

# The edge of the web

Paul Robert Lloyd

Responsive Day Out

1 March 2013

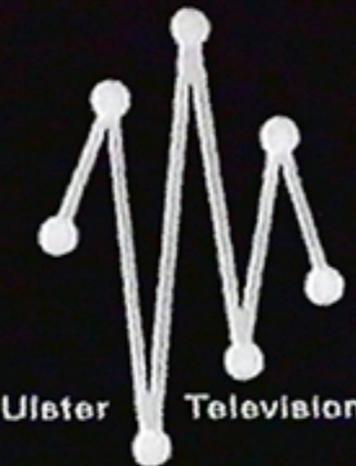


- Just seen the titles for The Avengers.
- **Designed by Jerome Gask in 1963.** These titles are **typical of those of this period.**
- Television may have been around **20 years old** at the time, **but still a crude medium.**
- Pictures were low definition, unfocused at the edges and black and white of course.
- Different television sets also cropped the picture at different points.

THE  
MAN WITH  
THE GOLDEN  
ARM



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BBC



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8.25  
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channel 8



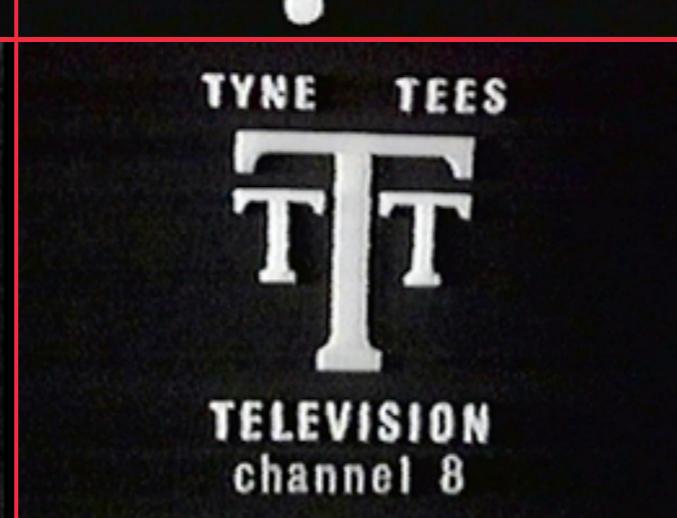
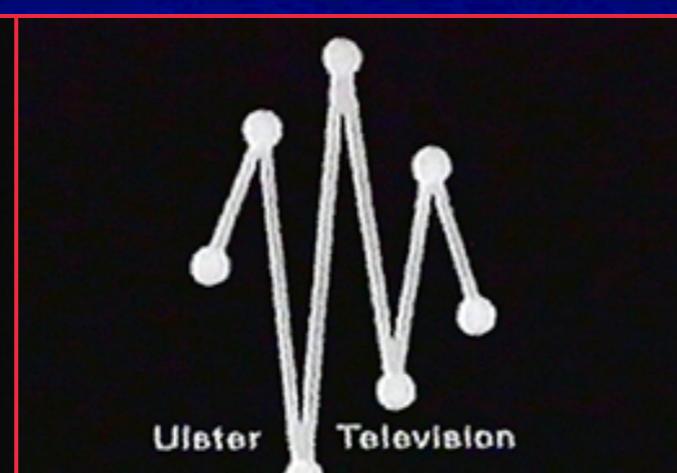
SOUTHERN

HARLECH

- Designers dealt with these conditions by using **highly contrasting shapes, and large, bold lettering.**
- Titles required, **strong tonal contrast**, and **illustrations with heavy lines and little detail.**
- The influence of earlier cinema work by Saul Bass can also be seen (image top left).
- **Pop art and op art themes were also prevalent;** the titles for Harlech Television (later HTV, bottom right) are almost psychedelic.



- Colour broadcasts were introduced towards the end of 60's.
- Yet for many years, designers needed to recognise that **many viewers still owned black and white sets**.
- This **ident for BBC1 introduced in 1981** was designed using highly contrasting colours for this reason.



- So why am I talking about television design at a conference about responsive web design?
- Sometimes, its helpful to look beyond our little bubble, and explore wider design landscape and history.
- I could spend 20 minutes talking about television graphics!
- But you can see how designers in television adapted their craft to suit television.



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...

