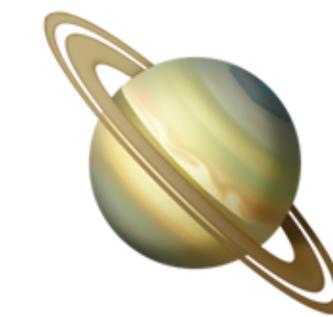


Ruby & the LISP Alien Tech



A Code Adventure





Hi.

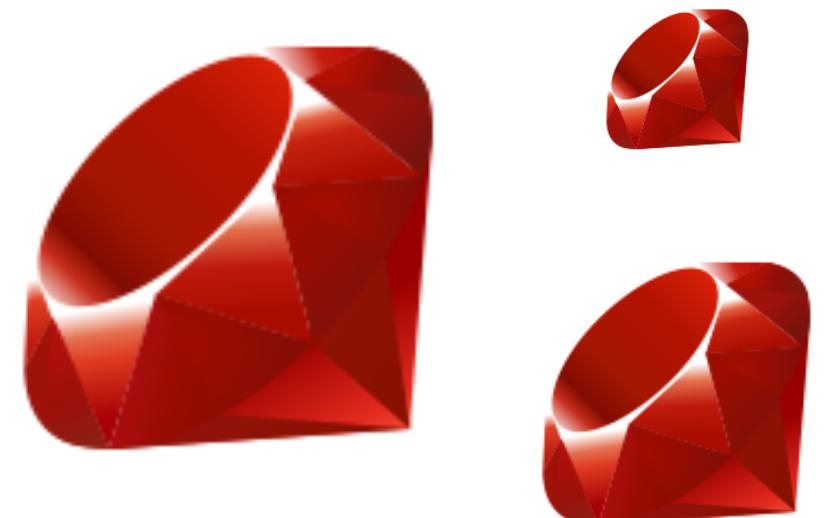
My name is Marian Posăceanu.

I'm a `senior` Ruby developer (mostly because I'm olde and have worked with Ruby for over a decade).



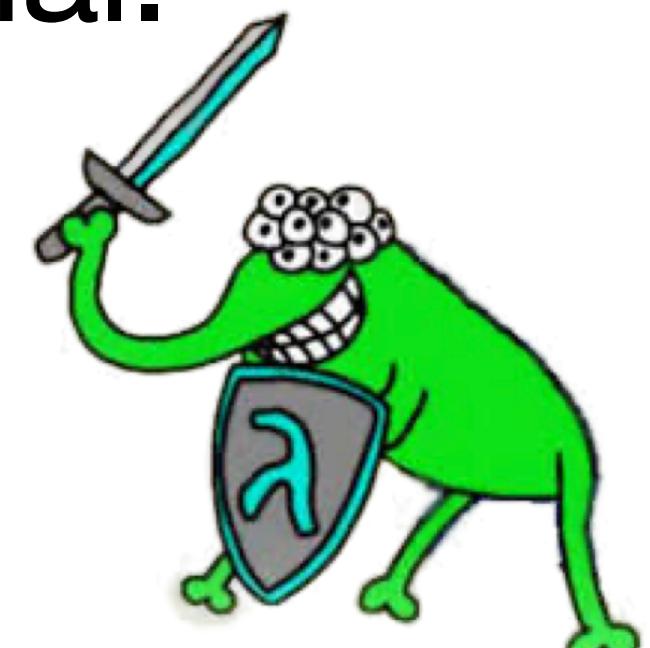
Ruby

- ✓ Elegant, human-readable syntax.
- ✓ Dynamic, object-oriented.
- ✓ Meta-programming.
- ✓ Vibrant community



LISP

- ✓ S-expressions: Central to Lisp.
- ✓ Used for both data and code.
- ✓ Code-as-data philosophy.
- ✓ Powerful meta-programming
- ✓ Ancient, yet still influential.



enter Clojure.

Identity vs. State.



Identity

- ✓ Represents a series of values over time.
- ✓ Stable logical entity.
- ✓ Transitions between different states.

State

- ✓ Value at a specific point in time.
- ✓ Immutable – doesn't change.
- ✓ Code-as-data philosophy.
- ✓ When an identity "changes", it's associated with a new state.

strange Ruby.
how about we mix Rails
with Clojure?

Let's render our
HTML with Clojure!



