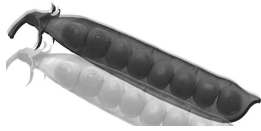


# Post-Obvious Double Dispatch

## OOPSLA's Official Newsletter

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I've been reading about the power of diversity to improve the decision making ability of organizations. Like you, when I hear the "d" word, I immediately conjure up a circle of faces from various genders, races, and other "categories" we tend to use for people.

The meaning I've been stumbling across, however, has to do with different viewpoints. Most organizations (and other groups) tend to hire (or bring in) those who are like themselves. It's a left-over from the Stone Age when we only saw people who were "just like us." We like people who are like us. We struggle with differences of opinion. We want to agree and get on with it. As a result, we lose the ability to come up with startling solutions and we don't do as good a job of satisfying our customers.



Linda Rising

My friend Mark Hurst sends out a free newsletter, Good Experience: <http://www.goodexperience.com/signup.php>

A recent issue pointed to a *Wall Street Journal* article about Vodafone's attempt to make a simpler cell phone (*Mobile Phones, Older Users Say, More Is Less*): <http://tinyurl.com/a9oqd> Here's an excerpt from that article:

What [Vodafone] heard from consumers aged 35 to 55 shocked executives of the Newbury, England company. Many in that age range didn't know their cell phone numbers or how to use basic functions. One-third, for example, said they didn't know how to tell when they had received a text message. Some thought the envelope icon that signals a message meant their phone bill had arrived...

Many 35- to 55-year-olds also didn't like going into Vodafone retail stores because the young staff -- average age 24 -- talked in acronyms they couldn't understand. These consumers said they weren't interested in the cameras, Internet browsers and many of the other features that are becoming standard on the latest cell phones. "Our biggest customer segment turned round and said: 'You haven't been listening to us,'" says Guy Laurence, the company's consumer-marketing director. "It was an industry for kids."

Vodafone is like a lot of product producers -- they assume their customers are "just like us" and, therefore, want the things that we want. Maybe some folks in these organizations with contrary thinkers would help.

I decided to try an experiment at OOPSLA, with my good buddy Mary Lynn Manns. We're hosting a panel with some brave folks: Kevlin Henney, Angela Martin, Alan O'Callaghan, and Rebecca Wirfs-Brock. The panel members will be asked to take sides on issues -- perhaps the side they wouldn't usually choose -- and defend that position in a time-boxed interval. This is the Agile Panel!

We will be taking questions from the audience, so we hope you show up with your provocative addition to this OOPSLA experience! Thanks!

-Linda Rising

### Sunday SCOOL Transactions

The Synchronization and Concurrency in Object Oriented Language (SCOOL) was organized by Tim Harris and me (Doug Lea) and attracted about 70 attendees. Interest in concurrency is growing as especially in anticipation that soon, just about every computer will contain multiple, multicore, and/or multithreaded processors.



Doug Lea

The main focus of many presentations and discussions surrounded the question of whether transactions, similar to the kinds used in databases, are a better fit to programming languages than classic locks and monitors. This entails support for constructs like "atomically { something(); }" that says to achieve something() in all-or-none fashion, without saying whether to use any particular locks, or perhaps even relying on future hardware transactional memory support. The consensus seem to be that this is a good idea, although there are tons of details that still elude us, and the knowledge that there are many programs requiring other kinds of synchronization as well, so transactions are not a replacement for all concurrency support. And if so, what are those other constructions, and how can you implement them efficiently and avoid errors in using them? We had a bunch of presentations on those topics too. -Doug Lea

<http://research.microsoft.com/~tharris/scool05/>

## Hunting Creativity

Artists and scientists both search for understanding. Their methods and approaches differ, and their results are in different languages, but there is no *a priori* reason to grant primacy to either. Art seems predicated on creativity while science and engineering are thought less so. The question arises what creativity is and whether creativity in the sciences and engineering is the same as in art. This workshop explores that and related questions.

We are at the crossroads. The work of computer science seems stymied; progress is steady but boring. It's time for something to happen—and any suitable something requires acts of creation. This year, OOPSLA's (hidden) underlying theme is creativity: Explore; Discover; Understand is its motto. A former poet laureate was the keynote. This workshop was aimed at understanding creativity from all angles. Is it the work of recluses, autistics? Are creative people stubborn, nonreligious, diligent, monotonous? Can creativity be triggered or managed? Is creativity the central act of art? Of science? Of design? Of engineering?

What about problem solving? And coding—does the surface look of creation reflect actual creation?

And what of understanding itself: Is understanding constructed/created? If so, what is understanding?

Are some software methodologies more conducive to creative thinking? Are our programming languages stifling in ways that our natural languages are not?

In this workshop we brought together musicians, artists, scientists, and software people to try to understand the source and role of creativity in the sciences and in computing.

Near the end of the workshop, we decided to incorporate an exercise that went along with the opening speaker's poetic theme. We had participants write a poem, with their in-

spiration being three lines of a poem from Richard Wright.

This exercise wasn't performed by simply sitting and writing the poem, but rather by a type of writing telephone, where each person contributed a few lines to the whole. There were separate groups and each group had several poems floating between them. At the end of the time limit, we allowed them to look at their work and decide which one they believed to be their best work.

The groups were allowed to exercise some editorial revisions and then they were collected. For your own edification, we've provided these productions of your fellow attendees. This is their expression. This their Road Not Taken. This is their *Blow, blow, thou winter wind*. Oh, anyways, here they are.

