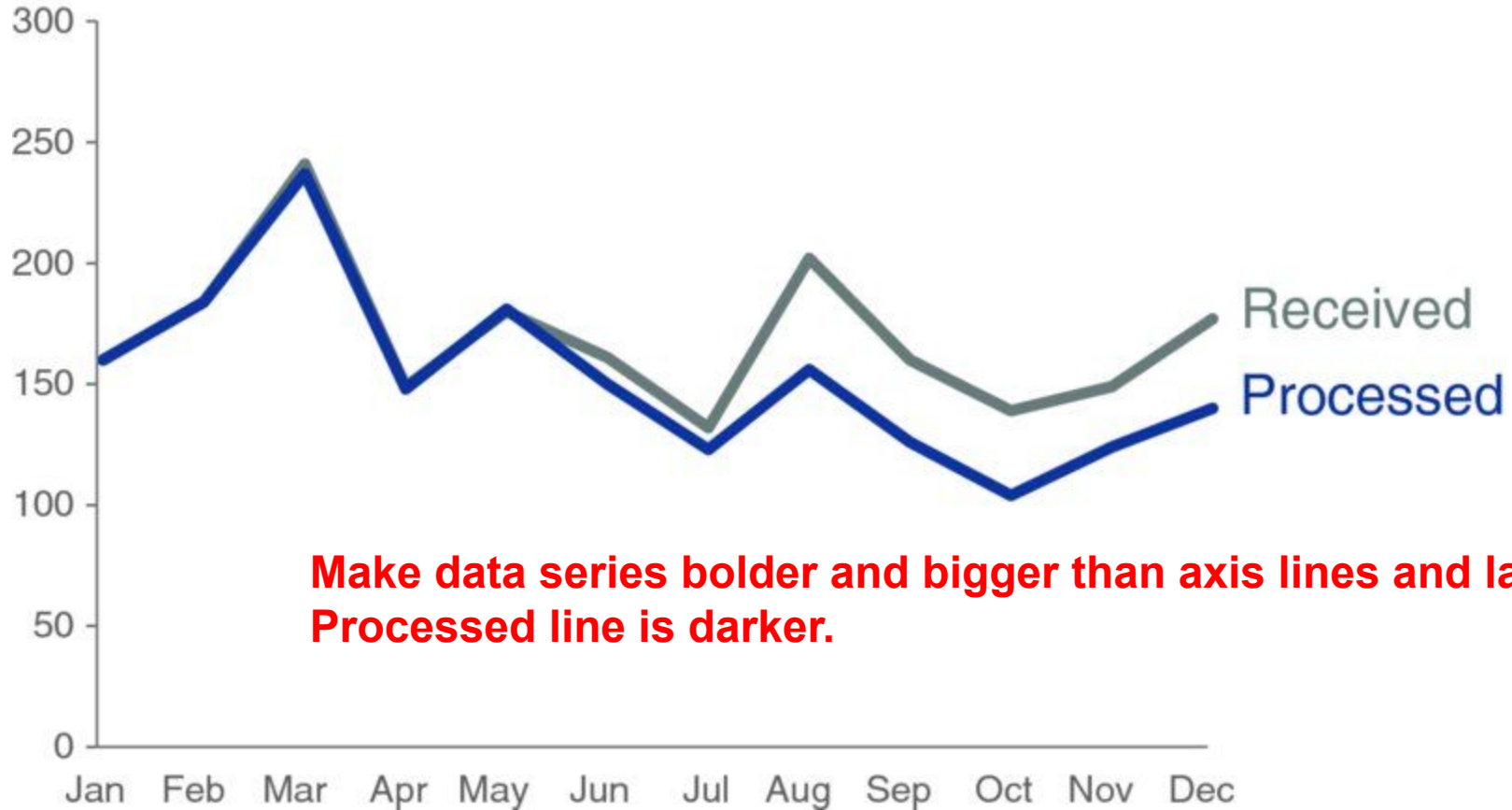The volume of incoming tickets exceeds your team's resources.

Where we left off...

Start by pushing everything to the background

Make the data stand out

Make data series bolder and bigger than axis lines and labels. Processed line is darker.

Too many data elements feel cluttered.

Data elements used sparingly help draw attention.

Color rules.

