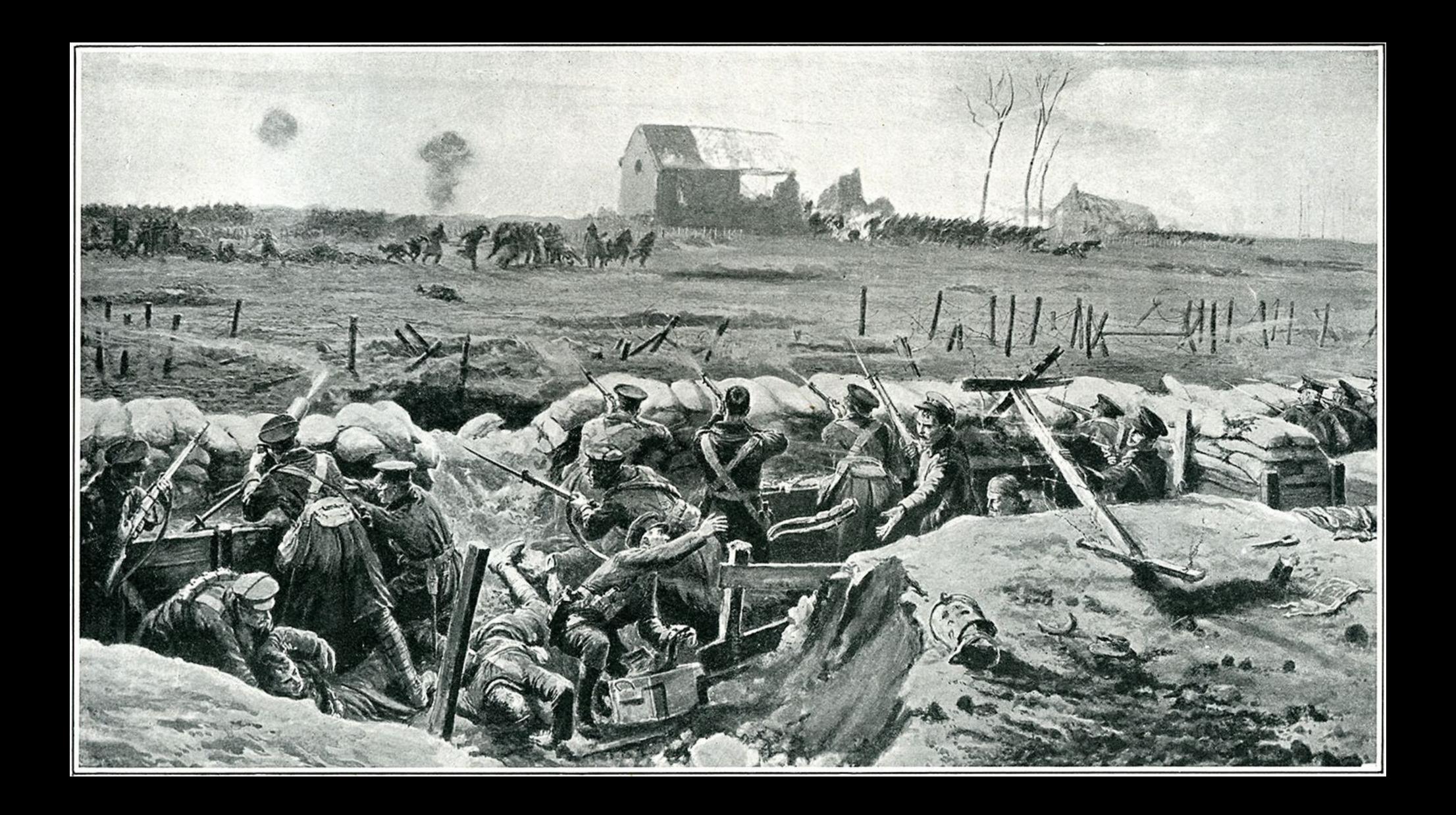


## Principles

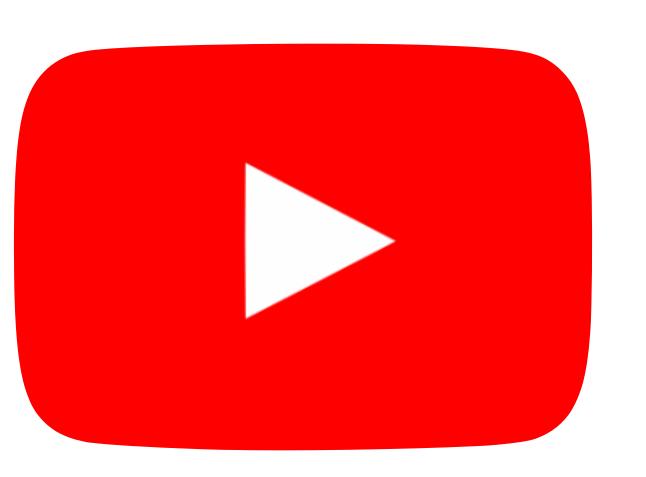




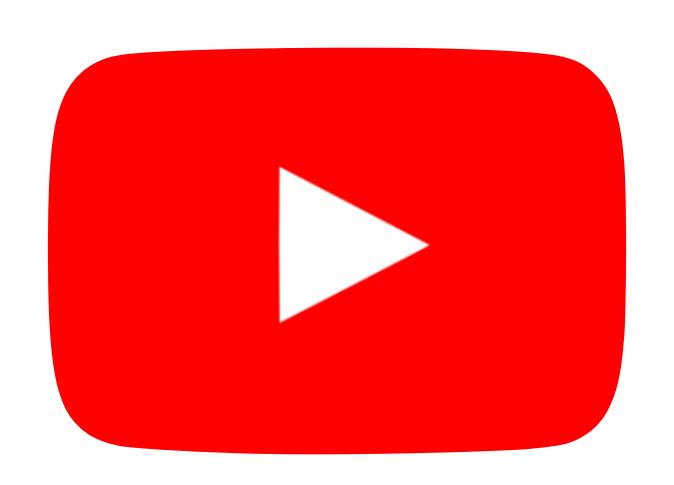




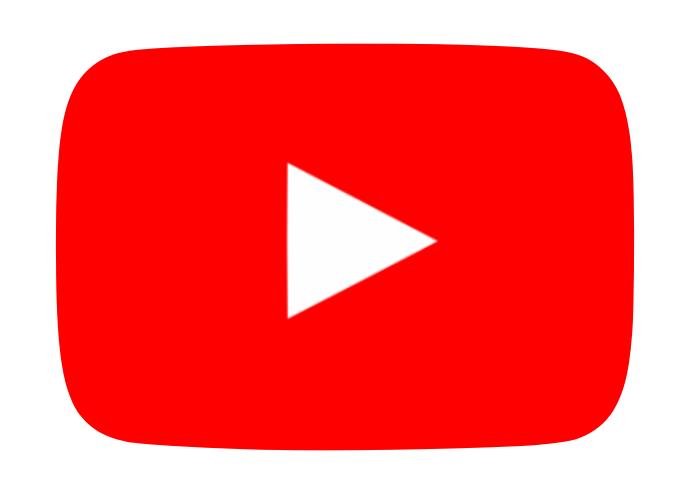
## analytics



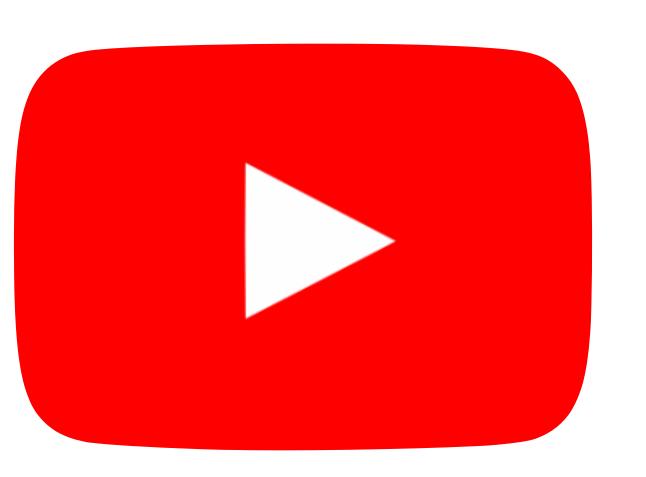
## 

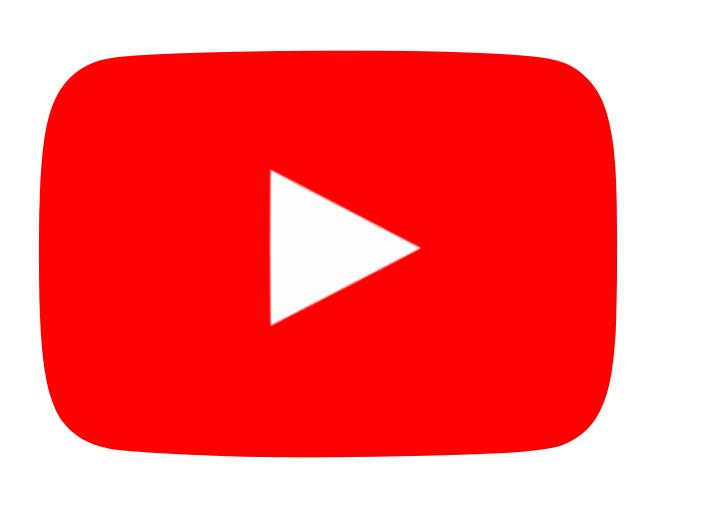


## 



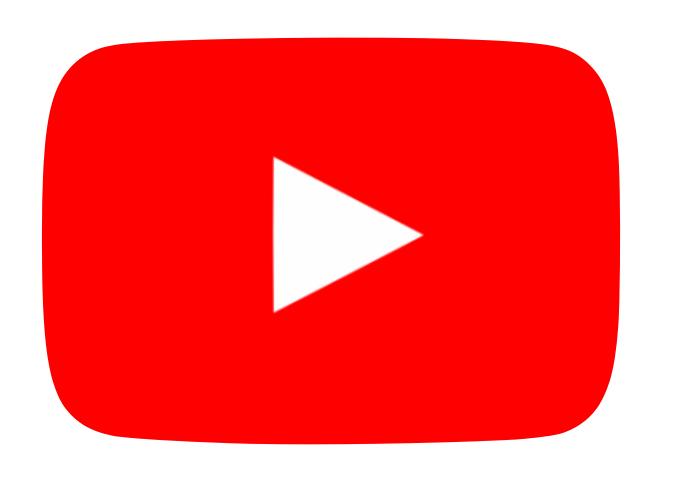
## 





## 2 minutes

20 minutes

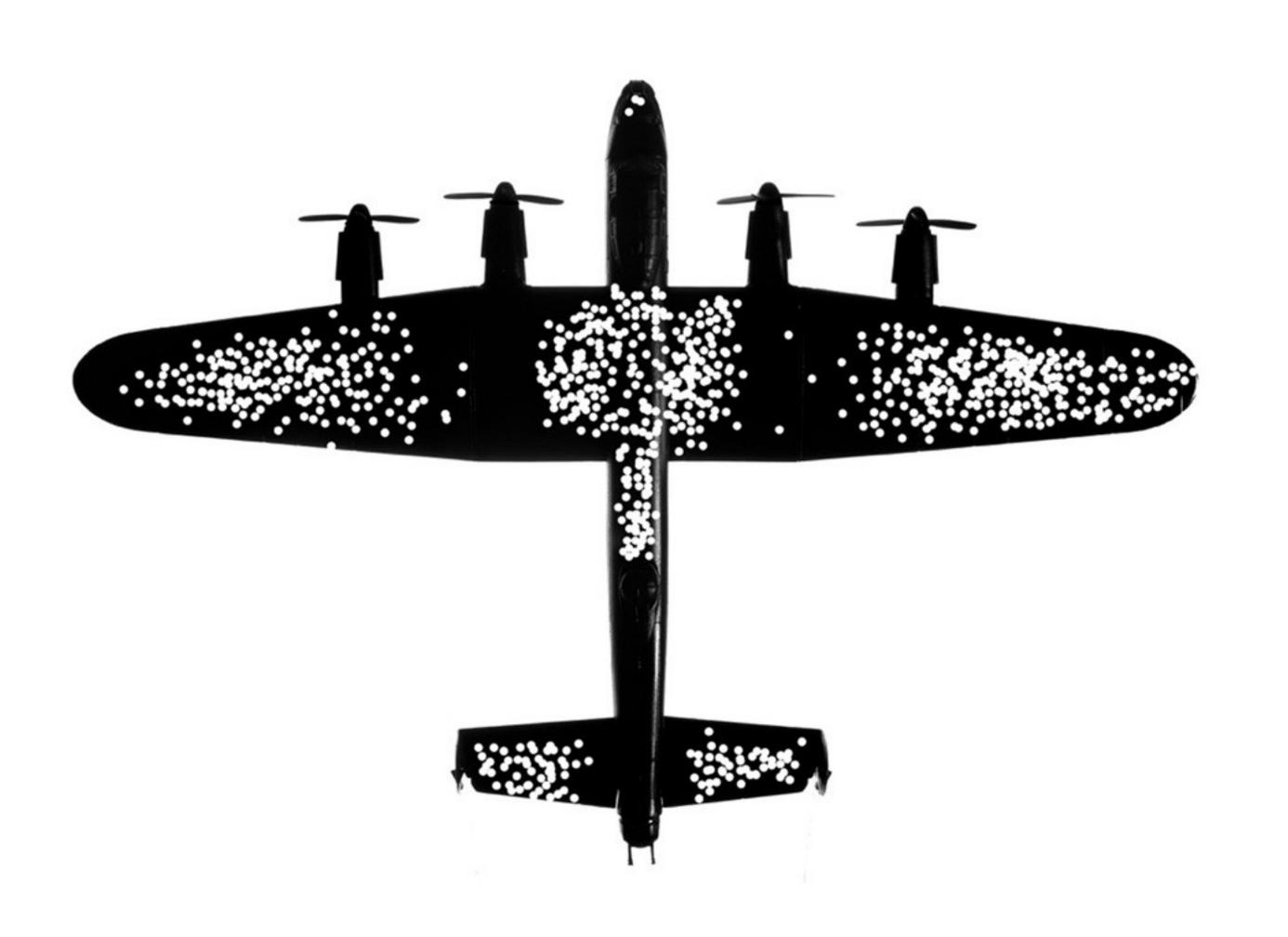