• Can we say the same is true today on the web?

• Does the work we're producing make any consideration to the needs of this particular medium?

• [PAUSE]

“

*Creating layouts on the web  
has to be different because  
**there are no edges.***

— Mark Boulton

## A Richer Canvas

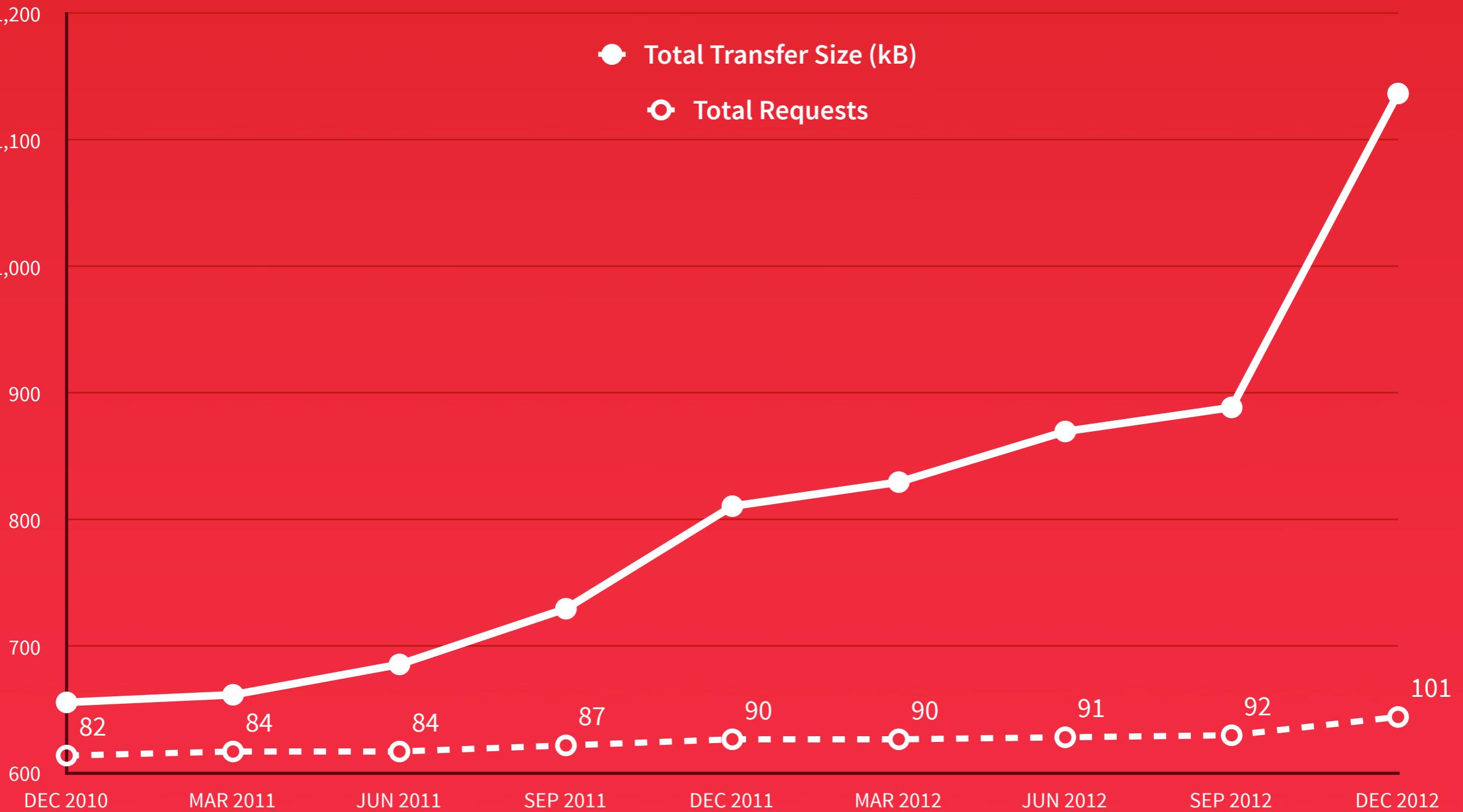
[markboulton.co.uk/journal/a-richer-canvas](http://markboulton.co.uk/journal/a-richer-canvas)

- We're all at a conference about **responsive design**. We're certainly starting to.
- A lot has been written about how our practice needs to change.
- Mark has written a lot about how **our approach to design on the web needs to change**.
- “There are no edges”.



