

EDV & Multimedia Interaktionsdesign

05 – Gadgets

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21. November 2011



Eine Frage

Was ist ein Tisch?

Eine pragmatische Antwort

Ein Tisch ist eine Platte, auf die man sich nicht setzt.

Weisen der Welterzeugung

Eine wissenschaftlich an dieser Stelle unzulässige, aber theoretisch grundsätzlich abgedeckte Verallgemeinerung besagt, dass unser Zugang zur Welt primär über den handelnden Umgang mit ihr hergestellt wird.

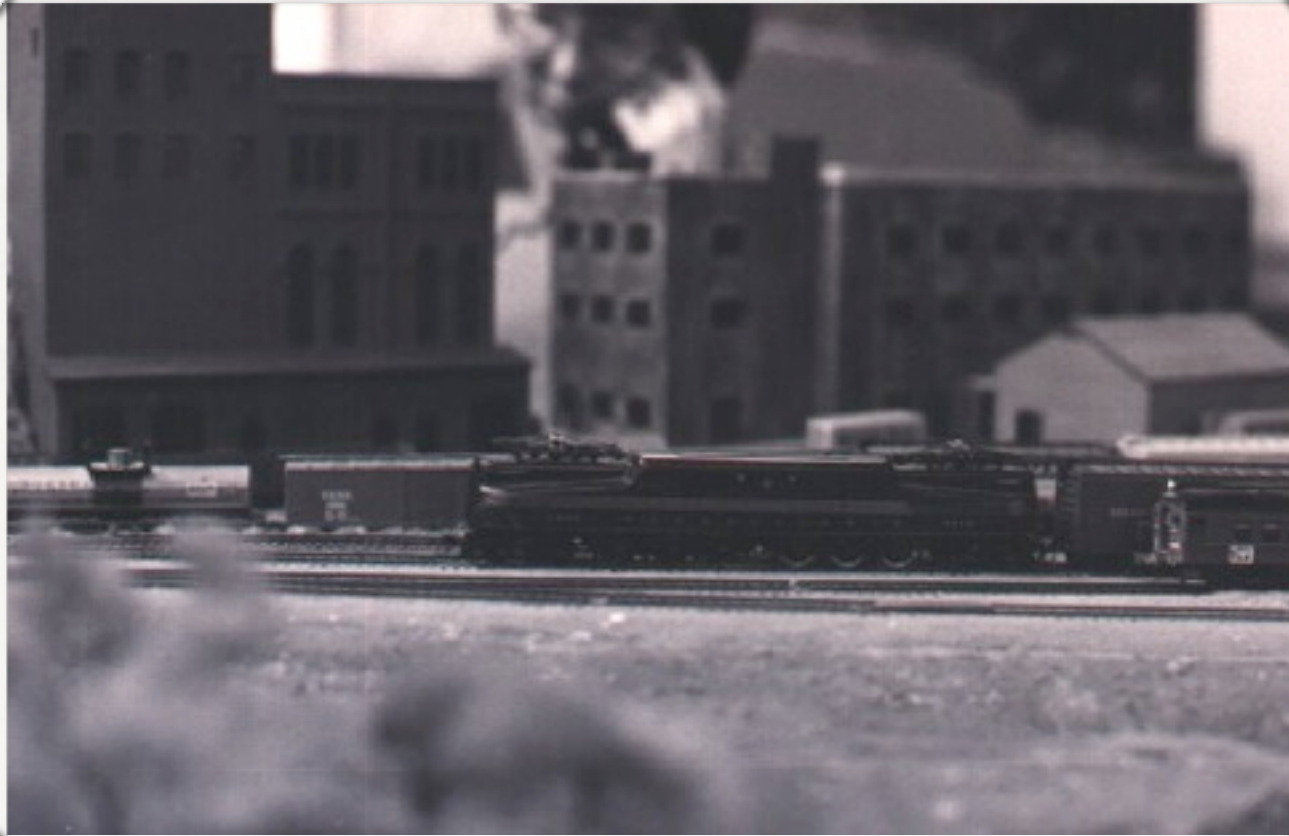
Was etwas ist, wird durch seinen Gebrauch bestimmt, nicht durch eine wie auch immer geartete und erkennbare Essenz.

Wenn eine Welt(-sicht) erst durch Gebrauchszusammenhänge erzeugt wird, kann sie mit ihnen auch geändert werden.

Darin liegt die Medialität selbstgebauter Gadgets.



Tech Model Railroad Club



1946 Gründung
1959 Computerkurs von McCarthy



Committees

New Construction
Maintenance of Way
Scene Comm
S&P: Signal & Power
Car and Loco
Administrative

MIT – Hackers



Peter Deutsch



Richard Greenblatt



Bill Gosper

TX-0 «Tixo»



Access to computers should be unlimited and total.

