Ajax design challenges

conceptual metaphor

time

make

take

save

movement

navigate
browse
surf

interaction

create

retrieve

update

delete

Sapir–Whorf hypothesis

It's really several technologies, each flourishing in its own right, coming together in powerful new ways.

— Jesse James Garrett

If the traditional web was letter writing, Ajax is instant messaging.

— Derek Powazek

Roller skates for the web.

— **Bruce Sterling**

The name is shorthand for Asynchronous JavaScript + XML.

— Jesse James Garrett

Asynchronous JavaScript And XML

Asynchronous
JavaScript
And
XML
HTML
JSON

Asynchronous

JavaScript

And

DHTML

XML

DOM Scripting

Asynchronous JavaScript And XML

Communicating with the server without refreshing the whole page.

— **Me**

frames
iframe
Flash
XMLHttpRequest

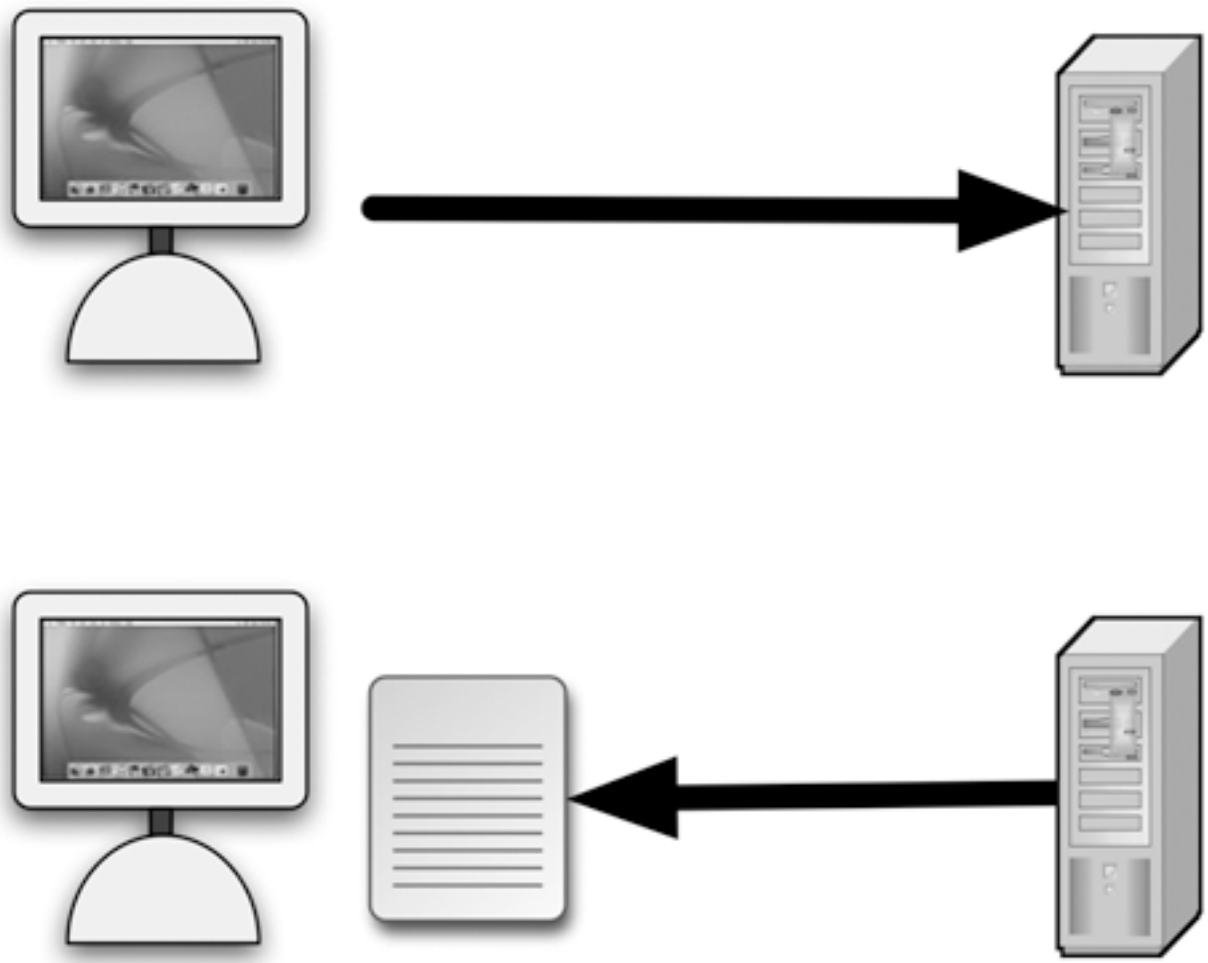
Microsoft IE5

Mozilla Safari Opera

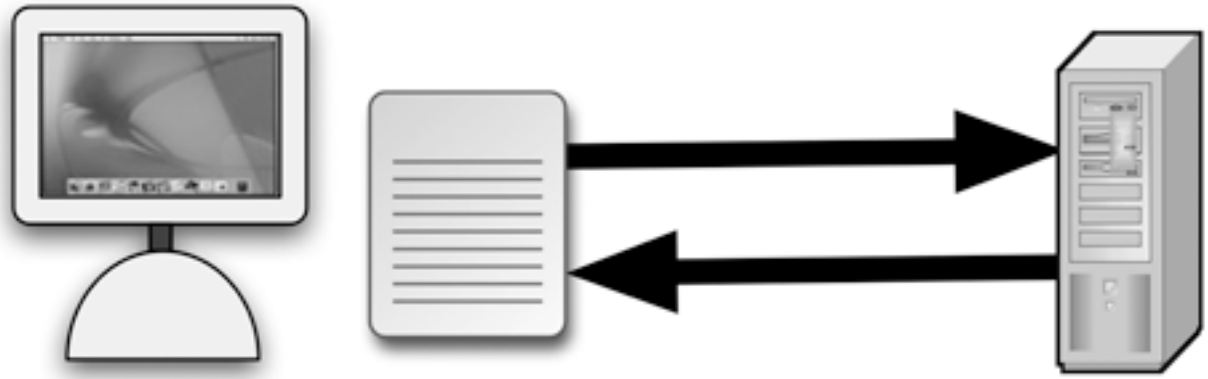
W3C

XMLHttpRequest

synchronous



asynchronous



XMLHttpRequest

SELF
SERVICE
mt.
50

thin client

browser « » server

display storage

processing

rich client

browser « »XHR« » server

display storage

processing

APPEL

deceptively rich client

browser « »XHR« » server

display

storage

processing

progressive enhancement

behaviour JavaScript

presentation CSS

structure HTML

content

```
<p>
This is the introduction
</p>

<p style="font-weight:bold">
This is the introduction
</p>

<p class="intro">
This is the introduction
</p>
.intro { font-weight:bold; }
```

```
<a href="help.html">
Need help?
</a>
<a href="help.html"
on click="window.open
(this.href); return false">
Need help?
</a>
<a href="help.html"
class="help">
Need help?
</a>
```

```
window.onload = function(){
 // get links with class help
 // loop through each one
 link.onclick = function() {
  window.open(this.href);
  return false;
 };
};
```

