The 3D interface...

... is a big temptation: what best way to surprise and impress users?



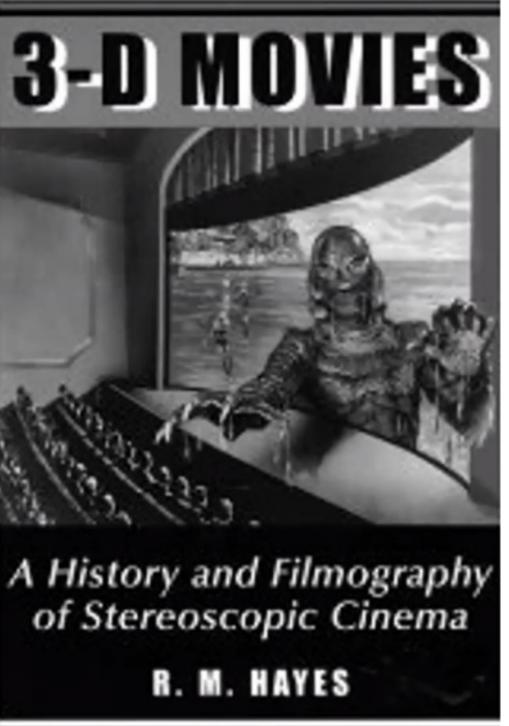
Let's go a bit backwards...



Subsequently

♦ 50's onwards

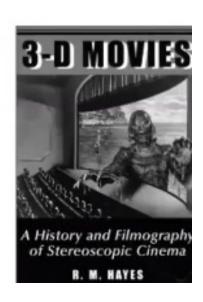




Third millennium (now..)







So on the web...?

For the same reasons than in the other media: no success, at least for now, due to the computational costs that are too high (both in perception and in usability)

Another jump backward...

- ... but not so long ago
- ◆ 1980: Aspen Movie Map (MIT Labs) (remember, the WWW is from 1989...) (*aspen)



Click on the image above and drag your cursor to view the interior. Press the **Shift key**, or + directly under the image, **to zoom in**. Press the **Ctrl key**, or - directly under the image, **to zoom out**.

2006 Acura RL

Model Info

Photo Gallery

Get A Quote





Click on the image above and drag your cursor to view the interior. Press the **Shift key**, or + directly under the image, **to zoom in**. Press the **Ctrl key**, or - directly under the image, **to zoom out**.

