Steyning CC AV Guide

Introduction

This guide is intended for those wanting to get started with audio-visual (AV) – setting slides to a soundtrack of music and voice. Audio visual has great power, and continues to evolve with the linking of video in this digital age.



Definitions

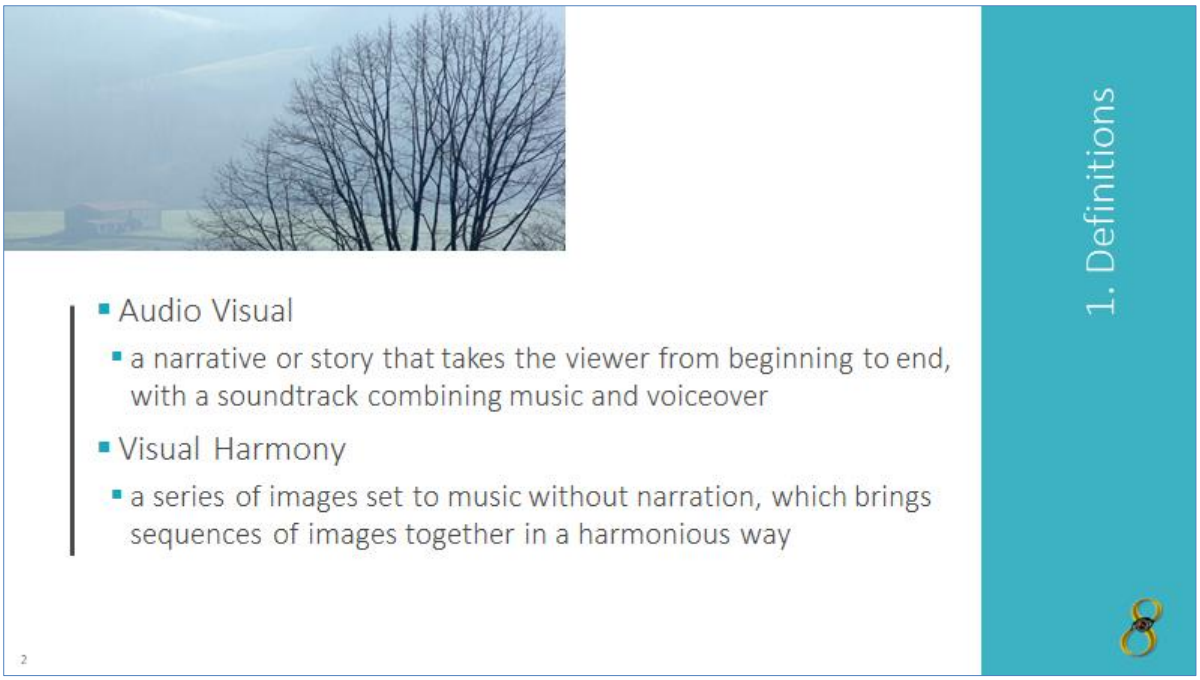
The workshop and this guide cover general principles, based on my long experience of free expression with the medium and is NOT tuned to the requirements of either PAGB or RPS for their distinctions in AV. Anyone interested in that is recommended to attend a Championship or assessment in order to understand what they require http://www.thepagb.org.uk/awards/apm-awards-av/ .

However I do need to make a distinction – one that these organisations make; I do not.

- **Audio-visual** has a narrative – a story that takes the viewer from beginning to end, with a soundtrack combining music and voiceover.
- **'Visual Harmony'** is a series of images set to music without narration, which brings sequences of images together in a harmonious way.

I get the impression that 'Visual Harmony' is seen as inferior, although definitely not by me – the best AVs I have ever seen were of this type, and not constructed narratives.

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My Background

I started producing AVs with colour slides in the mid-1980s, having seen then what I decided was the finest AV work I would ever see, by the British adventurer John Beatty. (John presented a key lecture to our club in 2009). I was not wrong.

Much of my own work has used standalone pieces to illustrate lectures or to make promos. I have also combined multiple pieces into larger-scale productions or suites.

My biggest challenge was a collaboration with composer Michael Finnissy to produce a visual accompaniment to his piano piece “Etched bright with sunlight”, which was presented at the piece’s world premiere in Steyning in 2000 and at several notable festivals. The images were presented manually to the piano piece played live.