Always yield to the Hands-On Imperative

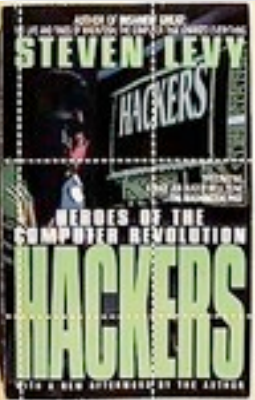
All information should be free.

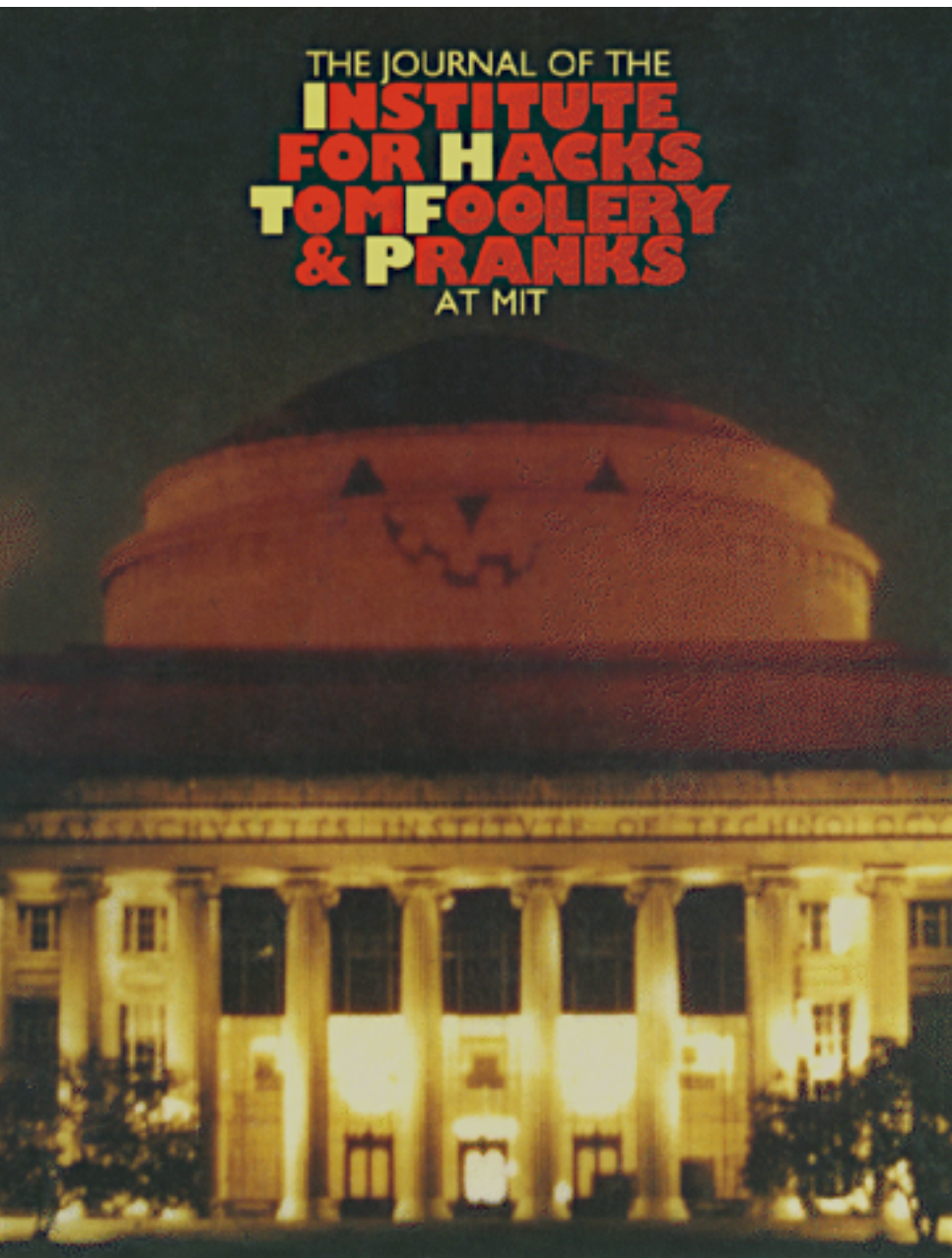
Mistrust authority--promote decentralization.

Hackers should be judged by their hacking.

You can create art and beauty on a computer.

Computers can change your life for the better.





http://hacks.mit.edu/books/ihtfp_leibowitz/

Simplicity: the act has to be simple but impressive.

Mastery: the act involves sophisticated technical knowledge.