## 2 minutes

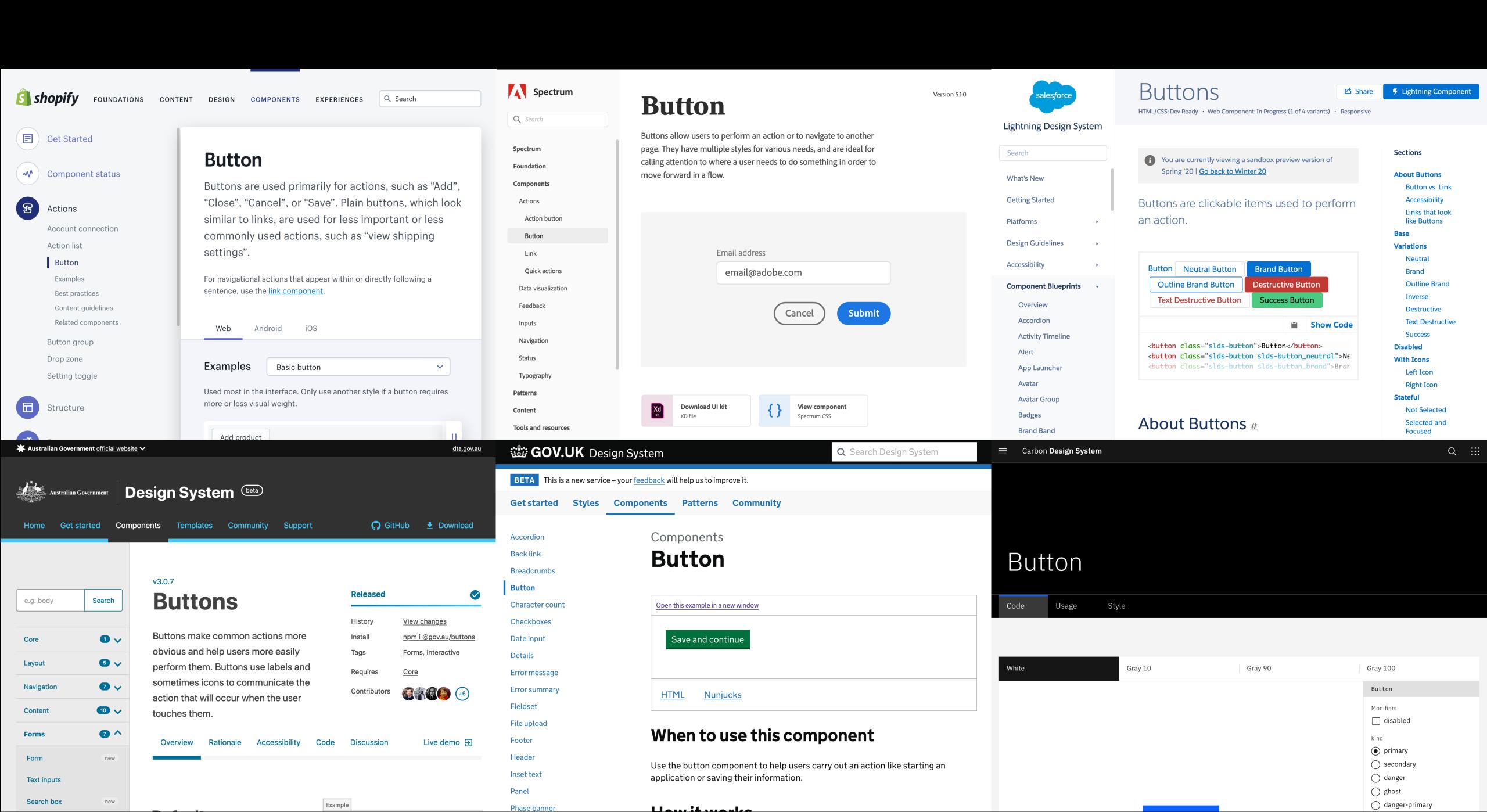
## expectations







## survivorship bias

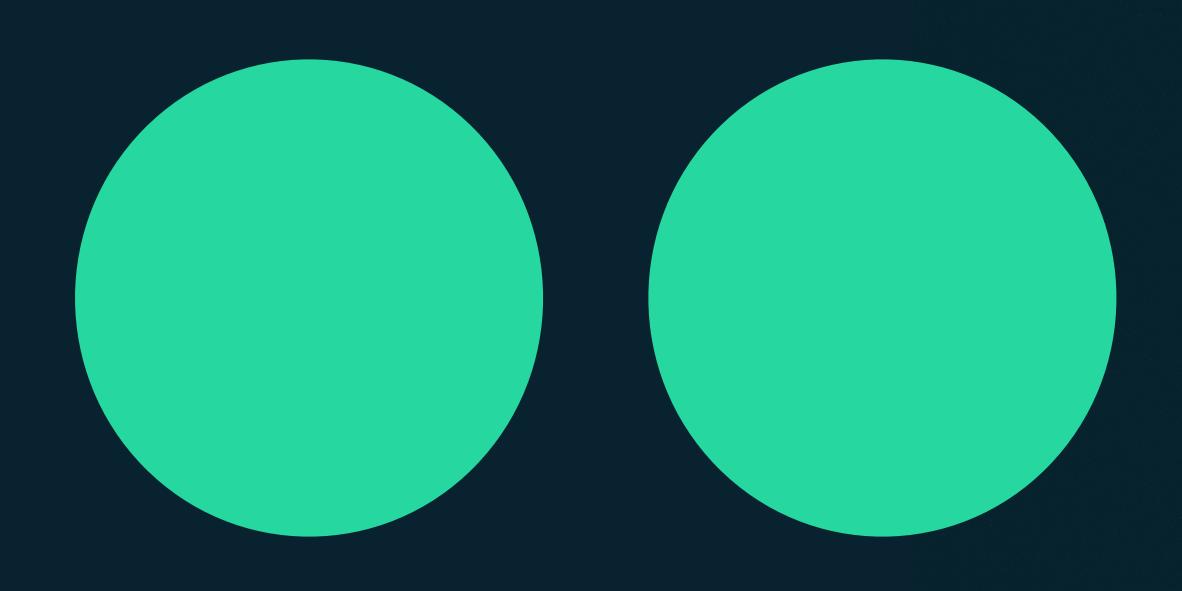




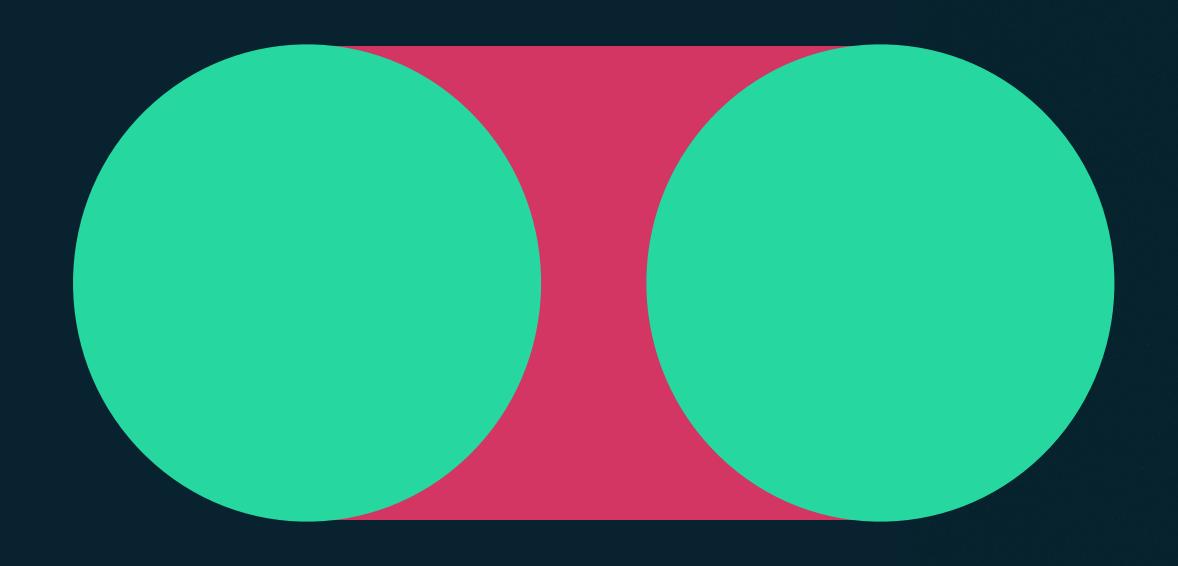


# gaps & overlaps

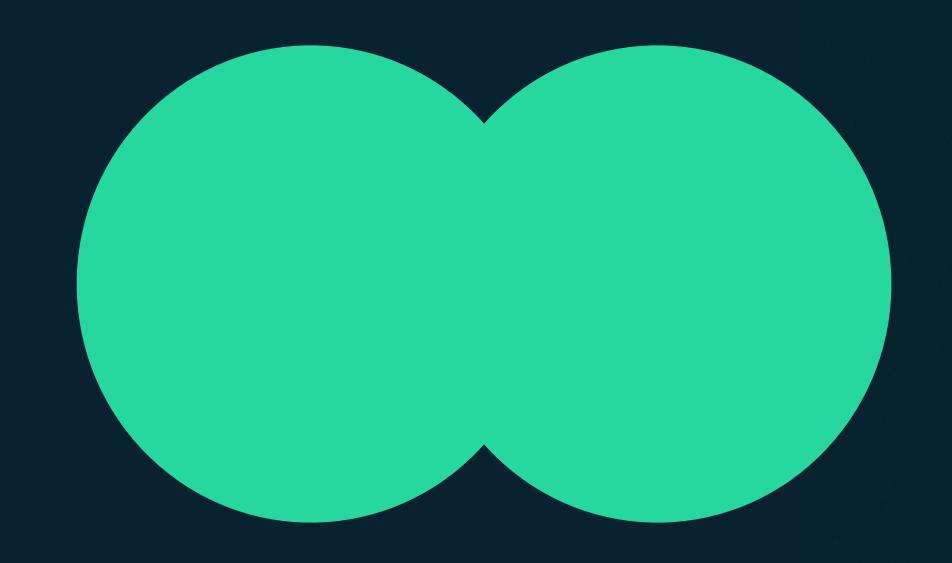








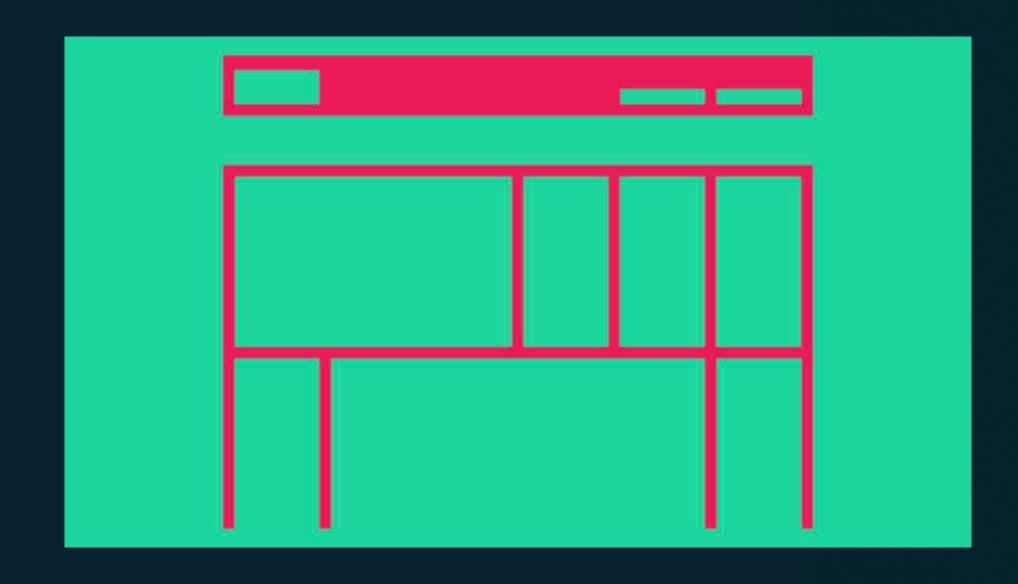
















## role mapping

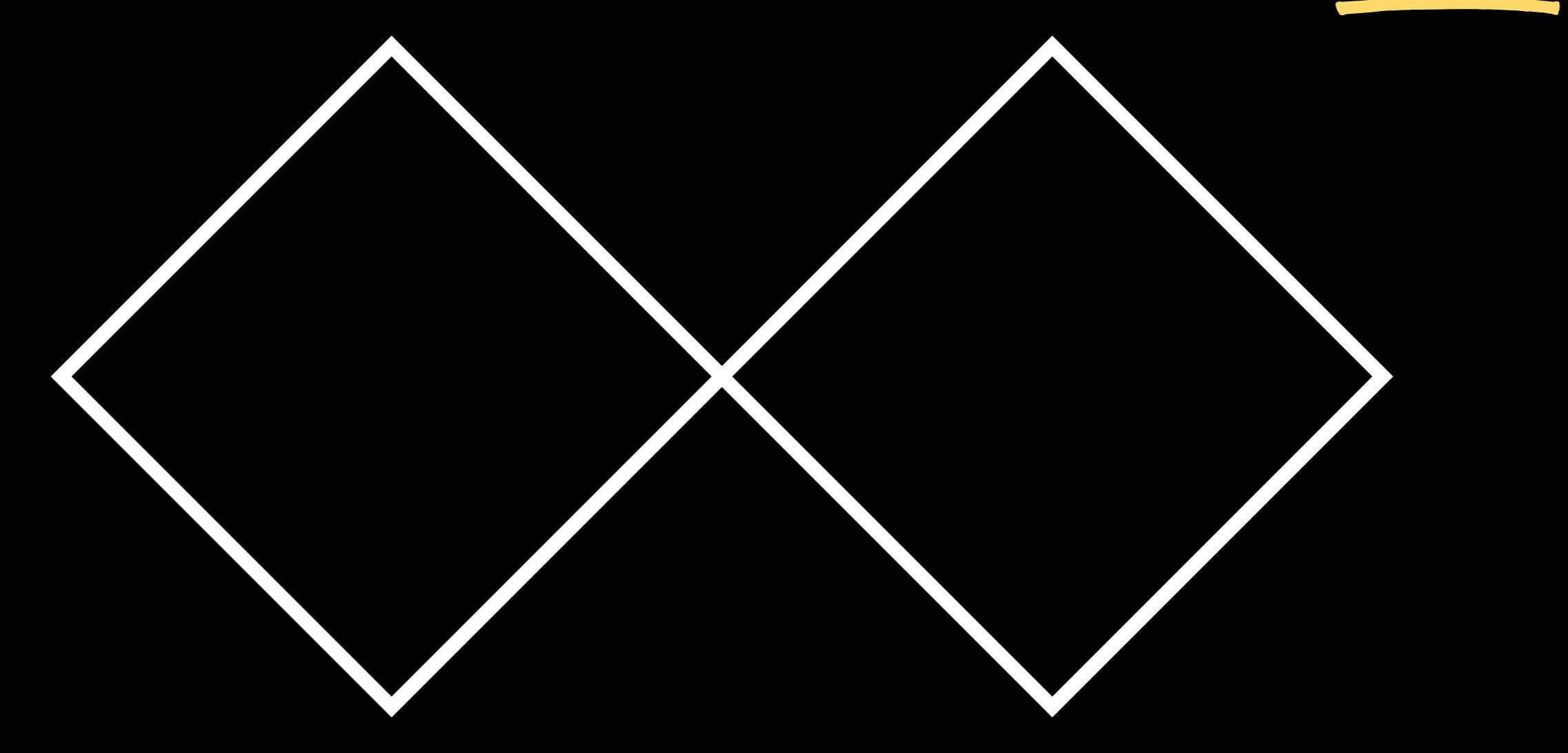


## fluffy edges





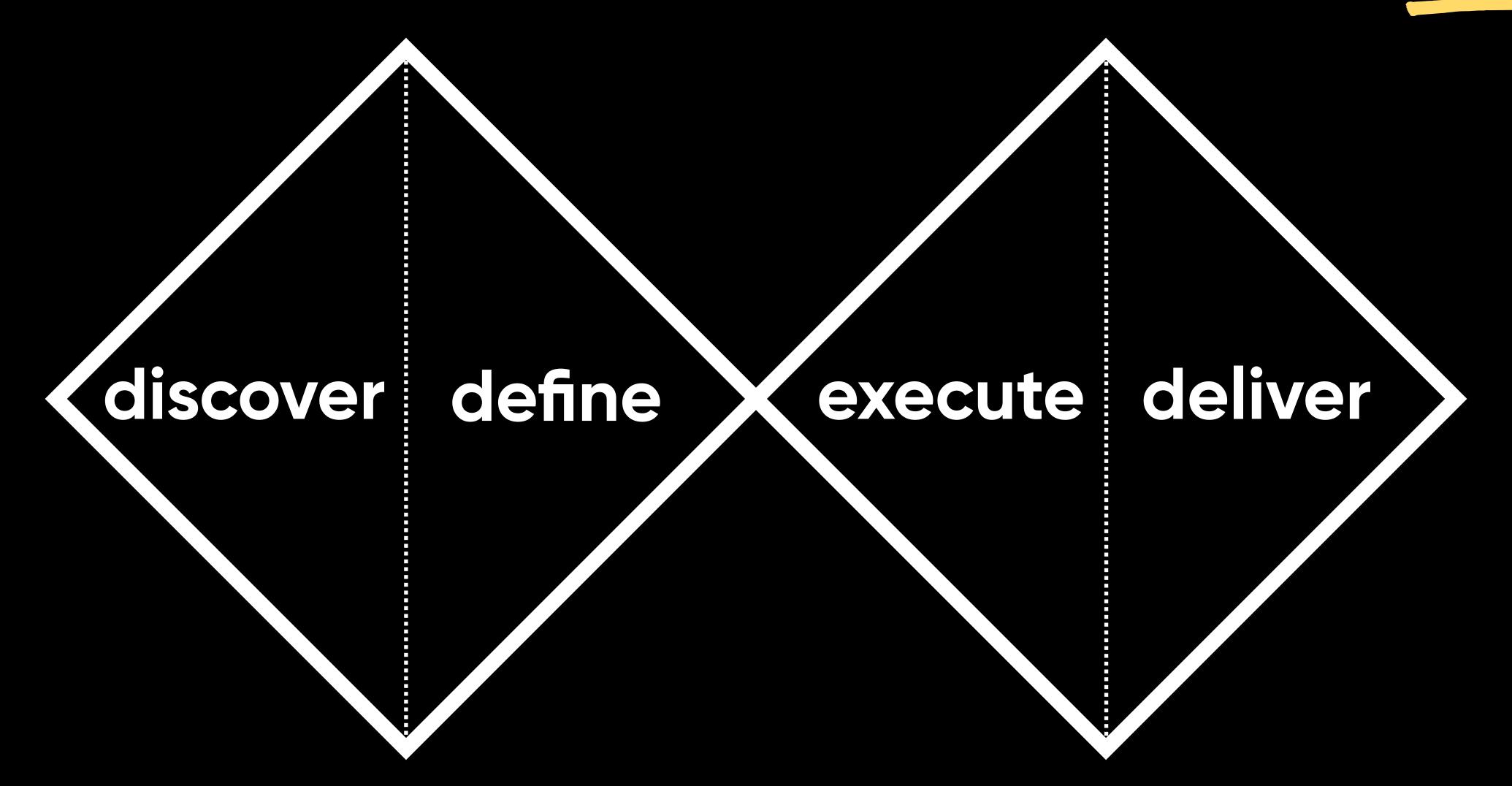




