

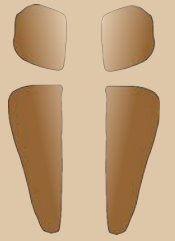
# Programming is a Groovy Activity

*An Introduction to Groovy, the  
Symbiotic Partner of Java*

**Dr Russel Winder**

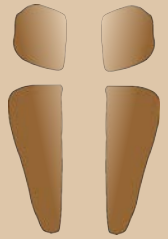
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## *Aims and Objectives*

- Give people enough of a start to be able to:
  - Do some useful Groovy programming and scripting.
  - Properly integrate use of Groovy into their Java codebase.
- Have fun, whilst learning something new.

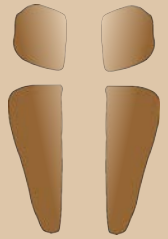


## *Structure of the Session*

- Introduction.
- Do stuff.
- Exit stage (left | right).

*Probably involving finding  
an hostelry for further  
discussion . . .*

There *will* be significant dynamic  
binding of the session.



## *Protocol*

- Some slides, to kick things off.
- Some Groovy programming to really demonstrate things.
- *NB Dynamic interaction between audience and presenter is mandatory; a necessity not an option.*

*We reserve the right to (shelve|stash) for later a particular interaction if it goes on longer than seems appropriate.*



## *Groovy: The Historical Introduction*

- Invented in 2003 by James Strachan and Bob ‘The Despot’ McWhirter. *The language is given a silly name from which it will never recover.*
- Pushed as JSR 241 within the JCP: vastly over-hyped generally.
- Project implodes and nearly stalls mid-2004.
- Guillaume Laforge with Dierk König, Jochen Theoderou, Paul King, Russel Winder, and others restart the project.
- Groovy 1.0 released 2007-01-02.
- Currently at 1.7.1. 1.7.2 due today.

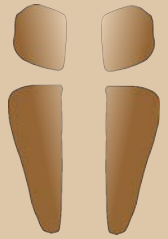
***Codehaus  
provides  
support.***



## *Groovy and Stability*

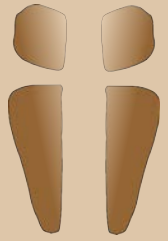
- Guillaume Laforge and Graeme Rocher start the Grails project – a Web applications development framework inspired by Ruby on Rails, founded on Java, Hibernate, Spring and Quartz.
- G2One founded to provide corporate backing to Groovy and Grails.
- SpringSource buys G2One.
- VMWare buys SpringSource.

*Groovy and Grails remain FOSS projects but now have significant commercial backing.*



## *Groovy . . .*

- . . . works with Java:
  - Symbiotic relationship between Groovy and Java.
  - Java provides the statically typed capability, Groovy provides the dynamically typed capability.
  - Groovy does not replace Java, it augments the developer toolkit for working on the JVM.
- . . . is familiar to Java programmers:
  - Be compatible in syntax wherever possible.
  - Be compatible in semantics at all times.

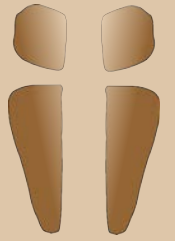


## *Groovy . . .*

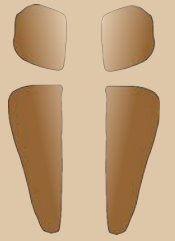
- . . . works directly with the types, object model and library of the JVM.
- . . . is a dynamic language, so relies on “duck typing”.



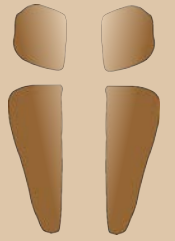




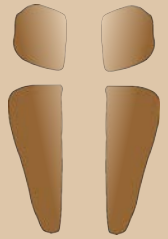
Let's get into the  
groove . . .



Are we feeling  
Groovy . . .



