

Techniques & Approaches



A Guide for Researchers by Scott A. Lukas (scottlukas@yahoo.com)

Incorporating audio, video, motion graphics, still photography, information design, VR/augmented reality approaches, and Web- or app-based technology in an experimental ethnographic project may result in interesting sensory augmentations of the work. It should be noted that while many of the listed resources or approaches have high learning curves, some of the approaches require very little technological learning. As an example, a simple iPhone or Android phone provides functionality and apps that relate to audio, video, and still photography uses. In terms of the resources below, I have not indicated whether the resource is free or paid and I have not defined the level of technical knowledge or learning that is connected with each form. You could investigate and discover on your own. A number of these media/technology approaches could be, over time, developed as a “+1 focus” in terms of a secondary research/representation aptitude to supplement the ethnographic text.

CONSIDERATIONS

In beginning conversations about the use of media in our projects, we might ruminate on a number of issues that could impact the nature of your use of such media.

Purpose – at a seemingly simple level, we might ask, what is the goal of using the media/technology/approach in your project?

Budget/Time – all of us, likely, have thought about the time involved in learning a new media approach or technology; as well, we do not have unlimited budgets. A challenge in terms of funding is that some grants do not allow spending grant money on software or even hardware.

Ability for Integration – a key focus might be a consideration of how the media form will integrate with your project. Thinking about the purpose of the media form—what role will it play in the work?—may have a value in terms of the initial stages of your work.

Archival Possibility – in today’s research age, we often discover that budget is not a limitation in taking photos or videos due to the low prices of storage (whether hardware or cloud based). As a result, there is a great advantage to extensive and perhaps redundant documentation of field and research contexts. You never know when you might need that seemingly obscure photo or video clip.

Design Approaches – as noted on the PECE Website, there is a value to adding design logics to the foundations of the ethnographic project. It may be valuable to begin with the design logic and then choose media and approaches that will be most expressive to that logic. We shouldn’t assume that all media approaches are interchangeable; rather, they should be considered in dialogue with the logic or theme at hand.

WRITING

It is interesting to consider that very few anthropology programs incorporate writing or creative writing workshops that are common in MFA Creative Writing programs. Perhaps there is value in developing a more explicit focus on ethnographic writing that parallels some of the creative writing tendencies. Here are some ideas for both experimental writing software and fiction writing software or approaches.



Moleskine

<https://us.moleskine.com/en/>

Some of us swear by a traditional notebook. You can write in it, sketch, even create a conceptual diagram or drawing or two. Down the road, scanning and manipulating your fieldnotes or sketches in an electronic form can have a very aesthetic look to it. Just don’t lose the notebook, like Edmund Leach!

Experimental Writing Software and Approaches



Twine

<http://twinery.org>

Twine is an open-source tool for telling interactive, nonlinear stories.



Texture

<https://texturewriter.com>

Texture is Hypertext creator and reader.



Surrealist Games

Surrealist Games can be a great starting point for energizing an experimental text.



Mystory

<https://users.clas.ufl.edu/glue/>

Greg Ulmer's mystory (and other textual) experiments are a great starting point in terms of experimental textual forms. I have utilized mystory assignments in previous first-year writing courses, and I have found them to be very valuable for students.

EndNote

EndNote

<https://endnote.com>

For many years, EndNote has been a standard in the world of citation, reference, and bibliographic software.



Scrivener

Scrivener

<https://www.literatureandlatte.com/scrivener/overview>

Scrivener takes a much different approach to composing a text. Instead of the one big chunk of a Word document, Scrivener allows the writer to compose in “chunks” that can grow over time. Chunks can be linked together when needed, and it is possible to annotate with research materials behind the scenes. This could be very useful for fieldnote entries, ethnographic field drafts, and the like.



Scapple

Scapple

<https://www.literatureandlatte.com/scapple/overview>

Scapple, made by the same folks who created Scrivener, is an organizational tool that connects ideas in a visual sense. It is very close to OmniGraffle, described below.



Ulysses

Ulysses

<https://ulysses.app>

Many folks swear by Ulysses. It is a minimalist program/app that organizes all of your writing entries and allows you to link certain entries to one another. It also has some powerful abilities to format and publish your writing to pdf, WordPress, Medium, etc.



yWriter

<http://www.spacejock.com/yWriter5.html>

yWriter is a popular word processor (intended mainly for novelists) that focuses on the scene-level of writing.



