



Wired

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Newspaper Item

Motion Comics

<http://www.guttergeek.com/page184/october2008/motioncomics/motioncomics.html>

“The biggest issue of motion comics may be that they’re trying to fill a niche that simply doesn’t exist.”

Henry Jenkins' notes on interstitial arts

*Okay, first, just have a look at THIS:

"Tears of the Black Tiger," a modern Thai cinema effort:

[http://henryjenkins.org/2009/11/
on_the_pleasures_of_not_belong_1.html](http://henryjenkins.org/2009/11/on_the_pleasures_of_not_belong_1.html)

(..."

"Paradoxically, though, genres have had a tighter hold on our imagination in recent years as the range of cultural choice has broadened and audiences have fragmented. Film historian Rick Altman tells us that far from imposing rigid boundaries between genres, the old studio system depended on the idea that the same film could appeal to multiple audience segments at a time when pretty much everyone in the country went to the movies once or twice a week. Hollywood films rarely fit into some narrowly composed category: the same film had to appeal to men as well as women, the young as well as the old, by signaling different entertainment elements ("Comedy. Romance. Action. Exotic Locales. Singing. Dancing....")

"Over the course of the 20th century, however, genre categories have become ever more specialized as media industries refine techniques for monitoring and targeting particular clusters of consumers. (...)

"Just as there are systems of cultural production where audiences express confusion if a work straddles genres, there are others where artists thrive upon and audiences anticipate mixing and matching genre elements. Take for example the so-called "masala films" that come out of the Bollywood film industry in India and are popular across Asia, Africa, and increasingly the west. The same film might move between historical and contemporary settings, might mix comedy and melodrama, might follow an intense (and disturbing) action sequence with a musical number, might mix the most sudsy romance with social uplift and political reform, and might acknowledge both Hindu and Islamic traditions. The descriptor "masala" refers to a mixture of spices used in Indian cooking. Just as one would be disappointed if an Indian dish only contained one spice, the Bollywood spectator would be disappointed if a Hindi film contained only one genre.

"We are seeing greater cultural churn as more and more works move across national borders, get picked up by new artists and audiences, get combined in new ways, paving the way for nouvelle culture in the same way that the global availability of spices and ingredients has led many of

our best chiefs to experiment with radical departures from and reinventions of traditional cuisines. The anthropologist Renato Rosaldo has contrasted a classic understanding of cultures as so many exhibits in an ethnographic museum with a more contemporary notion of cultures as garage sales, where people push, pull, and paw over other people's used stuff before taking it home, trying it on for size, and altering it to suit their needs.

"Many young American consumers are using the web in search of Korean dramas, Japanese anime, Latin American telenovelas, or Bollywood films, anything that takes them outside the parochialism of their own culture. The result really does defy any classification: look at something like *Tears of the Black Tiger* which starts as a classic Thai novel, throws in a little opera, adds a much more intense color palette, and tells the man's story as a western and the woman's story as a '50s style melodrama to suggest that the two protagonists are living in different worlds. (((That's what you just saw up there. Man, Henry Jenkins is the guru.)))

"Globalization is simply one of a number of forces which are breaking down the tyranny of genre classifications and paving the way for experimentation within popular storytelling...."

(((Well, that about sums it up, folks. Back to editing the English-language Serbian memoir here in Italy while listening to Indian electronica from the indianelectronica podcast.)))

Avatar Machine

Avatar Machine [LONDON] 2008 from MARC OWENS on Vimeo.

http://www.marcowens.co.uk/index_frame.htm

“Avatar Machine is a system which replicates the aesthetics and visuals of third person gaming, allowing the user to view themselves as a virtual character in real space via a head mounted interface.

“The system potentially allows for a diminished sense of social responsibility, and could lead the user to demonstrate behaviors normally reserved for the gaming environment....”

via @_neural

Kundalini Shock Attack

*American pop music used to be full of white middle-class Anglo kids who had taken some LSD and gotten all “weird.” Nowadays we’ve got pop music by extremely dissociative, utterly globalized networked kids who enjoy backpacking in the Hindu Kush while contemplating Italian Futurism. With ProTools. And they can cook.

<http://www.myspace.com/kundalinishockattack>

(...)

“Ashvin and Yousuf are both avid cooks as well, the old KSA song “Botch It Up Boccioni” being a culinary reference to the Italian Futurist painter Umberto Boccioni. The song is an accompaniment to a dessert tray designed by KSA boasting such creations as Iceleen Maru, Bisleri Halva, and Mumphali Fataka.

“There were parallels between the Futurists and KSA Art Movement, a point that Ash drives further when he captured a still from an Enrico Prampolini set design for the 1920’s futurist film *Thais* and cut it up and further treated it with KSA stylings for the cover of the KSA album “Lakulysha Moteek.”

Both Yousuf and Ashvin spent much time in mountains, deserts and villages of the Hindukush and Karakorums, Thar and Rajasthan. Yousuf bent time and space wandering the hills of the North West frontier in search of himself and having met with various tribes and mystics along the way from the plains of Deosai to lakes of Naltar, ending search in the plateau of Potohar. Gathering lights and sounds to race towards an inner awakening....”

The joy of intimidating peacenik troublemakers through their license plates

*Hey wow! Neat surveillance hack!

*Can't wait to see the law and order surge as girlfriends of prominent Tory politicians are marked "of interest." That would sure make great fodder for another anti-Tory "desperate housewives" sex blog.

*In fact, given the fact that "mission creep" in this system is so promising, why not mark ALL Tories "of interest?" Marking peace demonstrators "of interest" is sort of ridiculous, because they don't matter and nobody ever listens to them.

<http://www.guardian.co.uk/uk/2009/oct/25/surveillance-police-number-plate-recognition>

Activists repeatedly stopped and searched as police officers 'mark' cars

Paul Lewis and Rob Evans
guardian.co.uk,
Sunday 25 October 2009 20.52 GMT

The roads were empty when Linda Catt and her father drove their white Citroën Berlingo into London on a quiet Sunday morning. They could not have known they were being followed.

But at 7.23am on 31 July 2005, the van had passed beneath an automatic number plate recognition (ANPR) camera in east London, triggering an alert: "Of interest to Public Order Unit, Sussex police". Within seconds Catt, 50, and her 84-year-old father, John, were apprehended by police and searched under the Terrorism Act.

After filing a complaint, the pair, neither of whom have criminal records, discovered that four months earlier, a Sussex police officer had noticed their van "at three protest demonstrations" and decided, apparently on that basis, it should be tracked.

The two anti-war campaigners were not the only law-abiding protesters being monitored on the roads. Officers have been told they can place "markers" against the vehicles of anyone who attends demonstrations using the national ANPR data centre in Hendon, north London, which stores information on car journeys for up to five years.

Senior officers have been instructed to "fully and strategically exploit" the database, which allows police to mark vehicles with potentially useful information such as drink-driving convictions.

The use of the ANPR database to flag-up vehicles belonging to protesters has resulted in peaceful campaigners being repeatedly stopped and searched.

Documents released under the Freedom of Information Act reveal Kent and Essex police deployed mobile ANPR “interceptor teams” on roads surrounding the protest against the Kingsnorth power station, in Kent, last year.

The files reveal the pressure police placed on the local Medway council to assist with the installation of cameras on lamp-posts. Sergeant Keith Waymont, Kent police’s ANPR manager, wrote to the council three months before the demonstration to complain its officials were not co-operating. He wrote: “When I put this to my bosses, they were less than impressed, given the importance of this operation as the new power station build is likely to create a considerable number of jobs for Medway.”

But council officials had reasons to object. Internal emails reveal they were concerned temporary cameras could “alienate the community”. One wrote: “I agree – under what powers are they looking to do that? Everyone has a right to drive down a road unless we are returning to the miners dispute tactics of the 1980s.”

Police eventually succeeded in mobilising the Kent ANPR system, which appears to have been used to monitor protesters since four years ago....

Futurist Fantascienza: La fina del mondo, 1921

*I consider myself fairly hip about Italian futurismo, but I never before heard a whisper about a futurist space-travel novel in 1921 involving a genocide on Jupiter.

<http://www2.hum.uu.nl/congres/futurisms/abstracts.htm>

Kyle M. Hall (Harvard University): Poetics, Politics and 'La fine del mondo': Volt's Futurofascist Apocalypse

"Vincenzo Fani Ciotti, known to history under his Futurist pseudonym 'Volt', strode into Futurism relatively late, publishing his *parole-in-libertà* collection *Archi voltaici* in 1916 after meeting Marinetti earlier in that same year. After several manifestos published in various Futurist vehicles, including *La teoria sociologica della guerra*, he was moving beyond a strictly Futurist stance when he published what would later be described as a "romanzo di fantascienza futurista", *La fine del mondo*, in 1921.

"Dedicated to Mussolini, this book utilized little of the poetics typically associated with the Futurists in favor of a fantastic development of Futurist political thought. Looking to the year 2247, Volt applied Futurist ideas on war to what he saw as the logical conclusions that would arise from the Treaty of Versailles. This is no utopia, as Volt sees the positive capacities for human development being stifled by a secular world government that would prevent intergalactic space colonization rather than eradicating the native inhabitants of Jupiter. Our sickly hero, imitating the tuberculosis that would take Volt's own life at the age of thirty-nine, takes it upon himself to clear the way for the conquering and colonizing of Jupiter, blowing up the world parliament and himself in an apocalyptic explosion that leaves no doubt as to the necessity of conflict in the human experience. This paper examines the way in which Volt mixes Futurist ideology with a more traditional poetics that looked beyond the avant-garde towards a popularized Fascist politics that would soon bear itself out in the coming decades."

Spime Watch: ProForma

*ProFORMA: Probabilistic Feature-based On-line Rapid Model Acquisition." It's generating 3D models from real objects, live, with just a webcam.

<http://mi.eng.cam.ac.uk/~qp202/>

Via Fabbaloo.

Predictions 2010: The future of Twitter, Google, everything else

*Okay, these Seattle venture-capital guys are blowing smoke, but I like it that they're blowing such specific smoke. It's like they're blowing smoke-rings.

http://www.techflash.com/seattle/2009/11/predictions_2010_twitter_netflix_and_more_from_the_crystal_ball.html

On the panel were Kelly Smith, founding partner, Curious Office; Greg Gottesman, managing director, Madrona Venture Group; Glenn Kelman, CEO, Redfin; Bill Bryant, venture partner, Draper Fisher Jurvetson; and Andy Sack entrepreneur and general partner in Founders Co-op.

Read on for notes from the panel, gleaned from John's recording.

Let's say you're the CEO of Twitter in 2010. How do you make money?

Kelman: Charge for search, building on new partnerships with search engines. In general, Twitter is overvalued. The company is going to continue to grow, but people are paying too much attention to Twitter, and not enough to Facebook. That is still the dominant social network.

Sack: Twitter will make a lot more money than Facebook in 2010.

