

Using Technology in an Archive

A Primer on Digital Cameras, Online Catalogs, Databases, Backups, and More

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May 2, 2014
D-Lab



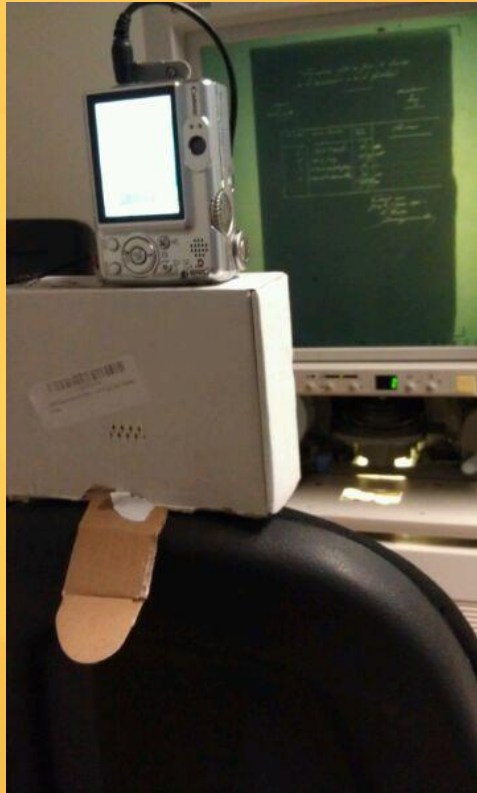
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Topics Covered

- 1. Getting the most out of your digital camera: accuracy, efficiency, and reliability**
- 2. Catalogs and archives available online: know before you go**
- 3. How to organize what you've gathered: some tips and brainstorming**
- 4. Making sure your data is secure: cloud computing, solid state vs. traditional data storage, optical media, etc.**

Always bring a tripod!

- Even if you don't think it will be useful or allowed, bring one anyway – just in case!




VS



Always bring a tripod!

- Try to find one that can invert, and can either fit on a table or is tall enough to stand on the ground (http://www.amazon.com/dp/B004RBX0GO/ref=pe_175190_21431760_cs_sce_dp_1)



FREE

Ravelli Professional 65" Ball Head Camera Video Photo Tripod with Quick Release Plate and Carry Bag
by [Ravelli](#)
★★★★★ (95 customer reviews) | Like (22)


Price: **\$53.69** & this item ships for **FREE** with Super Saver Shipping. [Details](#)

In Stock.
Sold by [CheetahMounts](#) and [Fulfilled by Amazon](#). Gift-wrap available.

Want it delivered **Thursday, May 3**? Order it in the next **2 hours and 53 minutes**, and choose **One-Day Shipping** at checkout. [Details](#)

New Camera Tripod from AmazonBasics
Check out the new AmazonBasics [60-inch lightweight tripod](#) for all camera types.

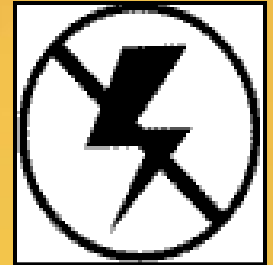
Click for larger image and other views



(1) Digital Camera: the Flash

- **Turn off the flash.**

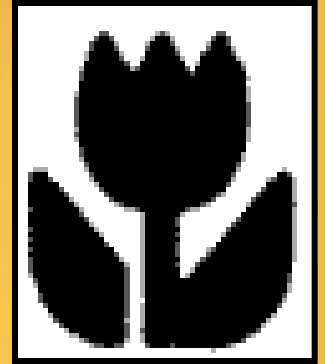
- Double check this every time you camera turns on or wakes from sleep.



- Many cameras reset the flash to automatic, and archives are strict about their flash policies, and you don't want to lose the privilege (and convenience) of having your camera.
 - You may need to set your camera to manual
 - (M, P) on most cameras

(1) Digital Camera: Macro Mode

- **Use macro mode.**
 - Macro mode sets your camera to take close-up pictures. In this mode, if you set the green box over the text, your camera will make sure that the text is in focus.
- Auto-focus is not your friend!



(1) Digital Camera: Storage

- **Take pictures first ask questions later.**
 - You can always delete what you don't need

- Be prepared with extra SD/Compact Flash/SDHC cards.