Illicitness: the act is 'against the rules'

Hacking

hack

1. /n./ Originally, a quick job that produces what is needed, but not well.
2. /n./ An incredibly good, and perhaps very time-consuming, piece of work that produces exactly what is needed.
3. /vt./ To bear emotionally or physically. "I can't hack this heat!"
4. /vt./ To work on something (typically a program). In an immediate sense: "What are you doing?" "I'm hacking TECO." In a general (time-extended) sense: "What do you do around here?" "I hack TECO." More generally, "I hack `foo'" is roughly equivalent to "`foo' is my major interest (or project)". "I hack solid-state physics." See Hacking X for Y.
5. /vt./ To pull a prank on. See sense 2 and hacker (sense 5).
6. /vi./ To interact with a computer in a playful and exploratory rather than goal-directed way. "Whatcha up to?" "Oh, just hacking."
7. /n./ Short for hacker. ...

The New Hacker's Dictionary



Great Droid, 1999



USB-Battery, 2005

Hacker

hacker /n./

[originally, someone who makes furniture with an axe]

1. A person who enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary.
2. One who programs enthusiastically (even obsessively) or who enjoys programming rather than just theorizing about programming.
3. A person capable of appreciating hack value.
4. A person who is good at programming quickly.
5. An expert at a particular program, or one who frequently does work using it or on it; as in `a Unix hacker'. (Definitions 1 through 5 are correlated, and people who fit them congregate.)
6. An expert or enthusiast of any kind. One might be an astronomy hacker, for example.
7. One who enjoys the intellectual challenge of creatively overcoming or circumventing limitations.
8. [deprecated] A malicious meddler who tries to discover sensitive information by poking around. Hence `password hacker', `network hacker'. The correct term for this sense is cracker.

The term `hacker' also tends to connote membership in the global community defined by the net (see network, the and Internet address). It also implies that the person described is seen to subscribe to some version of the hacker ethic (see hacker ethic).

It is better to be described as a hacker by others than to describe oneself that way. Hackers consider themselves something of an elite (a meritocracy based on ability), though one to which new members are gladly welcome. There is thus a certain ego satisfaction to be had in identifying yourself as a hacker (but if you claim to be one and are not, you'll quickly be labeled bogus). See also wannabee.

The New Hacker's Dictionary



Hacker's Attitude

The world is full of fascinating problems waiting to be solved.

Nobody should ever have to solve a problem twice.

Boredom and drudgery are evil.

Freedom is good.

Attitude is no substitute for competence.

