

# Peak Objects

William Cook

University of Texas @ Austin

ECOOP 2006

I've  
been  
away

10 years

enterprise  
software  
startup

I'm back

thank you  
for  
welcoming me

object  
implementation  
notes

objects  
encapsulate  
state

Myth



objects  
distribute  
well

Myth

objects  
persist  
easily

Myth

inheritance  
is  
classification

Maybe...

multiple  
inheritance  
unavoidable

objects  
model  
real world

(not many objects I know)

java is  
statically  
typed

Myth

performance  
doesn't  
matter

Myth

(most)  
programmers  
understand  
objects  
Sadly, no



“instance of”  
considered  
harmful

Design



Object

Implementation

Implementation  
should not  
influence  
design

UML



Object

Implementation

Philosophy

Modeling

Refinement

Verification

# Technology

Classes

Methods

Inheritance

Subtyping

Generics

Philosophy

Aspects

Features

Separate Concerns

# Technology

AspectJ

Mixins

Virtual Classes

etc.

(ouch!)



Philosophy

Domain Specific

Specification

Reuse

Technology

Text templates

C++ templates

Struts

etc.

Philosophy

!

Technology

technology  
is not  
good enough

philosophy  
is not  
complete

I  
want  
more

This community  
will find new  
solutions

??????



Object

Implementation



Modeling



Object

Implementation

don't  
design  
your  
programs

program

your

designs