Evernote

Evernote

<https://evernote.com>

Evernote is a note-taking app. It's a great way to keep track of your thoughts—like brainstorming ideas, outlining chapters, and jotting down inspiration when it strikes. The app could be useful in field settings when you need to use your phone to jot down some notes or headnotes. Evernote combines multiple functions—scanning, handwriting searches, and Web clipping—in one app.

AUDIO

Audio has incredible potential in the ethnographic project. With the exceptions of voiceover and field voice recordings and ethnomusicological applications of music and sound, sound and audio have been underused modes in ethnographic projects. Let us consider a number of the approaches and technologies that could jump-start your project.

Recording (Voice)



My number one tip is to use a high-quality external microphone (\$20 or less will do the trick) for recording voice-overs or for conducting field interviews.

Audio Recorder



Tascam DR-05

<https://tascam.com/us/product/dr-05/top>

I currently use a Tascam DR-05 for field recording applications. You simply plug the memory card into your computer to use the audio. Zoom also makes some very good audio recorders.



Voice Record Pro

<https://apps.apple.com/us/app/voice-record-pro/id546983235>

Since you have your cellphone, it is very easy to use the built-in microphone and a free app, such as Voice Record Pro.

Music/Ambient Sound

To create musical work or ambient/atmospheric sound, you have many options, depending on your musicality, experience with sound design, and desired outcomes. Many of the programs below are called DAWs, or digital audio workstations. They allow you to edit sound, apply effects, create music through MIDI or other approaches. Keep in mind that depending on your application, you may need to purchase additional hardware in conjunction with the software.



Garage Band

<https://www.apple.com/mac/garageband/>

Garage Band provides many audio and music features for your use while limiting features found in other DAWs.



Logic Pro X

<https://www.apple.com/logic-pro/>

Logic Pro X provides many additional audio/music features that are not available in Garage Band. The interface is similar to Garage Band, so upgrading to Logic will not be an entirely new learning experience.



Ableton

<https://www.ableton.com/en/live/>

Ableton is a DAW used by many DJs and sound performers. It has a slightly different workflow compared to other DAWs, and it allows for the triggering of audio clips or stems that can be layered on top of one another.



Pro Tools

<https://www.avid.com/pro-tools>

Pro Tools is a very popular DAW for your musical and audio needs. Like Logic Pro X, it has a high learning curve and significant price.



Audacity

<https://www.audacityteam.org>

Audacity is free and open source. I currently use it for many basic sound applications, like adding fades to my music tracks or boosting the gain or level of an audio file. The program also allows for easy conversion of audio formats (wav, aiff, etc.). Additional free programs may be found at: <https://www.techradar.com/news/the-best-free-audio-editor>

Environmental Sound/Electro-Acoustics

All of the following concepts that follow focus on sound as an atmospheric, mood-creating, and environmental approach.



BBC Sound Effects

<http://bbcsfx.acropolis.org.uk>

You may access the BBC's library of 16,000 sound effects for free.



The Microphonic Soundbox mk2

<https://www.leaf-audio.com/diy-machines/microphonic-soundbox/>

The Microphonic Soundbox mk2, which I am using in my presentation today, is a box that provides for electro-acoustic experimentation and that also acts as a powerful (clean electronics, 100x gain adjustment) hub for your piezo/contact microphones.



TENS-Midi

<https://www.midisprout.com>

The Midi Sprout or SCÍON from Instruo (used in my sonic work) translate biofeedback data, sourced from contact with organic surfaces, into musically useful control signals. It provides for useful sources of indeterminacy in musical and sonic worlds.



SOMA Ether

<https://somasynths.com/ether/>

Ether is a kind of anti-radio. Instead of being tuned to a specific radio station, it receives all the interference and radiation that a traditional radio tries to eliminate in order to create a clean signal. It captures the radio waves "as is" from hertz to gigahertz because it doesn't contain the tuned input

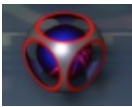
circuit that filters out all frequencies except the narrow band of a specific station. This allows Ether to perceive the invisible electromagnetic landscape that humans created unintentionally, making possible live electromagnetic field listening and recording.



Ambient Mixer Music

<https://apps.apple.com/us/app/ambient-mixer-music/id731882796>

Apps, like Ambient Mixer Music, allow you to download and re-mix atmospheric sounds. This particular app has an 8-channel mixer for such purposes.



MetaSynth

<http://www.uisoftware.com/MetaSynth/index.php>

MetaSynth is an award-winning electronic music and sound design studio for OS X. Its six “rooms” provide six unique environments for creating and manipulating sound.

