Presenting Your EDA to Others

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Summary

Become aware of the do's and don'ts in data visualization

Think about how to target your audience

Learn how to structure your EDA report

Do's and Don'ts

"Show, don't tell.
Misguided if taken too literally and
at face value"

Alberto Cairo

EDA Should Enable

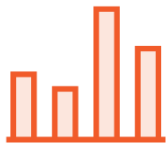Exploration

Analysis

Discovery

Communication

As a General Rule

Be truthful and always based on real data

Be accurate and avoid ambiguity
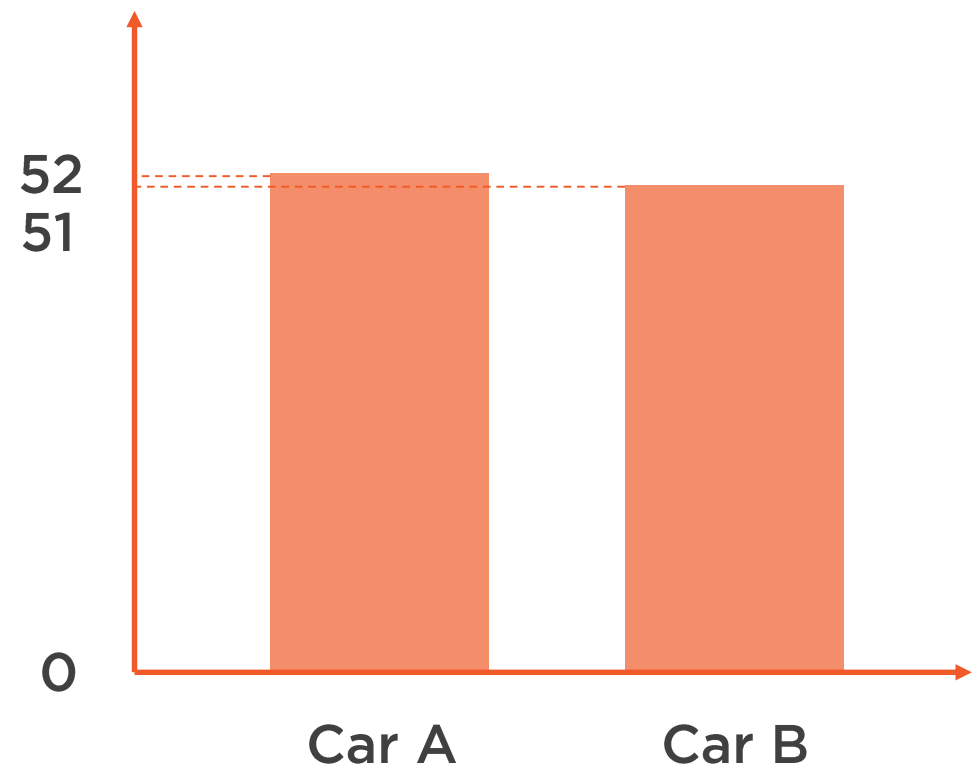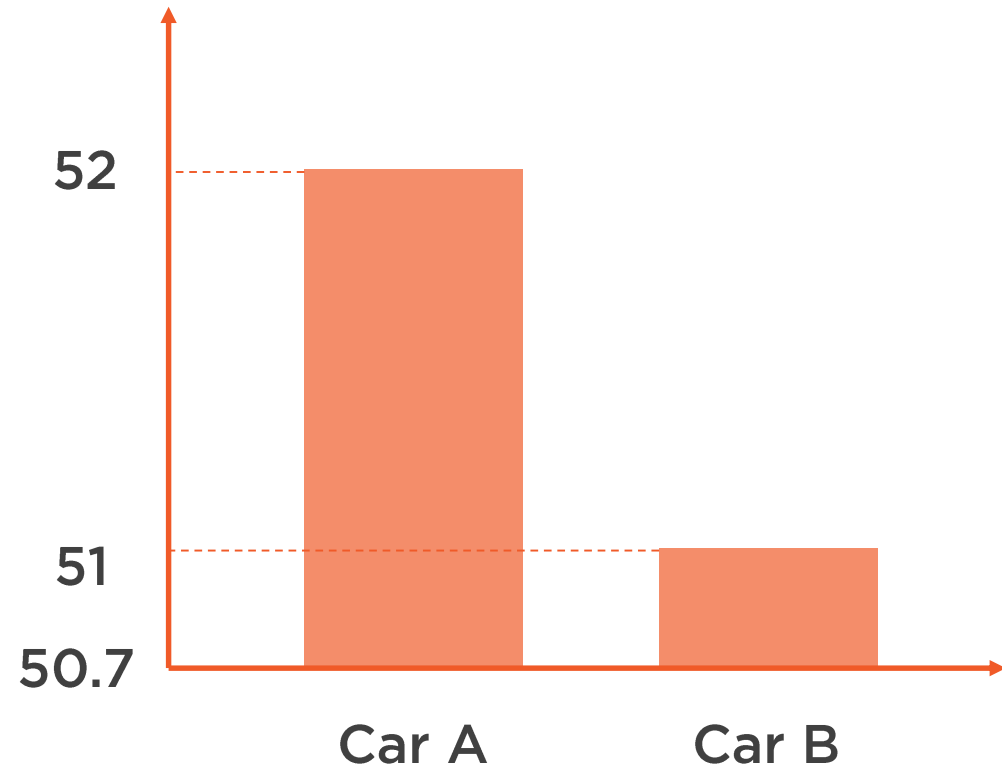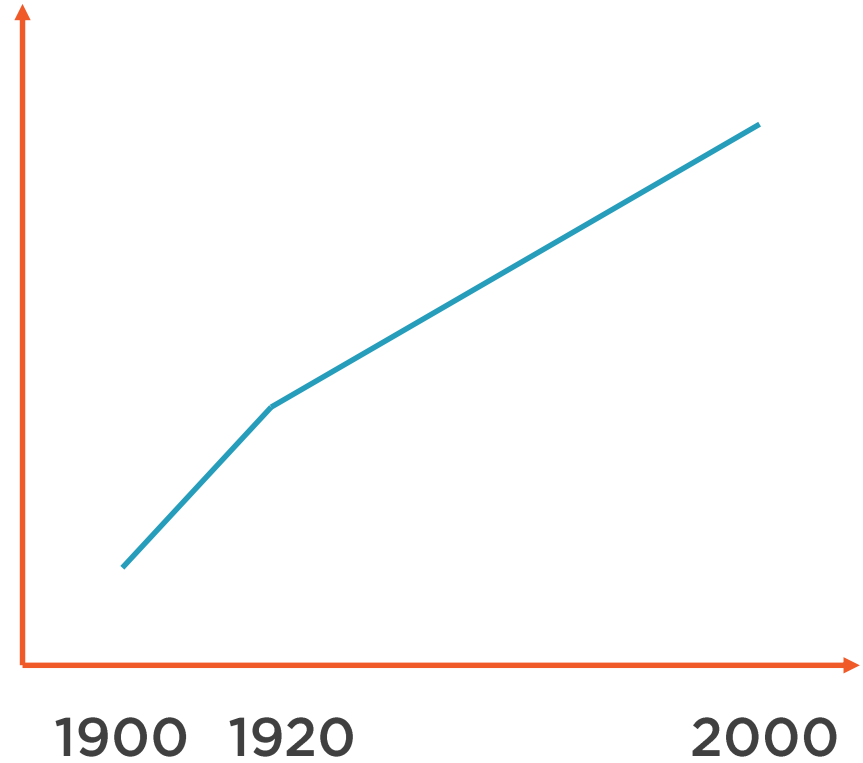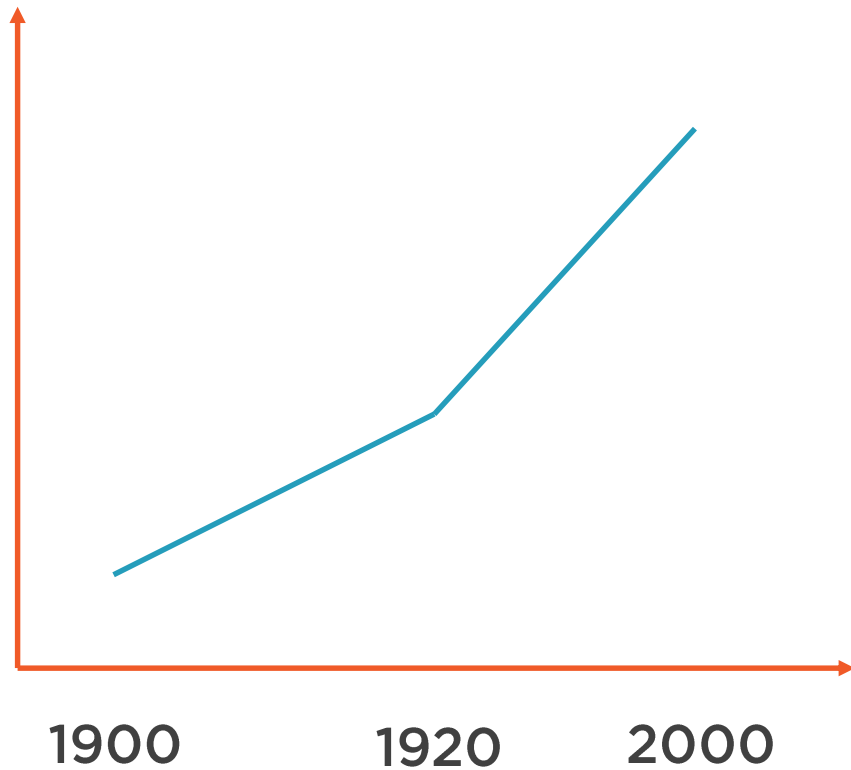
Ease interpretation to your audience

