Video and language documentation

Anthony Jukes, DocLing 2012

Video in language documentation

• Many (most?) people are using video these days
• There are very good reasons to do so

Video is good for...

• discourse
  – distinguishing participants
  – captures gesture – an essential part of communication
• adding or enhancing methodology
  – stimulus materials
  – the camera adds theatricality
  – easier to transcribe
• sign language work
  – video as fundamental form of inscription
  – pioneering methodologies
• appreciated by communities

But it’s not always good

• Expense
• Weight
• Fragility
• Intrusiveness
• More work
  – filming
• Even more work
  – recording good audio at the same time
• Even even more work
  – editing
  – transcoding into other formats
  – synchronising video and audio
• Even even even more work
  – Trying to do all those things "well"

Video as data

• video footage may seem 'true' but is actually less 'authentic' than audio - it frames with a hard edge rather than 'listens' to an environment

Language documentation video

• This has become a genre of its own
• Two main types can be seen:
  – sit and talk
  – point and show
Sit and talk

Here are Willem, Anes, and Bert

And here they are 63 minutes later

Point and show

• Pan around! Look at everything! This is great!

Should LDC video be watchable?

• Sure, why not? Or at least some of it should be. Great cameras are available these days — if we know how to use them
• Many language documenters have been given significant amounts of funding (public or private)
• they are working with people who are often custodians of unique linguistic and cultural knowledge
• they have both the opportunity and the responsibility to record this in ways that are both comprehensive and accessible.
• ‘Linguists may learn from ethnocinematographic contributions... that there is also an aesthetic aspect to the video documentation of communicative behavior’ (Dimmendaal 2010:155)

Things to think about

• what will you be filming?
• who is going to watch it?
• where/how will they watch it?
• how will you manage audio?
• how are you going to edit it?
• how much are you prepared to spend?
• how much are you prepared to carry?

Basics

• The most important elements of a camera are the lens and the sensor
• In principle, a large lens will let in more light and show more detail, while a large sensor will record that detail
• Differences in these two elements account for most of the variation in price between professional and consumer cameras, and between particular models

Lenses

• Like microphones, lenses are analogue
• Good ones are not getting cheaper
• For interchangeable lens cameras (like DSLRs or 35mm video), lenses will be much (or most) of the price
• But - consumer cameras are getting better at getting good results with smaller lenses
### Sensors

- The sensor receives the image from the lens and converts it into an electronic signal
- Larger sensors allow more detail and more control over depth of field (through use of larger lenses)
- Large sensors *are* getting cheaper

![Sensor Image](image.png)

### Depth of field

<table>
<thead>
<tr>
<th>Shallow</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>only the subject is in focus</td>
<td>everything is in focus</td>
</tr>
</tbody>
</table>

### Choosing a camera

- Not an easy process
- There are many things to consider, a bewildering number of types and models
- Different types have different pros and cons
- Find a balance!

### Professional

- Sony PMW-F3 (¥1,800,000)
- 35mm sensor – cinematographic quality and detail
- Uncompressed video and audio

### (Semi-)professional

- Canon XF300 (¥585,000)
- Panasonic AG-AF105 (¥600,000)

### Pro and semi-pro video cameras

- Great video
  - large sensors
  - good lenses
- Great audio
  - good onboard mics
  - professional XLR connectors for external mics
- Expensive
- Heavy
- Difficult to use
- May frighten speakers
- May cause trouble with border guards or police!
Camcorders

- There are many models. You will have to decide based on your needs and budget.
  - Most are now HD (3D is the new thing)
  - Card or internal storage
  - All use compressed video and audio
- Important points to think about:
  - Is there an input for external microphone?
  - Low light performance
  - Ease of use
- Generally, the more expensive models have:
  - Better lenses and sensors
  - More manual control
  - Better stabilisation
  - Allow external audio

Panasonic HDC-TM750
- ¥75,000

Panasonic HDC-TM45
- ¥32,000

Camcorders

DSLR for video

- Digital Single Lens Reflex cameras have recently become popular for video.
  - The large sensor allows a shallow depth of field which makes the subject stand out and gives a ‘filmic’ quality to the video.
  - They also allow a very large range of lenses to be used.

