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Peter F. Cook
ACCOMPLISHMENTS

Professors

"REGINA LANGEOUT
I was elected as a Fellow to the Society for Community Research & Action"

"NICK DAVIDENKO
I was an invited speaker at the Distinguished Speakers Colloquium Series at San Francisco State University. I also gave a talk at the Vision Science Society meeting in Florida.

I was a recipient of a Hellman Fellowship for $8,625 to study the role of experience in orientation-sensitive visual processing: http://www.hellmanfellows.org/fellows/nicolas-davidenko/

My illusion "Mind-controlled motion" (a.k.a. Motion Pareidolia) was selected as a Top-10 finalist in the international Illusion of the Year contest. Voting is open to the public and takes place June 11 and 12. Link to Contest website: http://illusionoftheyear.com Link to the illusion: https://www.youtube.com/watch?v=gTXWhR2oOX8"
BRUCE BRIDGEMAN


Increasing eye height makes slopes appear less steep

41.22, Monday, 18-May, 8:15 am – 9:45 am, Talk Room 2Session: Perception and Action: Interactions
Bruce Bridgeman1, Ian Cooke1; 1Department of Psychology, University of California, Santa Cruz

Several studies have shown that slopes of hills are greatly overestimated. We have recently demonstrated that the overestimates increase logarithmically as the end point of the domain to be estimated increases – every doubling of the distance to the end point results in a constant increment in perceived slope. A theoretical analysis showed that a critical parameter is the angle v between the observer’s line of sight and the slope of the hill, when the observer fixates the far point of the required domain. The theory predicts that increasing observers’ eye height above the surface of the hill will reduce the slope overestimates by increasing this angle. Here we test that theory by having observers stand on a 37 cm high box to increase their eye height. Observers estimated an outdoor slope in front of them in degrees, at ranges from 2 to 16 m. Estimates for various ranges defined by traffic cones again followed a logarithmic function (r² = 0.997), with lower estimates compared to other observers standing directly on the surface of the hill. Apparent slope increased more rapidly with distance than in a group standing on the hill’s surface, however, so that at larger distances slope estimates with and without increased eye height converged. As the length of the domain to be judged increases, enhanced eye height has a smaller and smaller effect on the angle v between the line of regard and the hill’s surface. A demand characteristic might induce observers to give different estimates for the four distances tested; an analysis of just the first estimate of each observer, however, showed that the distance vs apparent slope function remained logarithmic. We conclude that anticipated effort, perceived danger and other factors play only a minor role if any in slope estimates.
3 Accomplishments

Professors

CHRISTY BYRD
Presented papers at AERA and SRCD:

AERA: The Importance of Cultural Relevance for All: Secondary Students’ Perceptions of Culturally Relevant Teaching
SRCD: Black History Month and To Kill a Mockingbird: Student Perceptions of School Racial Socialization Practices

PHIL HAMMACK
I and all three of my graduate students traveled to New York in May for the second annual meeting of the Society for Qualitative Inquiry in Psychology. Andrew Pilecki and Erin Toolis organized an awesome panel on the use of qualitative methods to study moral exclusion of groups. The panel was a perfect UCSC-CUNY mix, with two graduate students from our sister program at CUNY in Critical Social and Personality Psychology, along with me and a faculty member from that program (Susan Opotow) as discussants.

An article co-authored with Andrew Pilecki is coming out in the Journal of Social Issues this month called "Power in history: Contrasting theoretical approaches to intergroup dialogue." It is part of a special issue examining the link between social psychology and history.

HARMONY REPPOND
I am graduating this summer and will start as an Assistant Professor at the University of Michigan, Dearborn in the fall.

ANNIE DITTA
Traveled to Las Vegas, NV for the Western Psychological Association to give my talk titled "Thinking about the future causes forgetting of the past."
Received the Frank X. Barron Award from the department for research on creativity.

SARA GOODMAN
I proposed my dissertation at the end of May (yahoo!) and received the Frank X. Barron Award for Creativity Research.

ELIZABETH GONZALEZ
I was awarded the Chicano Latino Research Center Graduate Student Mini-grant for my Dissertation research.

BRYAN HOLBROOK
I completed my qualifying exam this spring quarter. My committee also happened to loved the salsa I made for them.
JOANNA WEILL
I received an American Academy of Forensic Psychology Dissertation Grant in Applied Law/Psychology

ACACIA OVEROYE

THOMAS PETTIGREW

Also in March: Co-edited with Heather Smith (UCSC Ph.D. 1989) an issue on ADVANCES IN RELATIVE DEPRIVATION THEORY AND RESEARCH. SOCIAL JUSTICE RESEARCH, 28(1), 1-167.

On May 7th, gave the Jaspars Memorial Lecture at Oxford University, UK. (Same talk I gave as colloquium at UCSC several weeks before).
1. Would you please share your background with us?

