WEB GRAPHICS

WHO IS WHO

ME: MATEJ NOVOTNÝ

FMFI UK (i-4)
mnovotny@sccg.sk
www.sccg.sk/~mnovotny

YOU: STUDENTS OF AIN

Web developers, freelancers,
Web designers, ...

COURSE REQUIREMENTS

BASIC KNOWLEDGE OF:

Internet and WWW
Computer graphics (e.g. GSVM)
Programming

EXPERIENCE IN:

Browsing the web ☺

EVALUATION

TEST

50 POINTS

25 < required to pass

LABS / PROJECT

50 POINTS

Logo design
Webdesign
Webpage implementation
Mobile version (responsive)
”Simple Rich” Internet Application
Interactive 3D object online

25 < required to pass

PROJECT DETAILS

SIMULATION OF A REAL-WORLD ASSIGNMENT

CHOOSE 1 FROM 4 AREAS:

- Corporate webpage
- Luxury brand webpage
- Commercial webpage
- Artistic webpage

IF YOU CAN'T THINK OF ONE:

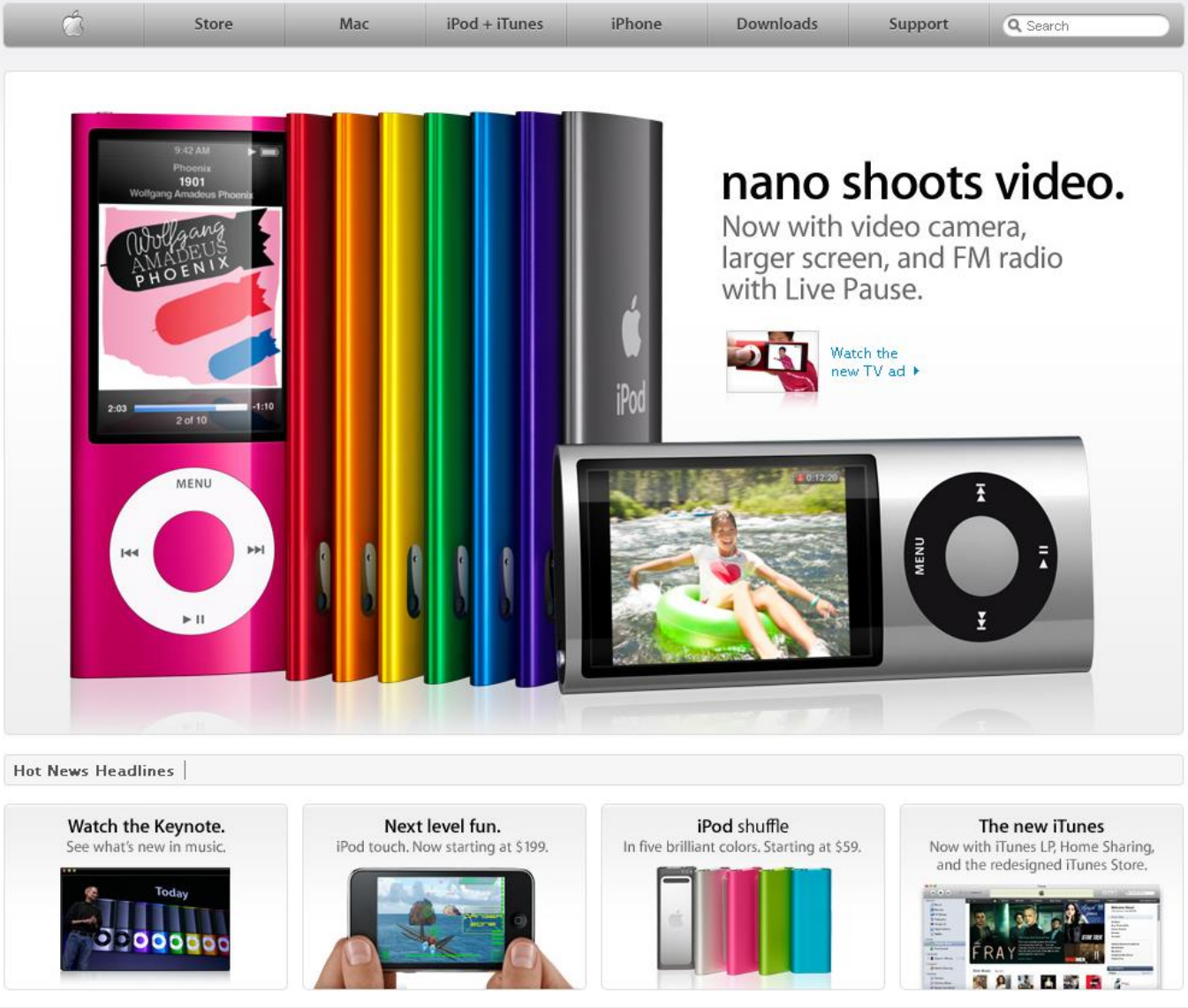
take an established brand/company and redesign its logo and webpage

