Real-Life React

Tools & Techniques

Zürich ReactJS Meetup
April 27th, 2016
http://bit.ly/real-life-react

Agenda

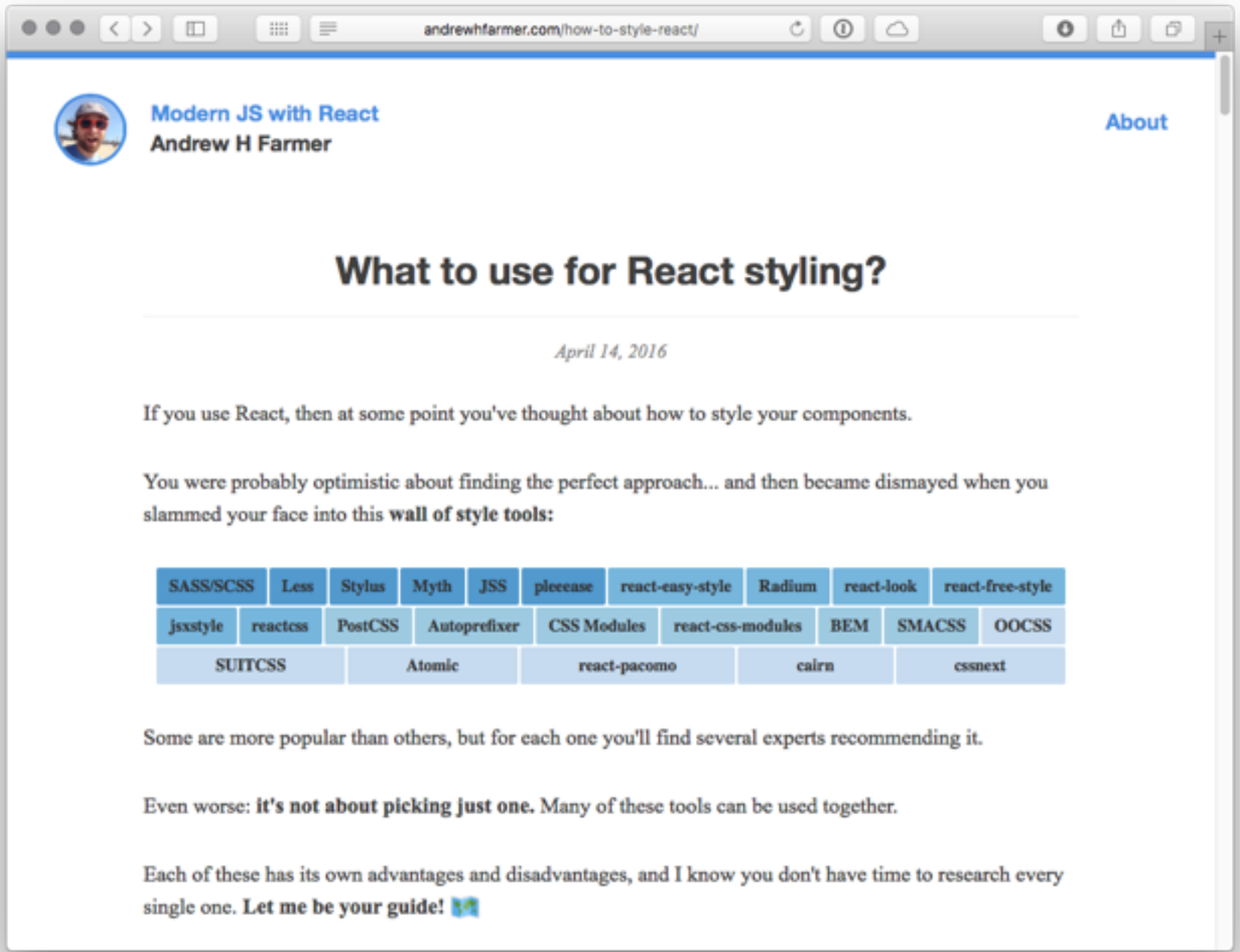
- **Styling** React components
  - Preprocessor: SCSS
  - Postprocessor: CSS Modules
  - Inline Style Helper: Radium
- **Documentation** for React components
  - Storybook
  - Catalog

The problem(s) with CSS

1. Global Namespace
2. Dependencies
3. Dead Code Elimination
4. Minification
5. Sharing Constants
6. Non-deterministic Resolution
7. Isolation

- https://speakerdeck.com/vjeux/react-css-in-js
- https://vimeo.com/116209150

Current solutions



Four Types of Tools

- Methodologies: disciplined use of CSS (e.g. BEM)
- Preprocessors
- Postprocessors
- Inline Style Helpers

Demo projects

```
dist/
  bundle.js
  index.html
src/
  index.jsx
.babelrc
package.json
webpack.config.js
```

Preprocessors

SCSS

- Like CSS, but with more features (Variables, Nesting, Functions…)
- Needs preprocessor (sass-loader for webpack), creates external stylesheets
- Makes CSS code easier to write and maintain, but used in components like CSS
- Not React-specific at all

Postprocessors

CSS Modules

- Stylesheet co-located with components
- Generates unique class names to avoid collisions
- Supports stylesheet composition
- Supported by css-loader for webpack
- ReactiveConf: The case for CSS modules https://www.youtube.com/watch?v=zR1lOuyQEt8

