



Aalto University
Media Factory

Digital_Fabrication_Studio.03

Intellectual Property, Open Design

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<http://www.slideshare.net/openp2pdesign>





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Today:

- * IP for Digital Fabrication
- * Mass-collaboration + Open Design

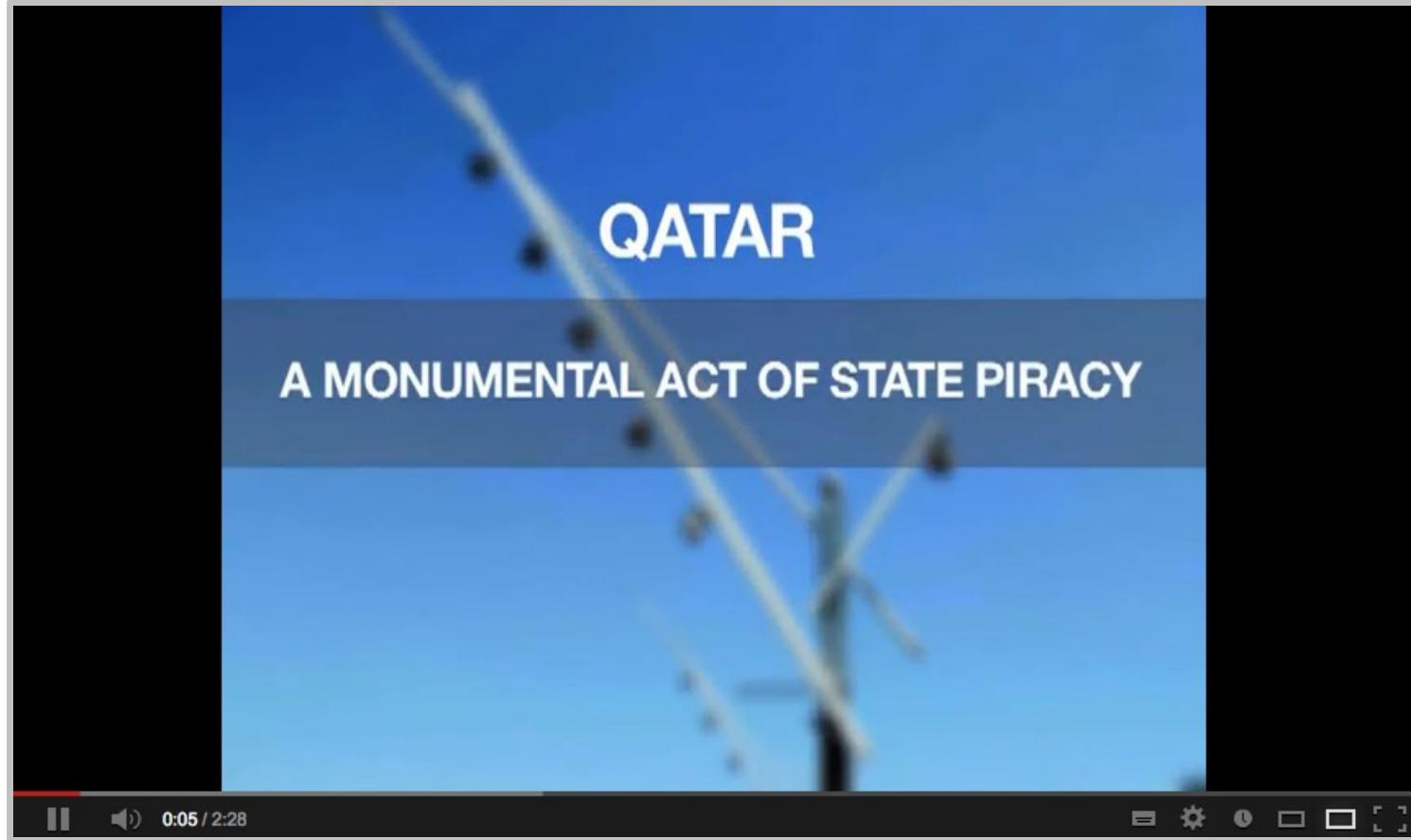


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01.

Intellectual Property: different ways of protecting your work

Design and Piracy



Even design have to face piracy...

Architectural design and Piracy



Even architecture have to face piracy...

Source: <http://www.dezeen.com/2013/01/02/zaha-hadid-building-pirated-in-china/>

Close to the Napster case of 3D Printing

The screenshot shows the homepage of The Pirate Bay. At the top, there's a navigation bar with links like "Search Torrents", "Browse Torrents", "Recent Torrents", "TV shows", "Music", and "Top 100". Below the navigation is a search bar with placeholder text "Search here..." and a "Pirate Search" button. There are also filters for "Audio", "Video", "Applications", "Games", and "Other", with "All" selected. A sidebar on the left features a "VIDEO" section with a thumbnail of a woman wearing sunglasses.

The main content area displays a promotional banner with the text "YOUWIN" and "Voita en iPhone 4S" (Win an iPhone 4S) along with three smartphones. To the right of the banner is a button labeled "Klikkaa hänen >>>". Below the banner is a table listing torrent results for "Physibles".

Type	Name (Order by: Uploaded, Size, ULed by, SE, LE)	View: Single / Double	SE	LE
Other (Physibles)	3D Hollow Diamond		1	0
Other (Physibles)	Screwless Cube Gears		3	0
Other (Physibles)	Enclosed Cable Chain with Calibrator		2	0
Other (Physibles)	Raspberry Pi Case with VESA mount		3	0
Other (Physibles)	120 Cell Hecatonicosachoron by George Hart		2	0

There is a rising debate about 3D printing as the next possible source of piracy... so there could be even more laws and restrictions!

DRM and Design



A group of designers have built a chair with a DRM system -- after being sat on eight times, it self-destructs.

Source: <http://www.wired.co.uk/news/archive/2013-03/03/drm-chair>

DRM and Design

The screenshot shows a news article from TorrentFreak. The title of the article is "3D Printer DRM Patent To Stop People Downloading a Car". The article discusses a patent for a DRM system that aims to prevent people from printing physical objects like cars using 3D printers. It includes a sidebar with author information, publication date, comments, tags, and a print option. A small image of a 3D-printed ship model is also visible.

TorrentFreak

The place where **breaking news, BitTorrent and copyright collide**

Subscribe via RSS | Subscribe via Email | Tip Us Off!

3D Printer DRM Patent To Stop People Downloading a Car

enigmax | October 12, 2012 | 226 | 3d printer, Physibles | Print

DRM systems in the digital media world are nothing new and are utilized extensively in the music, movie and video games industries. Now, after applying four years ago, a company has this week obtained a patent for a DRM system that aims to stop future owners of 3D printers from printing whatever they like. The dream of downloading a new pair of sneakers or even a car might already be in jeopardy, before it's even begun.

During the last 20 years inkjet printers made an unholy mess of the short-run commercial print guy's business, enabling just about anyone to print on anything from paper to plastics with a relatively tiny outlay.

During the next 20 years the 3D printer will be the bogeyman affecting industries both far and wide and large and small, by giving the man in the street the ability to print physical objects as easily as he can print a family



Digital Rights Management could be a strategy for “protecting” design...

Source: <https://torrentfreak.com/3d-printer-drm-patent-to-stop-people-downloading-a-car-121012/>

Digital Fabrication and copying...



But fabbing is only experiencing the same phenomena of design and manufacturing...

Source: <http://www.sculpteo.com/en/app/>

Digital Fabrication and copying...

LIVING / POLTRONE E CHAISE-LONGUE / POLTRONE E POUF

← Prodotto precedente Prodotto successivo

Santapouf di Campeggi

[Pin it](#) [Mi piace](#) 7

AZIENDA

Campeggi

Vai al sito →
altro da Campeggi →

DESIGNER

Denis Santachiara →
altro del designer →

CONDIVIDI

Stampa scheda →
Invia ad un amico →
Facebook →

SHOP ONLINE
Acquista su [made in design](#) ● ● ●

SCHEDA PRODOTTO

Nome:	Santapouf
Categoria:	Poltrone e Pouf
Azienda:	Campeggi
Stile:	Design
Designer:	Denis Santachiara
Anno:	2011
Materiali:	Poliuretano espanso, PVC, lycra



Arredo al confine tra arte e industrial design, Santapouf di Campeggi si ispira alla forma delle sculture a profilo continuo, sperimentate a partire dal Paleolitico. Tra le più conosciute sono quelle dello scultore fiorentino Giuseppe Bertelli, che le ha proposte nella modalità seriale: viste di profilo ricordano il profilo di un volto



But fabbing is only experiencing the same phenomena of design and manufacturing...

Source: <http://atcasa.corriere.it/catalogo/prodotti/Campeggi/Santapouf.shtml>

Digital Fabrication and copying...



But fabbing is only experiencing the same phenomena of design and manufacturing... So who copies who?

Source: <http://www.liveauctioneers.com/item/8263457>

Digital Fabrication and copying... even the details



They were so eager to clone Arduino that they even copied the "MADE IN ITALY" (from ebay)

337 271 days ago

But fabbing is only experiencing the same phenomena of design and manufacturing... even details are copied!

Source: <http://twitpic.com/7t9879>

Fashion Design and copying... “piracy” ?



Copying in Fashion Design is a common practice, because only the trademark is protected.. and that's how we they set trends!

Source: <http://www.refinedhype.com/hyped/entry/adidas-beachstar-sandal>

Fashion Design and copying... “piracy” ?



The screenshot shows a product page from the Adidas website. At the top, the Adidas logo is on the left, followed by a search bar, sign-up options, and a shopping cart icon indicating 0 items. A navigation menu below includes categories like SHOP, MEN, WOMEN, KIDS, MI ADIDAS, FOOTBALL, RUNNING, BASKETBALL, ORIGINALS, TRAINING, MORE, and GO ALL IN. The breadcrumb navigation shows the user has gone back to the previous page, then Home, then Men, then Shoes, finally landing on Men's Duramo Clog Slides.

The main product image displays two dark blue clog slides with white stripes on the toe area. Below the main image are three smaller thumbnail images showing different angles of the shoes.

The product title is "Men's Duramo Clog Slides" in bold black text. To the right is the Adidas logo. A green circular icon indicates "In Stock". Below the title is a 5-star rating with the text "Write the First Review".

Product details include "COLOUR New Navy / New Navy / Running White (G62583)" with a small image of the shoe. The size "SIZE 43 (Size Chart)" is listed with buttons for "43" and "44 1/2".

The price is "€ 30,00" and there is a "Add To Bag" button with a shopping bag icon. Below the price are links for "Send to a Friend" and "Add to Wishlist". Social sharing icons for Google+, LinkedIn, and Facebook are also present.

Copying in Fashion Design is a common practice, because only the trademark is protected.. and that's how we they set trends!

Source: http://www.adidas.fi/Men%27s-Duramo-Clog-Slides/G62583_640,fi_FI,pd.html

Copyright ...

Copyright essentially attaches to every original creative work that is fixed in a tangible medium. This includes most things that are written, drawn, or designed. However, the copyright only protects the actual writing, drawing, or design itself, not the idea that it expresses.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Copyright =

- * the right to copy (the rights to let or stop copying)
 - * the author's rights (the rights to be credited)
-

Patent ...

Patent protection is not granted automatically. An inventor must apply for a patent on her invention at the Patent and Trademark Office (PTO). The invention must be new, useful, and non-obvious. In making the application, the inventor must disclose information that would allow others to practice the invention. Finally, patent protection is significantly shorter in duration than copyright protection.

Once an object has been patented, all copies, regardless of the copier's knowledge of the patent, infringe upon that patent. Simply stated, if you are using a 3D printer to reproduce a patented object, you are infringing on the patent.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Copyright, Patent and originality ...

In the world of copyright law, this intuition is correct. When a child in Seattle writes an ode to his pet dog, that work is protected by copyright. If, two years later, another child in Atlanta writes an identical ode to her pet dog (unaware of the first ode), the second work is also protected by copyright. This is possible because copyright allows for independent creation, even if the same work was independently created twice (or even more than twice). While a work must be original in order to receive copyright protection, the work does not need to be unique in the world.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

However, and relevantly for reproducing 3D objects, patent law does have a novelty requirement. Patent law does not allow for parallel creation. Once an invention is patented every unauthorized reproduction of that invention is an infringement, whether the reproducer is aware of the original invention or not.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Watch out when you enter this game...