Kelman: You think Twitter is going to go from zero to \$300 million in one year?

Sack: Yeah, sure. They've sold the search feed to Microsoft and Google. Twitter is a promotional vehicle. Facebook is a social vehicle. Twitter has more potential to make revenue.

Bryant: Twitter is not mainstream, and the traffic numbers suggest it's not going to get there.

Gottesman: If I was the CEO of Twitter in 2010 I would sell. There are a lot of buyers out there, including Microsoft, who have the perception that they could do a lot more with Twitter than Twitter can do by itself. (((Like chase all the Twitter tweeples screaming into the wilderness of the Pacific Northwest, where they will live off nine-inch banana slugs)))

Smith: I completely agree with Greg. You're a lunatic if you think Twitter is going to become a profitable company before its sold. Twitter is going to sell a bill of goods to a prospective buyer, convince this big company of its potential value. It's going to be absorbed by a big

company and it's ultimately going to go nowhere. The signal-to-noise ratio on Twitter is completely unmanageable. If it's going to be useful, experience has to be totally different.

Google's stock price is currently around \$577. Where will it end up in 2010?

Sack: \$701

Smith: \$720; based on the strength of a Google-branded phone.

Gottesman: About where it is now.

Kelman: \$650; Huge shift to Google in the enterprise.

Bryant: \$500; Google is still a one-trick pony. They have not historically demonstrated any other revenue stream.

Microsoft is currently around \$30. Where will it end up in 2010? And will Steve Ballmer remain CEO?

Sack: Ballmer still CEO, \$31.75

Kelman: \$32, and if he hasn't left by now, why would he leave in 2010?

Gottesman: Ballmer will stay. Stock price will run up in 2010, with Windows 7, but will decline to current level by end of year.

Smith: Windows 7 a giant step forward. Will help them maintain market share. Azure cloud service gaining traction, and Bing has generated ability to take market share from Yahoo. About \$40.

Bryant: Price will at least touch \$40 with Windows 7 tailwinds.

Amazon currently around \$130 a share. Has been on a great run. Where do they end up?

Sack: I'm a shareholder, and I think the stock is going to continue to go up. International expansion, core-ecommerce. \$155-\$160.

Kelman: Agreed. Amazon the most entrenched brand on the Internet.

Gottesman: I just feel like the stock market has run up like crazy, so I'm a little less bullish on the macro stock market. That's why I think Amazon will be around where it is today, like the other ones.

Smith: Probably \$150.

Bryant: Amazon will buy Netflix and Hulu and close the year by buying Blockbuster, renaming them all as Amazon stores. Stock price: \$152

Cook: In 2008, Bryant predicted Amazon would buy eBay. So take his predictions with a grain of salt.

Major mergers and acquisitions in 2010?

Gottesman: There will be some big deals, Cisco buying EMC for VMware. Locally F5 could get acquired by Cisco. Microsoft could buy RIM. If Microsoft wants to win in mobile, they have to do something like

that.

Sack: Picnik will be purchased by Adobe, and ICanHasCheezburger will be bought by Rupert Murdoch.

Redfin will get purchased, no idea by whom.

Bryant: By the National Realtors Association.

Smith: comScore will get acquired, following Adobe's acquisition of Omniture.

When will Chinese companies start buying U.S. tech companies? ...

The Coming Uranium Famine

*That ought to prove interesting, if there's anything to it.

*Inevitable peak-uranium pro-nuke / anti-nuke cranks are invited to go comment on the Technology Review blog, where you'll find plenty of flame-flinging company to assure you that you have no idea what you are talking about, because any five-year-old child can determine the fate of the nuclear industry with a four-minute Google search, etc etc.

<http://www.technologyreview.com/blog/arxiv/24414/?nlid=2521>

"The world is about to enter a period of unprecedented investment in nuclear power. The combined threats of climate change, energy security and fears over the high prices and dwindling reserves of oil are forcing governments towards the nuclear option. The perception is that nuclear power is a carbon-free technology, that it breaks our reliance on oil and that it gives governments control over their own energy supply.

"That looks dangerously overoptimistic, says Michael Dittmar, from the Swiss Federal Institute of Technology in Zurich who publishes the final chapter of an impressive four-part analysis of the global nuclear industry on the arXiv today.

"Perhaps the most worrying problem is the misconception that uranium is plentiful. The world's nuclear plants today eat through some 65,000 tons of uranium each year. Of this, the mining industry supplies about 40,000 tons. The rest comes from secondary sources such as civilian and military stockpiles, reprocessed fuel and re-enriched uranium. "But without access to the military stocks, the civilian western uranium stocks will be exhausted by 2013, concludes Dittmar.

"It's not clear how the shortfall can be made up since nobody seems to know where the mining industry can look for more.

"That means countries that rely on uranium imports such as Japan and many western countries will face uranium shortages, possibly as soon as 2013. Far from being the secure source of energy that many governments are basing their future energy needs on, nuclear power looks decidedly rickety.

"But what of new technologies such as fission breeder reactors which generate fuel and nuclear fusion? Dittmar is pessimistic about fission breeders. "Their huge construction costs, their poor safety records and their inefficient performance give little reason to believe that they will ever become commercially significant," he says.

“And the future looks even worse for nuclear fusion: “No matter how far into the future we may look, nuclear fusion as an energy source is even less probable than large-scale breeder reactors.” ...

Blogger Donkey Hooligans

*via EDRI.

*Y'know, it's the donkey angle that really makes this all-too-common story. The "violence" angle is neither here nor there, as the secret police send plainclothes goons to publicly wallop people, and then accuse them of violent hooliganism when they get off the ground.

*A situation like this sounds interestingly political-theoretical, but somewhere there are a couple of smartmouth blogger guys in actual prison suits in an actual prison eating actual prison food.

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8. Azeri bloggers abusively sentenced by the Baku court

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On 11 November 2009, two Azerbaijani bloggers were found guilty on hooliganism and violence charges by a court in Baku and sentenced to two years and two years and a half prison respectively.

Bloggers and political activists Adnan Hajizade and Emin Abdullayev were arrested on 8 July 2009 on false charges of "hooliganism" after they had posted a video on YouTube mocking the purchase of donkeys from Germany by the Azeri Government. The sentence comes after four month of pre-trial detainment during which international organizations, institutions and individuals continuously asked for the release of the activists.

Many freedom group protested against the arrest and the detention of the two, considering the action was violating the freedom of expression. Reporters Without Borders said the case disregarded all the norms of the European legislation and Freedom House considered the case was "a disturbing pattern".

The situation of the two bloggers was also discussed on 1 October 2009 during the meeting between Elnur Majidli representing the Alumni Network, Chingiz Ganizade, the Chairman of the Committee of Human Rights and the High Commissioner for Human Rights of the Council of Europe Thomas Hammarberg. Both Majidli and Ganizade asked that the Council of

Europe

intervene in the human rights field in order to assist in the situation of the two young men.

The High Commissioner mentioned that the Council of Europe was following the trial and that the case was one of the main concerns in Azerbaijan.

Miklos Haraszti, the OSCE Representative on Freedom of the Media, considers the sentence as a political one. "The severity of the sentences for these young bloggers and other journalists who have criticized the authorities, including the President and the Interior Minister, is self-revealingly political," said Haraszti who added in a letter sent to the Foreign Minister: "These new imprisonments cement Azerbaijan's image as the pre-eminent jailer of journalists in the OSCE region. Five journalists are currently in prison, several of them on clearly trumped-up charges following organized provocations and unfair trials."

After the sentence, Abdullayev called on the audience to use all means to spread the reality of the situation in the country regarding freedom, justice and their case. Hajizade is said to have stated that the decision was framed in falsehoods and called on youth to change themselves and to work together for a better Azerbaijan.

The Verdict (11.11.2009)

<http://flyingcarpetsandbrokenpipelines.blogspot.com/2009/11/verdict.html>

Thomas Hammarberg: Bloggers case of our main concerns in Azerbaijan (10.2009)

<http://ol-en.blogspot.com/2009/10/thomas-hammarberg-bloggers-case-of-our.html>

Azerbaijan bloggers found guilty (11.11.2009)

<http://www.mediahelpingmedia.org/content/view/528/2/>

OSCE media freedom representative protests sentence handed down to Internet

journalists in Azerbaijan (11.11.2009)

<http://www.osce.org/item/41288.html>

EDRi-gram: Azeri online activists framed for hooliganism and put in
prison
(15.07.2009)
[http://www.edri.org/edri-gram/number7.14/azeri-online-activits-
jailed](http://www.edri.org/edri-gram/number7.14/azeri-online-activits-jailed)

Newspaper Item

Video Demonstrates Wired's Concept iPad App

Who takes Apple's rumored touchscreen tablet seriously? *Wired's* parent company Condé Nast. Earlier this week, the corporation revealed its plans to work with Adobe to repurpose magazine content for upcoming digital devices, including the Apple tablet (if it is indeed real). The first mag to get the tablet treatment, of course, is *Wired*.

All Things Digital's [Peter Kafka first reported](#) that news, and he said he was trying to convince Condé to share a video demonstrating the tablet app. Well, here you go. The video above was shot at the Wired Store promotional event currently being held in New York. On display there is a concept video of *Wired's* "iPad" app.

To me, the most interesting part appears around the 30-second mark, where we can see an animated, interactive graphic. Exciting to think about the potential for this hypothetical new format, isn't it?

Enough said. Here's a good time to ask — what do you think? Could an [Apple tablet save publishing](#)?

See Also:

- [Everything We Know About Apple's Touchscreen Tablet](#)
- [Large-Screen Kindle Won't Mean Squat if Apple Tablet Arrives ...](#)
- [How an Apple Tablet Could Pit iTunes Against Amazon.com](#)
- [In-App Sales and iPad: The Killer Combo to Save Publishing ...](#)
- [Essay: Steve Jobs' Legacy Is Missing Clue to Apple Tablet ...](#)
- [iTab Mania: Wired.com Readers Beat Apple to Producing a Tablet ...](#)

5 Nifty Apps That Turn Your Android Into A Universal Remote

With all the gadgets, remotes, and thingamajigs piling up on your coffee table, finding the right remote can sometimes be a real pain. But thanks to a few heroic Android developers, there are tools to consolidate some of those pesky remotes ... into your Android phone. While you can't use an Android app to turn your TV on or change the channels (because of the lack of an infrared emitter in the Android phones on the market today), the following apps let you control a home theater PC, Tivo, Squeezebox and other devices via your phone. And at the very least you can save a few bucks when it comes to media center accessories.

The following 5 apps are neat demonstrations of what you can do with a flexible, app-friendly phone like the Verizon Droid, the T-Mobile G1 or the Sprint HTC Hero.

1. RemoteDroid

This app transforms your Android into a wireless keyboard and mouse. It consists of 2 components: the RemoteDroid app on your phone and a server application for your computer. The difficulty level for set up is low; hop on a Wi-Fi network, run the server application and enter an IP address into the phone (the server app even displays it for you). Best of all, the app is free, so you'll have that much more money towards a custom home theater PC.