Inline Style Helpers

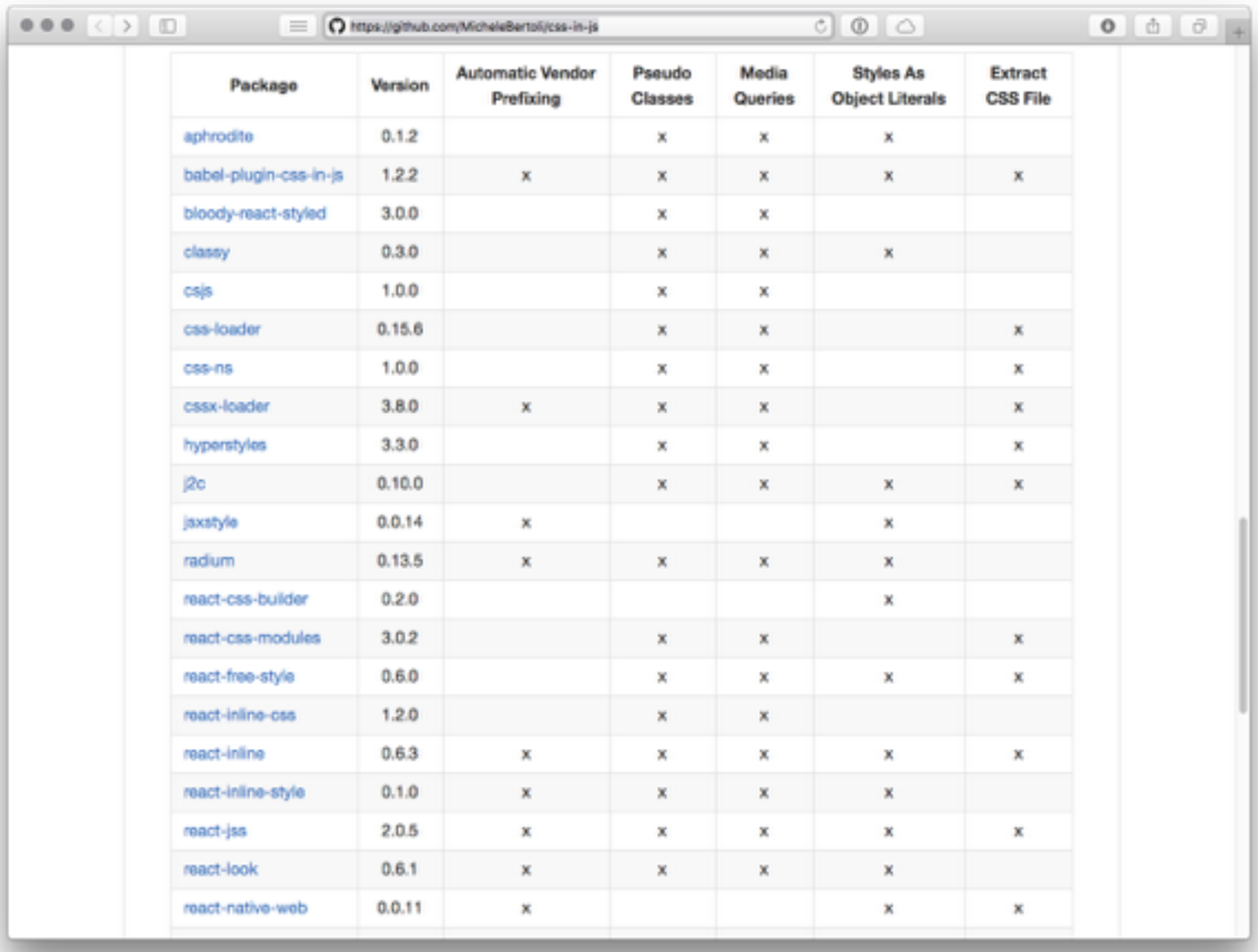
```
<div style={{color: "red"}}>
  Lorem ipsum dolor
</div>
```

- Joins form and function within component
- Explicit style attributes of DOM elements
- CSS can be handled like any other data
- Easy dynamic styling

Radium

- Adds features only available in CSS
  - Pseudo-selectors (e.g. `a:hover`)
  - Media queries (e.g. `@media print`)
- Automatic vendor prefixing
- Applied by wrapping component before instantiation (e.g. `Radium(App)`)

Other CSS-in-JS techniques



https://github.com/MicheleBertoli/css-in-js

Package	Version	Automatic Vendor Prefixing	Pseudo Classes	Media Queries	Styles As Object Literals	Extract CSS File
aphrodite	0.1.2		x	x	x	
babel-plugin-css-in-js	1.2.2	x	x	x	x	x
bloody-react-styled	3.0.0		x	x		
classy	0.3.0		x	x	x	
csjs	1.0.0		x	x		
css-loader	0.15.6		x	x		x
css-ns	1.0.0		x	x		x
cssx-loader	3.8.0	x	x	x		x
hyperstyles	3.3.0		x	x		x
j2c	0.10.0		x	x	x	x
jsxstyle	0.0.14	x			x	
radium	0.13.5	x	x	x	x	
react-css-builder	0.2.0				x	
react-css-modules	3.0.2		x	x		x
react-free-style	0.6.0		x	x	x	x
react-inline-css	1.2.0		x	x		
react-inline	0.6.3	x	x	x	x	x
react-inline-style	0.1.0	x	x	x	x	
react-jss	2.0.5	x	x	x	x	x
react-look	0.6.1	x	x	x	x	
react-native-web	0.0.11	x			x	x

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