Follow Christina Bonnington (@redgirlsays) on Twitter

Apple and Samsung Both Owe One Another Damages

By Christina Bonnington August 24, 2012 | 2:37 pm | Categories: R&D and Inventions

[Follow @redgirlsays](#)

[Like](#) [Send](#) [47 people like this. Be the first of your friends.](#)

[Tweet](#) [+1](#) [Share](#)

273 8 10



The Apple iPad and a Samsung Galaxy Tab have a rough day in South Korea. Photo: Jon Snyder/Wired

A South Korean court ruled that both Apple and Samsung infringed on one another's intellectual property and owe each other damages.

Source: <http://www.wired.com/gadgetlab/2012/08/s-korea-court-rules-damages/>

Trademark ...

Trademark developed as a way to protect consumers, giving them confidence that a product marked with a manufacturer's symbol was actually made and backed by that manufacturer. As a result, trademark is not designed to protect intellectual property per se. Intellectual property protection is instead a side effect of needing to protect the integrity of the mark.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Because trademark protection is specifically geared towards preventing consumer confusion in the marketplace, trademark infringement is described in terms of "use in commerce." Unlike patent or copyright, it is not copying a trademark that creates a trademark violation. Instead, it is using that trademark in commerce (thus potentially confusing a consumer as to the origin of the product) that results in a violation.

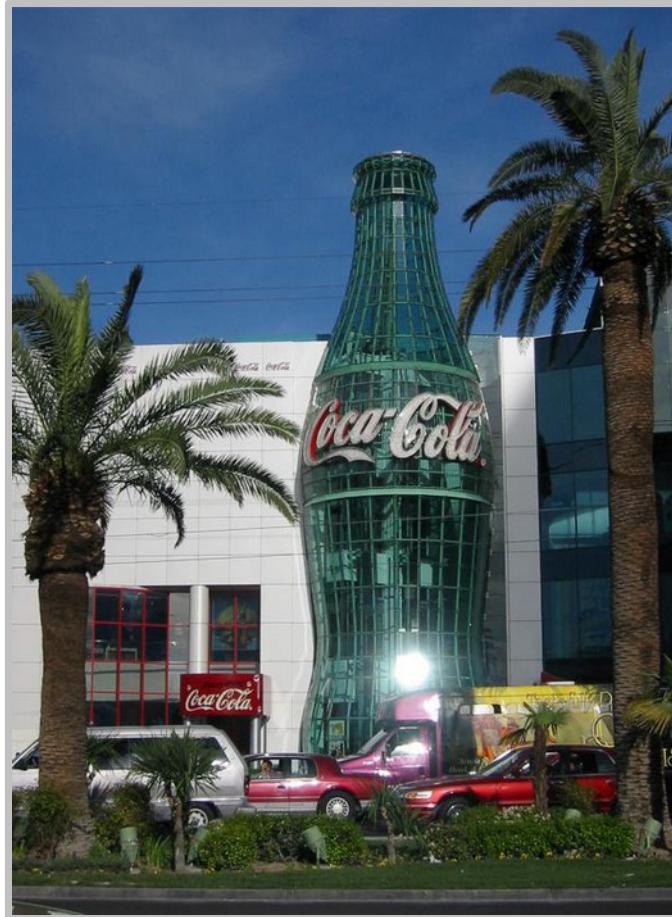
Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Trade Dress

Trademark protection can extend beyond a logo affixed to a product to include the design of the product itself. However, in order to extend protection to product design, courts have required that trade dress acquire a distinct association with a specific manufacturer. Acquiring this type of distinctiveness takes time, and must be proven by survey results or some other proof of association in the eyes of the general public. As a result most product designs, even unique designs intended “to render the product more useful or more appealing,” will not be protected as trade dress.

Source: <http://www.publicknowledge.org/it-will-be-awesome-if-they-dont-screw-it-up>

Trade Dress, an example



A very recognizable shape...

Source: http://en.wikipedia.org/wiki/Coca_cola

Be careful: every country has its laws...

The screenshot shows the voga.com website with a navigation bar at the top featuring categories like Furniture, Office, Lighting, Accessories, In Stock, Sale, Designers, and 2nd Stock. Below the navigation is a breadcrumb trail: Home > 100% Legal. The main content is titled "Legal statement". It begins with a paragraph about Voga Limited being an English company that sells replica furniture and lighting. It then discusses the UK rule regarding design protection for 25 years. A legal review concludes that English law applies to their service and that it is legal to use the service and buy products from voga.com. It also states that it is legal for users within EU/EEA to buy and import replica furniture, lighting, etc., even if protected by intellectual property laws in their home country.

Voga Limited ("Voga") is an English company. We sell replica furniture and lighting of well-known designers.

We operate under the UK rule (article 52 in Copyright, Design and Patents Act) whereby protection for such designs lasts for only 25 years.

Voga has obtained a legal review of its services and business model. The unequivocal conclusion is that:

1) English law applies to Voga's service on voga.com; and

2) Voga's business model is compliant with English law. In other words: It is legal to use the service and buy products from www.voga.com.

Furthermore, it is legal for users within EU/EEA to buy and import replica furniture, lighting, etc., even if the products are protected by intellectual property laws in the user's home country.

In UK copyright only lasts 25 years after the creation ...

Licensing your project ...

The main benefit of product licensing is that you do not have all of the risk and headaches that necessarily come with running your own business. It is quite true that you could make a lot more money if you sold your own idea (if you did not screw things up at any number of places along the way).

Source: http://www.core77.com/blog/columns/product_licensing_in_an_era_of_open_innovation_22953.asp

Young designers often gasp when hearing that a good royalty rate might be 5% of wholesale cost (around 2% of retail price)—"but it is MY idea!" Seasoned designers understand that a designed product (not to mention one that is not engineered, sourced, and fully developed and tested) is but a small part of the business equation.

Source: http://www.core77.com/blog/columns/product_licensing_101_so_lets_talk_money_23366.asp

Creative Commons: licensing the sharing

The screenshot shows the Creative Commons homepage. At the top, there's a green navigation bar with the Creative Commons logo, a search bar, and links for About, Licenses, Public Domain, Support CC, Projects, and News. Below the header, a large banner announces the "OPEN EDUCATION VIDEO CONTEST WINNERS ANNOUNCED". It features a cartoon boy sitting at a desk with a rocket ship launching from his head, surrounded by mathematical equations like $\Delta v = u_0 \ln \frac{m_0}{m_1}$ and $a = km/h$. To the right of the banner is a section titled "why OPEN EDUCATION matters WINNING VIDEOS ANNOUNCED" with a link to "Watch the winning entries in our open education video contest.". Below the banner, there are three main sections: "Mission", "License", and "Explore". The "Mission" section includes a "WHAT IS CREATIVE COMMONS?" section with text about sharing knowledge and creativity, and a "Learn about CC" button. The "License" section includes a "HOW CAN I LICENSE MY WORK?" section with text about the simplicity of choosing a license, and a "Choose a License" button. The "Explore" section includes a "LOOKING FOR CREATIVE WORKS?" section with text about finding music, video, writing, code, or other creative works, and a "Find CC-licensed works" button.

How to publish your content while at the same time enabling sharing and protecting your author rights.

Source: <http://creativecommons.org/>

License: Review conditions

-  **Attribution:** Licensees may copy, distribute, display and perform the work and make derivative works based on it only if they give the author or licensor the credits in the manner specified by these.
 -  **Non commercial:** Licensees may copy, distribute, display, and perform the work and make derivative works based on it only for noncommercial purposes.
 -  **No Derivative Works:** Licensees may copy, distribute, display and perform only verbatim copies of the work, not derivative works based on it.
 -  **Share alike:** Licensees may distribute derivative works only under a license identical to the license that governs the original work.
-

License: Select license



Attribution



Attribution - ShareAlike



Attribution - No Derivatives



Attribution - Non-Commercial



Attribution - Non-Commercial - Share Alike



Attribution - Non-Commercial - No Derivatives

Most Free

Least Free

Creative Commons: licensing the sharing

The image shows a step-by-step wizard for selecting a Creative Commons license. It consists of four panels connected by arrows:

- License Features**:
Your choices on this panel will update the other panels on this page.
Allow modifications of your work?
Yes (selected) / No / Yes, as long as others share alike
Allow commercial uses of your work?
Yes (selected) / No
License Jurisdiction:
International
- Selected License**:
Attribution 3.0 Unported
This panel displays the CC BY logo and a green "Free Culture APPROVED FOR Works" badge.
- Help others attribute you!**:
This part is optional, but filling it out will add machine-readable metadata to the suggested HTML!
Title of work: [input field]
Attribute work to name: [input field]
Attribute work to URL: [input field]
Source work URL: [input field]
More permissions URL: [input field]
Format of work: Other / Multiple formats
License mark: HTML+RDFa
- Have a web page?**:
This work is licensed under a Creative Commons Attribution 3.0 Unported License.
Copy this code to let your visitors know!

```
<a rel="license" href="http://creativecommons.org/licenses/by/3.0/deed.en_US"></a><br />This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by/3.0/deed.en_US">Creative Commons Attribution 3.0 Unported License</a>
```

 Normal Icon Compact Icon

How to publish your content while at the same time enabling sharing and protecting your author rights.

Source: <http://creativecommons.org/>

Everything is a Remix #01



**Everything
is a Remix**

More about the complex field of Intellectual
Property

Source: <http://vimeo.com/14912890>

Everything is a Remix #02



Everything
is a Remix

More about the complex field of Intellectual
Property

Source: <http://vimeo.com/19447662>

Everything is a Remix #03



Everything
is a Remix

More about the complex field of Intellectual
Property

Source: <http://vimeo.com/25380454>

Everything is a Remix #04

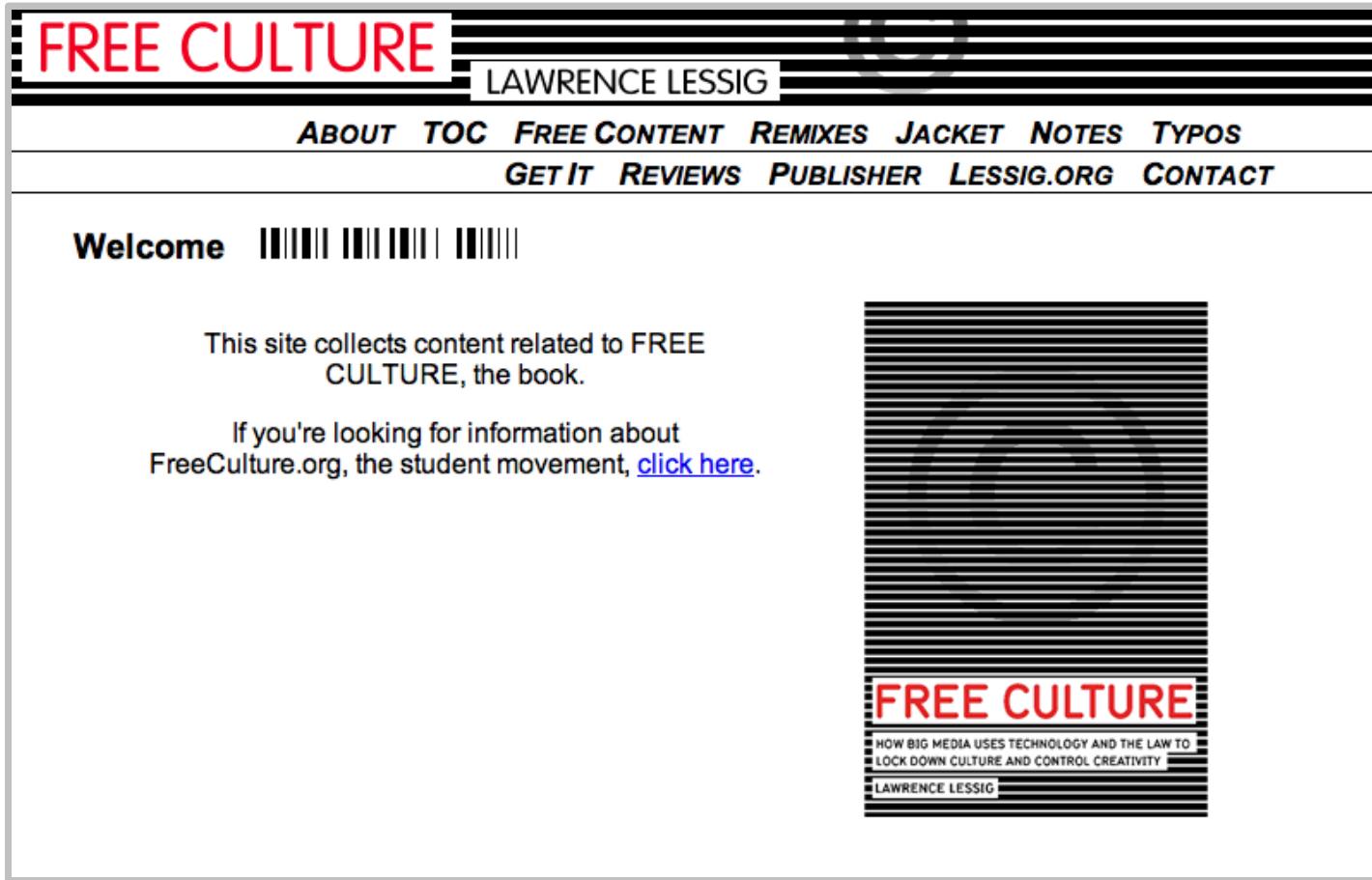


Everything
is a Remix

More about the complex field of Intellectual
Property

Source: <http://vimeo.com/36881035>

For a further reading on the topic ...