2006 Acura RL

Model Info Photo Gallery

Get A Quote





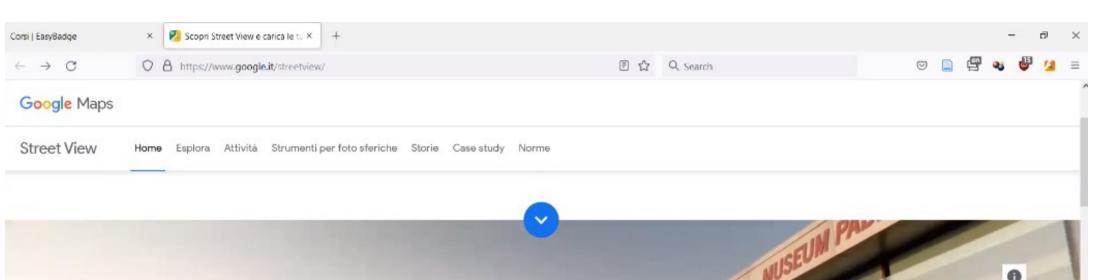
CURRENT OFFERS ≫

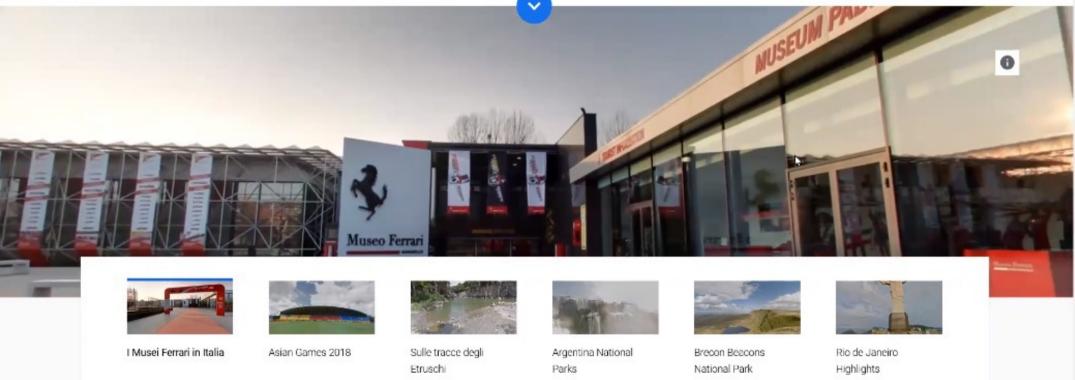
BUILD & PRICE >>

GET A QUOTE >>









To give you an idea...

• ... of the difficulties, but also of the progress of 3D, let's jump outside of the web, in 2.75D (*bt)



Example in the Web (opposite)

J. CREW

WOMEN MEN CREWCUTS FOR KIDS SHOES HANDBAGS JEWELRY WEDDING SALE SHOPPING BAG CHECKOUT

Personal Shopper Store Locator Help Order Status My Account Register Sign in site search - keyword or item # 60

the women's shop

FEATURES

new arrivals instant gratification (under \$100) J.Crew cashmere J.Crew collection handbag shop weddings & parties catalog/jcrew.com exclusives

SHOP BY CATEGORY

shirts & tops
sweaters
knits & tees
dresses
jackets & outerwear
pants
denim
shorts
skirts
suiting
swim
lounge & beach cover-ups
shoes
bags
jewelry







Moral

- Instead of 3D views, that are a big usability problem, it's massively better to offer 2D snapshots of 3D objects
- These snapshots have low complexity, and allow the user to explore the 3D aspects of an object with relatively small effort

Other multimedia

- Another way to impress users with special effects is using plug-in's
- But plug-in's suffer from a fundamental problem: they are «plug-in» (...!) and as such non-standard

Users and plug-in's

Users don't like to install plug-in's for a couple of reasons

First, the trust factor: they don't really know what's going on so their trust level is very low → better to

do nothing and avoid

problems

For this reason (trust factor)...

• ... new plug-in's are even worst, and suffer a penalty. They start to gather some trust only after **one year** from their distribution

Second reason

- User timers! Users don't want to lose time
- Moral: on average, every request of plug-in install makes for a loss of...
- **90%** of the users (!!)



Problem instance

- A big instance of the plug-in world:
- Flash!



The problems with Flash

- Summarizing, Flash has «internal» and «external» problems
- Internal: inside Flash, difficult to solve
- External: depend on the content creator



Internal problems

- Flash is always a plug-in, and so suffers from the problems typical of that category (although with less user loss, due to the wide trust factor)
- There are also time problems, due to potential high load time
- And other problems we'll hint at later

External problems

Flash gives many powerful tools and creative freedom, but just for this the risk for the user is to get bloated design and so a higher computational cost



31 December 2020

Adobe ends Flash support, and all Flash content stops to work (!)

