

# Trends in Computersprachen

2008-2009

(Carstens vollkommen subjektive Sichtweise)

# WORUM GEHT'S?

- State of 'C'
- Auf zu neuen Ufern
- VMs sind in
- Zusammengeklebte Sprachen?

# State of 'C'

**In den 90er Jahren ...**

**... waren 'C' Style Sprachen ueberall**

**C++**

**JavaScript**

**Java**

**C#**

# State of 'C'

'C' ist nicht das Programmierer 'Nirvana'

Die Karavane zieht weiter, auf der  
Suche nach dem 'Stein der Weisen'  
der Programmierer

Lua

Ruby

JavaScript

Haskell

# Tiobe Index

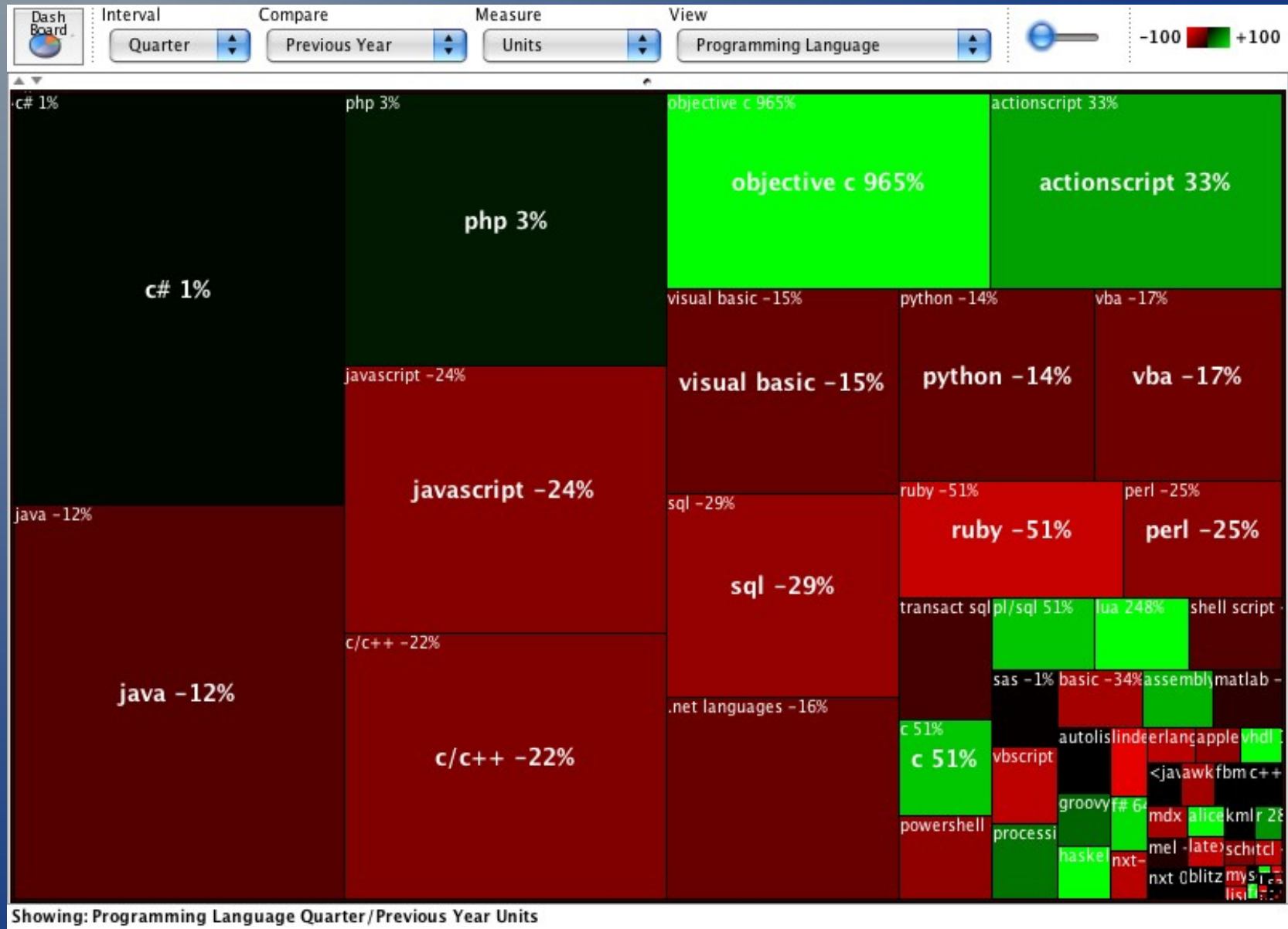
Position Mar 2009	Position Mar 2008	Delta in Position	Programming Language	Ratings Mar 2009	Delta Mar 2008	Status
