

**M-X EMACS-MEETUP**

**London**

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by **@DOTEMACS**

**ABOUT MODES**

**WHAT ARE MODES?**

**"...ENCAPSULATE A SET  
OF EDITING BEHAVIOURS."**

**- Bob Glickstein**

# YUKIHIRO MATZ

CHIEF DESIGNER OF THE RUBY PROGRAMMING LANGUAGE

**"I STARTED RUBY DEVELOPMENT WITH  
INFLUENCE FROM EMACS IMPLEMENTATION"**

**"BUT AS AN EMACS ADDICT  
I NEEDED A LANGUAGE MODE"**

**"AUTO-INDENT WAS A MUST"**



**"BACK IN 1993,  
THERE WAS NO AUTO-INDENTING  
LANGUAGE MODE  
FOR A LANGUAGE WITH SUCH SYNTAX"**

**"I SOMEHOW SUCCEEDED  
IN IMPLEMENTING AUTO-INDENT  
FOR A LANGUAGE  
WITH 'END' DELIMITERS"**

**"IF I COULDN'T MAKE RUBY-MODE WORK  
THE SYNTAX OF RUBY WOULD  
HAVE CHANGED TO MORE C-LIKE ONE,  
TOO SIMILAR TO OTHER SCRIPTING  
LANGUAGES AND AS A RESULT,  
RUBY WOULD NOT HAVE GAINED CURRENT  
POPULARITY"**

**HOW WAS IT DONE  
BEFORE?**

**BOB GLICKSTEIN**

**&**

**SCOTT ANDREW BORTON**

**MODES**

**TWO TYPES**

**MINOR & MAJOR**



**MINOR MODE**

# DEFINITION

(DEFINE-MINOR-MODE <NAME>-MODE ....)

**NAME**

**:LIGHTER**

# KEYMAP

SPECIFIC FOR THE MINOR-MODE

: keymap

**VARIABLE <NAME>-MODE**

**COMMAND CALLED** <NAME>-MODE  
that can toggle the mode on/off

# ADD IT TO A HOOK

```
(add-hook 'some-mode 'your-mode)
```

**MAJOR MODE**



**NAME**

# HOOKS

<name>-mode-hook

# SYNTAX TABLE

**ENTRY FUNCTION**  
**<nname>-mode**

**WHICH SHOULD DO  
THE FOLLOWING:**

**SYNTAX HIGHLIGHTING**

**WRITE OPTIMISED REGEXPS**

**or**

**USE REGEXP-OPT**

**INDENTATION**

# **SYNTAX TABLE**

## **"BEHAVIOUR"**

### **&**

## **MOVEMENT**



**REMOVE ALL BUFFER-LOCAL VARIABLES**  
(kill-all-local-variable)

# SET THE VARIABLES

```
major-mode TO <name>-mode  
mode-name TO string "<name>"
```

**INSTALL MODE  
SPECIFIC KEYMAP**

**OPTIONS FOR KEYMAP**

**SPARSE-KEYMAP**

**DEFINE YOUR OWN**

# BIND MODE TO FILES

(ADD-TO-LIST 'AUTO-MODE-ALIST '("\.BAR\"). FOO-MODE))

# RUN USER DEFINED HOOKS FOR THE MODE

Defined with

**<NAME>-MODE-HOOK**

**PROVIDE MODE**  
**(PROVIDE '◁NAME▷')**

**COOKIES**

**...###AUTOLOAD**



**THIS SOUNDS LIKE  
A LOT OF WORK.  
WHY RE-INVENT THE WHEEL?**

# COOKIE CUTTER

sample-mode - 2001

derived-mode

**CHECKDOC**

**THANK YOU**



# NOTES

- » Yukihiro Matz's notes on Ruby syntax design

- » How to write a minor mode

- » Book

"Writing GNU Emacs Extensions" by Bob Glickstein

- » Mode Tutorial

- » sample-mode

- » checkdoc