Like the Ruby people, strange people,



Clojure side

- ✓ use Hiccup library to represent HTML
- ✓ install Clojure & Leiningen
- ✓ generate an uberjar!

```
→ weird_ruby git:(main) ✘ cat project.clj
(defproject my-hiccup-clojure-rails-helper "0.1.0"
  :dependencies [[hiccup "1.0.5"]]
  :uberjar-name "hiccup-standalone.jar")
Execution time: 0,01s
```

```
→ weird_ruby git:(main) ✘ lein uberjar
Created /Users/marian/work/weird_ruby/target/my-hiccup-clojure-rails-helper-0.1.0.jar
Created /Users/marian/work/weird_ruby/target/hiccup-standalone.jar
```

Rails side I



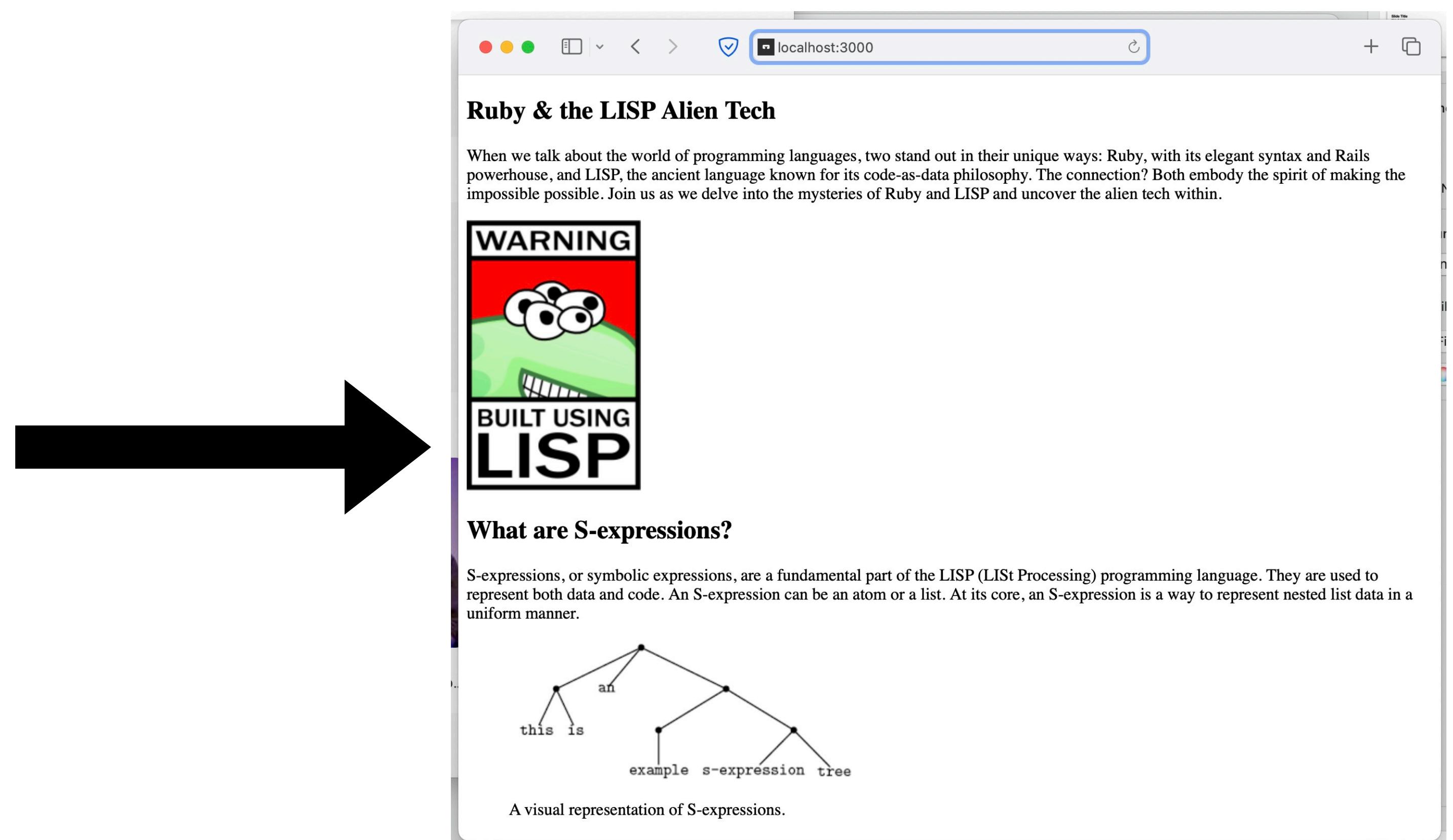
- ✓ generate a simple rails app using JRuby 9.4
- ✓ create a custom ActionView::Template as .clj
- ✓ use the uberjar to import Clojure and invoke methods on our library
- ✓ add required glue to make it work
- ✓ fire up `rails s` and see what happens

