

# Sorry

I can't get NeoOffice to export just the pages with notes, so you may want to jump to the middle, where the annotated versions start.



# **A Whirlwind Overview of FutureRuby**

Justin Love

With thanks to  
Pete Forde, Meghann Millard, Unspace,  
All the great speakers  
And good company.



# **A little math**

600 seconds  
20 presentations  
~30 seconds each



# **How Capitalism Saves Ruby From Corporatism**

Nathaniel Talbot

<http://blog.talbott.ws/articles/2009/7/15/how-capitalism-saves-ruby-from-corporatism>



# Capitalism

- Create assets
- Change your perspective on employment: an opportunity to learn while helping those who own the asset create value for their customers
- Explore new models of ownership: keep those doing the work connected with the results.



# **Lean & Mean Tokyo Cabinet Recipes**

Ilya Grigorik

<http://www.slideshare.net/igrigorik/lean-mean-tokyo-cabinet-recipes-with-lua>



# Tokyo Cabinet

- “Tokyo Cabinet” is a local key-value store
- “Tokyo Tyrant” uses it to build a database server
  - Binary, HTTP, or Memcached protocol
  - Built-in Lua for server side calculation.



# Programming Life

Austin Che



# Manufacturing Life

- DNA synthesizers can be bought – even on Ebay.
- Probably cheaper to buy on a piece rate from third parties – just paste your GCTA



# **Version Control: Blood, Brain & Bones**

Anita Kuno



# Blood, Brain, and Bones

- Body changes over time; each version is determined by the forces during it's construction.
- Lifetime of a red blood cell is around 120 days.
- Bone are rebuilt, cycle time is about 10 years.
- Caffeine increases focus, but this may be at expense of noticing other things (creativity)



# **Polyglots Unite!**

Foy Savas



# Polyglots Unite!

- Hate is a lie to simplify the world around us.
- A rubyist is someone who believes programming adapts around him, rather than the other way around.
- WSGI/Rack: “If you see something that has worked well in two languages, you have struck gold”
- C++Rack = Crack: multi-language web server



# **Terrible Noises for Beautiful People**

Misha Glouberman



# **Flying Robot: Unmanned Arial Vehicles Using Ruby and Arduino**

Ron Evans  
Damen Evans



# Arduino

- Open source hardware – build or buy.
- Compiles Ruby to C in order to fit it into limited embedded processor.
- <http://rad.rubyforge.org/>



# Flying Robot

- Provides Ruby framework for writing blimps on the Ruby/Arduino platform.
- [http://github.com/deadprogrammer/flying\\_robot/tree/master](http://github.com/deadprogrammer/flying_robot/tree/master)



# Ruby Go Mobile Web

Brian LeRoux  
Brock Whitten  
Rob Ellis

<http://sintaxi.github.com/presentations/future-ruby/>

<http://phonegap.com/>



# PhoneGap

- Develop mobile apps in HTML/Javascript
- Builds native applications for iPhone, Android, Blackberry, more coming
- Provides native API – tilt, geo, telephony, etc.
- Guided by HTML5 – goal is to make itself obsolete.



# **Building Native Mobile Apps in Rhodes**

Adam Blum

<http://www.rhobile.com/>



# Rhodes

- Ruby interpreter targeted for mobile.
- Builds native packages - iPhone, Windows Mobile, Research in Motion (BlackBerry), Symbian and Android.



# **The Four Agreements**

An impromptu talk by  
Pete Forde



# **The Four Agreements**

- Be impeccable in your word (including, don't gossip)
- Don't take anything personally
- Don't make assumptions
- Always try your best



# **Trans/Ending Encoding**

Collin Miller



# Trans/Ending Encoding

- Text is an imperfect representation of a program
- Direct editing:
  - Intentional Software
  - Subtext/Coherence



# **Living with 1000 open source projects**

Dr. Nic Williams

<http://drnicwilliams.com/2009/07/13/futureruby-talk-living-with-1000-open-source-projects/>

# 1000 Projects



- OSS projects don't scale – much like pets and children.
- If you abandon a project, give notice.



# **Crimes against humanity writ small**

Matthew Knox



# Crimes

- Milgram experiments: 70% of subjects willing to perform torture.
- Authority is sufficient: remote root exploit in human brain.
- Bad behavior is an artifact of structures, so set up better structures.
- Provoke forgiveness: Own your actions and results.



# **Between the battleship and the Failwhale**

Paul Dowman



# **Between the battleship and the Failwhale**

- Planning ahead without overengineering
- The big win is caching
  - Especially logged out pages, or otherwise with no custom content
  - Cache policies that can include extra information to cache customized pages.



# Heard over lunch

Typical Mind Fallacy.

Others are not like us.



# Cucumbered

Joseph Wilk

# Cucumbered



- Tags – test or exclude sets of tests
- Work in Progress – command line switch that inverts pass/fail
  - Combines nicely with a WIP tag.
- Abstraction – Given/When/Then inside tests to re-use tests.
- Background – provides setup/before functionality

# **Failure: An Illustrated Guide**



Avi Bryant



# **Programming and Minimalism**

Jonathan Dahl

# Minimalism



- Simplest approach to a problem
- Clever code is bad code
- If it isn't local business logic, it should be in a library.
- Don't over-abstract
- Abstract when necessary
- You don't need meta-programming
- Actively clean up
- Apply these rules wisely
- Simple code is beautiful



# **Introduction to Cappuccino**

Brian LeRoux  
Brock Whitten  
Rob Ellis



# Web Programming for Mac Developers

- Objective-J: Objective C for Javascript
- Set of widgets
- Open source GUI graphics
- Import Interface Apple's Interface Builder files
- Working on Atlas, a web app that works like Interface Builder



# **Artisanal Retro-Futurism and Team-Scale Anarcho-Syndicalism**

Brian Marick

<http://arxta.net>

# **Anarcho-Syndicalism**



- Worker self management
- Direct action
- Solidarity
- Now do that at as a team



# ARXTA

- Artisanal: caring about people, products, and craft
- Retro futurism: spirit of hope
- So: Be hopeful, and care about your work in self-organizing teams.



# **Fighting the Imperial Californian Ideology**

Jesse Hirsh

Joey Deville took much better notes than me:  
<http://www.globalnerdy.com/2009/07/15/futureruby-talk-fighting-the-imperial-californian-ideology/>



# Three books

- “Snow Crash” - Political ideology as a virus
- “Imperial San Francisco” - mining elite became the startup/VC culture, which only works there.
- “Free” - as technology drives production costs towards zero, social relations define value.



# Resources

- Questions: slides@JustinLove.name
- #futureruby on Twitter
- <http://www.opensourceconnections.com/2009/07/15/futureruby-characters-welcomed/>

# Sorry

I can't get NeoOffice to export just the pages with notes, so you may want to jump to the middle, where the annotated versions start.



Greetings Comrades

I was at FutureRuby last week, and when I saw the call for lighting talks I thought an overview might be something I could manage.



However, I didn't quite appreciate just how little time 10 minutes is.

I won't be able to do any of the talks justice, I just hope to pique your interest for later research.



First up, Nathaniel Talbot's talk on responsibility and the means of production is online, so I'm just going to present his call to action.



# Capitalism

- Create assets
- Change your perspective on employment: an opportunity to learn while helping those who own the asset create value for their customers
- Explore new models of ownership: keep those doing the work connected with the results.


5

Nathaniel asks us to create assets for ourselves and not just for our employers  
But if you are employed, use it as an opportunity to learn while creating value for for customers.  
Finally, defeat the corporate scapegoat by keeping those who do the work connected with results.



Ilya Grigorick Talked about Tokyo Cabinet,

A fast local database with interfaces in several languages

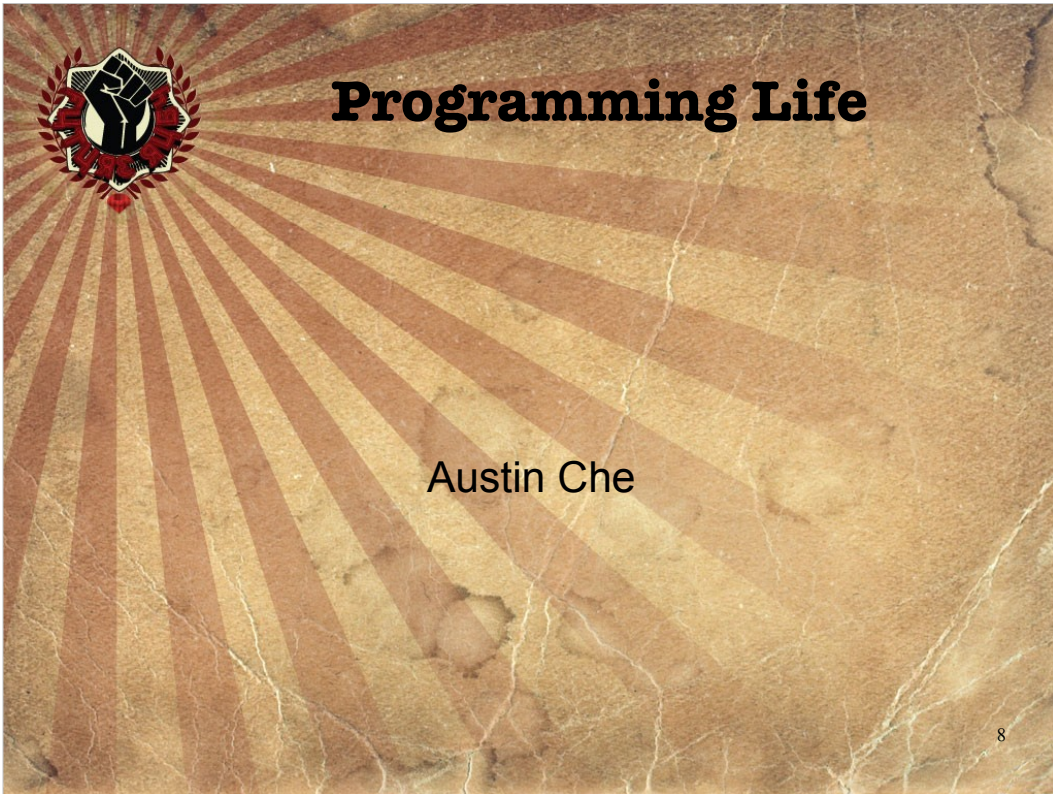


## Tokyo Cabinet

- “Tokyo Cabinet” is a local key-value store
- “Tokyo Tyrant” uses it to build a database server
  - Binary, HTTP, or Memcached protocol
  - Built-in Lua for server side calculation.