[nasa.gov/mission\\_pages/cassini/multimedia/pia12320.html](http://nasa.gov/mission_pages/cassini/multimedia/pia12320.html)

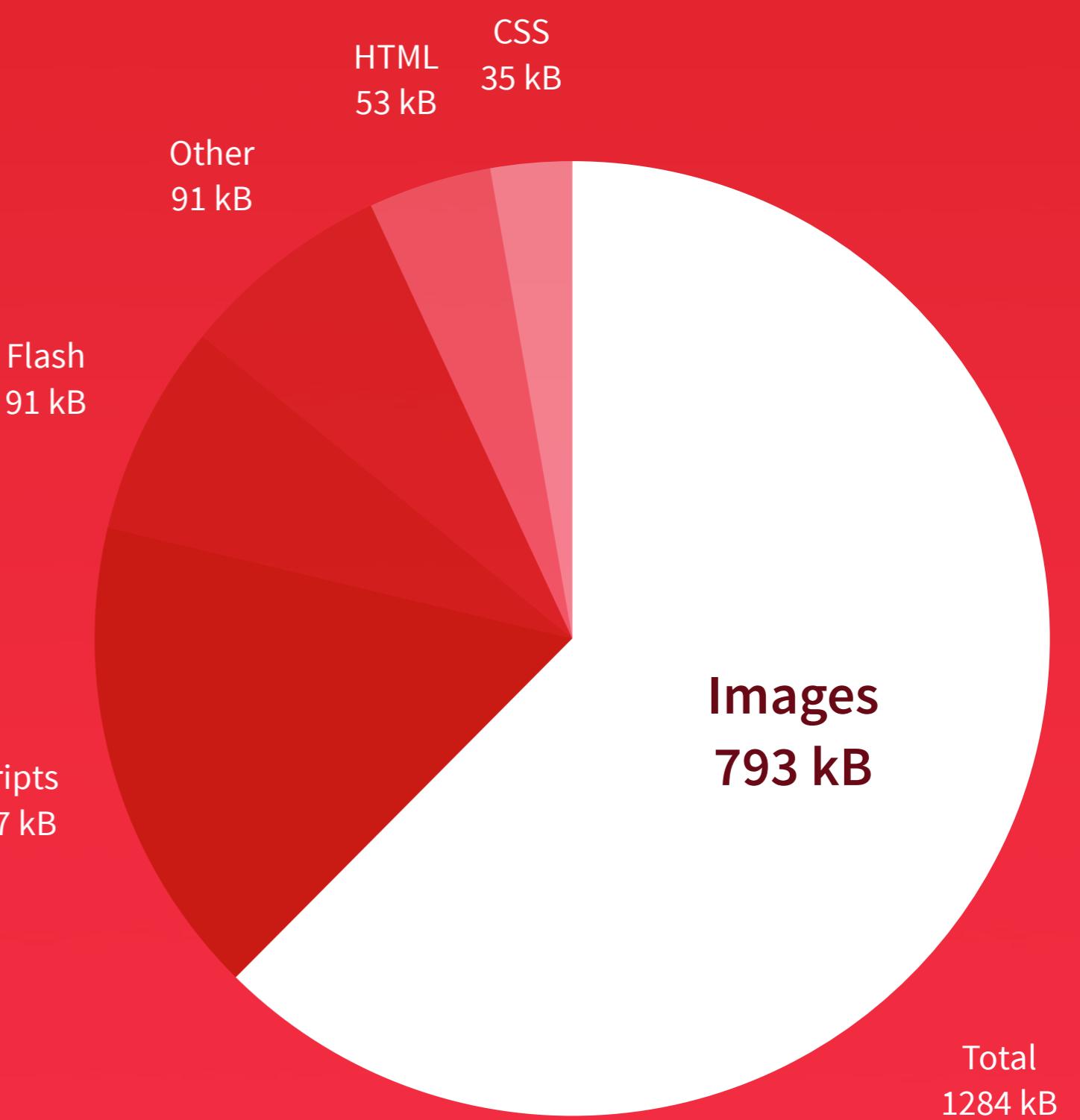
- The web does have **edges**, but they **are fuzzy and ill-defined**.
- They are **not seen**, but **felt**.
- We're essentially designing software.
- Our work is **less constrained by the dimensions of the page**, but the **capabilities of the network**.
- The experience is affected just as much by bandwidth and latency as it is by any visual concerns.
- I'll **ask the question again**; is the work we're producing well suited to the medium?
- [PAUSE]



