



syngenio

We make IT work.

Introducing Weave

Tim Becker

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EURUKO2008

European Ruby Conference

Prague, March 29th – 30th





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Lessons Learned Writing Native Extensions

Tim Becker
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EURUKO 2008 - Prague
Sunday 2008-03-30 (14:30?)



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Tim Becker - „Lessons Learned Writing Native Extensions“

Type-along tutorial on how to write C extension for Ruby. Very interesting, this could actually make me write C code again... He has started talking on cats and tigers and it seems like he wants to teach us how arrays work in C. **Booooooooooring**. Finally he is done with this and is back on the interesting topics like conversion of data types. Overall a really interesting talk. By far the best one I've seen today so far. Tim's post with code samples and links.

Lessons Writing Extensions

EURUKO2008
Sunday 29th

```
VALUE rb_define_class
(const char *name, VALUE super);

void rb_define_method
(VALUE klass, const char *name,
 VALUE (*func)(), int argc);
```

... `Array.sort` is too slow to
sort the internet, so I
monkeypatched it natively ...

```

#####
# # # # # #
# # # # # #
# # # # # #
# # # # # #
# # # # # #
#####

```

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ESC		3	N
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/	/	/	/

```

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### # #

#####
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#####

```

```

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                _mms   d
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,_. ,@@@@@@@@@@@@@@@@@@@@
g@@@@msW@@@@@@@@@@@@@@@@
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~M@@@@@@Af   VM@@@@@@@@
i@@@@@f   V@@@@@@@@
@@@@@f   V@@@@@Af
]@@@@@@@@@P   Y@@@@@
@@@@@@@@@`   '@@@@W
'~*@@@@@   @@@@@_
@@@@@.   ,@@@@@
Y@@@@@b   d@@@@@

```

When you really want to catch a coder by surprise, a monkey doesn't cut it. What you need is a **Ninja**.



When you really want to catch a coder by surprise, a monkey doesn't cut it. What you need is a **Ninja**.

... silent, untraceable,
precise, unpredictable,
and always deadly....



When you really want to catch a coder by surprise, a monkey doesn't cut it. What you need is a **Ninja**.



... silent, untraceable, precise, unpredictable, and always deadly....

And unlike monkey patching (...) Ninja-Patching happens when you least expect it.



Monkey Patching Demo

A Web Server Called *Ebb*

Ebb aims to be a small and fast web server specifically for hosting dynamic web applications. It is not meant to be a full featured web server like Lighttpd, Apache, or Nginx. Rather it should be used in multiplicity behind a load balancer and a front-end server. It is not meant to serve static files in production.

At one level Ebb is a minimalist C library that ties together the [Mongrel state machine](#) and [libev](#) event loop. One can use this library to drive a web application written in C. (Perhaps for embedded devices?) However, most people will be interested in the binding of this library to the Ruby programming language. The binding provides a [Rack](#) server interface that allows it to host Rails, Merb, or other frameworks.

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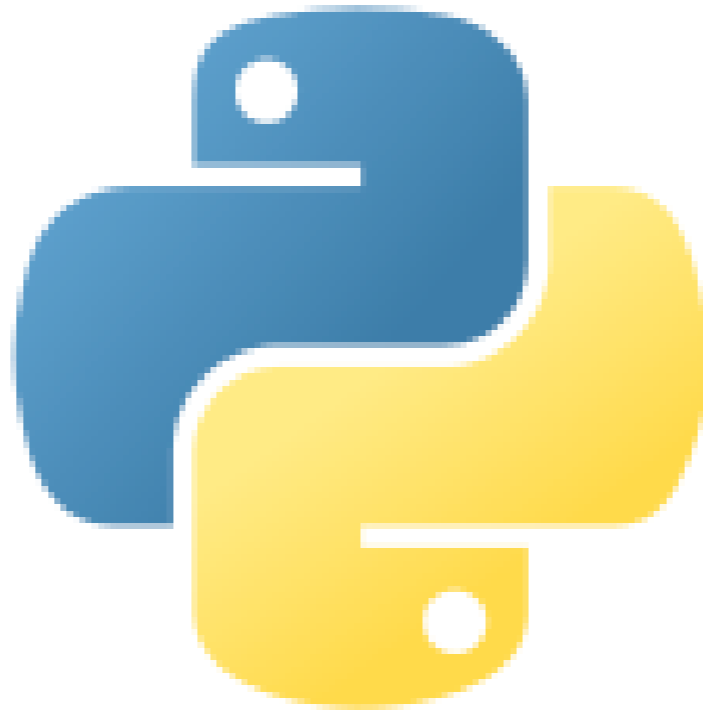
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Ruby people like meta.