Eric Raymond, *How to Become a Hacker*

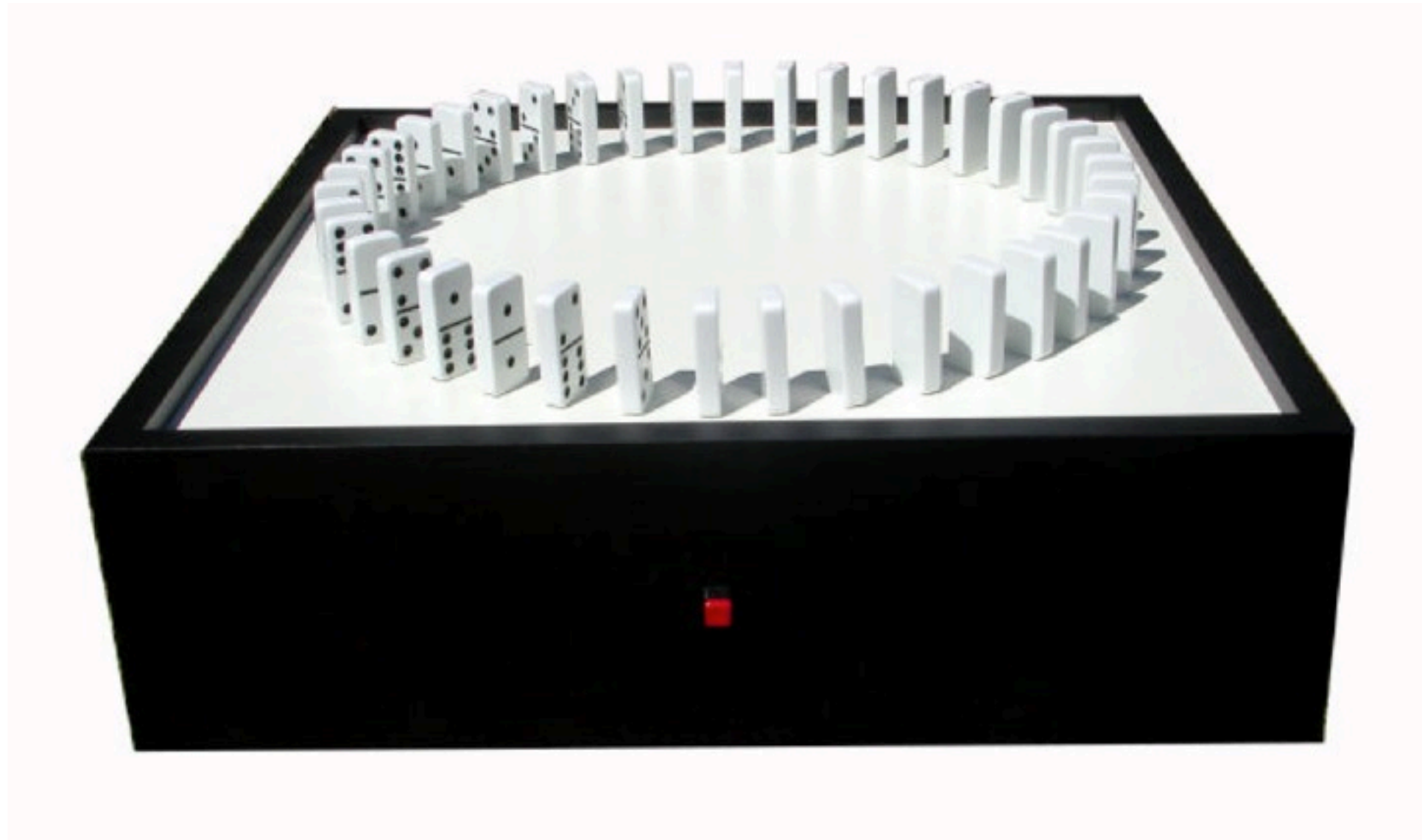
Handlungsschemata

Kognitive Muster und ihre Aufweichung



<http://www.youtube.com/watch?v=cZ34RDn34Ws>

Domino Skulptur



http://www.karllautman.com/Ouroborus_doc_nm.pdf

Rekontextualisierung

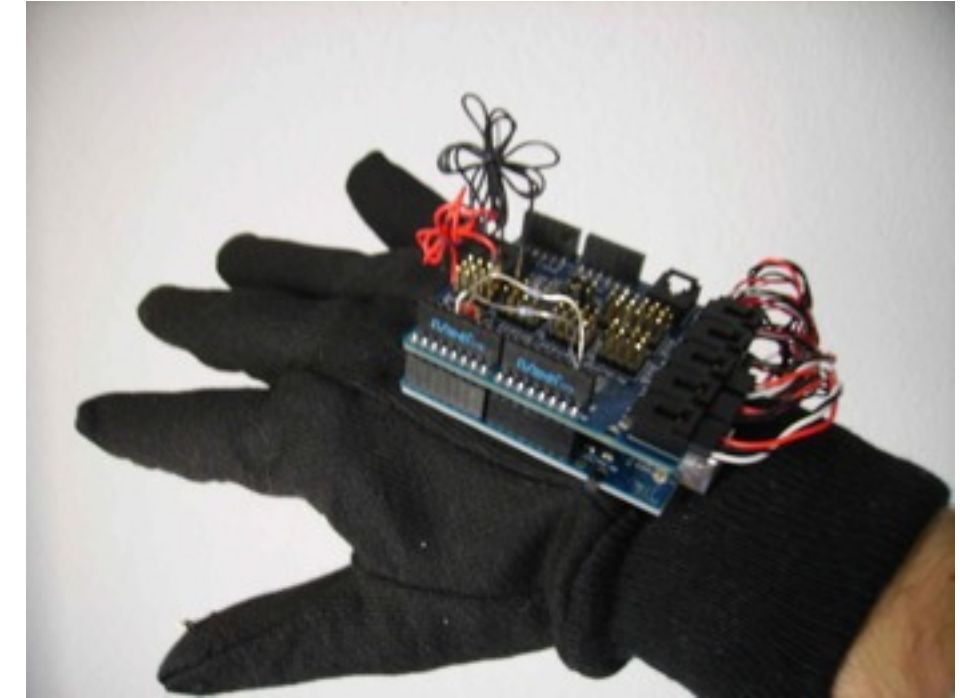
Gegenstände in neuen Gebrauchskontexten



<http://blog.formatlos.de/2008/12/01/digital-graffiti/>