## Total Transfer Size and Total Requests: Top 1000 Sites

<httparchive.org/trends.php>

- Looking at this graph, you would have to say **no, it isn't**.
- The average size of a web age is increasing exponentially, now well over a megabyte.
- This at a time when the conditions in which web pages are viewed are increasingly unknown.
- By that measure, our work is failing to meet the needs of the medium in a spectacular way.



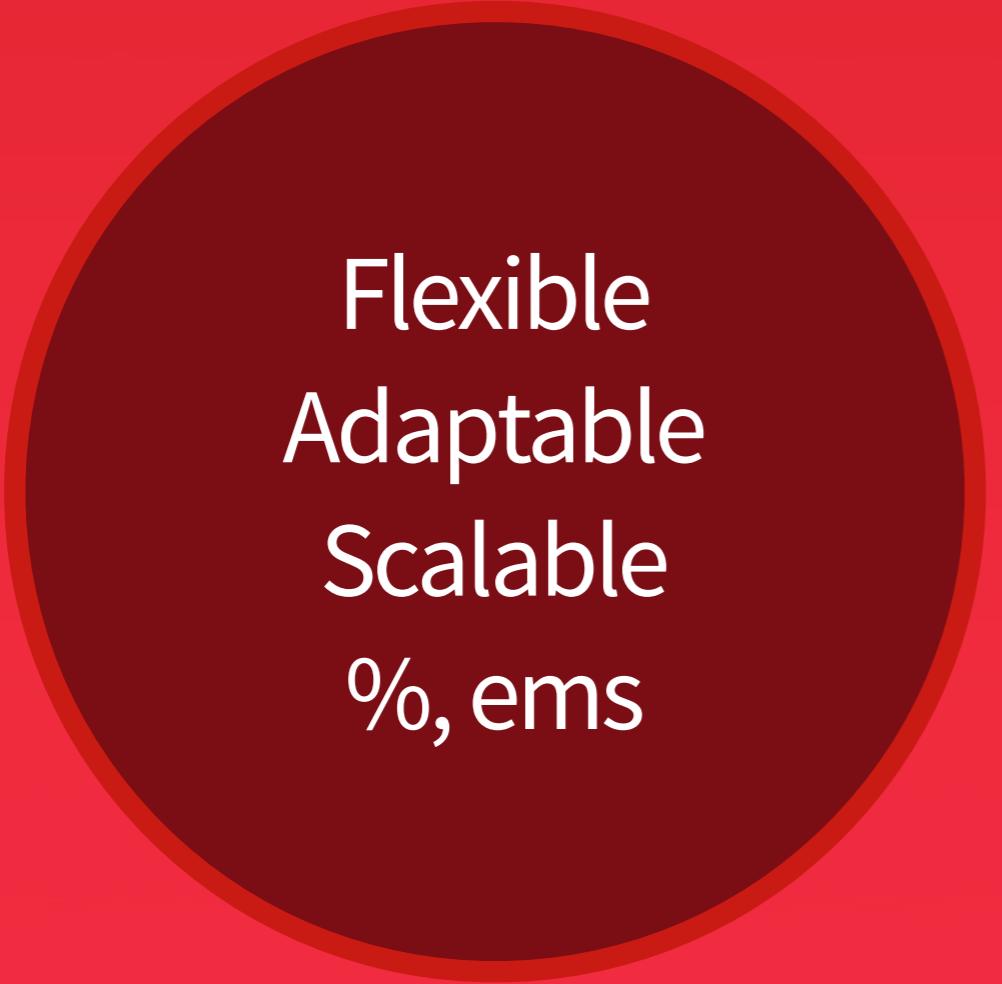
## Average Bytes per Page by Content Type

<httparchive.org/interesting.php>

- Much of this **bloat is taken up by images**—nearly two thirds of all requests are for images.
- As we continue to refine our practice, images have quickly become the focus of our attention.
- There are now **several proposals calling for finer control of images**; <picture> and @srcset



- I like to use this image when talking about responsive images.
- The idea of a responsive bitmap image is a bit of a misnomer.
- However we try to include images on the web, we're kind of forcing them into place.



