

Maybe's and Either's for worry-free dot-chaining

UtahJS SLC 2017-04

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<https://github.com/whiteinge/presentations>

Maybe and Either?



Dot-chaining (Lodash)

```
var minion_table = _.chain(minion_grains)
  .values()
  .map('grains')
  .filter(x => x.cpuarch != 'sparc')
  .slice(curPageStart, curPageOffset)
  .sortBy('num_cpus', 'num_gpus')
  .map(x => _.pick(x, visibleColumns))
  .groupBy('os')
  .value()
```

Dot-chaining (RxJS)

```
var konamiCode = $(document).keyupAsObservable()  
  .map(ev => ev.keyCode)  
  .windowWithCount(10, 1)  
  .selectMany(x => x.sequenceEqual(konami))  
  .filter(equal => equal)  
  .subscribe(() => console.log('KONAMI!'));
```

Maybe

- Represents a value.
- ...or not a value.
- Pass it around as though it was a value.
- Resolve it when you care; fall back to a default.

Either

- Represents a success or failure condition.
- Pass it around as though it was a value.
- Resolve it when you care; handle both options.

Other Common Interfaces

- Accumulate validation errors – Validation.
- Abstract away asynchronous tasks – Task.
- ...or build your own.

Resources



Folktale

<http://folktalejs.org/>



Professor Frisby Introduces Composable Functional JavaScript

🕒 110 minutes

<https://egghead.io/courses/professor-frisby-introduces-composable-functional-javascript>

James Forbes

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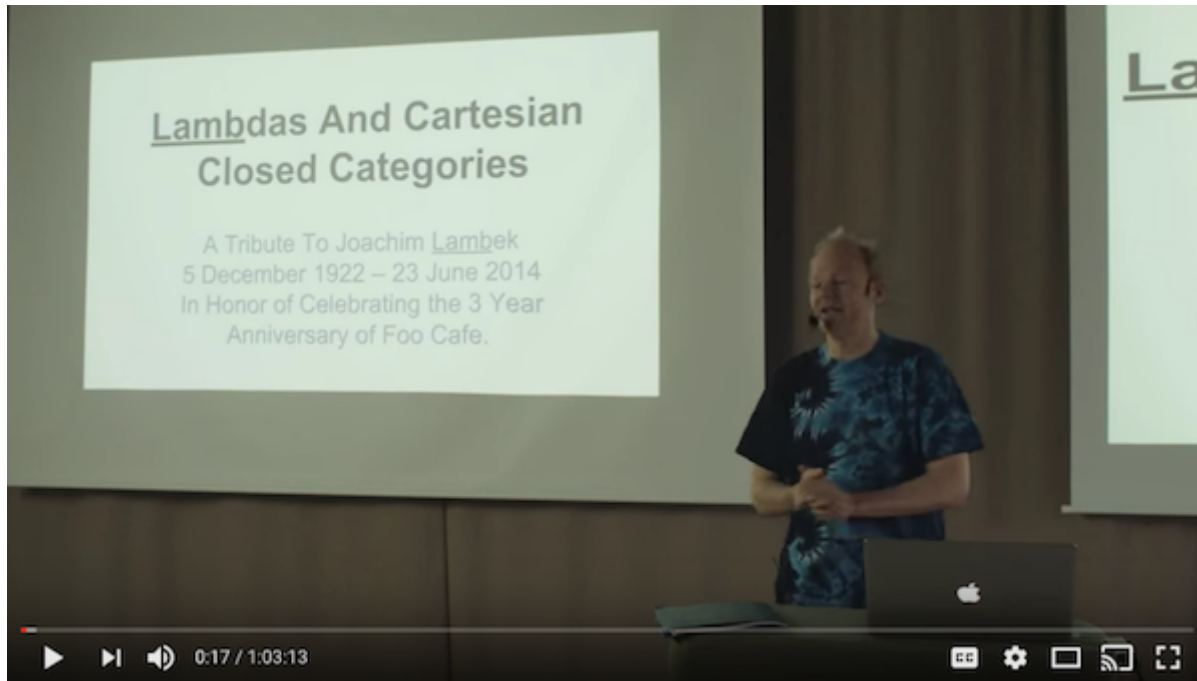
The Perfect API

Imagine for a second that everything had the same interface. Everything.