- More storage means higher quality pictures
 - don't skimp on the quality

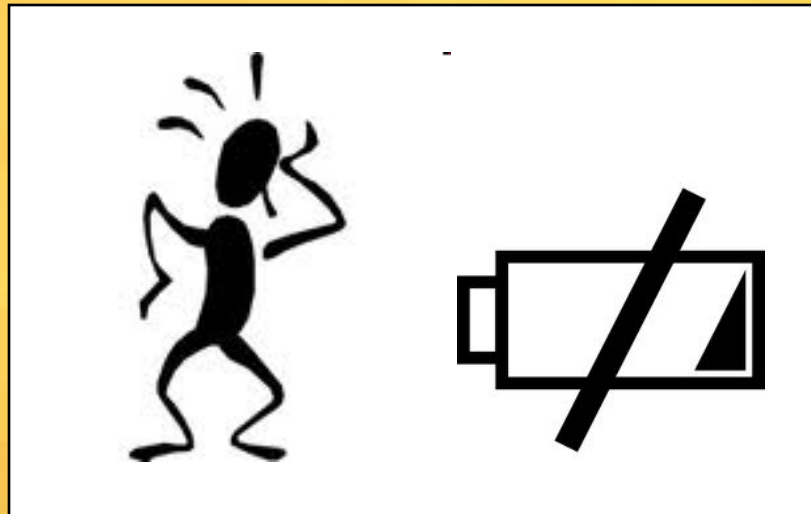
(1) Digital Camera: ISO Setting

- **Check your ISO setting.**
 - The higher the setting, the faster the camera takes the shot and the less light is needed for a clear picture.
 - High ISO: clear in low lighting, but grainier pictures
 - Low ISO: higher quality, but often very blurry without a flash or sunlight (or a tripod).
 - A good compromise is an ISO of 400, but 800 is recommended if you don't have a steady hand.



(1) Digital Camera: Battery

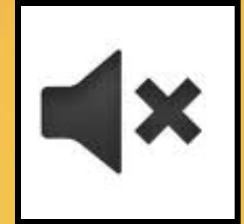
- **Bring plenty of batteries.**
 - Have spare rechargeable or disposable (or both) batteries
 - Buying an extra battery pack for your camera is probably a good investment



(1) Digital Camera: Mute

- **Mute your camera**

- Turning off the sounds not only saves your battery, it is a courtesy to your fellow researchers.



- **Disable picture preview**

- Disabling your preview can save you valuable time and battery life if you are photographing a lot of documents

(1) Digital Camera: Carton Info

- **Always photograph the carton information** each time you start a new document series.
- When you upload the pictures to your computer, **separate the folders into their respective cartons.**
- - It is advisable to upload the pictures to your computer the same day that you take them, so you don't forget where they go.



(2) Online Catalogs and Archives

- Many archives now have full-text documents and entire catalogs available online
 - See handout for some examples
 - <http://bit.ly/1iRBqMt>
- Planning ahead can give you a huge jumpstart before you go to the archives
 - AHA sponsored site:
 - <http://archiveswiki.historians.org/>

(3) Organizing Research

- Choosing a versatile database or research program can put a lot of great tools at your disposal



- Each program has its drawbacks and advantages
 - Choosing a program with good export options (csv, xml, xls, etc.) can save you a lot of hassle

(3) Top Programs - Database

- **Microsoft Access**

- Positives:

- Often included in Microsoft Office
 - Data tables work, in ways, like Excel
 - Great customizability
 - Works with other Microsoft Programs
 - Great export and search (query) options

- Negatives

- Expensive to purchase, but the University has purchased it for all students
 - Not available for Mac
 - Involved set-up



(3) Top Programs - Database

- **Alternatives**

- OpenOffice.org Base

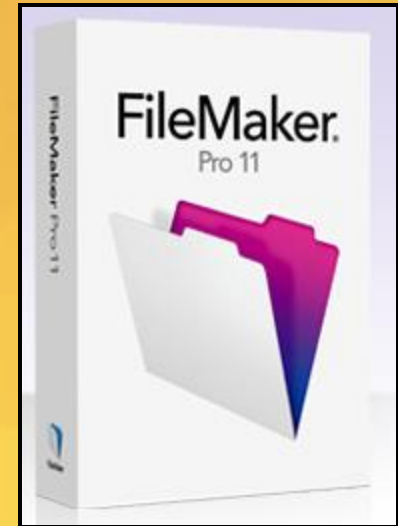
- Free!