#1 CORPORATE WEBPAGE

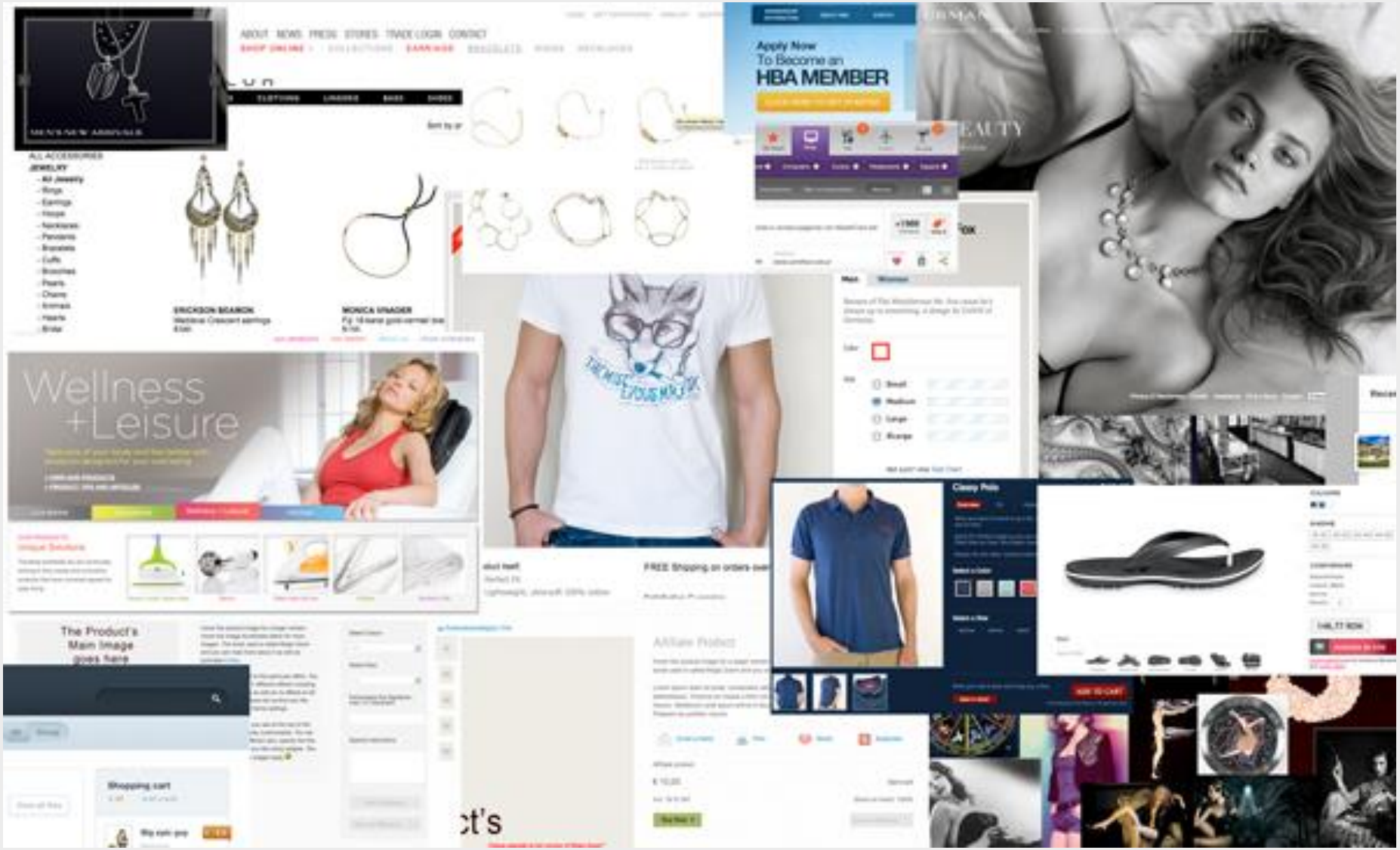
#2 LUXURY BRAND

#3 ARTISTIC WEBPAGE

#4 COMMERCIAL WEBPAGE



MOOD BOARD


Apply Now
To Become an
HBA MEMBER
Wellness
+Leisure
The Product's
Main Image
goes here
Shopping cart

LOGO

1.

2.

3.

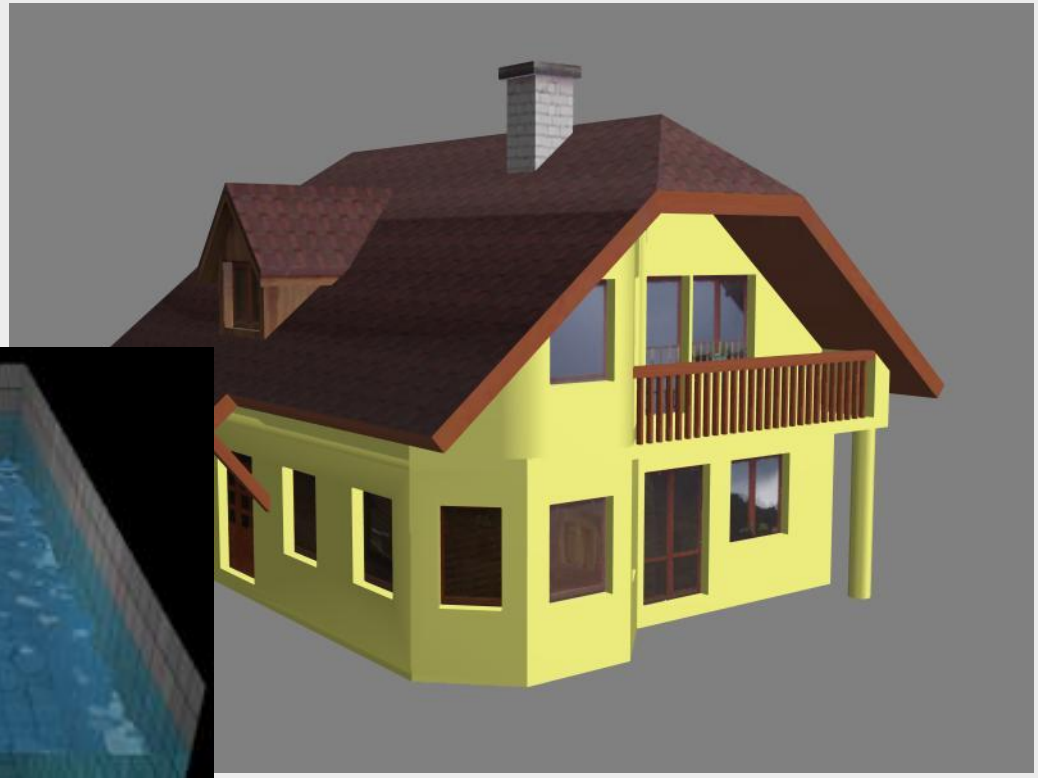
4.

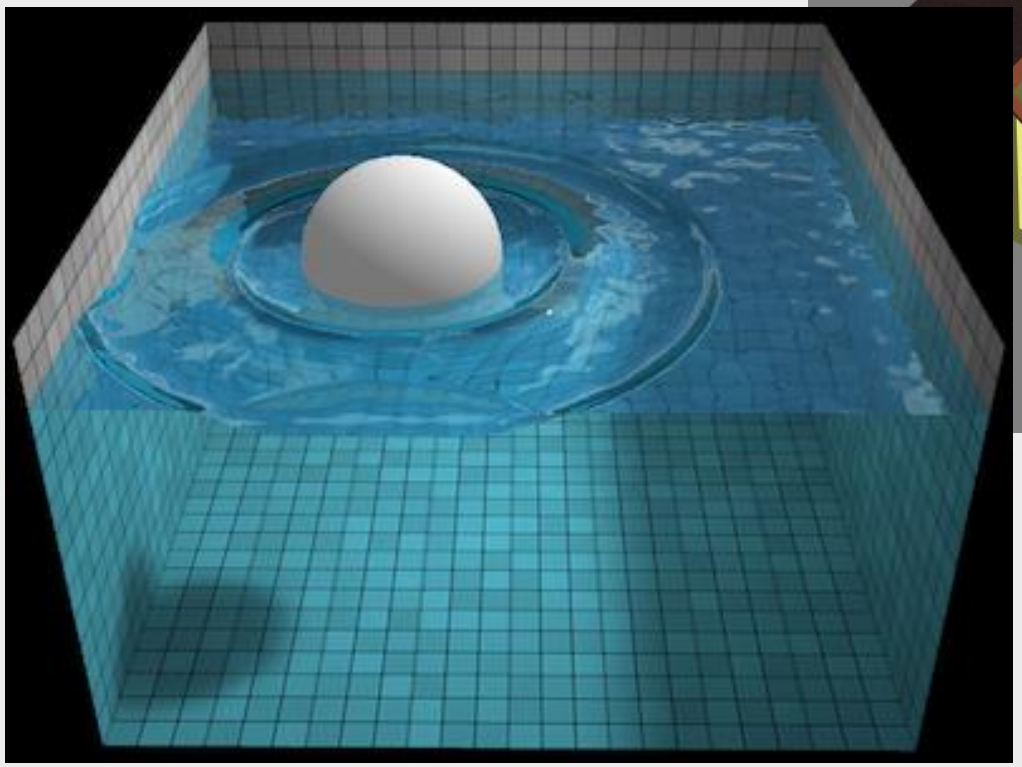
INTERNET APPLICATION

JAVASCRIPT (JQUERY), HTML5 (CANVAS), ACTIONSCRIPT (FLEX)