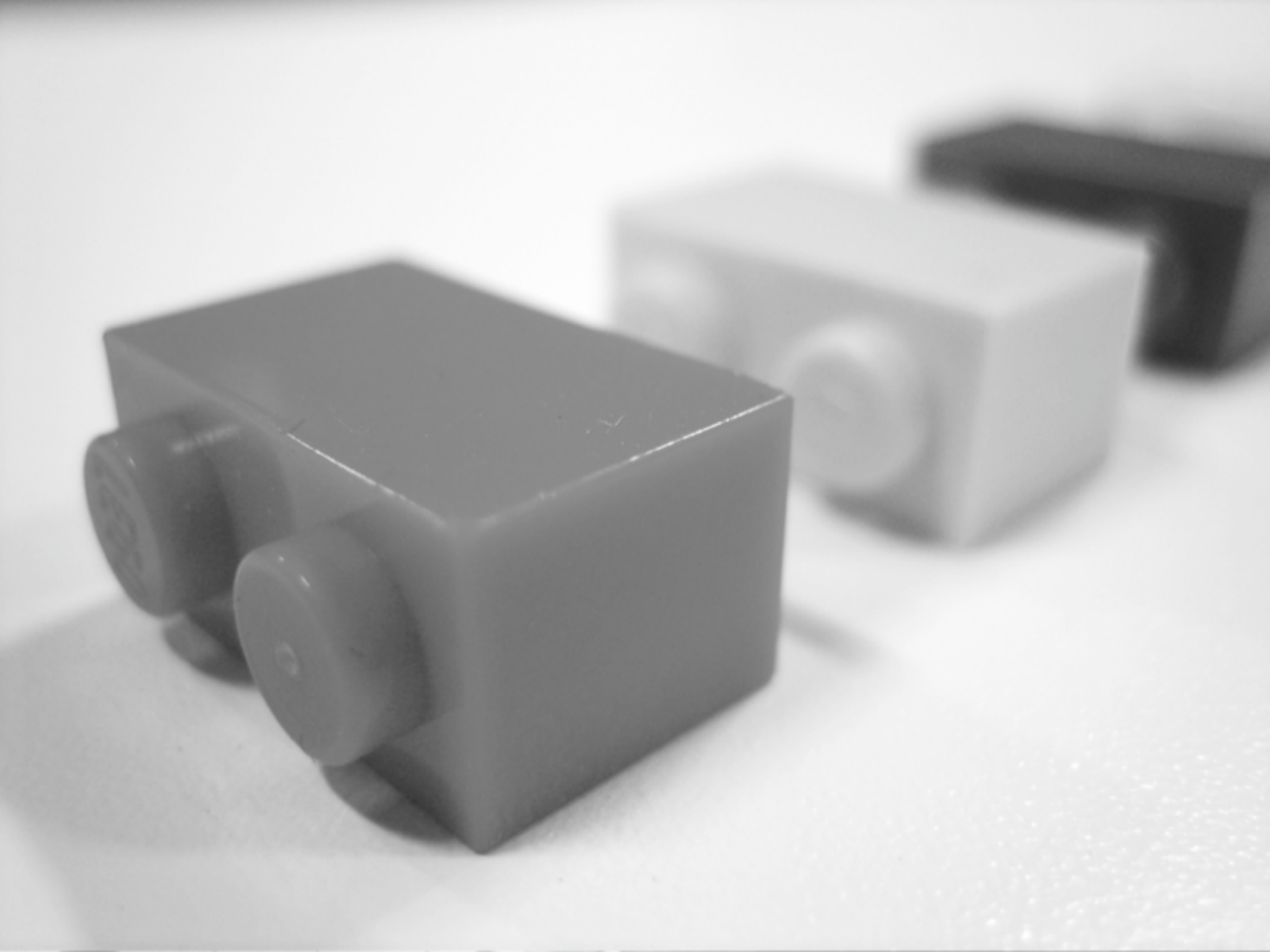
beware

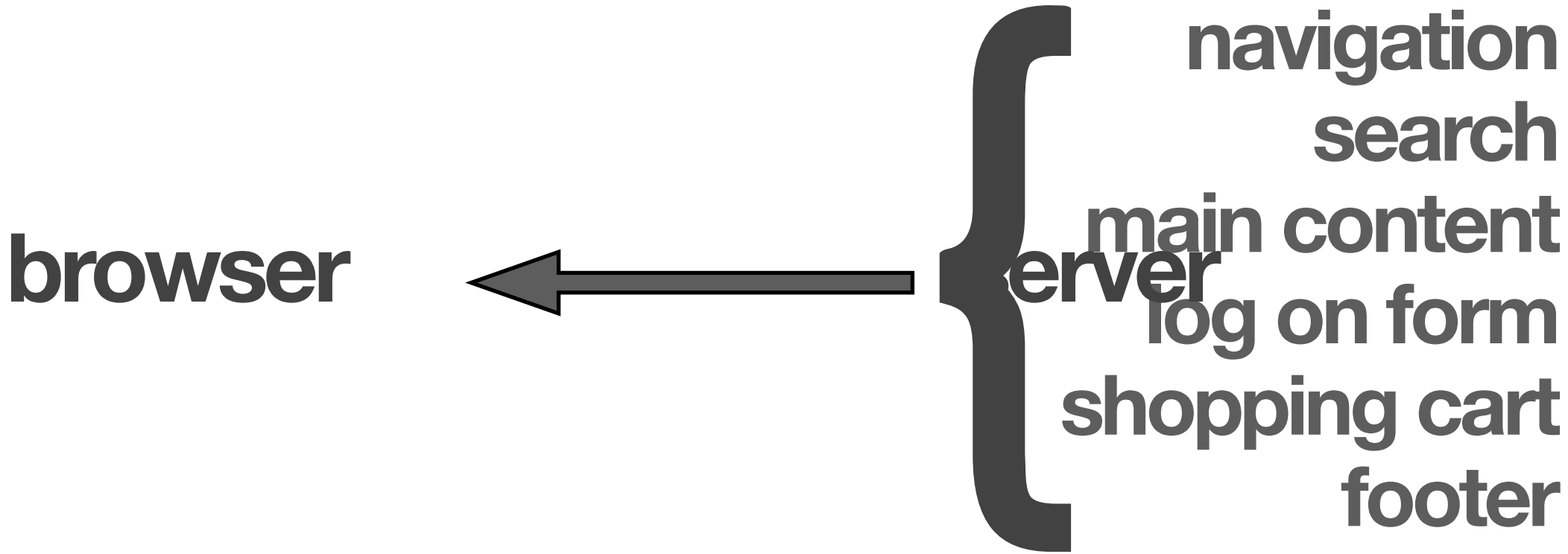
```
<a href="javascript:...">

<a href="#" onclick="...">
```