The screenshot shows the homepage of the Free Culture website. At the top, there is a red banner with the text "FREE CULTURE" and a black banner with "LAWRENCE LESSIG". Below these are two rows of navigation links: "ABOUT TOC FREE CONTENT REMIXES JACKET NOTES TYPOS" and "GET IT REVIEWS PUBLISHER LESSIG.ORG CONTACT". The main content area has a "Welcome" message followed by a barcode graphic. It also contains text about the site collecting content related to the book "FREE CULTURE" and a link to the student movement. To the right of the main content is a large, vertically oriented image of the book cover for "FREE CULTURE" by Lawrence Lessig.

FREE CULTURE

LAWRENCE LESSIG

[ABOUT](#) [TOC](#) [FREE CONTENT](#) [REMIXES](#) [JACKET](#) [NOTES](#) [TYPOS](#)

[GET IT](#) [REVIEWS](#) [PUBLISHER](#) [LESSIG.ORG](#) [CONTACT](#)

Welcome 

This site collects content related to FREE CULTURE, the book.

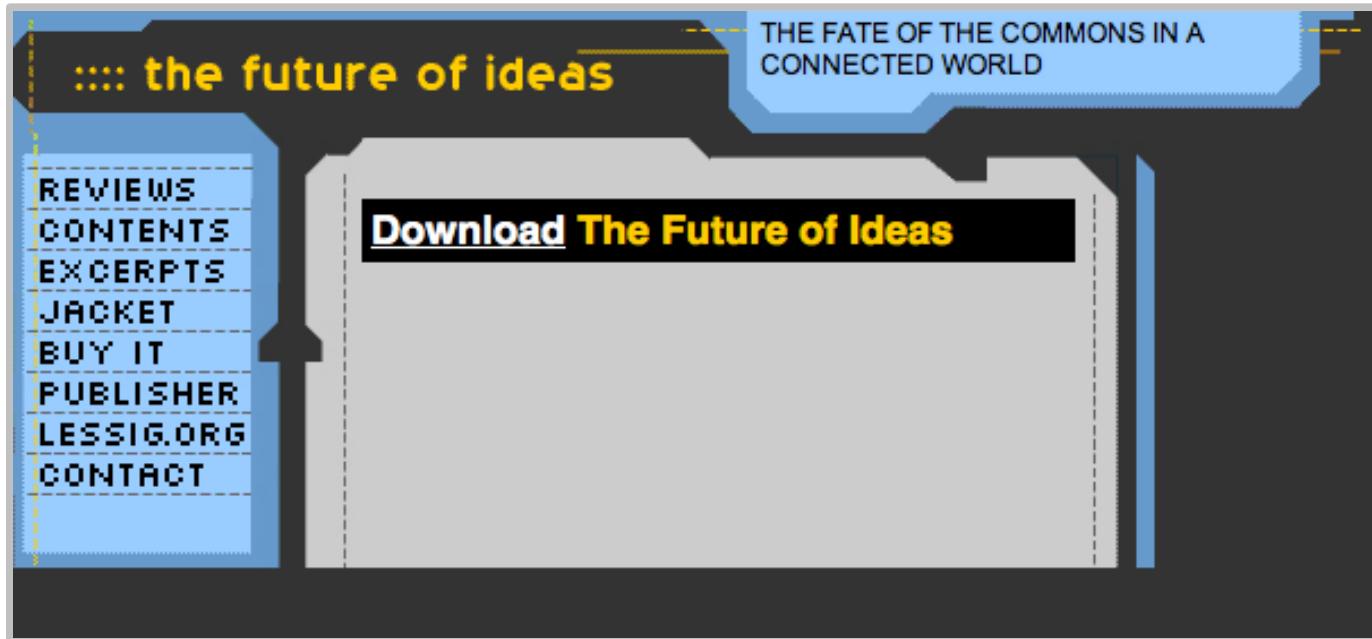
If you're looking for information about FreeCulture.org, the student movement, [click here](#).

FREE CULTURE
HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO
LOCK DOWN CULTURE AND CONTROL CREATIVITY
LAWRENCE LESSIG

An open and free book about Free Culture
and Open Knowledge.

Source: <http://www.free-culture.cc/>

For a further reading on the topic ...



An open and free book about Free Culture
and Open Knowledge.

Source: <http://www.the-future-of-ideas.com/download/>

For a further reading on the topic ...

The screenshot shows the homepage of the Sharing website. At the top, there's a navigation bar with links: About, Buy, Code, Comment, Datasets, Download, Media, and Models. To the right of the navigation is the book title "Sharing: Culture and the Economy in the Internet Age" by Philippe Aigrain, along with a small logo of the Amsterdam University Press (AUP). Below the navigation, there's a section titled "About" with a quote from Prof. Juan Carlos De Martin. To the right of this section are three call-to-action boxes: "Author talks and events", "5 reasons to buy the paper book", and a thumbnail image of the book cover. The main content area below the "About" section discusses the augmented edition of the book and its features.

About

“Anyone interested in the future of culture in the Internet age will want to read this carefully reasoned, pragmatic yet passionate book. Dr Aigrain enlightens our understanding of the present while opening our minds to new, better ways of reaping the cultural and social benefits of the digital revolution.”

Prof. Juan Carlos De Martin - Co-Director, NEXA Center for Internet & Society, Politecnico di Torino

This site hosts the augmented edition of **Sharing: Culture and the Economy in the Internet Age**, a book by Philippe Aigrain, with the contribution of Suzanne Aigrain, published at **Amsterdam University Press** on February 1st, 2012 as a paper book and as an open access digital monograph. On this site, you can access the **source code** and **datasets** used in the book, **comment on each of the book chapters**, run our **economic models** for the financing of a sharing-compatible culture with your choice of parameters, and run our diversity of attention analysis software on your own datasets.

Publisher and US distributor presentations

In the past fifteen years, file sharing of digital cultural works between individuals has been at the center of a number of debates on the future of culture itself. To some, sharing constitutes piracy, to be fought against and eradicated. Others see it as unavoidable, and table proposals to compensate for its harmful effects. Meanwhile, little progress has been made towards addressing the real challenges facing culture in a digital world.

Sharing starts from a radically different viewpoint, namely that the non-market sharing of digital works is both legitimate and useful. It supports this premise with empirical research, demonstrating that non-market sharing leads to more diversity in the attention given to various works. Taking stock of what we have learnt about the cultural economy in recent years, *Sharing* sets out the conditions necessary for valuable cultural functions to remain sustainable in this context.

An in-depth exploration of digital culture and its dissemination, *Sharing* offers a counterpoint to the dominant view that file sharing is piracy.

— Philippe Aigrain
with the contribution of Suzanne Aigrain

AMSTERDAM UNIVERSITY PRESS

An in-depth exploration of digital culture and its dissemination, Sharing offers a counterpoint to the dominant view that file sharing is piracy.

Source: <http://www.sharing-thebook.com/content/about>

For a further watching on the topic ...



An open and free documentary about
intellectual property and remix.

Source: <http://ripremix.com/> http://www.nfb.ca/film/rip_a_remix_manifesto/



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02.

Open Design: mass collaboration enabled by the Internet and other tools

Web 2.0



A new model of mass collaboration, based on user-generated content and commenting.

Source: <http://www.time.com/time/magazine/article/0,9171,1570810,00.html>

Web 2.0

THE CREATIVE WORLD AT WORK™

create a portfolio post a job log in

coroflot

design jobs portfolios member gallery employer directory groups genius my account

Olivier Henrichot

STAFF

OVERVIEW
→ PORTFOLIO PROFILE

Contact Olivier Share

follow

Last Login: 11 Aug 2011

Back To Thumbnails FOOTWEAR RUNNING (1 of 15) ← Previous Next →



Muscular (2003)

Description: Muscular fiber inspired shoe on track and field last.

Comments:

- Adrián Castro says: Excellent idea...cool!!! Posted 28 Jan 2009
- Jose Figueroa says: this is one of my favorite images in all of coroflot... Posted 27 Jun 2009
- s siddharth says: cool..!! Posted 26 Jul 2009

Tags: Design, Fila, Footwear, photoshop, Rendering, running

To add a comment you need to have a public profile. [Log In](#) or [Create an Account](#).

Description

Muscular fiber inspired shoe on track and field last

Comments



Adrián Castro says:
Excellent idea...cool!!!
Posted 28 Jan 2009



Jose Figueroa says:
this is one of my favorite images in all of coroflot...
Posted 27 Jun 2009



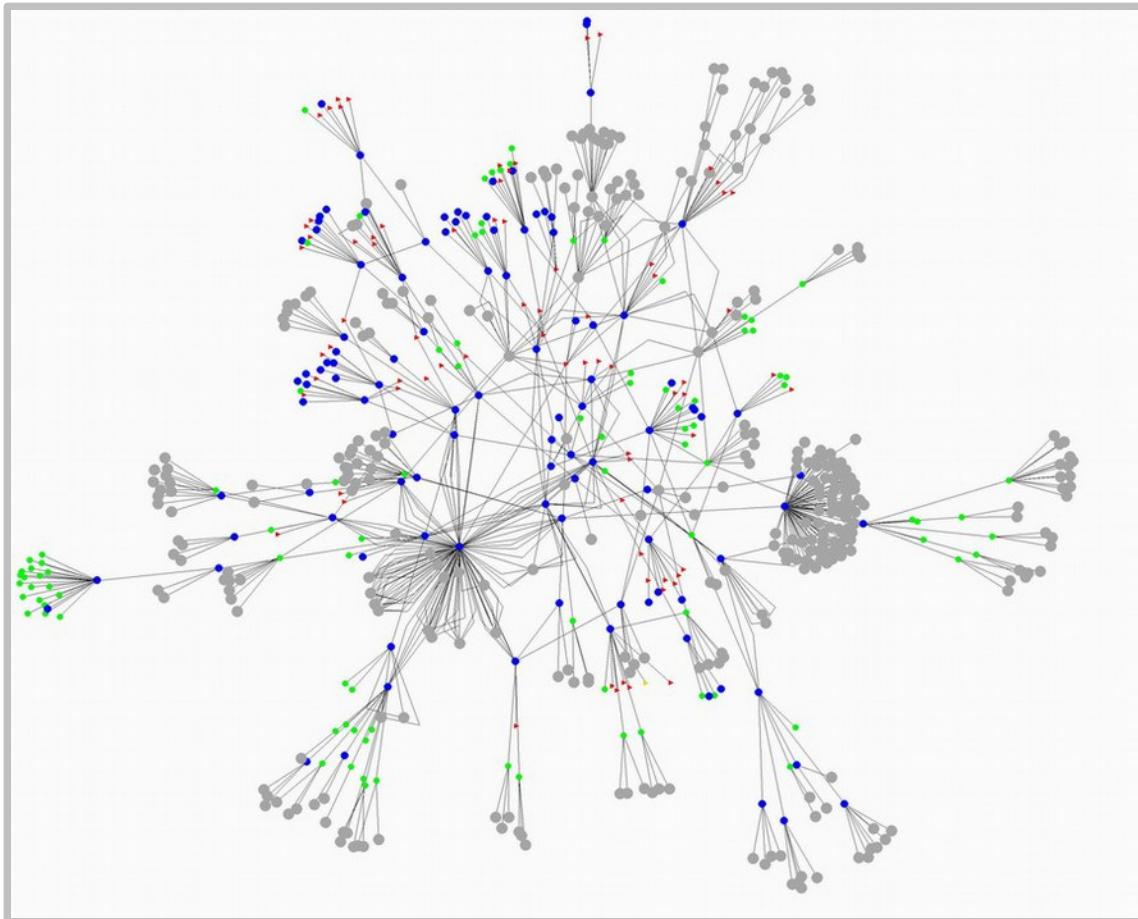
s siddharth says:
cool..!!
Posted 26 Jul 2009

To add a comment you need to have a public profile. [Log In](#) or [Create an Account](#).

