

becoming a better programmer

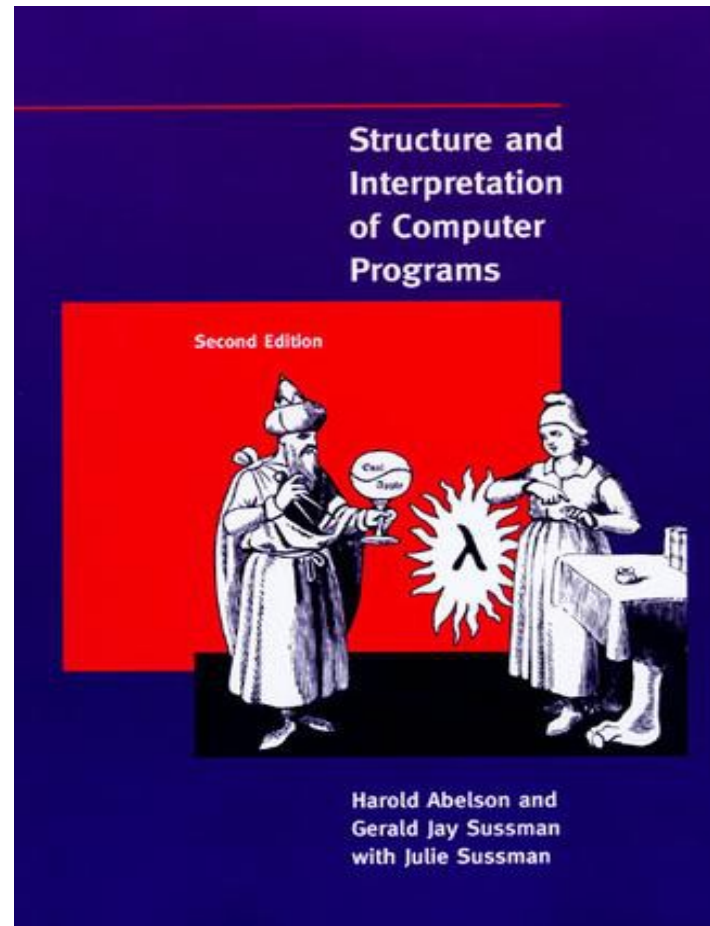
Harald Armin Massa
Lightning Talk Man

EuroPython 2012
Firenze, Italy

```
apt-get --purge remove java
```

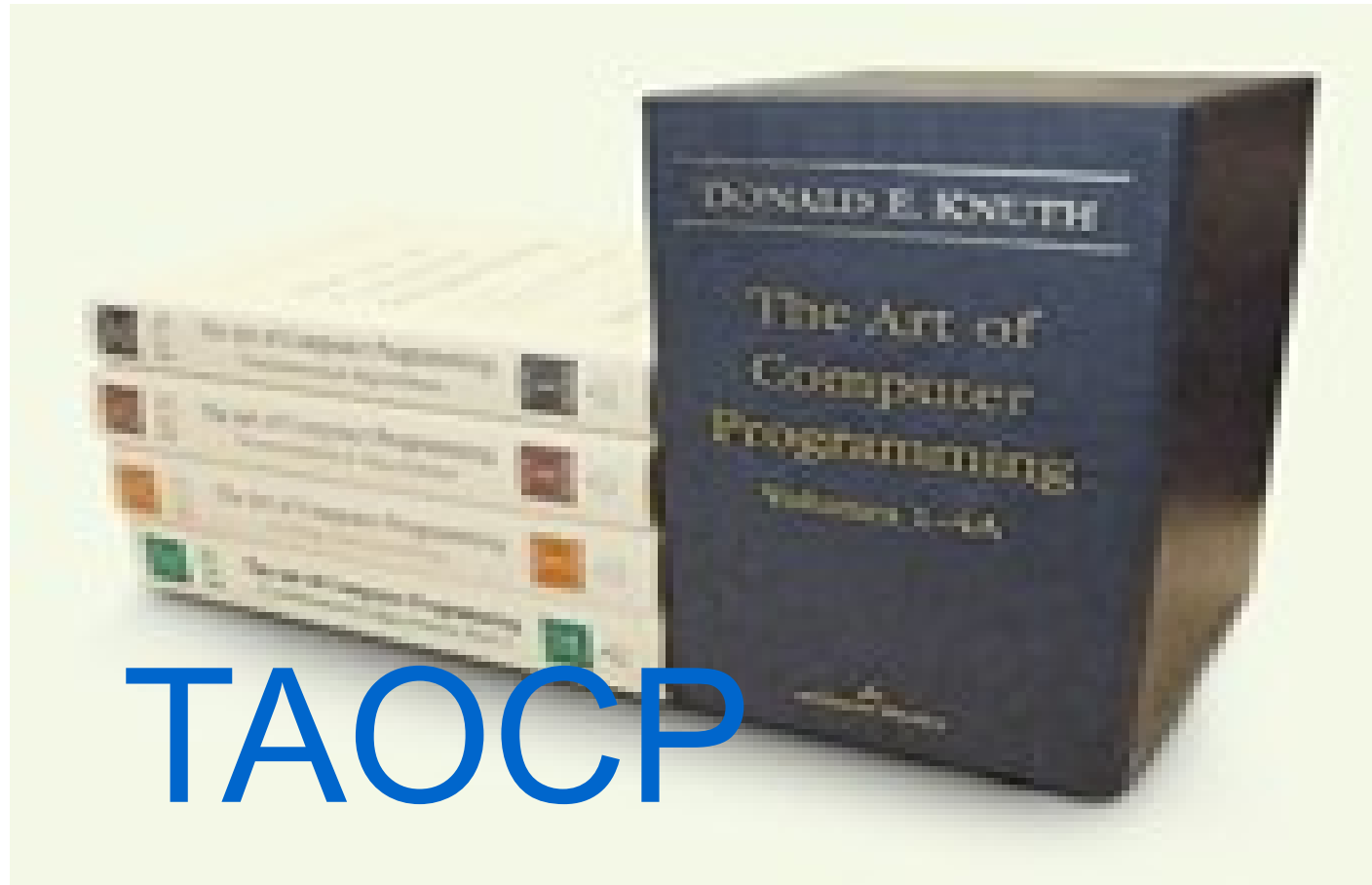
you are using THE programming language

you worked through...

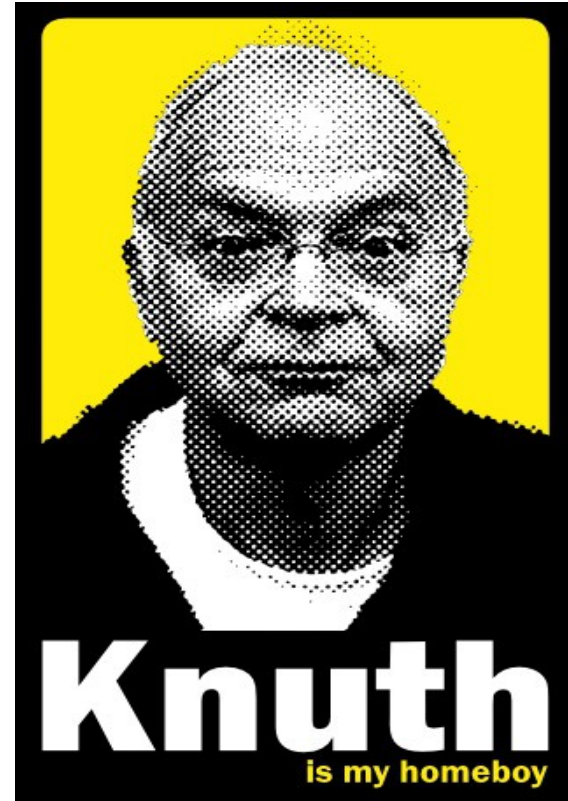


picture source:
<http://mitpress.mit.edu/sicp/>

and you completed this mission...



