



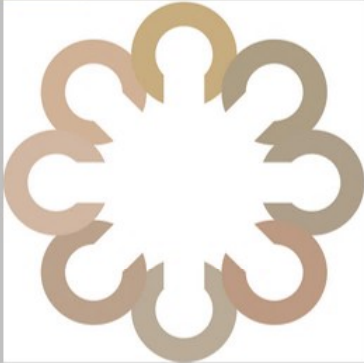
Monad is not a datatype.
It is a rule of composing functions.
Monads are simply a way to wrapping things
and provide methods to do operations on the
wrapped stuff without unwrapping it.



Ruby, dry-monad, intro

SVG-au Meetup group

[SVG-AU](#)



Slide references and links:

[RORO](#)



Ruby, dry-monad, intro

Alan Kay OO == Dynamic & message passing



Douglas Engelbart, OO == Human Modelling



MATHS

$$\begin{aligned}\mathcal{L}_{SM} = & \underbrace{\frac{1}{4}\mathbf{W}_{\mu\nu} \cdot \mathbf{W}^{\mu\nu} - \frac{1}{4}B_{\mu\nu}B^{\mu\nu} - \frac{1}{4}G_{\mu\nu}^a G_a^{\mu\nu}}_{\text{kinetic energies and self-interactions of the gauge bosons}} \\ & + \underbrace{\bar{L}\gamma^\mu(i\partial_\mu - \frac{1}{2}g\boldsymbol{\tau} \cdot \mathbf{W}_\mu - \frac{1}{2}g'YB_\mu)L + \bar{R}\gamma^\mu(i\partial_\mu - \frac{1}{2}g'YB_\mu)R}_{\text{kinetic energies and electroweak interactions of fermions}} \\ & + \underbrace{\frac{1}{2}\left|(i\partial_\mu - \frac{1}{2}g\boldsymbol{\tau} \cdot \mathbf{W}_\mu - \frac{1}{2}g'YB_\mu)\phi\right|^2 - V(\phi)}_{W^\pm, Z, \gamma \text{ and Higgs masses and couplings}} \\ & + \underbrace{g''(\bar{q}\gamma^\mu T_a q)G_\mu^a}_{\text{interactions between quarks and gluons}} + \underbrace{(G_1\bar{L}\phi R + G_2\bar{L}\phi_c R + h.c.)}_{\text{fermion masses and couplings to Higgs}}\end{aligned}$$



ScardeyCat

[CatVid](#)

How OO and Agile have lost thier way together, James Coplien



[Composition](#)

[FrameworkHomework](#)



Ruby, dry-monad, intro

FFT+ASIC+DESIGN

SCRAM



Ruby, dry-monad, intro

- * Class Oriented vs Object Oriented
- * Java vs Ruby
- * Predictability vs Flexibility
- * Provability: Secure Kernel SEL4
- * OO message passing circles back with Erlang messages
- * Inevitably Elixir
- * Ruby flexibility 'require's monolithic Object tree.
- * Ruby origins: C, Lisp, Perl
- * Listishness brings enumeration happiness.
Except for typish-functional langs.

- * Closures, scope local
- * Conceptual flexibility of Ruby with processing accuracy of $f(n)$
- * Hazards of $f(n)$, exceptions
- * Control flow
- * Concurrency
- * Erlang-Elixir
- * Scala, Clojure
- * ES6, Rust, Go
- * Use ES6 to learn functional
- * [GDPR](#)
- * [Functional Sandwich](#)
- * [#@MPJ](#)
- * [Monadic Data Flow](#)
- * [Railway-OP](#)
- * [ScottWlaschin-ROP](#)



Ruby, dry-monad, intro

- * Compilers
- * Transpilers
- * Hazards of $f(n)$, exceptions
- * Control flow
- * ES6 version management
- * NodeJS module hazards
- * debug issues
- * Ruby gems, good to “go”
- * WASM in browsers
- * [WRASM](#)
- * Popularity of browser extended functions. eg: webVR
- * [Railway-OP](#)



Ruby, dry-monad, intro

map
bind
yield
run
find
each forEach
then
.then
.flatMap .chain
blocks {}
.call



Ruby, dry-monad, intro

- * Blending of OO with $f(n)$?
- * Advantage of monolithic Xception handling
- * With microscopic failure indicators of monads
- * Concurrency performant?
- * Reliability & predictability of $f(n)$ with dynamic?
- * Keep the visibility of prying?
- * Business/conceptual flexibility of dynamic modelling?



???