And the same model can be applied to Design.

Source: <http://www.coroflot.com/heo/FOOTWEAR-RUNNING/1>

Peer-to-Peer



More than about file sharing, peer-to-peer
defines new dynamics between people.

Source: <http://home.comcast.net/~gregory.bray/>

Peer-to-Peer

KIVA GIFTS LOGIN REGISTER MY BASKET

Lend About Community Updates My Portfolio

Kanze Hanjari

Samburu, Kenya Retail | Retail



A loan of \$225 helps Kanze Hanjari to purchase bundles of maize flour and wheat flour for resale.

0% raised, \$225 to go

Select amount to lend

\$25

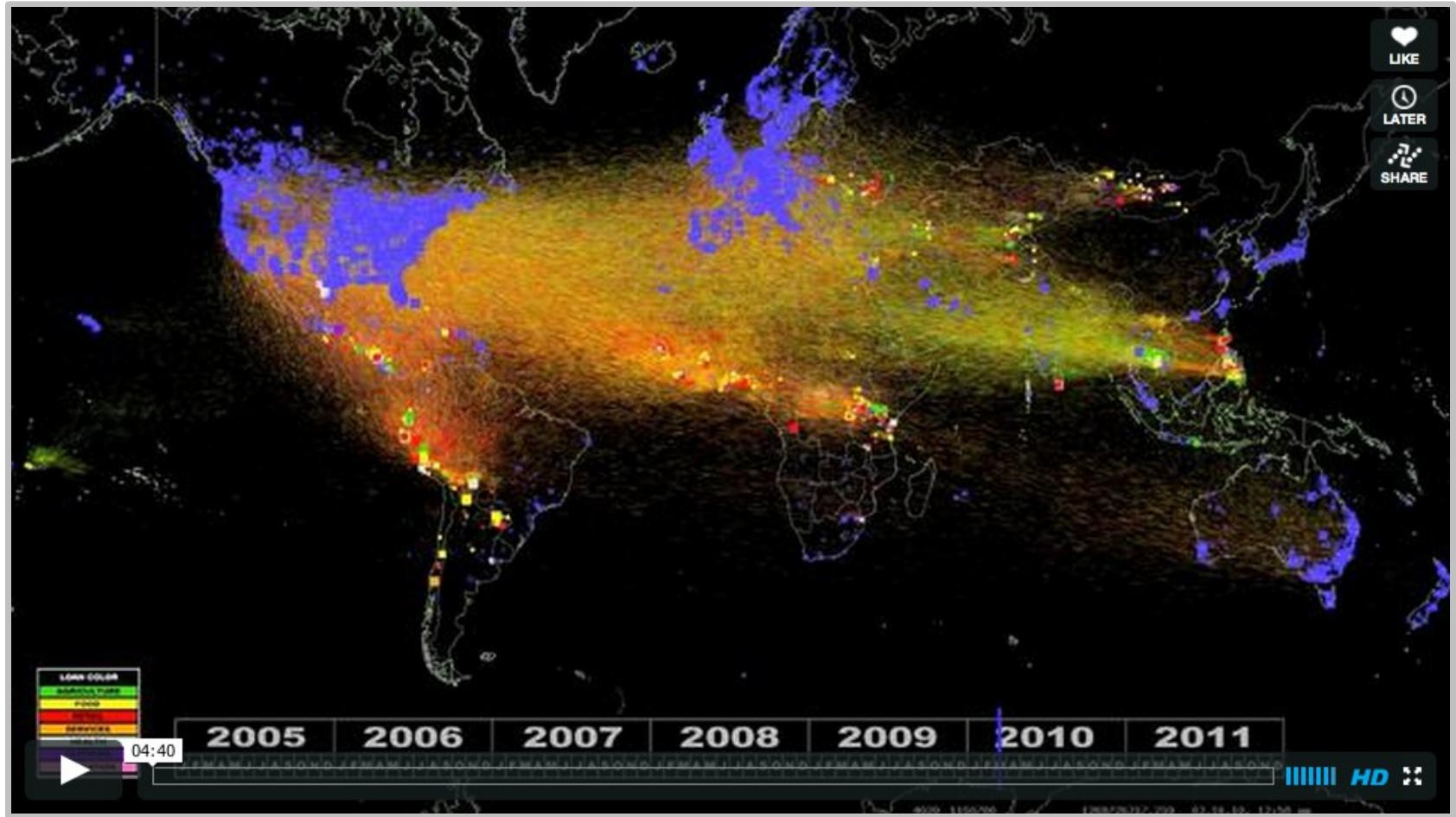
Repayment Term: 13 months (more info)
Repayment Schedule: Monthly
Pre-Disbursed: Aug 4, 2011
Listed: Sep 9, 2011
Currency Exchange Loss: Possible
Default Protection: Not Covered

Your funds will be used to backfill this loan.
Repayments will go to you.

And the same model can be applied to Design.

Source: <http://www.kiva.org/lend/333427>

Peer-to-Peer



And the same model can be applied to
Design, with important results!

Source: <http://vimeo.com/28413747>

Crowdsourcing

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Welcome To InnoCentive

Where the World Innovates

Are you looking to solve problems and accelerate your innovation capability?

Drive Innovation »



Are you passionate about solving important problems that really matter?

Become A Solver »



Open Challenges Show: **Featured Challenges** ▾ There are 114 active challenges | [View All »](#)

 A GRI (Glucose Responsive Insulin) for Better Treatment of Type 1 Diabetes Deadline: 11/09/2011 32 active solvers Referral award: \$10,000 USD	\$100,000 USD
 The Economist/Qualcomm Challenge: Pictures of Tomorrow Deadline: 10/31/2011 41 active solvers Referral award: \$100 USD	\$1,000 USD

NEWSFLASH

InnoCentive and JDRF Partner to Combat Diabetes
JDRF is harnessing InnoCentive's Challenge Platform and Global Solver Community to uncover solutions for a transformative and sophisticated insulin drug for patients with diabetes to improve

Outsourcing a project or a task to an online crowd,
more about competition than collaboration.

Source: <http://www.innocentive.com/>

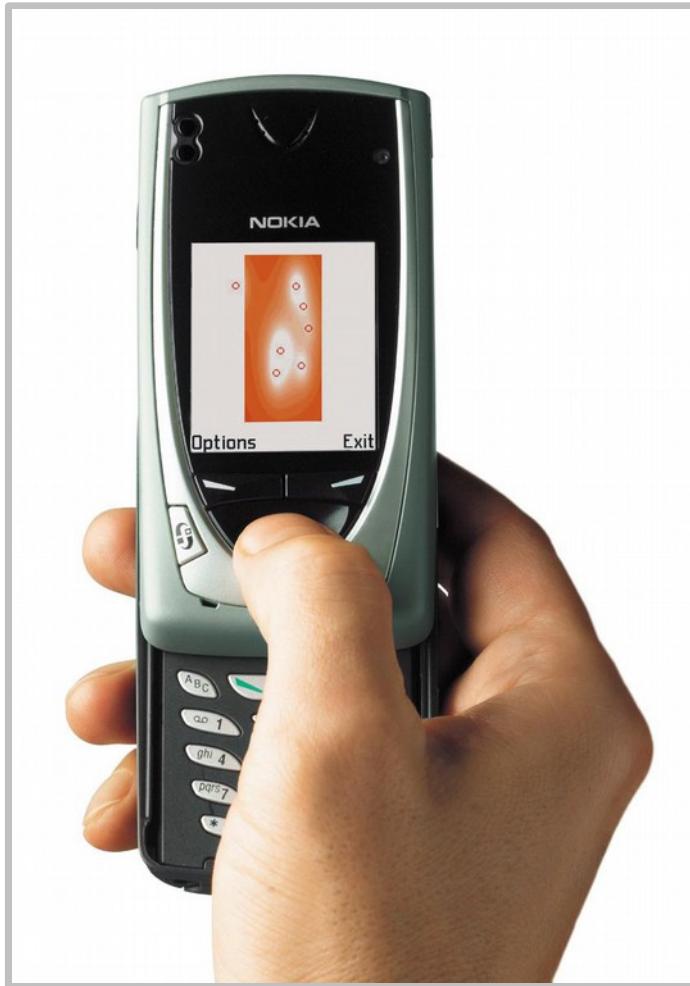
Crowdsourcing

The screenshot shows the homepage of DesignCrowd. At the top, there's a navigation bar with the logo 'DesignCrowd' (featuring a stylized blue starburst icon), 'Log in', 'Register', 'Help', and a green button 'Post a design project'. Below the navigation is a secondary menu with links to 'Categories', 'Get Started', 'Browse Projects', 'Portfolios', and 'About Us'. The main banner has a dark blue background with white text. It features the headline 'Custom Design. Online. Risk-free.' followed by a numbered list: '1) Post a project 2) Get 100+ designs 3) Select the best design'. Below this, two large statistics are displayed: '39,213 graphic designers' and '103 average number of designs / project'. There are two buttons at the bottom of the banner: a blue one with a play icon labeled 'See how it works' and a green one labeled 'Get started now'. Below the banner, the text 'As featured in' is followed by logos for 'YAHOO! FINANCE', 'smartcompany', 'Mashable', and 'TNW THE NEXT WEB'. At the bottom, there are four service cards with icons and prices: 'Web Design starting at €235' (with a smartphone icon), 'Business Card starting at €90' (with a business card icon), 'Flyer Design starting at €130' (with a flyer icon), and 'T-shirt Design starting at €130' (with a t-shirt icon). Each service card has a 'Learn More' button at the bottom.

And the same model can be applied to
Design, with critica results!!

Source: <http://www.designcrowd.com/>

Mobile: Single user designing, no collaboration



Collaboration is not only based on a single tool: not only on a PC!

Source: <http://www.mshape.com/>

Mobile: Smart Mobs, Ubiquitous Computing



We could even (re)build a design from
noncoordinated users.

Source: <http://grail.cs.washington.edu/rome/> <http://youtu.be/HrgHFDPJHXo>

Open Source: open collaborative development



The most complete and promising model for mass-collaboration on the Internet.

Source: <http://www.buglabs.net/ford-buglabs>

And hybrid models... like OpenIDEO

The Challenge 289 followers [Follow updates](#)

How might we use social business to improve health in low-income communities?

INSPIRATION 290 inspirations | **CONCEPTING** 98 concepts | **EVALUATION** 20 final concepts | **WINNING CONCEPTS** Announced! | **REALISATION** Ongoing

Congratulations to all our contributors!

Challenge Brief

OpenIDEO has partnered with the Holistic Social Business Movement (HSBM) of Caldas – a joint venture between the Grameen Creative Lab and the Government of Caldas, Colombia – to consider how social businesses can improve the health of low-income communities in Colombia and around the world. Together, with your help, we hope to develop a set of implementable and high impact solutions to support and promote social business development and improve health in low-income areas like Caldas, where 26% of the population lives in extreme poverty.

Sponsored by:
Grameen Creative Lab

Challenge Start Date:

Crowdsourcing 50% + Web 2.0 30% + Open Source 20%.

Source: <http://www.openideo.com/>

What is Open Source? A generic definition

A (software) project published with a **license** that facilitates its **access + modifying + sharing** in a collaborative way.

A (software) project developed **collaboratively** by a **community**, based not on hierarchy but on **reputation**.

Why Open Source in Software?



Source Code (human readable) --> Binary Code (machine readable)

Why Open Source in Software?



Source Code (human readable) --> Binary Code (machine readable)

Why Open Source in Software?



Source Code (human readable) --> Binary Code (machine readable)

Open Source Everywhere...

