They move. They move us. And you can take them anywhere.

An Introduction to Digital Video…

MOVING PICTURES.

Leonard Low

Presentation Overview

§ Why make digital videos?

§ Action! Digital production & post-production

ú Capture or Conversion ("Source" video)

ú Editing

ú Output and Sharing

§ Coming Soon…

Why make videos at all?

§ Videos are images + sounds + time... But greater than the sum of their parts!
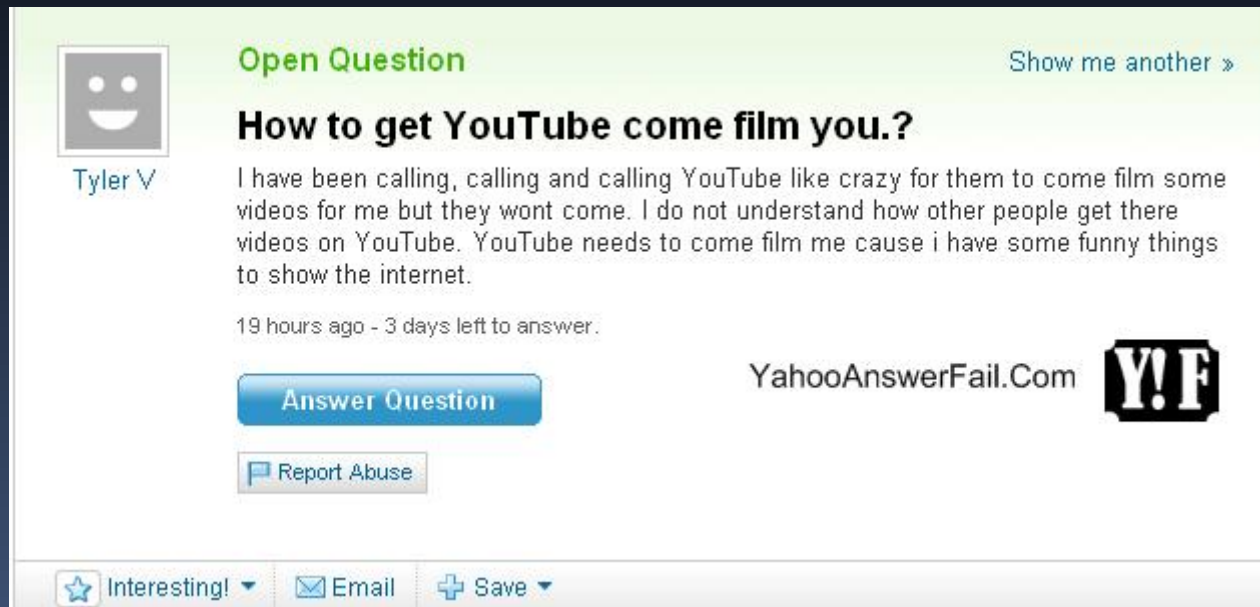
ú Videos record,

ú Educate,

ú Entertain,

ú Move and

ú Engage us

§ Film making is fun. Particularly if you like a challenge. J

Why digital video?

§ Prevent deterioration/loss of analogue media by converting footage to digital.

§ Better visual and sound quality than analogue equivalents

§ It is increasingly cheap and convenient

§ Comparatively little cost for consumables

ú Reuse memory with no deterioration in quality

ú Memory costs falling fast!

Oh yes... And it's easy.

Open Question

Show me another »

How to get YouTube come film you.?

I have been calling, calling and calling YouTube like crazy for them to come film some videos for me but they wont come. I do not understand how other people get there videos on YouTube. YouTube needs to come film me cause i have some funny things to show the internet.

Tyler V

19 hours ago - 3 days left to answer.

Answer Question

YahooAnswerFail.Com Y!F

Report Abuse

☆ Interesting! ▾   ✉ Email   ✚ Save ▾

§ Once you know how! You don't need anyone else to "do it" for you!

Action!

- Digital video production has three core steps:
  - Capture (or Conversion)
  - Editing
  - Output (and Sharing)
- (There are other stages in professional production, but these will do for now!)

