

4pac

(in a word, a package manager for 4th words)

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with no additional lexicon?

```
words          \ print available words
see foo        \ decompile or disassemble the word foo
sifting        \ find words
' foo .calls   \ list callers to a word foo (dependencies)
```

Words you use for local dictionary work for package management too.

for individual words?!?!

- Yes, for individual words
- ...but words depend on some other words that define it.
- A word and its dependencies form a package.

dictionaries & parser combinators

**dictionary is an n-way
OR expression:**

short circuiting: first
matching word is
chosen.

**words are n-way AND
expressions:**

short circuiting: if a
character fails to
match, skip that
word.

hyperstatic scope: shadowed words still work

- old versions of a word still work
- this was a goal of the Nix package manager
- Forthers embrace naming conflicts

...so what about versioning?

- **API compatibility not version numbers.**

The dictionary stack effect of a package is its version

- What is the effect of adding words to the dictionary?

I don't like MARKER or FORGET

- I prefer to just add words to the dictionary

but redefining words wastes space

- only add words that differ
- unchanged deps are not redefined.

redefine definitions not names

- match the definition not the name
- if a definition already exists, don't compile it.

This way:

- you can still clobber definitions with the same names.
- ...or you may want to escape shadowing with a new name.

Redefinitions should be about definitions not names

Thank you !

?questions
(comments)
world-views ?