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Ruby people like metameta.

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Ruby people like self-referentiality.

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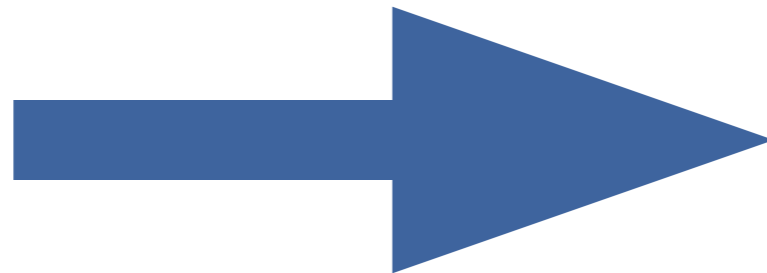
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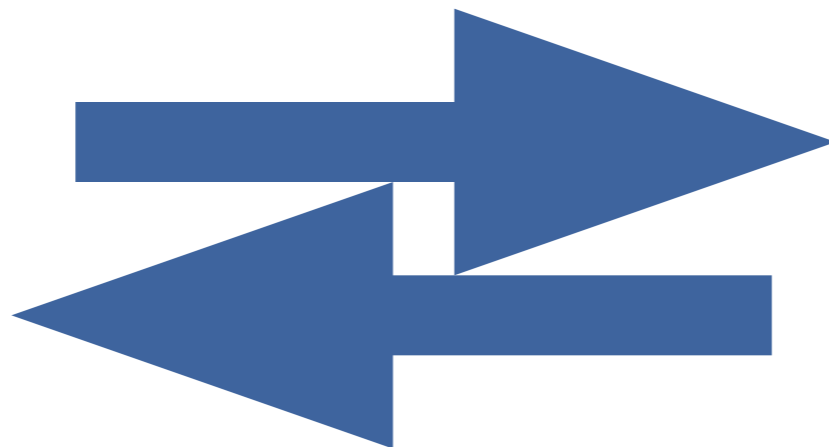