Capture or Conversion

§ This is the fundamental point of the lifecycle. If you have good quality, digital source files in a well-recognised format, you have lots of options later.

§ Conversion is taking a pre-existing recording and turning it into a digital file. Less ideal, as there's loss of quality in any conversion, and quality will never be better than the original.

§ Capture is using a digital device to create a direct digital recording. This is ideal. J

Conversion

- § Low-tech: Playback old version, record new version in real-time. E.g. project Super-8 or tape onto screen, and use a Digital Video Camera to record it digitally.

- § Moderate-tech: Cable & converter between tape player and computer.

- § High-tech/Professional: e.g. Frame-by-frame digitally photographing Super-8 film ("Telecine" TEL-e-SIN-a).

Example: Super-8 Conversion

§ Low-tech: view the source optically, capture it digitally.

§ In this case, a silent Super-8 film is projected on a screen, which is recorded by a digital video camera.

§ Movies by Sonja Menting, source: http://vimeo.com/8350058 and Andy Alderslade, http://vimeo.com/1219087.

Capture

- § Low-tech: camera phone, digital camera with video mode, webcam - few options or settings, just hit record and go for it.

- § Moderate-tech: e.g. a digital camcorder. These have quite a few features - even learning to zoom and use different exposure settings effectively may require some training or experience.

- § High-tech: Professional/broadcast camera or full manual control, interchangeable lens system like 5DmkII. Requires extensive training/interest/experience, but potential for professional results.

Issues (Capture & Conversion)

§ Resolution: bigger = more information and bigger files, need better specced machine for later editing

§ Files & formats: video has more different technical specifications and combinations than just about ANY other media type.

   ú Video file = Container + Video codec + Audio Codec.

   ú Examples: MP4, MPEG, Quicktime, AVI, ASF containers. H.264/ MP4-AVC, WMV, MPEG-2 video codecs. AIFF, AAC, MP3, audio codecs.

§ Image: Look for a good lens, sensor, and creative control!

§ AUDIO IS HALF THE FILM. If you want a good video, make sure you also capture good quality sound. :)

Editing

§ Requires software. Some examples:

    ú Movie Maker or iMovie (low end) – free, but limited.

    ú Camtasia or Premiere Elements (mid-level) - easy, capable.

    ú Premiere, Final Cut, Sony Vegas – not cheap or easy.

§ All the good ones are timeline based

§ Editing involves importing assets, sequencing and aligning elements, and adding elements, and ensuring everything looks and sounds its best.

§ "Rendering" is compositing clips into a smoothly playing, unified video (Workspace or Output).

Issues (Editing)

- § Better quality video input + more advanced editing software = need for much much better hardware.

- § Need to be aware of what you're starting with, and what you're aiming for, when setting up your Project.

- § Try to maintain highest quality and integrity throughout editing process - "THINK TWICE; CUT ONCE"!

Output & Sharing

§ Ultimately, I believe media is all about sharing. Not necessarily with the whole world, but with the people that matter. **J**

§ Outputting is about getting your edited video into a file or medium that others can access.

§ What that file or medium might be depends on how you're sharing!

Issues

§ Physical media – e.g. DVD + or – R?

§ Output containers & codecs. Different ones for different purposes.

§ Compression & Resolution vs Quality

§ Sharing online:

    ú Why?

    ú Which site?

Coming Soon. . .

- § 1 year: 3D
  - ú You or your a friend will buy a 3D home system in the next year. You or a friend will buy a 3D video camera in the next year.

- § 2 years: HTML 5
  - ú It will become as easy to embed a video in a web page as it is currently to embed an image. J

- § 3 years: You will be "in" a video or film. Your choices may even affect the plot.

Final Thoughts

§ Illumination: Your presence of mind and the extent of your creativity are as important as your skills in capturing, editing and sharing.

§ Camera: The best camera is the one you have with you.

§ Action: Try it out. See where it takes you. Avoid the cliches. Break the rules (even that one).