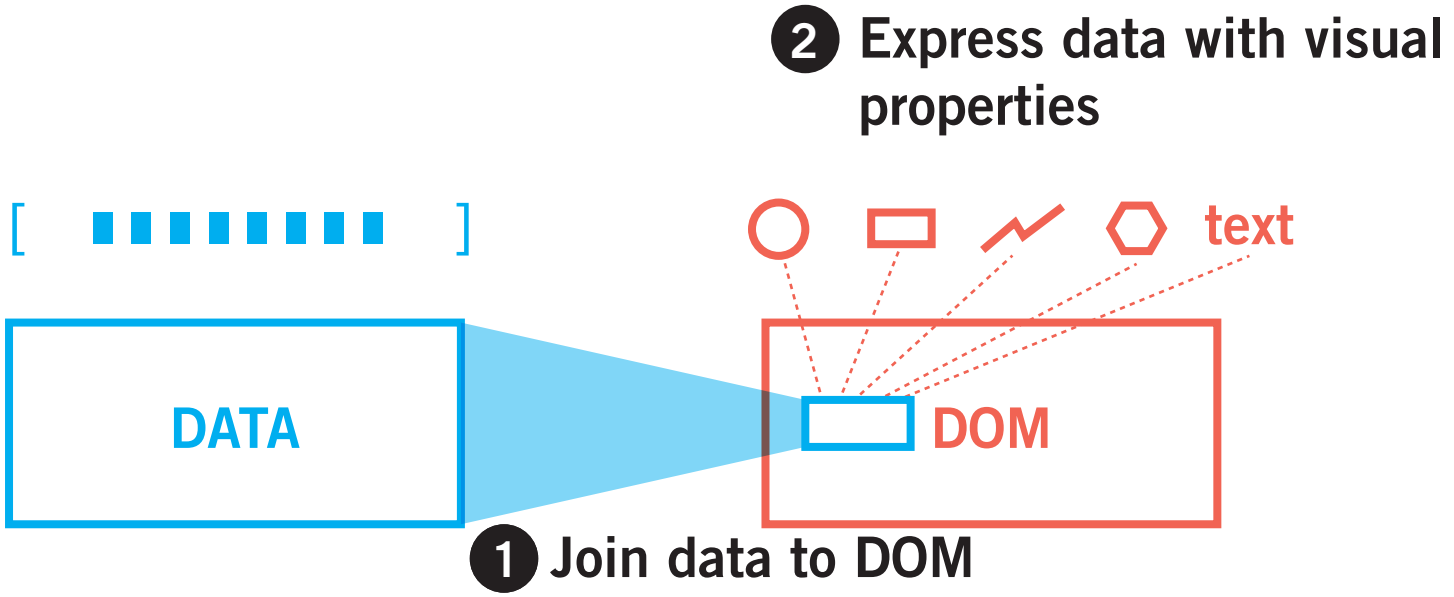
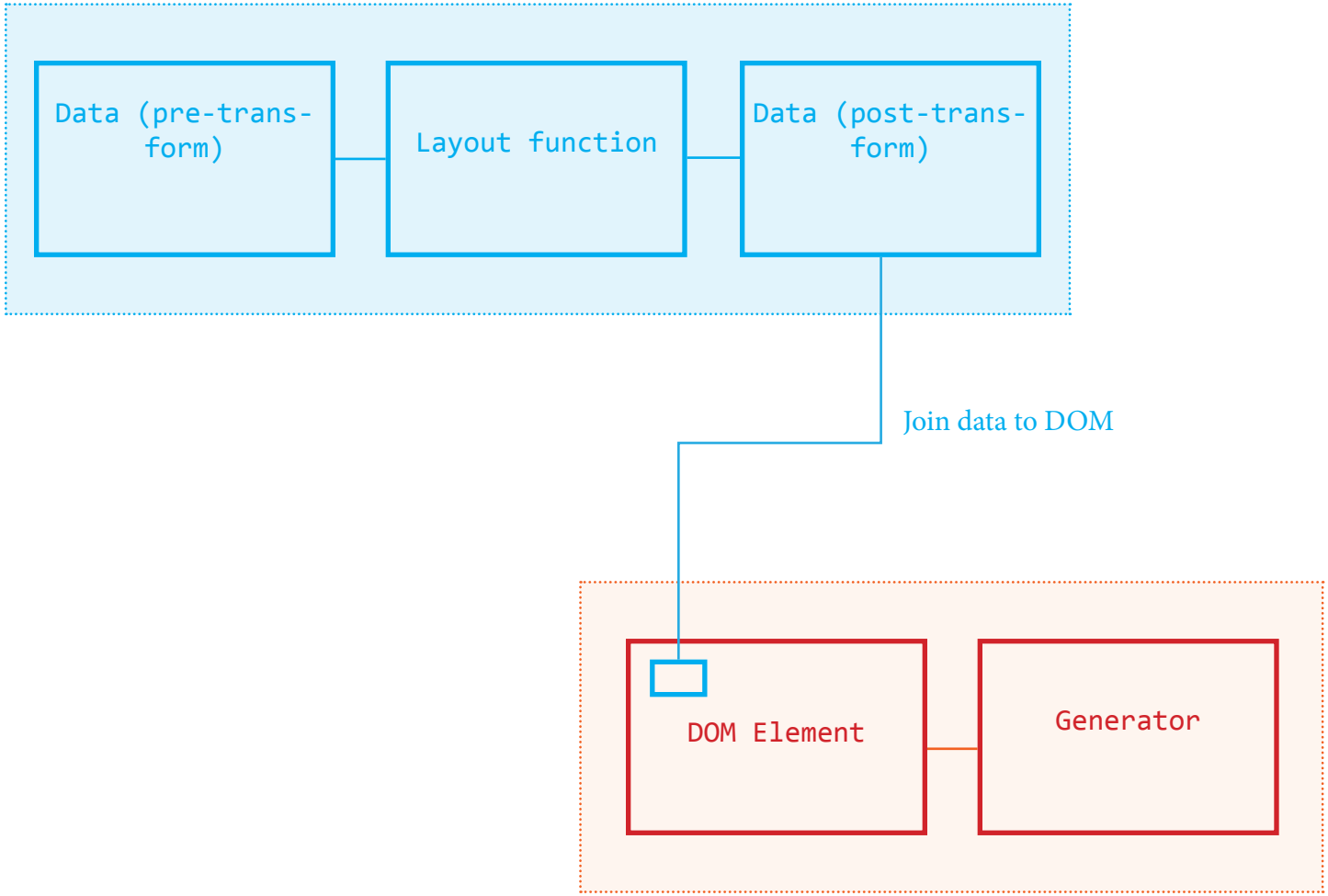
Information Design Workshop