That interface would need to support asynchronous and lazy values, so it clearly needs to use functions.

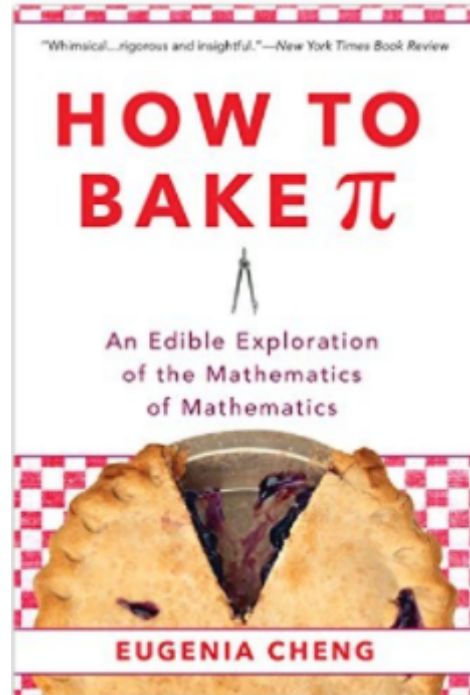
The interface would need to handle

<https://james-forbes.com/?/posts/the-perfect-api>

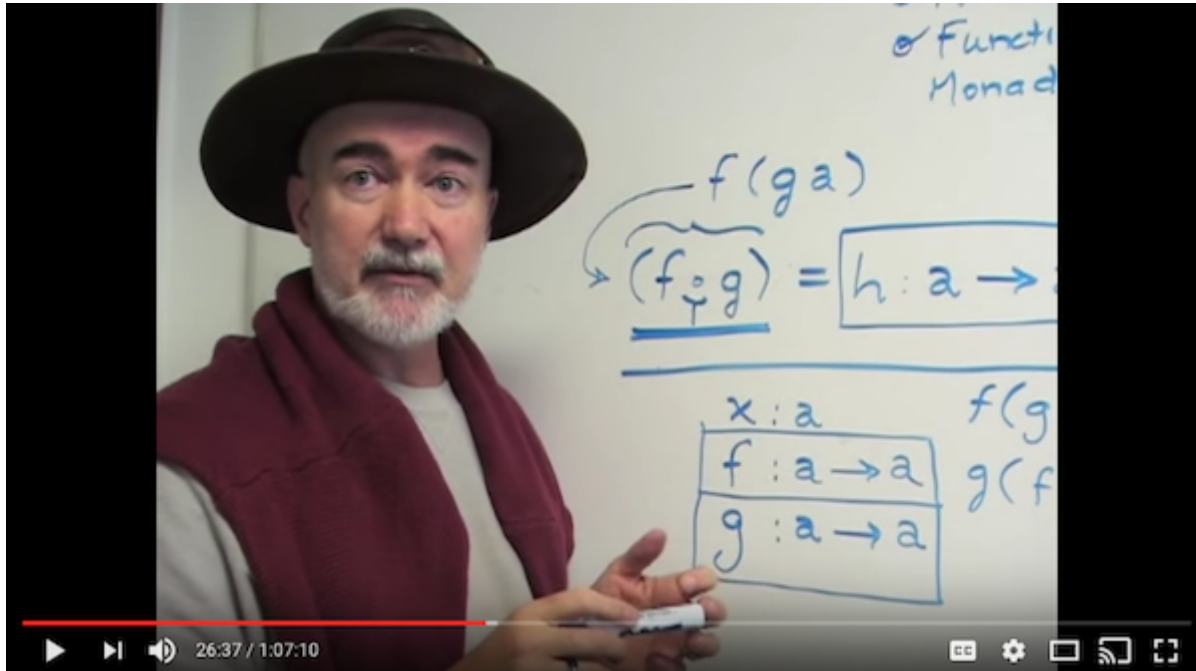


Erik Meijer – The essence of interface-based design

<https://www.youtube.com/watch?v=JMP6gI5mLHc>



<http://www.goodreads.com/book/show/23360039-how-to-bake-pi>



Brian Beckman: Don't fear the Monad

<https://www.youtube.com/watch?v=ZhuHCtR3xq8>