In 2010 Steyning CC organised and participated in ExAV with several other local clubs, where each club produced an AV for public showing. Our production “Life Actually” was produced by me with Mike Williams, Brenda Mumford and the dear, late Paul Dold.

I appraise AV often for clubs, though not for RPS or PAGB distinctions.

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Creating your AV Idea

AV has to start with an idea.

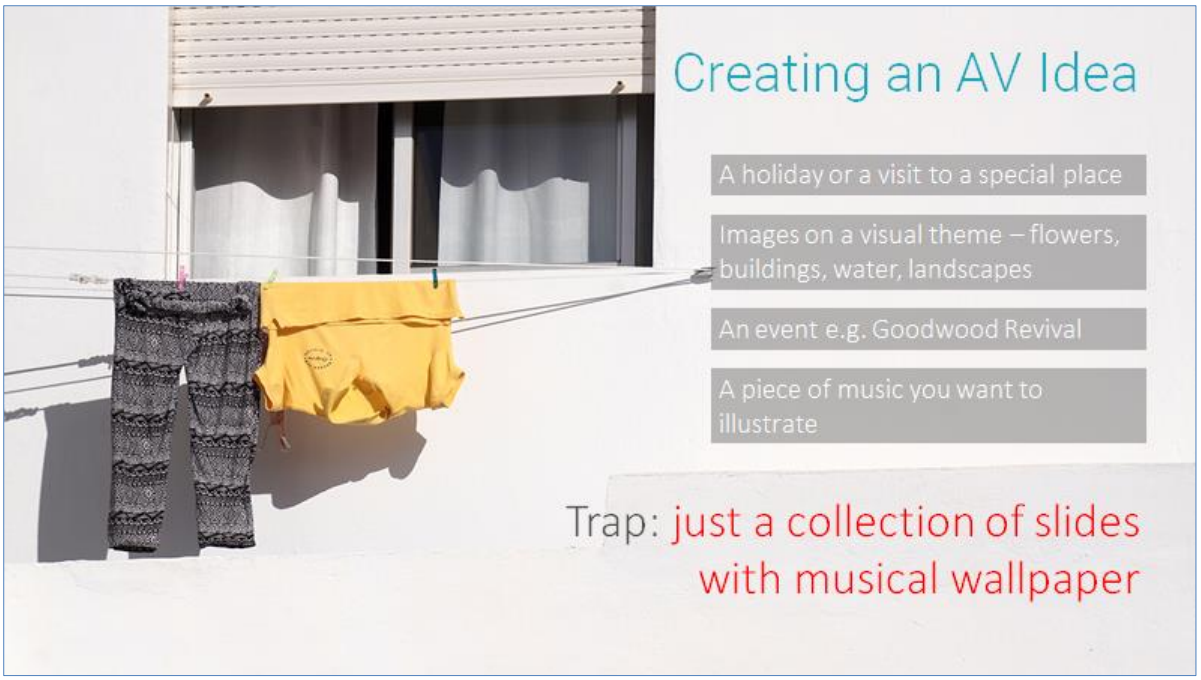
For inspiration, think about where you might have seen AV before. Some of the best examples are to be drawn from expert producers on TV:

The wonderful sports stories narrated by the late Eddie Butler, for example, made from stills and video clips;

Or, more simply, stills inserted into a TV documentary to supplement the narrative;

Most commonly, AV is associated with a collection of themed images set to a piece of music. This is the easiest way to start. Here are some ideas:

- A holiday or a visit to a special place
- Images on a visual theme – flowers, buildings, water, landscapes
- An event e.g. Goodwood Revival
- A piece of music you want to illustrate



Software now allows you to drop images together, add a soundtrack, synchronise them with a standard or selection of random transitions and press the 'Publish' button.

But that reveals the easiest trap to fall into as well. Such easy 'shows' are often just that: a collection of slides with musical wallpaper.

So much better to start with a the idea for a Production – the word is used intentionally.

- What is it about the special place? How did it make you feel?
- What is that visual theme? How do colours and tomes work and flow together? Is it hard or soft? What mood do the images create for you?
- What was the character of that event? Is there something special about it – the atmosphere, the people, the machines?

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- What is it about that piece of music? How does it move you? What images does it conjure for you when you listen to it – really listen to it – with your eyes closed?

