Psycho? Logical? Bulletin
June, 2006

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But wait: there’s more!
The majority of research on human perception and action examines sensors and effectors in relative isolation. What is less often considered in these research domains is that humans interact with a perceived world in which they themselves are part of the perceptual representation, as are the positions and actions (potential or ongoing) of other active organisms. It is this self-in-world representation that we call embodiment. Increasingly, research demonstrates that embodiment is fundamental to both executing and understanding spatially directed action. It has been theorized to play a role in reaching and grasping, locomotion and navigation, infant imitation, spatial and social perspective taking, and neurological dysfunctions as diverse as phantom limb pain and autism. Few formalisms have been put forward, however, to describe how self-representation functions at a mechanistic level and what neural structures support those functions. Behavioral research has revealed a number of tantalizing outcomes that point to a role for the representation of the body in basic human function; neuroscientists have identified multiple sensorimotor maps of the body within the cortex and specific brain areas devoted to the representation of space and place; and developmental researchers have identified neonatal behaviors indicating a representation of self and have traced the course of spatially oriented action across the early years. What is needed is a shared effort to merge perspectives of behavioral science, neuroscience, and developmental psychology in order to further our understanding of the forms and functional roles of the embodied representation. The 2006 symposium will provide a forum by which researchers from these various perspectives can come together to share their findings, ideas, aspirations, and concerns.

For more information and a schedule, see: http://www.psy.cmu.edu/embodiment/

The PLB will be taking the action of embodying his ego-space at the symposium, held in the Adamson Wing of Baker Hall (room 136). Hope to see you there!
PLB Shout-Out!

There was so much stuff going on in the department this last month that we couldn’t get by with only one shout out. Not two, but three shout-outs (shouts-out?) were required!

Brooke Feeney, Anna Fisher, Ken Kotovsky, Marsha Lovett, and David Rakison

These five served as judges for the Psychology Competition at Meeting of the Minds. There were some great projects (curious to know who won? See Page 4). Nick Yeung and I were organizing the competition, and it would not have worked without their help. It’s a lot of work to be a judge, but our judging staff was terrific. Thanks for a fantastic Meeting of the Minds!

June’s final PLB Shout-Out goes to Christi Gomez and Lori Holt, for organizing the poster session for the research methods classes. 4 classes of students came together to present their final projects in poster form. Lori and Christi made sure that everyone knew where to be, when to be there, and had an easel to put their poster on. Their work taking charge of the situation made the session a success!

Joan Knihnicki and Miriam Rosenberg-Lee send a gigantic shout-out to the man or woman of mystery who cleaned out the microwave in the grad student wing.

“Not since the valiant efforts of Nelson Mandela, Mother Teresa and Princess Diana has the world seen such selfless action in the face of adversity,” said Miriam. Joan agreed, “I have never seen such an act of courage. This person deserves a medal!”

Who was this anonymous do-gooder, this masked marauder of messiness? We may never know the face of the Microwave Vigilante, but we’ll always remember their heroic action. The PLB salutes you!

David Rakison and Leah Russell were just two of many people who enjoyed the poster session!
PITTSBURGH—The U.S. Department of Education has appointed Robert Siegler, the Teresa Heinz Professor of Cognitive Psychology at Carnegie Mellon University, to the National Mathematics Advisory Panel. The panel’s mission is to advise the president and secretary of education on how scientific research can advance the teaching and learning of mathematics.

The panel consists of 17 expert members, including Siegler, and six ex-officio members. It will issue two reports containing policy recommendations on how to improve mathematics achievement for all students. The panel’s first meeting took place May 21-22 in Washington, D.C.

Siegler’s research focuses on children’s reasoning and problem-solving abilities, particularly in mathematics and science. He has written seven books, edited four others, and authored more than 150 articles and book chapters. His book, “Emerging Minds,” was named one of the “Best Psychology Books of 1996” by the Association of American Publishers.

“Being appointed to this panel is both an honor and a challenge. Math achievement in the U.S. has improved somewhat in recent years, but it still lags far behind that of many other countries, especially at the middle and high school levels,” Siegler said.