Be elegant and aesthetically pleasing for better understanding

How Not to Lie: Don't Truncate

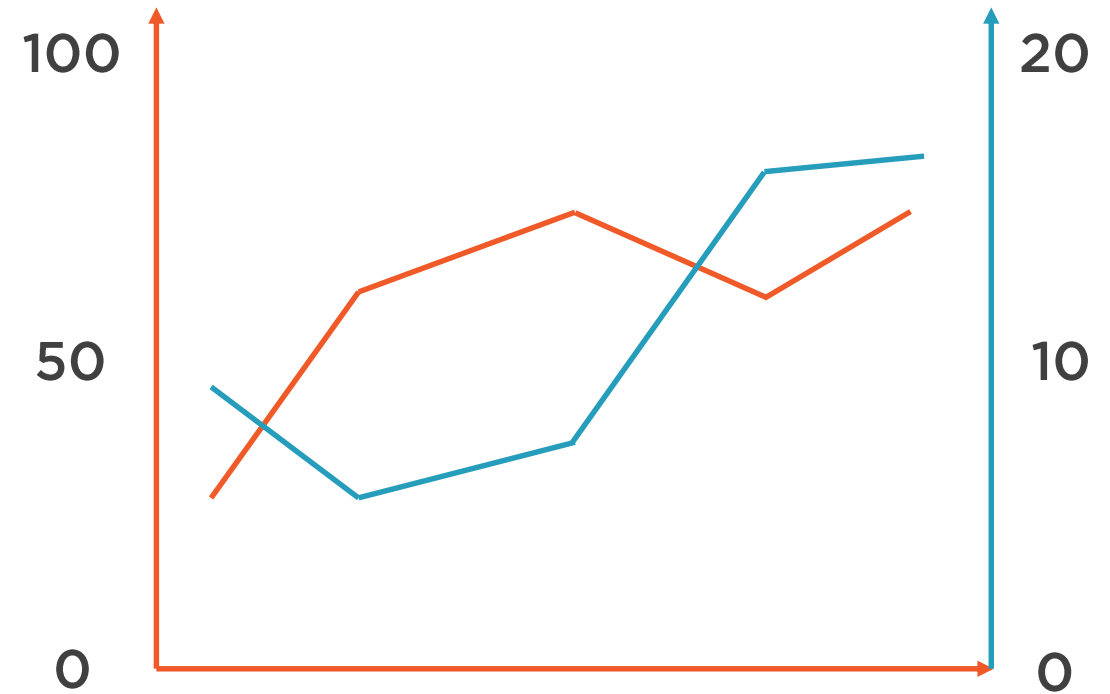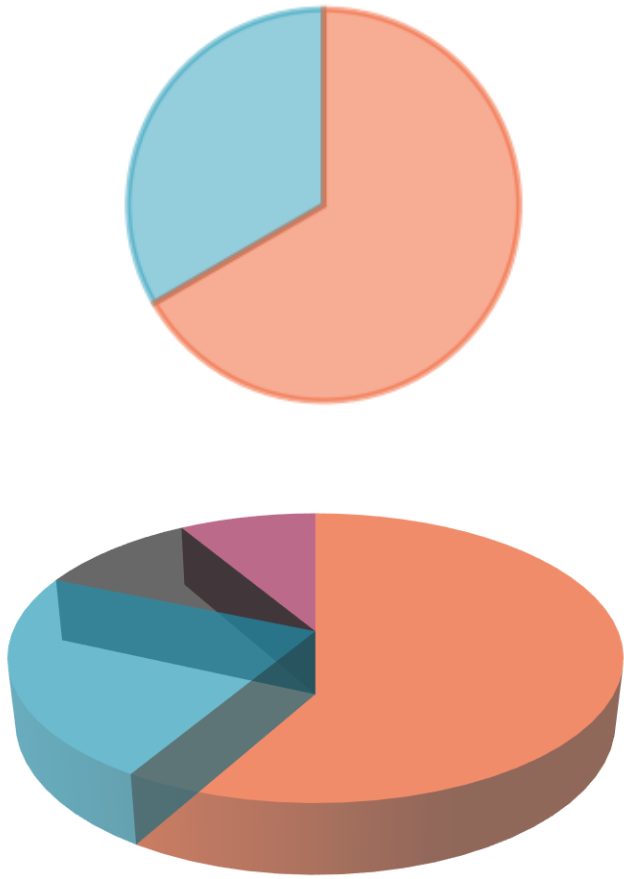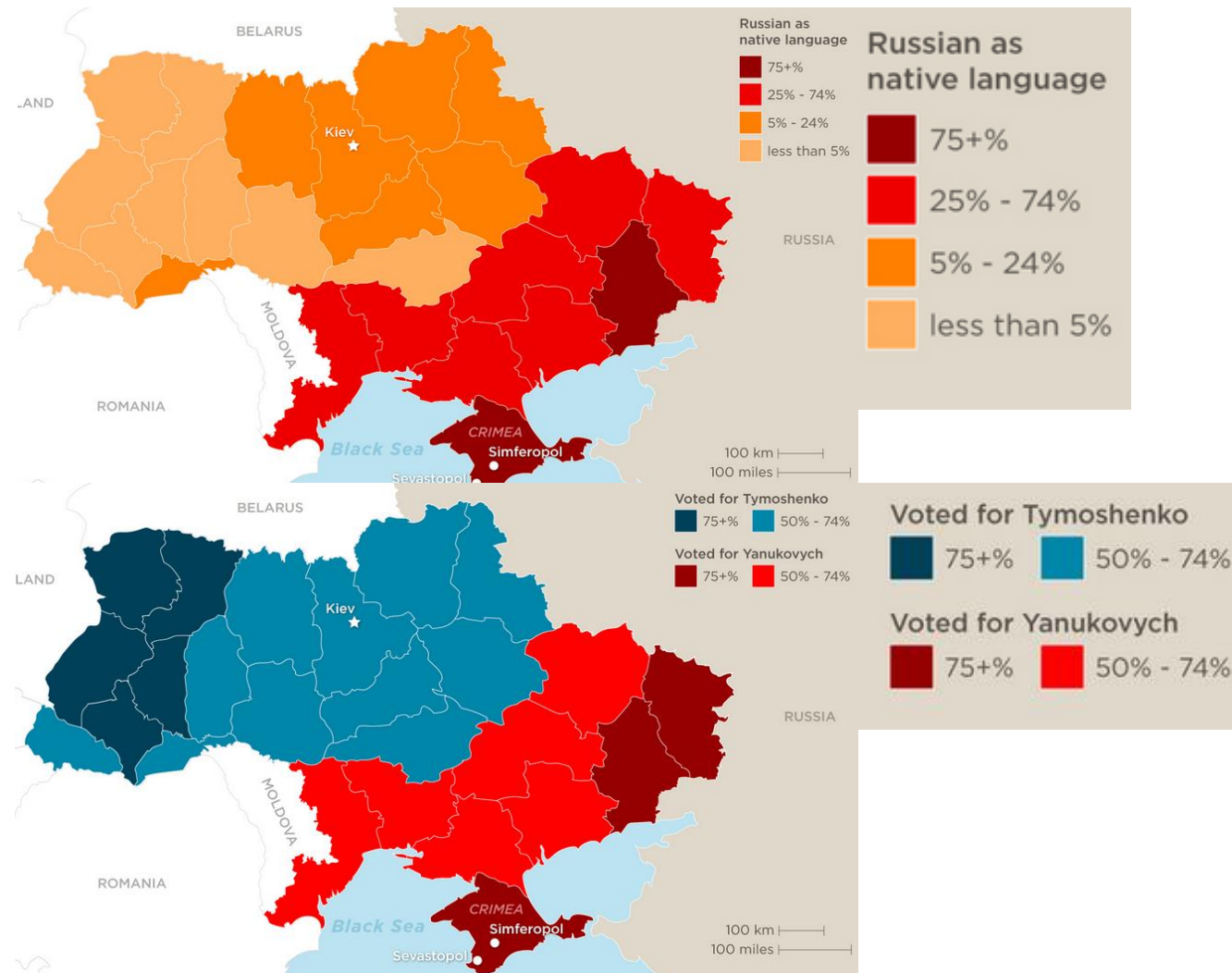# How Not