Flexible  
Adaptable  
Scalable  
%, ems

## The web

- When we think about the web, we talk about it being a **flexible, adaptable, fluid**.
- We can increase and decrease text size.
- And we're describing layouts using **proportional measures** like percentages and ems.

The diagram consists of two main components. On the left, a dark red circle contains white text listing four properties: 'Flexible', 'Adaptable', 'Scalable', and '%, ems'. Below this circle is the text 'The web'. On the right, a white rectangle contains dark red text listing three properties: 'Fixed', 'Static', 'Rasterised', and 'px'. Below this rectangle is the text 'Bitmap images'.

Flexible  
Adaptable  
Scalable  
%, ems

Fixed  
Static  
Rasterised  
px

The web

Bitmap images

- Although we can embed images on webpages, **bitmap images are not a native image format.**
- They are of a **fixed size**, and **measured in pixels**.
- If we scale them up, the quality of the image diminishes.
- If we scale them down, we end up downloading more bytes than are required to display that image.

Flexible  
Adaptable  
Scalable  
%, ems

The web

Flexible  
Adaptable  
Vectorised  
%, ems

Scalable Vector Graphics (SVG)

- **Vector images** on the other hand, in particular SVG, **are a perfect fit**.
- SVG is XML based, if you know HTML, you're well on your way to understanding SVG.
- Like the web, it is also scalable. We can use proportional units. It can even be scripted and interacted with.
- **Should more imagery on the web should be vector based.** Yes.



- But is there **no longer a place for rich, detailed bitmap photography on the web?**

“

*The responsive web will be  
99.9% typography*

— James Young

**The responsive web will be 99% typography**

[welcomebrand.co.uk/thoughts/the-responsive-web-will-be-99-9-typography/](http://welcomebrand.co.uk/thoughts/the-responsive-web-will-be-99-9-typography/)

- James Young wondered the same thing, and suggested the responsive web will be 99.9% typography.
- This is Similar to Oliver Reichenstein’s 2006 article, in which he stated that web design is 95% typography.

## Responsive Day Out

Friday, 1 March 2013 · The Corn Exchange, Brighton, England.

Tickets cost £50+VAT but they're all sold out now.

### Speakers

- \* Tom Maslen
- \* Andy Hume
- \* Anna Debenham
- \* Bruce Lawson
- \* David Bushell
- \* Elliot Jay Stocks
- \* Jeremy Keith
- \* Josh Emerson
- \* Laura Kalbag
- \* Mark Boulton
- \* Owen Gregory
- \* Paul Lloyd
- \* Richard Rutter
- \* Sarah Parmenter

### What is Responsive Day Out?

An affordable, enjoyable gathering of UK designers and developers sharing their workflow strategies, techniques, and experiences with responsive web design. You'll hear from Anna Debenham, Mark Boulton, Sarah Parmenter, Elliot Jay Stocks, Laura Kalbag, Bruce Lawson, and others.

-- press space for next page --

Arrow keys: Up and Down to move. Right to follow a link; Left to go back.

H)elp O)ptions P)rint G)o M)ain screen Q)uit /=search [delete]=history list

- The simple fact is, sometimes, the web is **100% typography—100% text**.
- For example as when viewed in a text-only browser like Lynx.
- **Sometimes it isn't even seen at all**, but heard.
- This is a totally **valid means of consuming content** on the web.
- You can't displaying images in this scenario; that's **not opinion, but plain fact!**

# Meaning is the baseline

# Design is an enhancement

- I find knowing this **hugely liberating**.
- Suddenly, images, typography, layout, design—they are all **enhancements**.
- All you can do is merely provide suggestions, hints. There is **no guarantee your design will be seen**.
- What's more important is that **content is well structured, and meaningful**.
- We all know this, right?

# When is an image not an <img/>?

- Therefore, when we think about image usage on the web, it's **less about whether it should be included as part of the design.**
- **More a question of if and how we include images in our markup.**
- So how do we make that decision?



## Interface

Vector (SVG)  
Icon font

CSS image replacement

### Interface:

- SVG images or maybe icons fonts, applied via CSS using image replacement methods.
- Branding assets also fall under this category.