“I’m hopeful that bringing together the insights of cognitive psychologists with the insights of the mathematicians, policy analysts and educators on the panel will help improve this situation,” he said. (story by Jonathan Potts)

The PLB’s suggestion for improving math education

If you want students to do well in math, you need to make math cool. And fortunately, no one has their finger on the pulse of America’s youth like the PLB, where we are constantly in touch with what the kids of today are thinking about. The youth of America don’t think math is cool. Why not? Well, one reason is obvious. Think back to the math teachers at your middle school and high school. Didn’t most of them have a little mustache like this?

I call that the math teacher mustache.

Now, the math teacher mustache (or MTM, for short), is not cool. There’s nothing WRONG with the MTM. But it doesn’t scream out “You had better respect my authority, or you’ll be feeling the business end of my mustache!”

Yeah. The Fu Manchu. Now that’s a mustache. If that mustache told you how to square root, you would pay attention! The Fu Manchu makes anything cool. Even math.

Of course, the Fu Manchu isn’t the only possibility. You could go with something like this:

Or even this:

Any of these mustaches would cause SAT scores to improve by 70 or 80 points. Bob, there’s no need to thank the PLB for the suggestion; we’re just doing our job!
Meeting of the Minds
Award Winners

1st Prize: Stephanie Manchin (Advisor: Marlene Behrmann)
“Face and object recognition abilities in patients with pure alexia”

2nd Prize: Rachel Wu (Advisor: David Rakison)
“Do infants associate identical labels with parts more than shapes of objects?”

Honorable Mentions
Ximeng Liu (Advisor: Wandi Bruine de Bruin)
“Deception and its effect on subsequent research participation effort”

Haley Vlach (Advisor: Sharon Carver)
“The effects of observation coaching on children’s graphic representations”

Congratulations to this year’s winners, and to all the students who participated for completing such excellent projects!

Life after death in Pittsburgh?

Submitted by the graduate students, via Brooke Feeney.
June’s Graduate Student of the Month is Jared Danker, the only person I know who attended both a Catholic high school and a Jewish university. We had a chance to talk about his research, Pittsburgh’s place in the Midwest, and razors.

PLB: Tell us a little about yourself.
JD: I’m from Massachusetts. I went to school at Brandeis.

PLB: Was it a big switch from Massachusetts to Pittsburgh?
JD: Without a doubt. It’s very much a difference between East Coast and Midwest. Although I don’t think Midwesterners would consider Pittsburgh to be Midwest. Pittsburgh is like the bastard child of the East Coast and Midwest.

PLB: Were you a psychology major?
JD: I spent my first two years as a psychology major, and then switched to neuroscience. I ended up with a double-major, but it’s been a while since I studied psychology.

PLB: Did you apply to a lot of graduate schools?
JD: A handful. This was the only psychology program I applied to. All the others were neuroscience.

PLB: So what made you pick the lone psychology program?
JD: I knew I wanted to do neuroimaging. I decided I could work with people who are great scientists and do imaging, or I could come here [Editor’s note: I was really tempted to just cut off the quote right here] and use imaging to do cognitive psychology. I felt like techniques come and go, but it’s the theory that’s important. My senior honors thesis was very exploratory rather than theoretical, which drove me kind of nuts. I came to the conclusion that experiments guided by theory are better, and that drove me toward this department.

PLB: What kinds of things are you interested in researching?
JD: I’m really interested in memory and problem solving. Basically any sort of complex task and how all the different parts of the brain come together to achieve complex reasoning. I feel like a lot of research is really specialized, looking into say, perception, or attention. I want to understand how those different things come together. All of these things have to come together when we achieve any sort of task in the world.

PLB: Your first year project was an elegant test of some predictions of the ACT-R theory. To what extent are you interested in doing work to see whether ACT-R is accurate, as compared to trying to understand the processes that guide behavior?
JD: To me, it’s the same question, because I see ACT-R moving toward that second goal. Historically, it’s always changed to fit with whatever new data comes around; it’s an evolving model. So my research is both an attempt to see if the model’s assumptions are correct, and if they’re not, then we can change them.
PLB: So, moving from the specific topic of your first year project, what would you say you learned about being a researcher from the experience?
JD: Well, I’m going to have to quote Lindsey Lopez here: just get ahead of your deadlines. It’s going to sound clichéd, but you have to be aware of what you need to do and when it needs to be done.