7

- A fast local key-value store with interfaces in several languages.
- If you just want a database server, use Tokyo tyrant, which has binary, HTTP, and memcached protocols, as well as a Lua interpreter for custom extensions.



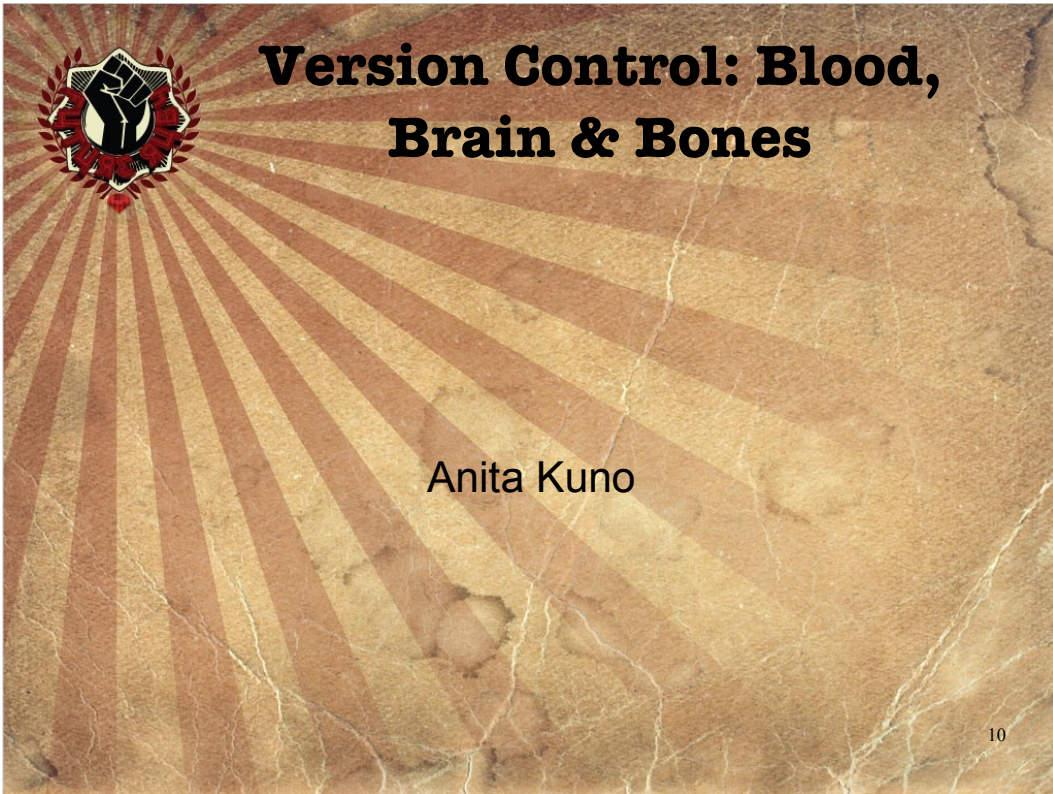
Before the conference proper, Austin Che had people growing their own bacteria, be it glowing or minty smelling.

**Manufacturing Life**

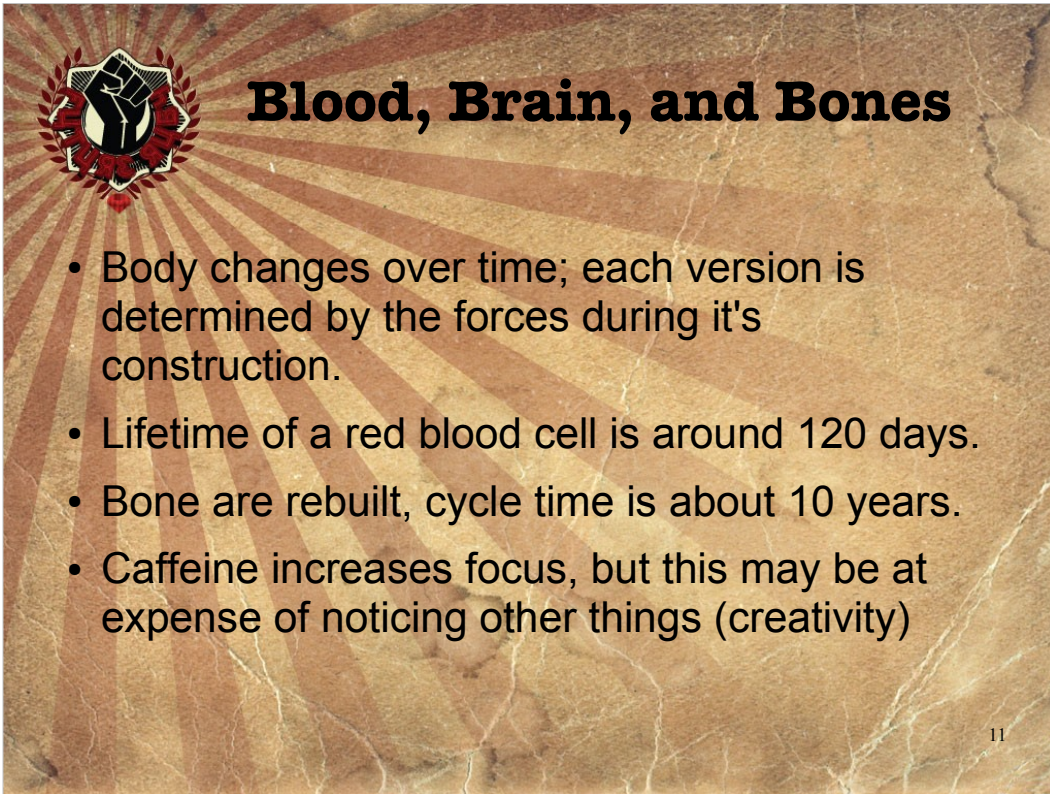
- DNA synthesizers can be bought – even on Ebay.
- Probably cheaper to buy on a piece rate from third parties – just paste your GCTA

9

- In his talk, he discussed the process of manufacturing life.
- DNA synthesizers are commercially available, although unless you get really serious, it's probably easier to use an online service. Just copy/paste your base pairs and get your DNA in the mail for a small fee



Next Anita Kuno gave a thinly veiled talk on nutrition



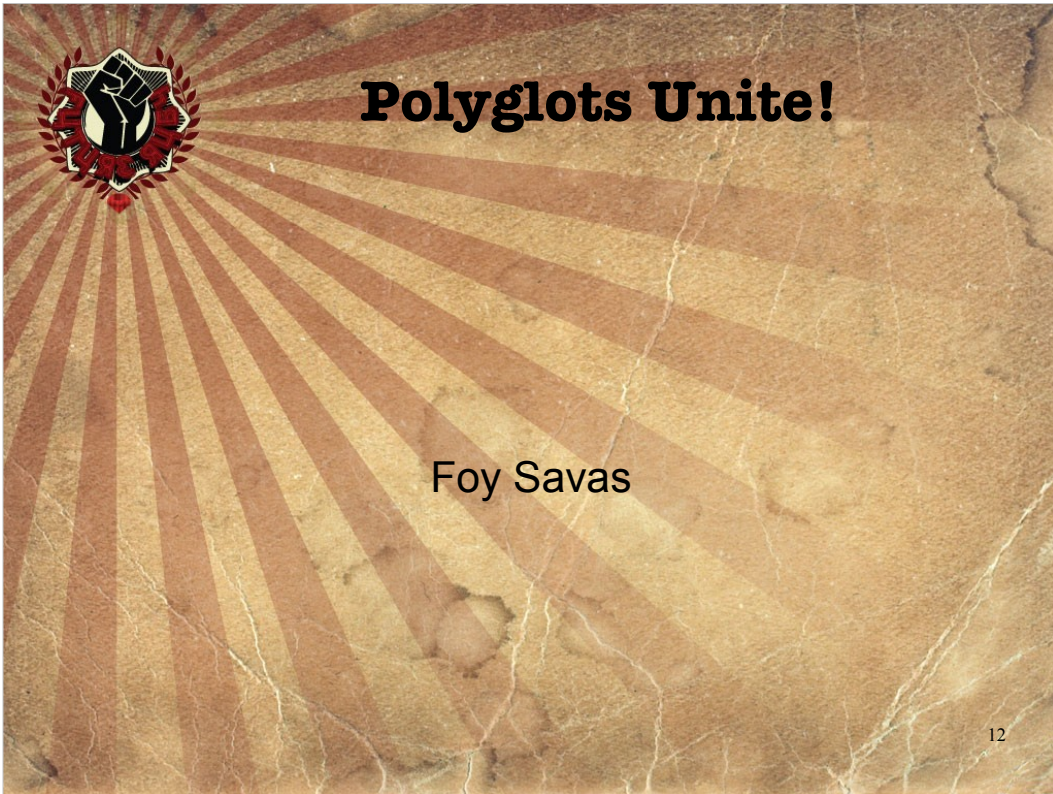
## **Blood, Brain, and Bones**

- Body changes over time; each version is determined by the forces during it's construction.
- Lifetime of a red blood cell is around 120 days.
- Bone are rebuilt, cycle time is about 10 years.
- Caffeine increases focus, but this may be at expense of noticing other things (creativity)