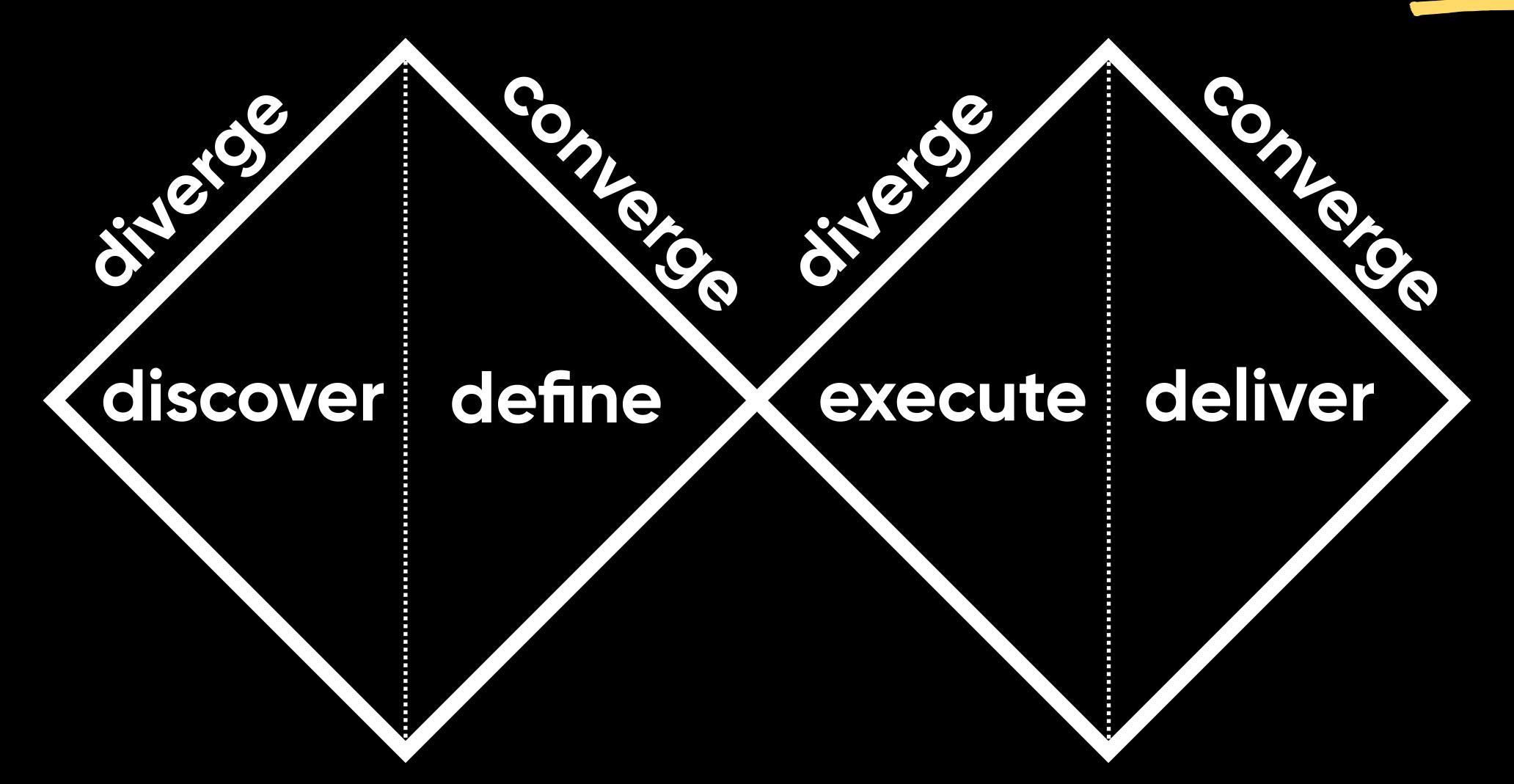




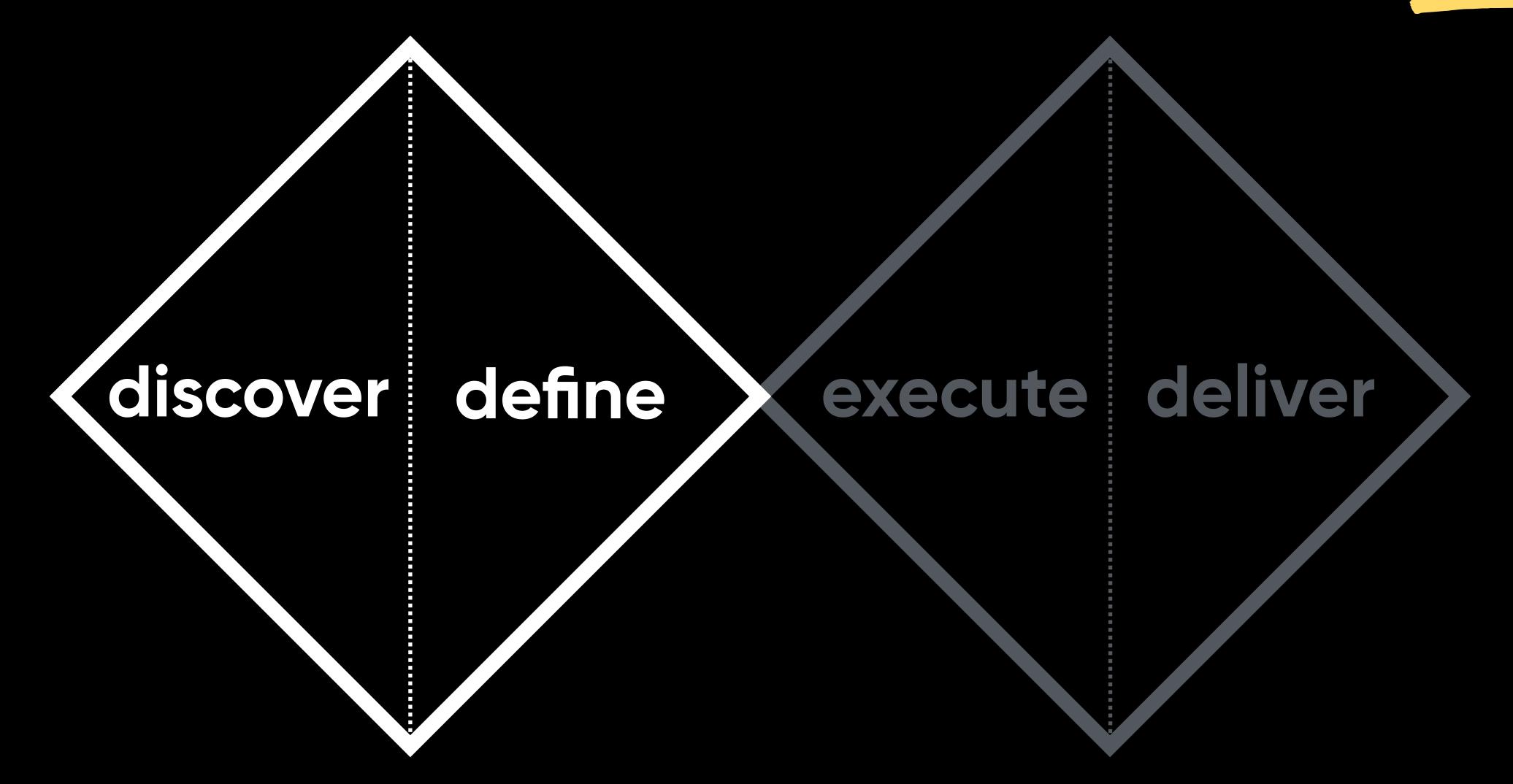




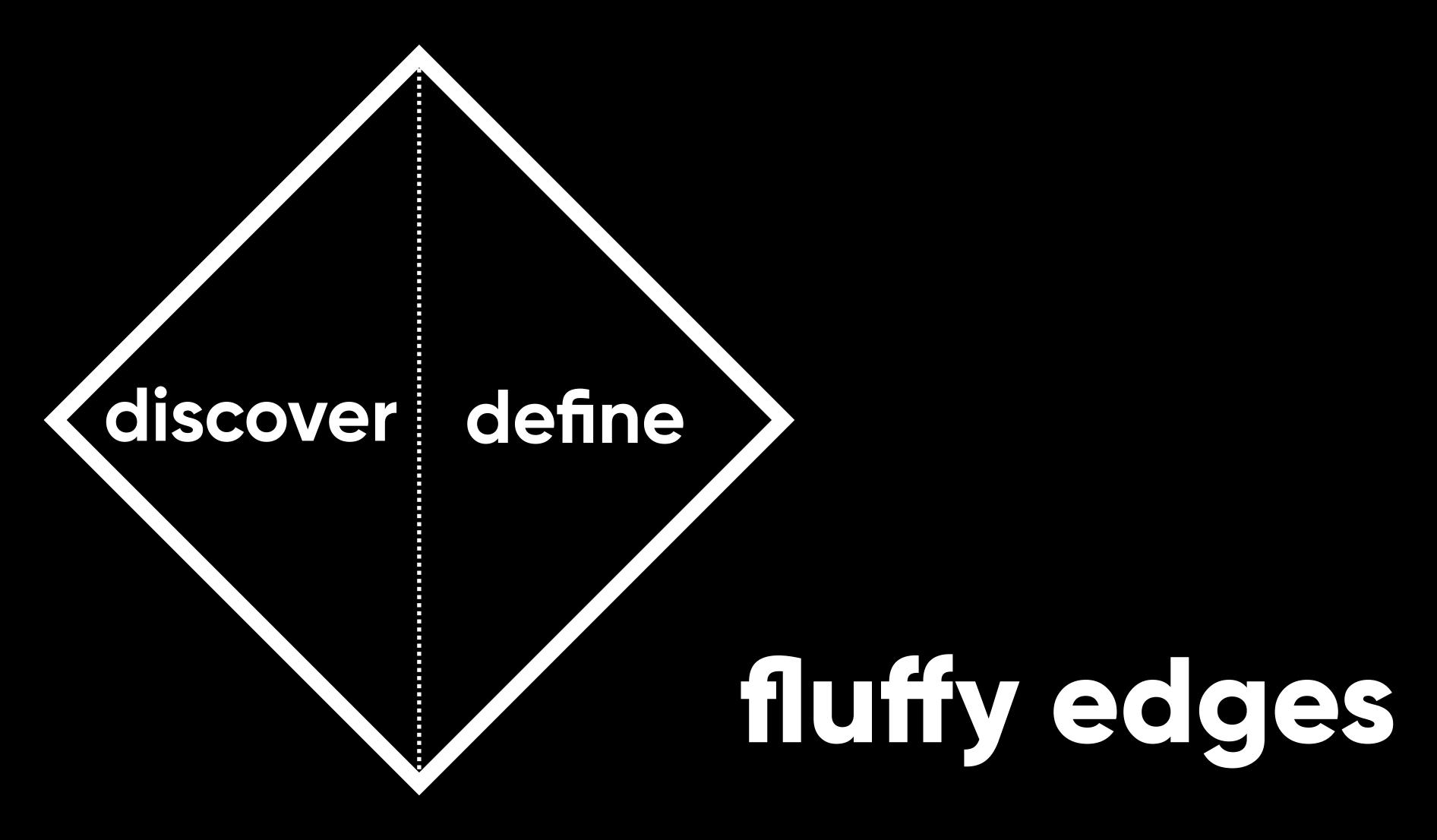




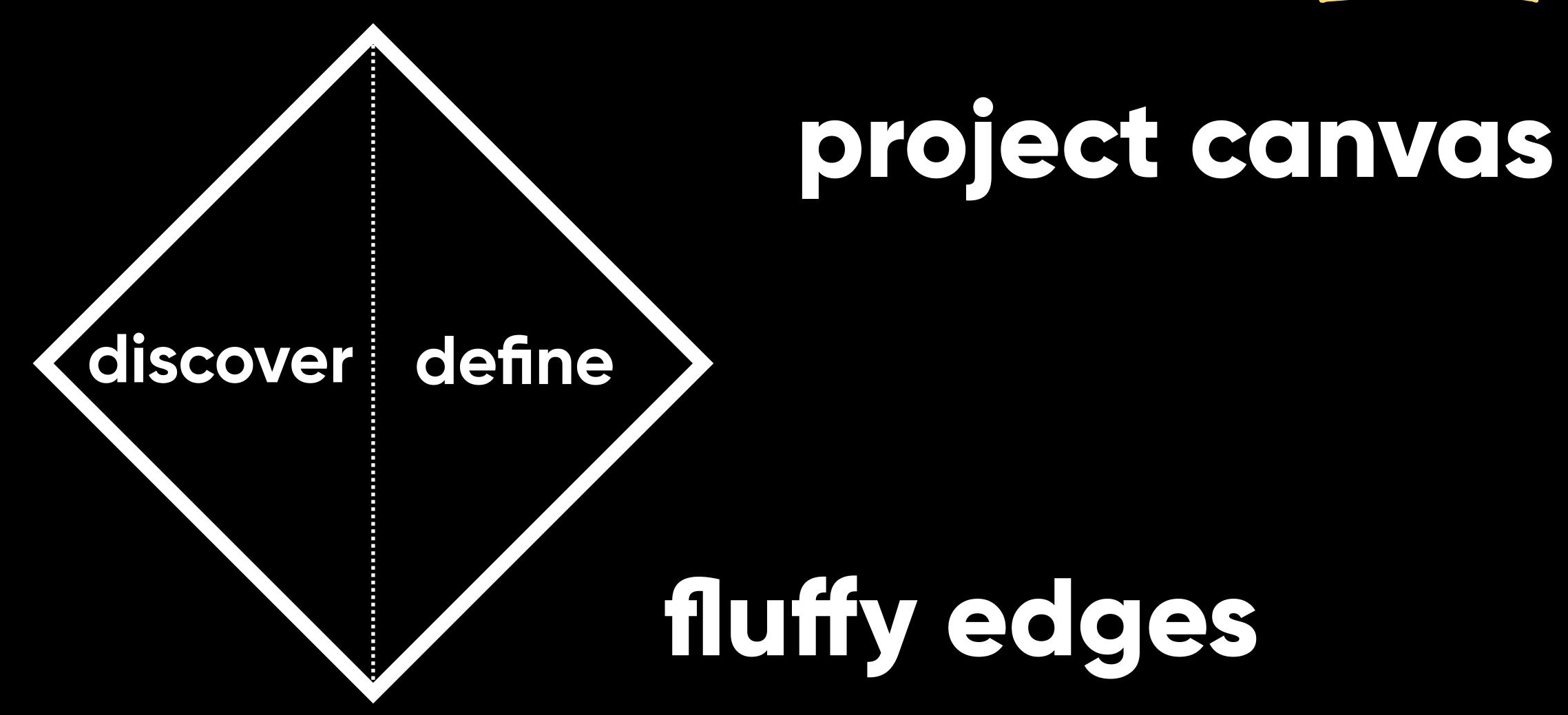




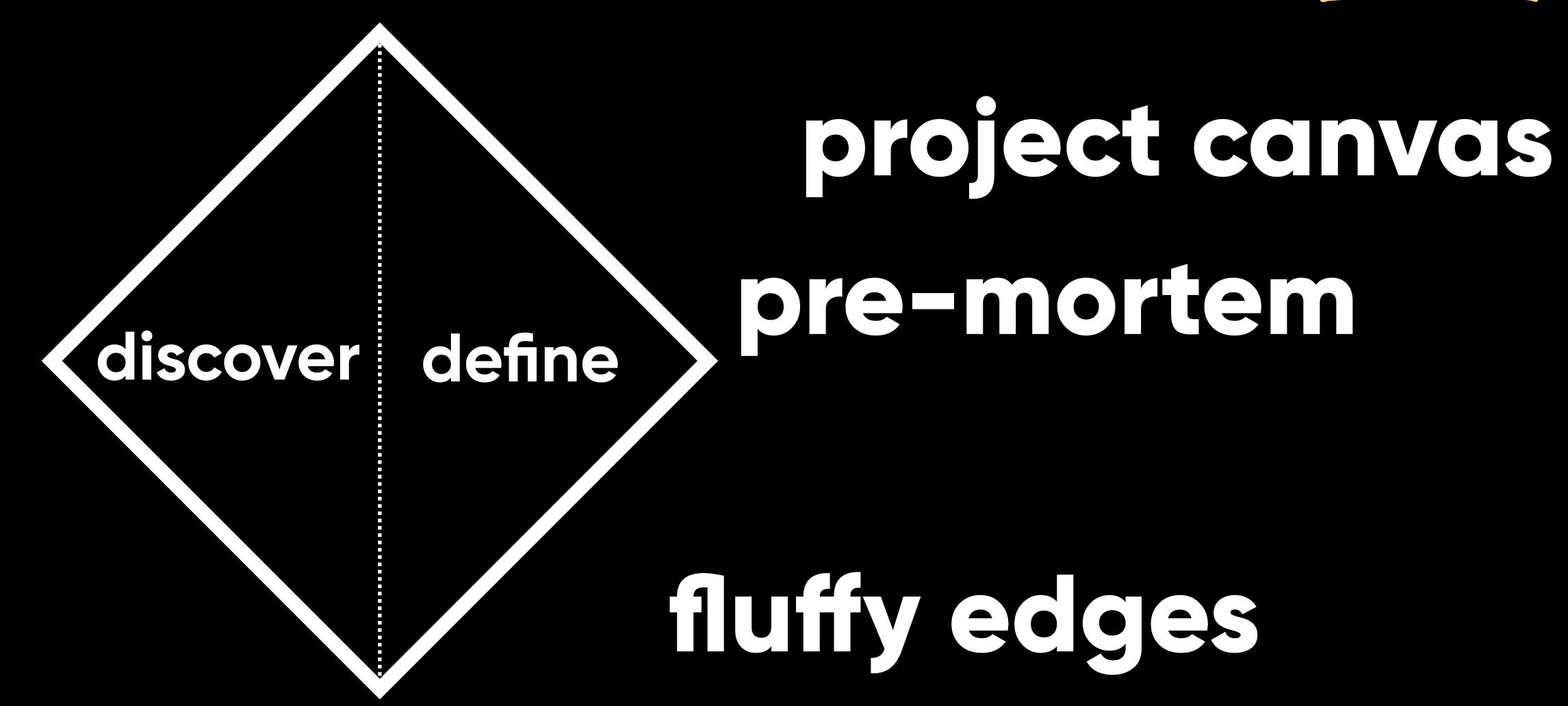




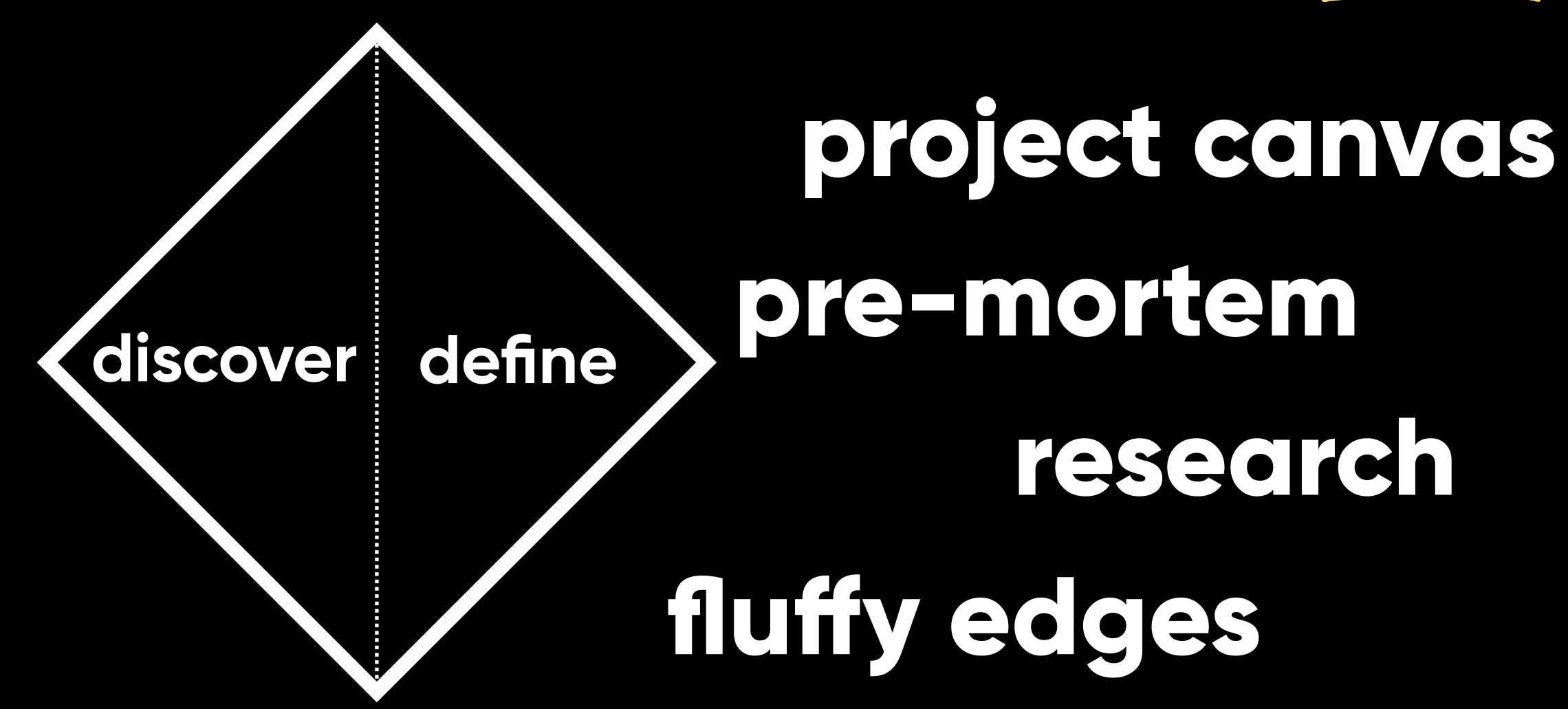












### assumptions

# expectationsbiasesassumptions

### Values

### our ose

## purpose principles

## purpose principles ocitens

## purpose orinciples octterns

## design