PLB: I like the fact that you refer back to Lindsey. It indicates that someone’s reading the PLB.
JD: The what?

PLB: Well, it at least suggests that the first-year graduate students are a cohesive team. Is that true?
JD: Definitely. We hang out a lot together. We all have different schedules, of course. But we get together on weekends. And the joint SDS students spend a good amount of time with us.

PLB: So, other than hanging out with the other graduate students, what sort of things do you do for fun?
JD: The usual stuff. Watching TV, movies, reading. I do a lot of non-cerebral stuff in my free time.

PLB: What kind of TV and movies do you like?
JD: *Law & Order* is my favorite TV show. I like science fiction movies. But not scientology; I still haven’t seen *Mission Impossible 3*.

PLB: I once told a person I studied psychology, and they thought I meant I studied scientology. It was a very odd conversation. But that’s neither here nor there, because it’s time for the PLB’s patented “Three Tough Questions.”
JD: I’m ready. I’ve studied up.

PLB: We’ll see if you’re ready. Number one: what, for you, is the big question?
JD: I’d have to say the mind-body relationship. I’m really interested in how cognition arises from our biology, particularly as it relates to neuroscience.

PLB: That is certainly a big question; I can’t claim you lack ambition! Number two: do you see psychology when you’re experiencing pop-culture? Does it pop out at you, “Hey, this is related to what I study?” If so, what’s an example?
JD: That IS a tough question. Wow, pop culture. I guess I’ll have to say, no. I don’t really think about psychology when I’m just sitting back and relaxing. I’m pretty good at segregating my life, so that my research doesn’t bleed into my free time when I’m trying to relax. I guess that would make it work.

PLB: Well, that can be a useful skill. Finally, our last tough question: how many blades does the optimal, Platonic form of a razor have, and does that razor vibrate?
JD: It has three blades. And it does not vibrate.

PLB: You are correct, sir!

This has got to be at least half-way through, right?
No doubt many of you saw this headline to the April edition of Focus. Yes, it’s true: the Faculty Senate opposes House Resolution 177 (The Academic Bill of Rights). Partially because it strikes many members of the Senate as a prelude to a witch-hunt, but mostly because it takes authority that ought to reside in the hands of the universities and places it in the hands of the state legislature.

What you might not know, however, is that this is but one of MANY things that the Faculty Senate opposes. To give you a sense of what Faculty Senate meetings are like, here is a list of:

The Top 10 Other things that the Faculty Senate opposes!

10) Alacrity
9) Subtext
8) People who answer the phone “Y’ello”
7) Cloture
6) Forming committees to sidestep making hard decisions*
5) Dill pickles
4) 5 minutes of discussion when 20 are available
3) The second person to receive a PhD at CMU
2) Mohawks
And the number one other thing that the Faculty Senate opposes is...
1) Dangling participles

*Just kidding. The Faculty Senate clearly does not oppose this

Lots of people have questions about plans for the new Gates Center.

If you check out this blog, you can actually get in touch with some of the movers and shakers on the project:
http://gatescenter.blog.cs.cmu.edu/

The site has plenty of information about Gates, including an anticipated budget, renderings of the proposed building, and details about the architect firm.

There will be no more Faculty Senate meetings until September. I know! What are we going to do with ourselves? However, if you have some issue that you feel like you want the august body of the Senate to consider, you can always get in touch with me so I can get it on the agenda for the coming academic year!
Point: Dr. Yeung has a million dollar smile
By Wendy Shalot, Sophomore Psychology Major

I wasn’t sure I wanted to take Cognitive Psychology this past semester, but one of my friends convinced me to take it because Dr. Yeung was teaching it. And boy, were they ever right. I loved Dr. Yeung’s class ever so much! He’s my favoritest professor ever. He’s just so cute and funny and smart. I could listen to him talk all day, and I really enjoyed his class.