1	1	=	Java	19.797%	-1.69%	A
2	2	=	C	15.862%	+1.00%	A
3	5	↑↑	C++	10.357%	+1.08%	A
4	4	=	PHP	9.485%	-0.41%	A
5	3	↓↓	(Visual) Basic	8.285%	-3.32%	A
6	7	↑	Python	5.185%	+0.42%	A
7	8	↑	C#	4.321%	-0.19%	A
8	10	↑↑	JavaScript	3.607%	+1.27%	A
9	6	↓↓↓	Perl	3.419%	-2.79%	A
10	9	↓	Delphi	2.710%	-0.09%	A
11	11	=	Ruby	2.601%	+0.74%	A
12	12	=	D	1.809%	+0.62%	A
13	13	=	PL/SQL	1.042%	+0.06%	A
14	22	↑↑↑↑↑↑↑↑	Logo	0.964%	+0.65%	A-
15	14	↓	SAS	0.796%	-0.15%	A
16	17	↑	Pascal	0.733%	+0.29%	A-
17	29	↑↑↑↑↑↑↑↑↑↑	ABAP	0.638%	+0.49%	B
18	26	↑↑↑↑↑↑↑↑	RPG (OS/400)	0.585%	+0.41%	B
19	21	↑↑	ActionScript	0.481%	+0.17%	B
20	18	↓↓	Lua	0.480%	+0.09%	B

