November 20, 2013

Conference for Research in the Arts, Social Sciences, & Humanities

UCSD Price Center

University of California, San Diego

This Conference is organized by Academic Enrichment Programs with the support of Student Affairs and the Office of Research Affairs.

CRASSH.UCSD.EDU
Welcome to the inaugural Conference for Research in the Arts, Social Science, & Humanities (CRASSH). The purpose of this conference is to promote and recognize research being conducted at UCSD in the arts, humanities, and social sciences, with particular emphasis on encouraging undergraduates to pursue research in these fields.

This conference was organized by Dr. Paul Yu, Associate Vice Chancellor of Research Affairs, as well as Dr. David Artis, Veronica Bejar, and Karen Van Ness of Academic Enrichment Programs. It was made possible by the generous support of the Experiential Learning Cluster, Student Affairs, and the Office of Research Affairs. Thank you to Dr. Sandra Brown, Vice Chancellor of Research Affairs; Dr. Melissa Famulari, Vice-Chair for Undergraduate Studies, Department of Economics; Jenelle M. Dean, Director, Alumni Relations, Division of Social Sciences; Theresa Mendoza of Academic Enrichment Programs; Courtney Giordano, Research Affairs; UCSD Catering; UCSD Marketing & Communications; and UCSD University Centers.

Most of all, we would like to thank our alumni, faculty, and student presenters for making this Conference a success.
Conference Schedule

• **10am:** Opening Remarks, Price Center Ballroom B

• **10:15am-12pm:** Plenary Session, Price Center Ballroom B
  Speakers:
  - Dr. Gordon Dahl, UCSD Department of Economics
  - Ricky Qi, UCSD alumnus, Class of 2009
  - Dr. Alan Daly, UCSD Department of Education Studies
  - Roland Ligtenberg, UCSD alumnus, Class of 2009

• **12:00pm:** Lunch, Price Center Ballroom B

• **12:30pm:** Undergraduate Presentations, Price Center East Ballroom
  Poster Presenters:
  - Stephanie Aguirre
  - Andres Albarran
  - Brian Bose
  - Elizabeth Hodgdon
  - Desiree Hollifield
  - Michele Lara
  - Dafne Melgar
  - Micaela Trujillo
  - Shirlene Wade

• **12:30pm:** UCSD Departments Information Session, Price Center East Ballroom

• **12:45pm – 1:00pm:** Undergraduate Student Performance
  Brian Bose, Performer

• **2:00pm:** Conference Close
**Dr. Gordon B. Dahl** is a Professor of Economics at the University of California, San Diego. He is also a Research Associate of the National Bureau of Economic Research, a Research Fellow of the Institute for the Study of Labor (IZA), and a Fellow of the Stanford Center for the Study of Poverty and Inequality. Previously, he was a faculty member at the University of Rochester and held visiting positions at the University of California, Berkeley and Princeton University. He received his Ph.D. from Princeton University in 1998 and his B.A. from Brigham Young University in 1993.


**Ricky Qi, Warren College 09’,** is a film director and Young Explorer of the National Geographic Society. Graduating from the University of California, San Diego with a degree in International Studies, Ricky moved abroad the next two years living in China, where he helped found JRJ Studios, a Shanghai-based professional photographer's collective, and chronicled the Shanghai jazz revival as well as documented portions of the Silk Road.

Ricky currently works at Protean Films, a Los Angeles-based documentary company, where he is directing his first feature-length film, *Under One Roof*, which follows China's last matriarchal society as their homeland in the Himalayan foothills undergoes rapid modernization. In 2012, his ongoing work with the documentary was awarded a National Geographic Society Young Explorer's Grant. Ricky also works as a commercial director for Los Angeles-based Arc Media, and is an avid surfer in his free time.
companies with strategy, product, and agile mobile development. Previously he was at Qualcomm where he was a founding member of Qualcomm Labs, an internal incubator focused on leading innovation in new wireless product development. There he was responsible for mobile product & business development for Gimbal SDK, a context awareness platform for iOS & Android developers.

Roland is always open to interesting opportunities and enjoys mentoring startups and entrepreneurs by helping them create value through constant innovation.