Other considerations:

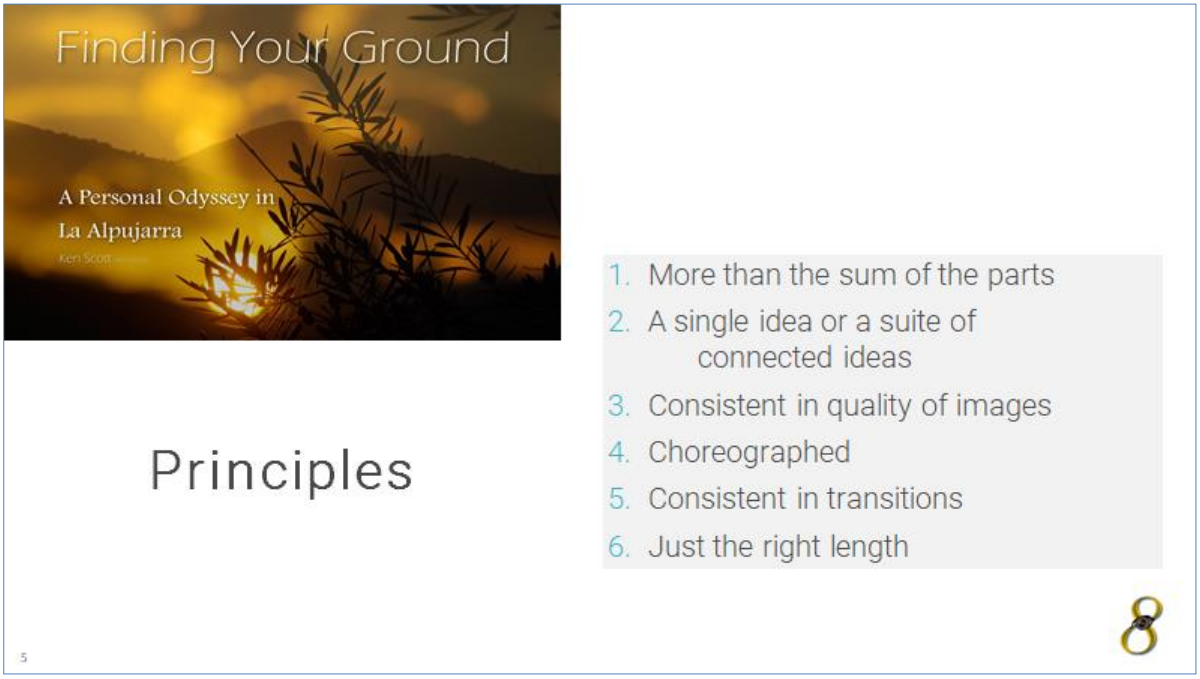
- Will the slides stand on their own or will you need captions and / or a voiceover?
- Is this one idea for one piece, or several ideas that will combine to make a suite?
  Tip: don't combine two ideas within the same piece of music, and if combining pieces, think also about the flow between them.

What music best encapsulates the feelings you have and want to express? (See Choosing Music)

So in essence, spend time on curating your idea. Storyboard it, if you like, so that you have an idea how it will look and feel and can identify images and sound that you need to create. That time will repay itself over and over when people love to watch your AV and when it leaves a mark on your audience and for you.

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Principles



These are the core principles of AV for me. An AV piece should be:

1. More than the sum of the parts
   – it is not sufficient simply to string together good images; they must combine with the music to tell a story or reveal a flow of visual ideas.
2. A single idea or a suite of connected ideas
   – it rarely works to change mood or idea during a piece; consider instead linking a new piece.
3. Consistent in quality of images
   – don't ever use AV as a repository for substandard slides; it is possible to use spacer slides but otherwise use images that you'd be happy to show as standalone.
4. Choreographed
   – changes in slides should match changes in the mood and timing of the music.
5. Consistent in transitions
   – choose a regular transition and stay with it (for the most part); don't be tempted by the many fancy transition styles offered in the software as they just distract.
6. Just the right length
   – for a single piece, three to five minutes is sufficient. Think of popular music and the ideal length for radio play. You can extend it but remember that Radio refused to play *Bohemian Rhapsody* when it was first released.