maybe even reached the bonus



picture source:
Geekz Shop, <http://http://geekz.co.uk>, out of business

created your own...

web framework

web framework
templating framework

web framework

templating framework

templating language very similar
but with slightly different quirks
then Python / C / Perl / ...

web framework
templating framework
templating language very similar to
but with slightly different quirks
then Python / C / Perl / ...
your own packaging system

i.e. the programmers version of

„build a house, plant a tree,
and have a son“

Grenzabstandsvorschriften für
Bäume, Hecken, Sträucher und
sonstige Pflanzen sind in den
landesrechtlichen
Nachbarrechtsgesetzen enthalten

Nachricht von Diskussion [reddit.com rewritten in Python](#)

Harald Armin Massa [Profil anzeigen](#) [Übersetzen in di](#) [Weitere Optionen](#) 5 Dez. 2005, 18:43

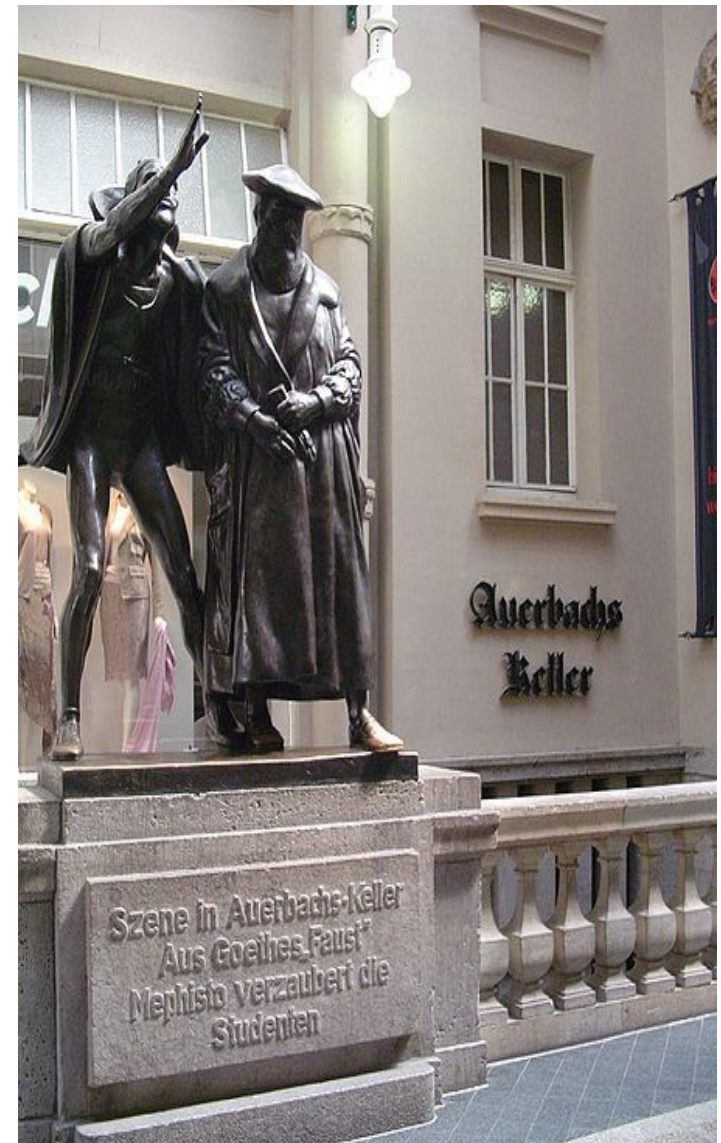
Yeah! Another web framework for Python!

Now we can prouldy say: Python: the only language with more web frameworks than keywords

Harald

Johann Wolfgang von Goethe, Faust Der Tragödie erster Teil

first part of the tragedy,
prima parte della tragedia

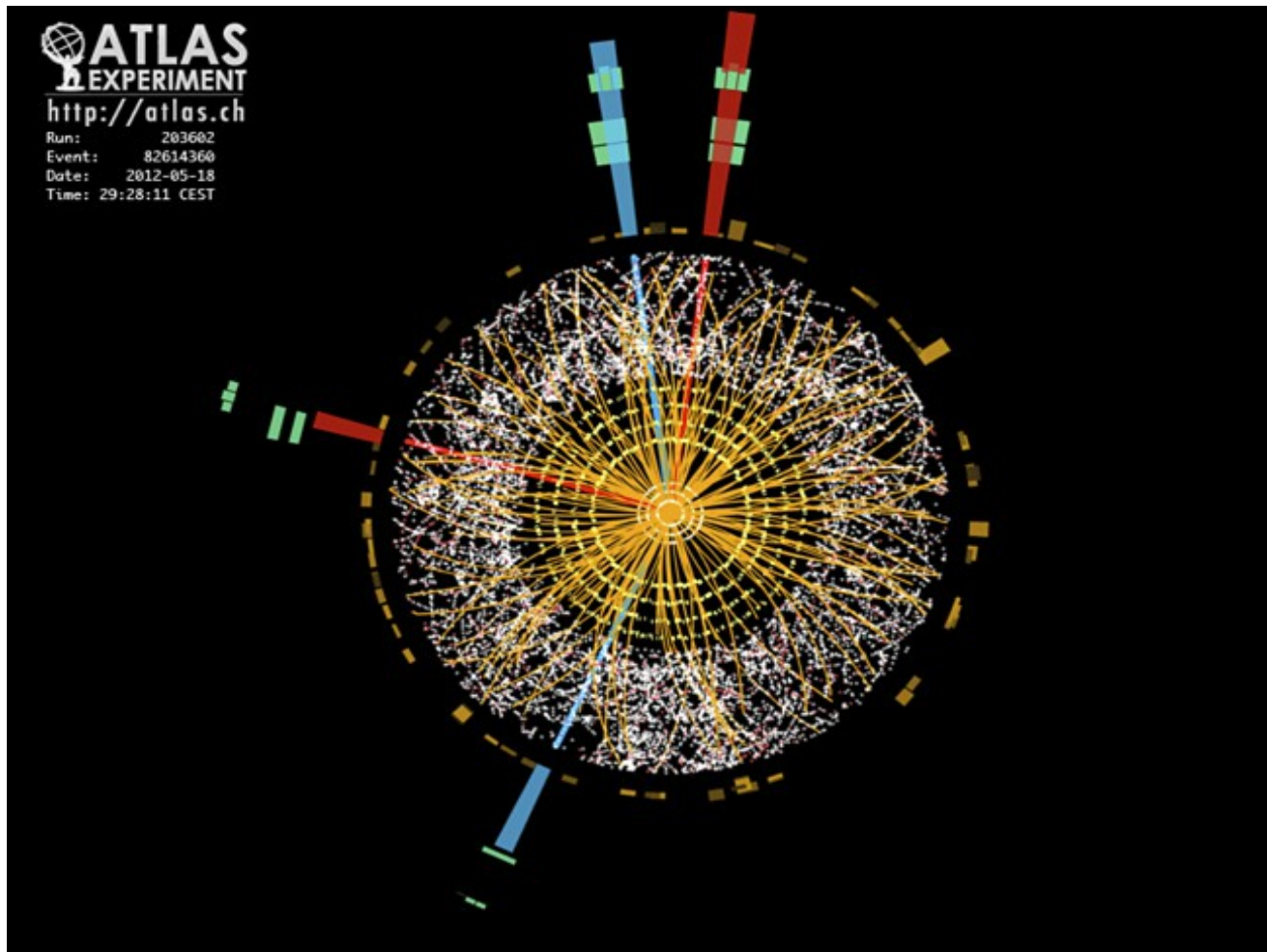


Habe nun, ach! Philosophie,
Juristerey und Medicin,
Und leider auch Theologie!
Durchaus studirt, mit heißem Bemühn.
Da steh' ich nun, ich armer Thor!
Und bin so klug als wie zuvor;

I've studied, alas, philosophy,
Law and medicine, recto and verso
And how I regret it, theology also
Oh, God, how hard I've slaved away,
With what result? Poor fool that I am,
I'm no whit wiser than when I began!