“Software is just the beginning ... open source is doing for mass innovation what the assembly line did for mass production. Get ready for the era when collaboration replaces the corporation.”

Thomas Goetz, Wired November 2003

Source: <http://www.wired.com/wired/archive/11.11/opensource.html>

Open Source as promising way to organise communities.

Source: <http://www.buglabs.net/ford-buglabs>

Open Drinks



Started as an example or for marketing, now
an important field of experimentation!

Source: [http://en.wikipedia.org/wiki/OpenCola_\(drink\)](http://en.wikipedia.org/wiki/OpenCola_(drink)) http://en.wikipedia.org/wiki/Free_Beer
<http://www.flickr.com/photos/16038409@N02/2327138220/in/photostream>

Open Biotechnology

The screenshot shows the Cambia website homepage. At the top left is the Cambia logo with the tagline "enabling innovation". To its right is a text block: "Cambia means change. Cambia is an independent non-profit institute **creating new technologies, tools and paradigms** to promote change and enable innovation." On the far right is a search bar with the placeholder "Search this website" and a "Search" button. Below the header is a navigation menu with links: Home, About Cambia, Media Centre, Papers & Publications, and Contact Us. The main content area features a large image of a hand holding and sowing seeds in soil. Overlaid on this image is a dark box containing the text "BiOS Biological Open Source Farmers have been doing it for ages" and a blue button with the text "» Visit the BIOS website". At the bottom of this section are three small numbered links: 1, 2, 3. To the right of this image is a sidebar with the heading "Global Problems?" followed by text about disease, hunger, poverty, climate change, and symptoms. It also includes a blue button with the text "» Cambia means change".

Go to the Cambia home page

Cambia
enabling innovation

Cambia means change.
Cambia is an independent non-profit institute **creating new technologies, tools and paradigms** to promote change and enable innovation.

Search this website Search

[Home](#) [About Cambia](#) [Media Centre](#) [Papers & Publications](#) [Contact Us](#)

BiOS Biological Open Source
Farmers have been doing it for ages

» Visit the BIOS website

1 2 3

Global Problems?

Disease, hunger, poverty, climate change... Most people see these as big worldwide problems.

We see them as symptoms.

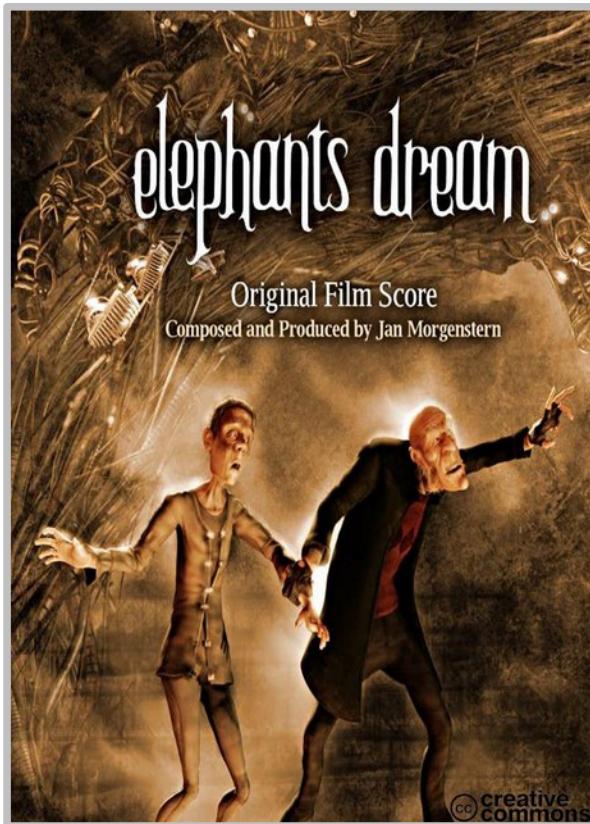
It's time to change the way we look at the world. The people who experience these problems *are the solution*.

» Cambia means change

Applied in many different scientific researches.

Source: <http://www.cambia.org/>

Open Movies + Videogames



Done with and for Blender (Open Source 3D modeling software).

Source: <http://www.elephantsdream.org/> <http://www.bigbuckbunny.org/> <http://www.sintel.org/>

What is Open Design? A generic definition

a project published with a **license** that facilitates its sharing and that can be “compiled” or “manufactured” locally.

- * sharing
- * collaboration
- * open licenses
- * code --> artifact

Open Design refers to every kind of design projects that can be **shared in a digital format over** a network.

Open Typography

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

abcdefghijklmnopqrstuvwxyz

“<<.:?!©*¶§&/(||)[!]{}€†‡@®™¿¡;,»”

The first open source font (2001) by Victor Gaultney, with a specific license: SIL Open Font License (OFL).

Source: http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=Gentium

Open Fashion Design

openwear/
collaborative
clothing

INFO
MEET THE COMMUNITY
BROWSE CREATIONS
COLLABORATIVE COLLECTION
BLOG

search | keep in touch | help / support | log in **JOIN US!**

Nadiuchka's Showbox

EXPERTISE: tailoring, fashion design, education

PROFESSIONAL from MILAN

Map

Lugano Varese Lecco Como Bergamo E60 E64 Busto Arsizio Rho Monza Monza Brianza Ovava Milano Lodi Piacenza Alessandria Voghera

ABOUT → PICTURES & CREATIONS →

NETWORK →

MY BLOG

FORUM

PICTURES & CREATIONS

PERSONAL PICTURE PERSONAL CREATION COLLABORATIVE CREATION CUSTOMIZATION

LATEST UPLOADS

BUY IT BUY IT BUY IT BUY IT

Visit Gallery

ACTIVITIES OF YOUR NETWORK

CREATIONS COMMENTS NETWORKING

Latest uploaded creations by collaborators

r0k0 uploaded: MEME expo panoji 2 08.04.2011 - 08:04

r0k0 uploaded: animacija_IMG_7018 06.04.2011 - 10:54

r0k0 uploaded: MEMEFEST expo Ljubljana debate 06.04.2011 - 10:10

r0k0 uploaded: MEME expo Ljubljana banners 05.04.2011 - 11:53

popland uploaded: fluo tshirt 17.01.2011 - 10:54

Open Fashion Design projects and brands.

Source: <http://www.openwear.org/>

Open Architecture

The screenshot shows a web interface for the Open Architecture Network. At the top, there's a navigation bar with links for 'ABOUT', 'PROJECTS', 'COMPETITIONS', and 'PEOPLE'. Below the navigation is a 'PROJECT DETAILS' section for the 'Native Cultural and Learning Centre'. This section includes fields for 'NAME', 'PROJECT LEAD', 'LOCATION', 'START DATE', 'CURRENT PHASE', 'PROJECT TYPE', and 'STUDENT'. The 'NAME' field contains 'Native Cultural and Learning Centre'. The 'PROJECT LEAD' field contains 'Toronto, Ontario, Canada'. The 'LOCATION' field contains 'October 02, 2007'. The 'CURRENT PHASE' field contains 'Design development'. The 'PROJECT TYPE' field contains 'Community Center, Cultural Display, Education Facility - Training Center, Theater (Stage), Youth Center'. The 'STUDENT' field contains 'Jake Chakasim'. To the left of the details is a large image of a modern building with a wooden facade and glass windows, surrounded by trees. Below the image, there's a caption about the project's purpose and a statement from Jake Chakasim. On the right side, there's a 'COPRIGHT' section with icons for Creative Commons licensing and a link to 'More info about Creative Commons Licensing'. At the bottom right, there's a button for 'Open Architecture iPad App' with an image of a globe and a link to download it from iTunes.

Not as advanced as Open product design, but still part of an ongoing experimentation.

Source: <http://openarchitecturenetwork.org/>

Open Architecture

The screenshot shows the homepage of the WikiHouse website. At the top left is the WikiHouse logo, which consists of a stylized cluster of black geometric shapes resembling a house or a molecular structure. Below the logo is the text "WikiHouse" followed by the Creative Commons logo (CC). To the right of the logo are navigation links: "PROCESS | ABOUT | PROTOTYPE | CONTRIBUTE". Further to the right is a red mathematical expression: $d = D \neq d$ underlined by a horizontal line, with a red square symbol below it. Below these elements is the text "design.is.design.is.not.design".

The central part of the page features a graphic of a globe with a dashed line around it, representing a network. Four small icons with user profiles and geometric shapes (representing house components) are connected to the globe by dashed lines. A large downward-pointing arrow originates from the bottom of the globe and points to a computer monitor icon at the bottom center.

Below the graphic, there is explanatory text: "Download houses and components which are created and shared by an open community of designers from around the world. Individual parts can be combined or adapted using the free program Google Sketchup."

At the bottom of the page, there is a navigation bar with numbered links from 1 to 10. On the left, there is a "powered by" logo for "00:/". On the right, there is a logo for "GWANGJU BIENNALE" featuring a stylized building silhouette.

Not as advanced as Open product design, but still part of an ongoing experimentation.

Source: <http://www.wikihouse.cc/>

(Open) Design competitions

(UN)LIMITED Design Contest **2011**

form food fashion fusion

Shades of Wood

Product view Manual view

Designer: Jorn van Eck & Overtreders-W.
Published: Sep 15, 2010
Number of designs: 1
Rating: 4.4 (12 votes)

Download blueprint



Contest winners

Shades of Wood
Jorn erfde een oude schemerlamp van zijn opa...
by Jorn van Eck & Overtreders-W

Coolplus micro knitted shawl with transfer flex folie
Future vision on the production of...
by Marina Toeters

2 teaspoons // tablespoons at once!
In cooking recipes we often...
by Eulàlia Llovet Vidal

Magic Box (entirely new)
Last year Magic Box was a tool that helped you to make custom boxes...
by Studio Ludens

Related products

Floo's Bag
The idea was to make a bag using the laser cutter only. The art of ...
by Floo

Emergency Coat Rack
Never Have a Coat Hanging Emergency Again! Just Break Apart ...
by D E Sellers

ClickBag
The ClickBag is based upon the beatiful Floo's Bag.I wanted to design a ...
by Jens

Most viewed products

Digital fabrication and FabLabs open new possibilities for Design competitions and Open Design.

Source: <http://unlimiteddesigncontest.org/>

(Open) Design competitions

The screenshot shows a web page from the Domus website. At the top, there is a navigation bar with the word "domus" in blue, followed by "Sections", "Magazine", "Network", "Store", and "Events". There is also a search bar labeled "Search Domus..." and a "Sign up" button. A small Italian flag icon is visible. The main content features a large, intricate geometric model, possibly a 3D printed structure or a digital fabrication project. Below the model, the text "Autoprogettazione 2.0: on display—" is displayed in large white letters. Underneath this, a dark grey box contains the text: "The selection committee has decided: here are the seven projects which will be on display at *The Future in the Making*, in Palazzo Clerici. A news report from Milan".

Digital fabrication and FabLabs open new possibilities
for Design competitions and Open Design.

