

## **Brief Bio and (PR)<sup>2</sup>: Problems & Pitches – Rants & Raves by Alex Soojung-Kim Pang**

Dear invited participant of the NSF Workshops on Knowledge Management and Visualization Tools in Support of Discovery at the National Science Foundation, Arlington, VA on March 10 & 11, 2008, see <http://vw.slis.indiana.edu/cdi2008/workshop1.html>.

In preparation for the workshop we ask you to provide a brief bio and your input to the questions below. Your input will be available to all participants and people which are “interested (but cannot attend)” before the meeting to complement the introduction of participants and to structure the workshop more effectively.

Thank you for your time.

### **Self Introduction**

Please introduce yourself by providing a

- photo of yourself
- brief biography of about 250 words
- up to five major publications
- link to your home page and
- links to data or software you serve (if applicable).

### **Biography**

Alex Soojung-Kim Pang is a research director at the Institute for the Future. At IFTF he conducts research on the future of science, technology and innovation. He holds a Ph.D. in history and sociology of science from the University of Pennsylvania, and conducted research on the history of scientific representation and visualization. Before joining IFTF, he served as managing editor of the *Encyclopaedia Britannica*, where he oversaw its transition from print to electronic publication. He also taught at Williams College and the University of California, Davis, and held postdoctoral fellowships at Stanford University and the University of California, Berkeley.

### **Publications**

*Empire and the Sun: Victorian Solar Eclipse Expeditions*. (Writing Science Series.) Stanford: Stanford University Press, 2002.

"Visual Representation and Post-constructivist History of Science." *Historical Studies in the Physical and Biological Sciences*, 27 (1997), 139-171.

"Stars should henceforth register themselves': The Rhetoric and Reality of Early Astrophotography." *British Journal for the History of Science* 31 (1997), 177-201.

"Victorian Observing Practices, Printing Technology, and Representations of the Solar Corona." *Journal for the History of Astronomy*, 25 (November 1994), 249-274; 26 (February 1995), 63-75.

### **Home Page**

<http://askpang.typepad.com>

## General Questions

1) What is (are) your main interest(s) in attending the workshop?

I'm PI for a project on the future of science, technology and innovation at the Institute for the Future, a Silicon Valley think-tank. My interest in the workshop is twofold: to get a sense of the future of scientific visualization and their future uses; and to understand how they might be used in our work.

2) What information/knowledge management needs do you have?

Explain your 'dream tool' for scientific discovery and innovation.

My dream tool would allow me to analyze social information generated by scientists—e.g, citation patterns, prosopographical data, communications, etc.—in ways that help identify emerging research areas and innovative regions.

3) What is the most insightful visualization of static or dynamic phenomena you know?

*[Ideally this visualization led to a major discovery/innovation. Examples could come from science, art, or any other field of human endeavor. Note that we plan to use this visualization on your name card.]*

Edward Maunder's visualization of the sunspot cycle, which definitively established the existence of the 11-year cycle, is one of my favorites. More recently, I find haptic+zooming interface technologies—Jeff Han's interactive screens, the Kitchen Budapest ZuiPrezi (<http://zuiprezi.kibu.hu>)-- to be really compelling.

4) What would you like to learn / achieve at the workshop?

First, to get a clearer understanding of how visualization tools are evolving, and how they might affect the future of the sciences; and second, to being to see what kinds of tools we might use in the X2 Project.

***Please send the completed document by February 20th, 2008  
to Katy Borner <[katy@indiana.edu](mailto:katy@indiana.edu)> and Elisha Hardy <[efhardy@indiana.edu](mailto:efhardy@indiana.edu)>***