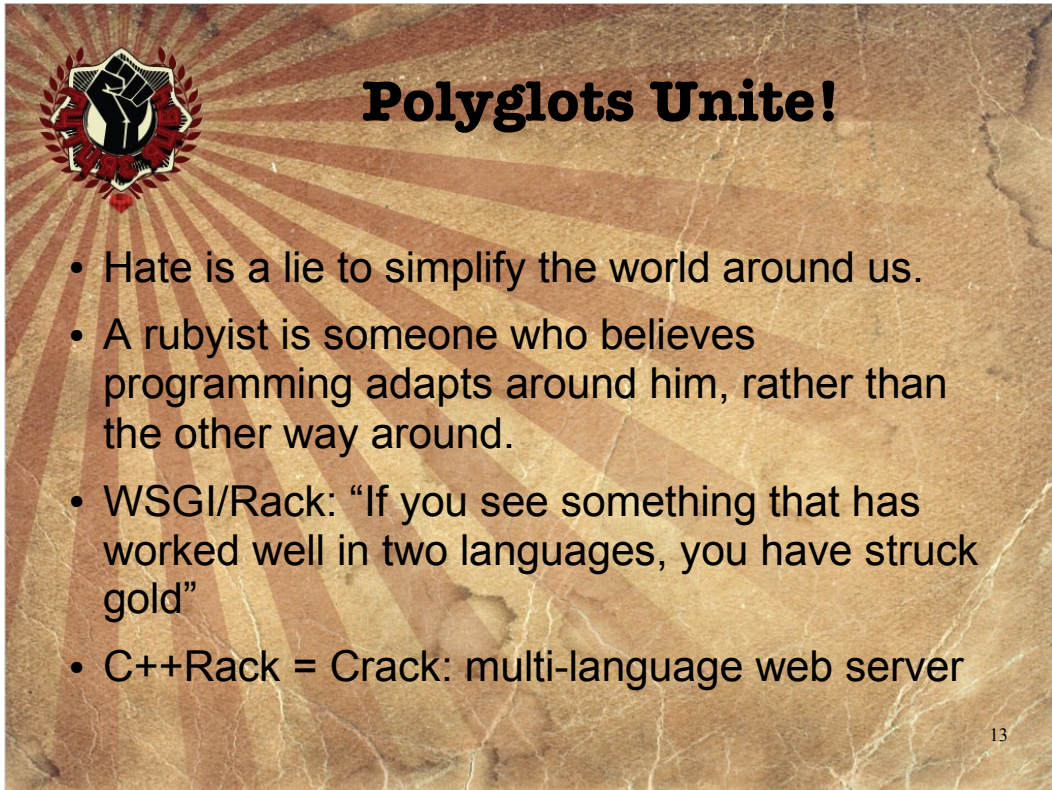
11

The version control tie in is that the body does change over time, and each version is determined by what went before.

Red blood cells, for instance live around 120 days, while bones are rebuilt over the course of 10 years. Another tidbit is that while caffeine does appear to increase focus when we know what we are doing, it may impair awareness of outside ideas required for creative work.



After that, Foy Savas enjoined Polyglots to unite

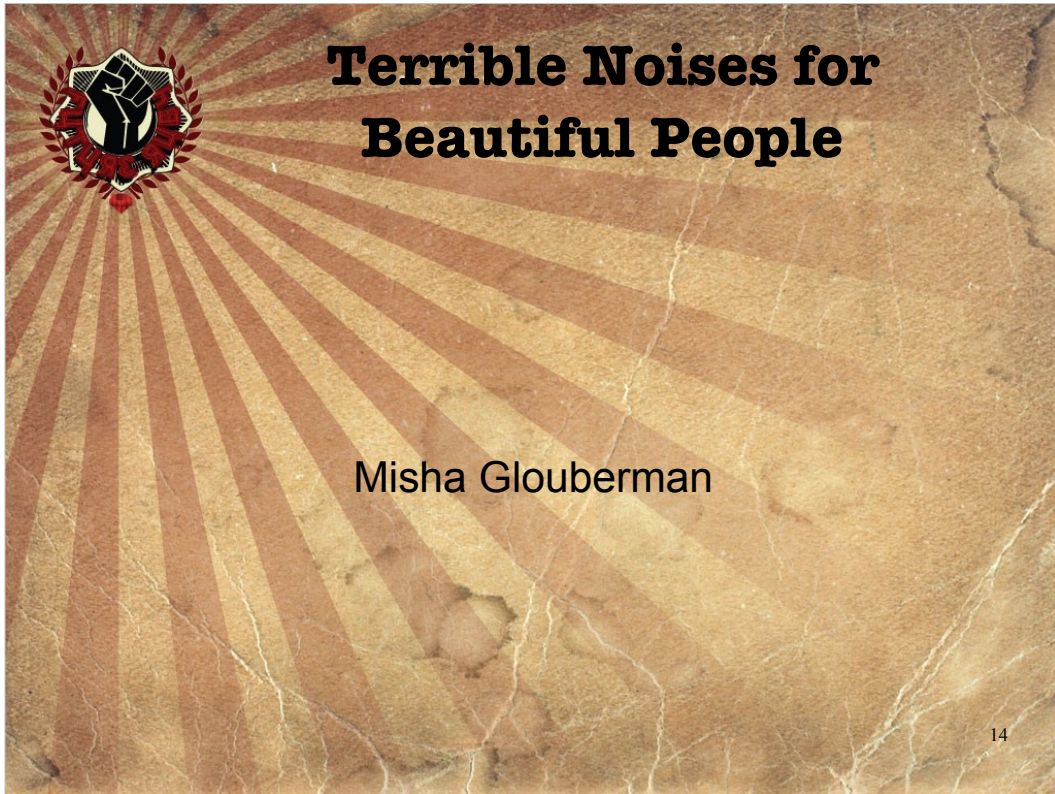


**Polyglots Unite!**

- Hate is a lie to simplify the world around us.
- A rubyist is someone who believes programming adapts around him, rather than the other way around.
- WSGI/Rack: “If you see something that has worked well in two languages, you have struck gold”
- C++Rack = Crack: multi-language web server

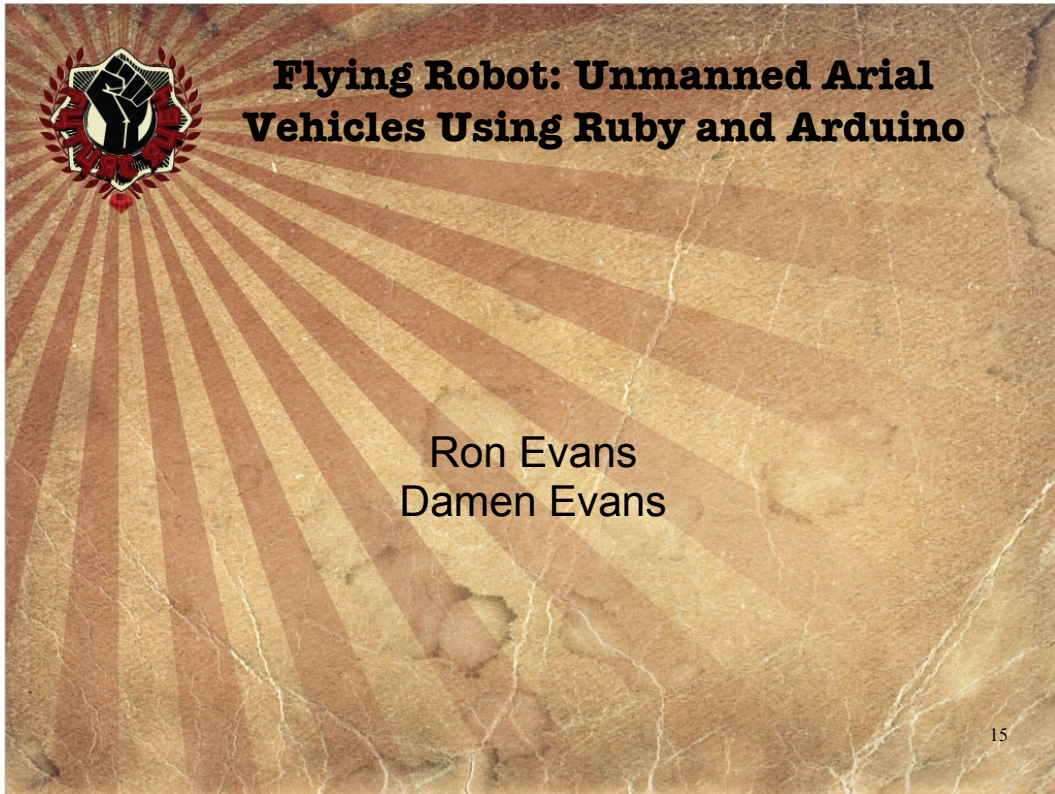
13

- He believes hate is a lie used to simplify the world – all languages have their uses.
- A rubyist is someone who believes programming adapts around him, rather than the other way around – even if that means not using ruby.
- In particular, he took the concept behind Python's Web Server Gateway Interface and Ruby's Rack, and create Crack. Since most languages can integrate with C, Crack could be come a multi-language web server.




Misha reminded us that you can enjoy making sound without an orchestra, score, or years of training.

He had the FutureRubyists omming, hissing, clapping, and even arrring like pirates when he made the mistake of asking for creative sounds. We passed spatulas (sometimes without spatulas) and played a live auditory Conway's game of life.