### Work Remains Undone

As my anger ebbs,  
The spring stars grow bright again  
And the wind returns

Birds are singing  
While I'm rocking in a chair

Work remains undone  
while I relax and reflect  
anticipating...

floating, my mind is pouring forth

Up and down, up and down, again  
it continues its motion

like a train on its track  
where the destination doesn't matter

To start a journey we need  
a destination  
whether that is our destination is  
another matter

### Too Bright for All but Teardrops

Like a spreading fire,  
Blossoms leap from tree to tree  
In a blazing spring.

Desperate against the sky  
A bloom explodes to sunlight

Leaves unfurl to catch  
Dusty beams through window panes  
Casting cool shadows

Shadowy men from shadowy planets  
Are apparently casting beams about

In the sunlight all is visible  
the shadows disappear  
and we can see clearly

Except the sun's face  
Too bright for all but teardrops  
Away to the ground

I shade my face with my hat  
to conceal the brimming tears

Clothing is how we choose  
What we hide, and what we reveal  
But you cannot clothe the soul

When you show your soul  
you show your true self  
But who wants to see that?

### Syzygy Matters

Twisting violently,  
A lost kite seeks it freedom  
From the telephone wires.

babbling incoherently  
a polymorphic pigeon coos

As it googled over the cat  
that was trying to jump at its feet

Googling over cat-5  
I found an attractive page  
That drew us all in.

Bits through the air fly lightly  
settling in my browser now

And my EMACS is dying,  
Yes, it's dying of too many bits,  
carrying me along.

Syzygy matters  
She said  
as the bridle tightened

The horse jumped  
as it became frightened

I tried to jump too,  
But was flummoxed in mid leap  
by a charlie horse

## Lions, and Tigers, and Bears!

This year we have many different events outside of the workshops and various other conference activities, one of which is the Wednesday night trip to the San Diego Zoo.



The San Diego Zoo is considered one of America's best zoos. This famous zoo has become home to some of the rarest animals in the world in-

cluding giant pandas and koalas. Visitors explore animal habitats organized into 10 bioclimatic zones, from arctic tundra to rainforest.

Not only is this trip a great way to get a little wild with your fellow attendees, but its also a good way to learn about some of the world's most beautiful creatures. The San Diego Zoo has a great assortment of animals and ways in which to interact with them, from bus rides, to balloon safaris.

Take a fascinating walk in the wild, in the Zoo's amazing new habitat called Joan B. Kroc's Monkey Trails and Forest Tales. Encounter rare and endangered animals native to forest areas in Africa and Asia, such as slender-snouted crocodiles, a variety of monkeys, industrious sociable weavers, wild swine, pygmy hippos, and so much more.

We hope you'll come out to enjoy the zoo and its many attractions with your fellow attendees. It will be a night to remember!

## Onward!

The Onward! track provides a forum for visions of the future of our field. Onward! is the place to reveal the revolutionary, air the provocative, and expose the subversive. The Onward! track is composed of three sub-tracks: papers, presentations, and films.

Onward! papers are included in the technical proceedings, and are part of the main research program. Of the 27 papers submitted to Onward!, two were selected for inclusion in the papers track.

Onward! presentation can describe: new paradigms or metaphors in computing, new thinking about objects, new framings of computational problems or systems, intriguing technologies, emerging methodologies, and late-breaking research. Onward! presentations are provocative, inspiring, interesting, amusing, irritating, and in some cases subversive. Presentations are submitted as 10-page research papers, and appear in the conference companion. Presentations provide a venue for those

exciting and groundbreaking ideas that are not yet ready for inclusion in a regular technical track.

Onward! films investigate ideas, concepts, insights, or almost anything related to programming. They can take almost any form: documentary on learning a new language; interviews with practitioners; animation/depiction of your new technique; diary of a frustrated grad student.

## Building Adaptive Systems

There have been an increase over the last few years at OOPSLA on ways to build systems that can more quickly adapt to changing requirements. This has included research on evolving programming languages towards a higher level of abstraction or giving developers means to program more closely to the domain they are working within.

Trying to make a system dynamic and easily configurable can be hard, but the payoff can be large. This is highly related to Business Rules research, specifically when you want to have automated ways to describe business rules and either generate the code or have the descriptive information for the business rules live in a database so that they can be easily manipulated. Topics related to this are: Generative Programming Techniques, Metamodeling, Domain-Specific Languages, Domain-Specific Modeling, Model Driven Development, and Model Driven Architecture.

Related Workshops at this year's OOPSLA on this topic are: International Workshop on Software Factories, The 5th OOPSLA Workshop on Domain-Specific Modeling, and Best Practices for Model Driven Software Development. And related Tutorials are: Generative Software De-

velopment, Adaptive Object-Model Architecture, and Domain-Driven Design: Putting the Model to Work.

A related BOF will be held, on Wednesday evening at 5:00 pm in the Esquire Room, discussing Real-time, high-frequency algorithmic trading systems. This session plans on discussing: technological demands of a new breed of financial trading systems being developed on Wall Street, techniques to incorporate AI, pattern recognition, data mining, and high frequency time series technologies to build predictive qualitative trading models, algorithms, and languages and rapid development methodologies that enable early delivery of business values AND allow for flexibility to change behavior at runtime such as those outlined at [www.adaptiveobjectmodel.com](http://www.adaptiveobjectmodel.com).

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