2. Boxee Remote

It's too bad you can't call your lost, wee Apple remote when it's disappeared and you know it's gotta be around *somewhere*. But if you're using Boxee, you've got a backup: The Boxee Remote app makes a great, free backup remote if you use Boxee as your primary means of streaming television and movies from your computer.

3. TivoRemote

A note to Tivo Series 3 and Tivo HD people: Forgetting to record your favorite shows on Tivo is a thing of the past. Put your medium-savvy tech hat on, dish out \$1 and remotely control your Tivo from anywhere using Tivo's Network Remote Control setting and TivoRemote. Since I don't have a Tivo myself, I wasn't able to personally test this application, but the reviews are positive and the community feedback are hymns of

praise. One commenter on the market also found a ninja-like purpose for the pocket-sized remote, “My wife finds this highly irritating... thanks!”

4. SqueezeControl

SqueezeControl is a free app that taps into and controls your Logitech SqueezeCenter, a handy wireless network music player. We are all accustomed to lugging our phones around, so any app — like this one — that eliminates the fumbling of pockets for an additional device has a place in our world.

5. Gmote

Similar to RemoteDroid (and, like it, totally free), this app becomes a wireless keyboard and mouse for your computer or HTPC set up. It’s not too hard to set up: All you need is the phone app along with the server application on the computer you wish to use. Gmote pulls music, movies, and other media and organizes it all in convenient folders. In addition to it’s wireless keyboard/mouse functionality, it offers a remote control screen to quickly control your media.

What apps do you use to control your media? Post your suggestions in the comments below.

See Also:

- [Android Version of Foursquare Combines Function and Fun](#)
- [Android Army Pumped for All-Out Attack on iPhone](#)
- [Photoshop for Android Phones Now Available](#)
- [12 Phones Strong, Android Army Mobilizes for Explosive Growth](#)

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Photo Credit: Roselyn Roark

Why Google Should Cool It With Chrome OS

Sometimes you have to take a step down to step up. That's what Google should've done with its open source PC operating system Chrome OS, which the corporation demonstrated Thursday.

Instead, Google is positioning Chrome OS against Microsoft with a lightweight OS shipping with netbooks next year. Chrome OS will function as a modified browser, enabling netbooks to handle everyday computing with web-based applications. That's right: No native software, just the web.

The philosophy behind Chrome OS is extreme: Go the web way, *all* the way. It's a "paradigm shift to make the web synonymous with the computer," as Mashable's Ben Parr puts it. But it's an idealistic vision that could take several years to actualize, given the currently limited state of wireless connectivity and web-based applications. Google is aware of that, and the company is merely massaging us with this radical idea of a web-only computing experience by suggesting we try it on netbooks first.

Looking ahead, the company said it plans to share Chrome OS with more-powerful devices, including notebooks and desktops. But we doubt consumers will show much interest in a Chrome OS netbook the way Google is currently packaging it.

With Chrome OS, the search giant is pushing an OS that enables us to do less — even less than already low-powered netbooks can do. Web apps can't let us process Microsoft Word documents, sync our iTunes libraries, or edit photos with Photoshop, for example. Thanks to their cramped keyboards and small screens, netbooks aren't ideal for productivity apps such as Photoshop or Microsoft Word — but you'd be surprised at the different uses for netbooks that made them last year's hit product category. Watch what happens when Google offers an OS that doesn't at least provide the option of using the aforementioned apps.

Of course, as Google's pitch goes, there are web alternatives to everything. Cloud storage for backups > Internet-streaming music and video services. The Google Docs web suite for all your spreadsheet or word-processing needs. The list goes on.

The idea is such: Give up the computing experience you've grown accustomed to for over a decade. Come live in Google's browser.

Why would anyone wish to do that today, tomorrow or even next year when the OS ships?

Michael Gartenberg, a tech analyst at Interpret, sums up the state of computer use today better than anyone else: “What we’ve seen is most users are looking for a combination of the two: rich applications on my desktop, and the apps where I want to be connected.”

“This idea that I’m somehow going to do away with rich app architectures and do everything through the browser is an old argument, and it’s never taken root,” he added.

The benefits of Chrome OS don’t seem to outweigh everything Google’s modified browser will do away with. The pluses: Tight security, thanks to Google’s careful monitoring for malware in Chrome OS apps; saving the money you’d spend on an external hard-disk drive thanks to cloud storage; ultimately, being able to “stop worrying about your computer,” as Google said in a promotional video shown at its Thursday event.

Stop worrying about our computers? We’re worried about you, Google. T-Mobile Sidekick customers should especially be disenchanted with the cloud. Microsoft, T-Mobile and Danger hosted the data of all of T-Mobile’s Sidekick users in the cloud, and recently the server crashed, losing everything.

Nobody’s perfect, so it’s conceivable that the same thing could happen with Chrome OS. After all, Google’s Gmail service crashed in February and again in September this year. While no data was lost, it did cause hours of Angst for people who had grown dependent on the mail service.

And then there’s money. Aside from losing access to the native apps we’ve paid for on our PC, it’s certainly imaginable that using Chrome OS could get expensive to use in general. If we wished to put an always-connected, web-app-only computer to good use, we’d need to purchase a data plan from a carrier. This could come in the form of an EVDO card or a smartphone tethering plan — in other words, a monthly bill. Google said Chrome OS will have caching features, so you won’t need internet access to do everything, but caching won’t provide the same offline experience as a full native application.

(Of course, our wireless problems could be solved if we could find an open Wi-Fi connection just anywhere we go. But unless you live in Mountain View, California, where Google provides free Wi-Fi, ubiquitous, free hotspots are not part of your reality.)

With all that said, there's a ton of potential here for Chrome OS to be vastly appealing, and I'm keeping an open mind. To succeed with Chrome OS, Google should take a step down. To start, Google should modify Chrome OS into a "mini OS" of sorts that can live alongside another OS, such as Windows, on a netbook.

For comparison, Phoenix Technologies offers a mini OS called HyperSpace, which some netbooks are already shipping with. HyperSpace runs parallel to Windows as an instant-on environment, allowing netbooks to perform internet-centric functions without actually booting into Windows. Functions include multimedia players, browsers, internet telephony, e-mail and IM.

Sounds a lot like what Chrome OS is going to be, doesn't it? That's because it's almost the same idea, only Phoenix Technologies is a lesser-known company (which developed the BIOS that boots many Windows computers today, by the way) and is taking a humbler approach — offering HyperSpace as an optional, complementary (but not complimentary) OS rather than a full-blown substitute for Windows. It's an approach that could lead to greater results if embraced by an incredibly powerful brand like Google.

By offering Chrome OS as a free, downloadable mini OS that runs parallel to a full one, Google can still continue to expand its presence onto hardware — without having to sell the OS with netbooks. Consumers could still try out the benefits of Chrome OS and cloud computing when it's convenient for them. Then, if users wished to boot into their primary OS to back up their data or do document processing with Microsoft Word, for example, they could — a hybrid, more feature-rich experience.

Unfortunately, not everything we want is on the web just yet. That's not going to radically change in one year, and not even Google can change that.

See Also:

- [Google Chrome OS: Ditch Your Hard Drives, the Future Is the Web](#)
- [Five Things Google's Chrome OS Will Do for Your Netbook](#)
- [Google Announces PC Operating System to Compete with Windows ...](#)
- [You Predict the Winner of OS Wars: Chrome, Windows, Linux, OS X?](#)
- [Google FAQ Reveals Chrome OS Hardware Partners](#)

Photo: Melanie Phung/Flickr

Android Version of Foursquare Combines Function and Fun

It's surprising that Yelp, the go-to site for finding restaurants, bars and other venues, has no presence in the Android Market. But that's okay. Foursquare does the job with a social incentive to boot.

Foursquare is a location-based social mobile network that allows users to check-in at different places, post tips and to-do items with their phones, and compete with their friends and fellow city rivals to accumulate points and become the "mayor" of various places (basically, by spending more time there than anyone else).

The Android app makes Foursquare into much more than a game — it becomes a handy way to find new places for a cappuccino, a martini or a bowl of ramen.

During my use, I found the app to be refreshingly simple. Foursquare hides most of the options in the "Menu" button; allowing the focus to be on its two main features: Nearby locations and friends. Clicking a location displays tips from other users, a map, and recent check-ins. If you would like further options, press "menu" and you can add a tip or call the establishment. Navigate to friends and you can view their recent check-ins, shout a message and keep tabs on the leaderboard. The app's consistency in usability makes it easy to dive in and find your way around; just press menu for more options.

Interestingly enough, Yelp is also built into Foursquare as an option to find further information. It seems at this point, Foursquare should build upon their business information and leave Yelp out of the equation completely.

Foursquare is free and available in the Android Market.

See Also:

- [Hands-On: Android App 'Layar' Brings Reality's Unique Snowflakes ...](#)
- [Taste Android 2.0 'Eclair' From Your Own Computer](#)
- [Spotify Premium Bundled With Android Phone](#)

Steve Jobs to Developer: Name Change ‘Not That Big of a Deal’

Apple is mighty protective of its iPod trademark, and if you violate it, you’ll get no sympathy from Steve Jobs.

Apple recently sent a letter to software company Little App Factory, requesting that it change the name of its most successful application: “iPodRip,” an app that enables you to copy and transfer songs from your iPod.

In response, John Devor, CEO of Little App Factory, sent a lengthy, emotional e-mail to Jobs. An excerpt:

Dear Mr. Jobs,

....

We are in desperate need of some assistance and we beseech you to help us to protect our product and our shareware company, both of which we have put thousands upon thousands of hours of work into. Our company goal is to create Mac software of the highest quality with the best user experience possible. I myself dropped out of school recently to pursue a path in the Mac software industry, and you yourself have been a consistent inspiration for me.

If there is anything at all you can do with regards to this matter, we would be most grateful.

Best,

John Devor

Jobs’ reply?

Change your apps name. Not that big of a deal.

Steve

Sent from my iPhone

Complying, Little App Factory has since renamed iPodRip to iRip.

That’s unfortunate for Little App Factory, but we have to admit it’s pretty funny Jobs didn’t even take the time to check for correct punctuation. In any case, it’s understandable why Apple is protective of its iPod trademark: It’s the name of one of Apple’s most successful products. From a business perspective, Apple’s legal team has to pursue

companies big or small trying to use the mark “iPod.” (On the other hand, it’s more difficult to sympathize for Apple when it’s chasing down companies using the word “Pod.”)

Little App Factory’s full letter is available at CrunchGear, which originally reported this story.

See Also:

- Apple Bullies iPhone Accessory Maker Over the Word ‘Pod’
- Apple Aggressively Pursues ‘Pod’ Trademarks
- Apple Battles Entrepreneur Over ‘Pod’ Trademark

Photo: happylandfill/Flickr

The Illustrated Man: How LED Tattoos Could Make Your Skin a Screen

The title character of Ray Bradbury's book *The Illustrated Man* is covered with moving, shifting tattoos. If you look at them, they will tell you a story.