3D ONLINE

WEBGL





COURSE OUTLINE

ELEMENTS OF VISUAL PERCEPTION
GRAPHIC DESIGN & AESTHETICS
WEB DESIGN
LOGO DESIGN
INTERACTION AND NAVIGATION
BASICS OF USABILITY
WEB MULTIMEDIA
3D ON WEB
HTML5, SVG
FUTURE VISIONS

DATES, DETAILS, DOCUMENTS

DDD@WWW

HTTP://WEGA.SCCG.SK

Site opens next week

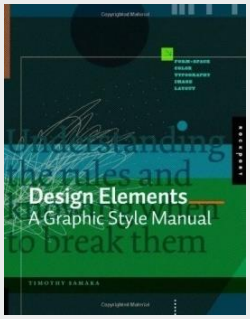
READ:

useit.com
jjg.netw3c.org
webpagesthatsuck.com

WATCH:

webdesignerdepot.com
abduzeedo.com
... you tell me

SOURCES



DESIGN ELEMENTS: A GRAPHIC STYLE MANUAL

Samara

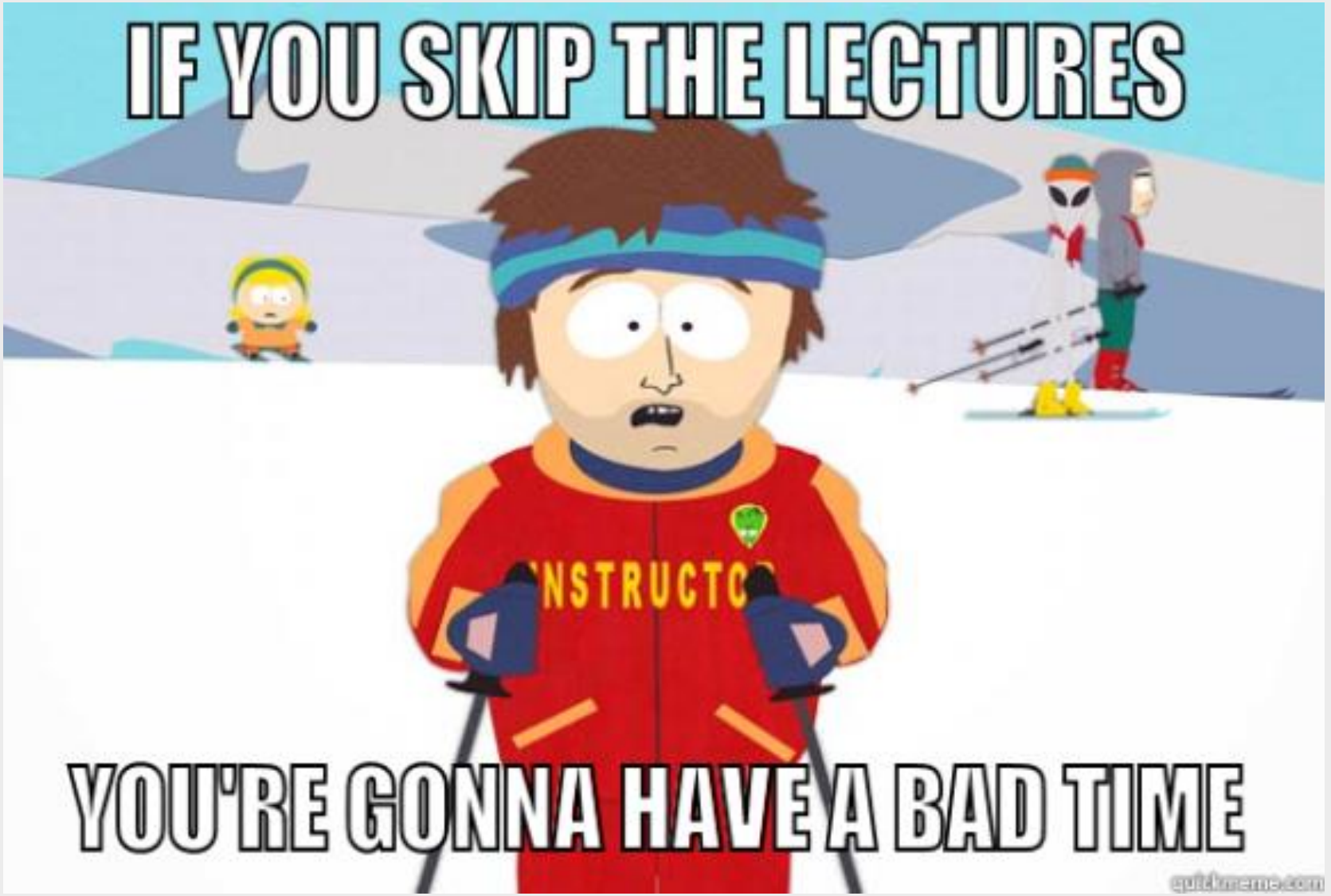
THE LAYOUT BOOK

Ambrose, Harris

A PRACTICAL GUIDE TO DESIGNING FOR THE WEB

Boulton

AND REMEMBER...