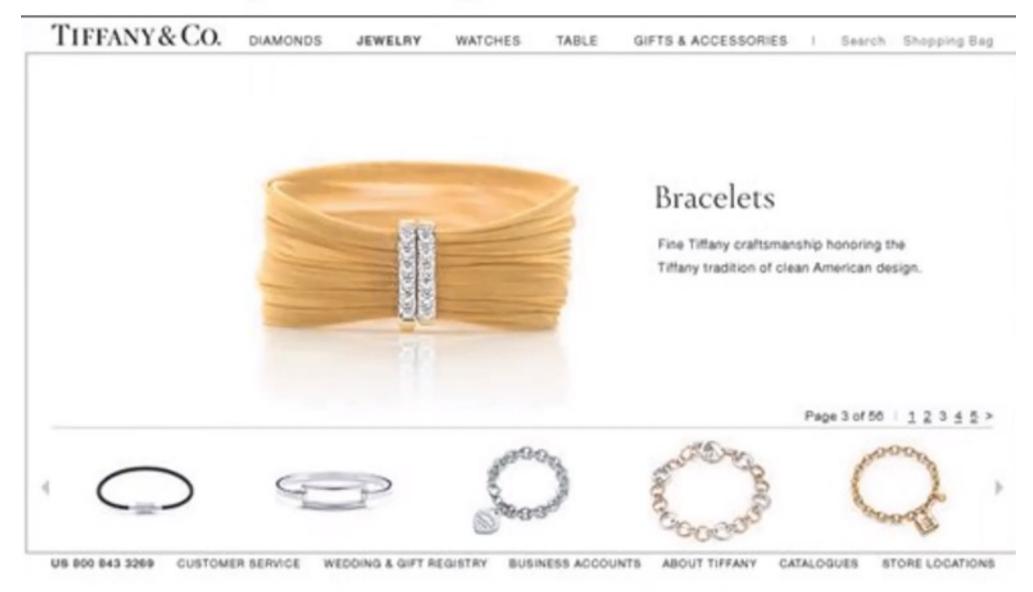
Why?



Hypothesis...

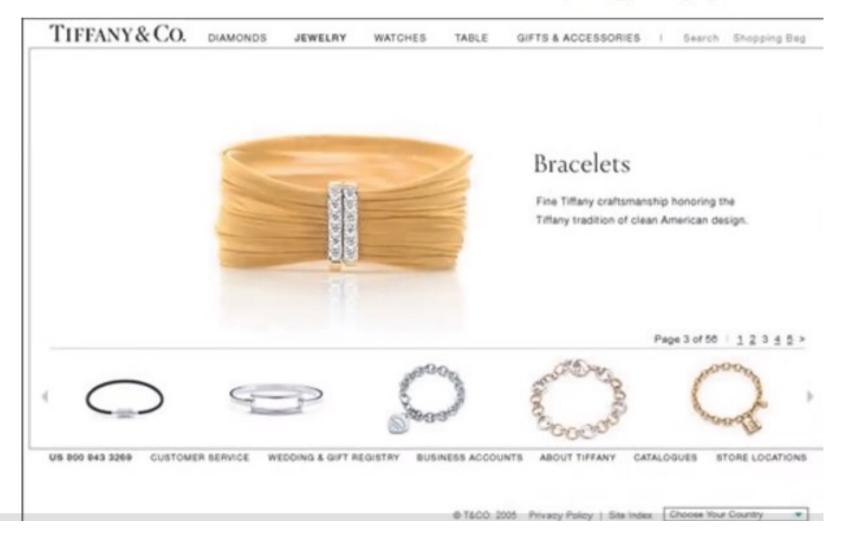
- The usability problems seen above
 - → user problems
 - → less Flash
 - → no Flash?
- Only partly true, up to the part of "less Flash"

Example of «good» Flash...