New LED tattoos from the University of Pennsylvania could make the Illustrated Man real (minus the creepy stories, of course). Researchers there are developing silicon-and-silk implantable devices which sit under the skin like a tattoo. Already implanted into mice, these tattoos could carry LEDs, turning your skin into a screen.

The silk substrate onto which the chips are mounted eventually dissolves away inside the body, leaving just the electronics behind. The silicon chips are around the length of a small grain of rice — about 1 millimeter, and just 250 nanometers thick. The sheet of silk will keep them in place, molding to the shape of the skin when saline solution is added.

These displays could be hooked up to any kind of electronic device, also inside the body. Medical uses are being explored, from blood-sugar sensors that show their readouts on the skin itself to neurodevices that tie into the body's nervous system — hooking chips to particular nerves to control a prosthetic hand, for example.

Chips are already used inside bodies, most notably the tiny RFID tags injected into pets. But the flexible nature of these “tattooed” circuits means they can move elastically with the body, sitting in places that a rigid circuit board couldn't.

The first displays are sure to be primitive, but likely very useful for the patients that receive them. You won't be getting the full-color, hi-res images that come with ink, but functional displays. This doesn't mean that the commercial and artistic possibilities are being ignored. Philips, the electronics giant, is exploring some rather sexual uses:

It's certainly rather creepy, but we're sure that the inevitable next stage of playing adult movie clips on your partner's back will be appealing to some. We, of course, are considering the geekier side of this tech. GPS, with a map readout on the back of the wrist would certainly be useful, as would chips that cover your eyeballs and can darken down when the sun is shining too bright.

And a full-body display will eventually be used for advertising. Combine this with bioluminescent ink, for example, and you could turn yourself into a small, walking version of Times Square. At least, unlike a real tattoo, you can switch this one off.

In fact, if you start to imagine the possible uses, they seems almost endless. Just like the stories that play across the body of the Illustrated Man.

Tattoo You [H+ Magazine]

Implantable Silicon-Silk Electronics [Technology Review]

Photo of real tattoo: Spacemanbobby/Flickr

Power HotSpot: Juice Your Gadgets Anywhere

The Power HotSpot from Solis takes something good (solar power) and makes it easy to use. For \$375, you get a portable solar panel and base unit which puts out a 12 Volt supply. Plug in anything with a car cigarette-lighter adapter and you have gadget-power, wherever you are.

Or at least, wherever it is sunny. Some possible uses are suggested on the site: keep the lights burning in a garden shed or den, run a pond fountain, or “maintain a deer feeder & surveillance camera” (and edge case, we suspect). Of course the real uses are far more fun. Blog about gadgets all day long from the beach, for example, or power a beer cooler and stereo whilst picnicking.

We like it, although “portable” in this case clearly just means “fits in a car trunk”. We’re intrigued by one of the possible use-cases, though. The list says that you can “recharge bun warmers”. What is *that* all about?

[Power Hotspot product page \[Solis\]](#)

Credit Card Cutlery: Ordinary Cutlery, Without the Cut

How many times have you wanted to eat something whilst out and about but been unable to do so because you had no cutlery? Me neither, and that's because, like you, I have hands and teeth. But for the prissier amongst you, those who have what my mother calls "good manners", we might have the perfect emergency fork and spoon with which to pick at and push your food around the plate.

Credit Card Cutlery comes in a little credit card sized package, from whence you draw the two plastic sheets and bend them to stiffen them up and form handles.

And what uses might there be for such handy implements? Not many. The only thing I usually need for picnics is a knife, for slicing a hard cheese, perhaps, or cutting a tomato so I can rub it on my bread. What I never need is a fork (like I said, I have hands), and very rarely a spoon. And this spoon rather stretches the definition anyway, being more of a flat paddle or a spatula.

No, this is destined for those people who like to think that they are prepared for every eventuality, but actually just like buying things and dreaming. It's a little like the person who spends thousands of dollars on new camera kit but then takes photos of nothing but color calibration charts, never actually leaving the house. The only thing you need to carry with you in your go-bag is a box cutter and a roll of gaffer tape. From this, as MacGyver showed us, you can make any object in the world.

[Cutlery Product page](#) [A+R Store via [Noquedanblogs](#)]

‘Smart Info Engine’ Media Player Isn’t So Smart

The *Cyberus Smart Info Engine* may sound like a steampunk computer which connects to the Victorian Internet (which would actually be awesome) but it is instead the most full-featured digital photo-frame ever.

To be fair, the manufacturer, Sungale, wouldn’t describe it like that. The company (which *does* make LCD photo-frames) is selling this as a device which can do almost everything in the way of entertainment: Internet radio, e-book reader, movie and music player, photo-frame (natch), RSS, Gmail, and so on. In fact, the only thing it doesn’t seem to do is connect directly to the web through a browser, which is an odd omission in a Wi-Fi-enabled box (although it might just be an omission from the spec sheet).

Add to that a big seven-inch touch screen and a planned price of \$280 and this starts to look like a rather compelling little box. And then things start to go wrong.

First, about that “e-book” reader. The screen may be “high-resolution” (actually, at 800×480 it is not), but e-ink it isn’t, and the reader only offers support for PDF (a terrible e-book format) and plain text files. Not even the emerging epub standard or rtf. Then there’s the movie “support”, which is AVI-only, or the almost brain-melting lack of MP3 support (you need to convert music to WMA).

Photo support is (of course) better: you can pop in an SD card to view JPG, TIF, PNG and BMP formats. And you’d better leave that card in there: the device ships with just 1GB of memory.

Worse still is the battery life. The Web site claims two hours, the press release four, but either way that is pretty poor, especially as this isn’t a power-hungry all-purpose laptop.

It is inevitable that this will be compared to the iPod Touch, which has a smaller screen but does all of the above and more, along with a battery that actually lasts long enough to read a book. It also has 8GB of memory and costs \$80 less. Oh, and it doesn’t look like a school-teacher’s Filofax, either.

[Product page](#) [Sungale]

Chumby Guts: Robot Viscera For Hackers

In Cory Doctorow's latest novel, *Makers*, one of the main characters puts together an amazing little hack using a bunch of *Boogie Woogie Elmo* toys. These have been stripped of their fur and let loose on a tiny electric Smart Car. Reprogrammed to know how to drive, they collectively take the car for a spin: one on the "gas", one on the brakes, one on the wheel and so on. They can talk and listen, so they call commands to each other, becoming one big many-armed robot.

Now, something similar has happened in real life. For \$140, you can buy a naked Chumby (or "Chumby Guts"). The Chumby is a plushie internet box which displays web-info on its little screen, and Chumby Guts come without the soft skin of the original.

On (limited) sale at the Maker Shed, Chumby Guts are pretty ideal for the beginnings of a hacking project. You might not be able to make them drive a car for you, but the 3.5-inch LCD touch screen, Wi-Fi, USB ports and assorted other gubbins have the advantage of being made to work together, and that you can pretty much reconfigure them however you want. My fogged, early morning brain can only think of building the screen into my fridge door as a podcast, music and widget device, but I'm sure y'all can do better. \$140.

[Chumby Guts product page](#) [Make]

[Cory Doctorow's *Makers*](#) [Craphound]

See Also:

- [Chumby Guts, Get Yer Chumby Guts!](#)
- [Worth the Wait: Chumby Lands at a Desk Near You](#)
- [Chumby to License its Software to Other Gadgets](#)
- [Chumby Desktop Media Player](#)

Newspaper Item

Istanbul Opens World's Largest Earthquake-Safe Building

The world's largest seismically isolated building, the new international terminal at Istanbul's Sabiha Gökçen Airport, is now complete and open for business.

Stretching across more than 2 million square feet, the terminal doesn't sit directly on the soil, but rather on more than 300 isolators, bearings that can move side-to-side during an earthquake. The whole building moves as a single unit, which prevents damage from uneven forces acting on the structure.

"What an isolation system does is that it enables the building to move through large displacements in unison, and in doing that, you absorb earthquake energy," said Atila Zekioglu, the engineer at the firm Arup, who designed the building.

Earthquakes accelerate buildings laterally, whipping them back and forth. Isolators (see photo below) slow down the motion of the building. In the case of the new terminal, the building will only have to withstand one-fifth of the acceleration that it would have had to without the earthquake proofing.

A devastating magnitude 7.4 earthquake struck Istanbul on August 17, 1999 killing 17,000 people and causing billions of dollars in property damage. Scientists estimate it's more likely than not that the city will be hit by another large quake in the next 30 years. Istanbul is located near the confluence of the Arabian, African, and Eurasian plates. The North Anatolian Fault runs less than 15 miles south of the city. So, like Los Angeles, San Francisco, and a host of other Pacific Rim cities, Istanbul's builders and planners have to take major earthquake precautions.

Luckily, designing structures for that kind of performance has become cheaper and easier. Increased computing enables better simulations of how buildings will act when an earthquake hits.

Zekioglu and his team ran their building designs through 14 different simulations of earthquakes.

"What we have done over the years is that there are many tests going around the globe in terms of shake tables, testing labs, and what we do is

we take that data... test the ability of our seismic simulation software," he said.

This software, called Dyna, was originally developed at Lawrence Livermore National Laboratory in the 1970s. It can be used to model what will happen to materials under all kinds of conditions from car crashes to earthquakes to bomb blasts.

The software has allowed engineers like Zekioglu to go beyond simply satisfying the building codes to designing buildings that will really meet the objectives of the structure's owners. You don't just want an airport (or a hospital) to stay standing after an earthquake, you want it to be functional.

The Istanbul project is quite similar to what was done with the San Francisco Airport's international terminal, said Michael Constantinou, a seismic isolation expert at State University of New York at Buffalo, but it uses a newer kind of seismic isolation device.

"This is one of the first projects, at the time they started this thing, to use this advancement," Constantinou said.

The new type, triple friction pendulum isolators manufactured by Earthquake Protection Systems in Vallejo, are more compact and can reduce the cost of constructing a building, he said. Many buildings, including three new hospitals in the San Francisco Bay Area, are now incorporating the new isolators.

Constantinou also highlighted a more general advantage that seismically isolated buildings have: They are actually easier to design because it's very difficult to quantify how and why a structure will collapse.

"You are designing so that the structure will remain undamaged, and that's much easier to understand," he said.

The new terminal is designed to withstand an earthquake as strong as 8.0.

Images: 1) The new terminal/ARUP. 2) Seismic situation near Istanbul/USGS. 3) The triple pendulum slider/ARUP.

