

We help you think about the future so you can act today ...

# What's Emerging?

The latest news and information ...

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## Extra Links November 2010

### Welcome to the end of November edition of What's Emerging.

This month Paul reviews what he says is close to the best book on ideas and innovation he has ever read. You can read the article under our "What are we writing about" section. There will only be one more edition of What's Emerging for the year – in the middle of December. Just a reminder that Paul is raising money for [Kids Under Cover](#) which does fantastic work in Australia helping preventing kids at risk from becoming homeless. If you would like to support this great cause go to our [home](#) page and click on the fund raising widget. Paul will match your donation.

We hope that you continue to find the newsletter interesting and valuable and would welcome any feedback.

Cheers

Paul Higgins, Sandy Teagle, Kim Stewart, Anitha Mendonca, Syed Muqthar, and Samantha Kyle-Little

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### What we are writing about

#### Book Review: Where Good Ideas Come From: The Natural History of Innovation by Steven Johnson

Right from the start I would say this is close to the best book on innovation and idea generation that I have ever read. The book begins essentially with the idea of the adjacent possible but before that states some remarkable statistics. Firstly there is a law that relates body mass of animals to their metabolism – that there is a very strong negative logarithmic correlation between the two that also seems to mean that the heartbeats per lifetime are about the same. Larger animals have slower metabolisms and heart rates. A similar sort of power law seems to occur with cities but it is a positive correlation – a city that is ten times the size of another city is on average 17 times more innovative. [Read More...](#)

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### Business Tips

Our business tips are in our main newsletter, please click [here](#).

## ■ What's Emerging

### Hour glass traffic lights

The Sand Glass is a new look at traffic lights. LED lights trickle down to make an obvious statement, regarding the time left for the lights to change Via PSFK. [Read More...](#)

### A comprehensive map of human genetic diversity

Researchers say they have now captured a record 95 percent of all human genetic diversity. The research is the first phase of a global collaboration called the 1,000 genomes project, an effort to sequence 2,500 human genomes from different populations using new technologies. [Read More...](#)

### Organs made from scratch

Replicating the complexity of an organ, by growing different types of cells in precisely the right arrangement—muscle held together with connective tissue and threaded with blood vessels, for example—is currently impossible. Researchers at MIT have taken a step toward this goal by coming up with a way to make "building blocks" containing different kinds of tissue that can be put together. [Read More...](#)

### Bubbles of energy are found in galaxy

Something big is going on at the centre of the galaxy, and astronomers are happy to say they don't know what it is. [Read More...](#)

### With urban farms, Motor City could be nearly self-sustaining

A new study on Detroit indicates that transforming vacant urban lots into farms and community gardens could provide residents with a majority of their fruits and vegetables. [Read More...](#)

### The hunt for jobs sends the Irish Abroad, again

Just three years ago as Ireland's economy boomed, immigrants poured in so fast that experts said this tiny country of 4.5 million was on its way to reaching population levels not seen since before the great potato famine of the mid-19th century. The conditions that prompted the Irish statesman Éamon de Valera to express the hope that Ireland's children would no longer "like our cattle, be brought up for export" seemed like quaint history. [Read More...](#)

### The future of Indian technology by Vivek Wadhwa

The Indian technology industry got its start running call centers and doing low-level IT work for western firms. Then, in the 2000s, it started taking on higher-level IT tasks, offering management consulting services, and performing sophisticated R&D. Now there is another transition happening, one far more significant: a transition to development of innovative technology products. [Read More...](#)

### Why all the interest in Tumblr? Try 1,540 percent pageview growth

Sometime last June, blogging service Tumblr hit an inflection point. It's visitors and pageviews just took off. According to comScore, Tumblr served up 1.2 billion pageviews in the U.S. in October, up a mind-boggling 1,540 percent from the year before (see chart above). Unique visitors from the U.S. hit 6 million, up 150 percent (see chart below). Worldwide visitors in September were around 14 million. [Read More...](#)

### Clean machines: 10 wonderful washers of the future

The next generation of washing machines is on the way. What will it bring? These concepts offer some of the best, strangest and most ambitious guesses for the future of our laundry. [Read More...](#)