## Interface

Vector (SVG)  
Icon font

CSS image replacement



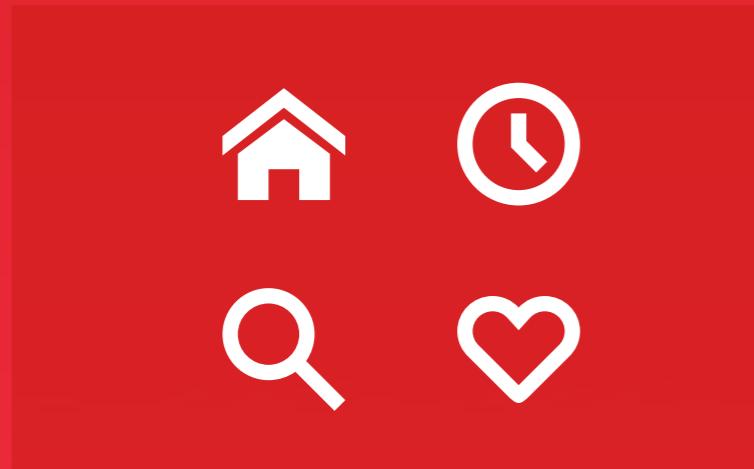
## Content

Optimised bitmap  
~80% quality

`<img src="" />`

### Content:

- Include important images in the mark-up.
- Such images are likely the exception rather than the rule, so can be saved with reasonably good quality.



## Interface

Vector (SVG)  
Icon font

CSS image replacement



## Content

Optimised bitmap  
~80% quality

`<img src=""/>`



## Decorative

Optimised bitmap  
~60% quality

`<div data-imgsrc="">`

### Decorative:

- Placeholder in markup, which we can **manipulate in the DOM with JavaScript**.
- Not placing the image in the markup, means we can avoid any race conditions.
- With JS, we can then make all kinds of judgements and detections as we see fit.
- **But what of the quality** of these images...?

Standard resolution image

8kb



'HiDPI' image

46kb



## UK unemployment total falls to 2.5m

UK unemployment fell in the three months to December, while the number in work also jumped to a new record, official figures show.

The jobless total fell by 14,000 between October and December to 2.5 million, [the Office for National Statistics \(ONS\) said](#).

The number in work rose by 154,000 to 29.7 million. More than 580,000 more people are employed than a year ago.

The number of people claiming Jobseeker's Allowance in January fell by 12,500 to 1.54 million.

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The number of people claiming Jobseeker's Allowance in January fell by 12,500 to 1.54 million.

- But what of the images themselves, if and when they are displayed?
- We've become intently concerned about their quality, especially on HiDPI displays.
- But if decorative images are not referenced in the mark-up, **we've already made a judgement call about their value**.
- If they aren't valuable enough to be included in the page source, **perhaps then we don't need so much about their quality**.
- Take these two images: **does the higher resolution warrant the download of an additional 38kb?**

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24 February 2013



The Afghan president orders US special forces out of Wardak province, over claims Afghans working for them are involved in torture and disappearances.

## Italy votes in key general election

24 February 2013

Italians vote in a general election regarded as crucial for the country's effort to tackle its economic problems and for the eurozone at large.

## Hollywood awaits 'open' Oscars

24 February 2013

Final preparations are made for what is likely to be one of the most unpredictable Academy Awards for years.

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The Afghan president orders US special forces out of Wardak province, over claims Afghans working for them are involved in torture and disappearances.



## Italy votes in key general election

4 hours ago

Italians vote in a general election regarded as crucial for the country's effort to tackle its economic problems and for the eurozone at large.



## Hollywood awaits 'open' Oscars

1 minute ago

Final preparations are made for what is

- These **ideas are already in the wild**.
- In fact, the site that got me thinking along these lines was the BBC News responsive mobile site.
- Here, **only one image**—the headline story—is referenced directly in the markup.
- Images for **other stories only appear when certain conditions are met**.

*http://*

prlloyd.com/responsiveconf

- Not enough time to describe these ideas in any great detail today.
- I've **put together some examples on GitHub**, which you can find at this address.