1. **Use color sparingly**. Too much variety prevents anything from standing out.
2. **Use color consistently**. Don't change-up the colors.
3. **Design with colorblind in mind**.
   https://michelf.ca/projects/mac/sim-daltonism/
4. **Be thoughtful of tone that color conveys.**
   http://www.informationisbeautiful.net/visualizations/colours-in-cultures/
5. **Brand colors:** To leverage or not to leverage?

Example:

Top 5 Drugs: Country-Level Sales Rank.

Rainbow-land loses preattentive value, nothing stands out.

A better alternative is to use **varying color saturation** of a single color (a heatmap).

Use color sparingly.

Country Level Sales Rank Top 5 Drugs

Rainbow distribution in color indicates sales rank in given country from #1 (red) to #10 or higher (dark purple)

Country	A	B	C	D	E
AUS	1	2	3	6	7
BRA	1	3	4	5	6
CAN	2	3	6	12	8
CHI	1	2	8	4	7
FRA	3	2	4	8	10
GER	3	1	6	5	4
IND	4	1	8	10	5
ITA	2	4	10	9	8
MEX	1	5	4	6	3
RUS	4	3	7	9	12
SPA	2	3	4	5	11
TUR	7	2	3	4	8
UK	1	2	3	6	7
US	1	2	4	3	5

Top 5 drugs: country-level sales rank

RANK	1	2	3	4	5+

COUNTRY | DRUG	A	B	C	D	E
Australia	1	2	3	6	7
Brazil	1	3	4	5	6
Canada	2	3	6	12	8
China	1	2	8	4	7
France	3	2	4	8	10
Germany	3	1	6	5	4
India	4	1	8	10	5
Italy	2	4	10	9	8
Mexico	1	5	4	6	3
Russia	4	3	7	9	12
Spain	2	3	4	5	11
Turkey	7	2	3	4	8
United Kingdom	1	2	3	6	7
United States	1	2	4	3	5

You might be required to use <u>the colors of your brand</u>.

Amazon

Facebook
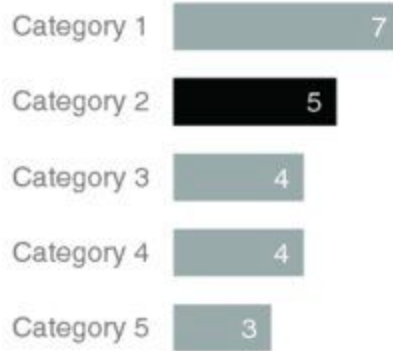
Google

It may make sense to deviate from brand colors.
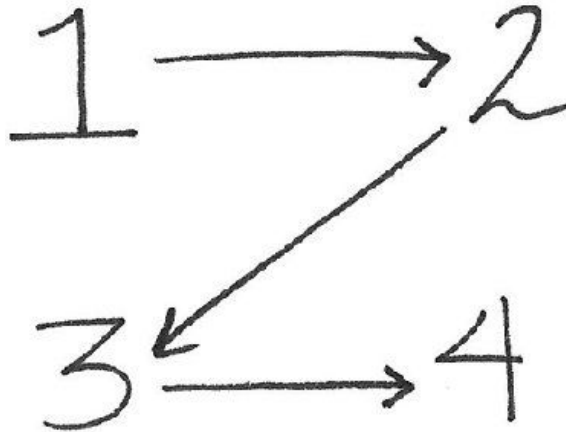
The client favored the last option with an entirely different color.

Position on page

Without other visual cues, most members of your audience will zigzag "z" to take on information on the screen. Put what's important **at the top.**
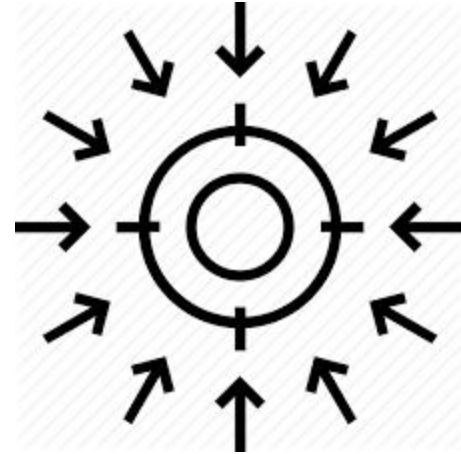
In closing...

Should the audience be left to process ALL the information in front of them?

Use preattentive attributes to draw the attention of your audience:

size, color, position on page

Focus your audience's attention

to where you want them to pay it.

References

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