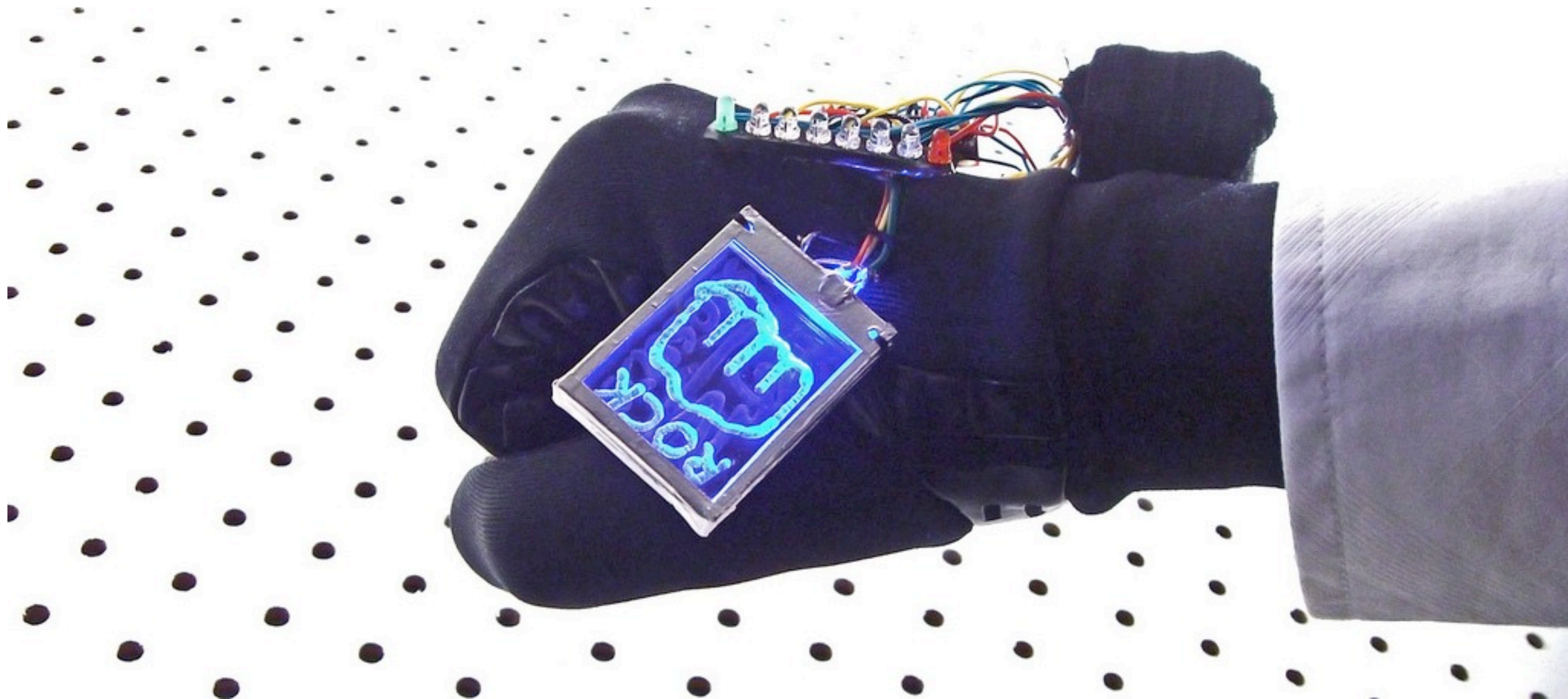


<http://fluidforms.eu/de/CassiusVideo.php>



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

Stein Schere Papier



http://grathio.com/2010/03/rock_paper_scissors_training_glove/



Wired

<http://www.wired.com/gadgetlab/>

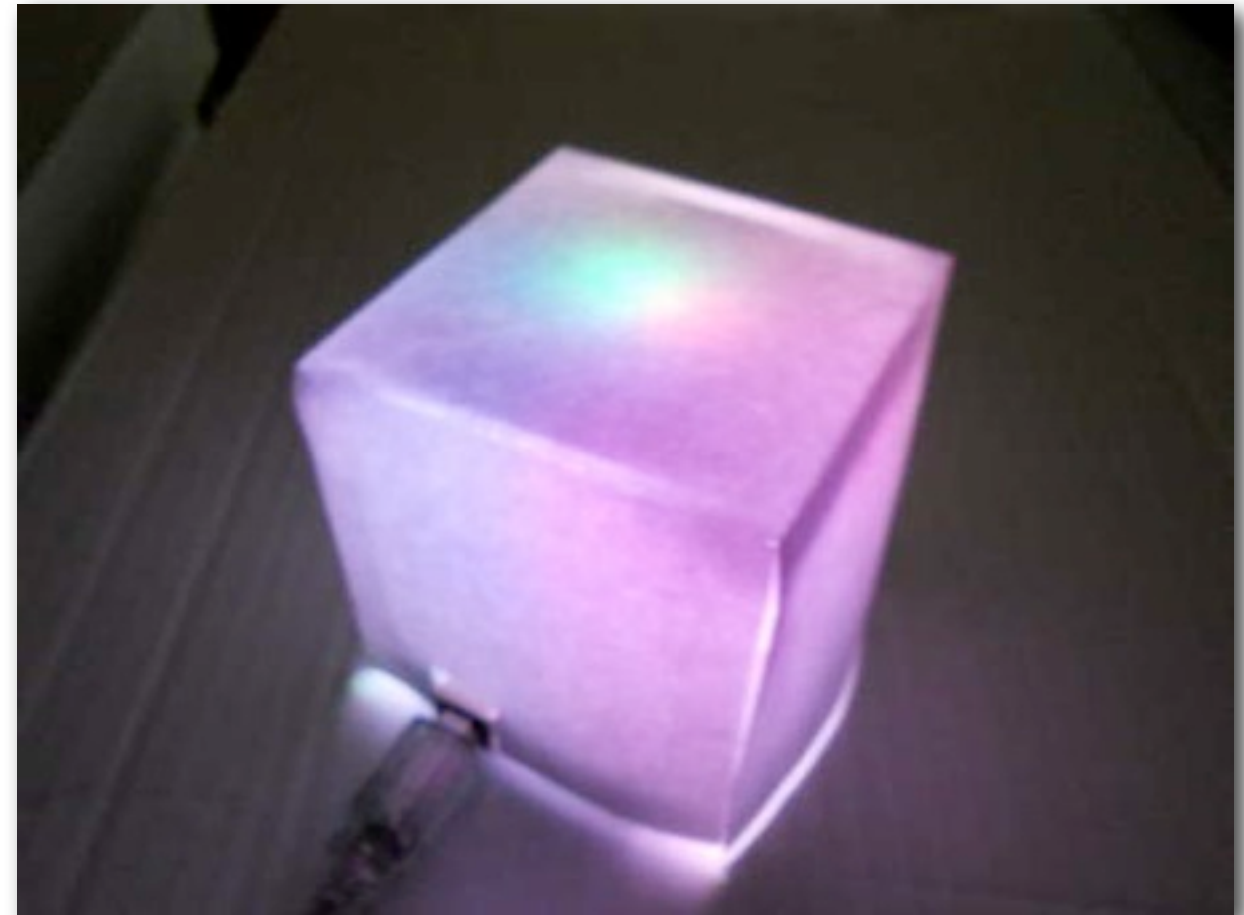
<http://www.wired.com/gadgetlab/2010/06/usb-typewriter-turns-ipad-into-paper/>