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Choosing Music

Music is – I believe psychologically – much more emotionally affecting than the visual imagery. Think of how the musical score in a film affects us emotionally and then imagine the same scene without the score.

Music means a thousand different things to a thousand people. Therefore, choose your music very carefully to match your idea and always with mood in mind.

Hard to express these principles without explaining the pitfalls:

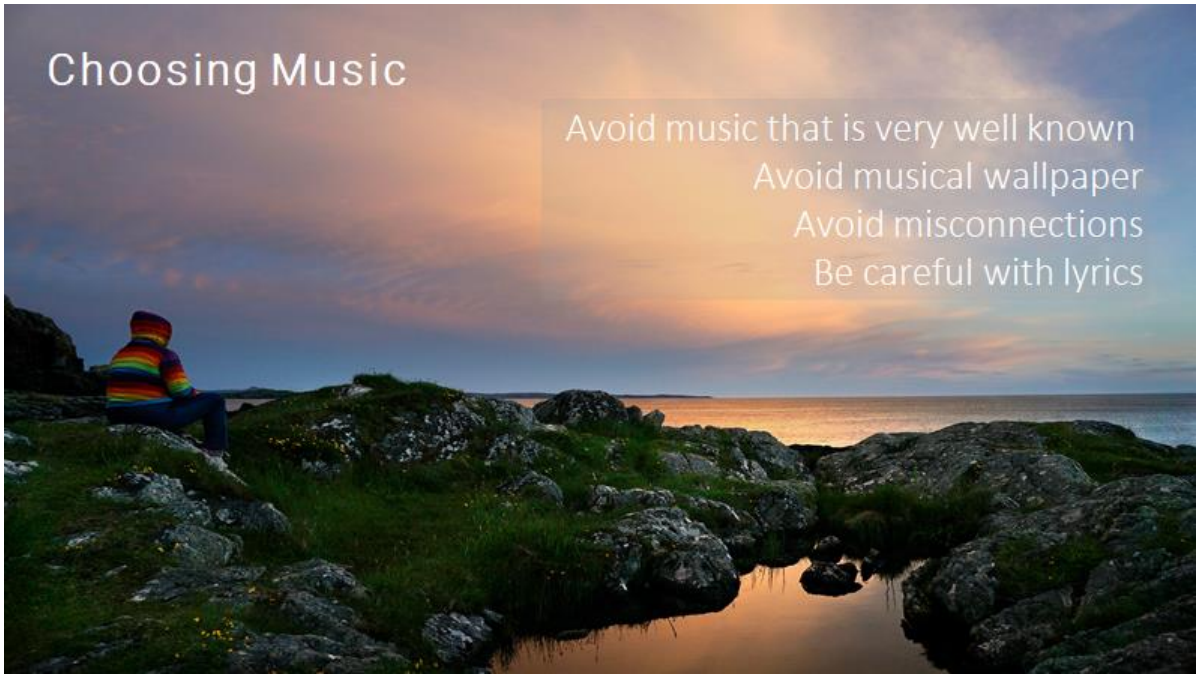
1. Avoid music that is very well known in its original context:
   – Many pieces of music are overused despite being forever brilliant – some of my very favourite pieces have been used frequently in documentary, for example Brian Eno's "*An Ending (Ascent)*" from the Apollo moon films, Gorecki's "*Symphony No.3 2nd movement*", or Fleetwood Mac's "*Albatross*"
   – Others for me cannot ever be separated from the film or scene into other contexts, for example John Barry's incredible "*Walkabout*" theme, Ry Cooder's "*Paris, Texas*" soundtrack, or Vangelis' "*Chariots of Fire*".

2. Avoid musical wallpaper:
   – I have a personal reaction against some classical pieces, which are overused and tend to feel old fashioned – think ITV regional rural documentary.
   – I favour more challenging contemporary pieces, but always with the mood I wish to convey and a connection to the subject matter.
   – ambient music could be very apt for a mood or relaxation piece, however, and could be great as a background fill behind a longer narration.

3. Avoid misconnections:
   – If the music was originally inspired by a place, by all means use it <u>for that place</u> but beware that it may be perceived as cliché e.g. Mark Knopfler's "*Local Hero*" pieces (guilty myself). And especially don't misconnect them, e.g. Enya's "*On Your Shore*", inspired by the west of Ireland but seen once illustrating sheep on the South Downs – just no!
   – There are pieces I have always wanted to use but have not had the images or connections with the place to make them work, e.g. Santana's "*Aqua Marine*".