### Beijing's focus on food prices ignores broader inflation risk

China took steps Wednesday to control rising prices at the most basic consumer level. But Beijing faces a severe challenge in preventing higher global commodity prices from igniting broader inflation that could threaten China's streak of powerful economic growth. [Read More...](#)

### Samsung files patent for liquid zoom lens

The advantage of liquid lens technology is that there are no moving parts or focus motors

needed. And with no motors, the lenses are faster and quieter than traditional mechanical lenses. In addition, liquid lenses are smaller and lighter than glass or plastic lenses. [Read More...](#)

## I am a cyborg and I want my Google implant already

El Camino Hospital in Silicon Valley is looking to cut expenses, so they've invested in 19 Aethon. This is one of 50 posts about cyborgs, a project coordinated by occasional Tech Channel contributor, Tim Maly, to commemorate the 50th anniversary of the coining of the term. [Read More...](#)

## Overcoming the blind spots while driving

The micro cameras are set up on both the sides and back of the car. Image processing technology is incorporated. The separate images captured by the micro cameras are combined and displayed on the windscreen seamlessly. The advanced technology used means that even in low-light conditions (for example, at night or on rainy days), visibility is still very good. Furthermore, a car full of passengers or cargo will not impede the driver's vision. [Read More...](#)

## Three visions revisited

**Paul Higgins: This is an interesting analysis of three popular visions on international developments and what has happened since they were put out there. I was particularly taken by the statement that:**

**"This is a reminder that simple visions, however powerful, do not hold up as reliable predictors of particular developments. Visions are vital for clarifying thinking about the forces that drive international relations, the main directions to expect events to take, and one's basic faith in matters of politics, but they cannot account for many specifics in the actual complexity of political life. The biggest ideas may also yield the least accurate estimates."** [Read More...](#)

## In the grip of the new monopolists

Do away with Google? Break up Facebook? We can't imagine life without them—and that's the problem. **Paul Higgins: Just reading *The Master Switch* by Tim Wu. This article is an interesting summary of the key idea in the book if people are thinking about buying it.** [Read More...](#)

## Planning expert tells Aussies to slum it

An urban planning expert says town planners can learn a lot from the slums of Rio de Janeiro when it comes to building our future cities. [Read More...](#)

## YouTube mobile use exploding: 75% report mobile is primary way of watching YouTube

According to a study of over 16,000 mobile YouTube users conducted by Google, 75% of respondents said that mobile is their primary way of accessing YouTube. [Read More...](#)

## Rollable, The Flexible Screen by Sony

Sony has developed 'Rollable', a revolutionary OLED full color display that can wrap around a thin cylinder. Even when rolling up, the image is not affected and still plays with the same quality and speed. [Read More...](#)

## 70 mpg, without a Hybrid

A new Mazda model debuting in Japan gets its high fuel economy from an improved gas engine and a lightweight design. [Read More...](#)

## 'Smart plugs' for stand-by power sippers

Many electronic devices left plugged in suck electricity from outlets even when turned off or in stand-by mode. The Department of Energy estimates stand-by power represents about 100 billion kilowatt hours of nationwide energy consumption and more than \$10 billion in annual energy costs. New York start-up ThinkEco has one strategy to finding out: the modlet. [Read More...](#)

## Making ads that whisper to the brain

Neuromarketing's raison d'être derives from the fact that the brain expends only 2 percent of its energy on conscious activity, with the rest devoted largely to unconscious processing. Thus, neuromarketers believe, traditional market research methods — like consumer surveys and focus groups — are inherently inaccurate because the participants can never articulate the unconscious impressions that whet their appetites for certain products. [Read More...](#)

## Microthreads help grow new muscles

Doctors can't do much in cases of severe muscle damage. New research shows that hair-thin threads might help. [Read More...](#)

## Surfaces that keep the ice away

Nanotechnology advance leads to materials that are resistant to icing. [Read More...](#)