Acquire
Parse
Filter
Mine
Represent
Refine
Interact


2 Express data with visual properties
text
DATA
DOM
1 Join data to DOM


Data (pre-trans-form)
Layout function
Data (post-trans-form)
Join data to DOM
DOM Element
Generator

Goal of the Workshop

Beyond acquiring the basic technical vocabulary, develop greater analytic skills and theoretical knowledge to inform your practice of data visualization.

Goal of the Workshop

Beyond acquiring the basic technical vocabulary, develop greater analytic skills and theoretical knowledge to inform your practice of data visualization.

Synthesize your skill sets in the context of a data visualization project.

Goal of the Workshop

Beyond acquiring the basic technical vocabulary, develop greater analytic skills and theoretical knowledge to inform your practice of data visualization.

Synthesize your skill sets in the context of a data visualization project.

Ultimately, you should be able to conceptualize, plan, develop, and iteratively refine a data visualization project in the context of any dataset.

Principles

BInformation visualization seeks to inform, not (necessarily) to persuade, certainly not to obfuscate.

Principles

"I want to make a data visualization that looks like X."

Principles

"I want to make a data visualization that looks like X."

Data visualization should not be conflated with a particular aesthetic or visual artifact.

Principles

"I plan to make a data visualization of X."

Principles

"I plan to make a data visualization of X."

Before delving into "how", ask "why". What are your goals for creating this data visualization? Who is going to look at it? What are their information seeking needs?

Planning a Project

Planning a Project

Start with Questions

A project begins with a dataset and/or a set of questions.

Gathering data and converting it to a machine readable format is in itself a very involved exercise.

Planning a Project

Understanding the Data

Understand the context for the data.

Planning a Project

Understanding the Data

Understand the context for the data.

- How was it collected?
- How might the data collection method impact its usefulness?
- Are there anomalies in the data? Is it noise or actually significant?
- Consult with domain experts.

Planning a Project

Data Discovery

Pose lots of questions to the data. Produce lots of sketches. Some will yield interesting patterns and lead to intriguing discoveries, even if many will not.

Planning a Project

Data Discovery

Pose lots of questions to the data. Produce lots of sketches. Some will yield interesting patterns and lead to intriguing discoveries, even if many will not.

Planning a Project

Data Discovery

"I know X is true. I will produce visualization Y to show X."

Is X really true? Even if it is, is it really the right or most relevant question to ask?

Planning a Project

Understand the Audience

Are they experts in this domain? Are they engaged?

Planning a Project

Understand the Audience

Are they experts in this domain? Are they engaged?

Depending on the answer, the final visualization product can span a spectrum between **expressive, explanatory, high level**, and **complex, exploratory**.

Planning a Project

Understand the Audience

For a low-engagement, non-expert audience, stay high-level.

For a highly engaged audience, provide a full range of exploratory capabilities.

Planning a Project

Wireframe, Prototype, Iterate, Improve

Planning a Project

...and After That

Data visualization is frequently the first step of an exploratory data analysis, the result of which is further data gathering, exploration (and visualization!)

Tangible Outcomes

Tangible Outcomes

A data visualization project

A framework for conceptualizing and planning a project

Better familiarity with more advanced topics in JavaScript and d3

Learn to work collaboratively within a studio pedagogy

Gain a greater body of theoretical knowledge the underlies how people perceive and understand information

Have better intuition about the appropriate use of different design strategies

Tangible Outcomes

A data visualization project

A framework for conceptualizing and planning a project

Better familiarity with more advanced topics in JavaScript and d3

Learn to work collaboratively within a studio pedagogy

Gain a greater body of theoretical knowledge the underlies how people perceive and understand information

Have better intuition about the appropriate use of different design strategies

Syllabus, Class Format, The Dataset