4. Be careful with lyrics:
   – If you choose a song with lyrics, there is an additional challenge in that the lyrics tell us what the songwriter wanted to say, so it is harder to transpose the mood into your own context.

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Whichever piece you choose, the mood of the music and the slides must match.

Choosing music cannot be decoupled from your idea for the slides. Wherever possible use the music as originally intended, not clipped or arbitrarily faded out (See Managing Workflow – Optimising Images and Soundtrack)

Copyright Music

You will have to consider whether to use Copyright music or copyright free music (See Music Licensing)

Choosing Images

Choosing images for your piece is not an exact art.

You could choose images from your files, or you could make images specifically for the purpose, which is common in advanced AV production.

You could also include archive images or third-party images (provided you are entitled to use them) and video clips as part of your story.

But, as already mentioned, don't be tempted to include any images that are in any way substandard.

Do follow these principles:

1. Landscape format images work best
   – AV production on TV or projector is primarily widescreen 16:9. Portrait format images can work as well, but try to avoid mixing them in the same piece.

Think about your transitions
– Images that include negative space are useful for creating one of AV's best kept secrets (sadly (sadly underused in modern times) the Third Image (See

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2. Transitions and Choreography). You might think about making some images for this purpose.
3. Gather more images than you will need, to enable you to experiment.

Managing Workflow – Optimising Images and Soundtrack

Here's where we get practical. The steps are generic and applicable to any software because it is about your data management not what the software does.

1. Create a folder for your AV Project, and within that make separate folders for Images (with subfolders if you need categories), Audio, Video (if you will use video), Project Files and Show Files.
2. Gather Resources
    a. Identify images from your collection (including logos or other graphics) and copy them to your Images folder. This is important because most software just creates an index of which images to use and where to find them. Images are not embedded until you compile the final published version. If you point to images in your catalogue and move them subsequently, your links will break. Moving copies of the show images to a separate folder for your show ensures that you always know where the images are.
    b. Identify music and sound and copy the files to your Audio folder.
    c. Identify video clips and copy the files to your Video folder.
3. Optimise Images
   AVs when compiled can make large files. They always run better if the images are optimised before using them. Most computers can run them smoothly, but this is especially important if you intend to broadcast them using Zoom or similar. To optimise:
    a. Consider the output resolution of the device you will show on most frequently. If it is an HD projector or TV then images need be no larger than 1920x1280 (3:2), 1920x1080 (16:9) or 1620x1080 (3:2).
    b. Resize your images to this projection size JPG – you will be familiar with this from club competitions.
    c. If you will be using some deep zoom techniques in your transitions, consider going up to say a 2k resolution 2560x1440.
    d. Don't worry unduly about 2k or 4k screens because in my experience an HD presentation scales beautifully on a 4k projector.
    e. Renumber the images to identify them (especially if your catalogue uses Version Stacking).
4. Make images the same aspect
   If you are in the habit of cropping randomly, to an aspect ratio other than 3:2 or 16:9, consider making all your show images the same aspect, because dissolving them together will be otherwise difficult.
5. Optimise Sound

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a. For music files unedited, MP3 format is fine.

b. If you wish to edit or mix a dedicated soudtrack, use a wav or other lossless format like WAV (equivalent to a TIF or RAW image) and then compress to MP3 when complete. Note that PTE software allows you to use WAV and then compress to MP3 when you Publish the piece (see Voiceovers and Making an Integrated Soundtrack).

c. Always fade your final image and sound out together to black before ending with a closing slide (See Captions). Do this even if the music ends abruptly; never drop straight out of the piece without a managed closing.

Workflow is a personal thing beyond these practicalities.

Some people prefer to develop a storyboard, i.e. to create a frame by frame picture of the images and sound that comprise the production. Others, like me, prefer to prototype iteratively, letting ideas come to me in the process.

Sometimes I use a spreadsheet to work out timings and moods. The one below was for the Steyning 2000 show “Etched bright with sunlight”.