Sensors/Circuits



Sensors offer the possibility of adding interaction to an installation. Water, light, proximity, sound, and many other elements may be linked to the use of sensors. Sensors can be used with CV to effect sound or video. One example is the KOMA Field Kit. <https://koma-elektronik.com/?product=field-kit>

Sensors that may be used with the Field Kit are available on Amazon for low prices.



DIY/Makers/Open Computing

Arduino, Raspberry Pi, etc.

If you are familiar with the DIY/maker community, you are likely aware of the true potential of some of these applications. An entire guide could be written on these approaches, but we could say today that a simple, customizable micro-processor, such as Arduino, could be used for multiple applications—audio, video, environmental design, etc.

VISUAL MAPPING/INFORMATION DESIGN

There are many useful programs and apps that provide opportunities to outline research, map project areas, or use graphical techniques to create information design diagrams or infographics.



OmniGraffle

<https://www.omnigroup.com/omnigraffle>

Is a super useful program for drawing and mapping relationships of objects. For some reason, I am always reminded of Actor Network Theory when I am using this program. Unlike creating diagrams in PowerPoint or another application, this program allows you to group and keep together objects or to move objects and to retain the lines or objects connecting them. The canvas is also flexible, so it can grow as your project grows in complexity. This is the program that I used to outline my talk. It provides an opportunity to think about relationships and connections in a careful sense. The company also makes other useful visualization programs, such as OmniOutliner.



IDEO Cards

The Design firm IDEO offers a very unique set of Method Cards that you may find to be inspirational in beginning a project, group collaboration, or charette.

You may download the entire deck of Nature Cards here:

<http://5a5f89b8e10a225a44ac-ccbed124c38c4f7a3066210c073e7d55.r9.cf1.rackcdn.com/files/pdfs/IDEO%20NatureCards%20April%202015.pdf>



Fabula

<https://fabuladeck.com>

Fabular cards are focused on the core elements of fiction writing.

Custom Card Decks

https://www.amazon.com/Apostrophe-Games-Blank-Playing-Finish/dp/B01H4CZQ14/ref=sr_1_2?dchild=1&keywords=custom+card+game+decks&qid=1581190463&sr=8-2



Blank card decks, such as those sold by Apostrophe Games, offer the possibility of creating custom decks that could be connected to any number of themes or contexts: toxicity, design logics, core principles for experimental ethnographic writing, etc.

IMAGE



Still Photography

In deciding on an approach to still photography, one may have some of the same considerations discussed under Video below. A DSLR is a great choice for high-quality photography. Many action cameras, designed for video, have basic photography options that often lack some of the adjustments and quality features of DSLRs. An iPhone or cellphone camera has the advantage of convenience (a one-stop-shop for many apps and features) and photo effects (3-D, panorama, portrait modes, etc.), but has the disadvantage

of sometimes less-than-ideal quality. Like any of the technological choices discussed, make a decision based on the goals of your field or research situation.

Image Functionality



Alchemy

<http://al.chemy.org>

The Alchemy drawing canvas has an intentionally reduced level of functionality. No undo, no selecting, and no editing. Interaction focuses instead on the output of a great number of good, bad, strange and beautiful shapes. Interesting features include: “Shout at the computer,” “Draw blind,” and “Randomize.”



GIMP

<https://www.gimp.org>

GIMP is a cross-platform image editor available for GNU/Linux, OS X, Windows and more operating systems. It is free software, you can change its source code. In short, it is an open-source version of Photoshop, the classic image manipulation software.

Google Photos

Image Storage

Images can take quite a bit of space on a hard drive, plus, if you are not using a remote desktop, you won't have access to them while on the road.

Who knows, you might need that obscure photo that you took years back for an upcoming presentation! I used to use Flickr, but a recent corporate buyout led to increased fees. As a result, I transferred my 50,000 or more photos to Google photos.



Document Scanning

There are many free cellphone apps that allow for convenient document and materials scanning. I use Genius Scan, which allows for easy exporting of your scans and uploading or e-mailing of them.

<https://apps.apple.com/us/app/genius-scan-pdf-scanner/id377672876>

VIDEO

Video Shooting

My video for educators, The Value of Video, offers some ideas about the opportunities (and challenges) or video work. <https://youtu.be/WzYcec2SW84>

Here are your main options for video shooting in the field. I include my advice and concerns with each form.



DSLR: A digital single-lens reflex camera is the choice for many who wish to shoot outstanding video (4K and beyond) and take high-megapixel still photography. Advantages: high-quality still images and video. Disadvantages: price; bulk (camera body and lenses); learning curve; additional equipment (tripod, microphone, etc.). I currently shoot all of my video on the Black Magic Pocket Cinema Camera and have purchased a number of vintage lenses from eBay in order to achieve alternative image looks in my videos.