Daß ich erkenne, was die Welt
Im Innersten zusammenhält,





picture source:
<http://www.atlas.ch>

2012-07-04

New Boson detected at
125.3 +/- 0.6 GeV
with 4.9 standard deviation

GenericStatementOfWork.pdf -> 120.376 bytes
Generic.7z -> 115.281 bytes

faust-goethe-ebook-italian.pdf -> 1.251.786 bytes
faust.7z -> 1.178.432 bytes

115281		1178432
120376		1251786
0,957674		0,941400



and the current
shall flow
inhibited by
20 Ohm resistance



Big Bang Theory Series 4 Episode 03 – The Zazzy Substitution

Sheldon: A breakup would imply she was my girlfriend. She was a girl who was my friend who is now a girl who is not my friend.

Penny: Wow. That's like the worst country song ever. So, how are you doing?

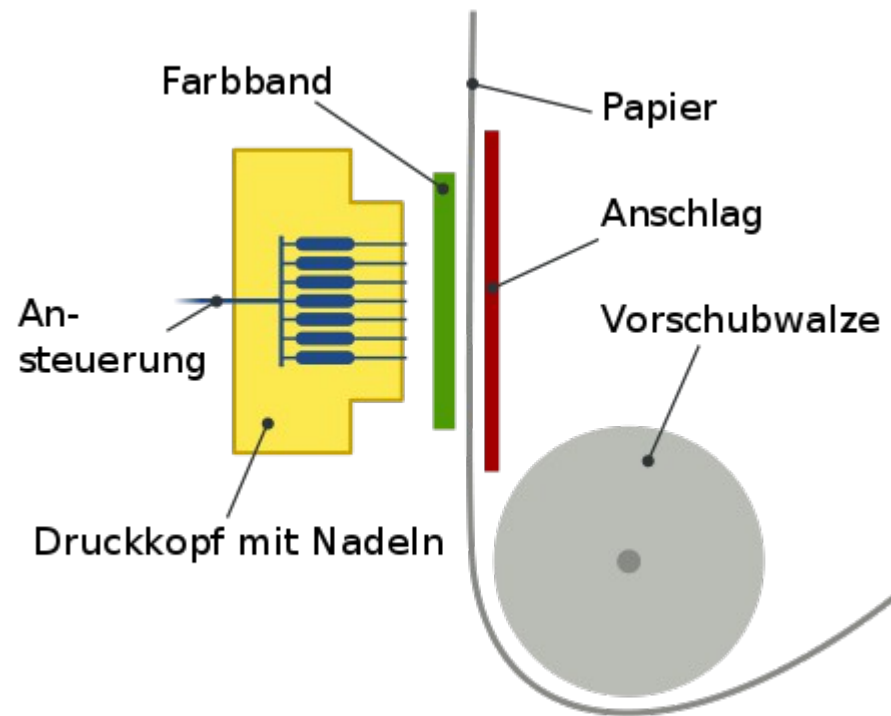
SQL for databases

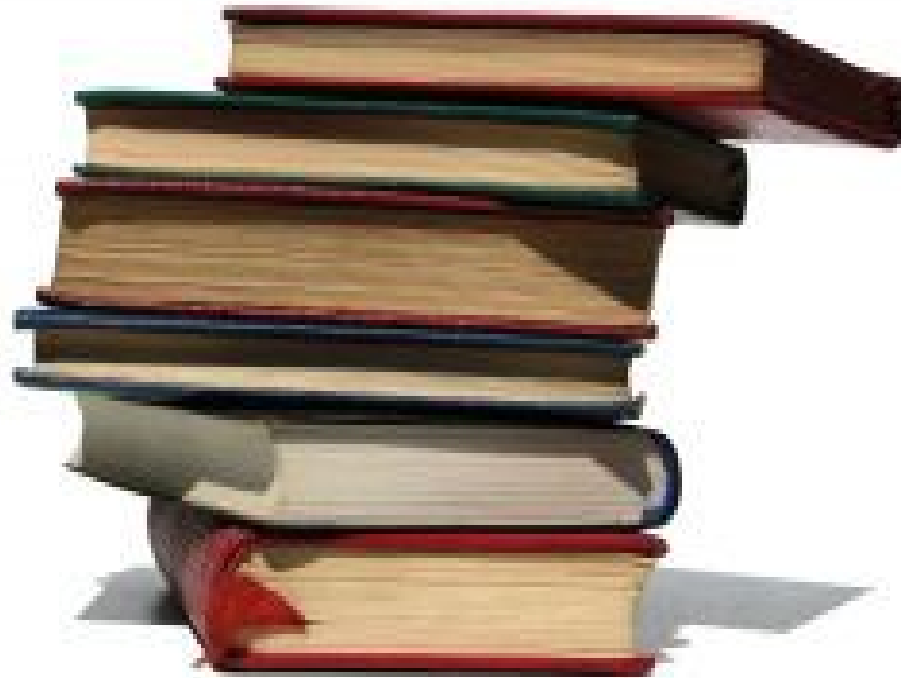
HTML, CSS

Javascript, learn to enjoy
the pain of the DOM

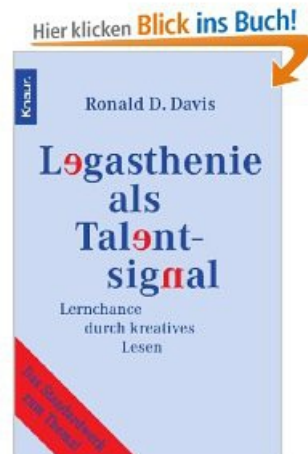
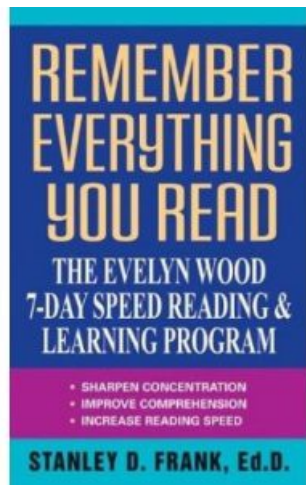
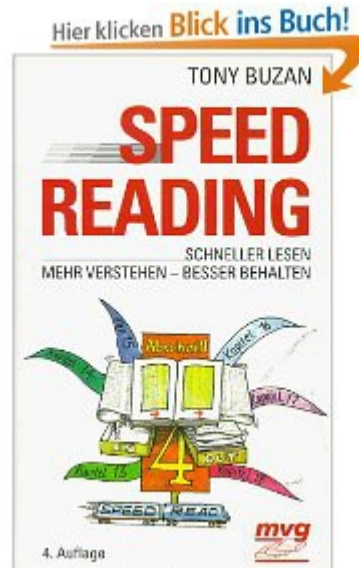
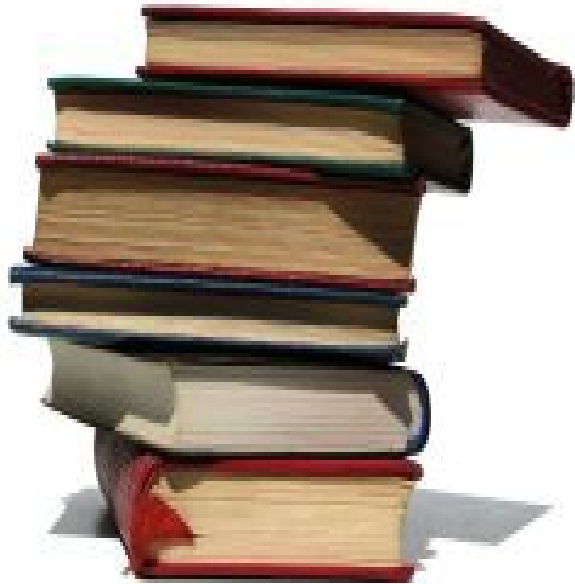