Done		Duration	Slides	Start	End	Mood	Subjects	Pace	Other Notes
Y	1	3 mins 20	20	0.00	3.20	bright, dramatic	lights, waterfalls		slows at 2.10
Y			0	3.20	3.30	pause			
Y	2	3 mins	3	3.30	4.10	sombre, reflections	reflections on water	slow	
Y			4	4.10	5.30	very dark notes	Heavy weather, trouble	v slow	Sudden shock at 5.30. Half pace
Y			3	5.30	6.30	very dark notes	advancing threat	quicker	Sudden shock at 6.20. Half pace
Y	3	6 mins	20	6.30	9.50	gentle, quiet, trickling	abstracts & patterns		
Y			6	9.50	10.50	musical, lyrical, loving	pastoral landscape, love	flowing	
Y			10	10.50	12.30	mysterious, calm, quizzical	forest, abstracts	gentle	
	4	3 mins 15	20	12.30	15.45	unease, panic	traffic, lights,	chaotic	pauses & quicks at 14.40, slows at 15.20
	5	2 mins	12	15.45	17.45	calm and angst	still, misty, reflective	v slow	pause at 17.35
	6	1 min	6	17.45	18.45	serial chaos & quiet		chaotic	
Y	7	1 min 30	9	18.45	20.15	melancholy, mourning	windows, churches	v slow	recovering at 19.45
Y	8	2 mins 45	16	20.15	23.00	reflective, nostalgic	interiors, windows, doors, portraits		
Y	9	1 min	6	23.00	24.00	melancholy, calm	water, sunlight	flowing	
Y	10	1 min	6	24.00	25.00	reawakening, hope	flowers, birds,		
	11	1 min 30	8	25.00	26.30	return to chaos	impact, buildings	chaotic	finish abruptly to silence
			149						

Whichever your preference, if you are going to create an integrated soundtrack of music, voiceover narration and other sound clips, you will need to organise creating the clips and the final soundtrack. Those clips need to be also copied to your Audio folder when made so that you can do the sound mixing (see Voiceovers and Making an Integrated Soundtrack)

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Transitions and Choreography

Transitions are the way one slide transitions to the next, and are fundamental to AV production.

Choreography refers to the matching of steps and movement to the music in dance. I rarely hear it talked about in any AV contexts, yet it is also fundamental. In AV good choreography matches the movement and transitions between slides to changes in mood and pace of the music.

Transitions

AV software comes packed with enticing presets – rather like Photoshop brushes and Filters – to create fun transition effects. This include swirls, 3D effects, curtains and shutters, blurs, rotations etc.

My strong advice is to avoid them all. They are garish and gimmicky for the most part.

Instead stick to three basics:

- **Dissolve** – transitioning one slide softly to the next;
  Perfect for creating Third Images and gentle, relaxing movement.
- **Fade** – or 'dip to black', where one slide fades out to black before the next fades in;
  Perfect for changes in subject or format.
- **Snap** – also called Quick Transition or Jump Cut, an instant cut from one image to the next;
  Perfect for faster pace, especially when the image is moving between video clips.

If you watch any AV produced for TV you will rarely see anything other than the Snap transition.

Transitions and the Third Image

Dissolve transitions can be long or slow, depending on the mood or pace of the piece. You can vary this within a piece according to changes in the soundtrack.

If using long dissolves then the Third Image comes into play. A Third Image appears when one slide is not fully faded out and the next is not fully faded in. It creates surprises and adds to the narrative.

Through experimentation, you can learn which types of images work well together to create Third Images, e.g. a light subject into a dark space.

SHOW EXAMPLE

In the old days of colour slides, a third-image transition could be controlled finely with the relative brightness of the two (sometimes multiple) projectors. But it is more difficult to achieve digitally. You can create third images digitally by:

- Using slow dissolves in the software;
- Creating a composite Third Image in your photo editor to be used as a separate slide between the originals;
- Creating image elements to be dissolved in the software using keyframes;

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Choreography

Choreography requires one key skill: listening.

By listening I mean really listening to a piece of music:

- How does it begin, suddenly or fading? How does it end, abruptly or fading?
- How does the mood come across to you? How does it build or change?
- Are there changes of pace?
- Are there any accents such as a sliding note or a drum beat that you can match with?
- Are there any key lyrics to match?

When you have a feel for the music, images can be dissolved across runs of notes, snapped in to beats and chosen to match mood.

