Everyday Creativity: Shared Languages & Collective Action


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Creativity is a word that people use as if we all share a similar sense of what it means. Yet, and I am certain I am not unique in this, talking to others at length often shows that how we define creativity is more multifaceted than our assumptions suggest. Given that I am a "creative" person and have come to see the term as both complex and ambiguous, I was delighted to learn that the 7th Creativity and Cognition Conference was coming to Berkeley this year. As a Berkeley resident, I was excited to find I could easily attend and learn how this group approached the idea. For this conference, the organizers decided to frame the program around the rubric of "Everyday Creativity" and posed several questions in their call for projects/papers: How do we enable everyone to enjoy their creative potential? How do our creative activities differ? What do they have in common? What languages can we use to talk to each other? How do shared languages support collective action? How can we incite innovation? How do we enrich the creative experience? What encourages participation in everyday creativity?

It was no surprise to find that those at the conference answered these questions from many vantage points, although it seemed the accepted submissions emphasized computer science, design (in an engineering sense) and education. (I believe they said that only 23% of the proposals were accepted, so I would assume that this kind of emphasis mirrors what the organizers wanted the conference to stress.) Still, the more hands-on discussions are those that have stayed with me to a greater degree. Although often more descriptive than quantitative or statistical, this work was striking because it showed evidence of problem-solving through visuals that also demonstrated a complexity that I do not think we have quantitative tools to describe. One paper that brought the humanness of creative acts to mind was "Assistive Devices—Stroke Patients' Design" by Ana Correia de Barros and Carlos Duarte. Their interviews with 48 stroke patients illustrated many cases where "private" solutions were used to provide equipment to the patient so that they were better "equipped" to deal with their disabilities. Often these impressive handcrafted devices, made by family and friends of the patients, were similar to those on the market. Not having access to, or information about, the manufactured product, these "helpers" developed solutions that would function similarly to the unknown device and would successfully ease the daily tasks of someone in need.

Cathy Treadaway's paper "Hand E-craft: An Investigation into Hand Use in Digital Creative Practice" similarly presented a sensitive articulation of the complexity of the creative process. In this case, she showed a video to allow us to see how an artist combined computer-aided design with work by hand. Treadaway's approach to conveying the value of haptic sensitivity in a creative process seems important when we consider the trend toward digital and technological projects that often include a "distance" from directly exploring our natural space.

I was also quite taken with a personal element that was very present throughout this conference. For example, Sarah Atkinson's contribution, an invited installation commissioned by BigDog Interactive, Ltd., was a creative inspiration that allowed many of us to receive unique conference bags. Atkinson issued a "Call for Bags" before the conference, asking participants to recycle their old conference bags so that she could re-craft them for this event. I received one of these bags at registration, with an attached tag that says it was "constructed using three different CHI conference swaggers that were cut into circles of various sizes and then sewn back together to make the fabric for this bag." Thank you, Sarah! I simply adore my bag and I am delighted to have this cool replacement for an old, ratty bag I've carried around forever. Another nice touch was the poster and demo madness session. Everyone who was doing a poster or a demo spoke for about a minute. These quick summaries allowed the attendees to have a sense of each project and to build a mental map of what to look for in the poster-demo session. There were also a number of prizes presented, including Amy F. Ogata for "Cultivating and Commodifying Everyday Creativity in Postwar American Childhood," Kiniko Ryokai for "Children's Storytelling and Programming with Robotic Characters," and Benjamin G. Shaw for "A Cognitive Account of Collective Emergence in Design"; Brittany Smith received the "most helpful student volunteer" prize.

Anyone who has attended a parallel track conference knows how frustrating it is to have to make choices between papers when conflicts arise. Creativity and Cognition had only one stream of sessions, so we were all able to appreciate all the activities. Another plus was the idea to have a keynote on each of the three days. Each was different and, as a whole, they added tremendous scope to the event. JoAnn Kuchera-Morin of AlloSphere Research Laboratory Nanosystems opened the conference with her paper "Using the Creative Process to Map N Dimensions: Quantum Information at Your Fingertips." Her powerful talk put me in exactly the right mental space for the three-day event. To oversimplify, Kuchera-Morin introduced us to the Design Stage environment she has set up in the AlloSphere. This site allows researchers to transform their working space into an immersive design canvas where they can overlay their mathematical algorithms and real data and, in a sense, perform their work. Her presentation was so captivating that it was only later that it occurred to me that I am not sure I entirely grasped what all of this has to do with quantum information.