to Lie: Appropriate Scale
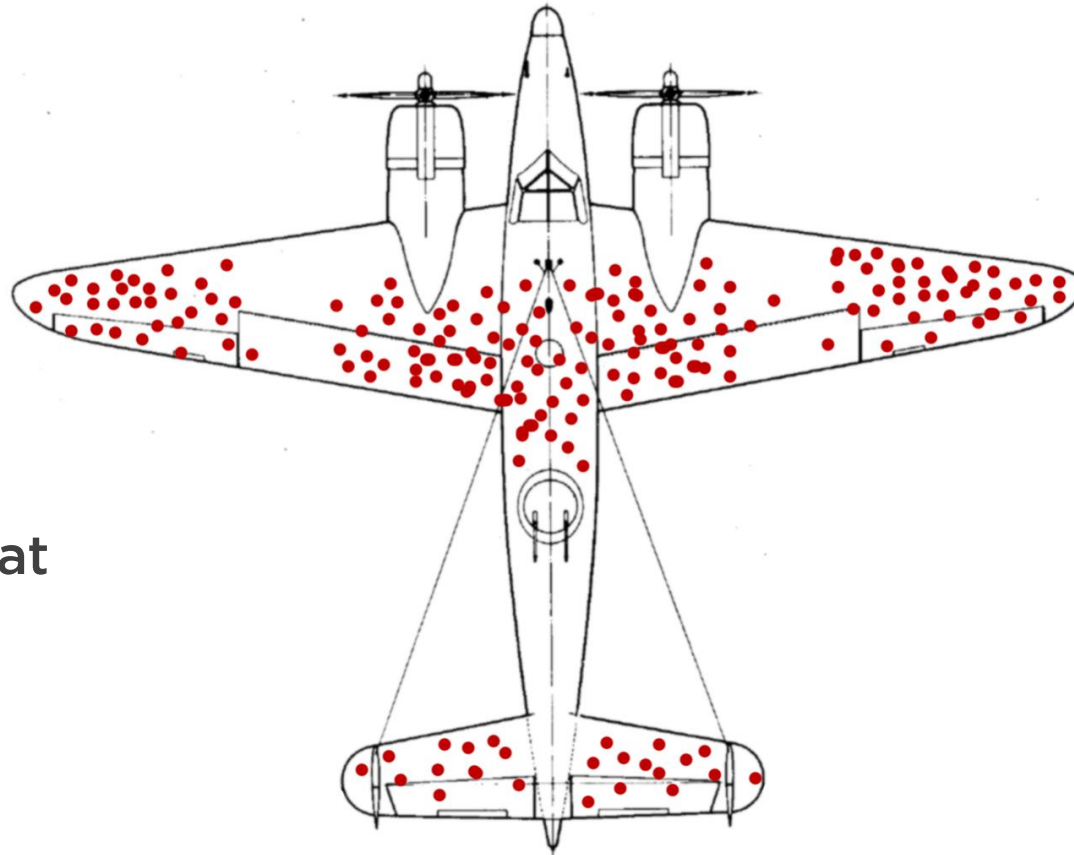
How Not to Lie: Proportions and Projections

