

Summary

- We examine the “reboot” of television as a process of **cultural determination**.
 - technical protocols: *resolution over reception*
 - political & legal decisions: *awareness over education*
 - home hardware: *obsolescence-driven replacement*

Rebooting

- **Cultural, not technical, retentions**
 - Foreclosure onto legacy
 - Return to the “spirit” of a previous state
- **Rebooted as digital**



Batman on screen: A History of Batman in Movies. Film School Rejects (2008).

Available at: <http://www.filmschoolrejects.com/news/batman-on-screen-a-history-of-batman-in-movies.php>

Additive vs. Reboot

■ Additive Changes

- UHF to VHF
- Color to black and white broadcasts

■ DTV Reboot

- Potential for complete reinvention
- Carry-over of the “spirit” of the original
 - FCC constraints
- Forced home theater obsolescence

Overview

- 1) Discovered a technocratic discourse favoring **resolution over reception** for broadcasting as a public service;
- 2) a government/legal discourse that carried out an **inadequate public information campaign** without public debate; and
- 3) a re-articulated home theater assemblage leverages DTV for a **system of replacement-driven by obsolescence**.

Processes of Cultural Determination

- Grand Alliance's options for sound
 - Dolby
 - MIT
 - Philips' Musicam (used in Europe's DTV)
- Dolby struck a deal with MIT to share royalties
 - Alliance against Musicam
 - MIT votes against their own system

Resolution over Reception

- DTV gives clearly superior visual fidelity
- Degradation of digital is immediate & severe
 - DTV sound drops *completely*
 - Images become blocky or freeze and become impossible to decipher
- Loss of smooth static
- Clean room, not practical, protocol

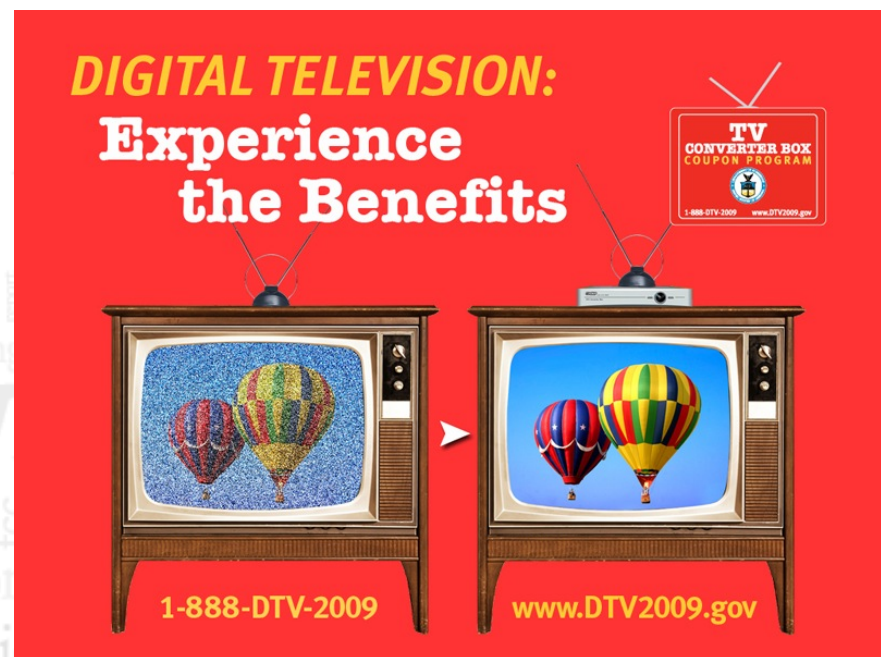
Awareness over Education

- **Who *thought* they were affected**
 - Color TV: 98+% of homes (EIA 2005)
- **Who was *actually* affected**
 - OTA dependent: 25% (EIA, 2005); 10-11% (Nielsen, 2009)
 - In 2005, 69% of OTA dependent households have household income of **less than \$40,000** (EIA 2005)

