Sharpening the tools

Dan North, DRW

http://en.wikipedia.org/wiki/File:ALM_05_Dolch_edit2.jpg

How you become a software craftsman

The Dreyfus Model

Novice programmer
Advanced beginner
Competent
Proficient
Expert
...
Novice architect...

Along the way you gather some tools

Technical tools

- Languages and libraries
- IDEs, Operating Systems
- SCM and build tools
- “Back pocket” utilities

Programming tools

- Refactoring
- TDD
- Patterns

Modelling tools

- UML, DDD
- Lo-fi prototyping

Methodology tools

- XP, Scrum, BDD
- Lean, Kanban, ToC

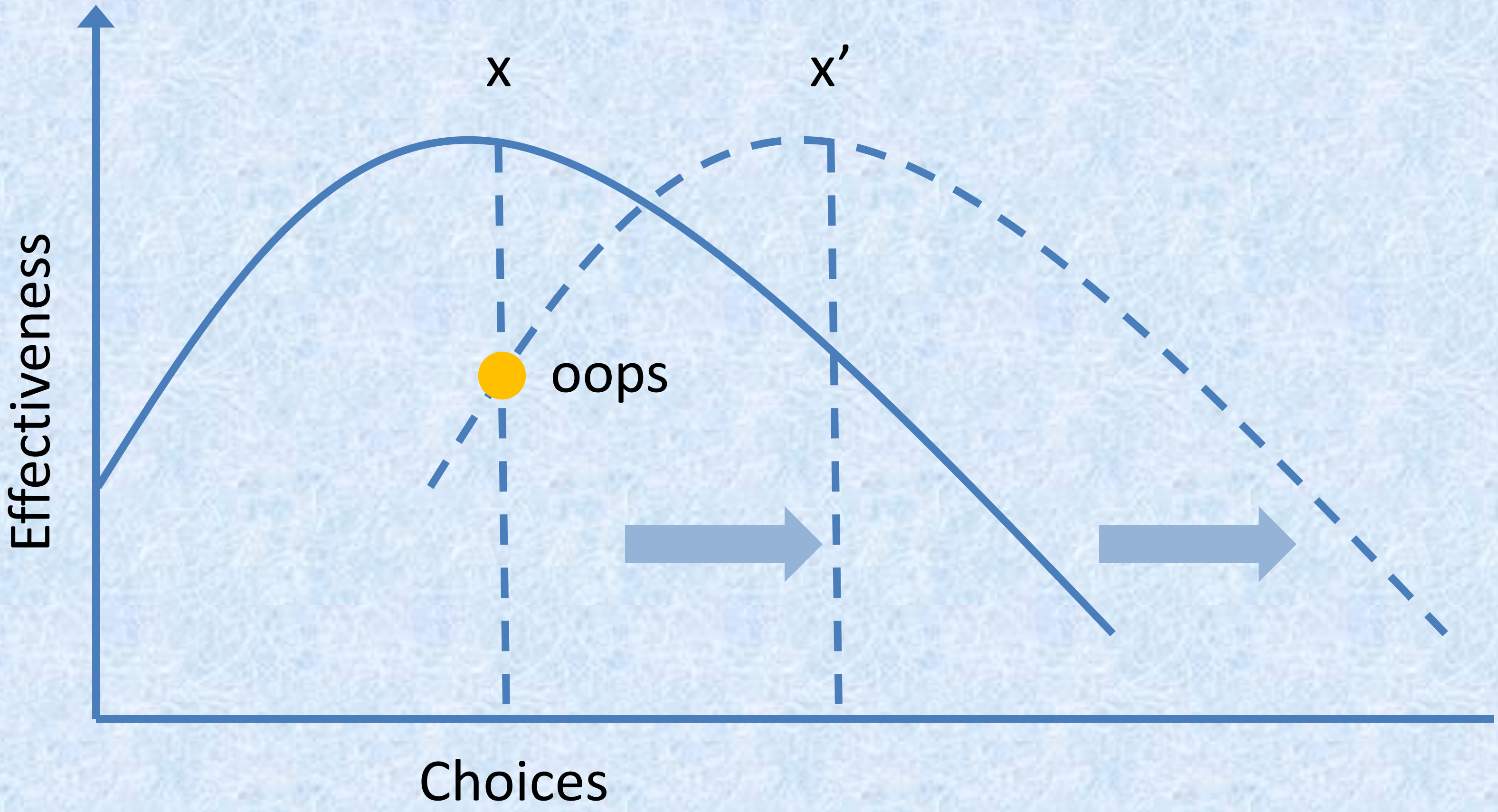
Personal tools

- To-do lists, GTD, Pomodoro
- GROW framework
- NLP “chunking”

Group tools

- Six thinking hats
- Stand-ups
- Retrospectives

Meanwhile…



John Roberts – the Modern Firm

Then one day I got a shock

I hadn’t been “doing” software for a while...

or any *real* coding

but surely it’s like riding a bike?