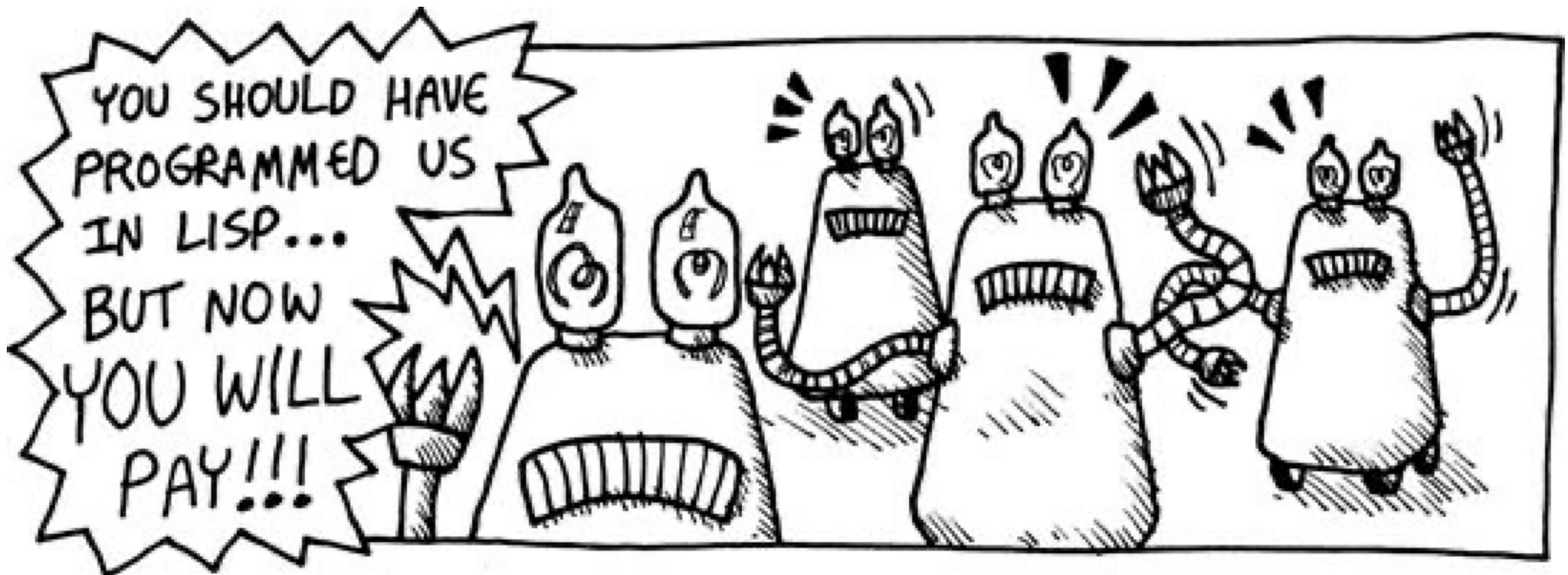
```
1 require 'java'
2 require './lib/hiccup-standalone.jar'
3
4 java_import 'clojure.java.api.Clojure'
5
6 class CljHandler
7   def call(template, _source = nil)
8     # Load and refer the hiccup.core functions
9     Clojure.var("clojure.core", "require").invoke(Clojur
10    # Avoid prefixing method calls with hiccup in the vi
11    Clojure.var("clojure.core", "refer").invoke(Clojure.
12
13    eval_fn = Clojure.var("clojure.core", "eval")
14
15    # Evaluate a Clojure expression that uses Hiccup
16    # Actually this is our .clj template
17    expression = Clojure.read(template.source)
18    result = eval_fn.invoke(expression)
19
20    "output_buffer.safe_concat('#{result}'"
21  end
22 end
```

Rails side II

```
1 <html
2   [:main
3     [:section {:id "ruby-lisp-alien-tech"}
4       [:h2 "Ruby & the LISP Alien Tech"]
5       [:p "When we talk about the world of programming language
6           "with its elegant syntax and Rails powerhouse, and
7           "code-as-data philosophy. The connection? Both embed
8           "Join us as we delve into the mysteries of Ruby and
9           [:img {:src "https://www.lisperati.com/lisplogo_warning.png"}]
10
11      [:section {:id "s-expressions"}
12        [:h2 "What are S-expressions?"]
13        [:p "S-expressions, or symbolic expressions, are a functional
14           "programming language. They are used to represent
15           "atom or a list. At its core, an S-expression is a
16           "manner."]
17        [:figure
18          [:img {:src "data:image/png;base64,iVBORw0KGgoAAAANS..."}]
19          [:figcaption "A visual representation of S-expressions, showing nested lists and atoms."]]]
```

N... <app/views/articles/index.html.clj clo... 26% In :5/19 ≈:37





Thank you 

Seven Concurrency Models in Seven Weeks

When Threads Unravel



Paul Butcher

edited by Jacquelyn Carter

- ✓ [https://github.com/marianposaceanu/
weird ruby](https://github.com/marianposaceanu/weird_ruby)
- ✓ [https://github.com/weavejester/hiccup/
tree/master](https://github.com/weavejester/hiccup/tree/master)
- ✓ [https://blogit.michelin.io/clojure-
programming/](https://blogit.michelin.io/clojure-programming/)
- ✓ Seven Concurrency Models in Seven
Weeks

Resources