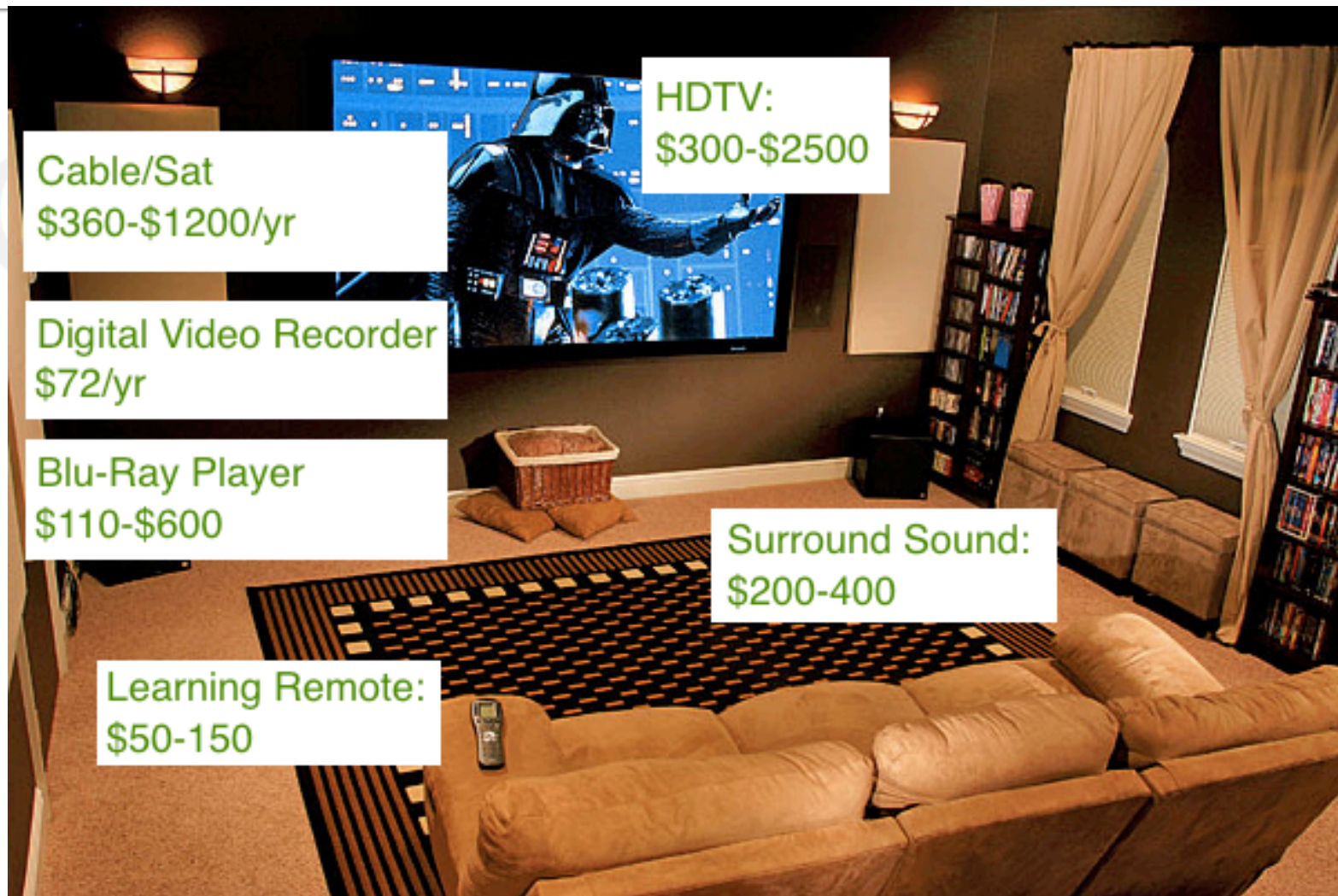


Technical Cover Discourse

- Electrical sublime
 - Programming
 - Widescreen format
 - Station multicasting
 - Surround sound
- No decisions
 - No public debate
 - No format wars



The New Theater of DTV



Theater Image from: <http://berniermediagroup.com/>

Minimal Remediation



Image from: <http://www.zatznotfunny.com/2008-09/dtv-transition-in-action/>

Failure to gain many DTV advantages:

- High Def picture
- Surround sound
- Integration with time warping devices (VCRs/DVRs)

In a 2008 Nielsen Report, data indicated that three out of four OTA viewers chose a more expensive option than keeping their pre-transition set.

...if nothing else, DTV sold paid subscriptions and new television sets!

Turner vs. FCC (1997)

“Must Carry”

- Gives OTA networks the most powerful bargaining position
- Assures widest audience for OTA networks
- Argues for HD carriage
- Flips focus of broadcasting from OTA audience to cable

Other Topics in Larger Study

- **Digital “Pipes”: DTV and Internet overlap**
 - DTV: 19 megabits per second, 2/3 of cable broadband
 - Excel, e-newspapers
 - Netflix streaming, Hulu
- **DTV protocols:**
 - Mpeg2
 - Forward error correction (refavoring reception)
 - Versioning
- **FCC’s cultural, nontechnical requirements**
 - Spectrum 6 MHz, matching analog channels
 - “One broadcast, one channel”
 - Shared spectrum
- **Obsolete and limited hardware (VCR & converter boxes)**

Conclusions

*Digital will do for television what it has done for every other communications technology it touches – **make it better, more efficient, more interactive, more competitive, and more exciting than ever before.** The world is going digital, and I have no doubt that over-the-air television had to go digital as well. **It's a win-win for consumers and for the long-term health of the broadcast industry.***

Michael J. Copps, FCC Commissioner
June 13, 2009