It’s scary how quickly your skills can atrophy

Tip #1: Practise the basics

Practise kata

Code for fun!

Learn a new language *that you don't need!*

Learn shortcuts

Practise your shell-fu

Tip #2: Learn from other people

Stalk experts

Listen to novices

Read books, blogs and online magazines

Read code

Follow people on Twitter

Programme in pairs

Tip #3: Understand trends

Build a network of people you listen to

This time last year I knew nothing about

- distributed SCM
- Clojure, Erlang and Scala
- HTML 5, WebSockets, JavaScript, V8
- NOSQL data stores

This year I know *nearly* nothing

Do you know what you don't know?

Tip #4: Share knowledge

Blog about your successes – and your failures

- You never know what people might find useful

Join mailing lists

- Don’t just lurk, answer questions

Organise learning lunches

- or Muffin Mornings

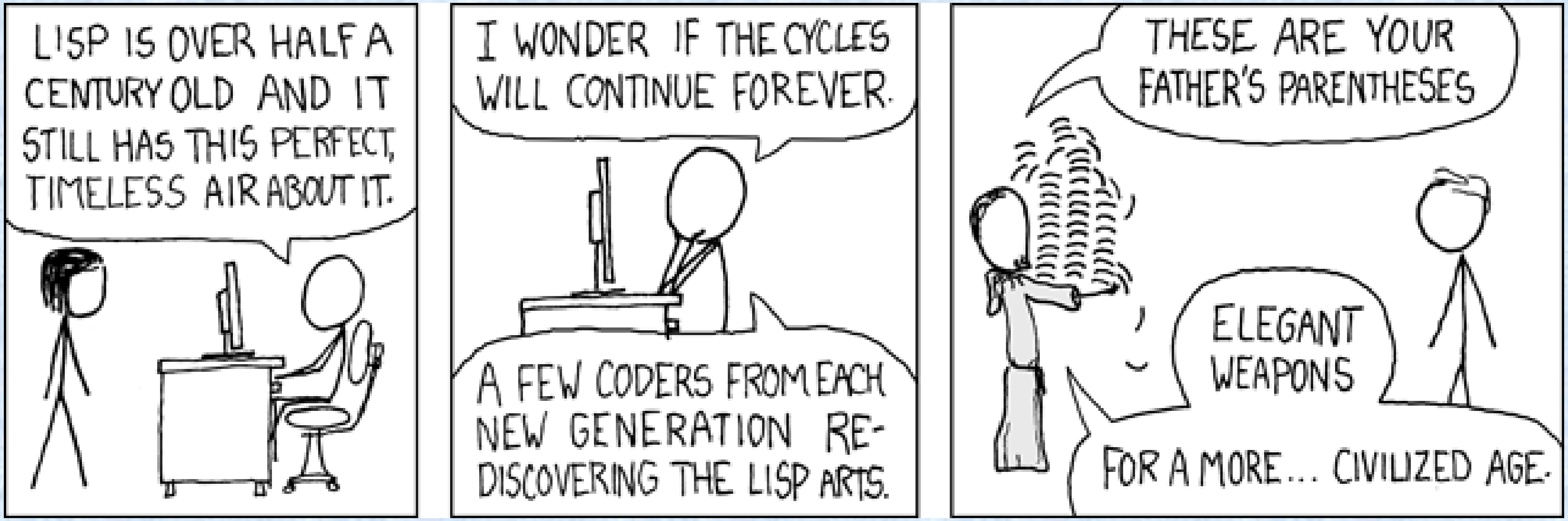
Speak at conferences

Tip #5: Maintain your toolbox

Some tools are timeless, some are disposable

Some tools are a delight to rediscover

Use the “clothing” rule to update your tools


LISP IS OVER HALF A CENTURY OLD AND IT STILL HAS THIS PERFECT, TIMELESS AIR ABOUT IT.
I WONDER IF THE CYCLES WILL CONTINUE FOREVER.
A FEW CODERS FROM EACH NEW GENERATION RE-DISCOVERING THE LISP ARTS.
THESE ARE YOUR FATHER'S PARENTHESES
ELEGANT WEAPONS
FOR A MORE... CIVILIZED AGE.

http://xkcd.com/297/

Tip #6: Learn how to learn

Understand how learning works

Understand second-order incompetence

Start using Six Thinking Hats

Practise chunking

And then do it all again!

Eat your own dogfood

Actively solicit feedback

“Listen like you don’t know the answer”

Conclusion

Always assume you are out of date

- Never stop gathering and sharpening your tools

You owe it to yourself to keep current

- as well as to your team and your organisation

It's a continual cycle of learning and relearning

Thank you

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