Animations

For the duration that a slide is displayed, it can also be animated. There are many effects possible, including zoom in or out, panning and rotation. Such effects are often referred to as 'Ken Burns Effects' after their originator. Again they should be used appropriately and with care such that the effect is purposeful or subliminal.

Noticeable animations are particularly well suited to Snap transitions or Jump-cuts,

If you plan to use zoom to any greater degree than 10% then you should consider optimising your images slightly larger than HD, say to 2k 2560x1440. However since the audience is not examining the image in detail then there will rarely be a noticeable degrade in quality.

Keyframes

Keyframes are one of the key reasons for using purpose designed, pro software. Keyframes allow you to control animations and captions and other image effects within the slide's duration on the screen. For example captions can fade in and out or be held over the next slide. Keyframes allow every slide to be multi-layered, giving you more creative control over image effects, if you wish.

Captions

Written captions are an ideal way to add narrative to your piece. Can you imagine a film or video drama or documentary without title and end sequences? Captions can add weight to the ideas created by the images themselves and signpost changes, as well as creating the introduction and endings.

But, they must look professional and slick. It is very easy just to use a default font with no transition or animation, creating a clumsy block of text with no design value

In principle:

1. Think about your typeface / font.
   In my view a minimal slim typeface like *Courier* or *Eras Light* works beautifully, elegant and readable without being obtrusive. Avoid any heavy block typefaces and definitely no *Comic Sans*! Script typefaces and other stylised fonts can look good with the right subject matter. Make the caption readable and subtle - choose your size carefully

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2. Use animation
   Using animation or keyframes to bring a caption in or fade it out over the top of a slide can look very professional and well thought through.
3. Use black slides
   If you have a change of subject midway (which is possible though difficult) you might consider placing your new caption / title on a black slide.
4. Make an eye-catching and professional title
   This will be the first thing your audience sees, and if it is too sudden or clunky then expectations will be set low before your slides have even begun. Get this right, on the other hand, and your audience will be primed to expect the best.
5. Make a personalised title sequence
   You can make a video signature (think production house logo and sound theme) to give your AVs a personalised touch. But not too grand or pretentious until you're feeling competent and confident. Make them look professional.

Advanced Techniques

Voiceovers and Making an Integrated Soundtrack

More advanced Audio-visual productions, as opposed to Visual Harmony, require some form of voiceover narration. These need to be scripted and planned into your storyboard, then recorded and mixed with your soundtrack.

Recordings made using onboard microphones in a laptop, phone or webcam are rarely adequate for a good soundtrack; they can sound hollow and rough, especially if the music quality is high.

So it is important to invest in a good setup, which includes:

- a USB microphone or (better) a condenser microphone;
- a means of dampening the sound in your recording space;
- sound mixing software such as Audacity;

Sound mixing software is thankfully accessible and free in the form of Audacity (See Software). Audacity can be used to mix multiple sound sources together into an integrated soundtrack for export to MP3. It has the capability to mute and adjust volume on each track and to automatically dip a background track during voiceovers.

Mixing is also possible to lesser extent in some AV software itself e.g. PTE AV studio, making the production process more dynamic.

Inserting video clips

In some software such as PTE AV Studio, video clips can be imported and used like stills. They will play in the compiled production. Video clips can be transitioned using dissolves but are well suited to snap transitions or jump cuts.

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Software Alternatives

Here are some of the common software choices with recommendations:

1. PTE AV Studio (was Pictures to Exe) - https://www.wnsoft.com/en/pte-av-studio/

   In my opinion the best there is. PTE can compile an executable file (.exe) for Windows or a Mac app, as well as videos in MP4 and a number of useful presets. It includes all the usual building tools as well as a powerful audio editor and both a Slides and Timeline view to aid choreography. It's interface takes a little getting used to, particularly controlling animations, text and caption placement, but it is unsurpassed.

   Other software can produce a basic show, but once you have used keyframes you'll never look backwards.

   Available as a one-off buy.

2. Photopia (used to be ProShow) - https://photopia.nl/

   ProShow (Gold and Producer) used to be the main alternative until it sank. Now a compatible replacement has arisen in the form of Photopia Creator and Director (the pro version).

   Useful if you have old ProShow content to be resurrected but unlike PTE available only on subscription.