After a break to recover, Ron and Damen Evans performed live coding of flying objects

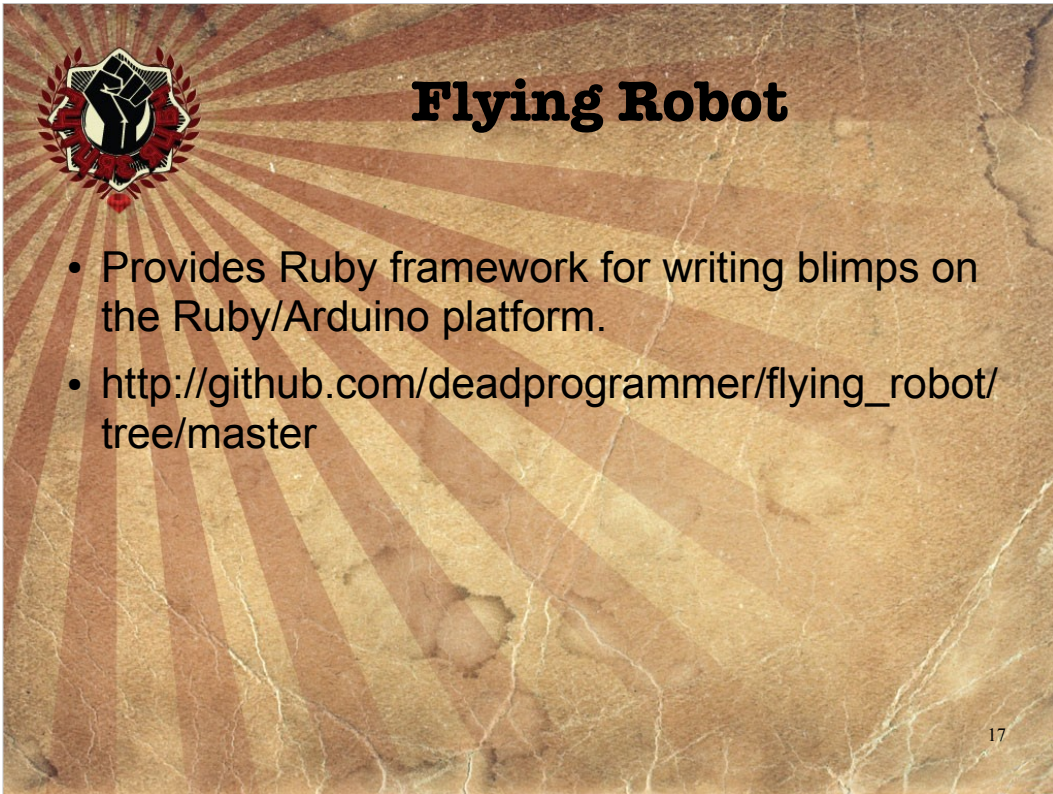


## Arduino

- Open source hardware – build or buy.
- Compiles Ruby to C in order to fit it into limited embedded processor.
- <http://rad.rubyforge.org/>

16

Their small blimps are powered by Arduino, an piece of open source hardware – you can buy one, or download the source files and have it made yourself. An embedded processor won't fit Ruby however, so they use RAD, the Ruby Arduino Development kit to compile Ruby to C and then into microprocessor code.



**Flying Robot**

- Provides Ruby framework for writing blimps on the Ruby/Arduino platform.
- [http://github.com/deadprogrammer/flying\\_robot/tree/master](http://github.com/deadprogrammer/flying_robot/tree/master)

17

On top of this, they built Flying Robot, a Ruby framework not unlike the web frameworks we all know.



The people from Nitobe knew web technologies, but they wanted to do mobile development. So they built PhoneGap.



## PhoneGap


- Develop mobile apps in HTML/Javascript
- Builds native applications for iPhone, Android, Blackberry, more coming
- Provides native API – tilt, geo, telephony, etc.
- Guided by HTML5 – goal is to make itself obsolete.

19

- PhoneGap builds native applications for a growing set of mobile platforms.
- It provides APIs to access native features like accelerometers, geolocation and telephony.
- The project is guided by HTML5 – the ultimate goal is to make itself obsolete when all platforms implement the standard.



Adam blum provided a mobile double-header. If you don't like HTML and Javascript, perhaps you'd rather develop in Ruby.

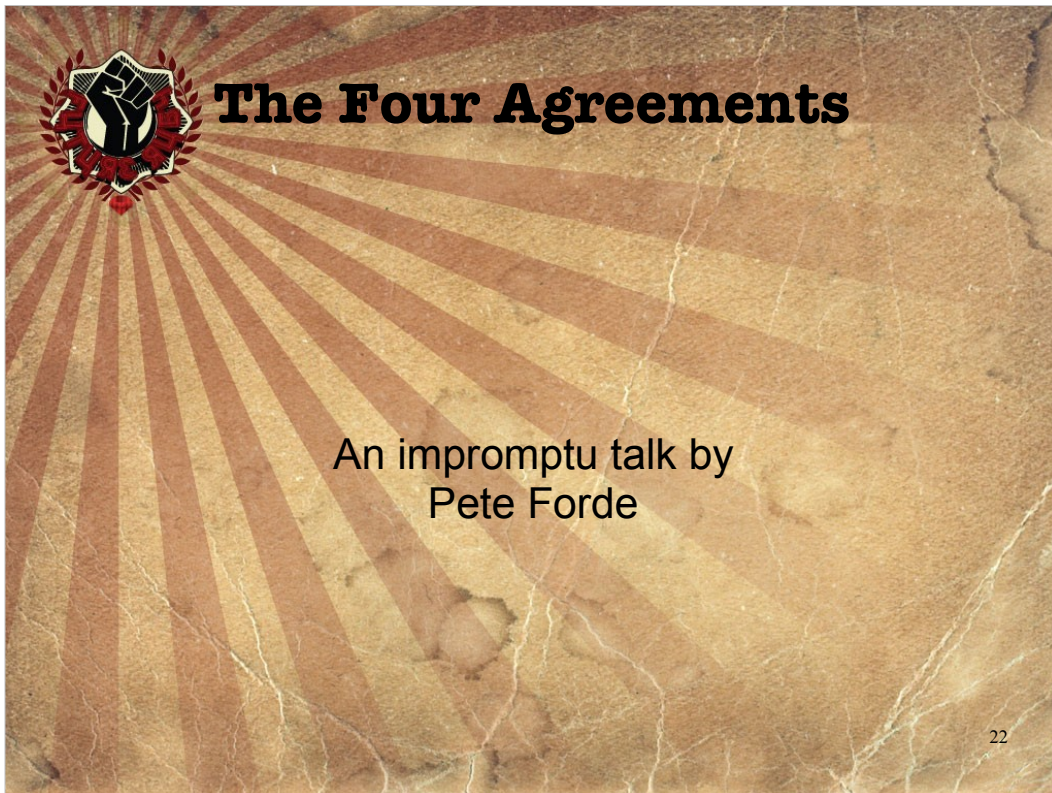


## Rhodes

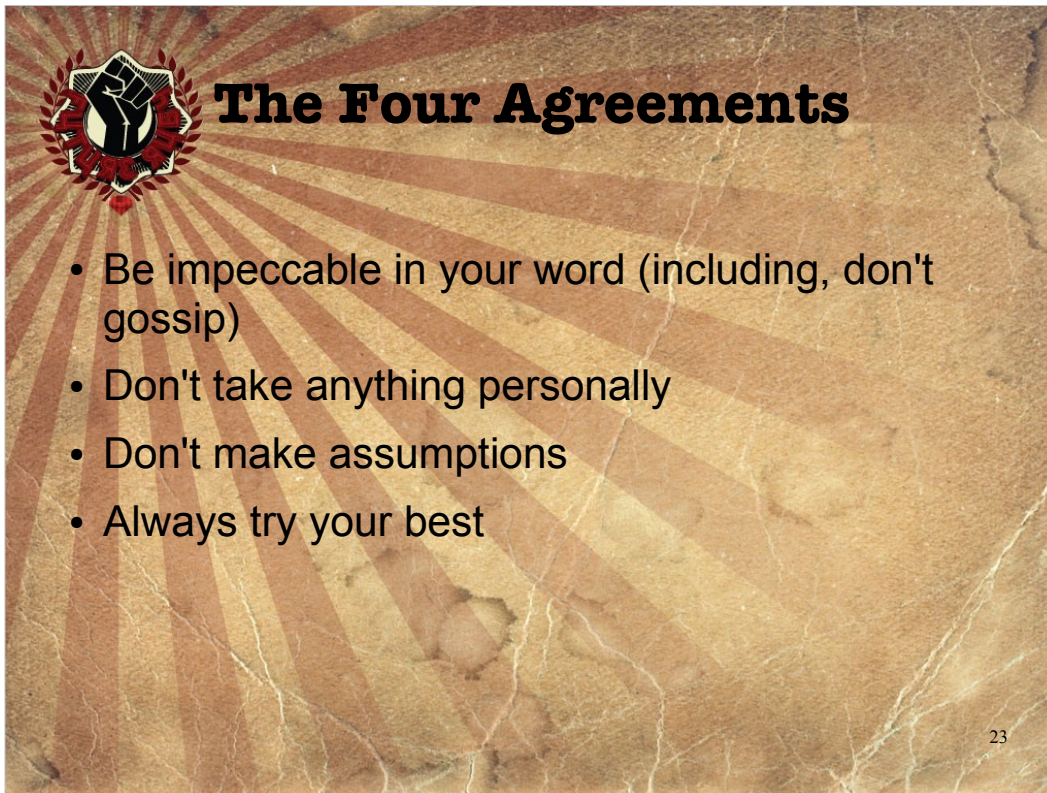
- Ruby interpreter targeted for mobile.
- Builds native packages - iPhone, Windows Mobile, Research in Motion (BlackBerry), Symbian and Android.

21

From a distance, it's pretty much the same story: Rhodes packages it's own Ruby interpreter into a native application, but targets a larger number of platforms.



Conference figurehead Pete Forde opened Sunday with an impromptu talk on *The Four Agreements*, a book he found...



