How Emacs changed my Life

Yukihiro "Matz" Matsumoto
@yukihiro_matz

1980

I started programming

BASIC

400 steps

1988

I met Emacs

on Sun-3

shared by 200 undergraduates

I tried Emacs

but I never used

Emacs was prohibited

It consumed too much precious memory

We are free to download free software

We are free to read the source code

I downloaded Emacs source code

and investigated

Emacs was my first Lisp interpreter

I learned a lot about language implementation from Emacs

Embedding integers in pointers

Mark and sweep garbage collection

Calling convention between Lisp and C

I really understood how Lisp work

I was fascinated by Lisp objects

Lisp objects implemented by C

Then I got a Sparc Station

I started to use Emacs

Emacs become part of me

If I didn't like anything in Emacs, I could change it

Emacs is totally configurable

Emacs made me realize anything can be changed by a programmer

It is total freedom

I could edit without thinking key binding

I didn't want to write anything without Emacs

Programs, Documents and Mails

so I wrote my own mail client

named "cmail"

in Emacs lisp

It was my first non-trivial (Emacs) Lisp program

I used it everyday

1993

I started Ruby development

with influence from Emacs implementation

Integers are coded in tagged pointers

It uses simple mark and sweep garbage collector

It uses similar object model to Lisp

Then I put Smalltalk-like OO system on top

For syntax, I wanted Algol/Ada/Eiffel like one

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

So I tried to write experimental ruby-mode.el

fighting with emacs lisp and regular expression,

for almost whole week

I somehow succeeded to implement auto-indentation

for a language with "end" delimiters

If I couldn't make ruby-mode to work

the syntax of Ruby would have changed

to more C-like one

too similar to other scripting languages

as a result, Ruby would not have gained current popularity

Summary

1. Emacs taught me freedom for software

2. Emacs taught me how to read code

3. Emacs taught me power of Lisp

4. Emacs taught me how to implement a language core

5. Emacs taught me how to implement a garbage collector

6. Emacs helped me to code and debug

7. Emacs helped me to write and edit text/mails/documents

8. Emacs helped me to be a effective programmer

9. Emacs made me a hacker

10. Emacs has changed my life

forever

Thank you