



Creativity Challenges and Opportunities in Social Computing: New Media Art & Human Centered Computing

Pamela Jennings, Ph.D.

Research Manager Informatics Circle of Research Excellence (iCORE) Visiting Professor Advanced Research Technology Lab Banff New Media Institute Alberta, Canada

pamela_jennings@banffcentre.ca
http://www.bnmiResearch.ca
http://www.pamelajennings.org

Please Note:

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"Since the artist cares in a peculiar way for the phase of experience in which union is achieved, he does not shun movements of resistance and tension. Rather he cultivates them, not for their own but because of their potentialities, bringing to living consciousness an experience that is unified and total."

"In contrast, the scientific man is interested in problems, in situations wherein tension between the matter of observation and of thought is marked. He cares for their resolution, but he does not rest in it; he passes on to another problem using an attained solution only as a stepping stone from which to set on foot further inquiries."

John Dewey, Art as Experience (1934)

A question that comes to my mind is whether or not Dewey's 1934 definition of the artist and the scientist still holds true? Do these generalizations help us understand the potential relationships between the vocation of art and the vocation of science? Or do they widen the gap between disciplines of the creative practitioner and scientist?

Dewey identified two conditions when a society is incapable of supporting aesthetic experiences. The first is a world in constant flux and filled with instability making impossible the reflective process necessary to recognize experience.

The second is a world that has completed its course in history and has no need of or facility for experiential reflections. (Dewey, 1934)

Who is the Creative Practitioner?

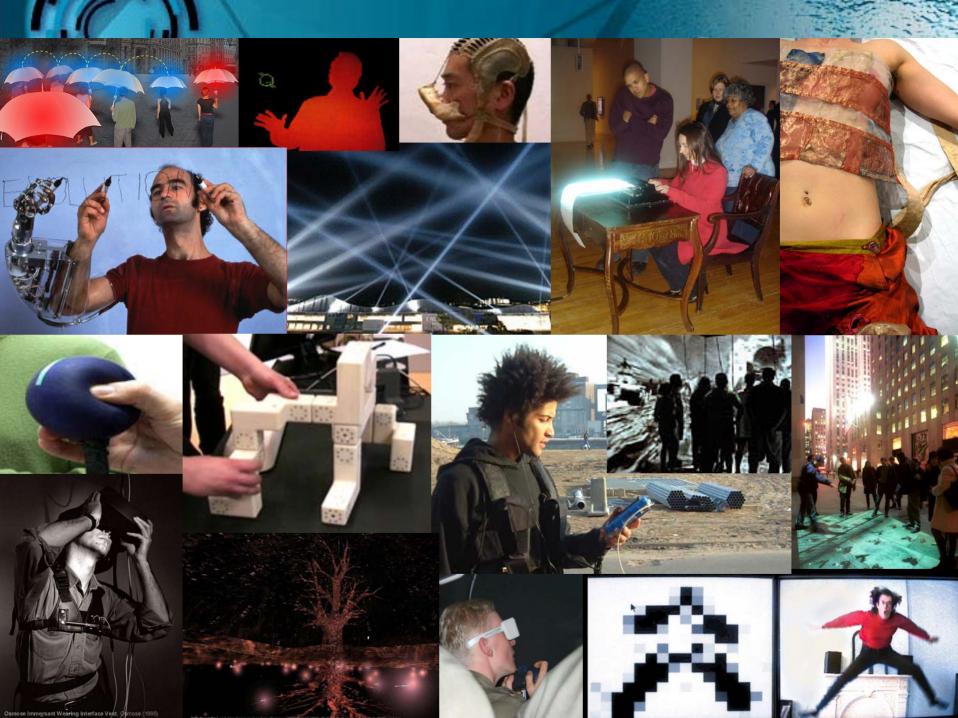
A person who combines aesthetics, creative and critical inquiry for the development of new systems that are bounded by the tools and methods of their creative discipline.

The outcome of creative practice is the articulation of new forms of expression, communication, knowledge and innovation.

While browsing the CHI2009 Program, I was pleasantly surprised to note the inclusion of session topics covering "aesthetics", "new media", and "reflective practice" in the mainstream program. This in addition to typical CHI venues for the exploration of experimental HCI concepts such as alt chi and workshops.

However, we still have a long way to go in terms of bringing together communities of practice who have, whether they realize or not, common interests.

I am advocating for the active inclusion of a breed of creative practitioners who find no contradiction in engaging the aesthetic, the technical, the critical, and the social in their creative products. There are several among this breed, in which ACM CHI is a one among an overlapping topology of core dissemination venues. The question is, how can this minority class become more visible in such a community such that valuable contributions and insights from their work – be it called research or practice – can continue to co-mingle and influence future directions in HCI?



As new media practices transcend the aesthetic it occupies a parallel track of shared concerns about the impact of technology on society as does research in human centered computing.

New media is a platform for the experimentation and integration of critical discourse, aesthetics, design and technology as a means to produce new forms of information technology applications.