principles

## Ten Things We Know To Be True

Ten Principles Inat Contribute To A Googley User Experience

## Ten Principles For Good Design

Dieter Rams

## Design Principles For Design Principles

"Make it usable!"

"Usability is more important than profitability."

even over

"usability, even over profitability"

"profitability, even over usability"

### The Priority of Constituencies

"In case of conflict, consider users over authors over implementors over theoretical purity."

### The Priority of Constituencies

## universal principles?

Hofstadter's law

"It always takes longer than you expect, even when you take into account Hofstadter's Law."

#### Hofstadter's law

"Ninety percent of everything is crap."

Sturgeon's law

"Anything that can go wrong, will go wrong."

### Cole's law

"Shredded raw cabbage with a vinaigrette or mayonnaise dressing."

### Cole's law

### Hanlon's razor

"Never attribute to malice that which can be adequately explained by incompetence."

#### Hanlon's razor

### Occam's razor

"Entities should not be multiplied without necessity."

#### Occam's razor

## design principles





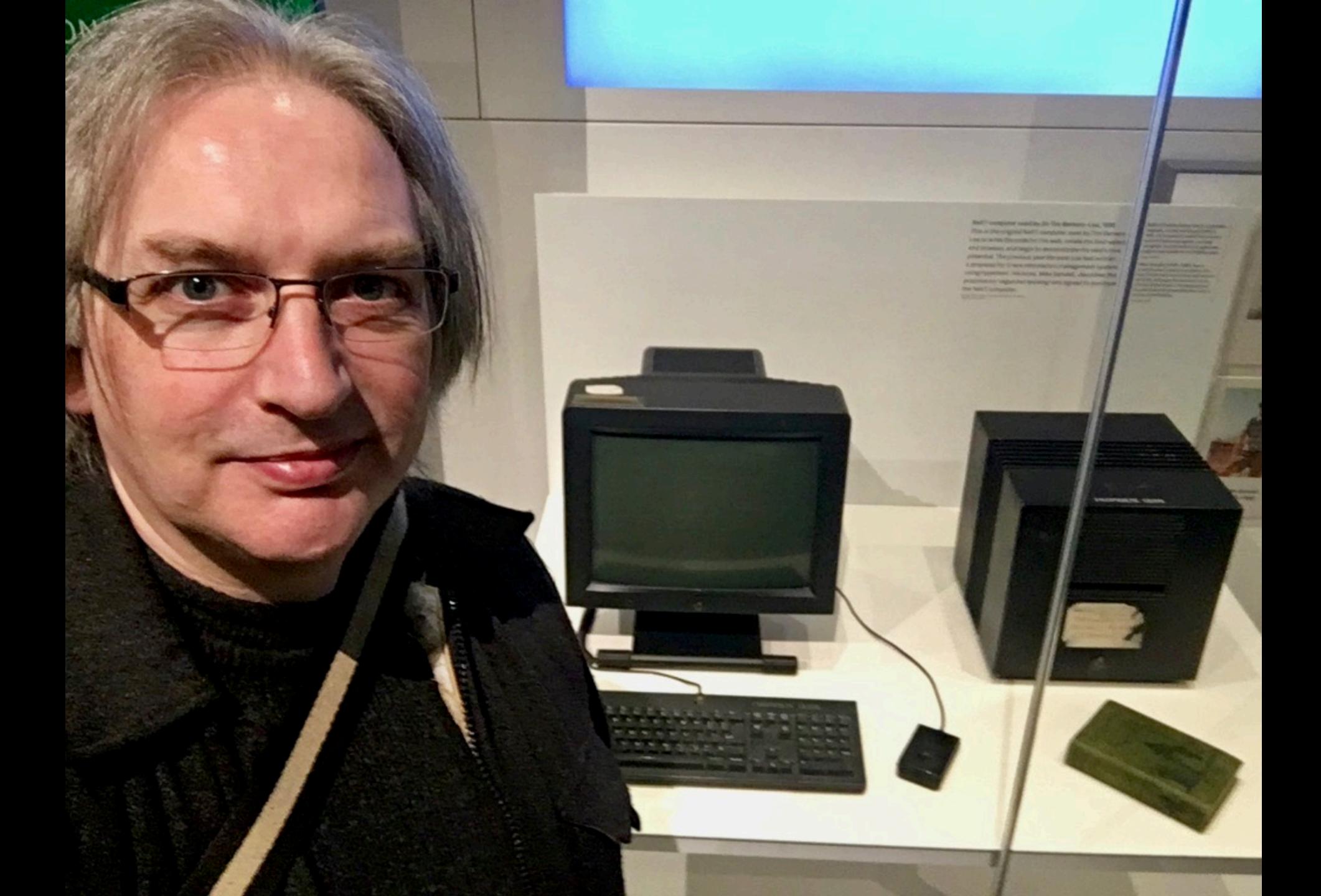
Information Management: A Proposal

# Information Management: A Proposal

#### Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext sytstem.

Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project



## worldwideweb.cern.ch



### worldwideweb.cern.ch

| WorldWideWeb |   |
|--------------|---|
| Info         | Þ |
| Navigate     | ▷ |
| Document     | Þ |
| Edit         | △ |
| Links        | ▷ |
| Style        | ▷ |
| Print        | р |
| Page Layout  |   |
| Windows      |   |
| Services     |   |
| Hide         | h |
| Quit         | q |

| ■ The World Wide Web project  |           |  |  |
|---|-----------|--|--|
| World Wide Web  |           |  |  |
| The WorldWideWeb (W3) is a wide-area <u>hypermedia</u> information retrieval initiative aiming to give universal access to a large universe of documents.   |           |  |  |
| Everything there is online about W3 is linked directly or indirectly to this document, including an <u>executive summary</u> of the project, <u>Mailing lists</u> , <u>Policy</u> , November's <u>W3 news</u> , <u>Frequently Asked Questions</u> . |           |  |  |
| What's out  | there?    | Pointers to the world's online information <u>, subjects</u> , <u>W3</u><br><u>servers</u> , etc.  |  |
| <u>Help</u>   |           | on the browser you are using   |  |
| <u>Software F</u>   | Products  | A list of W3 project components and their current state. (e.g.<br>Line Mode ,X11 <u>Viola</u> , <u>NeXTStep</u> , <u>Servers</u> , <u>Tools</u> , <u>Mail robot</u> , <u>Library</u> ) |  |
| <u>Technical</u>  |           | Details of protocols, formats, program internals etc   |  |
| <u>Bibliograph</u>  | <u>19</u> | Paper documentation on W3 and references.  |  |
| <u>People</u>   |           | A list of some people involved in the project.   |  |
| <u>History</u>  |           | A summary of the history of the project.   |  |
| How can I   | help ?    | If you would like to support the web   |  |
| Getting cod   | <u>de</u> | Getting the code by <u>anonymous FTP</u> , etc.  |  |

#### Information Management: A Proposal

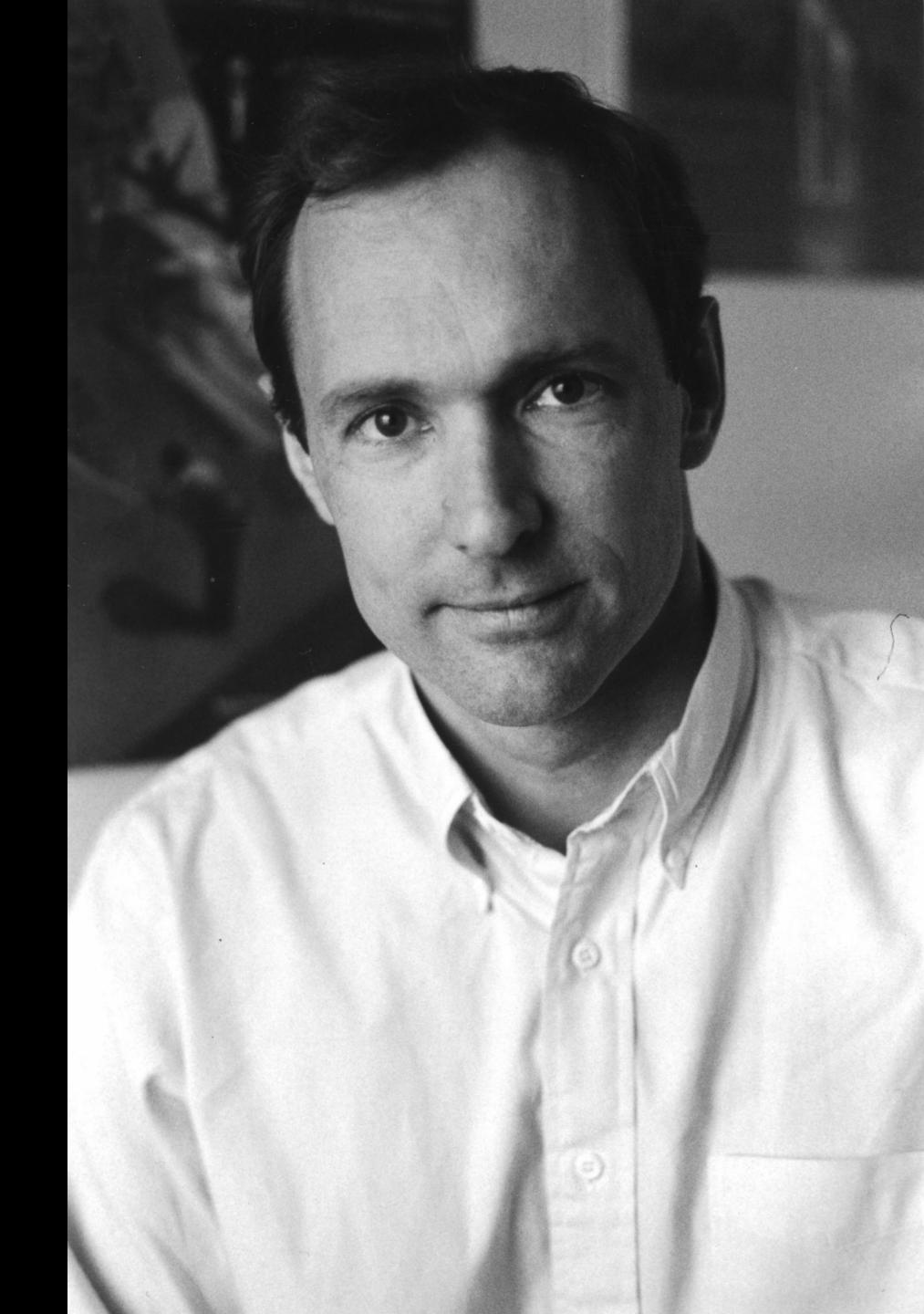


Axioms of web architecture

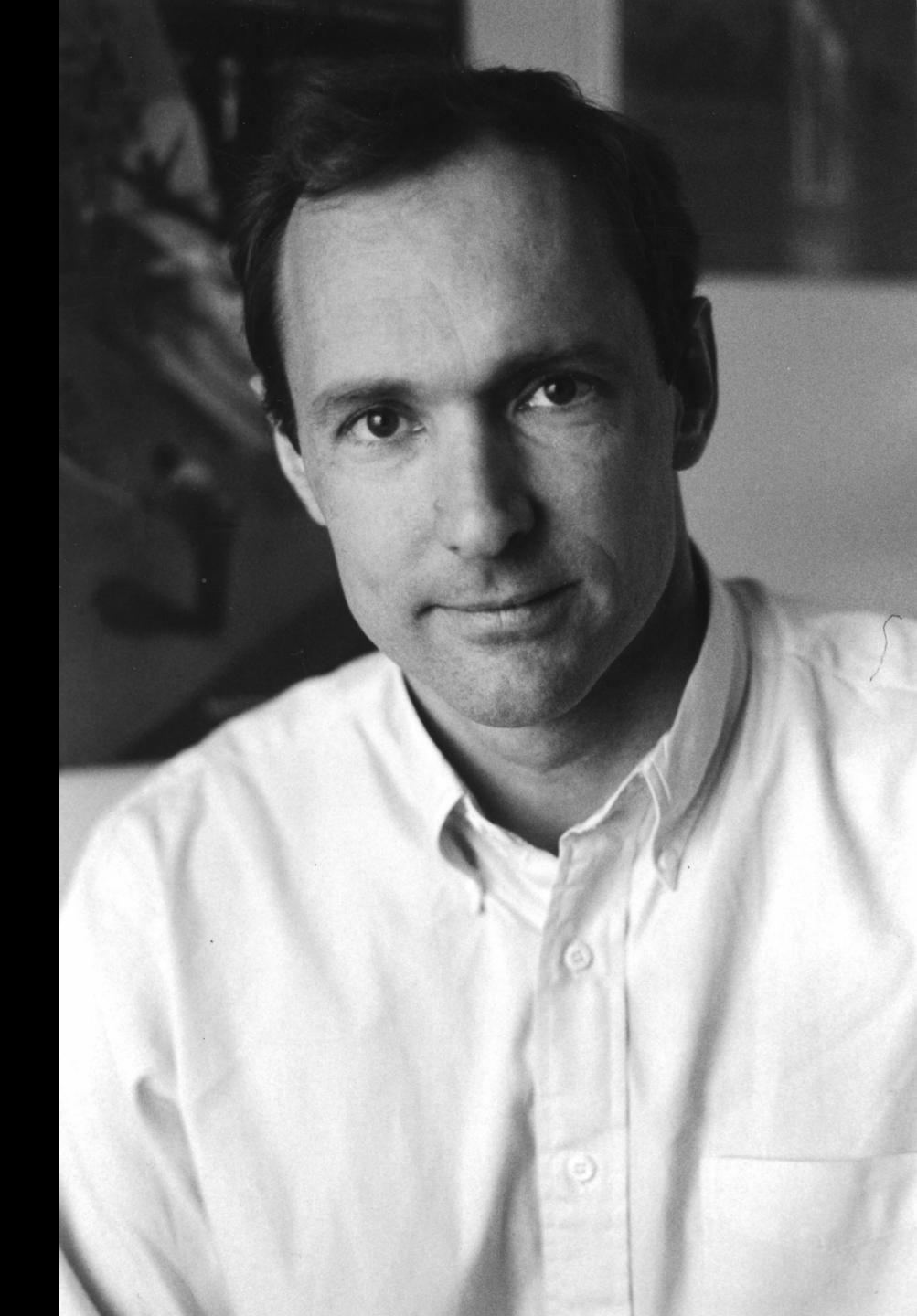




"Principles such as simplicity and modularity are the stuff of software engineering;