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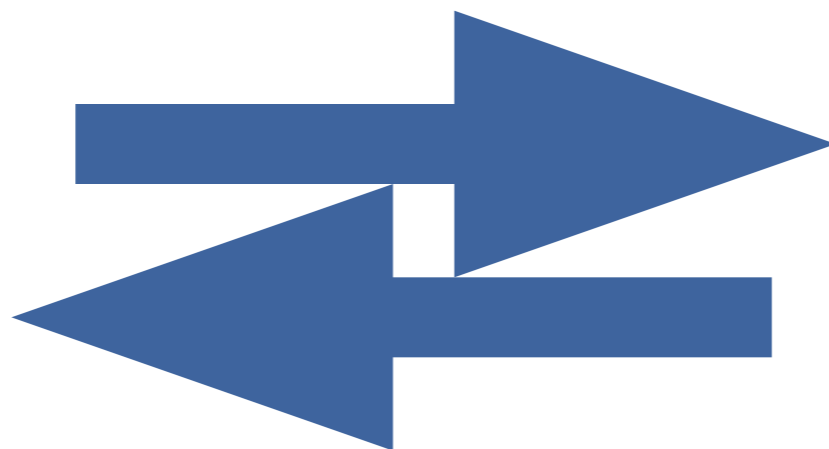
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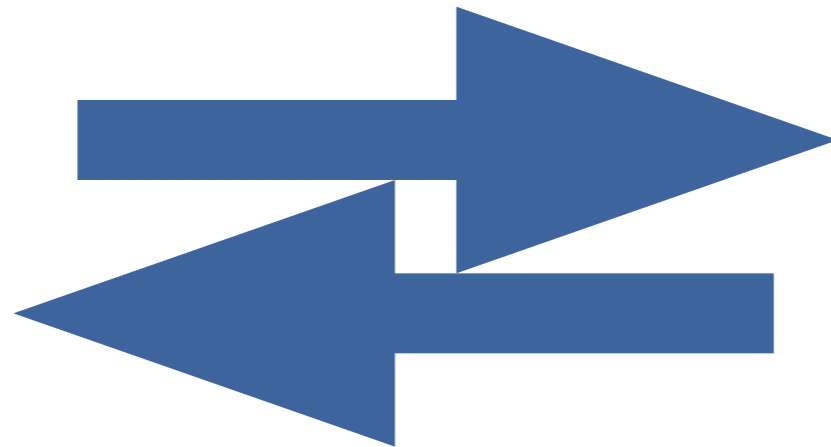
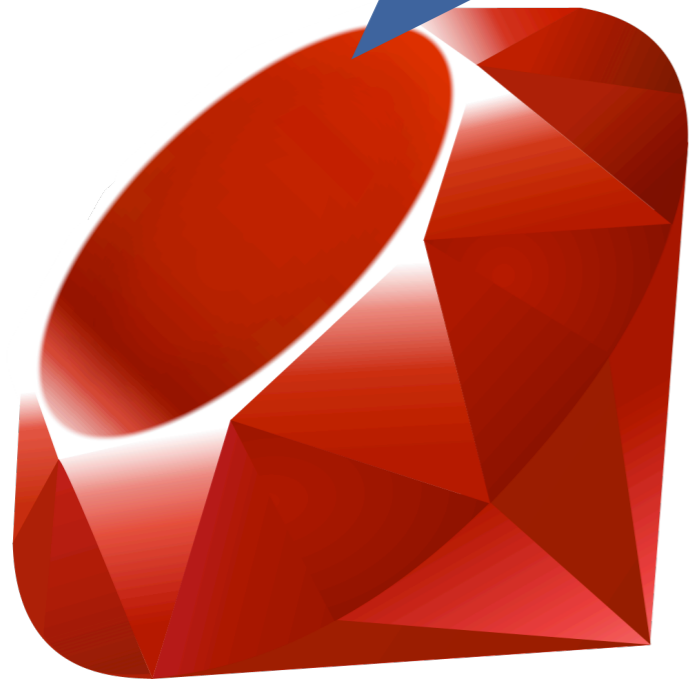
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Ruby people use meta.