The best thing about Dr. Yeung is his smile. When he smiles, his face lights up! There’s a review of Dr. Yeung on Ratemyprofessor.com, and it says “I had a HUGE crush on this teacher. What a smile!” And that review is so right! Dr. Yeung has one of those million dollar smiles; it makes everyone in the room feel special whenever he’s smiling.

Sure, I learned a lot about the brain and science and psychology and stuff in the class. But really, the draw of the course is just the chance to be with Dr. Yeung. I could watch him smile all day long! I might have to re-take the course. I think there’s probably some stuff that I didn’t learn nearly as well as I could have. I hope he teaches it again someday. He’s so dreamy.

Counterpoint: Nick’s smile is worth, at most, $28,127.74
By Erik Thiessen, Less Popular Assistant Professor

There’s been a lot of talk about Nick Yeung’s smile lately, especially amongst undergrad ladies. And I have to admit, I’ve been skeptical all along. Sure, Nick has a nice smile. I mean, it’s not as though he’s missing any teeth, or gap-toothed. But I never saw what was so special about it. Most times, when someone commented on how nice Nick’s smile was, I just shrugged or nodded. To each their own, that’s what I say.

But when I heard this latest claim, that Nick’s smile is somehow worth 1 million dollars, I just had to say something. A million dollars? That’s ludicrous! Let’s think about this for a second, people. What’s in a smile? Teeth, right? And we all know, the minerals in your teeth are hardly worth anything.

Let’s think about this further. What would make a smile really worth something? Dental work, especially gold fillings. So let’s imagine that Nick had a gold filling in each and every one of his teeth. Now, the average filling weighs 1.5 ounces. There’s 28.35 grams in an ounce. Currently, on the world markets, gold is selling for about $20.67 a gram. If Nick had a filling in each one of his 32 teeth, that’d be a final sum value of 32 x 1.5 x 28.35 x $20.67, or $28,127.74 (rounding up!). That’s nowhere near one million dollars.
Recently, the PLB had a chance to review Coca-Cola’s latest product, Coke Blak. Here’s what we thought!

**Description:** Coca-Cola refers to Coke Blak as a “fusion beverage.” This is both because it’s an energy drink, and because it’s a combination of iced mocha and Coke. That’s right: if you have ever said “I wish my coffee had just a bit of Coke in it,” Coke Blak might be the drink for you!

**What our Taste-Testers Said:**

“Wow. I just got punched in the mouth by Coke Blak.”

“I have a headache now.”

“It’s cold, and hurty.”

“Flavor is kicking me in the head! From inside my mouth.”

“They ought to call it Coke Blech.”

*Our most positive response came from someone who really loves both coffee and Coke:*

“It’s very strange. The flavor confuses me. I can’t tell if I hate it or not.”

**Summary:**

Coke Blak tastes exactly like you would expect: like cold coffee with a bit of Coke aftertaste. A lot of energy drinks have a bland flavor, almost the ghost of flavor. That is definitely not true of Coke Blak. The scientists at Coca-Cola have clearly solved the mystery of how to apply flavor to energy drinks. However, it would have helped if, at some point in the process, someone had reminded them of the dichotomy between “good” and “bad” flavor. As it stands, Coke Blak is the sort of flavor that sits around in your mouth for minutes afterward and laughs at your inability to get rid of it.

**Possible uses:**

1) Coke Blak is intended as an energy drink, and all of the caffeine packed in a bottle will certainly keep you awake. Frankly, you would have to have an extremely pressing need for consciousness to make achieving it via Coke Blak worth the price. And I’m not talking about the two dollar purchase price. I’m talking about the aftertaste.

2) Coke Blak comes in a very hefty bottle, which can serve to keep you from drinking Coke Blak. After purchasing a 6-pack of Coke Blak, simply take one of the bottles and use it to bludgeon yourself into unconsciousness. This will allow you to avoid drinking Coke Blak. Most consumers, however, will find that this purpose is more easily achieved by simply not purchasing Coke Blak in the first place.
On a recent weekend in New York, the PLB caught a showing of the Moscow Cat Theatre, in which a ringmaster has his cats perform a variety of unusual tricks. Here’s what we thought:

In 75 minutes, the cats do many tricks. The hand-stand is my favorite.