**Dr. Alan J. Daly** is an Associate Professor at the University of California, San Diego. Professor Daly has held a wide variety of positions in public education ranging from classroom teacher to district psychologist to site administrator. Alan’s research interests include social capital, the analysis of social networks, trust, educational policy, and the building of strengths-based systems of support.

**Roland Ligtenberg, ’09**, is a technologist whose passions encompass all things mobile, startups, and disruptive ideas accelerated by technology. A long time serial entrepreneur, he recently co-founded HouseCall - the app for your house. HouseCall helps homeowners find and book trusted neighborhood service professionals at the push of a button. In addition he is an advisor at Ice House, a global mobile software development agency, where he helps Fortune 500 and startup
1. Stephanie Aguirre, Muir College
   Psychology Major

Mentored by Dr. So-One Hwang & Dr. Rain Bosworth, Center for Research in Language

*Visual Language Sensitivity in Non-Signing Hearing Adults and Infants*

Our goal was to explore what characteristics of visual input lead to language recognition. We investigated this from two perspectives: hearing non-signing adults who participated in an American Sign Language (ASL) Judgment Task, and infants who were tested through eyetracking. We presented participants with video stimuli of real ASL signs and other non-ASL visual inputs. The latter included time-reversed, biologically unnatural videos, which violate expectations of biological motion.

Adults were asked to make judgments about whether or not the video presented might be a real sign. They detected at higher than chance accuracy that time-reversed stimuli were not ASL. Unable to report their intuitions for their judgments, participants seem unconsciously aware that biologically unnatural movements cannot constitute language.

Using the Tobii eyetracker, infants were exposed to similar stimuli while their looking times and where they looked were recorded. Infants looked longest at videos of real ASL. They attended to the hands of the signer for real signs but not for time-reversed signs. These findings suggest that infants are born with an innate attraction to linguistic inputs, regardless of modality. Future studies on deaf infants will provide important information to parents, educators, and clinicians about early critical periods for language development.

2. Andres Albarran, 6th College
   Education Studies Major

Mentored by Dr. Frances Contreras, Education Studies Department

*Negotiating Fisher: Affirmative Action, Constitutional Law, and School Segregation*

My research paper centers on the Abigail Noel Fisher v. University of Texas, Austin case. Currently in the Supreme Court awaiting a verdict, the case will have important implications in Texas, California, and across the country. In my paper I trace the development of the law around the use of race in educational admissions. Beginning with Brown v. Board of Education in which the court found segregated schools to be unconstitutional and following with an end to Affirmative-Action in California through Proposition 209—The California Civil Rights Initiative—I trace the ways in which public higher education has become (re)segregated with particular attention to the flagship institutions like U.T. Austin in Texas and U.C. in California. Using an interdisciplinary methodology including historical-archival, expert interviews, census data, amicus briefs, and dissent opinion from Court rulings my paper makes the argument for a desegregation of public higher education through a court upheld use of affirmative action policies in admission decisions.

3. Brian Bose
   Theatre & Dance Major

4. Elizabeth Hodgdon, Eleanor Roosevelt College
   Psychology Major

Mentored by Dr. Carol Padden & Dr. So-One Hwang, Center for Research in Language

*Communicating with the body: study of sign languages and gesture*

Many sign languages, just like spoken languages, have complex grammatical structure that has been evolving for centuries. We study sign languages to better understand how linguistic elements are created using the body, which involve unique characteristics that do not have exact equivalents in the spoken modality. We also have the opportunity to study the emergence of new sign languages and how these grammatical properties develop over time.
In this project, we are studying older, established sign languages: American Sign Language and Japanese Sign Language. These languages have been in use by deaf communities for at least 250 years. We are comparing them with new sign languages that have been spontaneously created in small villages of deaf and hearing people in the last two or three generations: Al-Sayyid Bedouin Sign Language of Israel and Central Taurus Sign Language of Turkey. Finally, we recruit as a comparison group, hearing non-signing English speakers (UCSD undergrads), and study the gestures they produce when asked to describe concepts without speaking.