See Also:

- [Massive Fake Quake Shakes 6-Story Condo](#)
- [Scientists Drill a Mile Into Active Deep Sea Fault Zone](#)
- [NASA Drone Uses Radar to Map Quake Faults in 3-D](#)
- [How Earth's Hum Could Help Us Map Mars](#)
- [Man-Made Dam May Have Triggered Great China Quake](#)

- Tsunami Risk for West Coast Higher Than Expected
- Videos Simulate Earthquake in San Francisco Bay Area

WiSci 2.0: Alexis Madrigal's Twitter, Google Reader feed, and green tech history research site; Wired Science on Twitter and Facebook.

Sushi DNA Tests Reveal Fraud

A biologist walks into a sushi bar and orders some tuna. What does he get? Escolar, a nasty fish with buttery flesh that can cause bizarre episodes of diarrhea, accompanied by a waxy intestinal discharge.

It's not a joke. It happened five times to the same scientists during a brief research project. The results of that study were published Wednesday in *PLOS One*.

"A piece of tuna sushi has the potential to be an endangered species, a fraud or a health hazard," wrote the authors. "All three of these cases were uncovered in this study."

The team of researchers from Columbia University and the American Museum of Natural History ordered tuna from 31 sushi restaurants and then used genetic tests to determine the species of fishes in those dishes. More than half of those eateries misrepresented, or couldn't clarify the type of fish they were mongering. Several were selling endangered southern bluefin tuna.

Although their results were shocking, exposing sloppy sushi joints wasn't their main goal. The scientists were trying to improve on a new species-identification technique, called DNA barcoding. A coalition of labs has been collecting fish, reading their genes and uploading the information to a database called FISH-BOL.

Their goal is to build a catalog of every fish species on earth so that anyone with a handheld DNA reader could definitively identify fish within minutes. Wildlife officials could use that technology to spot-check fish markets, and fine people who are selling protected species.

Right now, the FISH-BOL database is roughly 20 percent complete, but zoologists can't seem to agree upon the best way to condense the genetic information from each fish into a concise signature. That's where this study comes into play. By checking 14 carefully selected spots on a gene called *cox1* and matching them up with the database, the scientists could accurately identify any kind of tuna.

Citation: Lowenstein JH, Amato G, Kolokotronis S-O, "The Real maccoyii: Identifying Tuna Sushi with DNA Barcodes – Contrasting Characteristic Attributes and Genetic Distances." PLoS ONE 4, 11, 2009, e7866.

*Photo: Spicy tuna roll
stuart spivack/Flickr*

See Also:

- [ID Error Leaves Fish at Edge of Extinction](#)
- [Tuna Ranch Hormone Cocktail Could Save Bluefin](#)
- [Genetic Testing for Tuna: Is It Really Yellowfin?](#)
- [Bird Cam Captures Albatross, Killer Whale Rendezvous](#)
- [Hacking Salmon's Mental Compass to Save Endangered Fish](#)
- [Saving Fish Is Possible, Unless They're Past the Tipping Point](#)

Ghostly Bones of Galactic Feast Revealed

A new infrared image of the galaxy Centaurus A reveals the gassy, ghostly bones of a galaxy that it consumed several hundred million years ago.

The parallelogram of stars leftover from the collision had been obscured by dust. But using new processing techniques in the near-infrared part of the spectrum, European Southern Observatory astronomers were able to glimpse the leftovers of the cosmic dinner.

“There is a clear ring of stars and clusters hidden behind the dust lanes, and our images provide an unprecedentedly detailed view toward it,” said Jouni Kainulainen, in a [paper on the new data](#) visualized in the image. “Further analysis of this structure will provide important clues on how the merging process occurred and what has been the role of star formation during it.”

The black hole lurking in the center of Centaurus A, 11 million light-years away, is 50 times as massive as the one at the center of the Milky Way. It’s one of the most active source of radio waves in the universe, which is why astronomers have pointed [all kinds of telescopes](#) at it and eventually revealed the basic features of the galaxy that [Centaurus A had consumed](#).

Image: ESO using the New Technology Telescope at the La Silla Observatory.

See Also:

- [Spectacular New Image of Black Hole Jets](#)
- [Scientists Make Desktop Black Hole](#)
- [Supermassive Black Holes Collide to Become Even More Super and ...](#)
- [Strange Eye-Shaped Galaxy Has Black-Hole Iris](#)
- [Multi-Galaxy Collision Caught in Action](#)
- [Hubble Snaps Fantastic Galaxy Collision](#)

WiSci 2.0: Alexis Madrigal's [Twitter](#), [Google Reader feed](#), and [green tech history research site](#); [Wired Science on Twitter](#) and [Facebook](#).

When Good Rockets Go Bad

<< [previous image](#) | [next image](#) >>

In the grand scheme of human space programs in Russia and the United States, catastrophic failures are relatively rare. But they are often quite spectacular and make a big impression on the public and on the funding for space exploration. The explosions in the videos we've assembled here were very costly, some in terms of life, some in terms of lost equipment and all in terms of progress of the space programs.

Vanguard TV3 Fuel Tanks Explode

Dec. 6, 1957: The United States' first attempt to launch a satellite into orbit was also its first failure. Two seconds after leaving the launch pad at Cape Canaveral, this rocket lost thrust and sank back down, rupturing and exploding its fuel tanks. It had reached a height of about 4 feet.

Though the rocket was destroyed, the Vanguard satellite it was carrying was thrown clear, its transmitters still signaling. The satellite is now on display at the Smithsonian's Air and Space Museum.

Video: NASA

Malaria Gaining Resistance to Best Available Treatment

WASHINGTON — Malaria that is resistant to the best available drug is more widespread in Southeast Asia than previously reported, new research shows. The worrisome finding poses a risk that travelers could carry this strain of the malaria parasite to other parts of the globe and unwittingly spread it, scientists reported Nov. 19 at a meeting of the American Society of Tropical Medicine and Hygiene.

The frontline drug in question is called artemisinin, the most potent medication currently in use against malaria. Signs of malarial resistance to artemisinin have surfaced over the past several years in Cambodia (*SN: 11/22/08, p. 9*). The new findings confirm that resistant malaria has now cropped up beyond a spot on the border of Thailand and Cambodia where it was initially detected. Now it has appeared in Vietnam and in two spots along the Burma border with Thailand and China.

“Things are changing. There’s no doubt the signs are concerning,” said Robert Newman, director of the Global Malaria Programme at the World Health Organization in Geneva. But he added that these signals are early and need further verification.

Patients in these areas take longer on average to overcome a malaria infection when given a standard combination of artemisinin and another antimalarial. This lag results from slower clearance of the malaria parasites from the blood, said WHO’s Pascal Ringwald, a medical officer who presented the update.

Patients who remain ill for longer stretches despite treatment need extra medication to recover from malaria and are also more likely to have severe or fatal cases, Ringwald said.

Malaria is caused by a single-celled parasite that infects the blood. Symptoms include fever, headache, chills, anemia and a swollen spleen. Of the more than 350 million people who come down with malaria worldwide each year, up to 1 million die. Mosquitoes spread the parasite from person to person.

Malaria has a history of becoming resistant to drugs, and artemisinin now risks becoming the most recent addition to that list. The new reports are disheartening to doctors because artemisinin normally packs a considerable wallop. Although artemisinin is a short-acting drug that gets cleared from the body in a few hours, it makes the most of its time — driving down parasite levels dramatically.

Using artemisinin alone invites resistance. So the standard therapy teams it with one of the longer-acting drugs, which perform mop-up duty on the remaining parasites, said Christopher King, a physician and epidemiologist at Case Western Reserve University in Cleveland.

The new flashes of resistance may have arisen because combination treatment isn't always available. And since artemisinin can be bought over the counter in many parts of Asia, people seeking relief don't always follow the WHO guidelines of pairing artemisinin with another drug, King said.

Also, taking artemisinin for a fever that isn't caused by malaria can allow resistant strains of the parasite to take hold, Newman said.

In the past, malaria's resistance to other drugs has been linked to specific genetic changes in the parasite. The precise mechanism underlying resistance to artemisinin is still unsolved, King said.

Artemisinin is derived from extracts of the sweet wormwood bush. The bush's leaves have been used as a folk remedy against fevers for roughly 2,000 years in Asia but fell out of use in the 20th century with the introduction of modern antimalarial drugs such as chloroquine.

During the Vietnam War, North Vietnamese leader Ho Chi Minh appealed to China for traditional remedies for soldiers who had malaria. Tea made from sweet wormwood leaves worked and ultimately became the basis for artemisinin drugs. It's not clear whether parasites in Southeast Asia are the first to become resistant because they have had a long history with artemisinin, or if other factors are involved, Newman said.

Image: Malaria from Plasmodium falciparum. Flickr/Got Jenna

See Also:

- [Malaria Jumped to Humans From Chimpanzees](#)
- [New Hope for Anti-Malaria Mosquito](#)
- [Bush Triples Funding for AIDS, Malaria and Tuberculosis](#)
- [A Better Mouse Model for Malaria — and Maybe a Vaccine](#)
- [GM Mosquitoes Nearing Widespread Release in Malaysia](#)

Dung Fungus Provides New Evidence in Mammoth Extinction

The latest evidence in the disappearance of the mammoths, and nine other North American species weighing over a ton, comes from fossilized dung fungus. But despite their lowly origin, if the new findings hold, they point away from human causes and could rule out an asteroid impact altogether.

By studying the abundance over time of a fungus that lived only in the dung of these animals, scientists have revealed that the animals began to decline in numbers earlier than previously believed.

Much of the uncertainty surrounding the extinction of the North American megafauna, which includes mastodons, saber-tooth tigers and giant ground sloths, is due to a scarcity of evidence and difficulty pinning down the timing of events. Several major events occurred around the same time the animals disappeared: Major environmental upheaval associated with the end of the Ice Age; an asteroid explosion over North America; and the arrival of man.

Because the youngest megafauna fossils found are around 13,300 to 12,900 years old, the asteroid which is hypothesized to have impacted Earth's atmosphere around 12,900 years ago seemed like a good bet for the cause of the extinctions. But, the short-lived Clovis culture inhabited North America around the same time.

Now the new study, led by scientists at the University of Wisconsin-Madison and published Thursday in *Science*, fills some holes with a different type of data. By studying the abundance over time of a particular fungus that produces spores in the dung of big herbivores, a team of scientists determined that the animals' major decline occurred much earlier.

"Megafaunal populations collapsed from 14,800 to 13,700 years ago, well before the final extinctions," the authors wrote.

This effectively exculpates the asteroid impact, and makes the case for human causes thinner.

"If people were responsible for the decline, they must have been pre-Clovis settlers," Christopher Johnson, who studies the extinction of the Australian megafauna at James Cook University in Queensland, wrote in a commentary in *Science*.

Though the Clovis people were long believed to be the first North American settlers, new evidence of earlier settlers that arrived around the time that the fungus shows the decline beginning has begun popping up.

The idea of a pre-Clovis peopling is still hotly debated, but even if it didn't exist or wasn't robust enough to have a major effect on the animals, the Clovis people could have dealt the final blow or contributed to the ultimate demise of the megafauna.

