Video and language documentation

Anthony Jukes, DocLing 2013
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
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
• 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
Depth of field

Shallow – only the subject is in focus

Deep – everything is in focus
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

BUT
• 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
Camcorders

- Panasonic HDC-TM750
  - ¥75,000

- Panasonic HDC-TM45
  - ¥32,000
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

Sony Cybershot DSC-W570 (¥9,500)

Canon Powershot A2200 (¥8,000)
Higher-end P & S

Sony DSC-HX9V
¥59,800
- Larger lens than most, large sensor
- Good, sharp image in good light
- Image stabilisation

Canon Powershot G1X
¥65,000
- Large lens and sensor
- Approaching DSLR quality
Video enabled audio recorders

Zoom Q3HD
• ￥20,500

Olympus LS-20M
￥26,800
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 / off-camera noise
  – Including some footage of the source will make the noise less bothersome
• 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?
- Be prepared to bother people.
  - Ask them to move to a better spot, or out of the way
  - Ask them to start again, or do it again, or wait
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

• http://www.camcorderinfo.jp/
  – Reviews of digital video cameras

• http://www.dpreview.com/
  – reviews of DSLR and other cameras

• http://dslrvideoshooter.com/
  – advice and links for DSLR video

• http://kakaku.com/camera/
  – Find the best price!