picture source:
wikipedia, Nadeldrucker Photo by User:Jarlhelm





picture source:
<http://blog.mkedu.org/>



concepts

WPM – words per minute

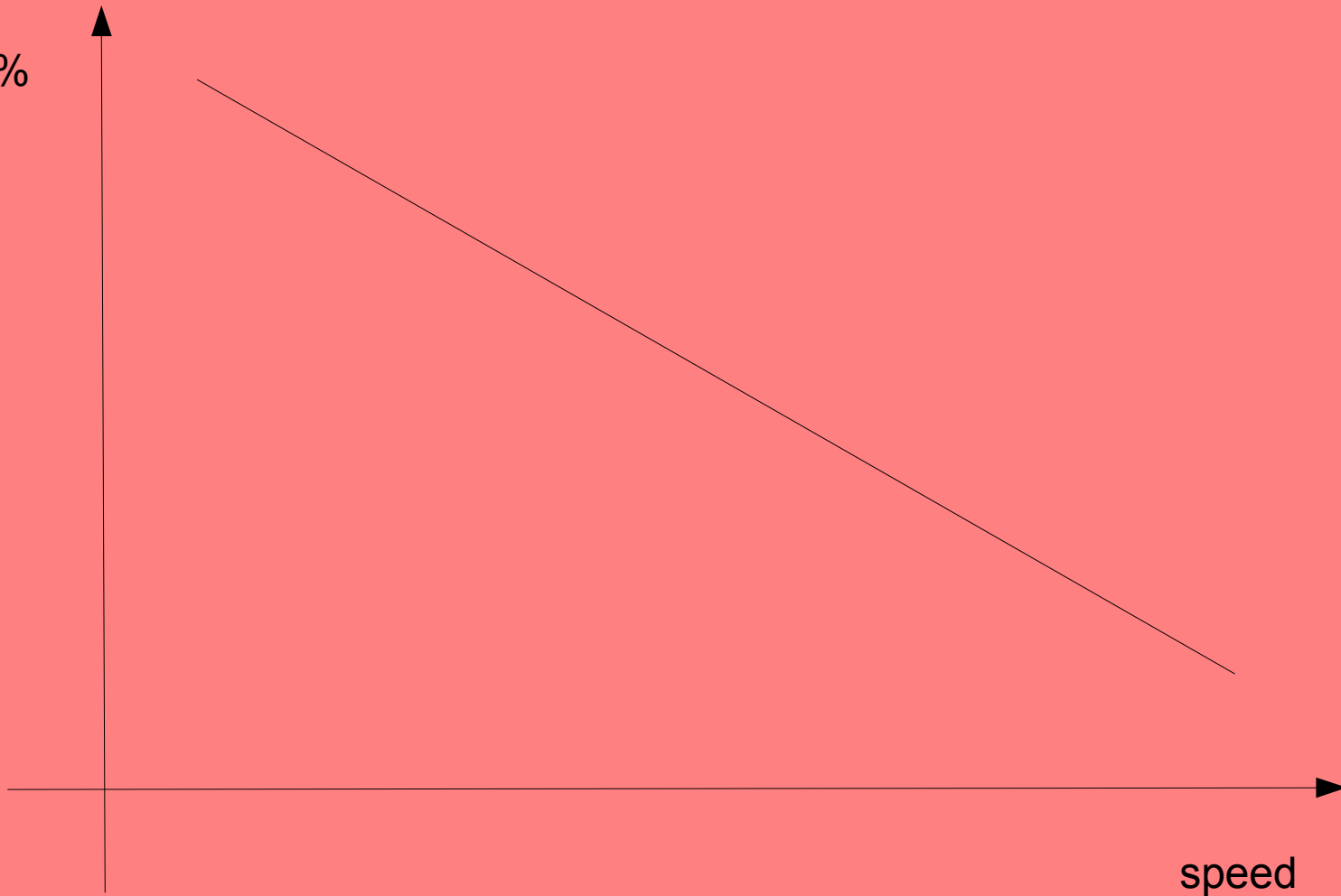
comprehension – how much do you understand
(measured in %)

typical reading speeds

<i>who</i>	<i>speed</i>
grown ups without reading in their daily job	100 WPM
average speed when reading to others	150 WPM
average reader, used to reading	200-300 WPM
fast readers	1000 WPM
records with scientific check	3000-4000 WPM

