Nonfiction review: 'Where Good Ideas Come From' by Steven Johnson

Published: Saturday, October 02, 2010, 9:03 AM

Special to The Oregonian

"Ideas are like rabbits," John Steinbeck once said. "You get a couple and learn how to handle them, and pretty soon you have a dozen."

Perhaps. But Steinbeck raised the key questions. How and why do important ideas surface? And what's the best way to handle them?

In "Where Good Ideas Come From: The Natural History of Innovation," Steven Johnson, an
author and Internet entrepreneur, draws on natural science, intellectual history and 21st-century technology to identify the environments that are conductive to innovation. Johnson doesn't define "good ideas" -- or indicate whether their pathways to implementation differ from those of "bad ideas." He's excessively sanguine -- and at times a bit glib -- about the impact of iPods, iPads, Web searches, text messages and Tweets. Nonetheless, his "long zoom" view of fertile idea-ecosystems is engaging, informative and, well, inspirational.

Johnson demonstrates that ideas rarely emerge from the "eureka moment" of a solitary inventor. And that neither decentralized markets nor command-and-control governments provide the best platforms for innovation. Constrained by copyrights, patents, a culture of secrecy and top-down bureaucracies, each of them, albeit in different ways, drains the "liquid networks" where hunches and serendipitous collisions, connections and collaborations thrive. Good ideas, Johnson suggests, "want to complete each other as much as they want to compete." They -- and we -- are best served by a free flow of information and institutional settings in which ideas can flow in unregulated channels, take hold and get implemented.

Johnson draws on research in psychology and evolutionary biology in a fascinating discussion of patterns of innovation. Human brains, he indicates, have a phase-locking period, in which they pulse in regular rhythm, and experience intervals of electrical chaos, lasting on average for 55 milliseconds, in which neurons are out of sync with each other. In the latter state, the brain assimilates new information and designs strategies for responding to changing realities. When forced to confront errors, moreover, our brains become more creative. The best innovation labs, then, "are always a little contaminated."

In nature, Johnson adds, a trait developed for a specific use often gets hijacked to serve a different function: Feathers to regulate temperature, for example, proved useful in regulating the flow of air on the surface of the wing, thus allowing birds to glide. The phenomenon (which scientists call exaptation) unlocks doors in human innovation as well. When Sergey Brin and Larry Page developed PageRank, the algorithm that put Google on the map, Johnson points out, they exapted an innovation initially designed for navigation -- the hyperlink text -- and used it to assess the content of Web pages.

At its best, then, "Where Good Ideas Come From" is a magical mystery tour of the history and architecture of innovation. Whether he's illuminating the "slow hunch" that led Wilson Greatbatch to invent the cardiac pacemaker or comparing the role of serendipity in newspapers and the Web, Johnson is always provocative and never dull. At the end of the day, as they say, his advice to would-be innovators is pretty sound: Write things down, learn from mistakes, "follow the links; let others build on your ideas; borrow, recycle, reinvent."

-- Glenn C. Altschuler

**Reading:** Johnson discusses "Where Good Ideas Come From" at 7 p.m. Friday at a Wordstock special event at the Bagdad Theater, 3702 S.E. Hawthorne Blvd. Tickets are $26.95 and include a copy of the book. They're available at the Bagdad and Ticketmaster.

**WHERE GOOD IDEAS COME FROM**