Source: <http://www.domusweb.it/en/upcoming-event/call-for-ideas-autoprogettazione-20--/>
<http://www.domusweb.it/en/news/autoprogettazione-20-on-display/>

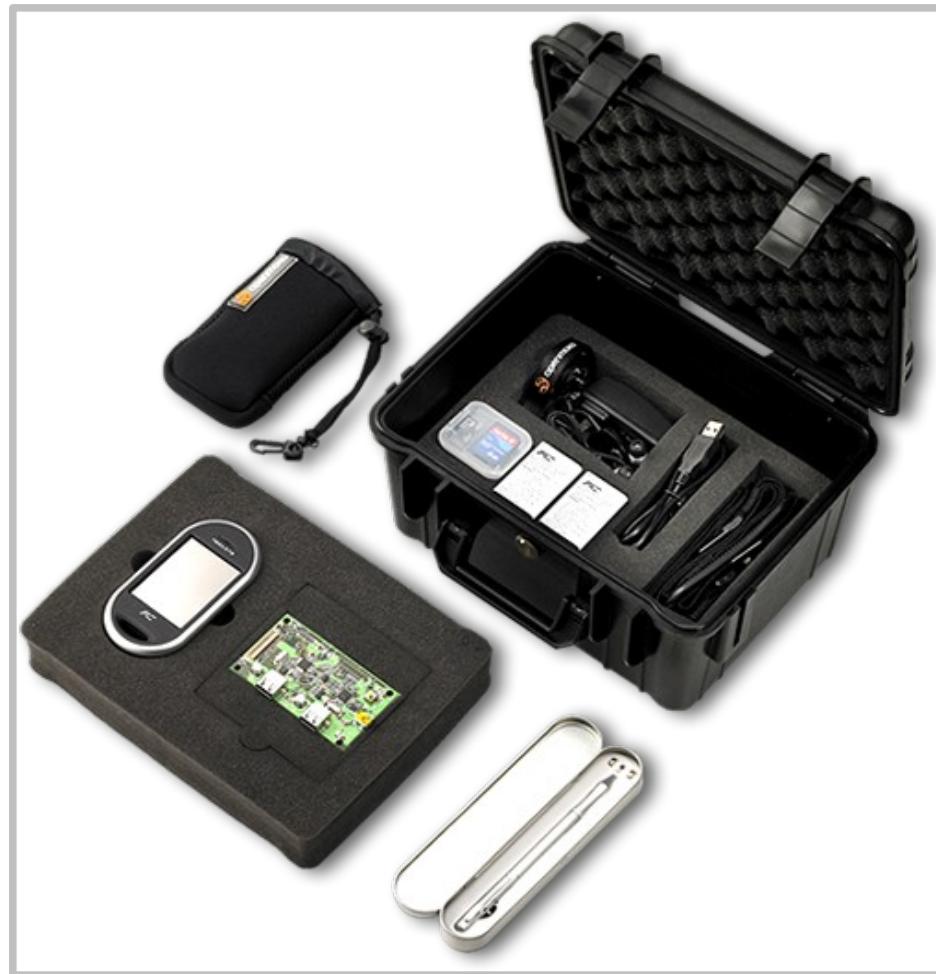
Completely Open: Hardware, Software, Design



OpenMoko was the first product to be completely open:
open hardware, open source software, open design.

Source: http://wiki.openmoko.org/wiki/Main_Page

Completely Open: Hardware, Software, Design



OpenMoko was the first product to be completely open:
open hardware, open source software, open design.

Source: http://wiki.openmoko.org/wiki/Main_Page

Completely Open: Hardware, Software, Design



BugLabs has been much more successful in offering completely open products.

Source: <http://www.buglabs.net/>

BugLabs + Ford

Ford + Bug Labs Press Release

login
sign up



Bug System
Apps
Store
Support
Community

Businesses
Education
Developers

Google™ Custom Search

Mailing List
Feed



Ford and Bug Labs explore open innovation and crowd sourced, community-driven development

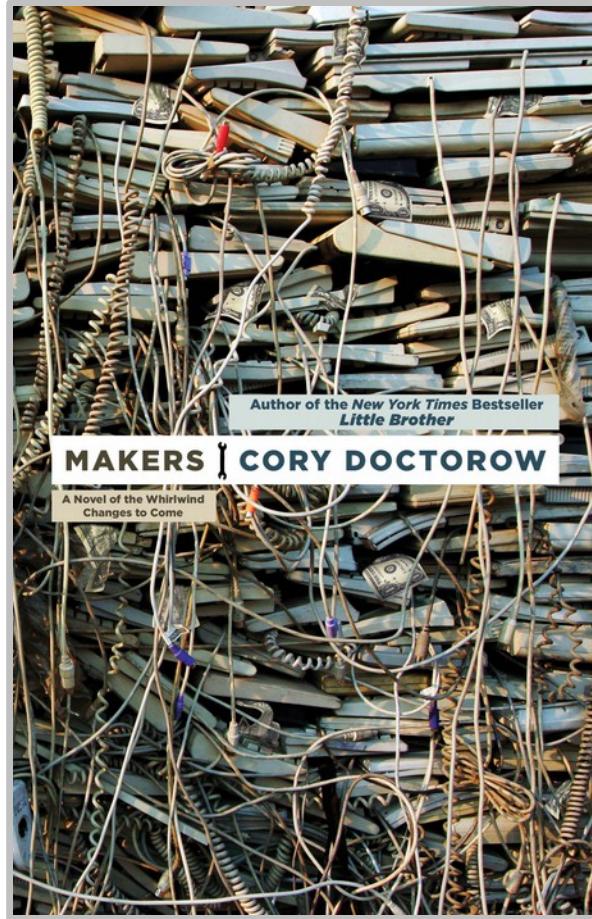
Ford and Bug Labs Develop Open-Source R&D Platform for Socially-Networked In-Car Connectivity Innovation

- Ford and Bug Labs, an open-source hardware and software provider, announce a joint development project to research, develop and distribute open-source developer tools to advance in-car connectivity innovation

So successful that they just announced a partnership with Ford Car.

Source: <http://www.buglabs.net/ford-buglabs>

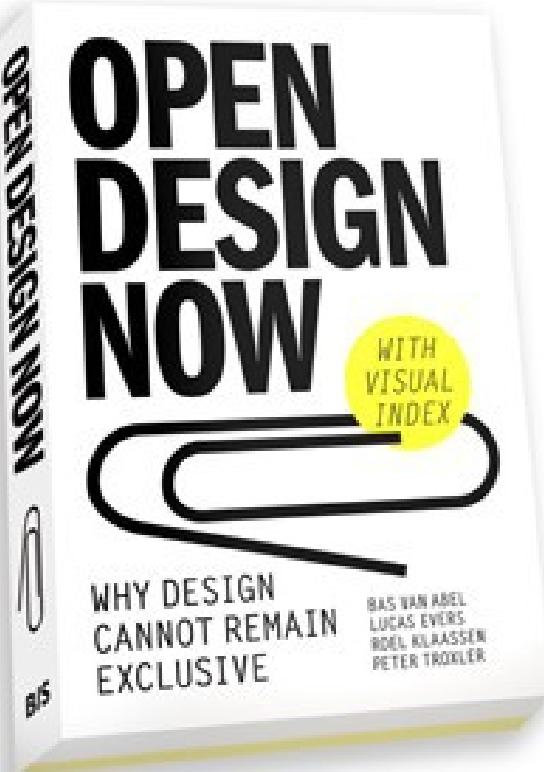
Open Design: (almost) already successful



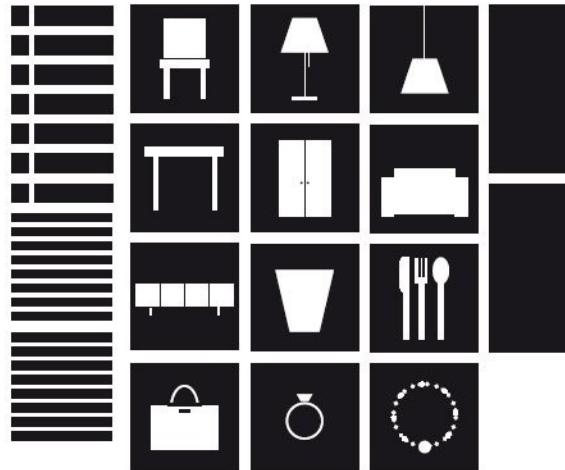
When you have a sci-fi novel from a popular autor about open design and makers, they are not underground any longer.

Source: <http://craphound.com/makers/download/>

Open Design: (almost) already successful



design for download



When a famous design company and the national organization of design embrace Open Design ...

Source: <http://www.buglabs.net/ford-buglabs>

Open Design: (almost) already successful

The screenshot shows the Instructables website. At the top is the logo featuring a yellow robot-like character and the word "instructables" with the tagline "share what you make". Below the logo is a navigation bar with categories: Food, Living, Outside, Play, Technology, Workshop, and a category represented by three bats. The main content area displays a red header for a blog post titled "Community : forums : community blog" followed by the title "Instructables Joins Autodesk". The text of the post discusses the impact of the Instructables community and the announcement of its acquisition by Autodesk. A second paragraph continues the narrative, expressing excitement about the future of the community.

Instructables Joins Autodesk

The Instructables community is incredible: you build, bake, and create amazing things, then share your projects and ideas with the world. I think it's great when someone builds a project using instructions from our site, but it's even more amazing when we inspire someone to start (or finish) that project they've always dreamed of. This has been my vision for Instructables: to have a positive impact on the world by giving passionate people great publishing tools to document their projects, and connect them to a community full of like-minded people.

Today I'm able to share my plan for accelerating that vision, and making Instructables an even better place to be. I'm proud to announce that **Instructables is becoming part of Autodesk**. Everyone here at Instructables HQ is absolutely thrilled, because this is going to be awesome for the entire Instructables community.

And when probably the biggest CAD design software house buys an open design community, there must be money ahead!

Source: <http://www.instructables.com/community/Instructables-Joins-Autodesk/>
<http://techcrunch.com/2011/08/01/autodesk-acquires-diy-community-instructables/>

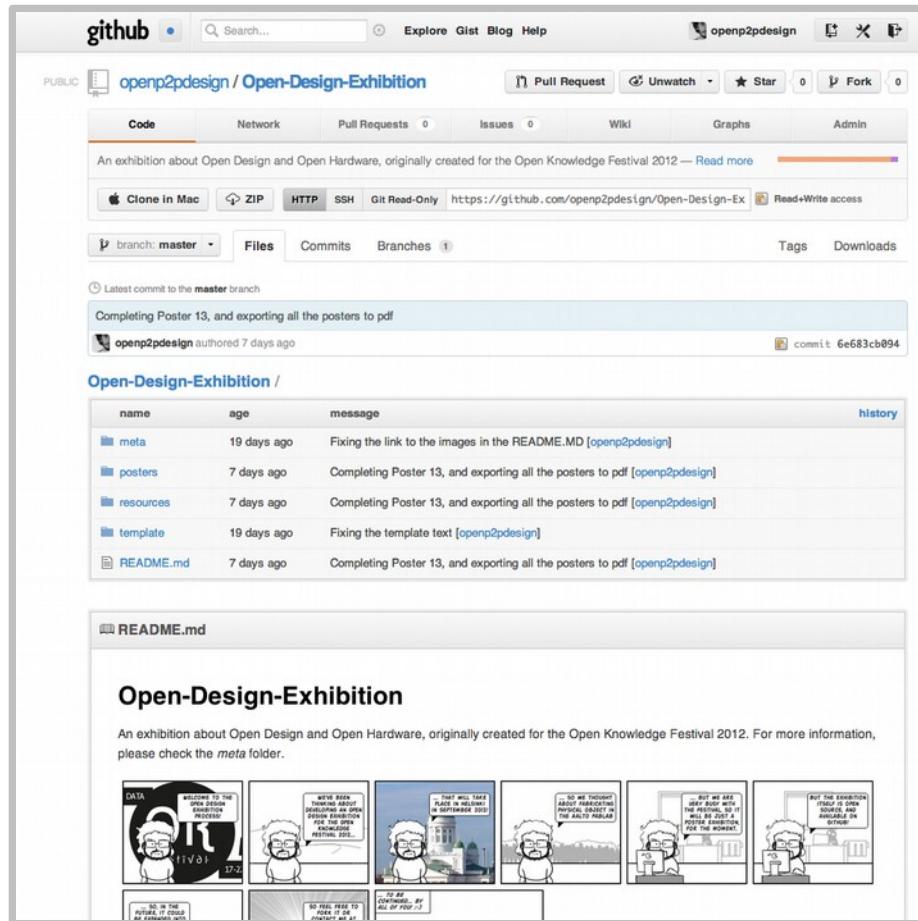
Open Design: (almost) already successful

The screenshot shows the Autodesk 123D Beta 7 website. At the top, there's a dark blue header bar with the Autodesk 123D logo on the left, followed by navigation links: "About 123D", "Get Content", "Gallery", "Make It", "My Corner", and "Get 123D". On the right side of the header are "Login or Register", "My Cart (0 Items)", and "Support". Below the header, the main content area has a white background. A large title "Autodesk 123D Beta 7" is centered at the top of the content area. To the left of the title, there's a text block: "Laser cutting workflows plus in-app access to fabbing services and free 3D models." Below this text is a yellow "Download" button. To the right of the text, there's a large image showing a wooden laser-cut model of a Star Wars Millenium Falcon cockpit. The model is highly detailed, featuring the cockpit windows, a landing gear bay, and various structural elements. A small wrench and a small wooden piece are also visible near the model.

And when probably the biggest CAD design software house offers freeware software for makers, there must be money ahead!

Source: <http://www.123dapp.com/>

More on the Open Design Exhibition!



