# **Hyperaudio and AJ+**

—A Proposal by Mark Boas, Hyperaudio Inc, January 16th 2014.

This document contains a proposal on how we can work with AJ+ to take interactive journalism to the next level with Hyperaudio.

We'll outline the possibilities and present a series of options with a view of partnering and collaborating with the new AJ+ channel in 2014.

### Hyperaudio

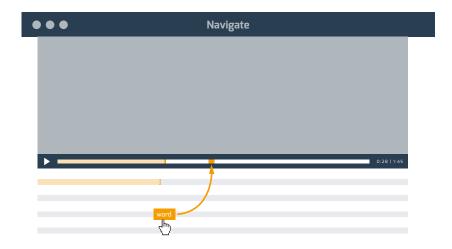
When it comes to media, many of us consume it, few of us produce it although most of us know good and effective media when we see it. In short we are 'media literate' in the sense that most of use read media well, less so when it comes to writing.

Hyperaudio provides the technology and platform for people to learn to both read and write media. At the heart of the Hyperaudio concept are world aligned timed transcripts linked to audio or video assets. These hypertranscripts allow people to consume and manipulate media in new and exciting ways.

Once media has been transcribed we make it more:

- Accessible
- Searchable
- Composable
- Shareable

We can easily skim through media, when we have the transcript in front of us, this tied with the ability to go directly to content by clicking on the related text gives us a very powerful mechanism for navigating media.



Once we have created text based representations, we can search this content and allow search engines to index it.

Creating word level accurate timings mean we can create revolutionary new tools for people to share, edit and compose content. With Hyperaudio, our vision is to create a platform that allow people to respond, address and comment on media, not just with text based comments but with media.

In short we want to promote a remix culture, we want consumers to become producers, produce new forms and further the discussion on the topics AJ+ will seed using their new media output.

#### **Our Resource**

With initial funding we have built the Hyperaudio platform. <sup>1</sup>

This consists of:

- 1. Website, services and tools people can use to transcribe and remix content. <sup>2</sup>
- 2. A comprehensive API for transcription.
- 3. A suite of JavaScript Libraries (hyperaudio.js). <sup>3</sup>
- 4. Partnerships with third-party transcription services.
- 5. Partnerships with Content Delivery Networks.
- 6. A distributable open source platform.
- 7. Growing Community 4.

We also have three engineers and a designer available for further work on the platform or adjacent projects.

### **Our Organisation**

We are a non-profit incorporated in Rhode Island USA.

We're winners of US Ignite 2013 and were chosen for WebFWD, the open source accelerator program.

We work closely with other non-profit organisations such as the Mozilla Foundation, Internet Archive and the Participatory Culture Foundation.

We have proven the Hyperaudio concept creating a series of award winning interactives for Al Jazeera English and others.

<sup>&</sup>lt;sup>1</sup> http://hyperaud.io/

<sup>&</sup>lt;sup>2</sup> http://hyperaud.io/blog/the-hyperaudio-pad-next-steps-and-media-literacy.html

<sup>&</sup>lt;sup>3</sup> https://github.com/hyperaudio-dev/hyperaudio

<sup>&</sup>lt;sup>4</sup> https://groups.google.com/forum/#!forum/hyperaudio

### **Our Approach**

Our approach is to create a series of modules, loosely coupled so we can quickly and easily incorporate these modules into any projects we create.

In this proposal we want to take advantage of this approach by putting forward and number of solutions that can build upon each other.

The idea is to start with a base and build upon it, while reacting to user feedback.

We are very excited by the possibilities.

### Hypertranscripts and AJ+ Content

As a base we propose that we transcribe and time-align AJ+ content and produce an interactive transcript that works together with that content.

We have integrated with the YouTube API and can work with any videos placed upon their platform.

You can try a quick example in our lab. <sup>5</sup>

Transcription aside, the technology is all client-side running in the browser, which means we can place Hyperaudio material on any server. We are happy to provide those services ourselves or produce something that can be easily deployed on AJ+ servers.

We are collaborating closely with the Internet Archive so that we can reliably mirror the content you create on their servers.

We also have developers available that are willing to relocate and work closely with you in your San Francisco offices.

With this proposal implemented you will have already made your content accessible, searchable and indexable.

Upon tracking and measuring the success of this new form of content it should become increasingly clear how we can add to the base functionality.

<sup>&</sup>lt;sup>5</sup> http://hyperaud.io/lab/haexamples/hypertranscript/youtube

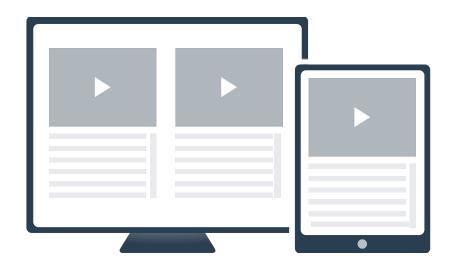
# 1. Phase 1: Proposal—Interactive Transcripts

We propose that we partner launch with AJ+ to produce interactive transcripts for videos uploaded to YouTube. These would be web-based and work on desktop, tablets and smart phones (specific platforms TBD).