The screenshot shows a web browser window for the dConstruct 2012 website. The address bar reads "d 2012.dconstruct.org". The page features a large, stylized title "PLAYING WITH THE FUTURE" in red and white. Below the title is a large, close-up portrait of a man's face. A navigation bar at the top includes links for "CONFERENCE", "WORKSHOPS", and "LOCATION", along with a "SOLD OUT" indicator. To the right, there is a section for "dConstruct 2012" with the date "SEPTEMBER 7TH BRIGHTON, UK". A paragraph describes the event as a gathering of smart and entertaining people at the intersection of technology and culture, followed by a link "Would you like to know more?". Below this are two rows of smaller portraits of speakers, each with their name underneath: JAMES BURKE, BEN HAMMERSLEY, ARIEL WALDMAN, TOM ARMITAGE, JENN LUKAS; and JASON SCOTT, SCOTT JENSON, SEB LEE-DELISLE, LAUREN BEUKES. At the bottom right is a link to "2012.dconstruct.org".

- It's also worth mentioning that **there are lots of other options too**.
- I particular fond of **last year's dConstruct website**, designed by **Bevan Stephens**.
- His design was such that it meant indexed **8-bit images** could be used.
- If they were scaled up, they actually felt more tied to the design!



- [PAUSE]
- So when I see this image multi storey car park.
- I think it's wrong on so many levels...

```
<picture width="800" height="600">
  <source media="(min-width: 45em)" src="carpark-large.jpg"/>
  <source media="(min-width: 18em)" src="carpark-med.jpg"/>
  <source src="carpark-small.jpg"/>
  
  <p>This image is wrong on so many levels.</p>
</picture>
```

- Because of the mark-up behind it. Responsive image **proposals are well meaning** and an **incredible amount of effort** has gone in to them.
- But I find myself disagreeing with the proposed solution.
- Fundamentally, it **perpetuates the myth that we can have control on the web**.
- Imperfect because it strives to give designers the illusion of perfection.
- The **problem with images** on the web **is not their size or quality, but their usage**.
- We are not willing enough to optimise, or question their presence within our markup.

## The Web Aesthetic

[alistapart.com/article/the-web-aesthetic](http://alistapart.com/article/the-web-aesthetic)

- It's also important to think about the usage of imagery on the web in a broader context.
- As the web matures, we're starting to see **designs that are less influenced by that of print, more by software**.
- This is something I wrote about last year in A List Apart.

Arts – The New York Times

[www.nytimes.com/pages/arts/index.html](http://www.nytimes.com/pages/arts/index.html)

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ART REVIEW

## A Spectrum From Slaves to Saints

By HOLLAND COTTER 2:30 PM ET



Museo Nacional del Prado, Madrid

"The Three Mulattoes of Esmereldas" (1599) is one of the works in "Revealing the African Presence in Renaissance Europe," at the Walters Art Museum in Baltimore.

The rich and complex exchange between Africa and Europe and how this is revealed in Renaissance art is the subject of an exhibition at the Walters Art Museum in Baltimore.

• [Slide Show](#)

MOVIE REVIEW | LINCOLN

## A President Engaged in a Great Civil War

By A. O. SCOTT

"Lincoln," starring Daniel Day-Lewis, is more a political thriller than a biopic, a civics lesson that is energetically staged and alive with moral energy, placing slavery at the center of the story.

• [Daniel Day-Lewis on Playing Abraham Lincoln](#)



ARTS & LEISURE

### Restart Me Up Once More

By JON PARELES 5:00 PM ET

The Rolling Stones, who are celebrating 50 years together as a band, are preparing to hit the road again.

• [Slide Show](#)

### Man in the Middle

By SAM TANENHAUS

John Updike's 1971 novel "Rabbit Redux" remains the most illuminating and prophetic of modern political novels, though on the surface it seems not about politics at all.

### Broadway's Just a Suburb of Cincinnati

By PATRICK HEALY 9 minutes ago

Katie Holmes (once Mrs. Tom Cruise, if you hadn't heard) and Norbert Leo Butz are among the Midwesterners in "Dead Accounts," a play set in Cincinnati and opening this month on Broadway.

Special Section

From the International Herald Tribune

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### Christie's Sale Suffers From Sky-High Expectations

By SOUREN MELIKIAN

"Water Lilies," a major work by Monet, went for a fortune, but other works earned little enthusiasm during an auction of Impressionist and Modern art.

