

Media, Visualizations, and Layout

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What this session is about

Improving the ability of our community to author non-textual content
...and make it look good

We'll get four thoughts from four folks:

- Visualization
- Story Builder
- Semantic media display styles
- Cross-functional support for rich media

And then we'll discuss these and other ideas.

**Making articles more
interesting with data
visualization**

T149547

Yurik demo

Story builder
T150461

A thought experiment

- What do we have
- What do we miss
- What would we need to fill that gap ?

Stories !

- All about communication
- As much about knowledge as about fiction
- But not something we currently do much of

We tell stories



Kinds of stories

- Interviews
- Explanations of complex topics
- Investigative journalism
- Knowledge beyond notability
- Exploration and experimentation

Example

- Graphite Mining
- The lost generation of China

So what do we need ?

- Building blocks of content
 - Graph
 - Wikipedia excerpts
 - Audio interview on Commons
 - Transcript from Wikisource
 - Slideshow of images
- Layout
 - Positioning
 - Visual effects
 - Adaptive to resolutions
- Publishers

What do we really need ?

- A better way to pull multiple types of content from multiple places
- A more advanced way to think of a page than just a single column of text
- Refine what a contributor is, can do, history etc.

**Cross-functional
support for rich media
T147604**

Media formats & audio/video

Let's start by finishing up video and audio which have been in half-working state for some time.

Complicated by our patent rules on data formats, which have kept us from using common MP4 files.

Later, more work on 3D models, panoramas, etc would be great, using common infrastructure.

MP4 format family issues

MP4 more widely supported than Ogg & WebM.
Why don't we use it?

- MPEG-LA controls patent pool on **H.264 video** and **AAC audio** encoding.
- 2014 Commons community RfC turned down the idea of arranging license with MPEG-LA due to NDA over the license agreement

Should we try again, or keep working around it?

Desktop video playback

Ogg and WebM currently playable in all browsers, using ogv.js shim on IE, Edge, Safari.

Working on replacing old version of MwEmbedPlayer with current Video.js:

- More maintainable plugin architecture
- More modern look & feel
- Subtitle compatibility needs more work...
- Needs some final fixes and beta deployment.

Mobile media playback

- Mobile web video needs final stages on reworking video player JS
- ogv.js shim works in iOS Safari, is ready with new frontend code!
- Mobile apps need Parsoid support for media
- iOS needs to integrate OGVKit for custom video playback

Social embedding, InstantCommons

- social media embedding of videos might work with iframes, needs tech work and coordination with twitter and Facebook
- InstantCommons serving of videos could work with an iframe too, eliminating need to install extensions locally

Finding and using media

- search engine needs to be able to restrict media searches by type (still, audio, video)
- VisualEditor needs to be able to handle media options for sizing, start time, etc
- VisualEditor view should allow previewing that media!

Backend: video transcoding servers

- Transcoding to viewable sizes requires more server resources at peak times - sometimes people upload lots of archival footage in a row
- Job queue in MediaWiki doesn't handle long running video jobs well, often over schedules and saturates CPUs.
- Either need to handle long processes better in queue or run them differently!

Getting video / audio in

- Audio/video upload complicated by our format requirements
- Tools available for conversion but not integrated
- Could route through a partner like Internet Archive (experimenting with this) or outsource to commercial transcodes
- Looking at phone-based uploader helper app for iOS and android

Popcorn editor

In browser video clip editor

Developed at Mozilla, but abandoned, but saved by decoupling from backend

Picked up by Internet Archive

May supplement higher level sequence creation tools?

Who can help?

- Discovery - tagging files by video/audio characteristics
- Reading - mobile app iOS playback integration (OGVKit?)
- Parsing & services - getting media into Parsoid in consistent way. Standardize parameters?
- Ops - more transcode servers, fixes for job queue long processes
- Editing - VE media insertion and preview
- Partnerships - IA as converter? Social media compatibility coordination?

**Semantic
wiki-configurable
styles for media display
T90914**

Types of styles

- Semantic specific layout
 - Sizing
 - Positioning
 - Visibility
 - “Full-width”
 - Lead images
- Grid (thumbs, text, etc)
 - Columns
- Sidebars
 - Grid with semantic purpose

Strawman Syntax

```
{{#file:Foo.jpg|type=illustration|caption=Hello  
and welcome to Wikipedia!|altText=Welcoming  
image of a person smiling}}
```

For gallery type functionality, perhaps:

```
{{#file:type=two-side-by-side|file1=A.jpg|file2=  
B.jpg|caption1=A|caption2=B}}
```

Strawman style definition

[[MediaWiki:MediaType-illustration]] contains:

inherits: MediaType-default

border: none

float: right

width: 500px

Inheritance should be cross-wiki, by the magic of

[T91162](#)

Other semantic properties

This sets up a hierarchy:

[[localized image type]] < [[common image type]]

But perhaps we need multiple inheritance, so we can orthogonally apply hints such as “lead image”, “should appear in left sidebar”, “suppress on mobile”, “full page in PDF”, etc.

[[User:TheDJ]] has a demo of some hints you might want to add.

Let's Discuss!
<etherpad link here>