This little guy goes hand over hand up these bars with no trouble. If you look closely, you can make out the treat in the ringmaster’s hand.

Lots of the stunts involve climbing.

As you can see from the pictures, the cat tricks are great. But not all of the show is pure gold. Only 55 minutes are devoted to neat cat tricks. Scattered throughout the show are 20 minutes of clown-centric activities in which the audience is required to clap. And the clowns do some really strange things.

For example, in one sequence, the ring-master goes to sleep, and has a dream. In his dream, he’s in space, where he’s greeted by two martians. At first, he and the martians are friends. But then the martians attack him. The dream sequence finishes with him on his knees, praying for mercy, as the martians surround him.

What does it mean? Is it a cautionary tale about immigration? A metaphor for man’s inhumanity to man? A parable about the relation between science and religion? A straightforward warning not to trust martians? I just don’t know! I do know, however, that the show would be better with less freaky ringmaster dream sequences, and more cats.

One final note: there’s a fair bit of audience participation in the Cat Theatre. I was called up on stage to dance, and have cats jump on me. Immediately after they saw me dance, the clowns sent me back down to the audience. I think perhaps they were intimidated.
The PLB has just received an important news bulletin from Lynne Reder: John Anderson’s brother has purchased a condo in Whistler, British Columbia, and is renting it out. Rates are as follows:

Weekends will cost approx. $100 per night (friends’ and relatives’ rate) and $500 per night during the Winter Olympics (in 2010). Weekly rentals available for $450; and during the Olympics weekly rentals will be $2,500. This is on a first-come first-serve basis. Unobstructed views of most events and best of all it’s very private.

Let me just say what everyone is thinking: if we were to hold first- and second-year brownbags at the condo in Whistler, attendance would skyrocket. I’m sure Mike Scheier is already looking into ways to make this happen with department funds!

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Last Month’s Answers:

1) What is the name of the mall in Back to the Future where Marty meets Doc with the Delorean? At the beginning of the movie, it’s called Twin Pines Mall. But in the past, Marty crashes into one of the pines, so when he returns to the future, it’s called Lone Pine Mall.

2) In what movie does one of the main characters order dry white toast and water? The Blues Brothers

Beau Stephens answered both questions, so he gets to pose two stumpers this month!

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Trivia Questions

Submitted by Beau Stephens

In what 2002 film does the main character walk out of a doctor’s office only to find himself in front the door to Lori Holt’s lab?

In the 1942 film, “The Talk of the Town,” how does Cary Grant’s character like his borscht?

First person to answer these two questions gets to submit two questions to bewilder and perplex the department next month.

Submit your answers to CMUPLB@hotmail.com

Good luck!
What’s all this then?

It’s the equipment of PBS’ television crew, in Baker to film Sheldon Cohen as part of a documentary. The preparations and the interview lasted several hours, suggesting that budding TV star Dr. Cohen could get plenty of screen time.

The PLB was unable to confirm an exact broadcast date for the documentary. However, our sources indicate that Dr. Cohen is already working hard to fit in with television and big screen stars by trying to forget the little people.

Caption Contest

Last month, we asked you to come up with funny captions for this photo. Here’s what you said:

From Nick Yeung:
Behold the power of the Ames’ room illusion: Ken Kotovsky is actually four times the size of David Klahr, but they appear the same size owing to clever use of perspective. To see the illusion, compare the sizes of the two wine bottles in the picture.

From Mike Scheier:
So how far you’d say it was to Brokeback Mountain?
Here is this month’s photo for the caption contest, taken by someone who may have been enjoying using the zoom on the camera just a little too much. E-mail your suggestions for the caption to rakison@andrew.cmu.edu.

Given that David is actually the subject of the photo, you may want to use an anonymous e-mail address...

Just so you know, BabyGotBack@hotmail.com and CheekyMonkey@hotmail.com are already taken.

The PLB is going on vacation in July, so the next issue will come out on August 1st. See you then!