Instructables

<http://www.instructables.com/tag/type-id/category-technology/channel-arduino/>



<http://www.instructables.com/id/Arduino-powered-Haunted-Mansion-Signing-Busts/?ALLSTEPS>



<http://www.instructables.com/id/How-to-Make-an-LED-Ambient-Mood-Light-A-Beginner-/>

Möbel



<http://www.geeky-gadgets.com/rgb-led-coffee-table/>

Garagenöffner



<http://rake.sh/blog/2009/03/25/using-my-iphone-as-a-garage-door-opener/>



http://web.me.com/bfarn/Secret_Knock_Detector/Secret_Knock_Detector.html

Doorbell



<http://www.psychicorigami.com/2010/09/06/ultimate-arduino-doorbell-part-1-hardware/>

Steampunk Watch



<http://www.instructables.com/id/Arduino-Watch-Build-Instructions/>

Hack-a-day

<http://hackaday.com/>



<http://hackaday.com/2011/11/17/simple-telepresence-hack-lets-remote-user-rotate-this-laptop/>



<http://hackaday.com/2011/10/03/freakyphone-has-a-puzzle-for-you/>
<http://www.youtube.com/watch?v=GdDxavA3RRY>



<http://hackaday.com/2011/09/09/no-quarters-required-for-this-sidescrolling-game-in-a-box/>