- Filemaker Pro / Bento

- Extensive template exchange

- Scribe (<http://chnm.gmu.edu/tools/scribe/>)

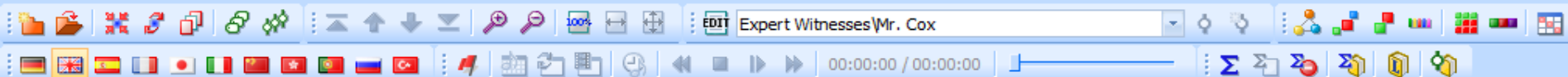
- Buggy, but great idea
 - Integrates with Zotero



(3) Qualitative Research

- Qualitative Research programs, such as **ATLAS.ti**, **MAXQDA**, or **Nvivo** allow you to code (aka ‘tag’) text within your sources and then run powerful query and coincidence searches
- Great way to process your data, and though they are mostly geared toward anthropology and sociology, can be quite useful at the final stages of research
 - Free webinars and video tutorials are available at each software’s website





Document System

- Documents **1232**
 - Documents 6
 - ICTR Judgements & Sentences (Guilty) 1206
 - Case Summaries 20
 - Oldman et. al. 0
 - Muhimana Summary 0
 - Gacumbitsi Summary 0
 - Akayesu Summary 12
 - Bagosora & Kabiligi & Ntabaku... 3
 - Barayagwiza & Nahimana & N... 4
 - Gacumbitsi Summary 0
 - Mpambara Summary 1
 - Nsengimana Summary 0
 - Multimedia Files 0
 - Video Documentation 0
 - Rwanda 0
 - Maps 0
- Sets **51**

Document Browser: Case Summaries\Akayesu Summary

23 13. The Chamber then considered whether the events that took place in Rwanda in 1994 occurred solely within the context of the conflict between the RAF and the RPF, as some maintain, or whether the massacres that occurred between April and July 1994 constituted genocide. To that end, and even if the Chamber later goes back on its definition of genocide, it should be noted that genocide means, as defined in the Convention for the Prevention and Punishment of the Crime of Genocide, as the act of committing certain crimes, including the killing of members of the group or causing serious physical or mental harm to members of the group with the intent to destroy, in in whole or in part, a national, ethnical, racial or religious group, as such.

24 14. Even though the number of victims is yet to be known with accuracy, no one can reasonably refute the fact that widespread killings took place during this period throughout the country. Dr. Zachariah, who appeared as an expert witness before this Tribunal, described the piles of bodies he saw everywhere, on the roads, on the footpaths and in rivers and, particularly, the manner in which all these people had been killed. He saw many wounded people who, according to him, were mostly Tutsi and who, apparently, had sustained wounds inflicted with machetes to the face, the neck, the ankle and also to the Achilles' tendon to prevent them from fleeing. Similarly, the testimony of Major-General Dallaire, former Commander of

Code System

- Code System **1232**
 - Explaining the Import of Colonialism 1
 - genocide 1
 - Colonialism 16
 - Identity Cards 82
 - Belgium 49
 - Germany 17
 - Ethnicity 628
 - Expert Witnesses 1
 - Dr. Alison Desforges 16
 - Dr. Andre Guichaoua 28
 - Dr. Zachariah 13
 - General Dallaire 21
 - Mr. Cox 6

Retrieved Segments

- Case Summaries
 - Bagosora & Kabiligi & 40-40
 - Colonialism
 - Identity Cards
- Case Summaries
 - Barayagwiza & Nahimana 90-90
 - Colonialism
 - Identity Cards

29. During an attack on Gikondo parish on the morning of 9 April, the Rwandan army sealed off the Gikondo area and gendarmes moved systematically through the neighbourhood with lists, sending Tutsis to Gikondo parish. The gendarmes checked the identity cards of the Tutsis at the parish against their lists and then burned the identity cards. The *Interahamwe*

43. The Chamber has reviewed the Radio Rwanda and RTL M broadcasts that were introduced by the Prosecution to establish that Hassan Ngeze called for the extermination of the Tutsi and Hutu political opponents, and that he defended the extremist Hutu ideology of the CDR. The Chamber considers that through these broadcasts, Ngeze was trying to send a message, or several messages, to those at the roadblocks. One clear message

(3) General Tips - Organizing

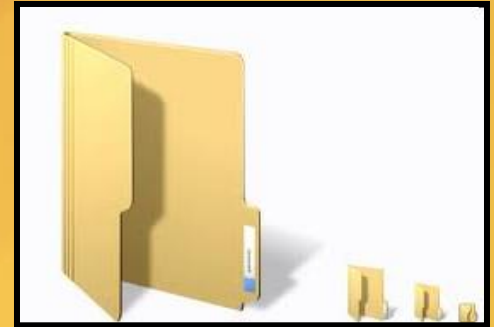
- **OCR (Optical character recognition) is your friend**



- Adobe Acrobat Pro can make any PDF text searchable (really only works with print sources)
- The University now provides the full Adobe Suite for free! (\$2000 worth of software)
 - <http://technology.berkeley.edu/productivity-suite/adobe/>

(3) General Tips - Organizing

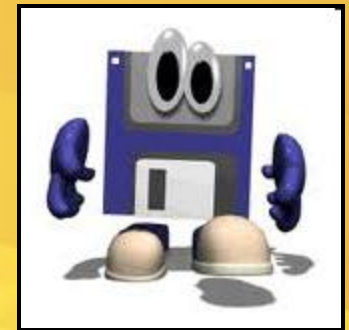
- Take the time to organize your file structure and keep all your materials in one parent folder on your computer



- Once you begin organizing (with Database or Qualitative Research software) you can add to this folder, but don't change, move, rename, edit, or delete the files and folders inside
- Finally, backup, backup, backup!