How to Not Lie: Context

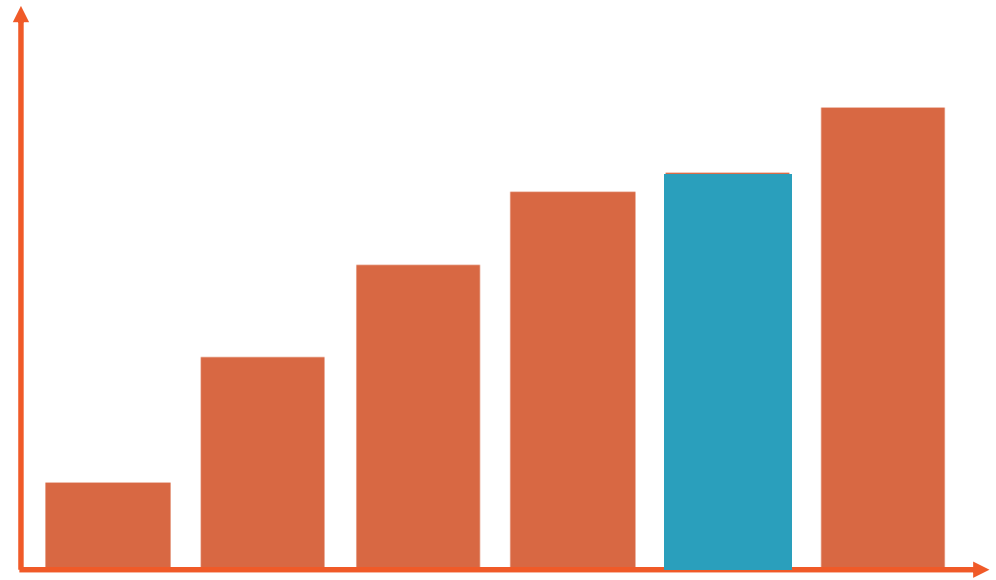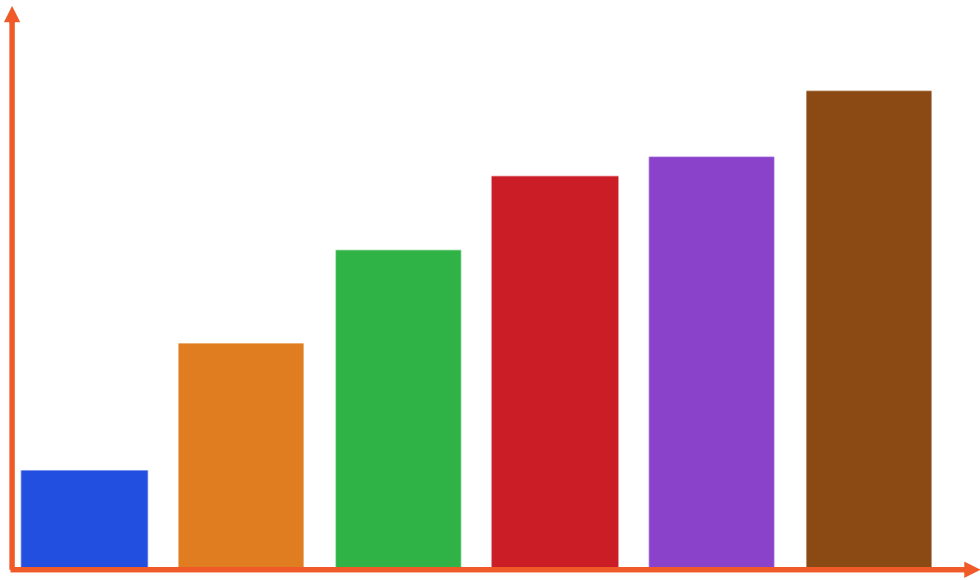https://edition.cnn.com/interactive/2014/02/world/ukraine-divided

How to Not Lie: Selection Bias

Bullet impacts on planes that returned from war

What about those that didn't return?

Choosing Color

Colorblindness

Normal Vision

Red - Green
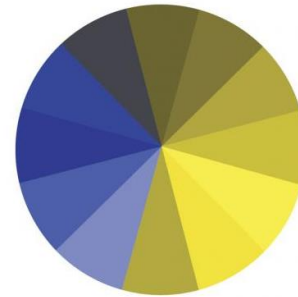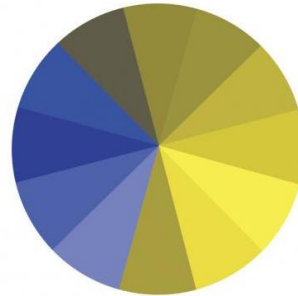
Blue - Yellow