comprehension

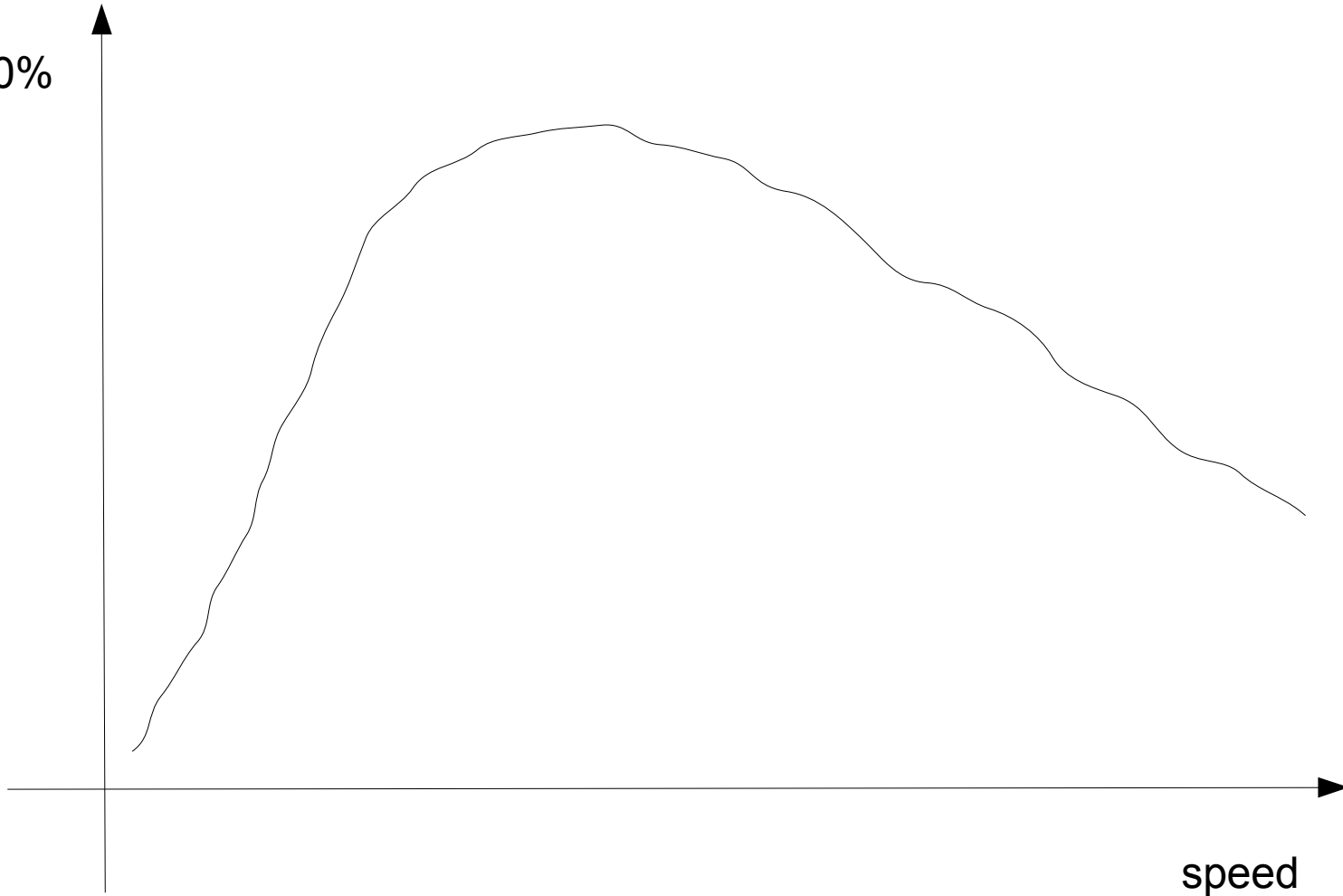
100%



speed

comprehension

100%



speed

why?

what	number of words	time @ 250WPM	time @ 1000 WPM	time @ 3500 WPM
Python standard library docu.	~500.000	2000 min 33,3h	500 min 8,3h	143min 2,4h

why?

what	number of words	time @ 250WPM	time @ 1000 WPM	time @ 3500 WPM
Python standard library docu.	~500.000	2000 min 33,33h	500 min 8,333h	143min 2,38h
itunes licence	~ 5.200	20,86 min	5,2 min	1,5 min
IOS licence	~11.000	43,8 min	11 min	3,1 min

100% knowledge about 5% of library

5% knowledge about 100% of library

P Y T H O N

PYTHON

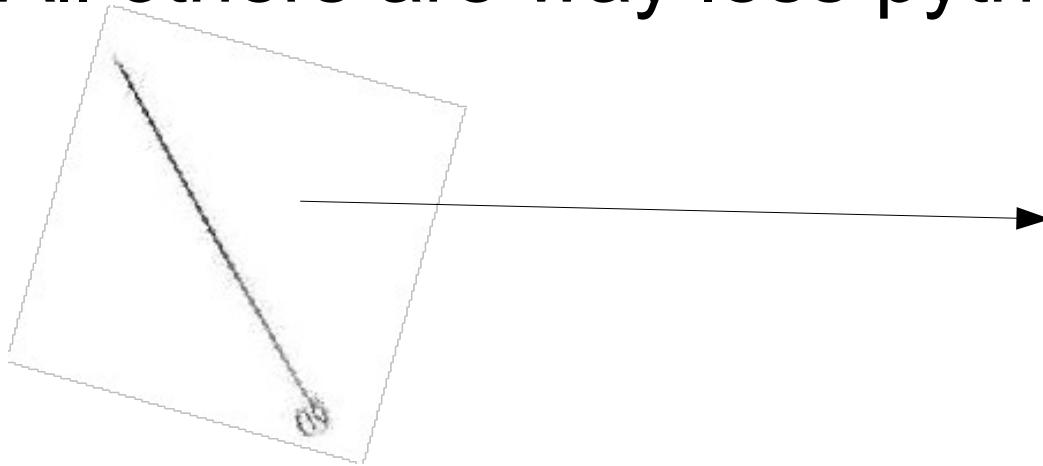
vocalizing

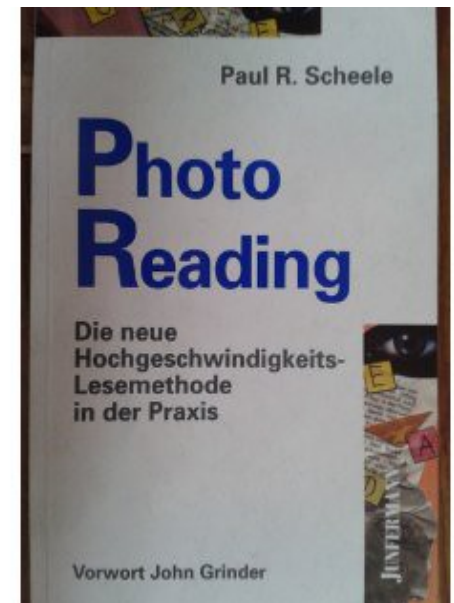
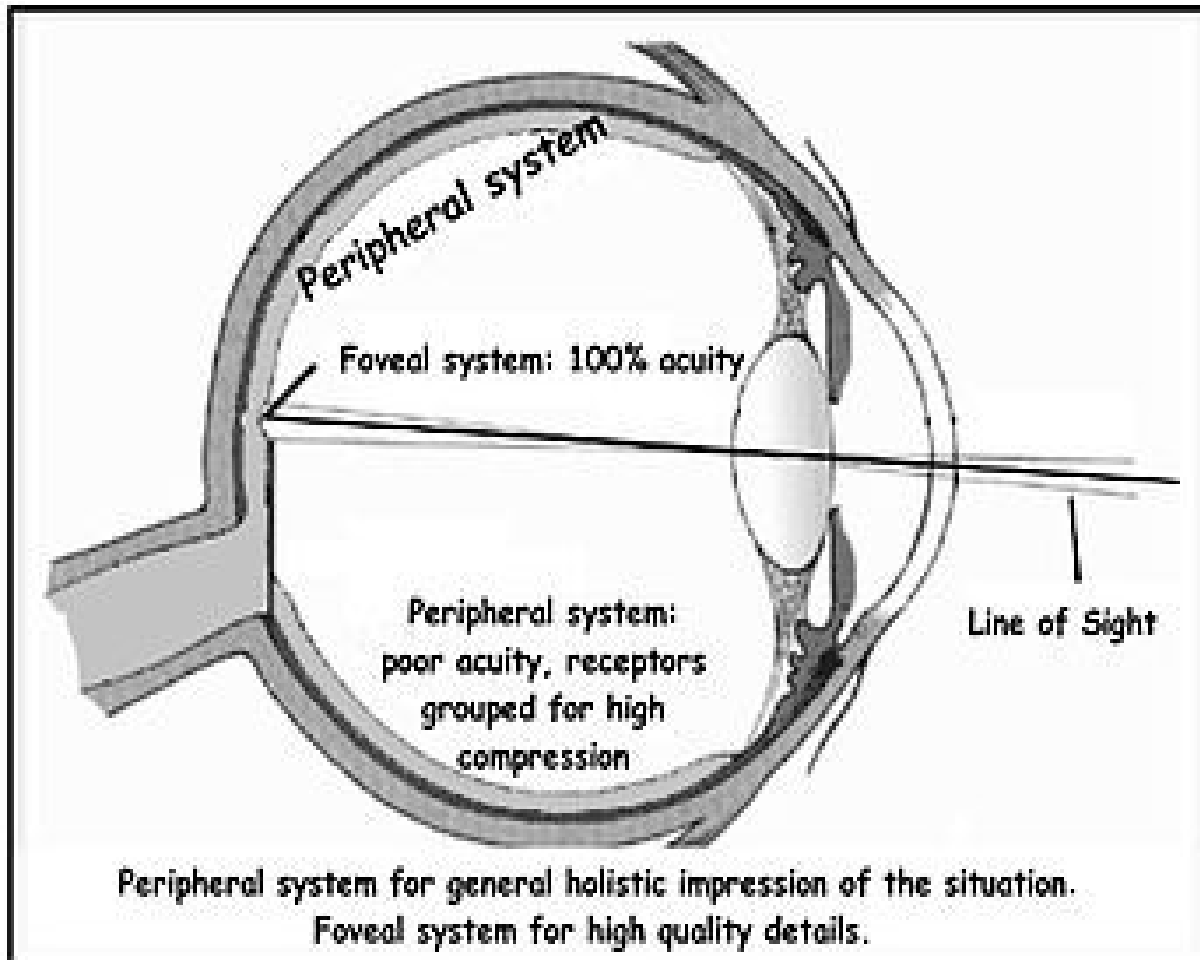
sub-vocalizing

Python is the most pythonic language.
All others are way less pythonic.