The scientists also studied pollen from the time period and discovered that as the large herbivores declined, a new set of broad-leaved trees began flourishing. This woodland could have arisen because the animals that fed on those plants and kept them in check weren't around anymore. And because these major changes in the environment occurred after the animals were in decline, this is a strike against the idea that climate caused the changes which then caused the extinctions.

The new research adds much needed information to a spotty fossil record and scattered clues. But the question of whether or not humans caused the demise of North America's giant beasts has always provoked strong feelings and intense debate, and this latest evidence is likely to stir things up more than it helps settle them.

Image: Mastodons, giant ground sloths and camels./Barry Roal Carlsen, University of Wisconsin-Madison

Citation: "Pleistocene Megafaunal Collapse, Novel Plant Communities, and Enhanced Fire Regimes in North America," by J.L. Gill; J.W. Williams; K.B. Lininger at University of Wisconsin-Madison, WI; S.T. Jackson at University of Wyoming, Laramie, WY; G.S. Robinson at Fordham University. Science Vol. 326, Nov. 20, 2009.

See Also:

- [Genome Hacking Could Reverse-Engineer Extinct Woolly Mammoth ...](#)
- [Evidence for Bone-Crushing Wolves Discovered](#)
- [Megafauna Extinctions Not Entirely Humans' Fault](#)
- [If Climate Didn't Doom Neanderthals, Did Humans?](#)

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Farmer Ants Fertilize Their Gardens With Bacteria

Thanks to their vast underground fungus farms, leafcutter ants are one of Earth's most successful species — and one secret of their agricultural success is bacteria, which the ants use like fertilizer.

By farming with microbes that pull nitrogen from the air, the ants thrive in nitrogen-poor rain forest soil. Researchers say their bug-harnessing tricks might point people toward better ways of turning plants to fuel, or boosting our own crop yields.

“The reason we're able to produce such massive crops is by the massive fertilization of nitrogen in our fields,” said University of Wisconsin bacteriologist Cameron Currie, co-author of a paper published Thursday in *Science*. “Ants supplement their crops through symbiotic associations with bacteria.”

A star of rain forest documentaries, leafcutter ants are one of about 250 ant species that subsist on farmed fungus. Most of these species live in colonies of a few thousand individuals, with tiny garden plots.

Leafcutter colonies have millions of members, with leaf-fed farms yielding more than a ton of fungus every year. Some scientists estimate they account for a full four-fifths of all living, nonplant rain forest matter.

Fascinated by their success, researchers have studied leafcutter gardening, but something wasn't adding up. Though Earth's atmosphere is nitrogen-rich, animals get their nitrogen by eating plants, or eating animals that eat plants. But rain forest foliage is nitrogen poor, as are the soils colonized by the ants.

“Nitrogen is one of the elements that ultimately determines productivity,” said Currie. “The nitrogen balance in ants is way off, based on what's predicted from their diet.”

Currie's team investigated the mystery of where the ants were getting their extra nitrogen by raising leafcutter colonies in airtight boxes. The soil in the boxes contained normal nitrogen. But the nitrogen in the air was replaced with a nitrogen atom with a different number of neutrons, called an isotope. By measuring the levels of the isotope in fungus and ant bodies, the researchers could track whether nitrogen was coming from the soil or the air.

They found that the fungus was getting nitrogen from the air. They then studied bacteria growing on the fungus, and found microbes from a

genus called *Klebsiella*, which pulls nitrogen from the air at rates comparable to microbes that live on the roots of some plants.

“It’s entirely possible that nitrogen-fixing bacteria played a critical role in the evolution of this very different group of ants, with their giant colonies and massive effects on the environment,” said Ted Schultz, a Smithsonian Institute entomologist who was not involved in the study. He and Currie both noted that leafcutters are uniquely complex among fungus-growing ants, but evolved just 10 million years ago, or 40 million years after other fungus growers.

“What humans do for nitrogen is mine it from other sources, and dump it on our crops,” said Schultz. But this leads to waste and pollution, “and the ants accomplish it through microbes. Who knows? Maybe humans could do something similar, and cultivate microbial communities in the soil around our crops.”

And this isn’t the only trick farmers might learn from the ants. In March 2008, Schultz showed that leafcutters also use antibiotic-producing microbes to keep their gardens pest-free.

Currie is studying whether nitrogen-fixing bacteria help break down the ants’ leaf cuttings into a fungally-digestible form. If so, the bacteria may suggest better ways of turning plants into biofuels. “We need to discover new enzymes, new processes, to convert plant cell walls into simple sugars that can be converted into ethanol,” he said. “Ants have been converting plant biomass into energy for millions of years.”

Currie added that leafcutter ants are the subject of thousands of papers authored over the last century, “yet this critical aspect of their success was completely unknown.”

“This is a well-studied natural system, and we’re still learning who the players are,” he said. “What does that say about most of the natural world, where mutualisms and associations haven’t been studied?”

Images: 1) A leafcutter ant tending fungus, from Cameron Currie. 2) The nitrogen-tracking test apparatus, from Science. 3) An excavated leafcutter colony, from Science. 4) Leafcutters returning to their colony with freshly cut leaves, from Jarrod Scott.

See Also:

- [Could Ants Hold the Key to Sustainable Agriculture?](#)
- [Taking Traffic Control Lessons — From Ants](#)
- [A Brief History of the Superorganism, Part One](#)
- [A Brief History of the Superorganism, Part Two](#)

- Cockroach Superpower No. 42: On-Board Nitrogen Recycling
- Future of Fertilizer

Citation: "Symbiotic Nitrogen Fixation in the Fungus Gardens of Leaf-Cutter Ants," by Adrián A. Pinto-Tomás, Mark A. Anderson, Garret Suen, David M. Stevenson, Fiona S. T. Chu, W. Wallace Cleland, Paul J. Weimer, Cameron R. Currie. Science, Vol. 326, No. 5956, Dec. 20, 2009.

Brandon Keim's Twitter stream and reportorial outtakes; Wired Science on Twitter. Brandon is currently working on a book about ecosystem and planetary tipping points.

ID Error Leaves Fish at Edge of Extinction

In an extinction scenario that might have been concocted by Douglas Adams or a taxonomically minded Kafka, a classification error has allowed fishermen to drive a species of skate to near oblivion.

If it vanishes, the flapper skate will be the first fish officially exterminated by commercial pressures — and for the last 83 years, it wasn't even considered a species.

Biologist R.S. Clark declared in 1926 that the flapper skate, formally known as *Dipturis intermedia*, and the blue skate, or *Dipturus flossada*, were actually the same animal. His classification was widely accepted, and the two species were lumped together as the common skate.

But when French Museum of Natural History biologist Samuel Iglesias decided to review Clark's assessment, he noticed that common skates often look quite different. Genetic analysis backed up his suspicions: Clark was wrong.

The flapper skate and blue skate really are different species. And that means trouble, because overfishing had already pushed the common skate to critically endangered status — a prognosis that now seems optimistic.

Instead, continued reports of rare common-skate catches have obscured the flapper skate's even-nearer-total collapse. According to Iglesias, whose analysis will be published in an upcoming issue of *Aquatic Conservation: Marine and Freshwater Ecosystems*, immediate action is necessary to save the flapper skate.

Otherwise it will go extinct, soon — and if it weren't for Iglesias, nobody would have known.

Image: Flickr/DanCentury

See Also:

- [Saving Fish is Possible, Unless They're Past the Tipping Point](#)
- [Hacking Salmon's Mental Compass to Save Endangered Fish](#)
- [Climate Change Caused Radical North Sea Shift](#)

Citation: "Taxonomic confusion and market mislabeling of threatened skates: important consequences for their conservation status." By Iglésias S.P., Toulhoat L., Sellos D.Y. Aquatic Conservation: Marine and Freshwater Ecosystems, in press.

Brandon Keim's Twitter stream and reportorial outtakes; Wired Science on Twitter. Brandon is currently working on a book about ecosystem and planetary tipping points.

Plants Have a Social Life, Too

After decades of seeing plants as passive recipients of fate, scientists have found them capable of behaviors once thought unique to animals. Some plants even appear to be social, favoring family while pushing strangers from the neighborhood.

Research into plant sociality is still young, with many questions unanswered. But it may change how people conceive of the floral world, and provide new ways of raising productivity on Earth's maxed-out farmlands.

"When I was in school, researchers assumed that some plants were better or worse than others at getting resources, but they were blind to the whole social situation," said Susan Dudley, a McMaster University biologist. "I went looking for it, and to my shock, found it. And we've found more of it since."

In a paper published in the November *American Journal of Botany*, Dudley describes how *Impatiens pallida*, a common flowering plant, devotes less energy than usual to growing roots when surrounded by relatives. In the presence of genetically unrelated *Impatiens*, individuals grow their roots as fast as they can.

Acknowledging relatives in this way is an example of kin recognition. It's common in the animal world, and is a precursor to kin selection, in which animals help their familial group, not just themselves. Dudley thinks plants have kin selection, too. It's a controversial idea, but that it's even being debated shows how far research into plant sociality has come.

When Dudley was in school in the 1980s, the very idea of plant sociality was practically taboo among scientists. It had burst into popular consciousness a decade earlier with the publication of *The Secret Life of Plants*, a New Age classic which also discussed orgones and dowsing. Later studies on "talking trees" went unreplicated, and the idea fell into disrepute.

But even if full-blown sentience was a silly idea, research on plant communication gathered. Much of it described how plants defended themselves, producing toxins and concentrating resources on their immune systems when unrelated neighboring plants were eaten. That clearly involved some sort of chemical signaling. Further studies conclusively showed plants were able to recognize themselves. Whether plants might respond to their relatives became a legitimate and intriguing question.

The answer isn't only of concern to people with imaginations stirred by thoughts of chatting flora. It could provide a whole new perspective on plant behavior and evolution. By providing insights that improve agricultural productivity, studies of kin recognition could literally bear fruit.

"We know that in the animal world, kin recognition and selection plays a very important role for family structure, altruistic behavior and those kinds of things," said Hans de Kroon, a plant ecologist at Radboud University in the Netherlands. "It's so prominent in the animal literature. Once we start to discover that plants can recognize their kin, there's a whole set of hypotheses we can apply to studying plants, that nobody ever thought to."

The field's landmark paper came from Dudley's laboratory in 2007, when she showed how American searocket plants accelerated their root growth when placed in pots of strangers, but slowed it down when potted with siblings. Were they animals, they'd be described as sharing water and food.

In a *Communicative and Integrative Biology* paper published in October, University of Delaware biologists Harsh Bais and Meredith Biedrzycki tried to isolate the means of recognition by exposing *Arabidopsis thaliana* seedlings, each in its own pot, to root secretions from other *Arabidopsis* plants. The signal indeed proved to be in the roots — and just as Dudley had seen, growth patterns varied according to whether secretions came from genetically unrelated plants, or family.