Minecraft in Real Life



<http://www.benpurdy.com/2011/08/minecraft-in-real-life/>

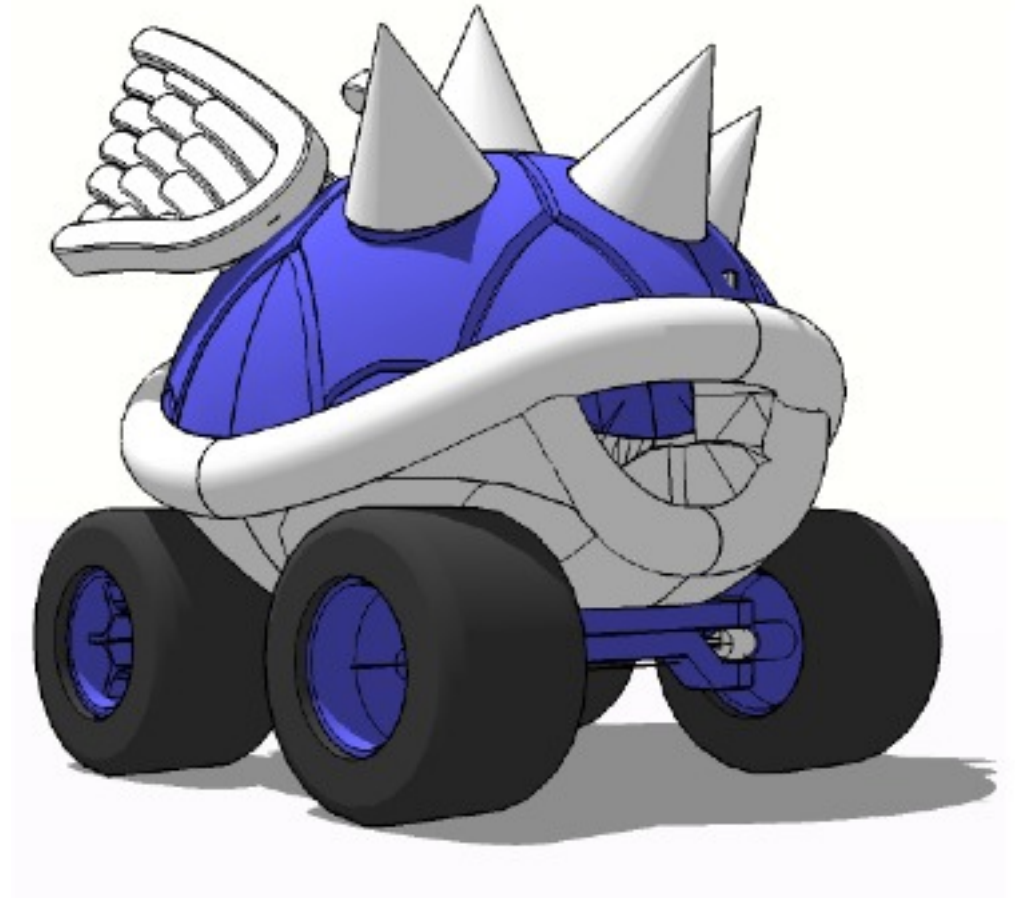


<http://www.ladyada.net/make/monochron/index.html>

Turtle Shell Racer



<http://www.makerbot.com/blog/2011/08/05/turtle-shell-racer---high-power-edition-by-skimbal/>



http://thingiverse-production.s3.amazonaws.com/assets/a3/94/e9/32/f4/Turtle_Shell_Racer_-_HP_v1.pdf

Extension of Man

Erweiterungen des Körpers

AeroQuad



<http://AeroQuad.com/>

Kite Aerial Photography



Make Magazine



Robotic 3D Carver of Invisible Stuff

<http://blog.makezine.com/tag/LatestInRobots>



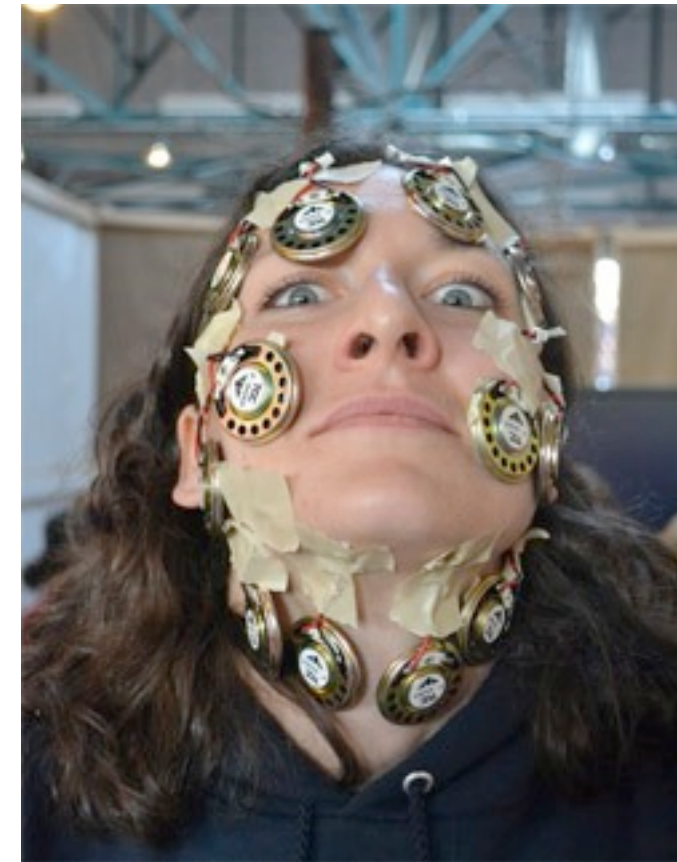
<http://www.thinkgeek.com/gadgets/electronic/e9e5/>



<http://www.thinkgeek.com/homeoffice/gear/dc37/>

My Dog Light Writing “Makers”





<http://syneseizure.wordpress.com/>

Brain Machine



<http://www.ladyada.net/make/brain/index.html>

3D-Drucker



<http://www.youtube.com/watch?v=fScRYhq-5M0>

MakerBot



<http://www.thingiverse.com/thing:7649>

Thingiverse

Gadgets

1. The computer has become a new medium (a new set of media forms).
2. To design a digital artifact is to design an experience.
3. Digital design should not try to be invisible.