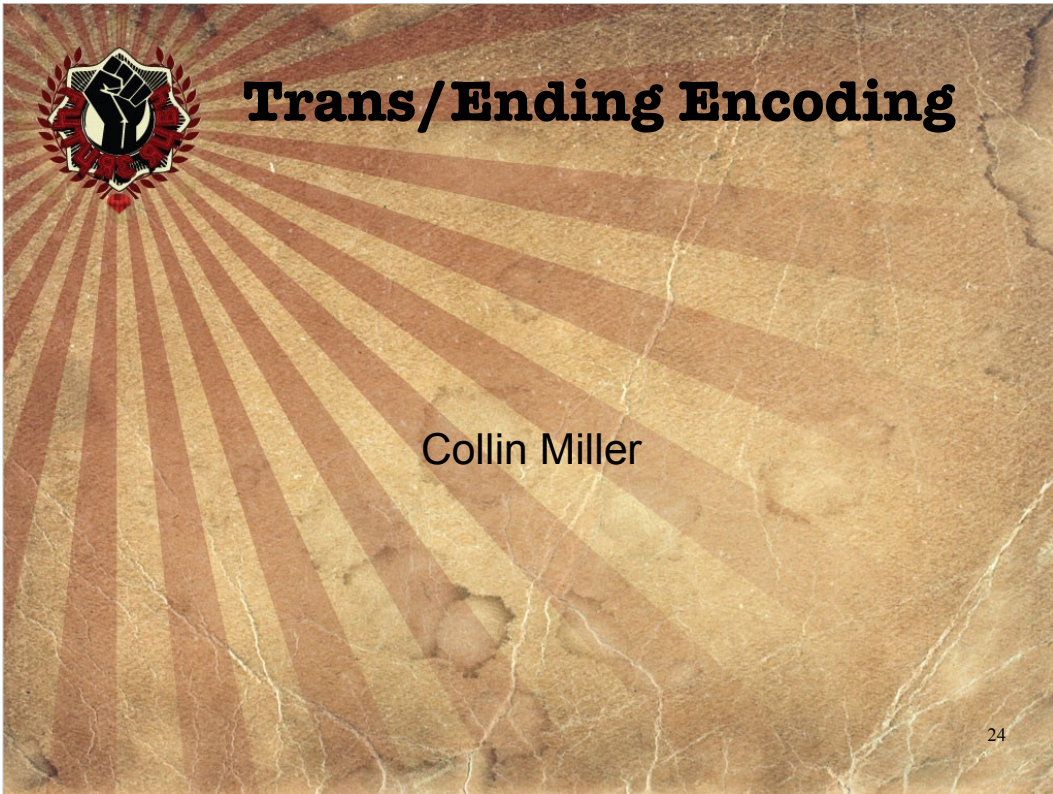
## The Four Agreements

- Be impeccable in your word (including, don't gossip)
- Don't take anything personally
- Don't make assumptions
- Always try your best

23

...a book he found in place of a bible at the Jupiter Hotel in Portland, OR.

It's theme seems to be that we are trained to abuse ourselves and feel guilty. The four agreements are offered as a way out of this state.



Colin Miller spoke on a subject I take some interest in.



## **Trans/Ending Encoding**

- Text is an imperfect representation of a program
- Direct editing:
  - Intentional Software
  - Subtext/Coherence

25

- Programs have structure – graphs, trees, etc.
- Text files are a serialization (encoding) of a program.
- Compare to directly editing serialized objects or an MP3 file.



**Living with 1000 open  
source projects**

Dr. Nic Williams

<http://drnicwilliams.com/2009/07/13/futureruby-talk-living-with-1000-open-source-projects/>

26

Dr. Nic Williams took his 80 some projects in 3 some years and did a little extrapolation.

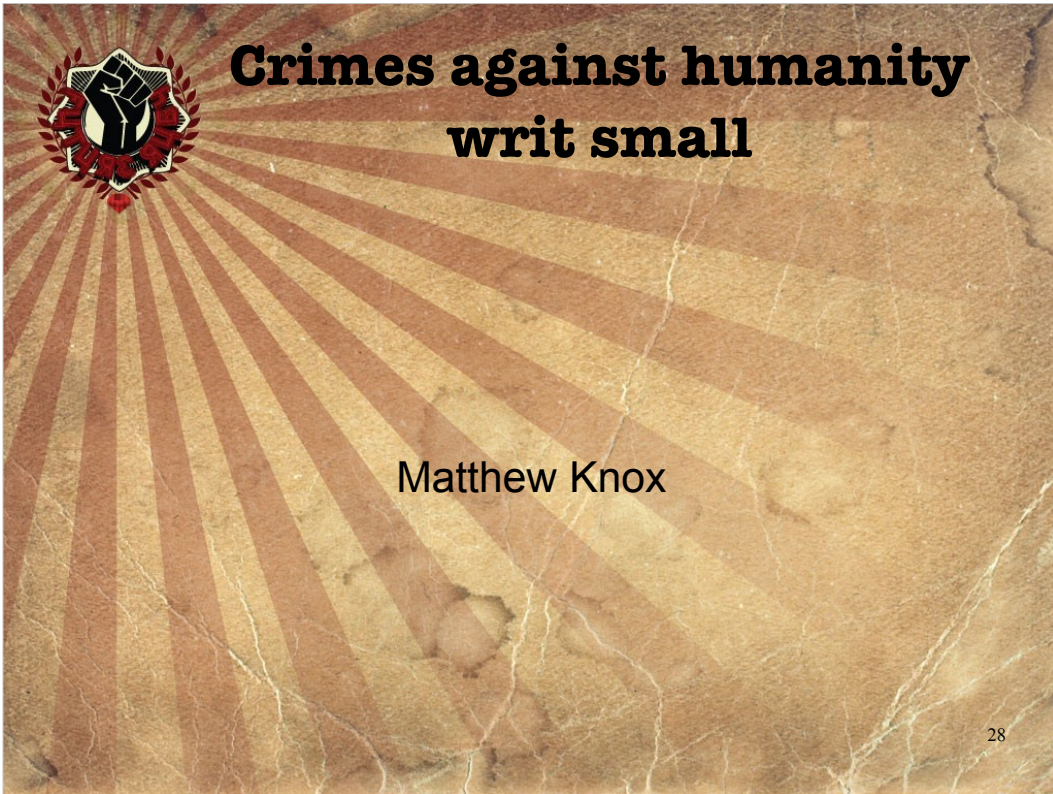


## 1000 Projects

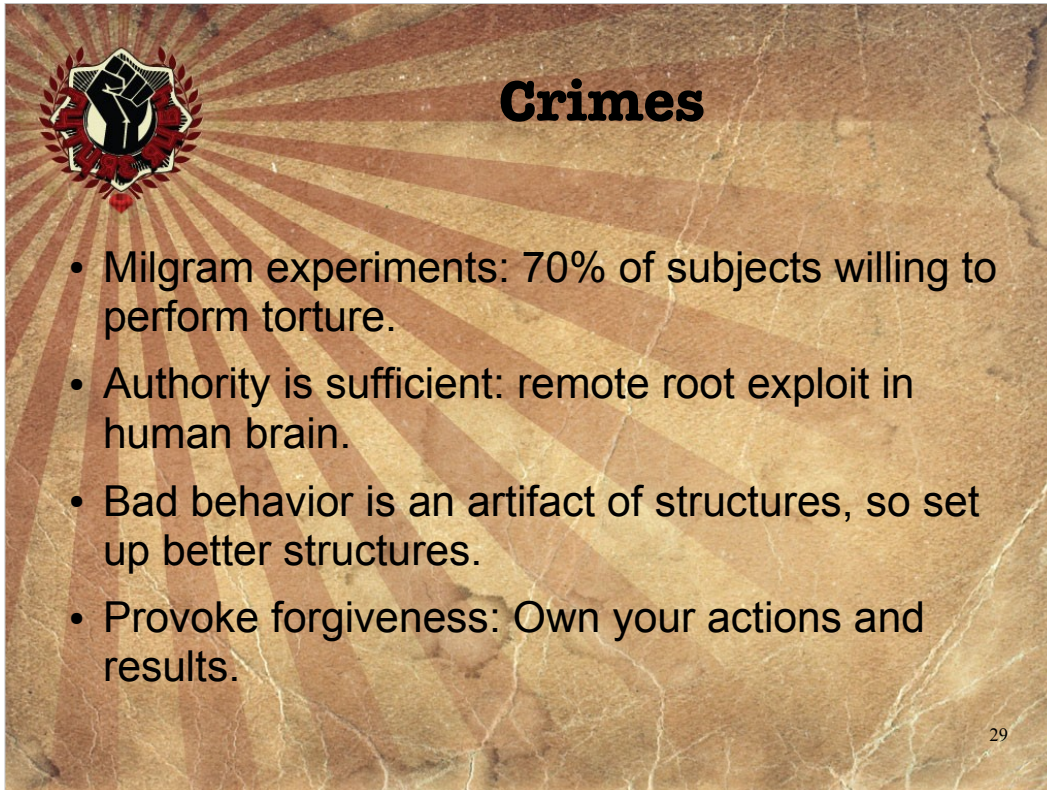
- OSS projects don't scale – much like pets and children.
- If you abandon a project, give notice.

27

- He has decided that OSS projects don't scale – much like pets and children. His advice is to formally abandon a project when you can no longer maintain it, and give notice so that the community can respond appropriately.



Matthew Knox went from anti-spam to finding himself employed at an adware company.



**Crimes**

- Milgram experiments: 70% of subjects willing to perform torture.
- Authority is sufficient: remote root exploit in human brain.
- Bad behavior is an artifact of structures, so set up better structures.
- Provoke forgiveness: Own your actions and results.

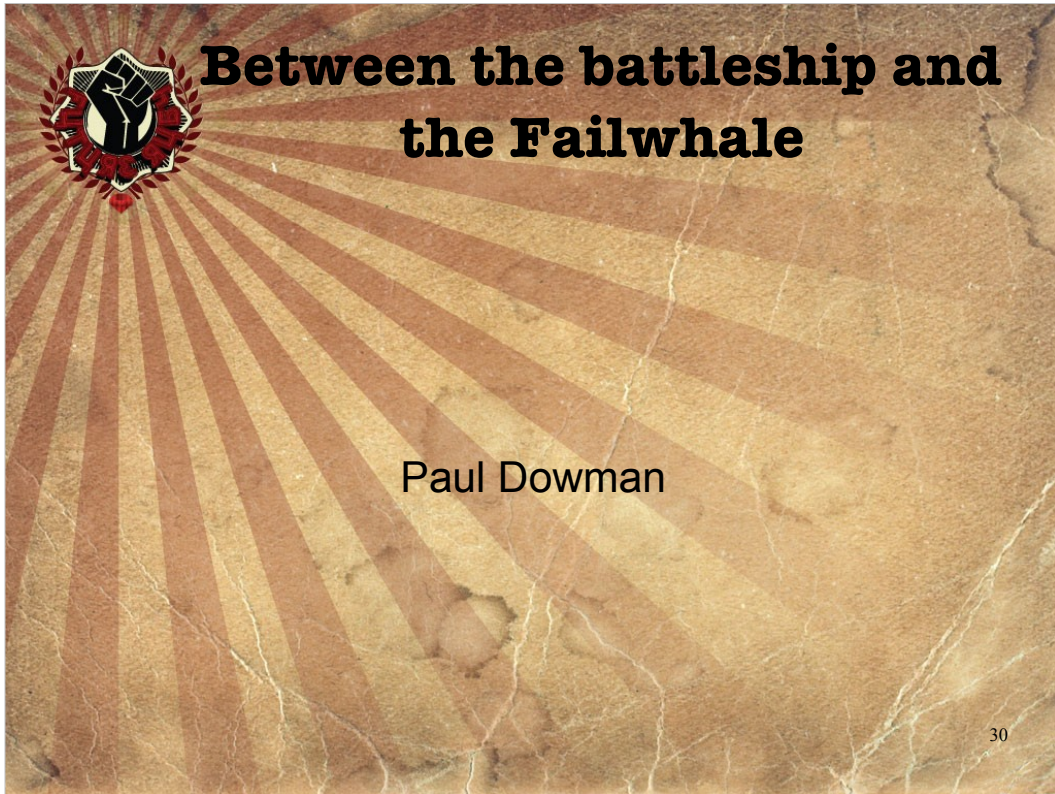
29

Reflecting on this brought him to the Milgram experiments, where it was found that 70% of subjects were willing to perform torture.