On the second day, Jane Prophet's keynote introduced us to her work as an artist who frequently collaborates with scientists. I found her talk the most engaging of the conference because of the multi-faceted nature of her projects and the themes she incorporated into them. Her "Sound Drawings," also on display in the Creativity and Cognition exhibition area, was a video work she created in collaboration with cardiothoracic surgeon Francis Wells. It presents a drawing done by this doctor during a pause in an open-heart surgery. It was conceived to explain his procedure to medical visitors in the theater. Because the doctor is using the patient's blood to make this quick sketch, the drawing challenges us to think about what a creative person does. In this case, I was confused about what was going on until Prophet explained that he was not taking time from the operation to do the drawing. In terms of "Everyday Neuroscience"...
Creativity," it is intriguing to think that he made this sketch using the material at hand in his "everyday" environment. This work alluded to many things, including the creativity of the surgeon, the sharing of this creativity through the teaching of others in the theater, the artistic vision of Jane Prophet in recording the sequence, and the reactions of the audience to the unusual drawings she presents. Prophet writes: "In the Swab Drawing videos, we are privy to an intimate moment as cardiothoracic surgeon Francis Wells uses a swab of the patient's blood, during open heart surgery, to recall diagrammatically the operating procedure." The subject and the controversy bring to mind The Sacred Heart: An Atlas of the Body Seen through Invasive Surgery by Max Agulera-Hellweg.

The final keynote, by Mihaly Csikszentmihalyi, was one of the few papers that incorporated recent work in cognitive neuroscience. I was surprised to find those at the meeting emphasized psychological studies and results rather than what is going on in the cognitive neuroscientific community, particularly in light of the interest in musical work at the conference and the recent explosion of studies on music and the brain. Perhaps it was because many of the projects seemed to stress applications more than theories.

Overall, the program provided a stimulating environment. The emphasis on design and engineering reinforced my sense that creativity has various meanings in our culture, a thought partially reinforced by the fact that my research into creativity is in other areas and moves in parallel directions. At the end, I found myself unsure as to how to evaluate the outcome. On the one hand, as someone who is generally critical of overly theoretical work, I was surprised to find myself feeling this event placed too much stress on contextual and applied approaches to the topic. It is undeniable that deciphering psychological traits is useful, as are efforts to encourage creativity in children and in the population at large. Indeed, it might be said that all our efforts to learn more about why the urge toward creativity resonates on so many levels are of value.

On the other hand, when walking home from the conference, I realized that I had wanted to raise many points about everyday creativity that seemed outside of the scope of this meeting. One that has nagged me for many years is that highly creative people sometimes have a negative impact on society. The financial devices that have wrecked havoc on the world economy, like Bernard Madoff's Ponzi scheme, are undeniable creative inventions that deserve no praise. Also, the many creative behaviors that defy social norms and stymie our lives were on my mind. Coincidentally, the next morning I awoke to a discussion on NPR in which a reporter explained that one of the problems in Afghanistan is that the terrorists are becoming more creative in how they make and use their weapons of destruction. I'm not certain it is appropriate to suggest that an academic research conference centered on Everyday Creativity should have addressed financial and moral issues. Still, one of the most challenging aspects of creativity is that we cannot separate it from these kinds of difficult aspects of life because the negative products of the creative mind are also a part of our environment. Even Leonardo, the acknowledged master of creativity, put as much energy into devising battle machines as other kinds of engineering devices.

So the question remains: How does a society differentiate between a discovery that is a "correct" product in the sense that it is in line with a culture's norms and the discovery of something that is socially disadvantageous? As we educate each generation, I suppose the tools we use help formulate cultural balance and individual potential and build models that include structure, cooperation, teamwork, the individual and the exceptional. All of these elements were a part of the 7th Creativity and Cognition Conference to some degree, which is no doubt why it was a successful event.