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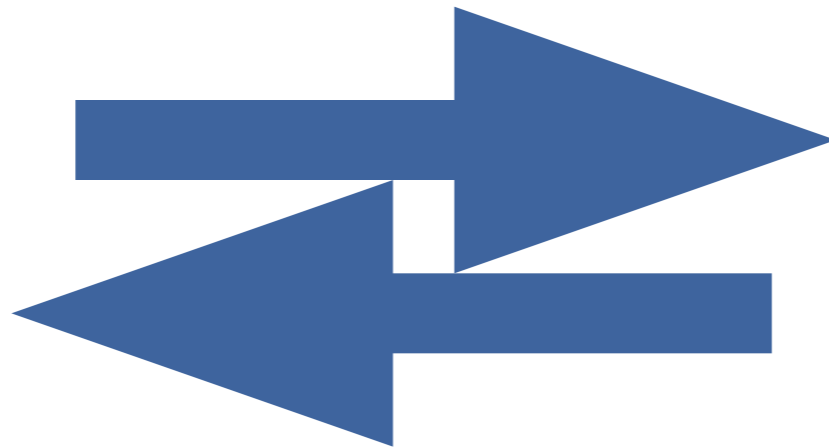
Ruby people use self-referentiality.

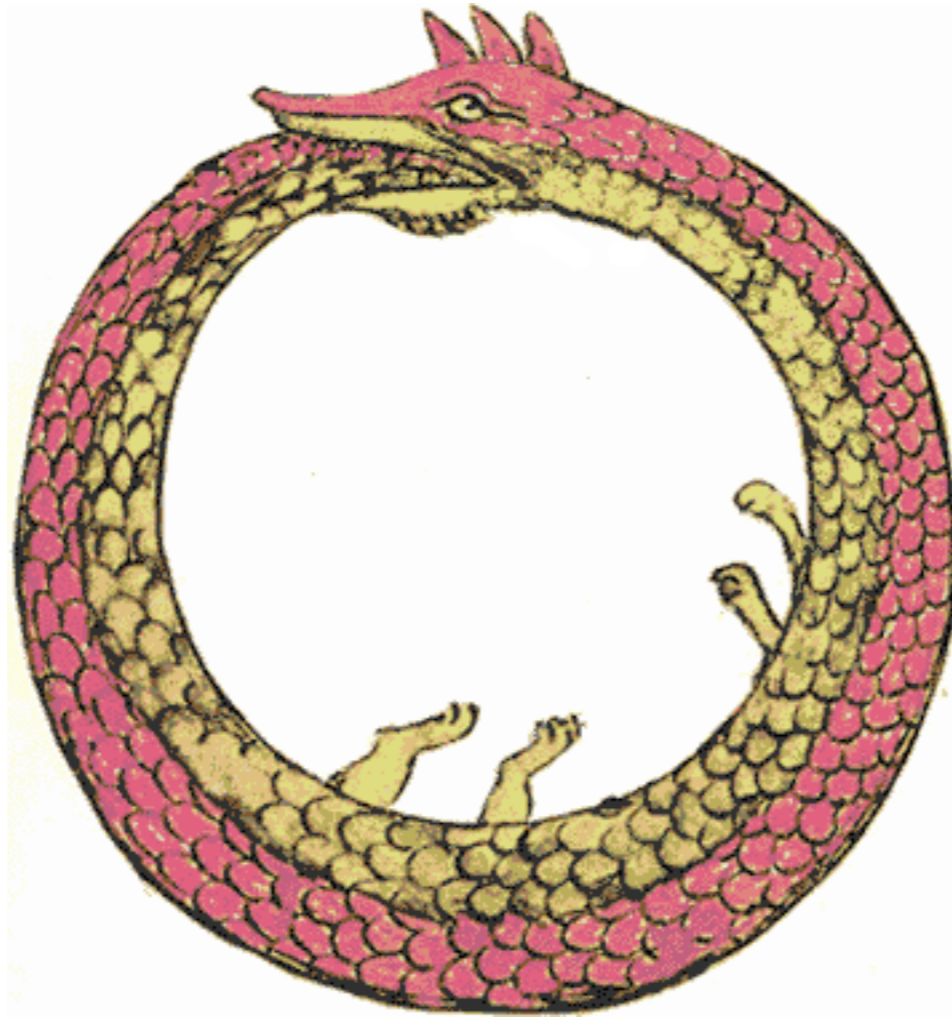


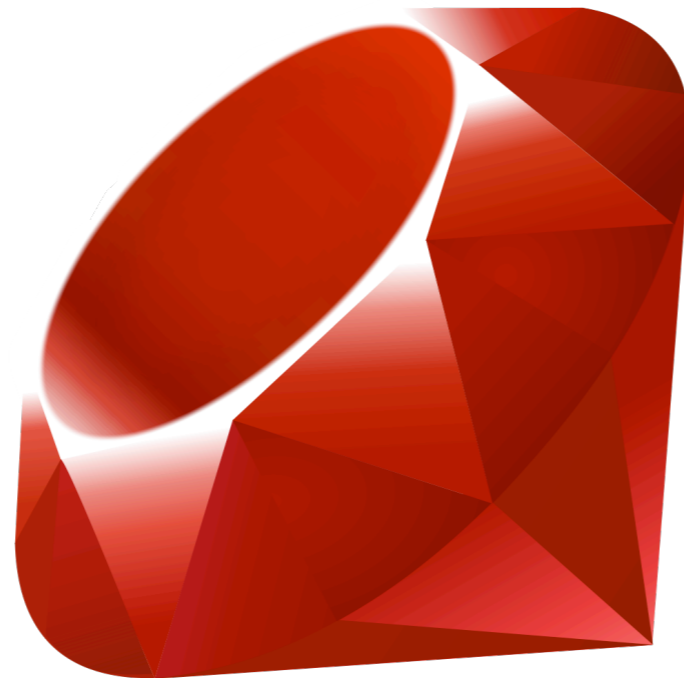
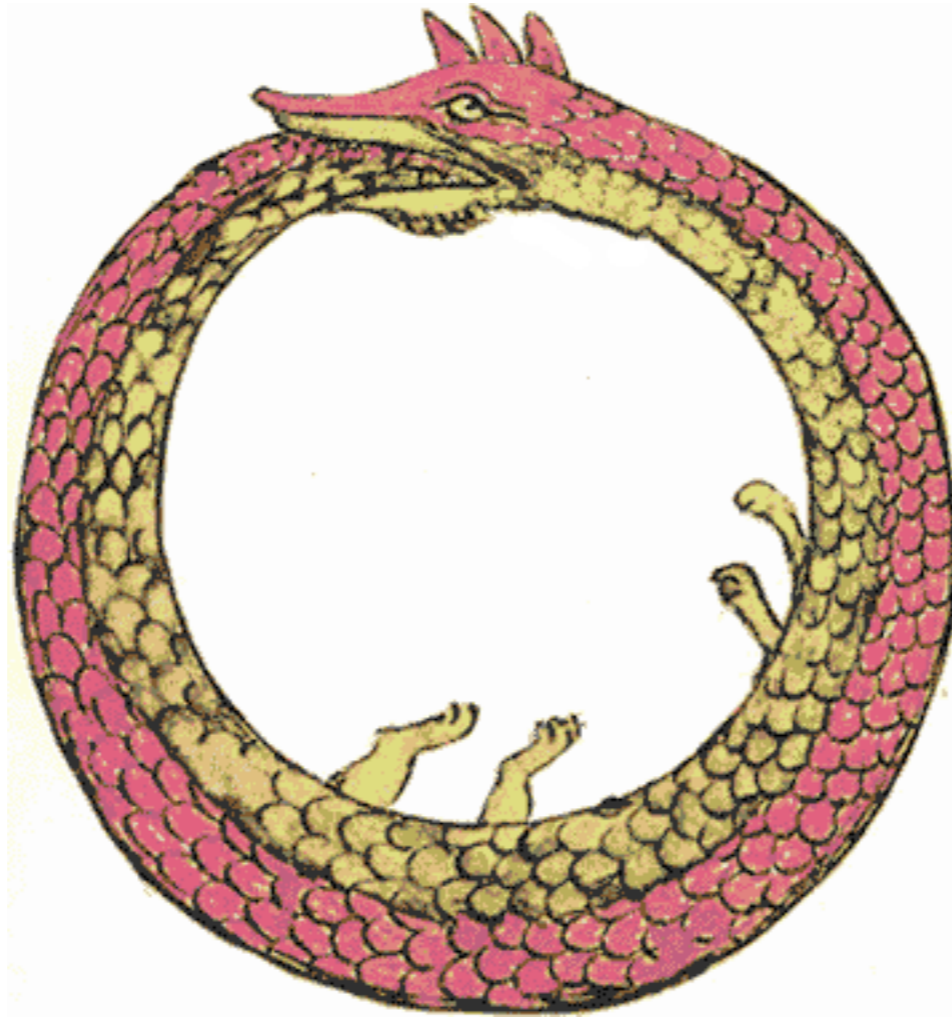
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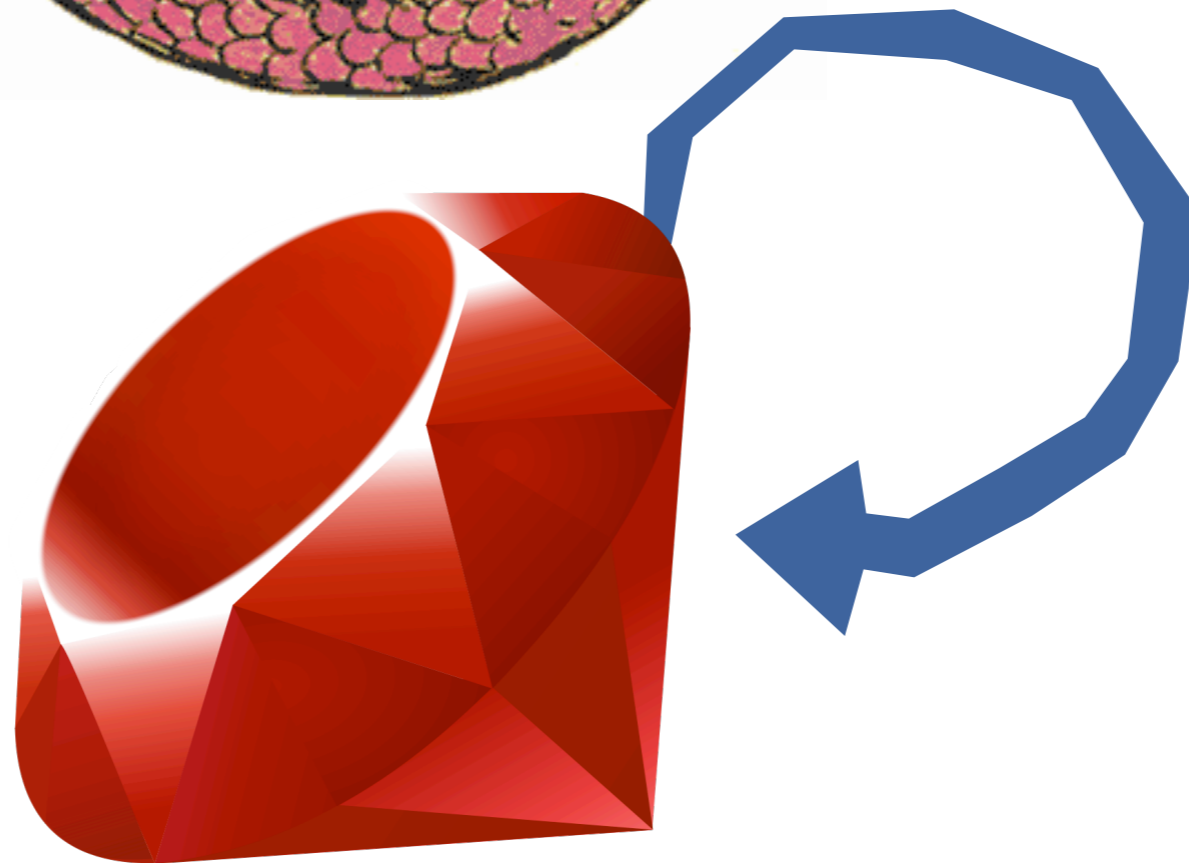