Complete

Colorblindness

15-color palettes adapted for color blindness
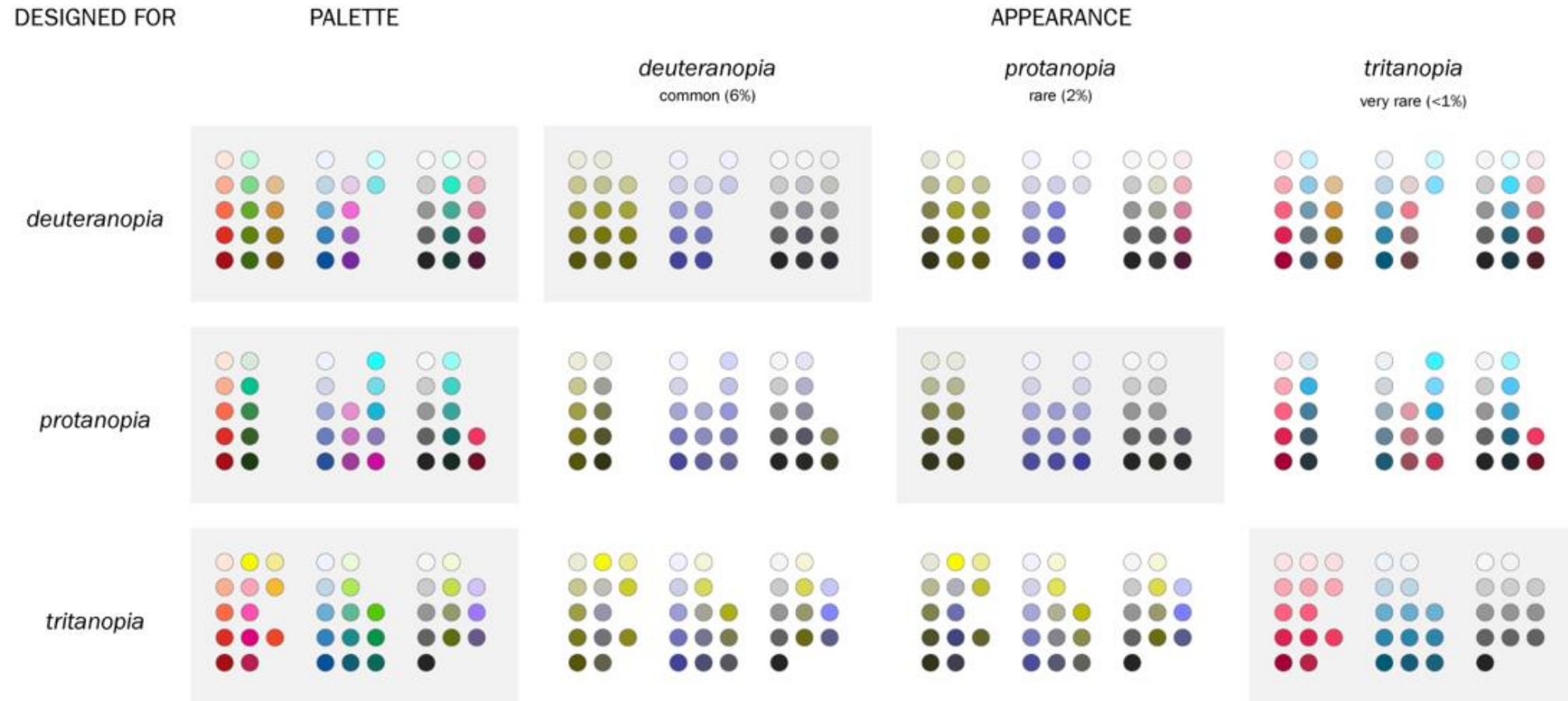
Colorblindness Check Tools

Color Oracle
Design for the Color Impaired

Let's get color blind
by **Nullbrains**

It all depends on the message to communicate

Demo

Learn how to perfom a colorblind test

By using open source software:
- Color Oracle

Targeting Your Audience

Usually 3 Types of Audience
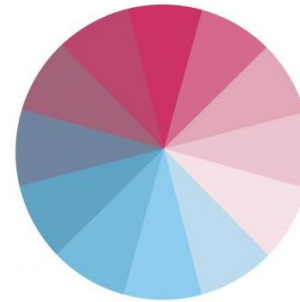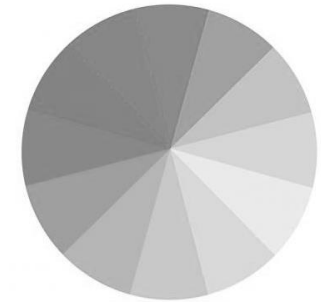
Technical People

How it's made, why did you decide this or that

Business People

How is this good for business, how much impact, enable decision making

Sales People

How is it useful or attractive for customers?