BUT

- They are harder to use than camcorders, especially keeping focus on a moving subject.
- Audio is not good (use an external recorder like a Zoom H4n)
- File sizes are large, and there may be limits on recording length (e.g. 12 minutes on Canon KISS X5)

Inexpensive DSLRs

Canon EOS KISS X5
- ¥48,000 + lenses

Nikon D3100
- ¥42,000 + lenses

Micro-4/3rds

- Similar to DSLRs, but without mirror and generally with slightly smaller sensor
- E.g. Panasonic GF2 (¥25,480 + lenses)

Point-and-shoot camera

- There are many, many brands and models.
- They are small, convenient, and easy to use.
- Video quality and format depends on the model
- Image resolution can be HD, but quality is generally average (at best) due to small lens
- Audio is not good, and there is unlikely to be external input
Random P & S cameras

<table>
<thead>
<tr>
<th>Camera</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Sony Cybershot DSC-W570</td>
<td>¥9,500</td>
</tr>
<tr>
<td>Canon Powershot A2200</td>
<td>¥8,000</td>
</tr>
</tbody>
</table>

Higher-end P & S

<table>
<thead>
<tr>
<th>Camera</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony DSC-HX9V</td>
<td>¥25,000</td>
</tr>
<tr>
<td>Canon Powershot G1X</td>
<td>¥65,000</td>
</tr>
</tbody>
</table>

- Larger lens than most
- Good, sharp image in good light
- Image stabilisation

Video enabled audio recorders

<table>
<thead>
<tr>
<th>Recorder</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom Q3HD</td>
<td>¥20,500</td>
</tr>
<tr>
<td>Olympus LS-20M</td>
<td>¥26,800</td>
</tr>
</tbody>
</table>

Your mobile phone

- It almost certainly has a camera
- The quality is almost certainly not good, for both video and audio
- But it may be better than nothing!
  Remember
  - “The best camera is the one you have with you”

Shooting

- Whatever camera you use, there are some basic things to think about before shooting
  - Actors
  - Action
  - Framing
  - Lighting
  - Stabilisation/camera movement
  - Audio
  - SAFETY!

Actors

- Who are you filming? How many people?
- Are others likely to wander in?
- Off-camera speakers
- Did they all give permission?
- Are they comfortable??
**Action**

- What's happening?
- Where is the best place to shoot?
- Is there movement? How will you handle that?
- How will you know when it starts and ends?

**Framing**

- Close-up or further back?
- Focused on one subject or trying to get everything?
- Are there distractions in shot?
- Rule of thirds

**Lighting**

- Most camcorders don’t work well in low-light
- We usually don’t have lights in the field (but consider taking LED panels) so we have to work with natural light or existing artificial light
- Don’t place your subject in front of a light source (window, brightly lit wall etc)
- Reflectors can help

**Stabilisation**

- A tripod is the most obvious and best way to keep the camera still (and safe!)
- Heavier tripod = more stable
- Fluid head = smoother movement
- Alternatives to tripods
  - Monopod
  - Gorillapod
  - Bag of rice / beanbag

**Handheld stabilisation**

- If you are holding the camera (i.e following a moving subject) there are ways to keep the camera steady
  - Steadicam or camera rig

**Audio**

- Some problems
  - Consumer level cameras don’t have good microphones
  - In any case, the best place for a camera is not always the best place to record audio
- So you must either
  - get good audio into the camera with external microphones (needs long cables or radio mics), or
  - record the audio separately (with a Zoom or similar and microphones) and synchronise it later
- Turn off AGC!
Editing

• Are you editing to create a narrative, or just trimming?
• It may be possible to trim in camera (top and tail)
• Free programs like iMovie (Mac) or Windows Movie Maker will perform many basic tasks
• For more complex editing upgrade to Adobe Premiere or Final Cut Pro – but be prepared for a steep learning curve

Editing

• If you recorded audio separately, you have to synchronise it with the video
• Clapperboard
• Or Pluraleyes, FCP X software will sync automatically if there is guide audio
• You can also sync in ELAN if you are only ever going to use video there

Useful sites