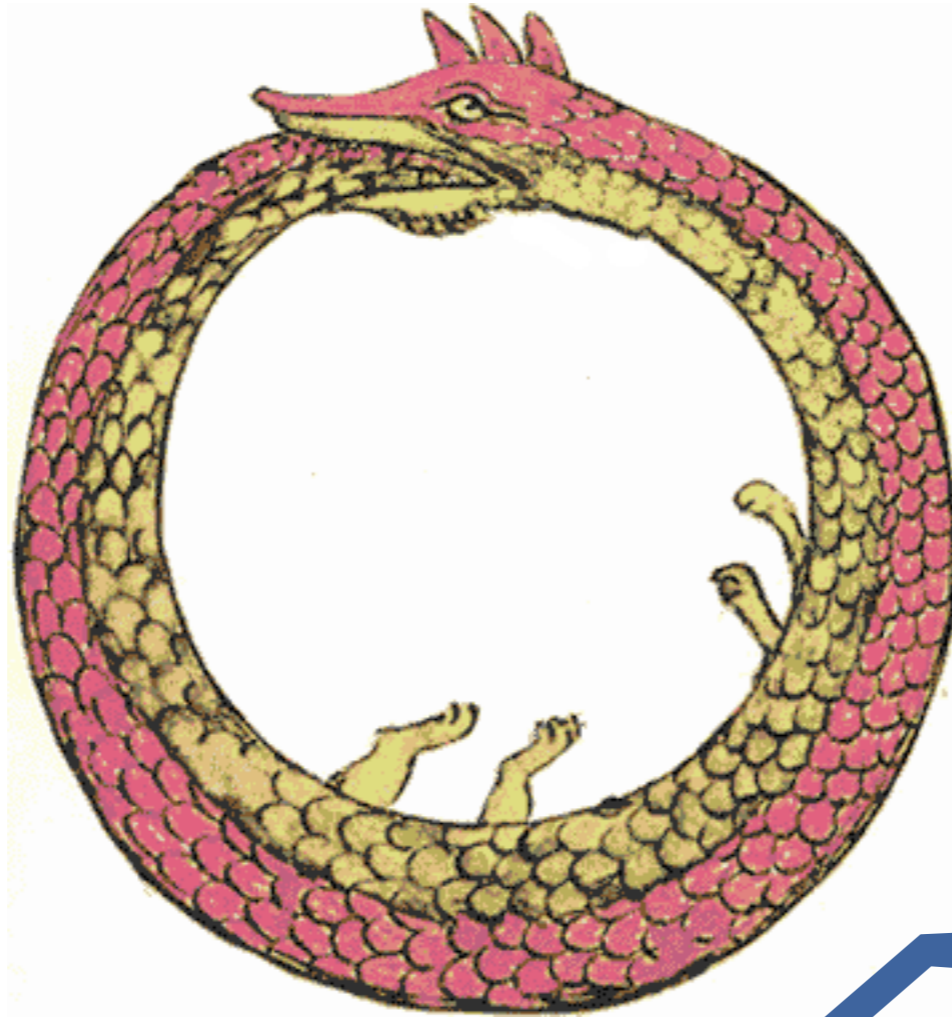
Ruby people use metameta.

Ruby people use *erlang* essentiality.









```
VALUE rb_define_class
(const char *name, VALUE super);

void rb_define_method
(VALUE klass, const char *name,
VALUE (*func)(), int argc);
```

```
module Weave
  def self.rb_define_method(
    klass, name, sym, arity)
    # (...)
  end
  def self.rb_define_singleton_method(
    object, name, sym, arity)
    # (...)
  end
end
```

Weave:

Weave:

monkey patching

Weave:

native

monkey patching

Weave:

live

native

monkey patching

Weave:

red hot
live

native

monkey patching



Monkey Weaving Demo

Links

Ninja Patching:

<http://avdi.org/devblog/2008/04/01/announcing-ninja-patching/>

Ebb:

<http://ebb.rubyforge.org/>

Slides:

<http://blog.kuriositaet.de/>

Weave:

<http://weave.rubyforge.org/>

Thank you!
Questions?

No, it has no practical use.