## Carbon geosequestration will contaminate water supply, study says

Geosequestration is part of a series of new carbon capture and storage technologies under development by governments and industries worldwide — including the U.S. Department of Energy — to reduce the amount of greenhouse gas emissions entering the Earth's atmosphere. But according to Duke University researchers, the carbon dioxide will eventually bubble up into drinking water aquifers near the Earth's surface, driving up levels of contaminants in the water more than 10 times over. [Read More...](#)

## New startup analyzes 100,000 web pages with a snap of your fingers

Web crawling service 80Legs and Natural Language Processing service Language Computer Corporation have combined their efforts to create Extractiv, a web crawling and semantic analysis service offered at an affordable price. [Read More...](#)

## Brain-machine interfaces offer improved options for prosthetics and treatments after injury

Artificial retinas, thought-controlled devices and brain stimulation therapy show promise. [Read More...](#)

## Tablets may encourage long-form news experiences

News consumption on the iPad peaks twice during the day -- first at 8 a.m. and then again at 10 p.m., suggesting that people use tablets during leisure times. A chart published on WSJ.com on Monday shows the digital habits of news consumers on smart phones, computers and the iPad. [Read More...](#)

## What happens when you breathe in nanoparticles

Researchers watch fluorescent nanoparticles move through the respiratory system, an advance that could lead to better drugs. [Read More...](#)

## Self-assembly revolutionizes metamaterial manufacture

A new self-assembly technique could make optical metamaterials cheaply and easily for the first time. [Read More...](#)

## Social gaming: Where we've been, and where we're headed

This post was written by Mike Su, Vice President of Games at dude-centric video network Break Media where he created the social gaming group. [Read More...](#)

## Google launches interactive book to teach everyone about the web

In an attempt to teach the average person about the fundamentals of browsers and the web, Google has released an interactive online book that explains concepts like, TCP/IP, HTML, browser extensions and malware. [Read More...](#)

## Scientists grow miniature human livers in the lab for the first time

Scientists have successfully grown miniature human livers in the laboratory, taking a leap forward towards creating 'bespoke' organs for patients. Previously the same bioengineering success had only been achieved with rat cells in a proof-of-concept study. [Read More...](#)

## Photosensitive film turns light into kinetic energy

Researchers at a Japanese company called RIKEN have discovered a way to turn light into kinetic energy through the use of molecules that change their structure when exposed to light. [Read More...](#)

## Can a PC be upgraded forever?

This little aluminum computer has one big goal: To be the last PC you will ever need. That's what the manufacturer claims—"The Xi3 Modular's three boards will allow you to upgrade it forever." [Read More...](#)

## White paper on 3D printing and the law: The coming copyright

Public Knowledge's Michael Weinberg has a new white paper: "It Will Be Awesome if They Don't

Screw it Up: 3D Printing, Intellectual Property, and the Fight Over the Next Great Disruptive Technology" -- the title says it all, really. [Read More...](#)

Gartner: 54.8 million tablets will be sold in 2011

The research firm provided its tablet outlook almost in passing as it handicapped smartphone sales for the third quarter. However, that passing line raises an interesting question. Will tablets ding smartphone sales? [Read More...](#)

A drug that could give you perfect visual memory

Imagine if you could look at something once and remember it forever. You would never have to ask for directions again. Now a group of scientists has isolated a protein that mega-boosts your ability to remember what you see. [Read More...](#)

The chip inside you is tech that will not die

Our friends at CNET are out with a feel-good story about silicon chips you could swallow 18 months from now, that will track your condition and report back. The news here is that Novartis is looking to bring chip-pill technology from Proteus Biomedical to market very quickly. [Read More...](#)

Apps that deliver a competitive edge

How companies are developing mobile applications that cut costs and improve employee efficiency. [Read More...](#)

Now I see you

A surgery-free prosthetic retina restores vision in blind mice and raises the prospects for something similar in people [Read More...](#)

New report: Growing water scarcity in US is 'hidden' financial risk for investors owning utility bonds

Los Angeles, Atlanta utilities face increasing risks, according to report's water risk assessment. [Read More...](#)

Air Force wants neuroweapons to overwhelm enemy minds

Late last month, the Air Force Research Laboratory's 711th Human Performance Wing revamped a call for research proposals examining "Advances in Bioscience for Airmen Performance." It's a six-year, \$49 million effort to deploy extreme neuroscience and biotechnology in the service of warfare. [Read More...](#)