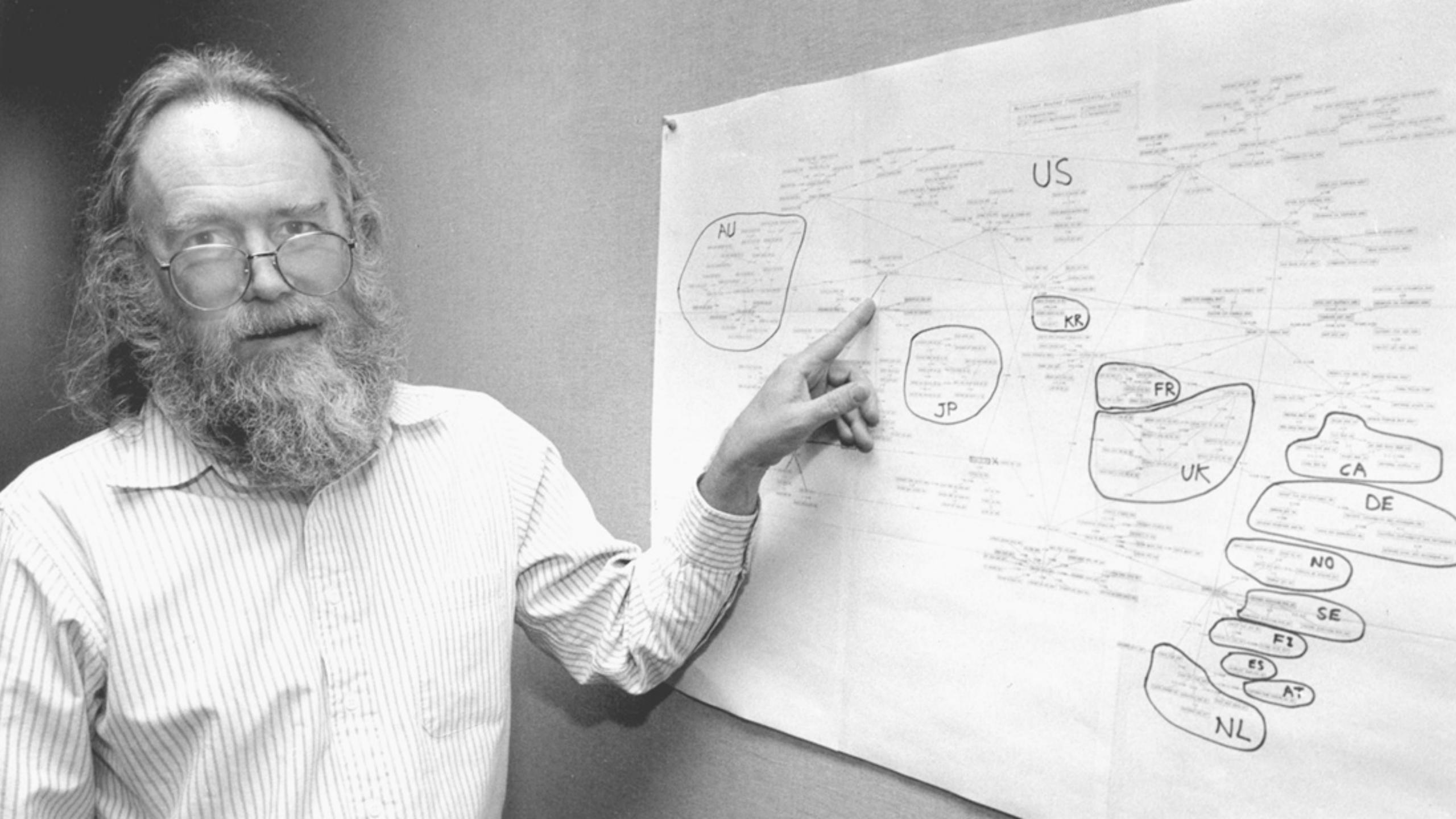


"Principles such as simplicity and modularity are the stuff of software engineering; decentralization and tolerance are the life and breath of the internet."



tolerance





"Be conservative in what you send, be liberal in what you accept."

### Postel's law

# Be conservative in what you send

- 1.
- 2.
- **3**.
- 4.

- 1.
- 2.
- 3.
- 4. Web fonts

- 1.
- 2.
- 3. Images
- 4. Web fonts

- 1.
- 2. Your JavaScript
- 3. Images
- 4. Web fonts

- 1. Other people's JavaScript
- 2. Your JavaScript
- 3. Images
- 4. Web fonts

# JavaScript

Atwood's Law

"Any application that can be written in JavaScript, will eventually be written in JavaScript."

Atwood's Law

The principle of least power

"Choose the least powerful language suitable for a given purpose."

# The principle of least power



"In the web front-end stack —



"In the web front-end stack — HTML, CSS, JS, and ARIA —



"In the web front-end stack — HTML, CSS, JS, and ARIA— if you can solve a problem with a simpler solution lower in the stack, you should.



"In the web front-end stack — HTML, CSS, JS, and ARIA if you can solve a problem with a simpler solution lower in the stack, you should. It's less fragile, more foolproof, and just works."



# Government Design Principles

"Government should only do what only government can do."

# Government Design Principles

"Any particular technology should only do what only that particular technology can do."

"JavaScript should only do what only JavaScript can do."

# OUITCON

### button

- <div><br/>+ CSS
- + JavaScript
- + ARIA

### button

- <button>
- + CSS U

- <div>
- + CSS
- + JavaScript
- + ARIA

### dropdown

## dropdown

- <div>
- + CSS
- + JavaScript
- + ARIA

## dropdown

- <select>
- + CSS

- <div>
- + CSS
- + JavaScript
- + ARIA

## date picker

## date picker

- <div>
- + CSS
- + JavaScript
- + ARIA

## date picker

- <input type="date">
- + CSS

- <div>
- + CSS
- + JavaScript
- + ARIA



- <input type="date">
- <select>
- <button>

- <div>
- + CSS
- + JavaScript
- + ARIA

#### 

#### CCCESS

### control

```
<input type="date">
<select>
<button>
```

<div>

+ CSS

+ JavaScript

+ ARIA



"The web does not value consistency.



"The web does not value consistency.
The web values ubiquity."



"ubiquity, even over consistency"

"consistency, even over ubiquity"

### 

"consistency, even over ubiquity"

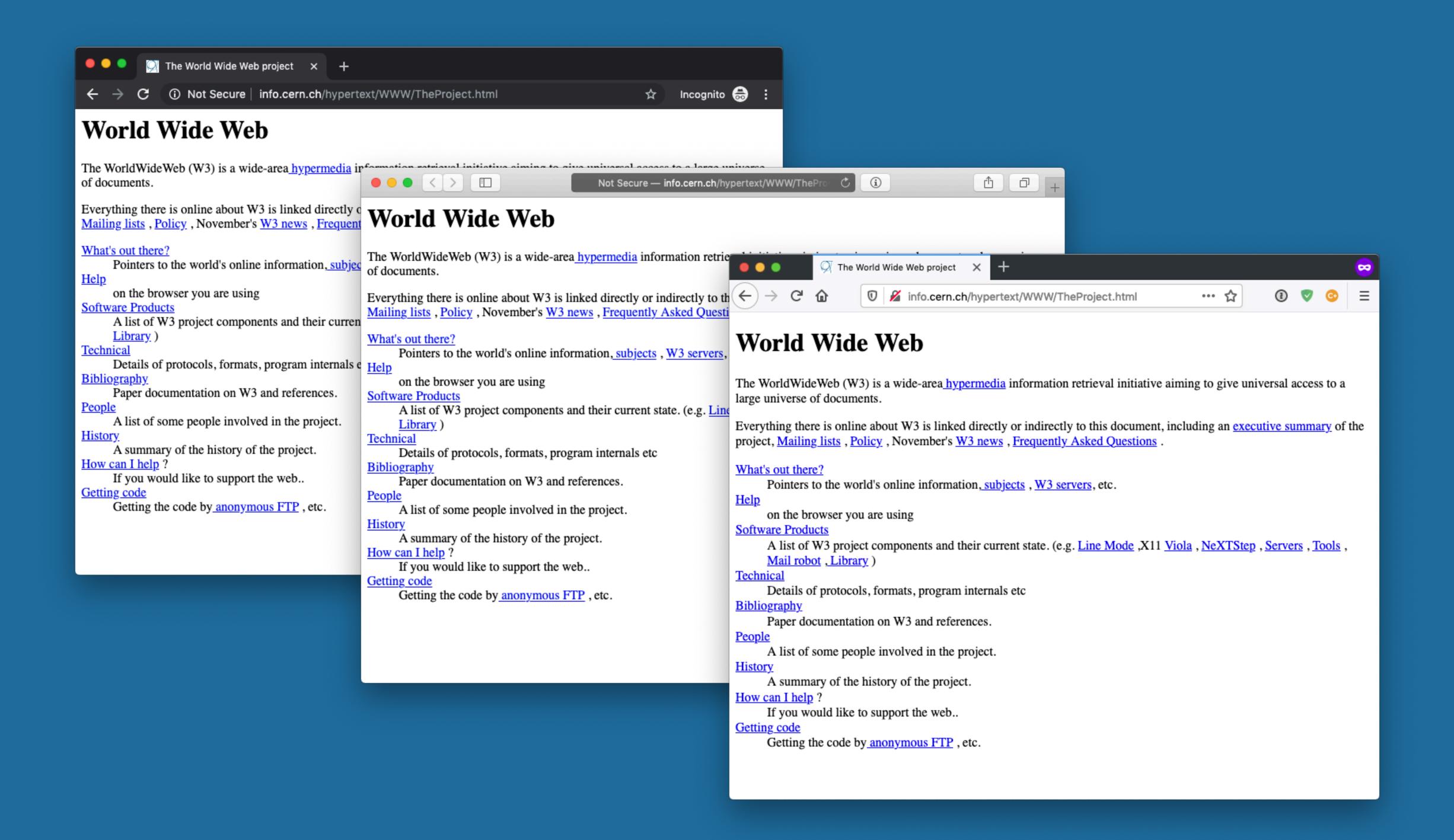
### World Wide Web

"ubiquity, even over consistency"

### World Wide Web

| 111          |   |
|--------------|---|
| WorldWideWeb |   |
| Info         | Þ |
| Navigate     | ⊳ |
| Document     | ▷ |
| Edit         | Þ |
| Links        | ⊳ |
| Style        | ⊳ |
| Print        | р |
| Page Layout  |   |
| Windows      |   |
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# Thank you