To coincide with the launch of AJ+ we can provide:

### 1.1. Interactive Transcripts

We will produce word-level accurate time-aligned interactive transcripts and couple them with AJ+ YouTube content. Users can easily skim through content and play pieces of interest.



## 1.2. Highlight and Share Functionality

We will allow people to highlight a portion of the transcript and Tweet or Facebook Share that content. The viewer of that shared link gets an idea of the text content and upon clicking the link will see exactly that portion the sharer highlighted. Try it out <a href="https://example.com/here.com/he



<sup>&</sup>lt;sup>6</sup> http://hyperaud.io/lab/ha-examples/AJ/v07/

#### 1.3. Measurement and Statistics

An advantage of the close coupling of text content and video is that we can track which parts people are watching, interacting with and sharing. We propose that we build tracking right into the Hypertranscript and use these statistics to guide us on further enhancements to the platform.

Since we have fine grained data available we can track:

- Content Played
- Content Navigated (words clicked on)
- Content Shared (text highlighted and shared)

### 1.4. Integration

We will style and brand the application to fit in with the AJ+ style guidelines. Since all functionality is client-side, we require no back-end integration. We can integrate the content through a Content Management System or separately as static pages.

Note: we have experience with all these techniques in interactive news pieces we have created for Al Jazeera English.

# 2. Phase 2: Possibilities

With interactive transcripts in place we can quickly build a number of features. Below we outline a few possibilities.

#### 2.1. Search

We can build search right in such that people can easily search for keywords or phrases and play them back and/or share the results of these searches.

We can also create the ability to search through multiple transcripts and so videos.



# 2.2. Inline Commenting

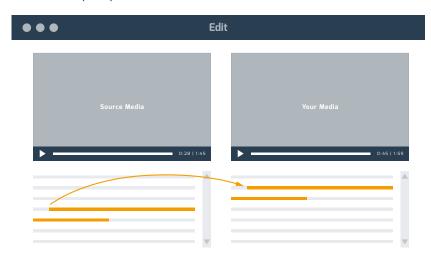
Now that we have fine grained access to content, we'd like to make it possible for people to leave comments on specific parts of that content. We envisage a system that takes the best from Medium's 'inline' comment system and SoundCloud's 'in-time' commenting, which displays comments at the time they were made during playback.



### 2.3. Remix as Commentary

We believe that remixed media can be an effective way of getting your point across and that an exciting way to comment on media is with media.

Our idea then, is to allow commenters to create their own content by remixing the original piece and other audio and video content to put forward their perspective.



### 2.4. Media CDN Mirroring, Automatic Transcription and Publishing

We have an agreement with Internet Archive to use their servers as a Media CDN. To make the process of transcription and creation of interactive transcripts more streamlined we propose we investigate the creation of a complete Media Management System.

Proposed flow of the system:

#### 1. Upload

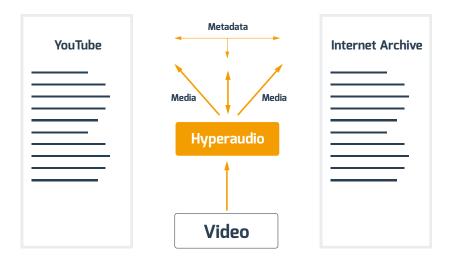
Video is uploaded to YouTube and Internet Archive simultaneously.

#### 2. Transcribe

Auto captioning results from YouTube is used to make the transcription process more accurate and more efficient. We take the cleaned up transcript and upload back to YouTube along with link back to the Interactive Transcript - which can use the Internet Archived version or YouTube version as required.

### 3. Backup

By mirroring content on the Internet Archive we expose content to a different audience and avoid a single point of failure. Moving forward we can manipulate media more deeply, accurately and efficiently when we have access to the MP4/WebM files.



# **Costs and Timescales**

Breakdown of costs and timescales (All costs in US Dollars)

### Phase 1

We'll work closely with Al Jazeera to produce the system outlined above.

### Timing:

February 1st to March 1st 2014

**Cost - System Implementation**:

\$20,000

**Cost - Transcription**:

\$2 per minute + \$100 per video

### Phase 2

To be discussed. We will have a developer available from May 2014 to work in the San Francisco office with you, should you require.

# Appendix—Hyperaudio Examples in the Wild

- WNYC—Radiolab / SoundCloud Demo http://hyperaudio.org/r/
- 2. Interactive video transcript of Denver debate http://www.aljazeera.com/indepth/interactive/2012/10/20121049528478583.html
- 3. Biden vs Ryan: Interactive video transcript http://www.aljazeera.com/indepth/interactive/2012/10/2012101225648908152.html
- 4. Interactive video of the Obama—Romney rematch http://www.aljazeera.com/indepth/interactive/2012/10/2012101792225913980.html
- 5. Interactive transcript of Florida debate http://www.aljazeera.com/indepth/interactive/2012/10/20121023134433218846.html
- 6. Deconstructing Obama's States of the Union http://www.aljazeera.com/indepth/interactive/2013/02/201321213243145814.html