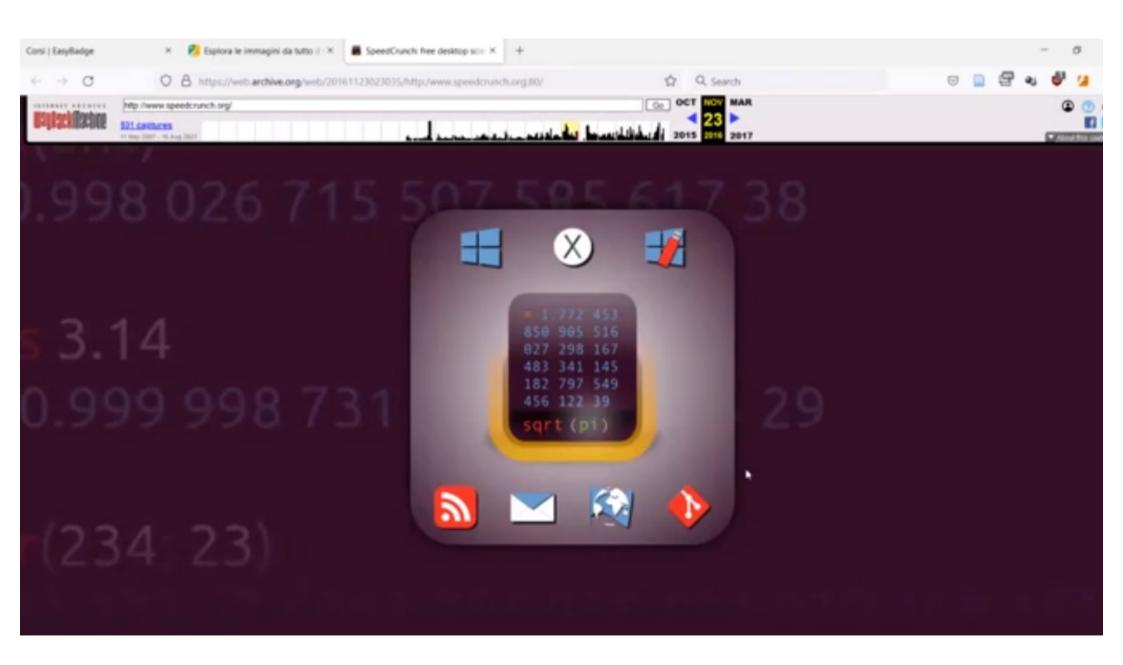
But...

... look: it seems a normal web page (!)



The real reason...?

Standarized alternatives (like HTML5, Javascript libraries etc) that being non-proprietary have seen a huge boost in functionalities (remember Gopher vs WWW!)



Other multimedia?

- 3D interfaces, as seen before, are problematic
- So, do we have a multimedia that has low computional cost?

VIDEO!

Think of the success of tv and web streaming: this happens precisely because video has (for us) low computational cost!



Still...

Video is quite attracting (low cost, and other factors as we will see), but it also has some problems that is helpful to know



The first problem...

- ... is the bandwith needed to handle it
- a big error is to handle video on our own, without resorting on other sites like Youtube etc



The second problem...

Even worst: videos typically can exceed user timers!









- What is the preferred average time?
- 1 minute!
- And the maximum suggested time?
- 2 minutes !!
- These times contribute to the timers, so videos should be inserted taking a lot of care to users and their navigation goals

Exceptions

When videos are part of the user goal!



VICTORIA'S SECRET

SEARCH * SIGN IN

CATALOGUE QUICK ORDER

SIGN UP FOR EMAIL

CUSTOMER SERVICE

YOUR ACCOUNT

SHOPPING BAG

BRAS

PANTIES

SLEEPWEAR

CLOTHING

SHOES

SWIM

BEAUTY

SALE

VICTORIA'S SECRET

VIDEO: 10 YEARS OF SEXY

BEHIND THE SCENES

MODEL LINE-UP

SHOP THE RUNWAY

SUPERMODEL BEAUTY

DEC. 6TH TUESDAY, 10/9C



MODEL LINE-UP



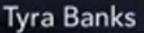












photos - 📗 🔁 🔞





Tyra is the recipient of the prestigious Michael Award for "Supermodel of the Year," and was named "Woman of the Year, 2000" by Sports Illustrated. In addition to her modeling career, Tyra is well-known on screen. Tyra secured a deal to appear regularly on "The Oprah Winfrey Show," and co-starred on the hit, "The Fresh Prince of Bel-Air." Tyra also starred in several feature film hits including, John Singleton's "Higher Learning" and Jerry Bruckheimer's "Coyote Ugly." Tyra's performances have gamered acclaim from critics and audiences alike.

Banks' success has given her the platform to guide and inspire today's youth. In 1992, she established "The Tyra Banks Scholarship," a fund that grants African-American girls the opportunity to attend her high school aims mater. After writing and publishing "Tyra's Beauty Inside & Out," with Harper Collins, Banks expanded her outreach with her self-funded charitable foundation, TZONE, an annual summer camp experience for teenage girls designed to enhance independence and self-esteem. WIYEIMAGE"