GREEN FLOAT

GREEN FLOAT is a new conceptual model for environmentally friendly cities. The idea is to construct artificial islands in the Equatorial ocean, with the aim of achieving self-sufficient, carbon-negative cities with zero waste. [Read More...](#)

Ray White and Flight Centre ditch Microsoft for Google

Leading real estate group Ray White will roll out Google Apps to 7000 users. According to Ray White property and IT director Ben White, the company has selected Google for email, messaging and productivity. [Read More...](#)

Reconciling the Two Indias

This is an excerpt from Patrick Smith's book, "Somebody Else's Century," ***Paul Higgins: This is an interesting read and got me interested in looking at the book. The thought that a country is passively accepting what is happening and that managing what is happening rather than deciding what should happen is the key issue is an intriguing one. How much are we pushed by forces we cannot control?*** [Read More...](#)

Groasis Waterboxx: A smart plant incubator

AquaPro Holland's Groasis Waterboxx is a smart plant incubator that collects water from the air and makes it available to the plant. The Waterboxx is designed as a small bucket filled with a few gallons of water and placed around a seedling. This helps facilitate condensation at night, where the device, due to its design, captures the moisture from the air and drips it into the soil in a controlled manner. [Read More...](#)

Bailout for Spain would empty European coffers, analysts warn

Bailout for Spain would require 'whopping €420bn', say analysts, amid fears that as yet undeclared debts could bring the country to its knees. [Read More...](#)

## Yelp introduces checkin offers

Foursquare may have pioneered the idea of rewards and specials associated with checkins, but everyone from Facebook to SCVNGR has followed suit. Yelp joins the fray, giving business owners the ability to add "Check-in Offers" to their venues. [Read More...](#)

## Phonekerchief lets your date know they've got your full attention

Not only does this cloth block your hands with it's loud lettering, it blocks phone signals to and from your device as it's made of a smart material that does such a thing. [Read More...](#)

## Out of many, one In-box

Nokia experiments with a universal in-box that combines messages from many separate apps into a single place. [Read More...](#)

## Silicon's long good-bye

Researchers make transistors out of a material that's better than silicon. [Read More...](#)

## Ending the war against bacteria

Just as antibiotic gels, soaps and wipes have become part of every mother's arsenal against disaster, health experts are calling for an end to our war against bacteria. It seems we have met the enemy and he is us. [Read More...](#)

## Global polio eradication to save \$50 billion, study says

The global initiative to eradicate polio could provide net benefits of at least \$40 to \$50 billion if transmission of the virus is interrupted within the next five years, according to a new study. The study published in the journal *Vaccine* by a team of scientists from non-profit group Kid Risk, evaluates the investments made since the Global Polio Eradication Initiative was formed in 1988. [Read More...](#)

## Trying to kill this snakebot just makes more snakebots

As if Israel's new robotic snake wasn't freaky enough, blowing one up might just leave you with a bunch of slightly smaller robotic snakes. And they'll be pissed. [Read More...](#)

## A Book: Enjoy the wait

One of Thailand's most known publishers is called A Book. They see 'waiting' as a chance to promote their books. When people have to wait they are bored most of the time, but A Book found a way to entertain people during the wait and promote their books at the same time. They are using some unusual media on which they print short stories that people can read when waiting. 5 concepts were developed: queue up tickets, running late SMS, widgets, place mats and sticker lines. [Read More...](#)

## From helicopters to hips, monitoring wear and tear

Israeli scientists are exploring how to modify a technique used to monitor the condition of military machinery to instead diagnose disease, analyze drugs and monitor orthopedic implants. Researchers led by professor Noam Eliaz at Tel Aviv University are working to modify ferrography — in which iron particles from lubricants such as oil are extracted to reveal wear on the machine in question — for the human body. [Read More...](#)

## Augmented reality goggles

New video glasses can produce dazzling special effects, but who'll wear them? [Read More...](#)

## In Cybertherapy, avatars assist with healing

In a series of experiments, researchers have shown that people internalize these virtual experiences and their responses to them — with effects that carry over into real life.

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