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All others are way less pythonic.

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All others are way less pythonic.



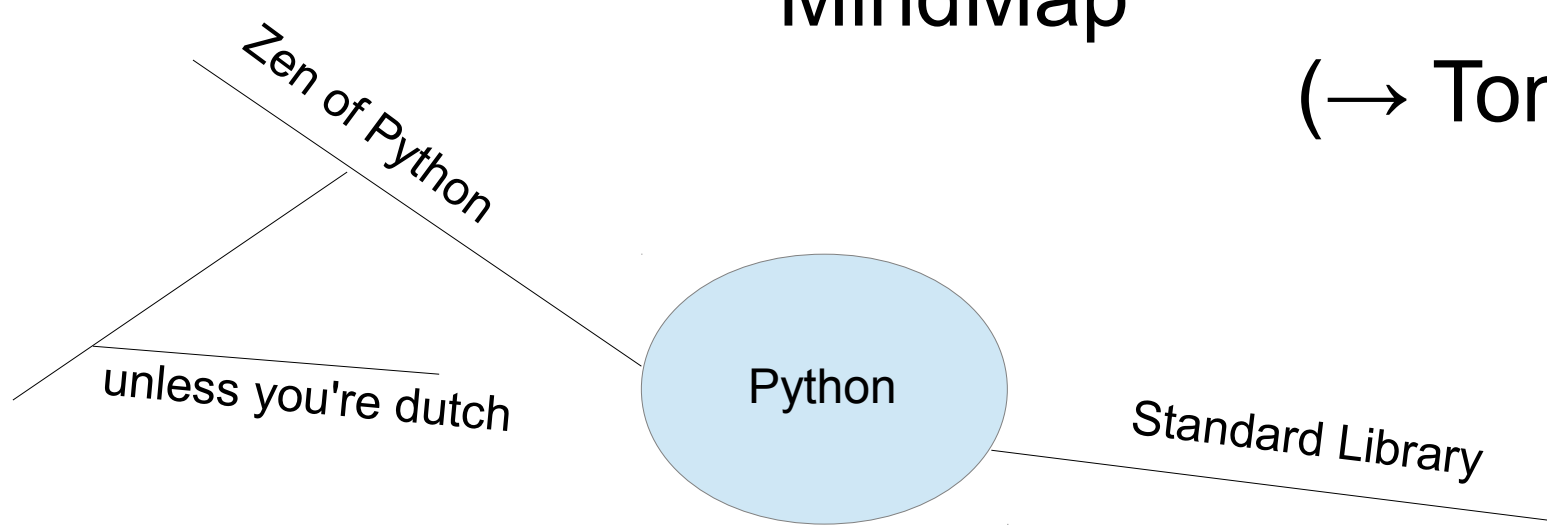


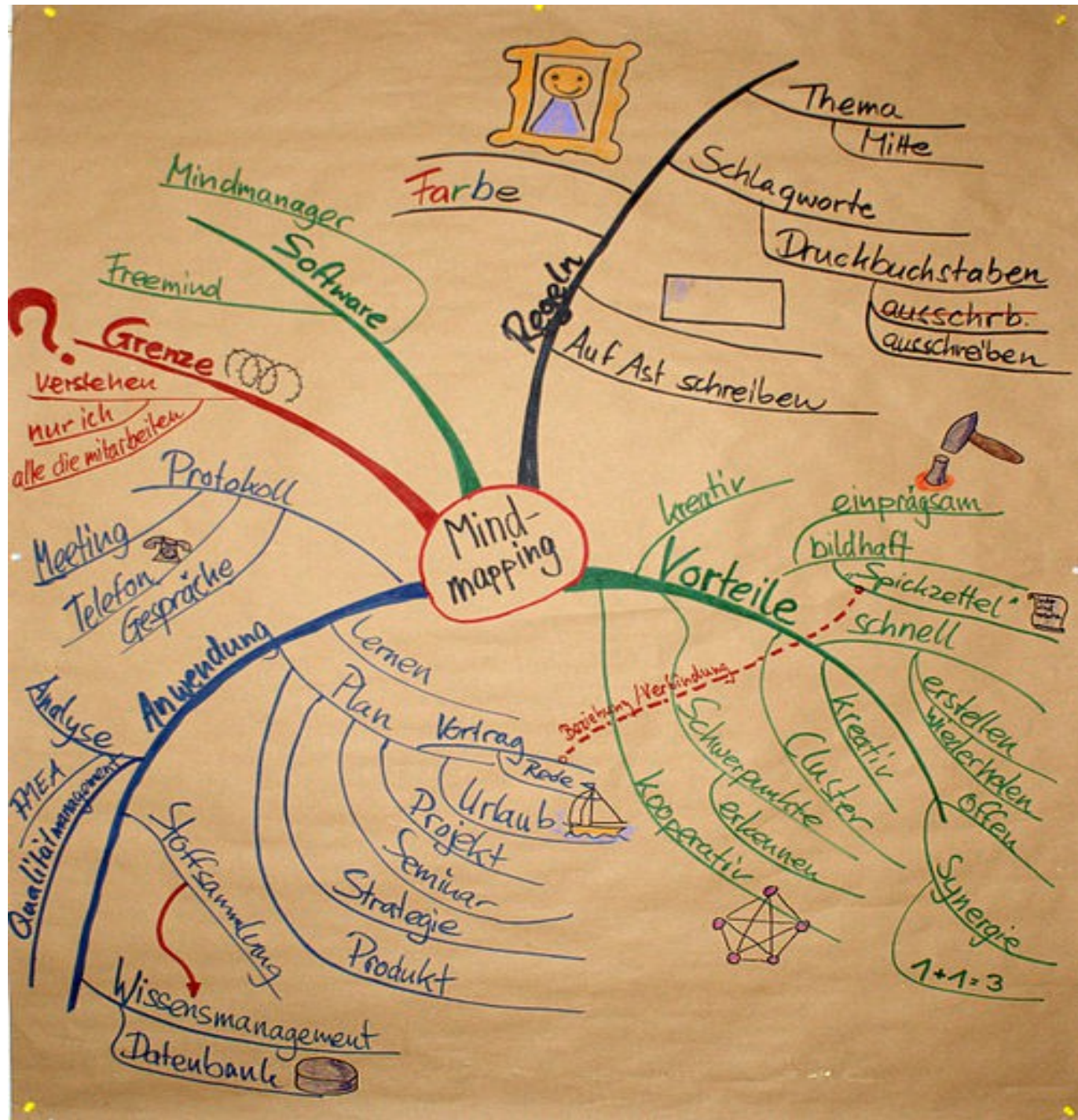
remember information

create structure

MindMap

(→ Tony Buzan)