Intriguingly, the plants in Dudley's latest study were potted separately and unexposed to each others' secretions, suggesting that their leaves emit chemical signals, as well as their roots. That's supported by the research of University of California, Davis ecologist Richard Karban, who in a June *Ecology Letters* study showed that sagebrush boosts its immune system when exposed to the damaged cuttings of a related plant [pdf]. It seems to hear warnings from its kin.

More studies are needed to show exactly what sort of benefits are provided by these signaling and response systems. De Kroon said kin recognition doesn't necessarily mean kin selection: maybe the plants are communicating, but it doesn't do them much good in practice.

One of Dudley's students, Amanda File, is now studying whether some trees favor their own progeny, which might grow best near their parents. Dudley and graduate student Guillermo Murphy, a co-author of

the *American Journal of Botany* paper, are looking for for kin selection in invasive plants.

“We’re testing the hypothesis that invasive plants evolve greater altruism within their populations, allowing them to be better invaders of their new habitats,” said Dudley.

For plants used in agriculture, Dudley recommends kin recognition studies to see whether certain arrangements of relatives and strangers would be especially productive. De Kroon is looking at multi-species mixes. Karban hopes to use communication insights to engineer natural defense systems against pests.

“Maybe we thought before that only humans could do certain things, or vertebrates, or animals,” said Karban. “Plants are capable of much more sophisticated behavior than we assumed.”

Images: 1) Mustard seedlings exposed to root secretions/Harsh Bais. 2) Impatiens seedlings grown next to relatives and strangers/Susan Dudley.

See Also:

- [Plants Know Their Relatives — And Like Them!](#)
- [Crowdsourcing for Plants](#)
- [Soybeans Grow Where Nuclear Waste Glows](#)
- [Food Web, Meet Interweb: The Networked Future of Farms](#)

*Brandon Keim’s [Twitter](#) stream and [reportorial outtakes](#); *Wired Science on [Twitter](#). Brandon is currently working on a book about ecosystem and planetary tipping points.**

Mummy Scans Show Heart Disease Was Rampant

ORLANDO, Florida — The curse of the mummy may truly be fatal. An examination of mummified bodies has revealed that ancient Egyptians suffered from hardening of the arteries in surprising frequency, suggesting that blame for heart disease extends beyond the modern culprits of smoking, fast food and the remote control.

Among 22 mummies who received full-body computed tomography scans, 16 had hearts or arteries preserved enough to study. Of those, nine had evidence of blockage from atherosclerosis. “This disease has been around since before the time of Moses,” said Randall Thompson of the St. Luke’s Mid America Heart Institute in Kansas City. Thompson and colleagues presented their findings Nov. 17 at the American Heart Association’s Scientific Sessions 2009. The data were also published in the Nov. 18 *Journal of the American Medical Association*.

Although researchers have previously taken X-rays and other images of famous mummies, “no one has ever put a series of ancient people through modern CT scans,” Thompson said. The mummies, from the Museum of Antiquities in Cairo, ranged from 2,000 to 3,500 years old. All were selected by museum staff, who chose the most intact bodies from different spans of time. On a CT scan, the buildup of fat, cholesterol, calcium and other substances inside artery walls looks as distinct for the dead as the living.

The scientists decided to conduct the study after two of the research team members — Gregory Thomas of the University of California, Irvine and Adel Allam of the Al Azhar Medical School in Cairo — visited the museum in 2008. They noticed that the nameplate for Merenptah, who ruled around 1200 B.C., claimed the pharaoh had suffered from atherosclerosis. Curious to know whether this was true, the doctors gathered a research team to determine the prevalence of heart disease among the preserved representatives of an ancient, upper-class civilization. Funding came from Siemens, the National Bank of Egypt and the Mid America Heart Institute.

In Orlando, the scientists reported the consequences of all those fatted calves: Among the eight people in the sample who had lived past the age of 45, seven had signs of clogged arteries. The most ancient mummy to have suffered from heart disease was Lady Rai, a nursemaid to Queen Amrose Nefertari. She died around 1530 B.C. while she was in her 30s, though her cause of death is not known.

“We would have thought this was a disease of modern man,” said Samuel Wann of the Wisconsin Heart Hospital in Wauwatosa and a study team member. The results, he said, are bound to stoke an ongoing controversy among cardiologists. “We have a debate among our colleagues whether atherosclerosis is inevitable if you live long enough,” he said.

The findings should not be taken to mean that modern risk factors have no bearing on heart disease, said Robert Bonow, chief of cardiology at Northwestern University’s Feinberg School of Medicine. The mummies studied would have had diets high in salt (for food preservation) and would have enjoyed the pampered lifestyle of the wealthy, so even these ancient people may have had risk factors like those of modern people, said Bonow, who was not part of the research team.

“This does not tell you what the true incidence was,” he said at the meeting. “Patients should not take this as evidence that they shouldn’t worry about preventing heart disease because it’s been around a long time.”

Image: Michael Miyamoto/UC San Diego

See Also:

- [Iceman Otzi Killed by an Arrow](#)
- [Mathematical Model for Surviving a Zombie Attack](#)
- [The First Aid: Iceman May Have Dressed His Own Wounds](#)
- [Bogosphere: The Strangest Things Pulled Out of Peat Bogs](#)
- [Clots Thicken Neolithic Murder Mystery](#)
- [Bewerewolves: Fullest Moon in 15 Years Tonight](#)
- [Freaky Sleep Paralysis: Being Awake in Your Nightmares](#)

Newspaper Item

Report: Tesla IPO “Coming Soon”

Tesla Motors is on the verge of going public.

So says Reuters, citing two sources “familiar with the matter” who say an IPO filing from Tesla is coming any day now. No one’s offering specifics on when or how, but as Reuters notes, an initial public offering can take months. Tesla Motors has never commented publicly on IPO rumors and isn’t starting now.

“We don’t comment on rumor and speculation,” said company spokesman Ricardo Reyes.

That said, CEO Elon Musk said early last year that an IPO could come in 2008 or 2009. And he’s undoubtedly watched battery company A123 Systems, which saw its stock climb 50 percent on its first day of trading on Sept. 25. That company saw its third-quarter revenue exceed expectations but A123 still posted a loss.

More info when we have it.

Photo: Jim Merithew / Wired.com

Fisker, Mission One Snag Design Awards

Say what you will about electric vehicles, the Fisker Karma and Mission One are sexy rides indeed. The judges at Spark agree and have honored the two EVs in the annual Spark Design and Architecture awards.

The Fisker Karma plug-in hybrid and Mission One electric superbike snagged gold awards, joining the exhibits at the California Academy of Sciences, the videogame Tony Hawk: Ride and a long list of other winners in the international design competition.

Spark honors the best designs in everything from architecture to advertising, and the jury includes more than a dozen designers, creative directors and professors. They considered more than 370 contenders before naming 93 winners in four categories.

Photo of the Fisker Karma taking a lap at Mazda Raceway Laguna Seca: Jim Merithew / Wired.com.

Photo of the Mission One at the Bonneville Salt Flats: Mission Motors.

Going Rogue in a Luxury Hybrid Snowmobile

When we heard that Sarah Palin got a \$1.25 million advance for *Going Rogue*, we wondered how she was going to spend the loot. With a new wardrobe in the closet and donors clamoring to her PAC like cranky old people to a town hall meeting, we think it's time for her to listen to her new pal Oprah and live that best life now.

We've got just the thing: a luxury snowmobile snow machine just perfect for a fabulously wealthy Alaskan former First Family.

The i-Scoob (Get it? No? Sound it out! Ice cube — good one!) is a concept from designer Jeff Darling. It's a plug-in hybrid with a well-appointed interior that can also be hosed out. It's designed to be as capable carrying precision instruments to measure the thinning permafrost as it is hauling bullet-riddled polar bear carcasses. Plus, there's an electric-only feature for crossing those especially environmentally sensitive areas of the tundra on the way to a seal hunt.

It's purely a concept — even in Alaska it'll never see the light of midnight, but gosh is it fun.

Depending on the time of year, Darling said that on-board solar panels may be useful for when all other fuel sources are expended. "While there may not be much sun in the areas the i-Scoob would operate, every little bit helps," he said. "Even if it takes a couple days to generate enough power to finish the journey it's better than being permanently stuck."

The passenger compartment of the i-Scoob is enclosed by a front-hinged capsule, and every hollow compartment is filled with foam for insulation and flotation. "Should the vehicle fall through ice into frigid water it will remain afloat," Darling said. "The foam also helps insulate the drivetrain components and occupants from the harsh environment." A glazed cockpit traps warm air from the sun, providing skeptics a real-life demonstration of the greenhouse effect.

Steering and acceleration are via joystick, while a radio and climate control keep passengers comfortable and entertained.

Images: [Jeff Darling/disen-art.com](http://JeffDarling/disen-art.com)

VW Builds the World's Coolest SUV

The Paris-Dakar Rally is a race so crazy competitors have been taken out by land mines. To say it's grueling is like saying Carrie Prejean likes shooting video. Just what sort of vehicle is required to take on a race where normal conditions include searing heat, towering dunes, ginormous rocks and weather conditions that would give a crab boat captain pause?

Volkswagen has the answer in their new Touareg for the next Dakar.

The cars, trucks, bikes and buggies that run in the Dakar rally are tech porn of the highest order. Take a look at what VW has to offer for the 2010 running of the race, which will be run through Argentina and Chile. (The name comes from the days when the race ran from Paris to Dakar, Senegal.) The Germans made history last year by taking the checkered flag in the first diesel-powered entry in the automobile class. It entered the diesel 'Reg in the Baja 1000, too.

This time around, the Touareg features such cool features as a carbon fiber-reinforced outer skin that weighs a mere 50 kilograms, a braking system capable of exerting pressure equal to that of 700 meters below sea level and a data acquisition system that can store 250 MB of data that is read and analyzed by race engineers at the close of a days stage.

Just the run of the mill specs for the Touareg shows you how serious of a challenge the Dakar is. The VW is powered by a 2.5-liter five-cylinder TDI diesel engine with two-stage turbocharging system with exhaust turbochargers and intercooling. The mill, mounted longitudinally behind the front axle, puts out approximately 280 horsepower and more than 440 pound-feet of torque. Gotta love diesels for buckets of torque.

All that power and grunt is put to the ground — no matter what kind of ground it is, tarmac, sand, gravel, rocks, you name it — via a longitudinally mounted sequential five-speed gearbox and a permanent all-wheel-drive. More slick hardware includes selectable viscous locking mechanical differentials and an hydraulically actuated three-plate ceramic clutch. Stopping power comes from 320 mm ventilated disc brakes squeezed by aluminum calipers with six pistons up front and four out back. The Dakar Touareg even has power-assisted rack and pinion steering.

All this is done in a surprisingly lightweight package that tips the scales at just under 4,000 pounds. The Dakar Touareg can hit 100 km/hr

from a standstill in 6.1 seconds on firm ground and tops out at , on hard ground, and will top out at approximately 118 mph, which may not seem like much.

