IIIF AV specifications work well for APIs serving **time-aligned linguistic annotations**.

Optimizing Interoperability of Language Resources with the Upcoming IIIF AV Specifications

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1 ELAN Case Study

- time-aligned annotations
- very flexible structure (tiers)

2 Requirements

1. common media transformations: format conversion, compression
2. AV specific transformations: time cropping
3. video/image specific transformations: cropping scaling, rotating, color filtering
4. audio to image transformations: spectrum and waveform extraction

3 Media API

- IIIF AV based implementation
- 3 extensions

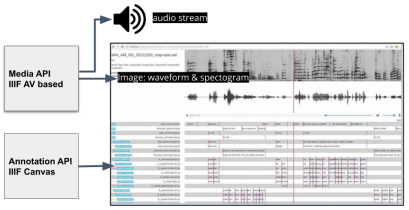
Canonical URI Syntax:

```
.../{section}/{region}/{size}/{rotation}/{filter}/{quality}.{format}
```

Request Parameters:

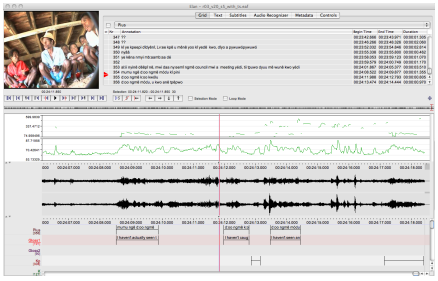
{section}	Defines the time portion of the full audio or video file to be returned.
{region}	Defines the rectangular portion of the full image or video to be returned.
{size}	Scales an image or video to a specific size.
{rotation}	Specifies mirroring and rotation for a image or video file.
{filter}	Applies filters to the input media file (waveform, spectrum, color, gray, bitonal, none).
{quality}	Defines the compression rate / quality scale of the returned media file (high, medium, low).
{format}	Format of the returned media file.

Prototype:



More information

ELAN:



IIIF AV URI Syntax:

Canonical URI Syntax of the IIIF Image API:

```
.../{region}/{size}/{rotation}/{quality}.{format}
```

Request Parameters of the IIIF Image API:

{region}	Defines the rectangular portion of the full image to be returned.
{size}	Determines the dimensions to which the extracted region is to be scaled.
{rotation}	Specifies mirroring and rotation.
{quality}	Determines whether the image is delivered in color, grayscale or black and white.
{format}	Format of the returned image.

Extension:

- `{quality}`: the technical quality scale of the media file, returns the image, audio or video bitstream in increasingly compressed version (Requirement 1)
- `{filter}`: if the input file is a audio or video, one can apply a spectrum or waveform filter here (Requirement 4)
- `{section}`: allows cropping of time sections of audio and video files (Requirement 3)

SCAN ME

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KA³: Cologne Center Analysis and Archiving of Audio-Visual Data