IN THE
BEGINNING
WAS THE WORD,
AND THE WORD
WAS ONLINE

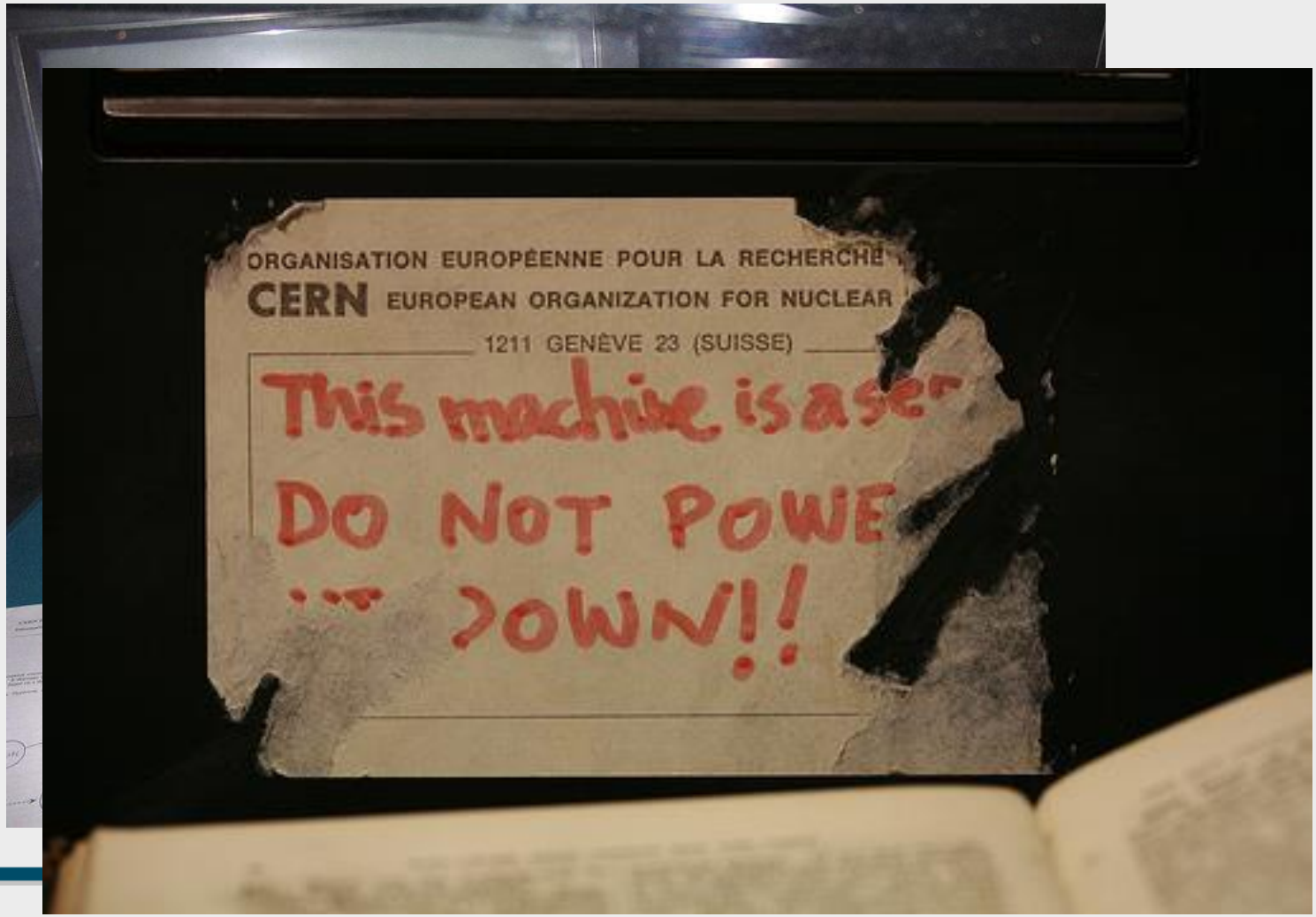
WWW:
BIOGRAPHY

INTERNET STONE AGE

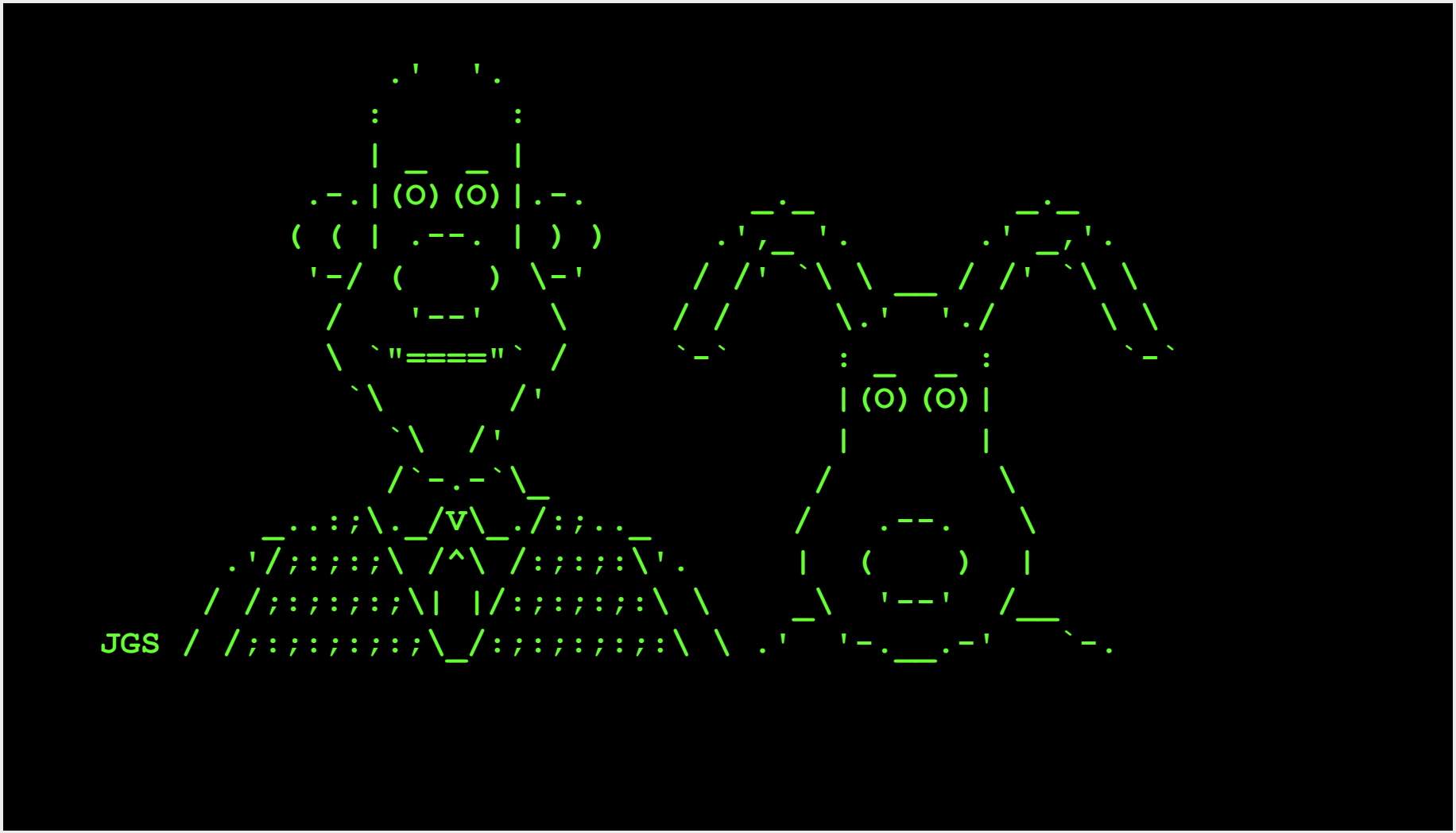
TELNET
GOPHER

THE FIRST WEBSERVER

1990, CERN, TIM BERNERS-LEE



TEXT-BASED GRAPHICS



WWW.ASCII-ART.COM

FIRST PICTURE ON THE WEB

1992, CERN, SILVANO DE GENNARO

GRAPHICAL WEB BROWSERS

ERWISE
1992

MOSAIC
1993

NETSCAPE NAVIGATOR
1994

INTERNET EXPLORER
1995

www.computerhistory.org

WEB DESIGN YESTERDAY

FRAMEs
IMGs
TABLEs

static web pages

weak formatting

dial-up internet
(56kbps = 7kB/s)

http://www.telegraph.co.uk/technology/6125914/How-20-popular-websites-looked-when-they-launched.html