Phone: Let's admit it, your Apple or Android phone has the ability to shoot great video, capture stellar audio, and take some very nice still images. Advantages: you already own one; all-in-one device for media uses; ability to upload images directly to your social media/audience platforms. Disadvantages: quality (at times, I have discovered my still images to be less than ideal)



Action Camera: An action camera combines the abilities to shoot video, capture audio, and take still photos of the above forms but adds the important feature of stabilization (a gimbal). I shoot all of my field videos that involve me moving on a DJI Osmo Pocket (about \$350). See, <https://www.dji.com/osmo-pocket> I should note that you may also purchase a gimbal for your cell phone camera.

Experimental Manipulation

The experimental, real-time, and environmental-reaction effecting of video has some real potentials, especially for the public presentation of ethnographic work.



Signal Culture Apps

<http://signalculture.org>

The apps Frame Buffer, Maelstrom, SSSScan, Re:Trace, V-Mass, and Interstream all provide abilities to manipulate video (computer based, live feed, webcams) in real time, with luma (brightness) and chroma (color). The Signal Culture Website, which “is dedicated to producing and distributing resources for use in the field of experimental media art,” may also be useful in terms of experimental video work.

Storyblocks

Stock Video

Stock video may not be required for your project, but depending on the context, using stock video can have an evocative effect in your work. There are numerous sites that offer such clips. I subscribe to Videoblocks for less than \$200 per year (<https://www.videoblocks.com>). One thing you will want to verify (for video, stock images, and stock audio) is the licensing of the clips for distribution. You should look at the number of impressions allowed, rights (such as worldwide), and whether models or properties (such as buildings) have releases.

Video Editing

Video editing can be complex and time consuming. Here are some of the common applications for this purpose.



Basic video editing (including edits, transitions, royalty-free music or sound effects, and titles) is available with YouTube (<https://www.youtube.com>) and other commercial sites and apps. While the functionality is limited, it is good enough to produce some convincing media for your audience. Additional free editing programs are available here: <https://www.oberlo.com/blog/best-free-video-editing-software>



iMovie

iMovie

<https://www.apple.com/imovie/>

If you were to ask me today, what is a good video editor that won't require a lot of time and technological pain, I would say that is iMovie. It doesn't have the bells and whistles of more involved programs like Final Cut Pro, but it is a great entry-level application.



Final Cut Pro

<https://www.apple.com/final-cut-pro/>

Final Cut Pro is the software that I currently use for all of my video work. If you use iMovie, you will find that upgrading to Final Cut Pro is less challenging.



Video Storage

Depending on your research, you may wish to find a platform that accomplishes the goals of storing your media (video files), engaging your audience in terms of social media, and tracking and analyzing data in terms of audience engagement.



Vimeo

<https://vimeo.com>

Vimeo is a video platform preferred by some artists and filmmakers due to the ability to store high-definition video.

ANIMATION AND MOTION GRAPHICS



Synfig Studio

<https://www.synfig.org>

Synfig Studio is an Open-source 2D Animation Software for Windows, Linux and OSX



Motion

<https://www.apple.com/final-cut-pro/motion/>

Motion is a very powerful platform for video creation and motion graphics. It does have a significant learning curve.



After Effects

<https://www.adobe.com/products/aftereffects.html>

After Effects is an industry standard for all types of video creation. Like Motion, it has a significant learning curve.



Blender

<https://www.blender.org>

Blender is the free and open source 3D creation suite. It supports the entirety of the 3D pipeline—modeling, rigging, animation, simulation, rendering, compositing and motion tracking, video editing and 2D animation pipeline.

MULTI-MEDIA



Canva

<https://www.canva.com>

I have been using Canva for some time in cases in which I need an infographic, flyer, social media post, or other graphical design. Canva is really use to use. While some of the features do require payment, you can get by with the free features without a problem.

Web/Blog

Using a web-based platform, whether as a traditional Website with content and links or a more moving and updated blog, is a good strategy for building an audience for your research/writing. Both Websites and blogs can be time consuming, and they require constant updates and development of both textual and media content (video, audio, graphics, photos, etc.). There are numerous options out there for Web hosting and blog creation, so just do a Google search and find out.



WordPress

<https://wordpress.com>

WordPress is a very popular Web/blog platform that can have a learning curve.