# The Multicore Revolution

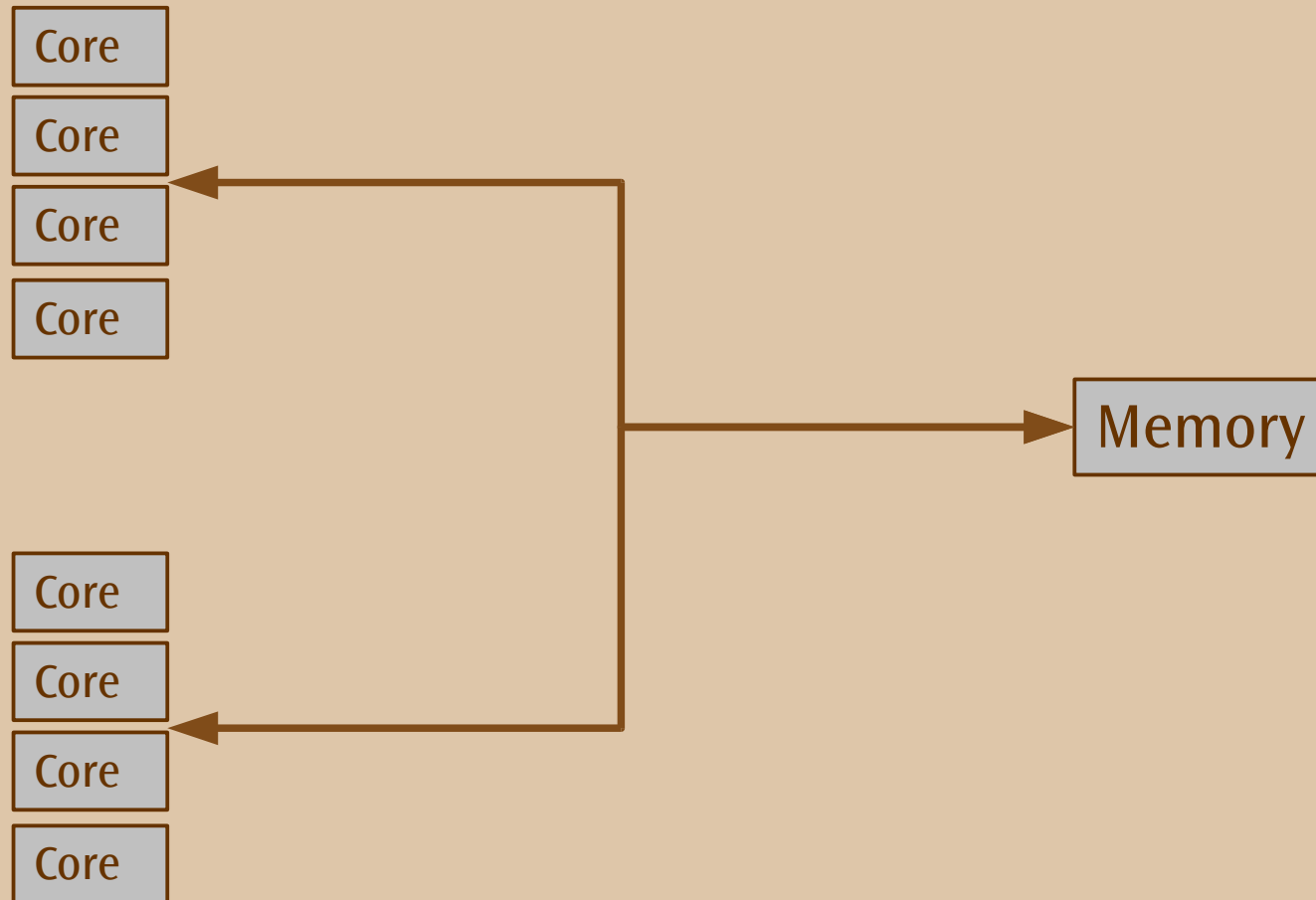


*1950 – 2000*



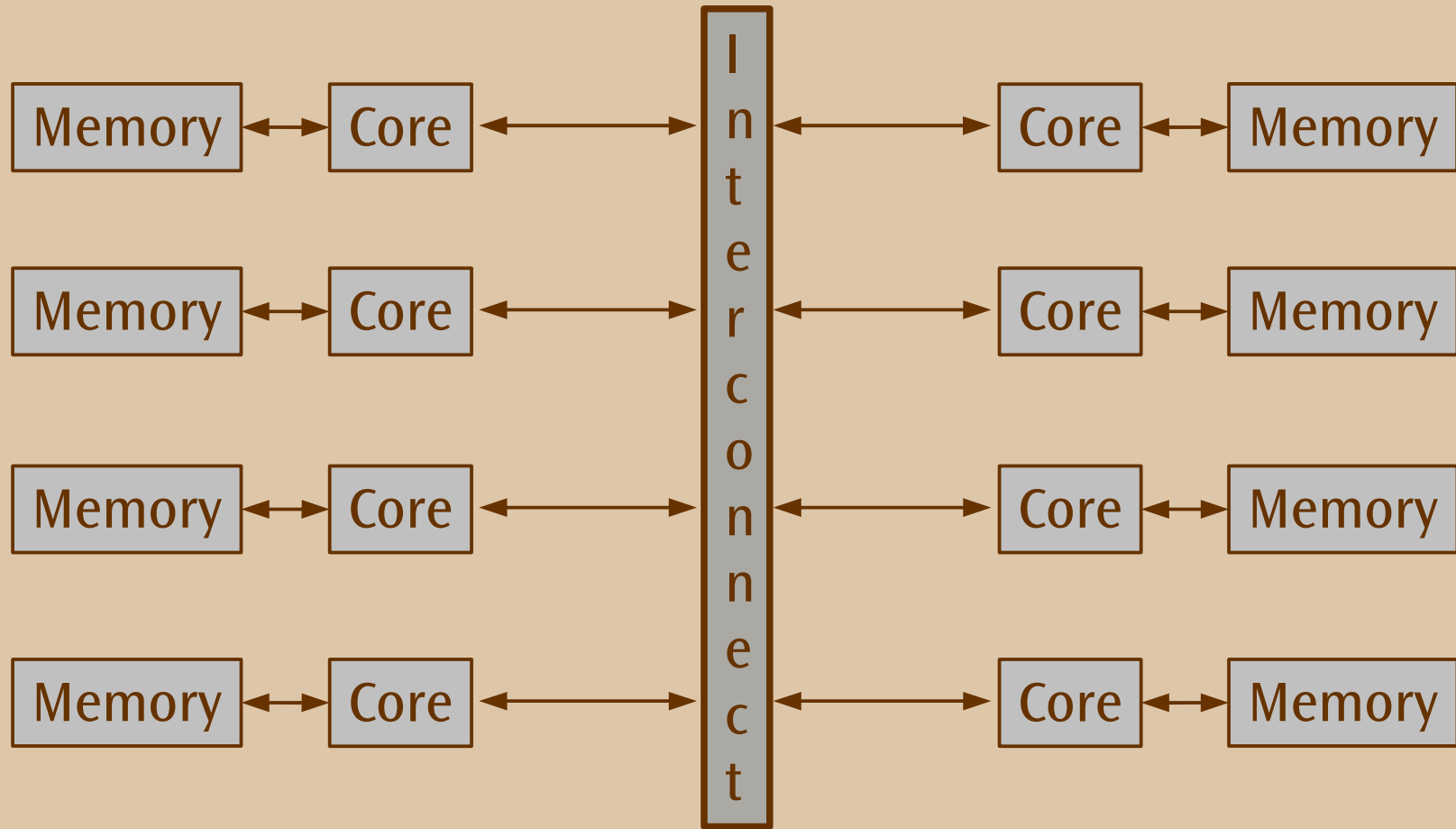


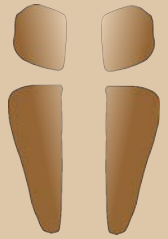
2005 – 201x





2011 –





## Summary

- Groovy is groovy, despite the name.
- Mixed Groovy/Java systems rock.
- GParS controls the parallelism.
- Other dynamic languages on the JVM don't really cut it compared to Groovy:
  - Jython
  - JRuby
  - Clojure
  - Jaskell