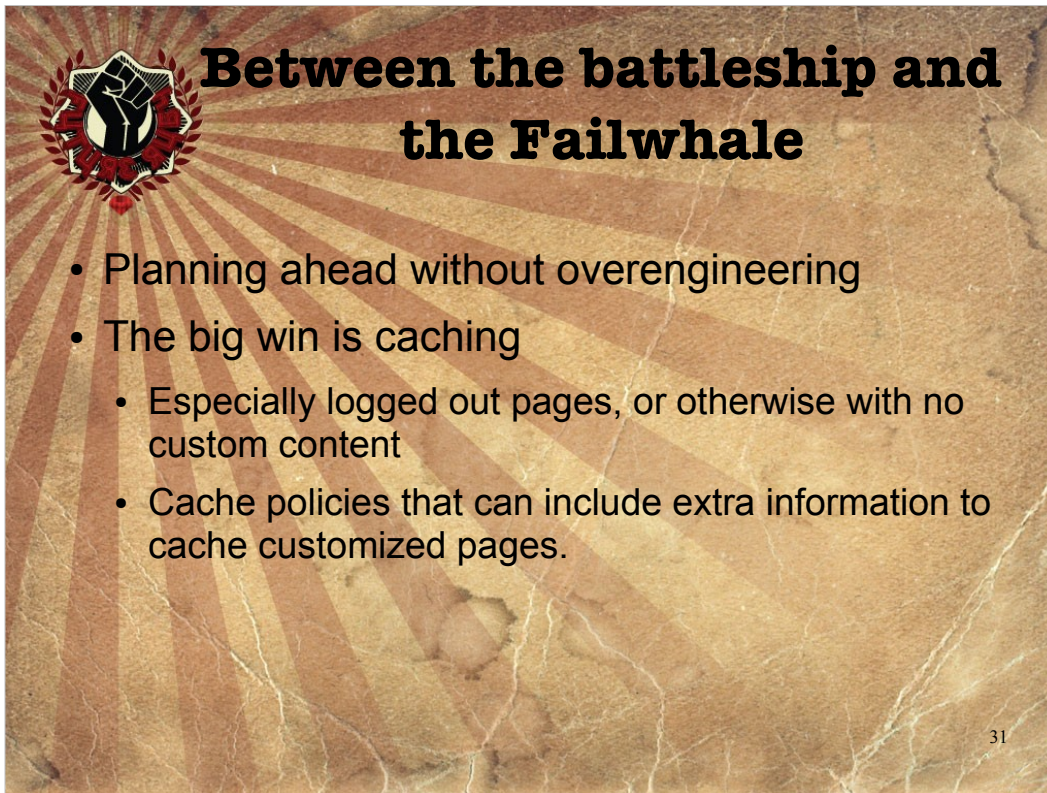
His conclusion is that authority is sufficient: a remote root exploit in the human brain.

He believes that bad behavior is an artifact of bad structures, so set up better structures.

For his own crimes writ small, Matthew found that the best way to provoke forgiveness is to own your actions and their results.



- Paul Dowman talked about planning ahead without overengineering



## Between the battleship and the Failwhale

- Planning ahead without overengineering
- The big win is caching
  - Especially logged out pages, or otherwise with no custom content
  - Cache policies that can include extra information to cache customized pages.

31

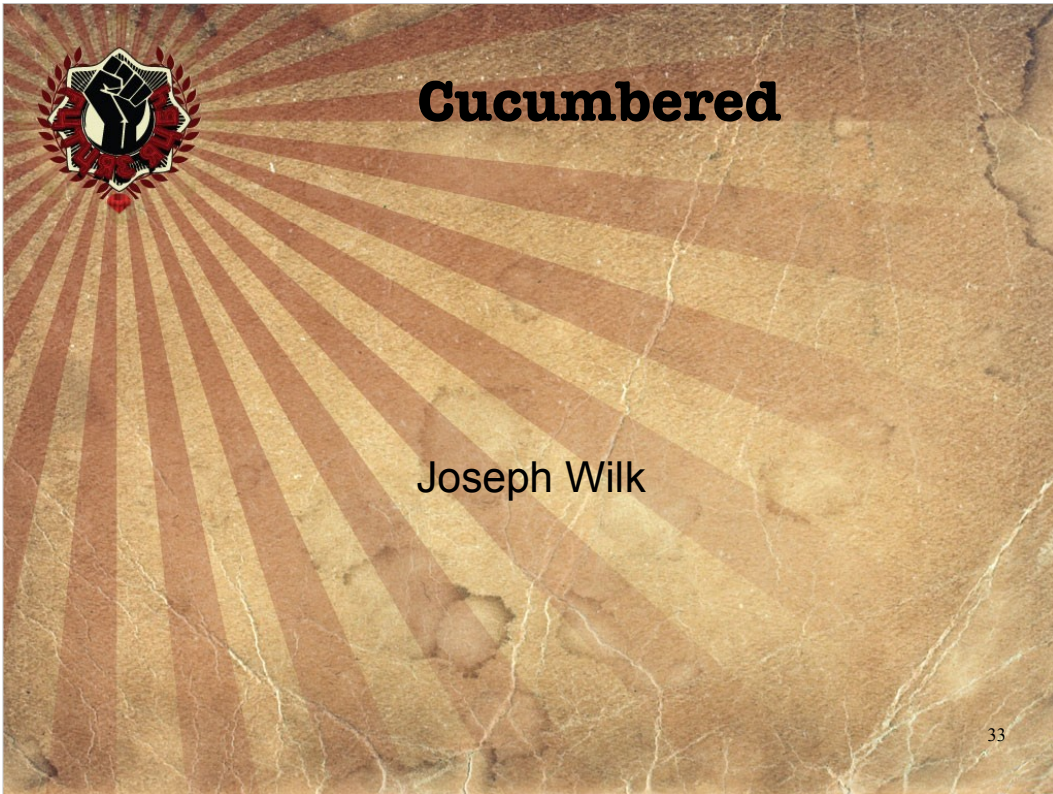
Unfortunately, I didn't pay much attention here, since I don't work on web apps much.

The big win, however is caching. The easy case is 'logged-out' pages, but there are some caching technologies that can take in additional information to work with some user-specific content.




In one of many enlightening conversations, I heard of the typical mind fallacy. It's easy to assume other people think the same way we do, but be careful making assumptions.

Some people cannot visualize, others can count the stripes on an imaginary tiger.



Joseph Wilk talked about Cucumber. Now, I've never had need of it's fluent interface, but it's been growing some nice features on the side.



## Cucumbered

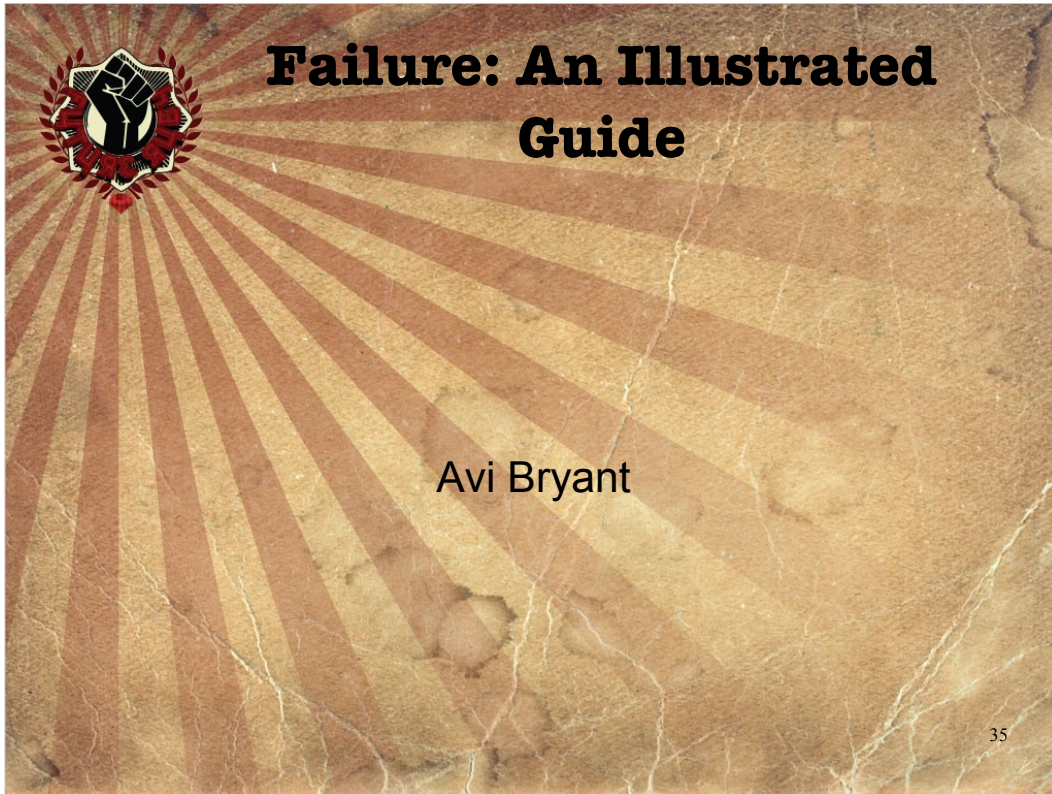
- Tags – test or exclude sets of tests
- Work in Progress – command line switch that inverts pass/fail
  - Combines nicely with a WIP tag.
- Abstraction – Given/When/Then inside tests to re-use tests.
- Background – provides setup/before functionality