3. Fotomagico - https://fotomagico.com/

   Powerful, dedicated Mac software that comes with high recommendation

4. Others include:
   - SmartSHOW 3D
   - Magix Photostory Deluxe
   - PhotoStage
   - Cyberlink MediaShow
   - AquaSoft SlideShow
   - Adobe Premiere (very expensive!) or Lightroom (limited function)
   - Powerpoint (limited function and poor image handling).

And for sound mixing, unless you have a favourite Mac app, no need to look any further than

5. Audacity - https://www.audacityteam.org/
   Audacity is free and open source and recommended just about everywhere as being of professional quality.

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Optimising for Zoom transmission

If you intend to show AVs over Zoom then there are some settings you need to optimise:

When compiling the show, maximise the view screen to the resolution you wish to transmit, i.e. no larger than HD.

When sharing your screen, tick on the Optimise for Video and Share System Sound boxes. The first of these will minimise other Zoom windows and ensure that the video is compressed slightly for smoother playback.

There is a guide available by Ian Bateman at the RPS here https://rps.org/media/itic1upy/optimising-your-system-to-show-avs-over-zoom.pdf

Music Licensing

This is very important: if you wish to make AVs using copyright music to show to anyone outside of your home then you must obtain the necessary music licenses.

The making of AVs with commercial recordings is illegal without appropriate licences under the Copyright, Designs & Patents Act 1988. Many AVers are unaware of this. Several licences are needed to produce and show an AV, film or video using commercial music, and all AV competitions insist on correct licensing as a condition of entry:

1. **Mechanical Copyright Protection Society (MCPS)**
   MCPS protects the rights of the composer and a licence allows you to copy the recording to a computer, tape or CD for showing in private or at amateur clubs and events.

2. **British Phonographic Industry (BPI)**
   The BPI licence permits the copying of the physical CD or record, copyright for which is owned by the record company. You must own and have purchased the recording through regular retail channels and you must not identify the artists and performers in credits.

3. **Phonographic Performance Ltd. (PPL)**
   Perhaps the most important is the PPL licence, which permits the performance in public of sound tracks created from commercial recordings. 'In public' is generally defined as 'outside of the home', so a PPL licence is required to show at a club or competition.

   Even with these licences, performance at a ticketed, public for profit event is not permitted.

4. **Musicians' Union**
   Performers Rights are administered by the Musicians' Union. Prior to August 2005 you also needed the performers' consent to use their work in a production, but this has now been waived, provided all the other licence conditions are observed.

5. **Performing Rights Society (PRS)**
   The venue at which your show is performed must be covered by a PRS licence. This is the responsibility of the venue, but you should check that your club or competition venue is covered.

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These licences apply to CDs, records and tapes that you have purchased. For legally downloaded or even streamed music, the position is not so clear and depends on whether the source uses DRM (Digital Rights Management). Check your Terms and Conditions very carefully.

The Federation Against Copyright Theft - www.fact-uk.org.uk has conceded in the past that its primary concern is the large-scale piracy of music and video, not recordings made for home use. However, the law still stands.

Where can I get the Licences

A copyright clearance scheme is offered by the Institute of Amateur Cinematographers (IAC). Membership costs £37.50 (individual) and all three licences then cost £8.54 pa together.

The club could buy a license, but it is important to note that a Club licence cannot be used by individual members for personal productions, and an individual licence cannot be used for club productions.

More information is available from IAC - https://www.theiac.org.uk/iac/copyright/copyright-clearance-scheme.html and for venues the PRS - http://www.prsformusic.com/

Hosting AV Sequences on You Tube or Vimeo

If you use Copyright music then regardless of your licensing arrangement your piece will be checked for copyright compliance when you upload to YouTube and Vimeo.

Many artists and rights owners have entered into arrangements with YouTube but many are also very strict about not granting rights. Steer clear of the biggest names for this reason – think Beatles, Eagles, Queen …

Sources of Royalty Free and Copyright Free Music

You Tube offers, through its creator studio https://studio.youtube.com/ an audio library of Royalty Free and Copyright Free Music. Much of it is good quality and covers a lot of genres. There are many other sources, but ones I have used are:

- LesFM - https://lesfm.net/
- Purple Planet - https://www.purple-planet.com/
- Motion Array - https://motionarray.com/

Sound clips are often useful too, and there are equally many sources for those, including:

- Freesound.org - https://freesound.org/

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