I grew up in the Seattle area, and had always intended to return to the Pacific Northwest. Then I read the recent New Yorker article on the giant earthquake due in the Cascadia subduction zone, and decided maybe Montana instead. My undergraduate schooling was at Pomona, a small liberal arts college in California’s Inland Empire, where I studied 20th century philosophy and writing (the latter, due to incredible good fortune, with the late great David Foster Wallace). As a long-time vegetarian and all-around softy, animal welfare had reliably aroused my sympathetic faculties since early childhood. I was particularly interested in phenomenological experience in non-human animals and its ethical ramifications, and this led me to write my senior thesis on belief states in non-linguistic animals. While doing so I realized that cognitive science was, in many ways, better suited than philosophy to grappling with the animal mind. So, two years after graduating, while living in New York with my wife, I entered a post-bacca laureate program in Psychology at Columbia University, where I worked in a primate lab and a walrus lab. The more I read in the animal experimental literature, the more convinced I became that the vast majority of studies had minimal ecological validity, and were thus under- and mis-representing animal cognitive faculties. While choosing grad schools, I was looking for a program where I’d have the flexibility to develop behavioral approaches for studying wild animals, outside the confines of the typical laboratory setting.
This brought me to Santa Cruz, and the Pinniped Lab, where Dr. Colleen Reichmuth had been collaborating with The Marine Mammal Center, a San Francisco facility that attempts to rescue and rehabilitate stranded marine mammals (predominately seals and sea lions). A large number of sea lions stranded each year with neurological symptoms (including reliable hippocampal lesions) due to exposure to neurotoxic algae. The Marine Mammal Center wanted someone to study the neurobehavioral effects of the exposure, and thus, with the kind and patient facilitation of Psychology Professor Meg Wilson, my dissertation project was born. I ended up collecting brain and behavior measures on over 60 wild sea lions, and now, seven years later, the primary related academic paper is finally in review. Of course, despite the blood, sweat, and tears required to conduct that series of studies, if I’m remembered it will surely be for my side project with Ronan the Dancing sea lion, the first non-mimicking animal shown able to flexibly keep a beat.

2. Would you briefly describe your current line of research?

My two primary current research endeavors both involve neuroimaging, and both are in keeping with my interest in ecologically valid, humane, alternative approaches to comparative cognitive science. With Dr. Greg Berns at Emory University, I’m doing functional MRI with awake, unrestrained domestic dogs. We recruit local dogs and their owners, and, through collaborative training, teach the dogs to participate in imaging studies. Because the dogs are fully awake (as opposed to most non-human fMRI, which is conducted in sedated animals), we can assess neural response to perceptual stimuli. Because they’re unrestrained (all prior imaging of non-human animals without sedation has used severe restraint), they’re in a relatively relaxed state, and are able to produce motor responses. This allows a wide range of imaging studies that haven’t been plausible with non-human animals previously. To date, we’ve assessed neural mechanisms and dynamics involved in the reward system, temperament, vision and olfaction, and motor inhibition and spatial memory. My other line of research involves high-resolution diffusion tensor imaging (DTI) with post-mortem brains.
Question 2 continued:

DTI allows one to map out white matter tracts, and can be employed in live or dead brains. We obtain brains opportunistically (there are plenty out there, so no need to sacrifice animals to get them!), and are focusing on previously under-studied species. Our first DTI paper just came out in Proceedings of the Royal Society B—we showed a previously undefined cortical auditory pathway in the dolphin brain. I’m now looking at changes in white matter integrity in sea lion brains that were damaged by toxic algal exposure, and exploring a number of comparative questions about terrestrial and marine carnivore brain networks.

3. How did you become interested in this topic?

We know a lot about animal behavior, but relatively little about animal brains (outside of humans, primates, and rodents). Previously, avenues for learning about the non-human animal brain have been highly invasive and often fairly gruesome. Now, with better post-mortem imaging techniques and with the demonstrated ability to do human-style fMRI studies with awake, unrestrained animals, it’s possible to obtain knowledge about brain structure, function, and networks across a wide range of species using humane approaches. This can help us better understand species-specific neurobehavioral function and dysfunction, but also opens the door to studying developmental and evolutionary constraints on brain organization.

4. What is your current occupation?

I’m entering my third year as a post-doctoral fellow in Psychology at Emory University.
5. Any advice you would like to give to graduate students?

This is a bit delicate, as there are as many approaches to facing the trials and tribulations of graduate study as are there are graduate students, and the “correct” path will obviously be different for different folks. Also, I suspect that much of the benefit of grad school comes from meeting and surmounting challenges on one’s own, without explicit guidance. However, I will say that people who are serious about pursuing an academic career path should push early and often in their grad career to be collecting data and analyzing and writing up the results for publication. Classes, TAing, qualifying exams, dissertation proposals, all these can suck up one’s time and energy and attention, and they all have some (I’d argue limited) value. But they’re not what being a scientist is about. You’ll likely learn more conducting, analyzing, writing, and dealing with reviews on one experiment than you will from jumping through all the grad-school hoops combined. Sure, this stuff is scary and often painful, but all the more reason to jump in and start developing the necessary coping skills now.

6. Anything else you would like to share with the UCSC psychology community?

Since I was nearly always at the marine lab, I was somewhat of an absentee Psychology grad student. That said, what really sticks with me is the joint dedication of the faculty to ecological validity. It gets lip service everywhere, but PIs in the Psychology Department at UCSC actually walk the walk. Psychology is about how animals (human and non-) think and act in the real world, and, as psychologists, we should always remember that, no matter our experimental paradigms.

Thanks for sharing!
You get to decide the location for your favorite conference in the upcoming year. Where will it be?

- Tulum, Mexico
- Maui
- Berlin
- Seattle
- Alaska
You get to decide the location for your favorite conference in the upcoming year. Where will it be?

Greece (if it’s free!)

St. Petersburg, Fl.

Finger Lakes Region, Upstate NY (Wine + Science + Lakes that look like fingers... can't beat it!)

Hobbiton, NZ

Portland

Banana Psych Newsletter | Spring 2015
You get to decide the location for your favorite conference in the upcoming year. Where will it be?

- Oslo, Norway
- Madagascar
- Amsterdam
- Rio de Janeiro, Brazil