A large number of works generated by the international new media arts community are or have been at the forefront and sometimes superseding, technology research development and the implementation of exploratory research that examines cultural and social implications of technology.

In 2004 the Helsinki Agenda was drafted by an international group of arts and new media policy experts and presented to the Finnish Minister of Culture. In this manifesto, we wrote the following principles to guide international new media arts practice and research policies.

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- 1. New media research is a key generator of new knowledge in arts, science, technology, communication and education.
- 2. New media practices have developed forms and protocols of knowledge sharing and access based on principles of openness, collaboration and creative freedom.
- 3. New media artists create transformative cultural experiences that inspire communities and individuals to engage in dialogue that expands the scope of creative industries and technology development.
- 4. By enabling and establishing deeper, as well as more pervasive modes of contemporary communication systems new media practices lead to richer possibilities of participation in social, inter-generational and inter-cultural communications.

Helsinki Agenda (2004)

http://www.ifacca.org/media/files/040916Helsinki_agenda_final.pdf

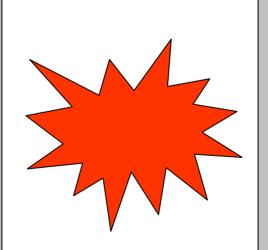
List of New Media Projects (Listed left to right; top to bottom)

- "UMBRELLA.net", Jonah *Bruckner*-Cohen (http://infamia1.infamia.com/coin-operated.com/)
- "Videoplace", Myron Krueger (http://en.wikipedia.org/wiki/Myron_W._Krueger)
- "Masticator", Takehito Etani (http://www.takehitoetani.com/)
- "Life Writer", Christa Sommerer and Laurent Mignonneau (http://www.interface.ufg.ac.at/christa-laurent/)
- "Whisper: wearable body architecture", Thecla Schiphorst and Suzan Kozel (http://www.sfu.ca/~tschipho/whispers/technique.html)
- "Alternative Interfaces", Stelarc (http://www.stelarc.va.com.au/)
- "Vectorial Elevation", Raphael Lozano-Hemmer (http://www.alzado.net/)
- "Squeeze Navigation Ball", Braden Kowitz
- "Constructed Narratives: Wireless Sensor Net Construction Kit", Pamela Jennings (http://www.pamelajennings.org)
- "Can you see me now?", Blast Theory (http://www.blasttheory.co.uk/)
- "World Skin, a Photo Safari in the Land of War", Maurice Benayoun (http://www.benayoun.com/)
- "Pedestrian", OpenEnded Group (http://www.openendedgroup.com/)
- "Osmose Breath Navigator" & "Osmose", Char Davies (http://www.immersence.com/)
- "World Skin, a Photo Safari in the Land of War", Maurice Benayoun (http://www.benayoun.com/)
- "Very Nervous System", David Rokeby(http://homepage.mac.com/davidrokeby/home.html)

Acknowledge the GAP and Celebrate the Interstices

Fine & Applied Arts

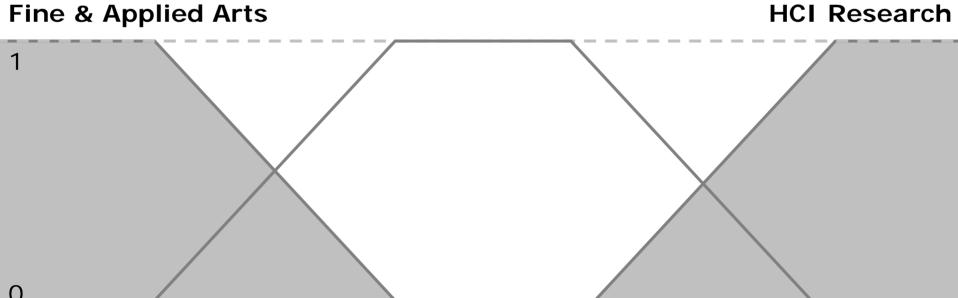
HCI Research



How do we acknowledge the gap, while celebrating – and supporting the interstices between the Fine and Applied Arts and human centered computing?

I propose here that the metaphor of the social-technical gap applied to **this** question is too Boolean.

Acknowledge the GAP and Celebrate the Interstices



Whereas an analogy culled from fuzzy logic is perhaps more appropriate.

There are multiple communities of practice that share common interests and to varying degrees form communities of interests. Although I would argue, that most do not.

We could, as an exercise, try to map evaluation methods, research platforms, projects, technology development and contextual goals in new media and human centered computing across the membership sets of this straw man inference engine.



Implications for HCC

I will end with the following questions.

Can the epistemological stances - the ways we come to understand and bring meaning to our work and the world - taken by disciplines that comprise the fuzzy membership sets of fine arts and human centered computing co-exist in light of the bigger picture - a desire to understand the role and impact of technology on society?

Can research policy be shaped around the very notion of clashing epistemologies?

Can integrative, interdisciplinary, and possibly transdisciplinary research agendas and educational programs be designed from the interstices between the fine arts and human centered computing? And finally,

Can we devise new value and reward systems that recognize the contributions that creativity in practice and research make to human centered computing.



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