# Tiobe Index

30	Prolog	0.213%
31	Erlang	0.194%
32	Objective-C	0.177%
33	Scratch	0.174%
34	Haskell	0.167%
35	Scala	0.165%
36	Transact-SQL	0.165%
37	ML	0.159%
38	Alice	0.150%
39	Awk	0.148%
40	NXT-G	0.148%
41	Focus	0.143%
42	Groovy	0.134%
43	Euphoria	0.129%
44	Smalltalk	0.128%
45	Progress	0.123%
46	Bourne shell	0.121%
47	CL (OS/400)	0.108%
48	Tcl/Tk	0.108%
49	Forth	0.106%
50	Q	0.104%



# O'Reilly Buch-Markt



# Neue Ufer

Neuen Programmiersprachen und  
-paradigmen werden getestet

Scala

Groovy

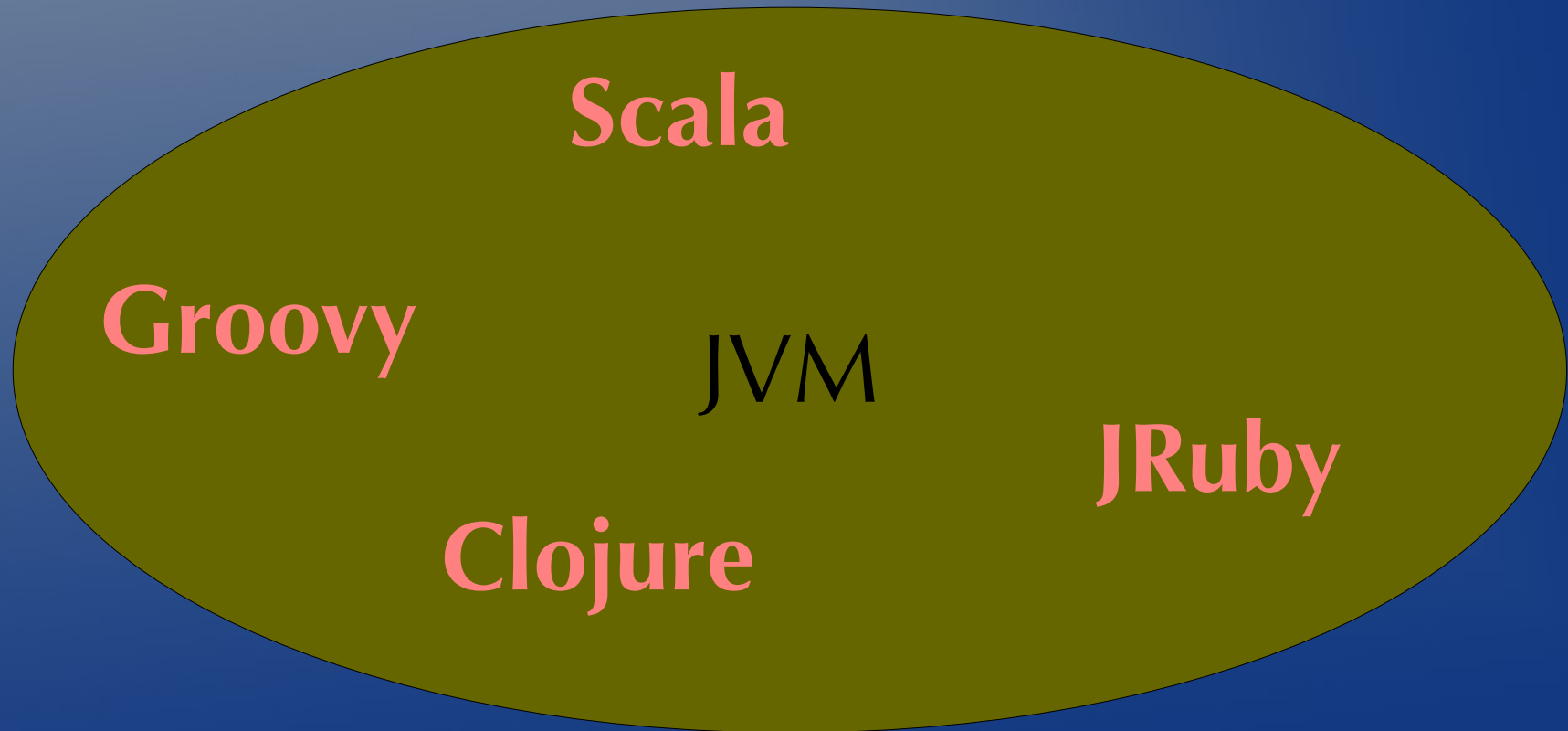
JRuby

Clojure



# Neue Ufer

Neuen Programmiersprachen und  
-paradigmen werden getestet



# Neue Ufer

JavaScript – der neue Koenig ?



**SquirrelFish**

**TraceMonkey**

**Tamarin**

VMs sind 'in'

Lua

Perl 6 (Parrot)

Java

JavaScript

VMs sind 'in'

**LLVM – low level virtual machine**

VMs sind 'in'

**LLVM – low level virtual machine**

**“LLVM is a low-level object code representation that uses simple RISC-like instructions, but provides rich, language-independent, type information and dataflow (SSA) information about operands.”**

# 'zusammengeklebte' Sprachen

**Onyx**

**Factor**

**Joy**

**Raven**

**CAT**

**Enchilada**

# 'concatenative' Sprachen

**Postscript**

**Onyx**

**Factor**

**Forth**

**Joy**

**Raven**

**CAT**

**Enchilada**

# 'concatenative' Sprachen

**Factor**



**CAT**



**Joy**



# 'concatenative' Sprachen

- Nachwuchs
- Aktive "community"
- Umfangreiche Bibliotheken
- ... aber nicht "Forth" im strengen Sinne

'concatenative' Sprachen

Gesellschaft fuer  
zusammengeklebte  
Sprachen e.V.