HTML WEBPAGE (TODAY)

HTTP SERVER

Database
Server-side scripts

HTTP PROTOCOL

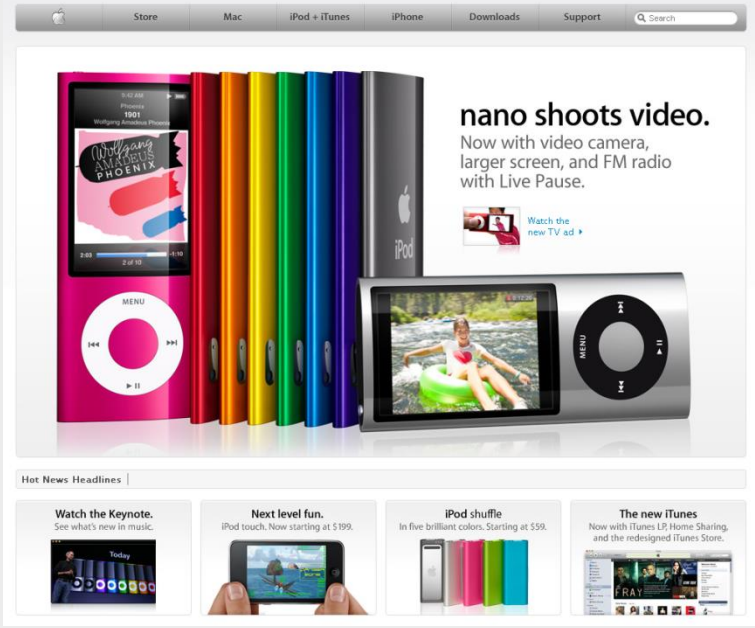
Client ▶ `Request` ▶ Server ▶ `Response` ▶ Client

WEB BROWSER

Document + formatting + multimedia = Webpage

WEB DESIGN TODAY

JAVASCRIPT, FLASH
ONLINE VIDEO
XML, XSLT, CSS
SVG, MATHML, CANVAS
DYNAMIC WEBPAGES
BROADBAND INTERNET
(250 MBIT =
4000 X DIAL-UP)



WEB DESIGN TOMORROW

AND WEBMASTER SAW CSS,
THAT IT WAS GOOD.

AND WEBMASTER DIVIDED
CSS FROM HTML.

WWW: ANATOMY

WEB SITE CREATORS

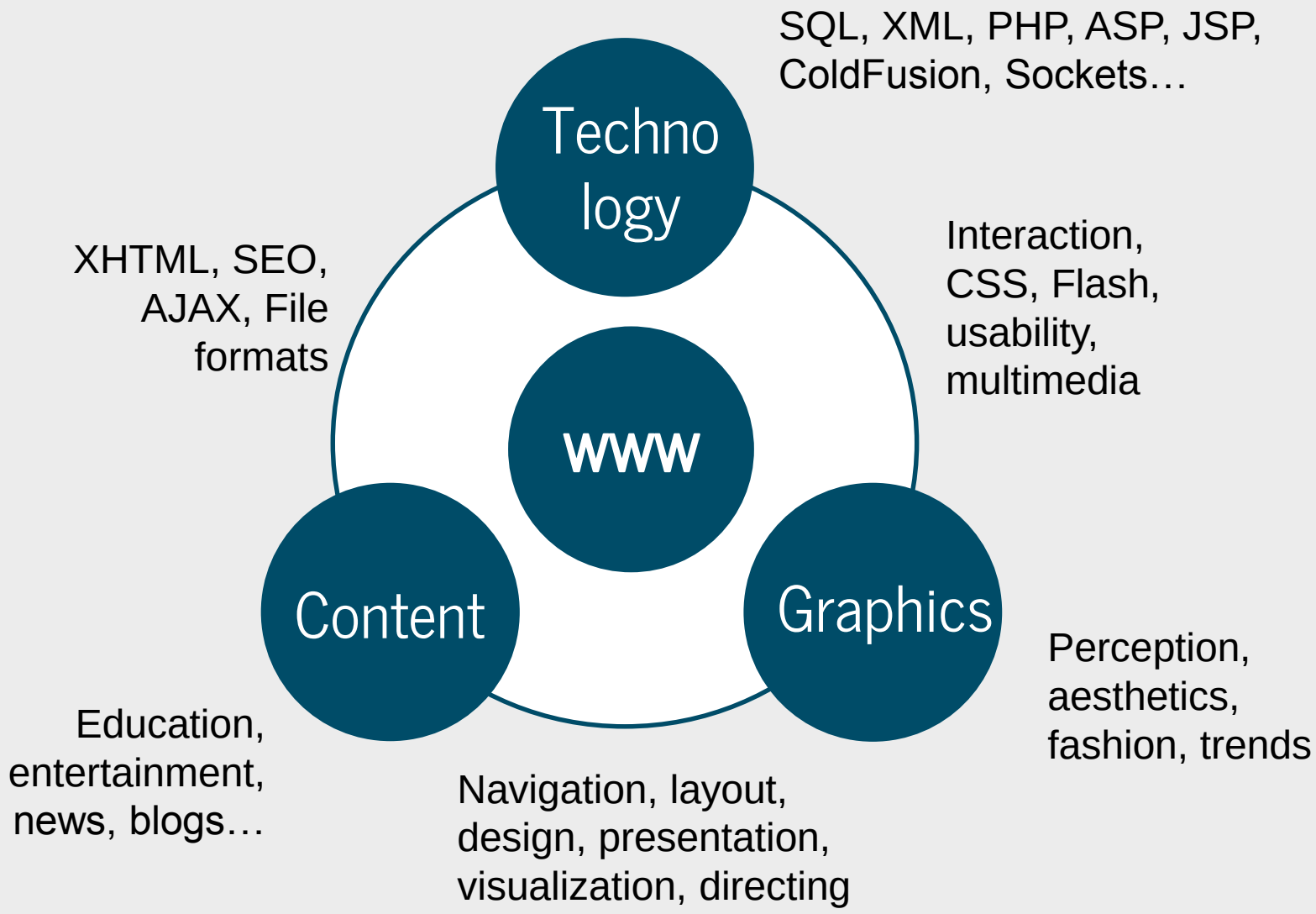
TECHNOLOGY
Programmers
Administrators

CONTENT
Authors
Editors

GRAPHICS
Web designers
GUI designers

Which part is the crucial one?