(4) Backup Overview

- Saving your work only to your computer's hard drive is not sufficient
 - Particularly true if your PC is a laptop
- All computer hardware will eventually fail, so treat your work as a “living thing.”
 - Don't backup and forget about it.
 - If you're backup drive is several years old, you need to get a new one to prep for the eventual failure of that drive.
- Keep your material backed up across multiple forms to have peace of mind.



(4) Physical Backups

- Print it out!
 - Pros: Old technology is often the most reliable
 - Cons: Can't manipulate printed data or “restore” it easily into digital format
- Optical Media (CD and DVD)
 - Pros: Longevity of stored data; portability
 - Cons: Limited space per disc; scratch-able read only (or read-write, but less secure)
- External (or backup internal) Hard-drives
 - Pros: Lots of data storage space
 - Cons: Depends on type of hard-drive



(4) Backup – Hard-drives

- Portable traditional backup drive
 - Great for the size/cost ratio.
 - For under \$100, you can get a USB drive that will store 1 terabyte of material, which is generally enough to backup your entire computer.
 - However! - Traditional hard drives wear out from physical movement, so limiting the jostling of this drive would be best.
- Portable solid state drive
 - Expensive, less space for the money.
 - Much faster than traditional drives
 - Your data will be better protected if you move the drive a lot, because solid state drives do not use moveable parts. They do wear out from write cycles, however.

(4) Backup – Hard-drives

- Miniature flash drives (USB / Pen drives) are a form of solid state drives, and are great for maintaining backups of files with smaller file sizes.



- However, this can be problematic if your data contains a lot of media or large image/pdf files.



- **Also, keep in mind that write cycles will eventually wear out your drive!**
- And these are easy to lose

(4) Backup – Cloud Computing



(4) Backups – Cloud Computing

- Pros
 - Accessible anywhere
 - (it goes out into the InterWebs!)
 - Many services offer free accounts
 - Very convenient!
- Cons
 - Reliant on the company’s solvency
 - Not good for sensitive data
 - (unless you encrypt it yourself)
 - Don’t have a “physical” copy



Data Sync is not backup

- **Data sync** is meant to keep your files current across computers, leading to conflicting copies (or worse, overwritten ones)
- It's always best to use a **backup service** that has version control, so that if a file is changed and needs to be rolled back, then it is still available

(4) Some Backup Services

Online Backup Service	Stated Price	Price for 3 PCs and 50GB Data for 1 Year	Free Plan
Carbonite	\$59/year/1 PC	\$177	15-day trial
CrashPlan	\$50/yr/1 PC unlimited	\$120	30 day, and free local, friend
IDrive	\$49.50/year/150GB/1 PC	\$149.50	5GB free account
Jungle Disk	\$3/month plus storage fees	\$81	None.
KineticD	\$2/GB/unlimited PCs	\$100	14-day trial
MiMedia	\$99/year/100GB /Unlimited PCs	\$99	7GB free account
MozyHome	\$5.99/mo/50GB/1 PC	\$119.88	2GB free account
Nomadesk	\$75/year/unlimited/3 PCs	\$75 (subject to fair use policy)	30-day free trial
Norton Online Backup	\$50/25GB/5 PCs	\$100	30-day 5GB trial
SOS Online Backup	\$79.95/year/5 PCs	\$79.95	14-day trial

(4) Some Data Sync Services

Dropbox

●●●●○ **EC**

2GB storage, free; 50GB, \$9.95 per month or \$99.95 per year Dropbox is a superbly implemented cloud-based automatic file-synchronization service that's ideal for working with files you can store in a single folder.



SugarSync

●●●●○

Plans starting at 10GB for \$2.49 per year or \$24.99 per year

Of the file-synchronization services we've seen, SugarSync has the most features. But there may be too many to keep track of conveniently.



Syncplicity

●●●●○

2GB, free; 50GB, \$9.99 per month or \$99 per year

Syncplicity is the only cloud-based file-synchronization system that integrates with other online services, but it has more rough edges than its competition.