GoDaddy

<https://www.godaddy.com>

GoDaddy offers very cost-effective domain registration and hosting. I used to create my own Websites from scratch using Rapid Weaver, but I found this time consuming. Now, I use GoDaddy's templates and have been impressed with the results. My samples:

<https://ltccteachingandlearning.com>

<https://scottlukas.com>

<http://www.genderads.com>

ENVIRONMENTAL APPROACHES

Environmental approaches are techniques that extend traditional ethnographic approaches to 3-D and immersive spaces.



VR/Augmented Reality

The use of VR in direct user applications (with VR glasses or augmented reality apps) has true potential for the design of experiential spaces. Imagine the addition of a VR technology to an experience of a “toxic” space or context! Two sources of inspiration include Varjo products (<https://varjo.com/products/>) and the immersive VOID experience (<https://www.thevoid.com>).



Designed and Created Spaces

Spaces that are fashioned from scratch—such as from power tools, fabrication, and 3-D printing—suggest a new physicality (in both the design/making and the experiencing stages of the work). Programs like the Experience Design Program at the University of Indianapolis (<http://www.uindy.edu/cas/experience-design/>) illustrate the possibility of combining theory, research, and design/3-D fabrication.



Performance Ethnography

There is an interesting and rich tradition in anthropology and the arts in terms of creating connections between performance and aesthetics and anthropological research/ethnography. Considerations may be given to the multiple approaches that could be created in the worlds of intermedia in terms of aesthetics and anthropology.

SOCIAL MEDIA/AUDIENCE-ENGAGEMENT STRATEGIES/RESEARCH COMMUNITIES

Let's be honest, none of these social media/community platforms were created with researchers in mind. With each comes the ills of consumer society in terms of limitations, ads, lack of functionality, and concerns about surveillance and privacy. Yet, their ubiquity allows you—the researcher—to engage audiences with your research, create research communities, and even conduct large-scale data collection projects (check with your IRB first!) It would be interesting to have additional conversations about the uses of such social media platforms in contemporary ethnographic and research contexts.

YouTube



<https://www.youtube.com>

As mentioned above, YouTube has many options for storing and editing videos. It also can act as a hub for community building for your research. Because it is motion/video-based, any of your textual content has to be stored or presented somewhere else. Video allows for audience engagement in ways unavailable with some of the other social media sites. In my own work, I have been interested in the possibilities of using YouTube as a space where others can gather and collaborate on like-minded issues or contexts.

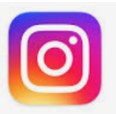
Twitter



<https://twitter.com/home>

I have always found the format of Twitter to be bafflingly uninteresting, clunky, and non-interactive. That being said, I find the information side of Twitter—such as papers and popular journalism pieces that I have discovered—to be helpful.

Instagram



<https://www.instagram.com>

Instagram's visual approaches may be effective in terms of communicating the more emotional and rhetorical sides of your research.

Academia.edu

<https://www.academia.edu>

Academia.edu has been the subject of some controversy due to their “pay-to-play” approaches, yet the site offers an opportunity to create research networks around a certain topic or field of study. It’s a good place to store your drafts of papers that you don’t intend to publish but that you wish to offer to readers. Also, the site features a draft and feedback option that allows researchers to collaborate on nascent projects. The format of the site isn’t really conducive to graphical or multi-media experimentation.



LinkedIn

<https://www.linkedin.com>

LinkedIn isn’t particularly attractive in its graphical design or user interface, but it does have some value in terms of professional networking and, potentially, collaboration on research projects.



Facebook

<https://www.facebook.com>

Facebook, well...what might the possible research applications of Facebook be? There are many to think of, albeit Facebook tends to be a platform that is not clearly congruent with research projects. That being said, the creation of specific community groups on the platform—which can be done on numerous other social media platforms as well—could be beneficial.



Pinterest

<https://www.pinterest.com>

Clearly, Pinterest has a graphic/design focus in terms of its boards and pinning approach. The visual content found on Pinterest could be valuable in terms of sourcing graphic inspirations for projects. As a research development tool, it is quite limited in approach.

BIG DATA ANALYTICS



Tableau

<https://www.tableau.com>

I have had some limited experience with Tableau in terms of analyzing course and curriculum data. A key advantage is the ability to create custom environments for data and, thus, it could have potentials for analysis as well as visualization of data sets for research projects.



Breadboard

<http://breadboard.yale.edu>

Breadboard is a software platform for developing and conducting human interaction experiments on networks. It allows researchers to rapidly design experiments using a flexible domain-specific language and provides researchers with immediate access to a diverse pool of online participants.

Check out the video here: https://youtu.be/FQgb9F_jngg



THOUGHTS

1. Have you used any of the approaches/techniques discussed in this handout?
2. How might these approaches/techniques transform your current research/representation projects?