An open exhibition about the most important Open Design projects:
on Media Factory's walls and on GitHub!

Source: <https://github.com/openp2pdesign/Open-Design-Exhibition>

Sketch Chair: Open Design as code

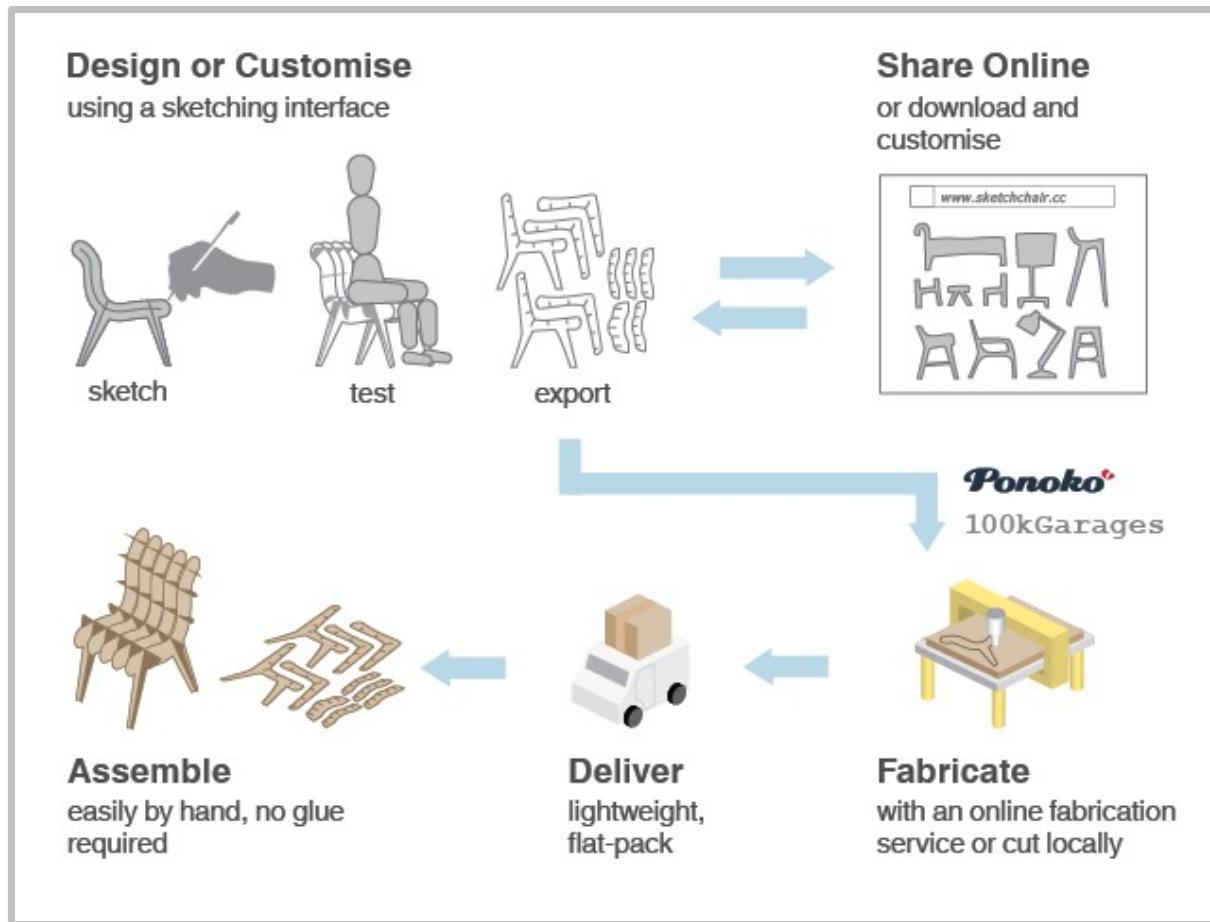
SketchChair



What is Open Design, if the chair is designed
by a software?

Source: <http://www.sketchchair.cc/>

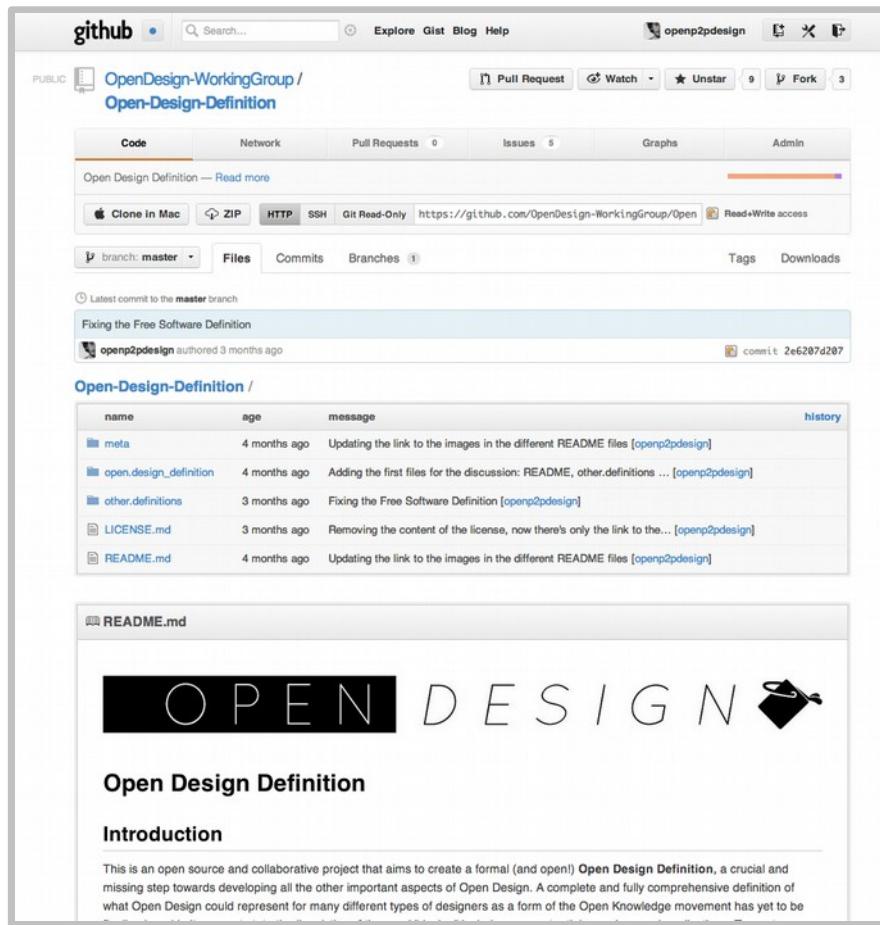
Sketch Chair: Open Design as code



What is Open Design, is manufacturing and supply chain process?

Source: <http://www.sketchchair.cc/>

... and participate in the Open Design Definition!



And when probably the biggest CAD design software house offers freeware software for makers, there must be money ahead!

Source: <https://github.com/OpenDesign-WorkingGroup/Open-Design-Definition>

The current status of Open Design

- * single persons or small groups design a project and then just publish it online
 - * lack of new tools, processes, systems that enable designers and users in developing open design projects
- > where is the collaboration?
- > where are the open processes?
- > where are the communities?



The current status of Open Design

From: torvalds@klaava.Helsinki.FI (Linus Benedict Torvalds)

Newsgroups: comp.os.minix

Subject: What would you like to see most in minix?

Summary: small poll for my new operating system

Message-ID:

Date: 25 Aug 91 20:57:08 GMT

Organization: University of Helsinki

Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus (torvalds@kruuna.helsinki.fi)

Just at the beginning of mass collaboration

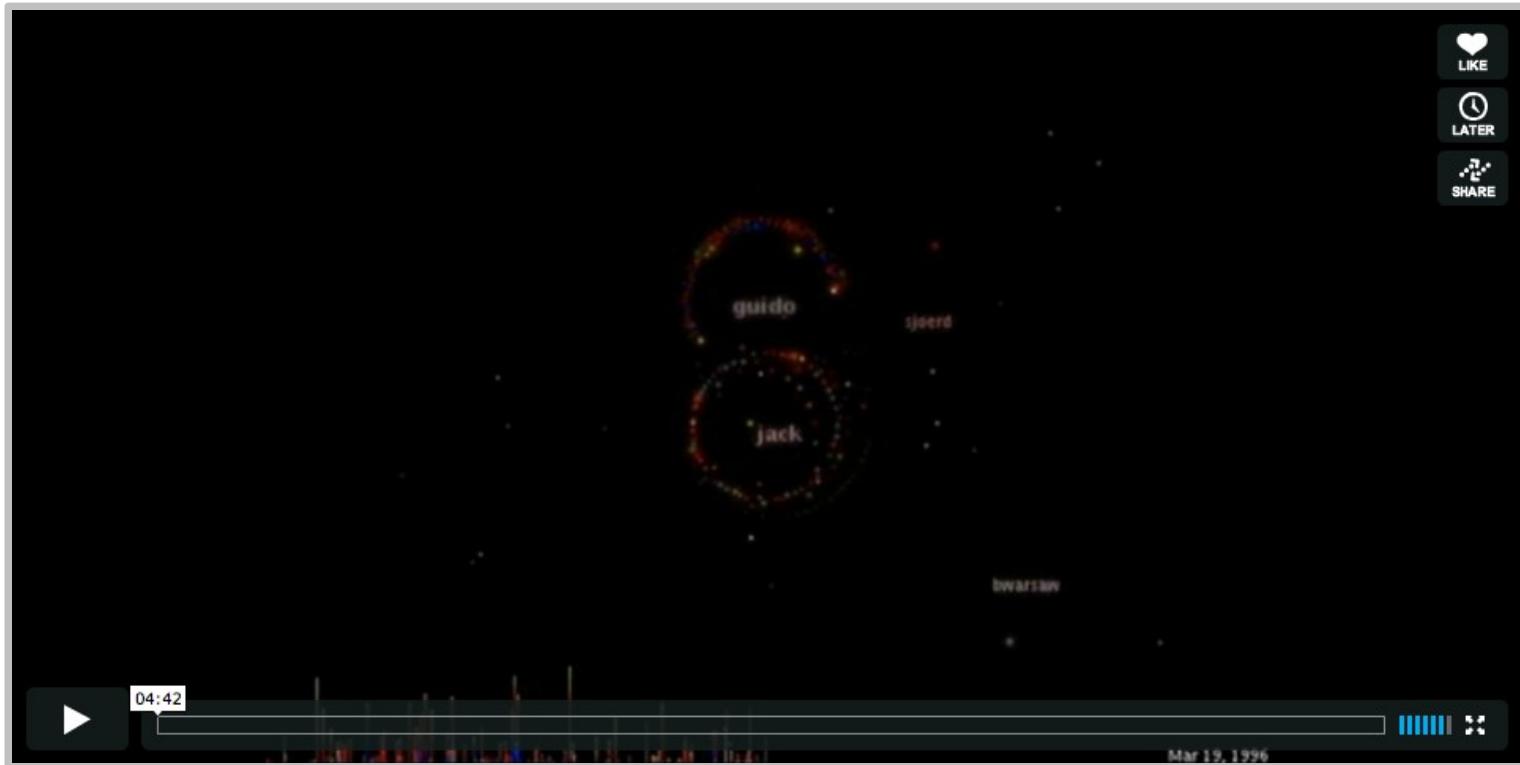
The experience of a user of Open Source software

The screenshot shows the SourceForge homepage. At the top, there's a navigation bar with the SourceForge logo, 'Register', and 'Log In'. Below it, a large banner says 'Find, Create, and Publish Open Source software for free'. A search bar contains the text 'Search from 293,991 projects' with a 'Search' button. Below the search bar, there are stats: 'TODAY: 3,506,302 DOWNLOADS', '5,259 CODE COMMITS', '3,374 FORUM POSTS', '577 BUGS TRACKED', and a 'MORE SITE ACTIVITY' link. On the left, there's a sidebar with categories like 'Audio & Video', 'Business & Enterprise', 'Communications', 'Development', 'Home & Education', 'Games', 'Graphics', 'Science & Engineering', 'Security & Utilities', and 'System Administration'. The main content area features a 'Project of the Month' section for 'OpenPetra', which has a logo, a brief description, and a 'Download Alpha 0.2.10' button. Another section below it is for '7-Zip', with its logo, a brief description, and a 'Download 7z922.tar.bz2' button.

The surface experience with open source software: not only finished products that can be downloaded and used!

