

# **The Zen of Python in Practice**

Balancing Idealism With Production Concerns

# The Beautiful Dream

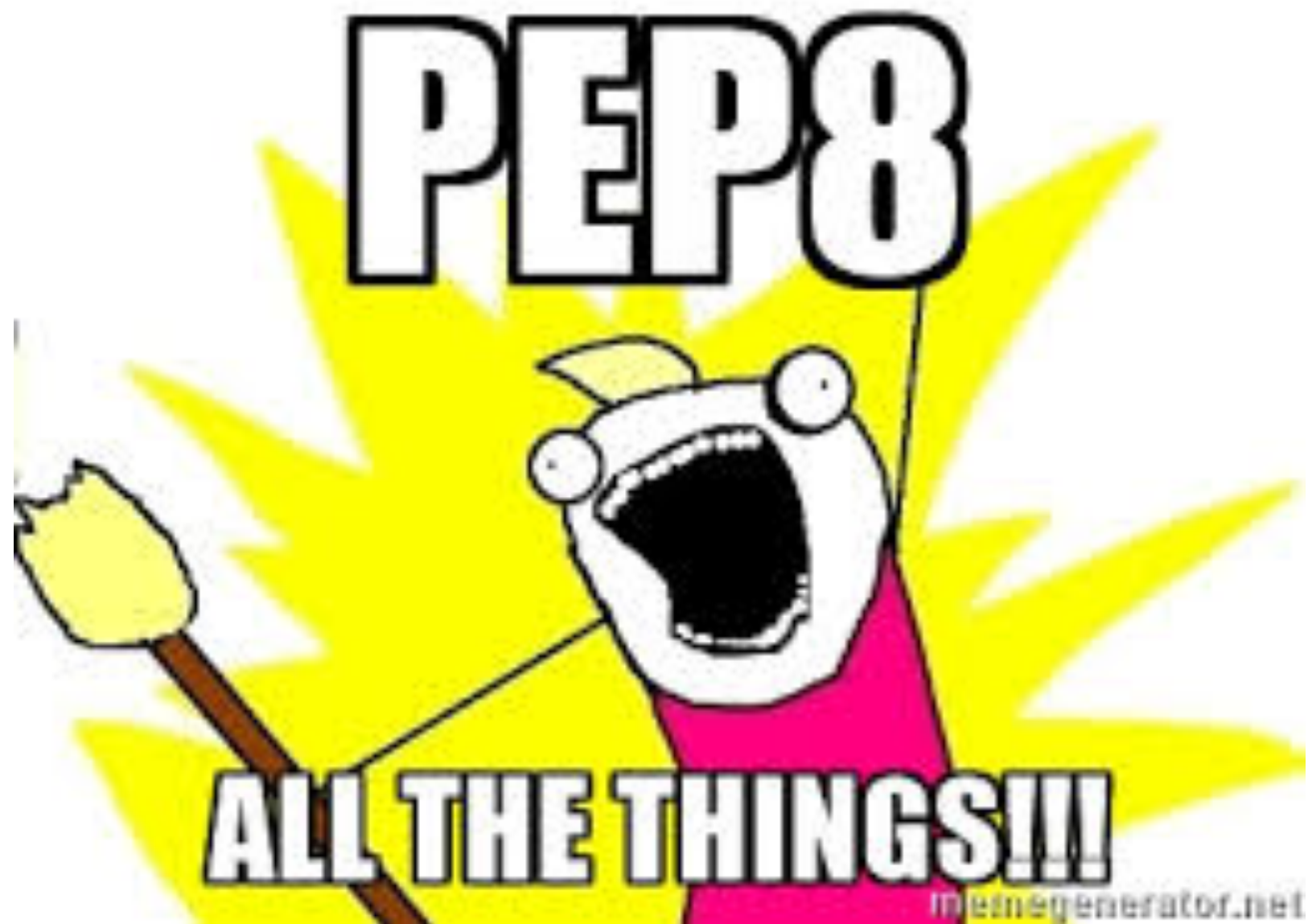
`import this`

```
[In [1]: import this
```

The Zen of Python, by Tim Peters

Beautiful is better than ugly.  
Explicit is better than implicit.  
Simple is better than complex.  
Complex is better than complicated.  
Flat is better than nested.  
Sparse is better than dense.  
Readability counts.  
Special cases aren't special enough to break the rules.  
Although practicality beats purity.  
Errors should never pass silently.  
Unless explicitly silenced.  
In the face of ambiguity, refuse the temptation to guess.  
There should be one-- and preferably only one --obvious way to do it.  
Although that way may not be obvious at first unless you're Dutch.  
Now is better than never.  
Although never is often better than \*right\* now.  
If the implementation is hard to explain, it's a bad idea.  
If the implementation is easy to explain, it may be a good idea.  
Namespaces are one honking great idea -- let's do more of those!

# Readability Counts



*(but so does the blame line)*

There should be one-- and  
preferably only one --obvious  
way to do it.

# *Inter-team dependencies and crazy edge cases*



# What now?

# Zen and the Art of Legacy Code Maintenance

You can't clean code you don't  
understand

If it works, don't poke it.

Ask questions, but don't insult  
your predecessors

Code maintenance is kindergarten  
soccer-- a team sport and we  
don't keep score

Public park rules - leave things  
nicer than when you arrived

Cuss up a storm in your comments



```
1 s = ""Gur Mra bs Clguba, ol Gvz Crgref
2
3 Ornhgvshy vf orggre guna htyl.
4 Rkcyvpg vf orggre guna vzcypvg.
5 Fvzcyr vf orggre guna pbzcyrk.
6 Pbzcyrk vf orggre guna pbzcyvpngrq.
7 Syng vf orggre guna arfgrq.
8 Fcnefr vf orggre guna qrafr.
9 Ernqnovyvgl pbhagf.
10 Fcrpvny pnfrf nera'g fcrpvny rabhtu gb oernx gur ehurf.
11 Nygubhtu cenpgvpnyvgl orngf chevgl.
12 Reebef fubhyq arire cnff fvyragyl.
13 Hayrff rkcyvpvgyl fvyraprq.
14 Va gur snpr bs nzovthvgl, ershfr gur grzcgngvba gb thrff.
15 Gurer fubhyq or bar-- naq cersrenoyl bayl bar --boivbhf jnl gb qb vg.
16 Nygubhtu gung jnl znl abg or boivbhf ng svefg hayrff lbh'er Qhgpu.
17 Abj vf orggre guna arire.
18 Nygubhtu arire vf bsgra orggre guna *evtug* abj.
19 Vs gur vzcyrzragngvba vf uneq gb rkcyvba, vg'f n onq vqrn.
20 Vs gur vzcyrzragngvba vf rnfl gb rkcyvba, vg znl or n tbbq vqrn.
21 Anzrfcnprf ner bar ubaxvat terng vqrn -- yng'f qb zber bs gubfr!""
22
23 d = {}
24 for c in (65, 97):
25     for i in range(26):
26         d[chr(i+c)] = chr((i+13) % 26 + c)
27
28 print("".join([d.get(c, c) for c in s]))
```

Any guesses as to what this is?

# *Fun Fact*

Even the Zen of Python source code violates  
the Zen of Python

You cannot tell me that this is not needlessly complicated 🤔

# Thank you!

Slides available at [tiny.cc/zopip](https://tiny.cc/zopip)