34

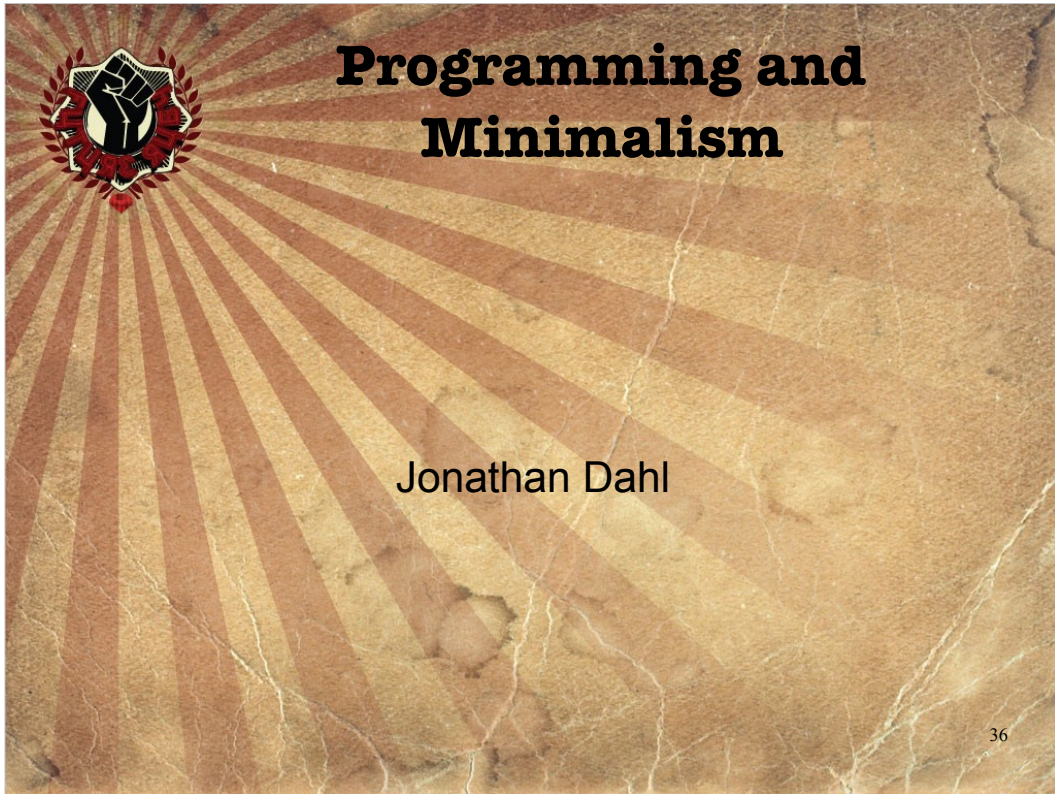
Tags allow you to include or exclude sets of tests.

These can combine nicely with a Work In Progress feature so that you can maintain working and broken tests without getting them confused.

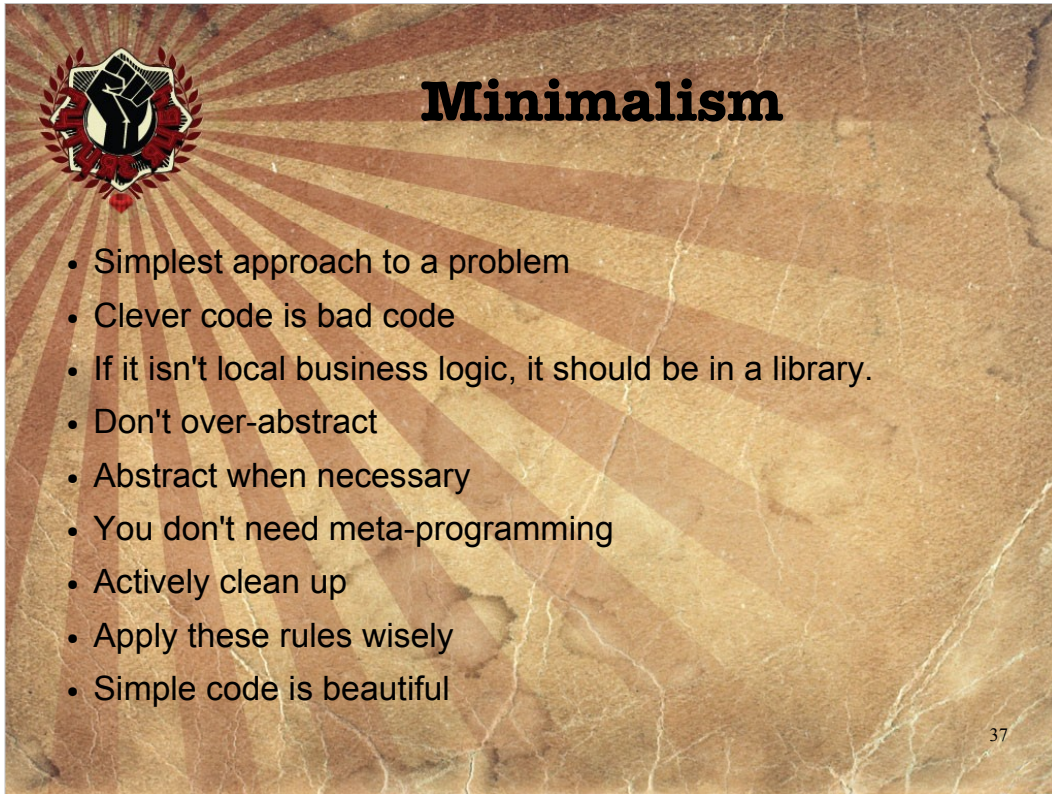
It also allows you to reuse Given/When/Then inside tests, and a background section provides the setup or before functionality you may be familiar with from other testing frameworks.



Avi Bryant offered a screenshot history of building trendly, once known as dshbrd. It was a fascinating journey through information design, but I can't usefully reproduce it here. The overall message seems to be fail fast, or iterate fast if you prefer.



Jonathan Dahl gave a talk on Expressiveness and Simplicity

The slide features a textured, brownish-gold background with a sunburst pattern of rays emanating from the top left. In the top left corner, there is a black fist icon surrounded by a red and white laurel wreath. The title 'Minimalism' is written in a bold, black, serif font in the upper right. Below the title is a bulleted list of ten principles. The number '37' is located in the bottom right corner of the slide.

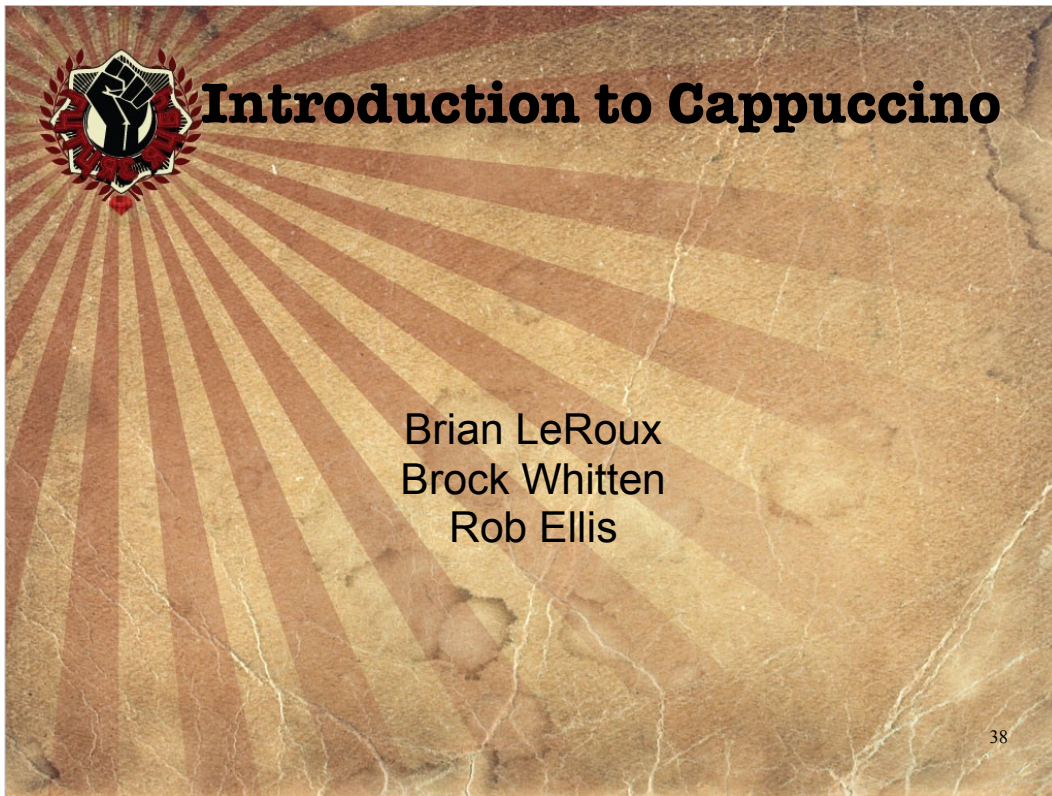
## Minimalism

- Simplest approach to a problem
- Clever code is bad code
- If it isn't local business logic, it should be in a library.
- Don't over-abstract
- Abstract when necessary
- You don't need meta-programming
- Actively clean up
- Apply these rules wisely
- Simple code is beautiful

37

He traced the history of minimalism in music and writing, as simple forms became complex and then rebooted with the best 20%

In the realm of writing, he covered George Orwell's *Politics and the English Language*, which I won't have time to review.



Whereas PhoneGap was made by web developers wanting to develop mobile apps, The guys from 280 North created Cappuccino for Mac developers wanting to make web applications.