WEB SITE ELEMENTS

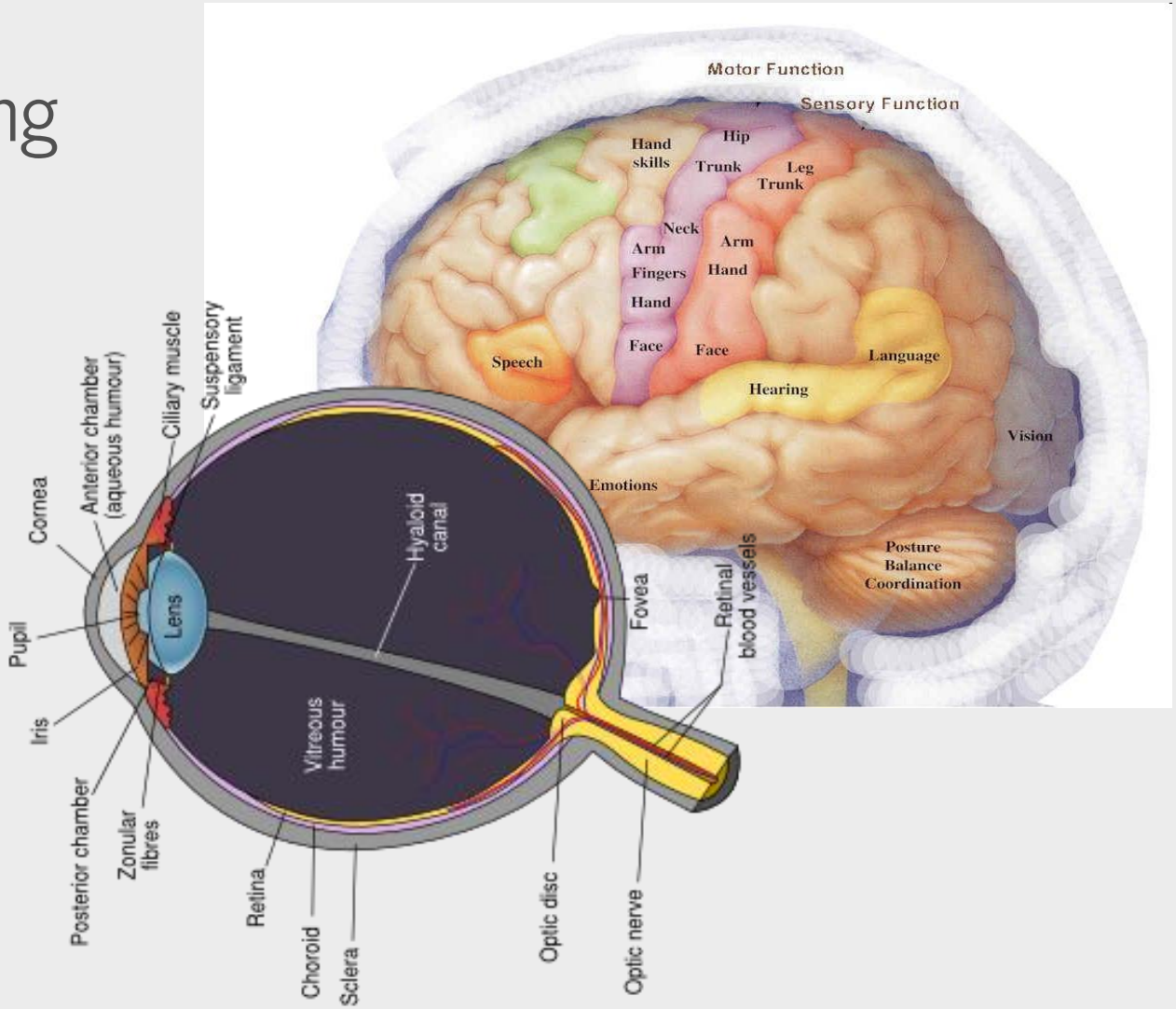


VISUAL PERCEPTION

HUMAN VISUAL SYSTEM

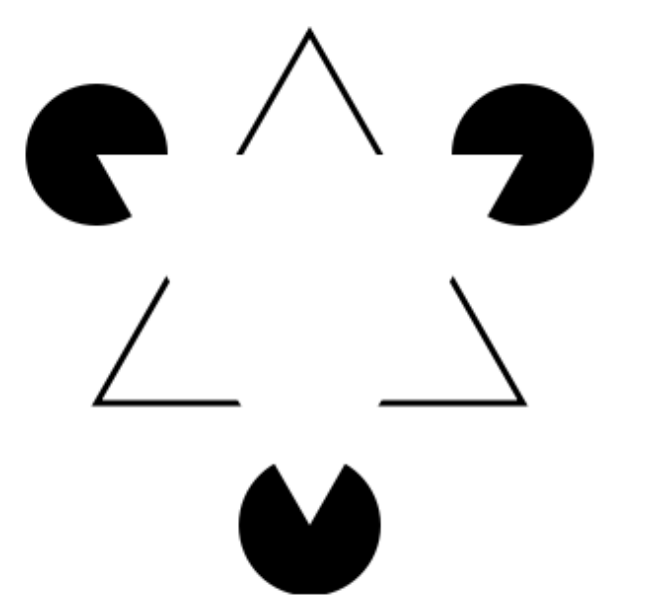
POWERFUL
Parallel processing
Adaptable

LIMITED
Easy to fool
Imprecise



OBJECT DETECTION

EDGE DETECTION
CONTRAST
EDGE ENHANCEMENT



ELEMENTS OF VISION - FEATURES

SENSORY MEANING,
UNIVERSAL,
FAST,
SIMPLE

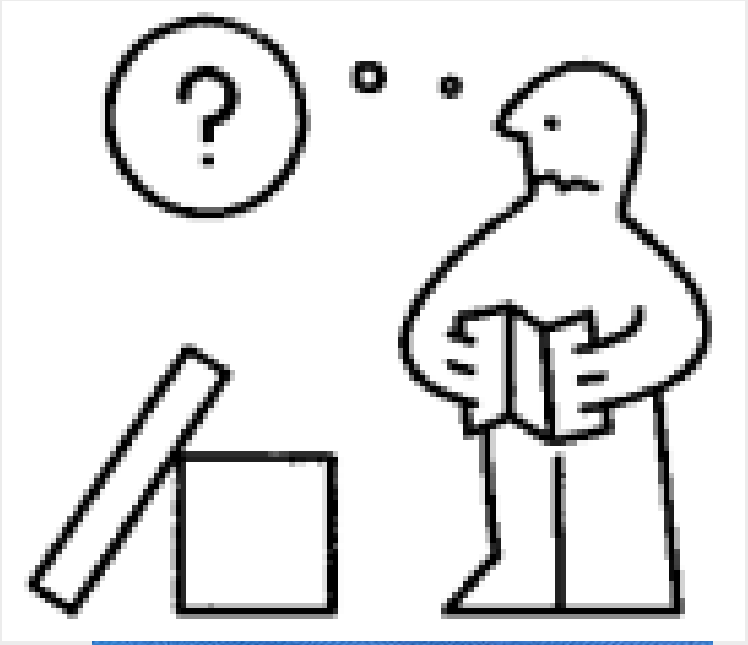
E.G.
COLOR, EDGE,
FOCUS, MOTION