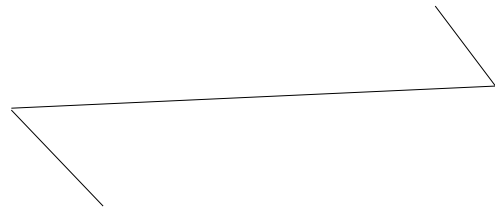




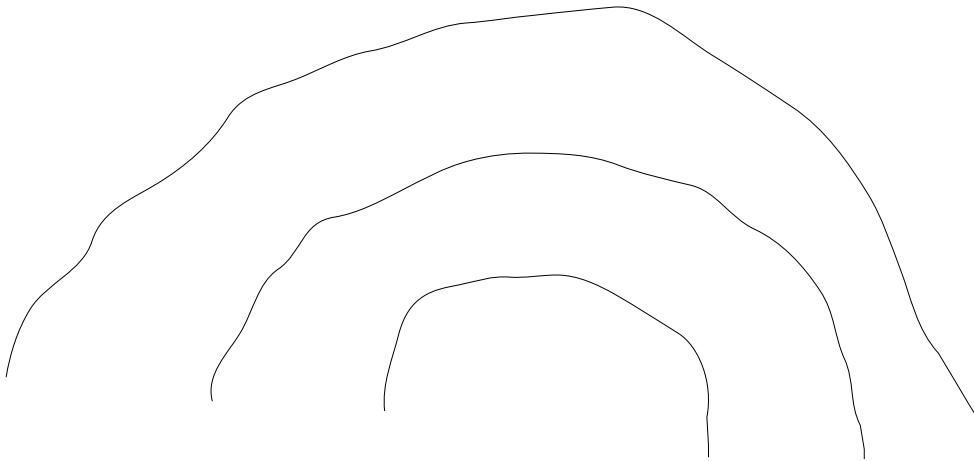
picture source:
Markus Bärlocher at de.wikipedia

slash recall pattern

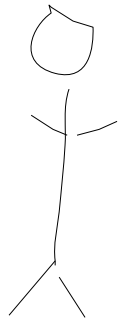
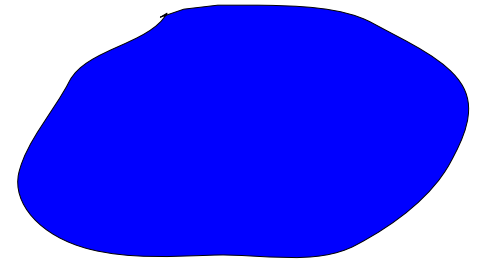
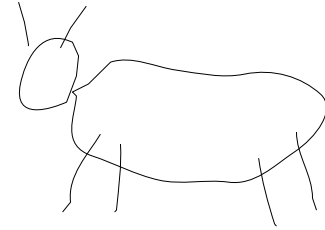
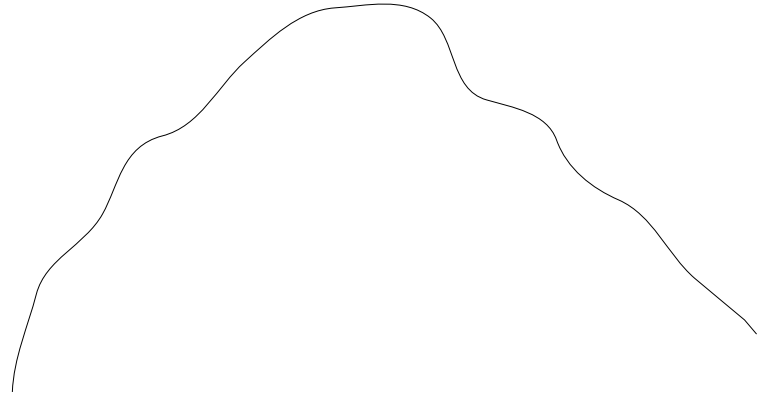
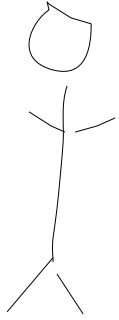
(→ Evelyn Wood)