Technical Audience

Confront Ideas

Disagree before you agree

Ask Why

Don't take anything for granted

Explain Every Detail

When possible

Stay Truthful

Argue based on data

Be Humble

Focus on outcome

Business Audience

High Dimensionality

Explain low dimension equivalent

Simple and Clear

Language, but don't oversimplify

Avoid wrong conclusions

From the audience due to an authority effect

Estimate Impact

Of conclusions when possible

Be Respectful

Make everyone understand

Sales Audience

Go right to the point

Be time efficient

Show capabilities

What can be done or decided with the insight

Show specific examples

Of how insight was applied

Foster counterfacts

To prepare people to field argumentation

Be clear
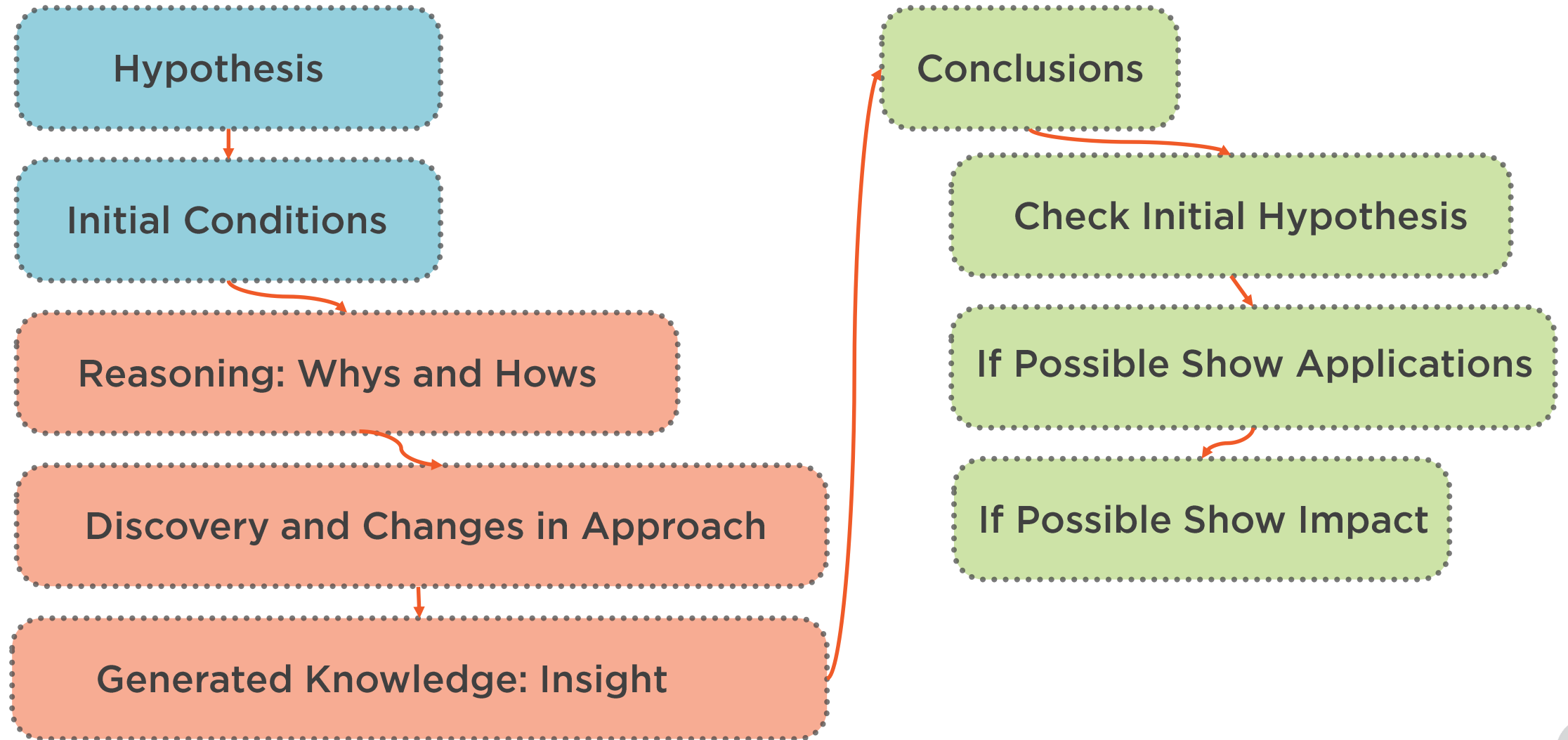
Focus on the main message that everyone should remember

Structuring Your Report

Report Structure

Remember

Keep it simple and stupid (KISS principle)

Be concise and accurate
Do not add extra information if it is not needed

Join explanation blocks with "whys" and "hows"

Be clear, don't be ambiguous