ELEMENTS OF VISION - SYMBOLS

ARBITRARY MEANING

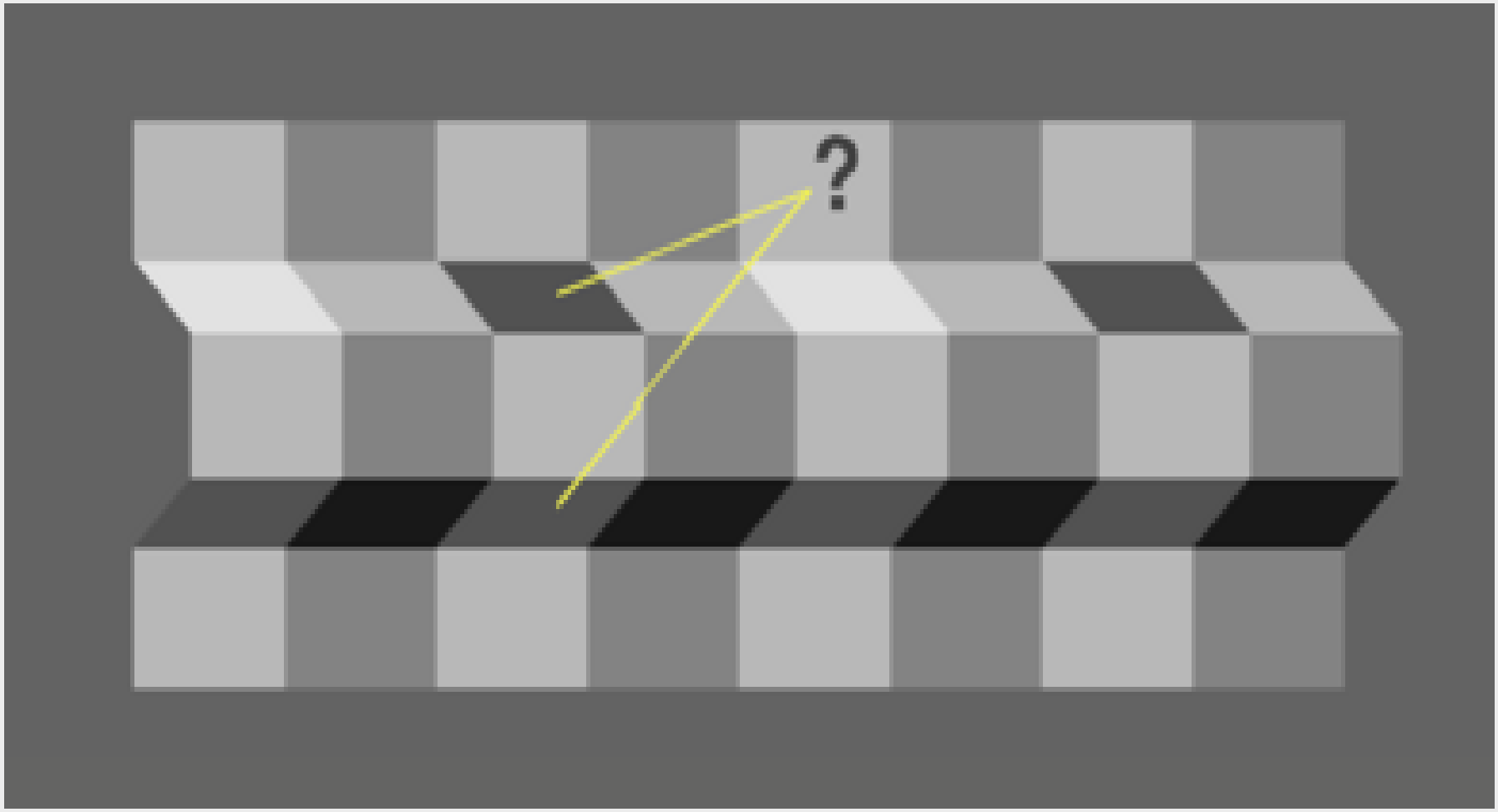
EMBEDDED IN CULTURE

NEED LEARNING



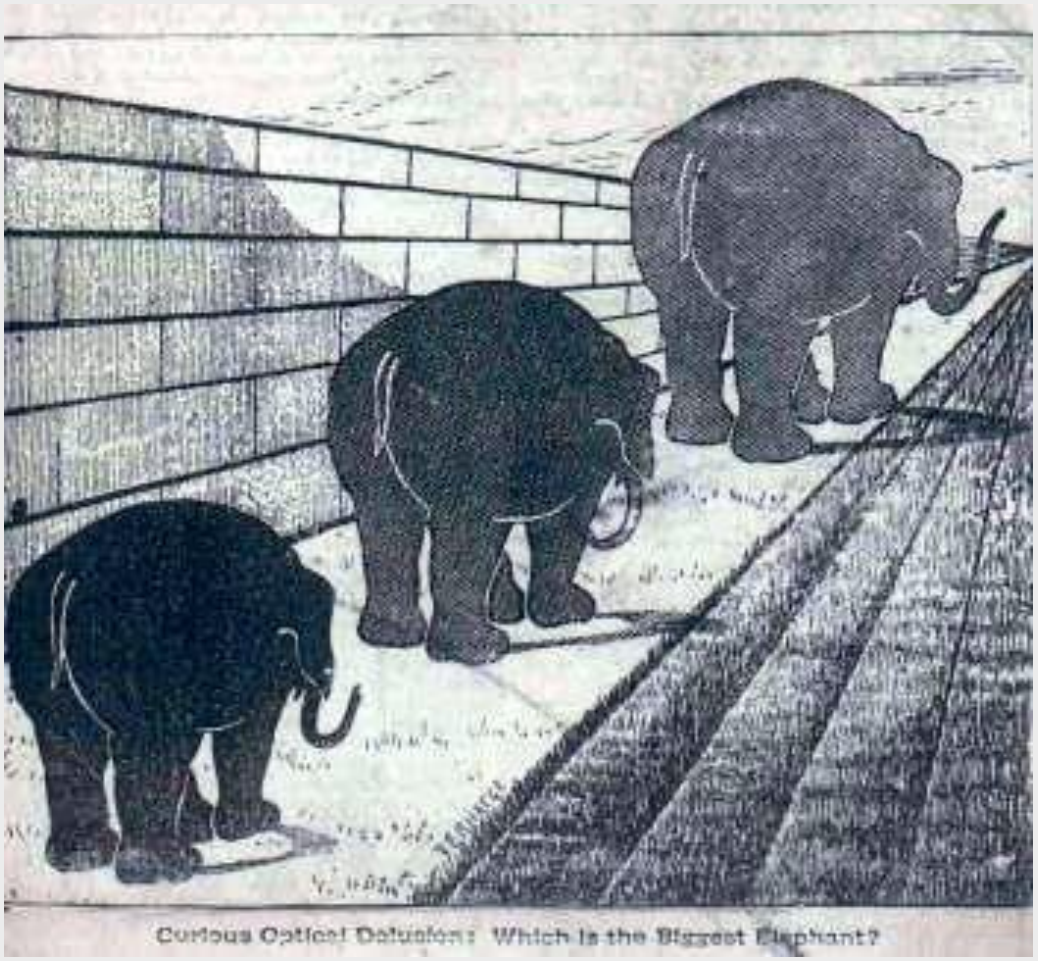
RISKS OF VISUAL PERCEPTION

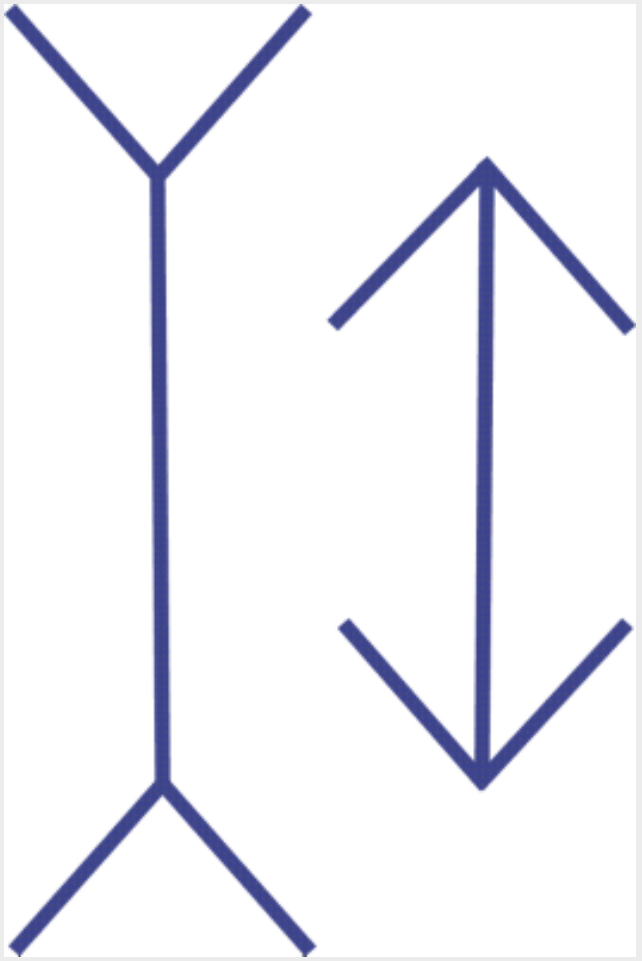
LUMINANCE COMPENSATION



RISKS OF VISUAL PERCEPTION

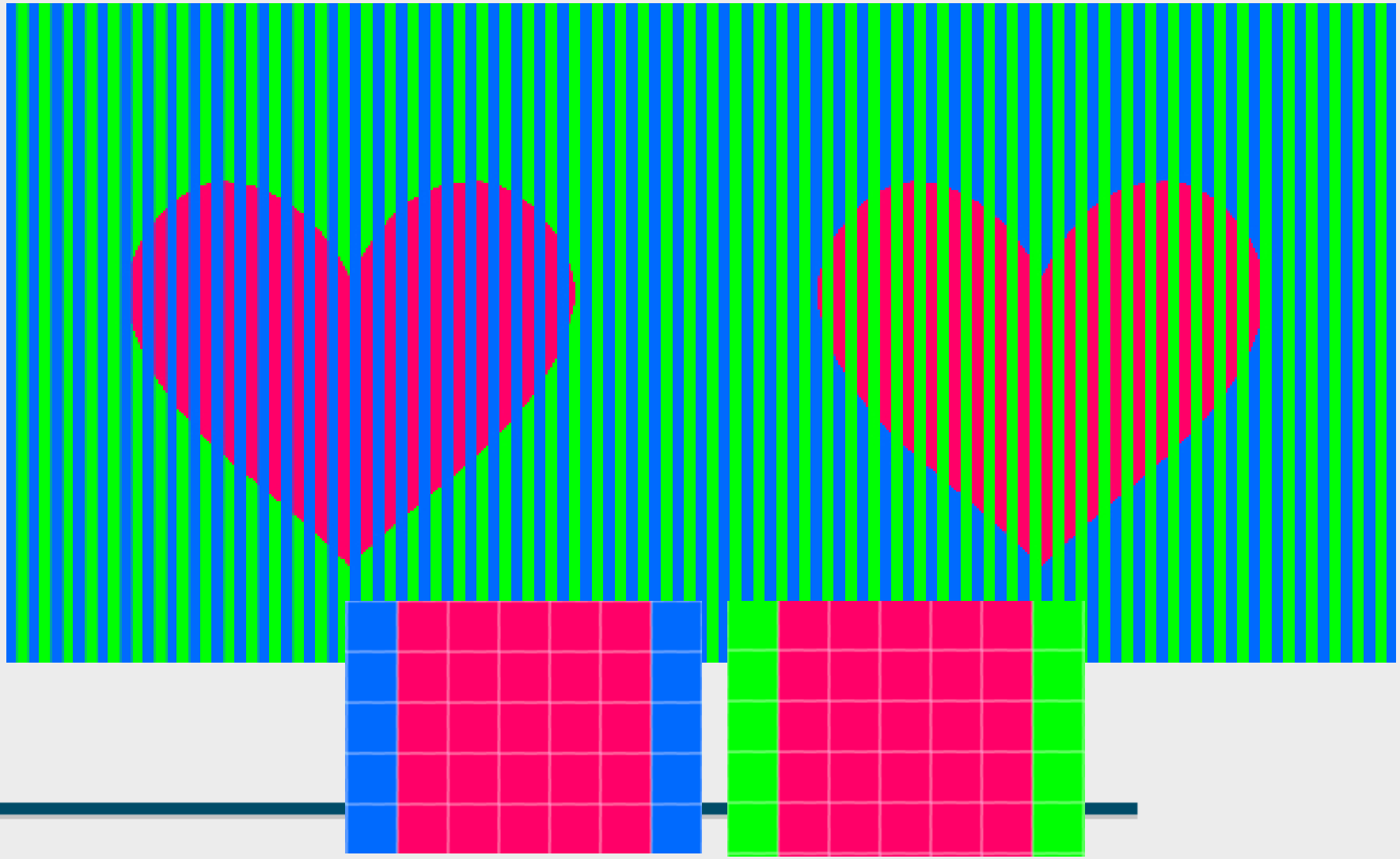
PERSPECTIVE COMPENSATION





RISKS OF VISUAL PERCEPTION

COLORS IN CONTEXT



WHAT AFFECTS OUR PERCEPTION?

A. BIOLOGY
   Anatomy of the eye, neural system
B. PSYCHOLOGY
   Attention, patience
C. CULTURE
   Experience, society, fashion
D. TECHNICAL ASPECTS
   Network, display, input device

MORE: 2-AIN-262 INFORMATION VISUALIZATION

WHY AM I TELLING YOU THIS?

THEORETICAL BACKGROUND

OUR FUTURE PLAYGROUND

AVOID MISTAKES

UNDERSTAND DESIGN DECISIONS

KNOW WHAT THE RULES ARE

And know how to break them

NEXT: COLORS