### Egypt's Poet of the People

By ABDALLA F. HASSAN

Abdel-rahman Elabnoudy, the songwriter,

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4. Art, Not Storm or Election, Is Blamed for Anemic Sale at Christie's
5. ArtsBeat: Gagosian Suit Offers Rare Look at Art Dealing
6. An Appraisal: Elliott Carter, Master of Complexity
7. Fake Art May Keep Popping Up for Sale
8. Teri Shields, Mother and Manager of Brooke Shields, Dies at 79
9. Video Games: Unfinished Swan, Assassin's Creed and Need for Speed

[nytimes.com](http://nytimes.com)

- One of the best examples of this transition can be found at The New York Times.
- Here is a page from their current website, **largely unchanged in a decade...**
- Traditional layout: header, body, sidebars, footer.

Times Skimmer by The New York Times

[www.nytimes.com/skimmer/#/Arts](http://www.nytimes.com/skimmer/#/Arts)

The New York Times Arts



ART REVIEW +

## A Spectrum From Slaves to Saints

BY HOLLAND COTTER

BALTIMORE — In a fall art season distinguished, so far, largely by a bland, no-brainer diet served up by Manhattan's major museums, you have to hit the road for grittier fare. And the Walters Art Museum here is not too far to go to find it in a high-fiber, convention-rattling show with the unglamorous title of "Revealing the African Presence in Renaissance Europe."

Visually the exhibition is a gift, with marvelous things by artists familiar and revered — Dürer, Rubens, Veronese — along with images most of us never knew existed. Together they map a history of art, politics and race that scholars have begun to pay attention to — notably through "The Image of the Black in Western Art," a multivolume book project edited by David Bindman and Henry Louis Gates Jr. — but that few museums have addressed in full-dress style.

Like the best scholarship, the Walters show, organized by Joaneath Spicer, the museum's curator of Renaissance and Baroque art, is as much about questions as answers, and makes no bones about that. Many wall labels begin with an interrogative, suggesting that a museum visitor's reading of a particular image carries as much weight as the curator's.

And, like most ambitious but risky undertakings, it has flaws. There is evidence of budget limitations. Although no corners were cut in getting crucial European loans, the catalog — a good one — has come in a third smaller in size than planned and with signs of changes-at-the-last-minute production.

The presence of a chatty "resource center" midway through the show, with gamelike audience-participation activities on offer, will rile museum purists. (I

MOVIE REVIEW +

### A President Engaged in a Great Civil War

BY A. O. SCOTT

"Lincoln," starring Daniel Day-Lewis, is more a political thriller than a biopic, a civics lesson that is energetically staged and alive with moral energy, placing slavery at the center of the story.

ART REVIEW +

### Relics of a Sculptor's Bronze Age

BY ROBERTA SMITH

"Calder: The Complete Bronzes" brings together nearly all Alexander Calder's forays into bronze in one place, the first exhibition to concentrate almost exclusively on these works.

BOOKS OF THE TIMES +

### Verses Wielded Like a Razor

BY DWIGHT GARNER

Louise Glück's latest collection assembles poems spanning her four-decade career.

Critic's Notebook : +

### Women's TV Block With 2-Track Mind

Pop : Restart Me Up Once +

More

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[nytimes.com/skimmer](http://nytimes.com/skimmer)

- Compare that to their 'skimmer' application, which takes on a more app like appearance.
- Already you can see **different decisions around the use imagery being made**.
- In this example, only one main image is shown—for the headline story—regardless of where the app is viewed.
- Clearer **delineation between the interface and the content**.



- Those were the first titles for Doctor Who, designed by Barnard Lodge, also in 1963.
- Lodge **created this more abstract, organic, ghostly effect by pointing a television camera towards a monitor**.
- He had an in-depth understanding of the constraints of the medium, but didn't let this limit his creativity.
- Created an iconic set of titles with an **underlying concept that has become timeless**.

# Opportunities

- It's at the limits of this blurred edge that creative solutions can be found.
- If we want **to produce our own designs that stand the test of time**, we need to become **familiar with this edge**.
- But we should strive not to cross it, but not be afraid to push against it either.

# Thank you!

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 [@paulrobertlloyd](https://twitter.com/paulrobertlloyd)

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• Thank-you!