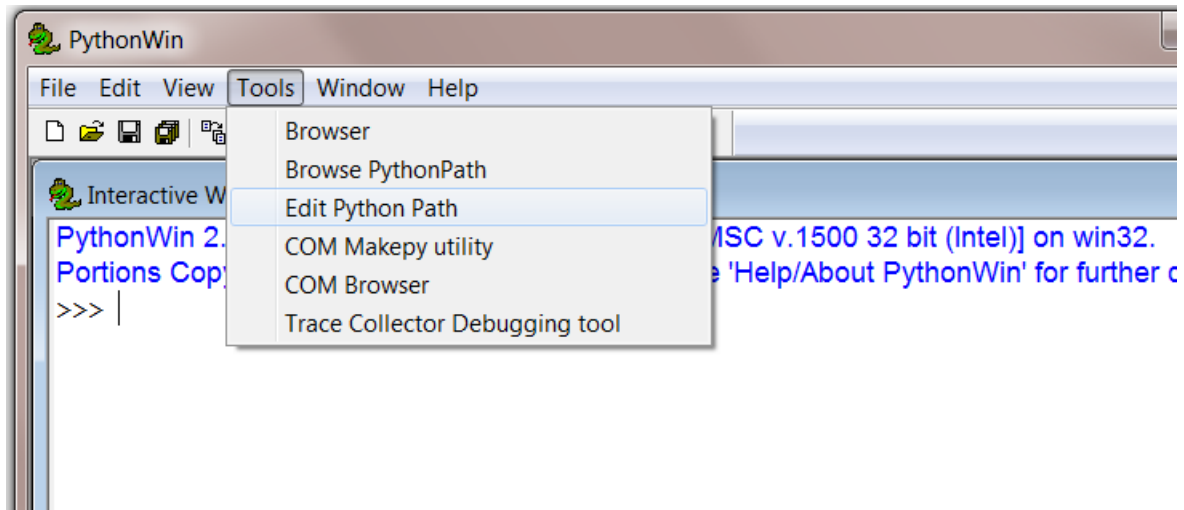


the brain – hacks upon hacks



recommended reading:
the accidental mind





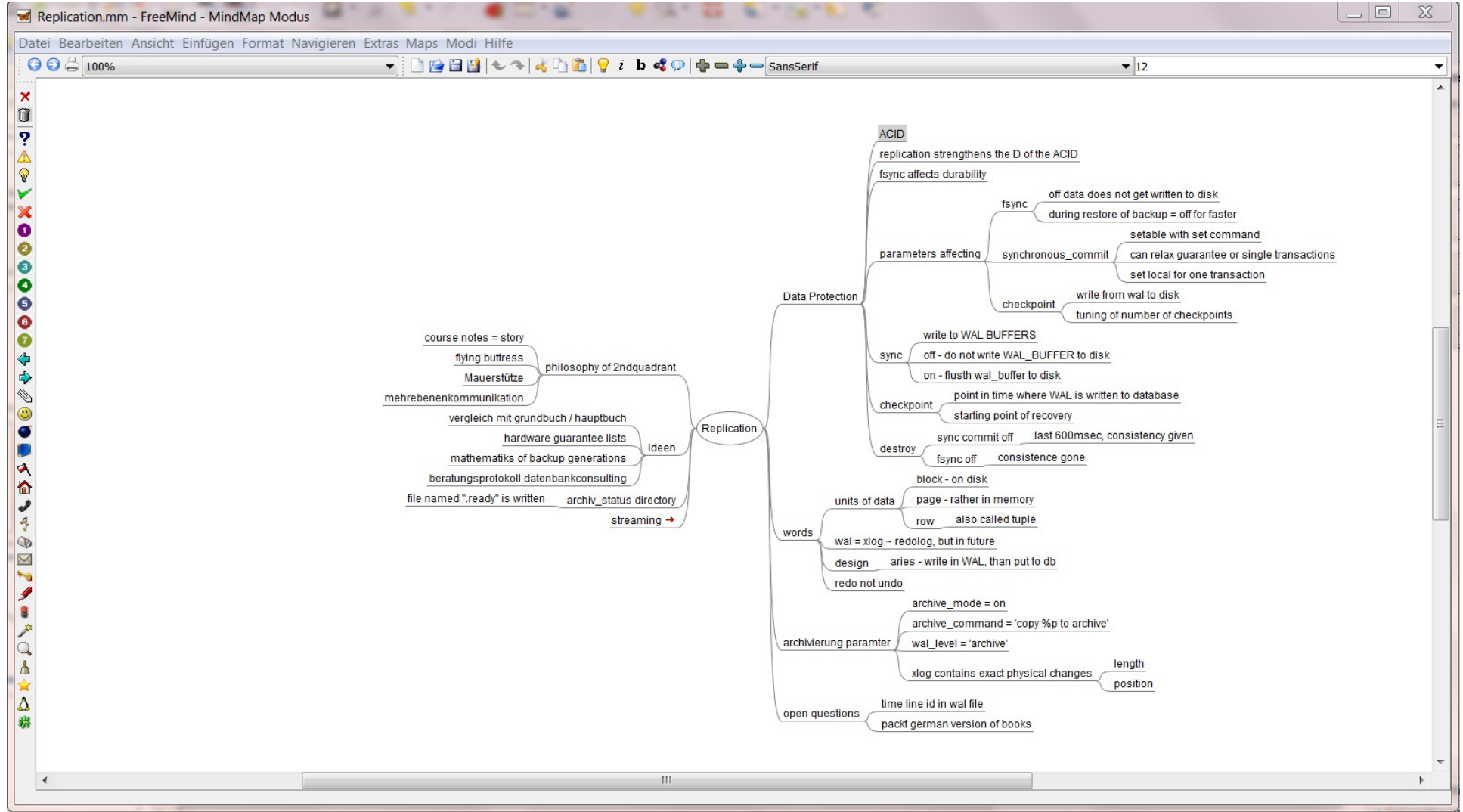
recommended reading:
Jeff Raskin about interface design

```
101 def get_packages(self, repo):
102     self.fetch_channel()
103     if self.channel_info == False:
104         return False
105     if self.channel_info.get('packages', False) == False:
106         return False
107     if self.channel_info['packages'].get(repo, False) == False:
108         return False
109     output = {}
110     for package in self.channel_info['packages'][repo]:
111         copy = package.copy()
112
113         platforms = copy['platforms'].keys()
114         if sublime.platform() in platforms:
115             copy['downloads'] = copy['platforms'][sublime.platform()]
116         elif '+' in platforms:
117             copy['downloads'] = copy['platforms']['+']
118         else:
119             continue
120         del copy['platforms']
121
122         copy['url'] = copy['homepage']
123         del copy['homepage']
124
```

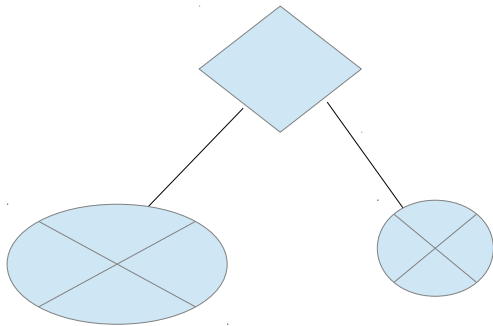
INSERT MODE, line 1, Column 1

Spaces: 4 Python

FreeMind



forced hierarchy



space constraints

readability

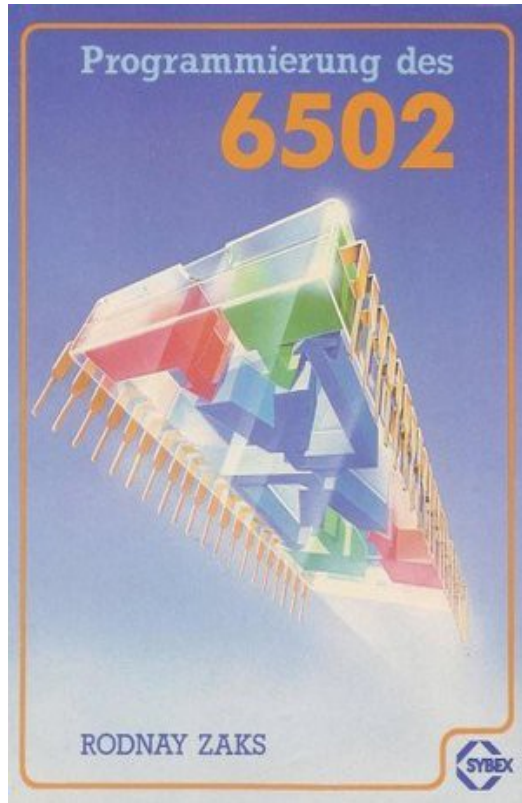
time constraints

frustration with some APIs even bigger

much to remember

function names
call parameters
variables
zen of python

whom to bill for all this stuff



Mnemonics

LDY #0
LDA #0
:SANDRA
STA 0100,Y
INY
CPY #11
BNE :SANDRA

great to remember during programming

harder to concentrate

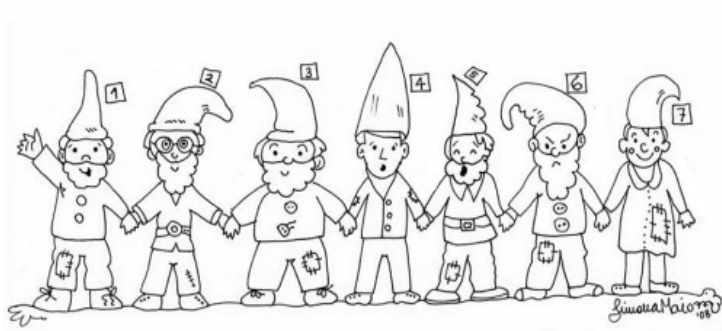
needs stable relationships
or at least being successfull @ flirt

absolutely
unmaintainable in the long run

mnemonics

mnemotechnic

idea: connect abstract information
with real world things



© Simona Maiozzi - www.letturacheavventura.it



good for Magic Numbers
(5432 is PostgreSQLs standard port)

was able to remember IP-Adresses
& Phone-Numbers & Serials

and to recall information as
„names of planets“

only a little slower
then you can find it

mein
Vater
erklärt
mir
jeden
Sonntag
unsere
neun
Planeten

or remember
shopping lists

in other words:
rather useless
for programming

fun fact

MegaMemory is a commercial system sold through infomercials that claimed to boost memory via learning mnemonic techniques, developed by Kevin Trudeau.

It was one of a range of products that the Federal Trade Commission prosecuted for fraud. Trudeau claimed that help anyone achieve a photographic memory, even people with learning disabilities or low IQ's.

The FTC found that the memory system would not enable users to achieve a photographic memory, and the advertising claims were false. Trudeau, along with other marketers, settled out of court for \$1.1 million.

sometimes:

code just flows into your editor of choice

you **feel** the calling conventions

variable names are more present and vivid
as your memory of your first kiss

some call it FLOW

(Mihaly Csikszentmihalyi)

some call it the (programmers)
ZONE

wild myths are told

„you can only reach it for x minutes a day“

„thou shall not be disturbed“



picture source:
<https://derhonigmannsagt.wordpress.com/>

selective serotonin reuptake inhibitors

koffein

modafinil

alcohol

hypnosis

procrastination

special state of mind

totally focused on something

ignoring other sensual information



picture source:
fotocommunity.de

get into „trance“ fast

meditation



picture source:
<http://www.kraeuterengel.de>

Single user mode is necessary for
a few administrative tasks

a stand-alone server can be used to
manually recover from certain kinds of
accidental damage to the system catalogs



picture source:
<http://www.wie-von-selbst.de>

fast reading

mindmap

read about brain research

check out hypnosis

meditation