5. Desiree Hollifield, Warren College Linguistics Major

Mentored by Dr. Carol Padden & Dr. So-One Hwang, Communication, Center for Research in Language

*Phonological Constraints on Two-Handed Productions in Sign-Naive Gesturers*

Although sign languages are different from spoken languages, both are organized grammatically. One of the first phonological conditions for sign languages describes the handshapes and movements that can be used together. For example, if the two hands have the same movement, they must also have the same handshape. Such phonological properties are found in all known sign languages. We investigated whether they are also found in the gestures of non-signing hearing people. We compared the responses of 13 Deaf ASL signers and 19 hearing non-signers when describing the same set of pictures and videos. Responses were coded for handshape, movements, and whether they were produced with one or two hands to determine if they follow phonological conditions. We found that the two groups follow the phonological conditions on two-handed productions at comparable rates. Findings provide a new perspective on early descriptions of phonological constraints for two-handed productions in sign languages. Patterns from gestures may provide a foundation for other phonological structures in sign languages. This study helps us understand whether particular phonological conditions are established through linguistic organization or more general constraints on how the two hands interact for communication.

6. Michele Lara, Muir College Ethnic Studies Major

Mentored by Dr. Curtis Marez, Ethnic Studies

7. Dafne Melgar, 6th College Spanish Literature Major

Mentored by Professor Luz Chung, Education Studies Department

*Empowering Marginalized Youth Through Leadership*

As part of my research I designed a leadership program to promote higher education in a continuing high school. At this location, students try to overcome poor academic and/or social skills, but do not know how. For this reason, with the help of a teacher at this location we choose a group of students who were ready to challenge their leadership skills. At the beginning of the program I made a survey using the Maslow’s hierarchy of needs and The Cycle of Socialization to learn about the student’s current physical needs and social influences. Based on the results I presented activities that encourage them to find self-empowerment and self-advocacy, while at the same time they learned how to give back support to their community. We met every Thursday for an hour in a classroom, and once a month we had a family day at the park. After three months, students reached personal growth, self-advocacy and most important the sense of belonging in the higher education community.

8. Micaela Trujillo, Warren College Linguistics Major

Mentored by Dr. Carol Padden & Dr. So-one Hwang, Center for Research in Language

*Using Gestures to Assess how Children Think and Learn*

We study gestures that children use when solving
problems to discover how they think. Gestures that children use can sometimes indicate knowledge that they are not expressing in what they say. In hearing children who speak English, gestures can be labeled based on what they are doing with their hands. In deaf children who use American Sign Language (ASL), both language and gesture are expressed in the visual-manual modality. For both groups, we try to identify the types of information that children express in language and gesture.

We studied hearing and deaf children ages 5-8 years who were tested on conservation knowledge. Students who understand conservation know that changes in shape and configurations of objects do not change their quantity. In contrast, students who do not yet understand the principle of conservation are likely to respond that two objects are different in quantity when they look different. We asked all students to answer questions about conservation and explain their answers. With that explanation we analyzed both their language and their gestures and attempted to use them as a window into how the children think and learn.

9. Shirlene Wade, Roosevelt College
Psychology, Linguistics (cognition and language) Major

Mentored by Jessica Sullivan and Dr. David Barner, Department of Psychology

*Number Representations and Mappings in Bilinguals*

What is the nature of the number word to magnitude pairings made in estimation? This study investigated the performance of 5- to 7-year-old Spanish-English bilingual children, dominant bilingual adults, and balance bilingual adults on a within-subjects estimation task. We asked whether estimation involved language-specific or language non-specific input to develop number word-magnitude mappings in L1 and L2. If estimation recruits processes that are language non-specific, it is expected that a bilingual child’s accuracy at estimation to remain similar in both languages. However, if estimation recruits processes or mechanisms that are specific to a language, estimation accuracies should differ based on language experience. Our findings suggest that specific language experience in children and adults appears to contribute to the accuracy of estimates in each respective language. We conclude that number word-magnitude mappings are strengthened by language specific experience and as such may be affected by bilingual proficiency or frequency effects.
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