Culture & Education

Biases people towards particular habits

Potential benefits if others share them

Potential costs if others don't share them

A root cause for faults

Natural Language

Semantic associations of words

Sound to/from character sequence mapping

Gives ability to 'chunk' some character sequences

Rapid visual processing of some character seqs

Language Issue Matrix

	Visual	Sound	Semantic
Confusability			
Memorability			
Usability			

www.knosof.co.uk/cbook/sent787.pdf

Mathematics

Developer experience handling equations

Expected behavior of some operators

Operator Issues

Computer languages contain many operators

Inaccurate knowledge of operator precedence

Developer resistance to using parenthesis

Source code Measurements

Measurement of C source

92.8% of expressions contain no binary operators

5.3% expressions contain one binary operator

Under 2% potential for inserting ()

Developer Knowledge

Experiment using experienced developers

average 14.6 years experience

Incorrect answers

33% wrong (50% if answered randomly)
Performance driven by frequency of occurrence in source code

Obvious Solution

Use ()

Deviations based on common usage