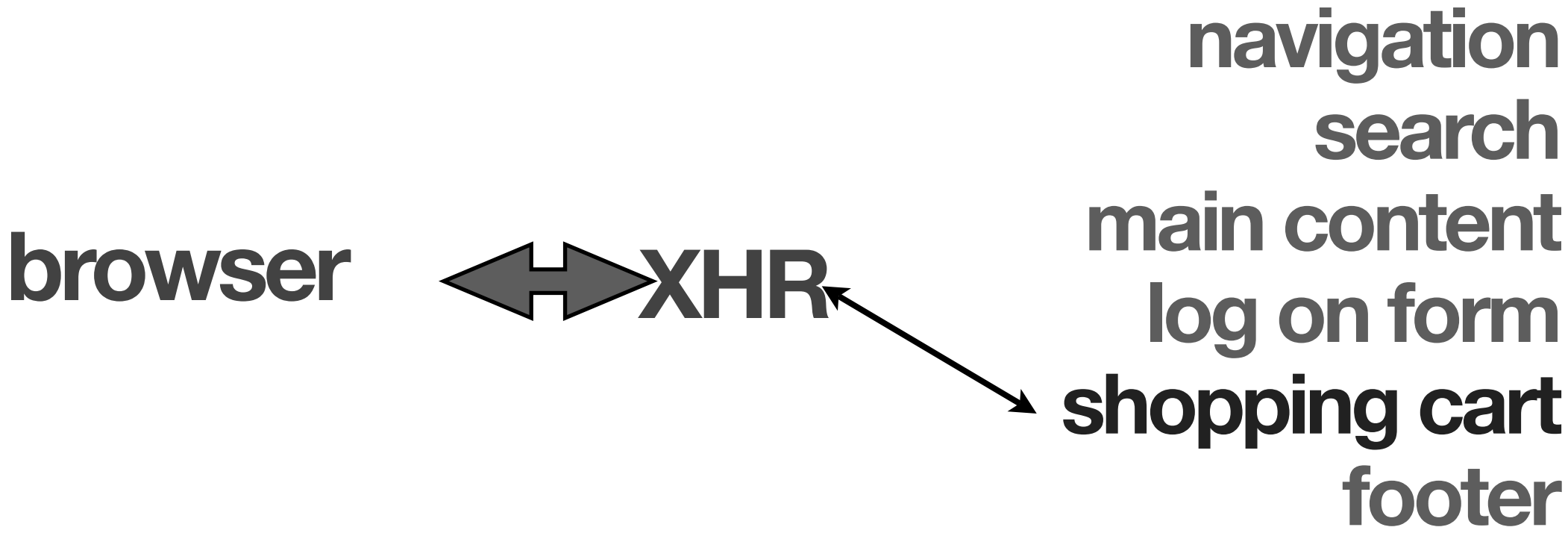
progressive enhancement

XMLHttpRequest

Hijax




browser
server
navigation
search
main content
log on form
shopping cart
footer


navigation
search
main content
log on form
shopping cart
footer
browser
XHR

paradox?

plan for Ajax from the start

implement Ajax at the end

pattern recognition

sign up

add a comment

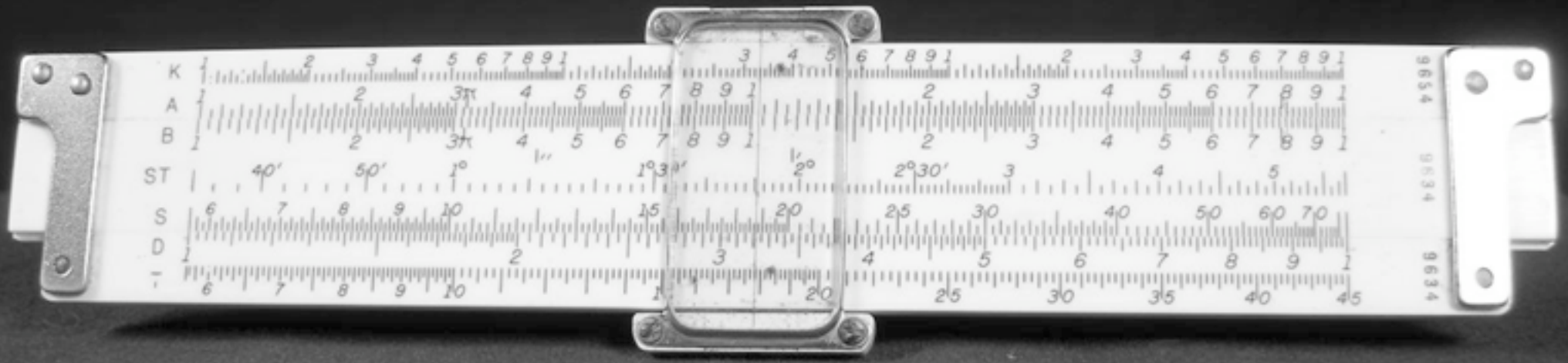
rate this

add to cart

search results?

pagination?

documents



applications

WTF?

what is happening?
what just happened?

conventions

status indicators

yellow fade

drag’n’drop

Push button
Wait for signal

PEDESTRIANS
YOUR
RED/GREEN
MAN SIGNAL IS
ON THE POLE
NEXT TO YOU

beyond the browser

the back button

bookmarking

libraries & frameworks

Software, like all technologies, is inherently political.
Code inevitably reflects the choices, biases and desires of its creators.

— **Jamais Cascio**

Find stuff and do stuff to it.

— jQuery

rich internet applications

rich
writing
typography
punctuation

thank you

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http://flickr.com/photos/flydown/42047131/
http://flickr.com/photos/bizzygirl/291918549/
http://flickr.com/photos/benchan/150094224/
http://flickr.com/photos/rogerjones/121736518/
http://flickr.com/photos/chuckbiscuito/161971512/