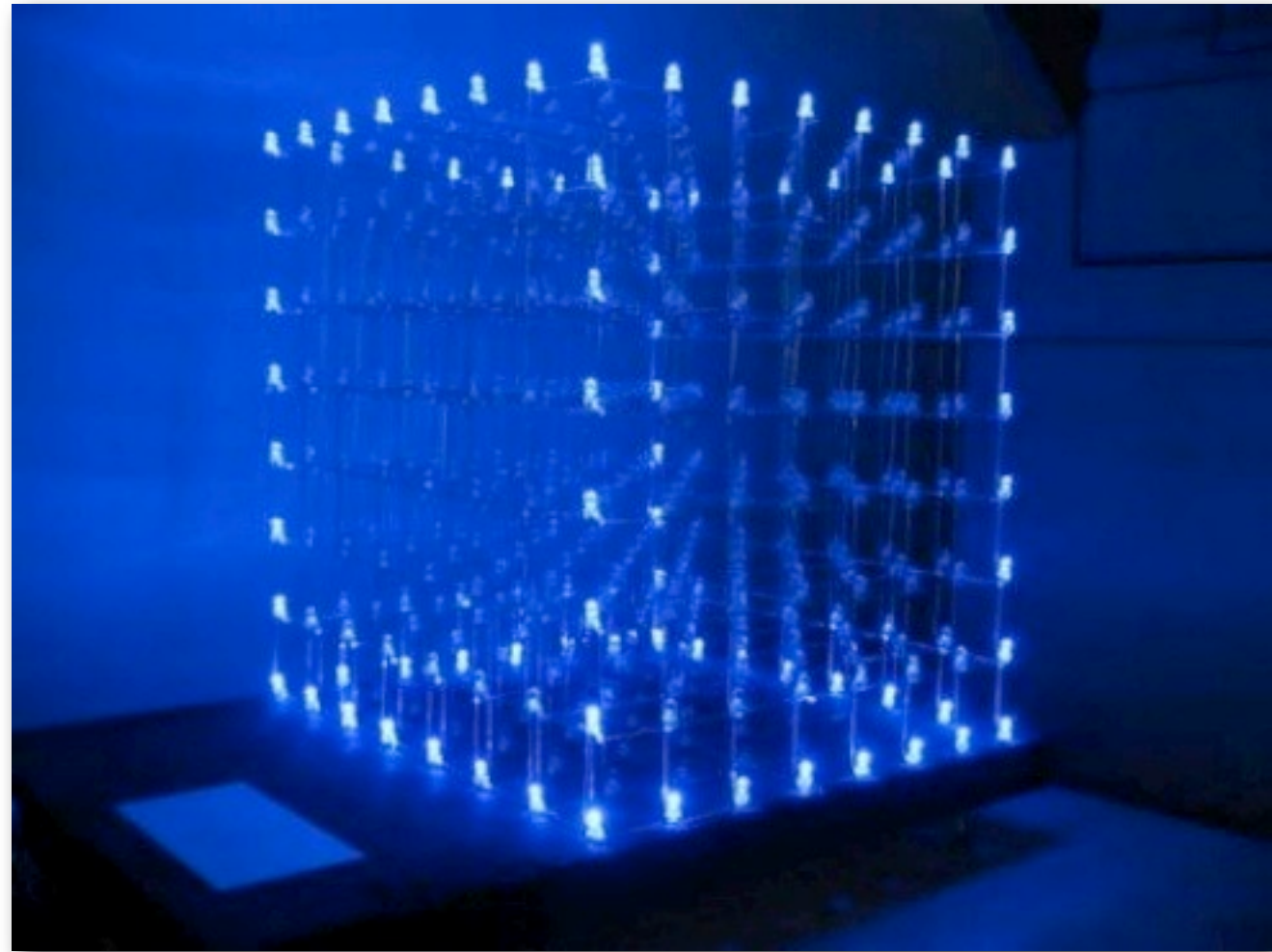
The most visible, and in some ways the most important, part of any digital application is its interface—the face that the application presents to its users. And **gadgets are** all interface, defined entirely by the experience of its viewing or use. That is why digital art can provide such a clear test of the possibilities and constraints of digital design: it fails or succeeds unequivocally on the strength of its interface.

If we only look *through* the interface, we cannot appreciate the ways in which it shapes our experience.

Gadgets are experiments in interaction design.

Frei nach Jay Bolter; Diane Gromala: *Windows and Mirrors*. MIT Press
2003

Lichtwürfel



<http://www.youtube.com/watch?v=GUCX41pokZY>

Never Ending Drawing Machine



<http://www.derivative.ca/Events/2010/NEDM/>

TV B Gone



http://www.tvbgone.com/cfe_tvbg_main.php



<http://www.youtube.com/watch?v=2mSqG9aIAgE>

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50

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96

106

O'REILLY

Make: Magazine



Eine Ausstellung zum Anfassen



11. Mai 2011, 18 Uhr
Medienwissenschaft am GSP

Bitte berühren

<http://creativecoding.uni-bayreuth.de/bitte-beruehren-2011/>