Source: <http://sourceforge.net/>

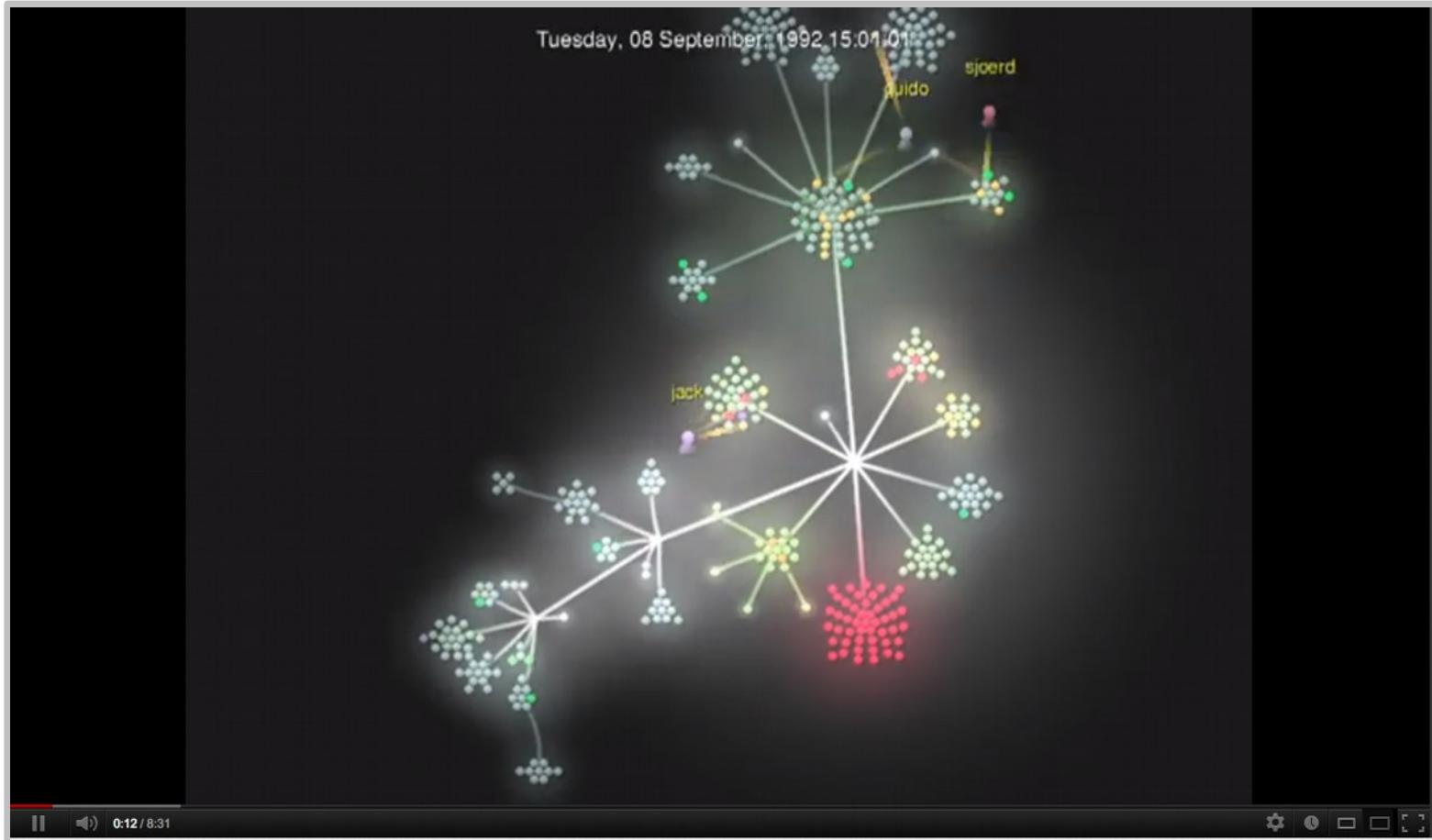
... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://code.google.com/p/codeswarm/>
<http://vimeo.com/1093745>

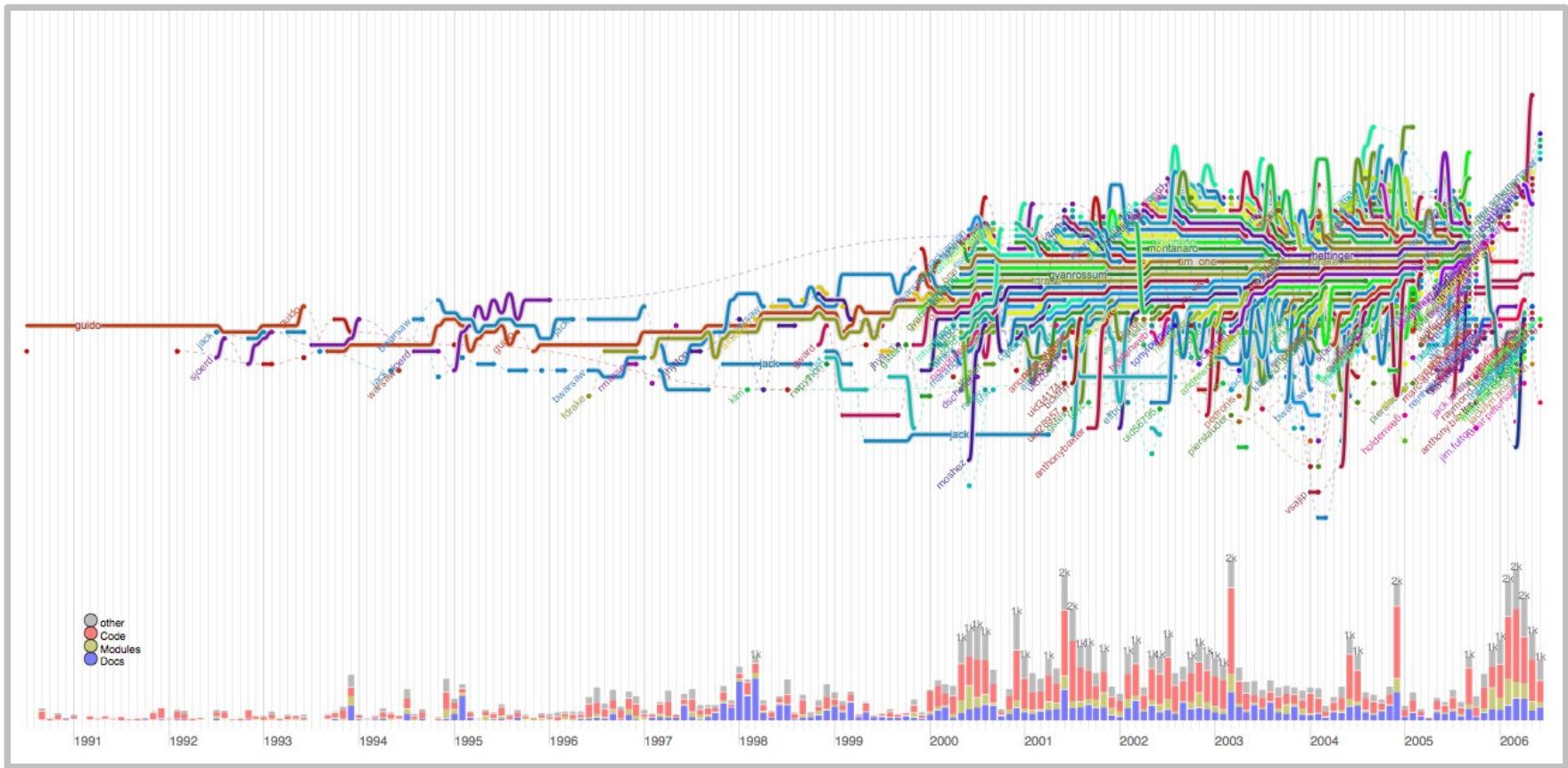
... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://code.google.com/p/gource/>
<http://youtu.be/aPk1BqK8zzI>

... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://www.michaelogawa.com/research/storylines/>

A more systemic definition of Open Design

A collaborative distributed **system** of design & manufacturing

- * sharing
- * collaboration
- * open licenses
- * open and distributed manufacturing technologies

A **system of agents** that:

- * use
 - * design
 - * manufacture
 - * market
 - * distribute
 - * manage the end-of-life
-



Aalto University
Media Factory

05.

**Work for the next weeks:
Clone the repository of the projects.
Work in your folder, document ideas for a
personal project with your README.md
file.**

Our repo on GitHub!

The screenshot shows a GitHub repository page for 'DigitalFabricationStudio / Project_03'. The repository is public and contains one commit. The commit details are as follows:

- Initial commit**
- openp2pdesign** authored just now
- latest commit** 2558494d7c
- README.md** just now Initial commit [openp2pdesign]

The README.md file content is:

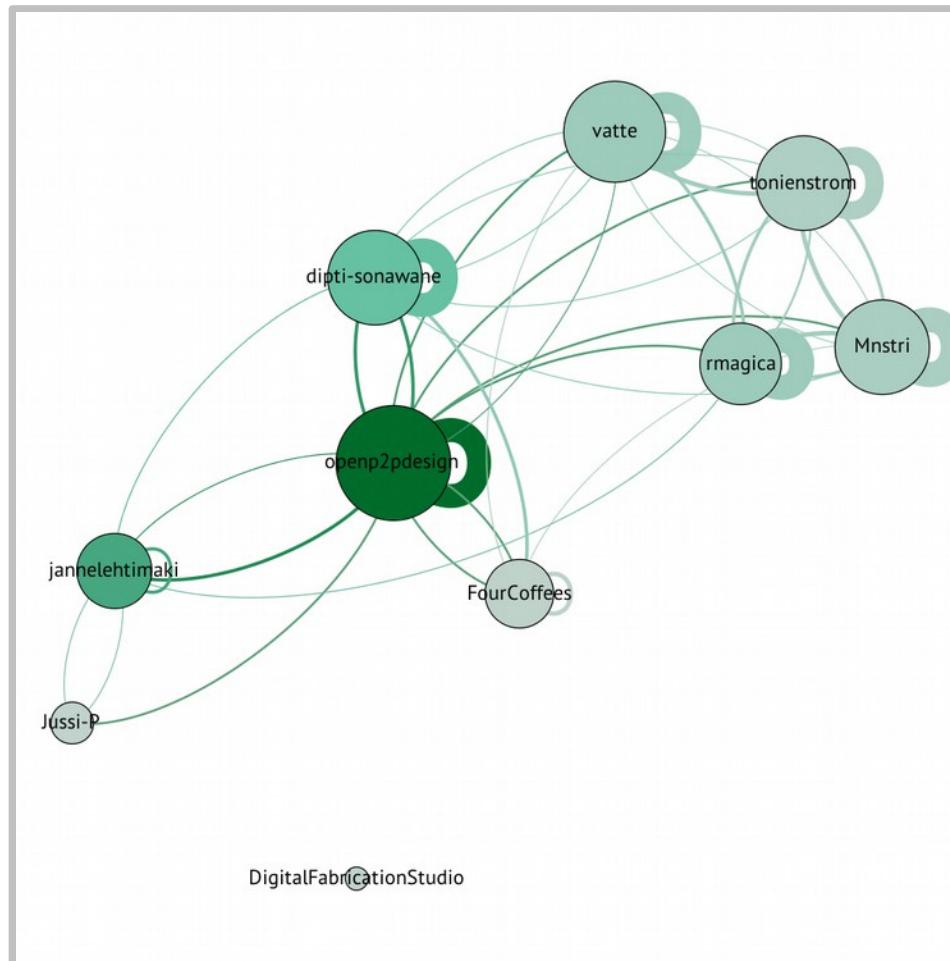
Project_03

The projects developed during the Digital Fabrication Studio course, 0.2 edition

This is where we will work together!

Source: https://github.com/DigitalFabricationStudio/Project_03

Past edition interactions



We can mine GitHub with its API and discover what have actually happened during the course.



Aalto University
Media Factory

05.

Work for next weeks:
choose a Creative Commons license
for your projects, and add it to the
Readme.md file.



Aalto University
Media Factory

Thank you!!

Massimo Menichinelli
Aalto Media Factory
massimo.menichinelli@aalto.fi
[@openp2pdesign](https://openp2pdesign.net)
<http://www.slideshare.net/openp2pdesign>

