Biological Futures

in a GLOBALIZED WORLD

Winter Quarter 2013 Colloquium Series



Ron Eglash Science and Technology Studies, Rensselaer Polytechnic Institute

Thursday, March 7, 2013 4:00 – 5:30 pm Communications 202

Ethics from the Bottom-Up: Recursive depth in technosocial networks

Bottom-up social networks mediated by technology are changing the political, economic, and cultural landscape. But not all bottom-up networks are equally democratizing: while Open Source and DIY empower their publics by increasing generative capacity, systems like Facebook offer only a shallow façade of exchange. Leveraging concepts from complexity theory, "recursive depth" offers a framework for assessing the ethics of bottom-up social networks—including those of the social scientist doing the assessment.

Ron Eglash is an American cyberneticist, university professor, and author. He is best known for his research on the relationships between under-served cultural groups and modern technology, such as the use of fractal patterns in African architecture, art, and religion; algorithms in Native American material and spiritual practices; and the "appropriation" of technologies by urban youth subcultures. His educational background includes a Bachelor's degree in Cybernetics, a Master's in Systems Engineering, and a Ph.D. in History of Consciousness, all from the University of California. A Fulbright fellowship enabled his postdoctoral field research, which was later published in the book *African Fractals: Modern Computing and Indigenous Design*, and more recently appeared as his <u>TED talk</u>.

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Dr. Eglash will also deliver the Mangels Lecture:

Computing for Social Justice and Sustainability

Wednesday, March 6, 2013 | 6:30 pm | Kane Hall, Room 120

Computational sciences provide us with a powerful array of technologies for visualization, simulation and analysis. But their power is more often at the service of military and industry than the visions of Gandhi or Martin Luther King, Jr. From complexity theory and nanotechnology to DIY sensors and crowdsourcing, there are exciting possibilities for not only applying computing to problems in social justice and sustainability, but using those challenges as drivers for new innovation and research.