## Web Programming for Mac Developers

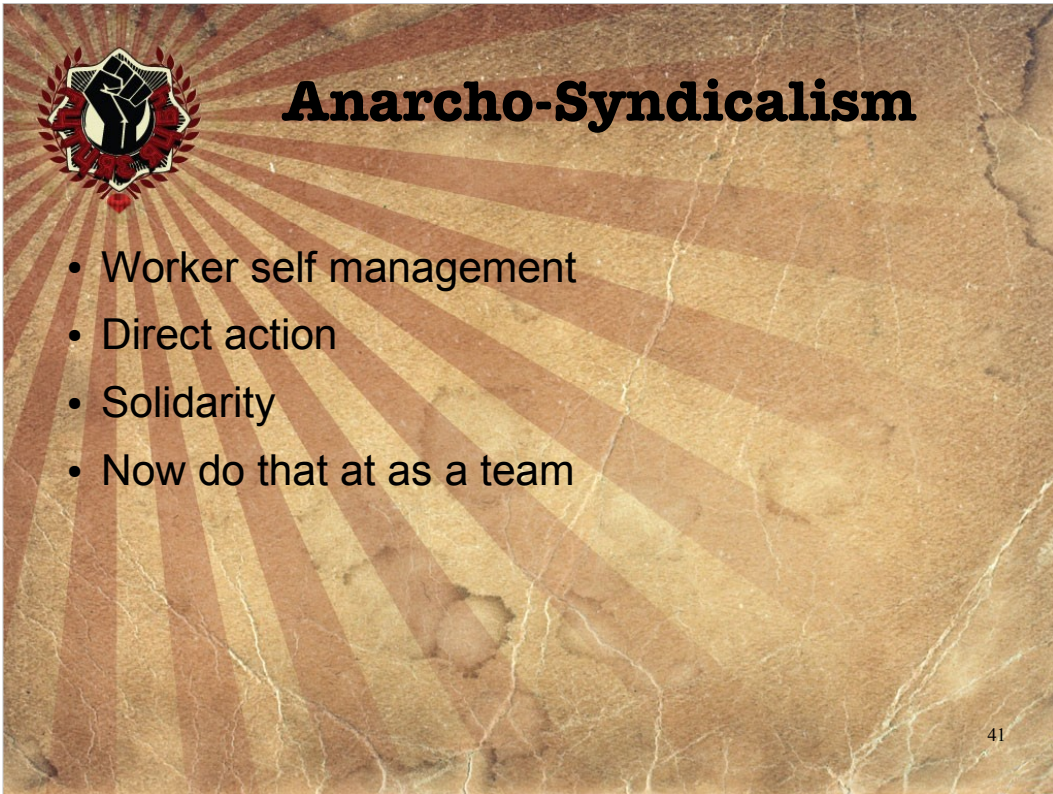
- Objective-J: Objective C for Javascript
- Set of widgets
- Open source GUI graphics
- Import Interface Apple's Interface Builder files
- Working on Atlas, a web app that works like Interface Builder

39

Cappuccino is built on Objective-J, an Objective-C for Javascript. It has a set of custom widgets, backed by open source graphics. Interfaces can be built in Apple's Interface Builder and imported, and 280 North is in the process of building Atlas, a web application for building web applications, which will replace the import with direct Interface Builder style editing.



Brian Marick wants us to adopt Artisanal Retro-Futurism crossed with Team-Scale Anarcho-Syndicalism

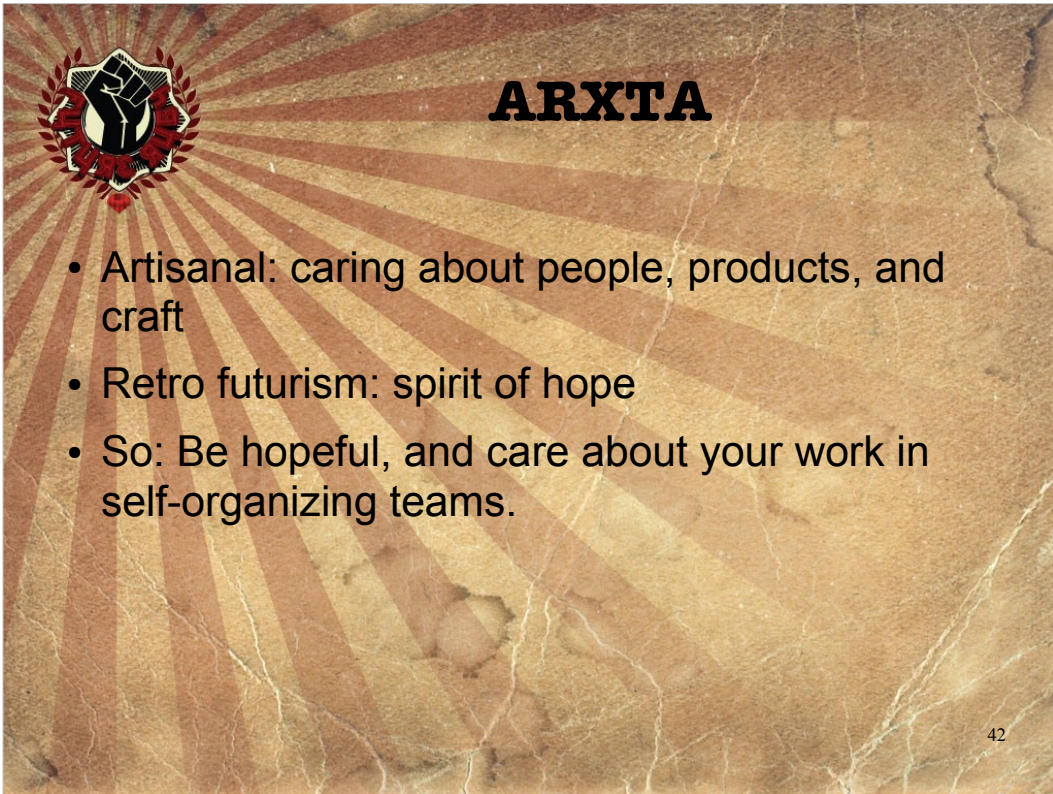


**Anarcho-Syndicalism**

- Worker self management
- Direct action
- Solidarity
- Now do that at as a team

41

Anarcho-Syndicalism was a movement built around Worker self-management, direct action, and solidarity. Brian asks us to apply this as teams rather than individuals.



- Artisanal: caring about people, products, and craft
- Retro futurism: spirit of hope
- So: Be hopeful, and care about your work in self-organizing teams.

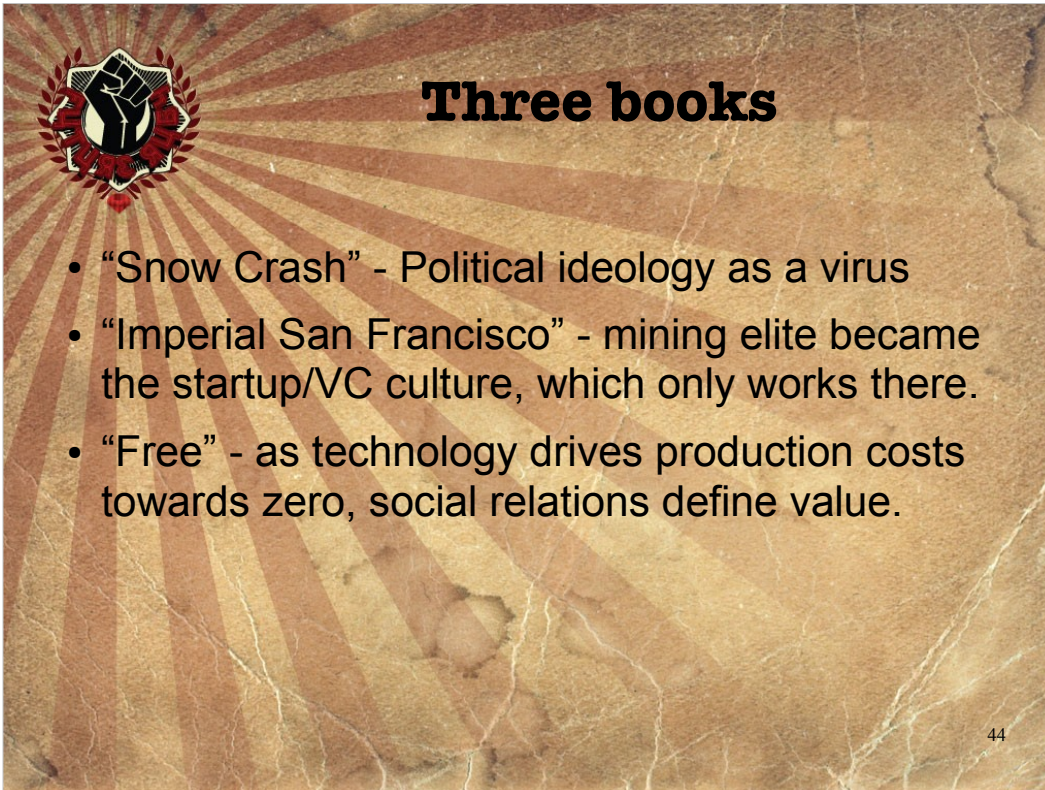
Artisanal signifies caring – about people, products and craft.

Retro-futurism tries to capture the feeling of hope from when people imagined flying cars and soaring towers.

All together: Be hopeful, and care about your work in self-organizing teams.



Jesse Hirsh closed out the conference with a warning against the californian ideology.



## Three books

- “Snow Crash” - Political ideology as a virus
- “Imperial San Francisco” - mining elite became the startup/VC culture, which only works there.
- “Free” - as technology drives production costs towards zero, social relations define value.

44

He claimed inspiration from three books.

Snow Crash introduced Political ideology as a virus; the virus at hand is the californian ideology

Imperial San Francisco charts the history of the mining elite which eventually begot the startup/venture capital culture – but it's a local phenomenon that doesn't really work outside that environment.

Finally, Free informs us that as technology drives production costs towards zero, social relations define value.



- Questions: [slides@JustinLove.name](mailto:slides@JustinLove.name)
- #futereruby on Twitter
- <http://www.opensourceconnections.com/2009/07/15/futereruby-characters-welcomed/>

- As I said, I haven't covered the half of it. If you want a link or to discuss an idea, track me down later. You can get a lot of pointers and pictures if you care to trawl through the futereruby tag on twitter. I already picked up one blog post that covered much of the conference.
- The best way to predict the future is to invent it – Alan Turing. (via Foy Savas)