Unless you're running flat-out through the desert.

Photos: VW

Big Brother Zeros in on License Plates

The town council in Tiburon, a Marin County community just north of San Francisco, has unanimously voted to install license plate recording cameras in a bid to bring down crime.

So what's the story? Does the town have an unusually high level of violent crimes? Hardly. From 2001 to 2008, this community of less than 9,000 people saw a total of 47 violent crimes, of which only one was murder. And Marin County is the richest in all of California.

To add to the metropolis suburb Shangri-La image, the town boasts a median household income of over \$100,000, a median home value of almost \$2 million with a list of residents –past and present– that makes the cast of *Oceans Eleven* look like a high school musical.

Will Tiburon track boat traffic too? *Photo: Flickr/nik.clayton*

Tiburon officials voted 4-0 — one member was absent — to install six license plate recognition cameras on the only two roads that feed into the community, Tiburon Boulevard and Paradise Drive. When they go live in six months, the system will compare the plates to databases of “vehicles of interest” — those that are stolen, or used in kidnappings, etc. Should they find a match, the cops will be alerted. The system will archive the information for 30 days to help identify or rule out suspects for current crime investigations.

The program will cost \$195,000, and the council vote was, predictably, met with mixed reaction. Police Chief Michael Cronin of course said it will make the city safer. But some residents, like 72-year old William Rotham, consider it an invasion of privacy and “overkill” akin to “going after a flea with a cannon.” Rotham told the *San Francisco Chronicle* he also worries the immediacy of the system will cause dangerous confrontations between police and criminals on the town's two major roads.

Yami Anolik, a 64-year-old real estate investor thought otherwise and told the *Chronicle*, “If it lowers the crime rate even a little bit, then it's a great idea.”

Similar programs, like the camera system in Denver, have proven valuable to law enforcement. Denver's system scanned more than 40,000 cars in two months and found 250 needle-in-a-hay-stack vehicles of interest. We don't debate the benefit such technology brings law enforcement, nor do we question the value of lower crime rates. But we do question the actual return on this kind of reactive technology versus a

proactive system like adding to two more police officers in a town that already has a crime rate lower than that of Pleasantville.

Who can we expect to be photographed by Big Brother? The list of current and past noteworthy residents of Marin county includes tennis star Andre Agassi, Metallica vocalist and guitarist James Hetfield, rocker Sammy Hagar, director George Lucas and actors like Sean Penn and Brad Pitt. We wonder how long before Tiburon's big-brother license plate tracking system is hacked and turned against them as a paparazzi informant 'bot.

Main photo: Flickr / Snapsi

Welcome to Iowa. Please Plug In Your Car.

California is the birthplace of the coming EV invasion, but a tiny town in Iowa wants to be the birthplace of a “Pony Express” of charging stations that will keep those cars going.

Businessman Mike Howard has erected four charging stations in Elk Horn, a town of 650 people about an hour east of Omaha. He has plans to install four more soon. No, that’s not many at all, and they’re in the middle of nowhere. But Howard says you’ve got to start somewhere, especially if you envision a network of charging stations stretching from Denver to Chicago along Interstate 80. He likens his network to the Pony Express.

“They had to have stations to continue on to deliver the mail,” Howard told the Associated Press. “This is a modern-day Pony Express.”

Many automakers are developing electric vehicles and plug-in hybrids, and cars like the Chevrolet Volt and Nissan Leaf are expected by the end of next year. The big question has been where people are supposed to plug them in when they aren’t home. We’ve seen campaigns to create “charging corridors” spring up in California and Arizona, and of course Better Place has an ambitious plan for a charging infrastructure people would subscribe to. The Obama Administration is providing \$3.4 billion in grants this year to spur development of EVs and bolster the grid.

But Howard wants to bring chargers to the heartland, even though there are, according to the AP, just 96 electric cars in Iowa and only one in Elk Horn.

“He’s definitely being progressive, but you know, somebody’s got to be first,” Pat Davis, program manager for the U.S. Department of Energy’s Office of Vehicle Technologies, told the Associated Press.

Amen.

Photo: General Motors

See Also:

- [A Roadmap to Vehicle Electrification](#)
- [EV ‘Charging Corridor’ Links L.A. and San Francisco](#)
- [Nissan Scrambles to Create EV Charging Stations](#)
- [Driven: Shai Agassi’s Audacious Plan to Put Electric Cars on the Road](#)

John Surtees Drives an EV Across the Channel

How cool is John Surtees? At 75 years old, the racing legend isn't slowing down. The motorcycle *and* F1 champ decided it would be fun to drive a Ginetta electric vehicle through the English Channel Tunnel, or the Chunnel, as they so cleverly call it.

Why? To mark the 15th anniversary of the Tunnel's opening, of course. And to pick up some rather nice French wine.

For those of you who don't know Surtees, he was a grand prix motorcycle champ who won the title in 1956, 1958 (twice, in two divisions), 1959 (twice) and again in 1960 (twice again). Then he won a Formula One championship for Ferrari in 1964.

What prompted him to do something so barking mad as a dash through the Chunnel, which, by the way, is not open to automobile traffic? It was part of the 37th Annual Beaujolais Run, which is little more than an excuse for Brits to drive from England to France, pick up some wine and have some fun. Not that there's anything at all wrong with that.

Surtees became the first person to drive the Chunnel in a production car. He used the rail link's central service tunnel. Surtees started the 31-mile trip in Folkestone, Kent. He did it in a sweet little car, too — a British-made Ginetta GV50EV electric prototype. The two-seater sports tops out at 120 mph and has a claimed range of 250 miles. It uses a brushless DC motor that is designed and manufactured by Zytek. Yes, that would be the same Zytek that's got all kinds of hybrids and EVs in motorsports.

The Telegraph newspaper says Eurotunnel, which runs the Chunnel, thought having Surtees make the dash to France in an EV would be in keeping with the firm's reputation for providing the "greenest" way to cross the Channel with a car. "Two forward-looking businesses, with ground-breaking, environmentally friendly products are working together to show the world that low carbon travel is now a real option," a Eurotunnel spokesman told the paper.

Yeah, yeah. We're sure it was more like someone thought the idea of letting Surtees loose in a quick car on a closed course would be fun.

Photo: Ginetta

Electric Rolls-Royce, In Time For Christmas 2010

Rumors of an electric Rolls-Royce Phantom are back, with the word being the super-luxe automaker could have one on the road within 12 months.

We've been hearing mumbling about this car for more than a year. It started when CEO Tom Purves said an e-Rolls would be perfect for well-heeled city dwellers. The car, he said, could build upon the drivetrain in the Mini E. The rumors picked up again in September when a Rolls spokesman let slip that an electric Phantom was under consideration back in Goodwood (or, more likely, Munich, since BMW owns Rolls).

Now *AutocarUK* cites an unidentified "company source" saying the e-Phantom could be on the road by the end of next year. Why the rush? Because BMW is a big sponsor of the 2012 Olympics in London, and my wouldn't it look green bringing a flotilla of electric land yachts to the games?

Personally, we think an electric Rolls makes perfect sense. Most owners simply tool around town, so range isn't a big issue. It could save owners some serious coin on emissions and road taxes in cities like London. And electric motors provide boatloads of torque and they're quiet — two hallmarks of a Rolls-Royce.

Besides — we love the idea of a Rolls plugged into a socket. "Jeeves, please *do* remember to plug the car in."

Photo of a regular ol' gas-burning Phantom: Rolls-Royce

Sugar Cane-Fueled Airliner On the Way

Brazilian aircraft maker Embraer and General Electric are working with renewable fuel company Amyris to develop sugar cane-based jet fuel for airliners. They say a test flight by Brazilian airline Azul Linhas Aereas could come in early 2012.

It's no surprise such an experiment would come in Brazil, which leads the world in the use of ethanol. The country's sugar cane crop has led to widespread use of ethanol-powered vehicles, and Embraer produces an ethanol-powered crop duster. Sugar-based ethanol provides a better energy return than the much-debated corn ethanol common in the United States. This is the first effort to produce a sugar cane-based jet fuel for widespread use by the airlines.

Air New Zealand, Virgin, Continental and Japan Airlines have tested biofuels in Boeing aircraft. Airbus and JetBlue also are working together on alt fuels, and the Air Force wants alt-fuel too. Most biofuels have faced stiff criticism as the environmental costs of growing and producing the crops have been shown to offset some of the gains. But with airlines struggling with rising fuel costs and increased pressure on emissions, many are eager to find alternatives to petroleum.

Amyris' synthetically derived biofuel doesn't avoid the land use issues facing many biofuels, but it claims its technique of bioengineering microorganisms like yeast allows it to transform Brazil's sugar cane into several renewable fuels including diesel and jet fuels.

Photo: Azul

Electric Smart Rolling Down the Line

Drum roll please! The electric Smart ForTwo is officially underway at Daimler's factory in Hambach, France.

From an urban mobility standpoint, there's been a lot to love about the Smart from the get go. Although small, it's built like a tank, it offers the comfort and convenience you'd expect and it gets great mileage. But if you're of a green bent and you want to get even better "mileage," so to speak, the car for you arrives soon.

We've been following the Smart for awhile, from the new car-sharing program in Austin, Texas, to those crazy Dutch treating them like cows and taking Daimler to task for not offering the diesel Smart or hybrid version on this side of the Atlantic. Yeah, you can say we're fans.

Like a lot of you, we've wanted to see the EV version of the fortwo as well. It makes total sense – because, let's face it, the fortwo isn't exactly a road trip kind of car. Around the city though, it makes total sense. So here comes the EV version — Tesla Motors helped with the drivetrain — off the assembly lines.

The first 1,000 customers to receive their Smart EVs, or Smart electric drive as they are officially called, will be participants in a variety of mobility projects in major cities in both Europe and the United States. Daimler is taking a page from BMW, which is doing the same thing with the Mini E. After Daimler gets feedback on electric driving under everyday conditions for the fortwo electric drive, it will be available to the general public in 2012.

"With the start of the series production of the smart fortwo electric drive, the Hambach plant enters a new era – at the same time, the smart fortwo emphasizes its pioneering role on the way to individual mobility with local zero-emissions in cities and urban areas," said Marc Langenbrinck, managing director of Smart. "Its innovative battery-electric drive makes the smart fortwo electric drive the ideal vehicle for the city: it combines responsibility to the environment with driving fun and joie de vivre in a virtually perfect manner."

This is the second-gen fortwo EV, but the first that isn't strictly an R&D project. By the time 2012 rolls around and Daimler's gotten feedback on how the little car performs in the real world, the Smart EV will be offered alongside other models in showrooms. Getting a practical, sorted city EV will be as hard as checking an option box on a sales form.

Photo: Daimler

See Also:

- [Smart EV Gets a French Connection](#)
- [So Smart: Electric ForTwo Arrives This Fall](#)
- [Share in Tesla Electrifies the Teutons](#)



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Food for the mind