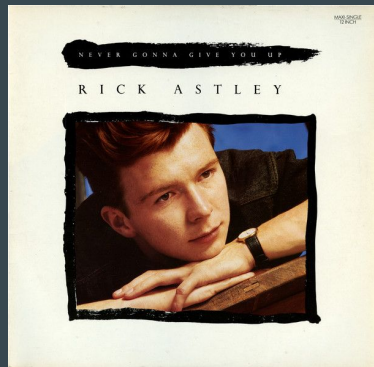


The World of Pokémon, Dungeons and Dragons, and 1980s Album Covers in Spatial Data Management!

...

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About Me

B.S., M.A., and Ph.D. in Geography

M.S. Information Sciences

Gamer, popular culture enthusiast

Data management enthusiast (i.e., I love a good file name!)

Academic librarian (faculty-status)



Data management is the foundation for all good research

Dishes analogy - you could go to bed now and do it in the morning. But future you might not be happy.

Going to school now for the benefits later

Taking the time to organize now pays off!

Data management is self care! Invest in yourself.

Helps you better communicate and share your research.

Houses need a good foundation, just like research



Data management is important, but is it exciting?

Well, to me, yes - but what about your average researcher/student? (who doesn't get excited by a great file name??!)

Things framed through compliance are rarely celebrated or enthusiastically engaged with

There **are** people who come to data management workshops because they want to....but many end up in mine because they **have to**

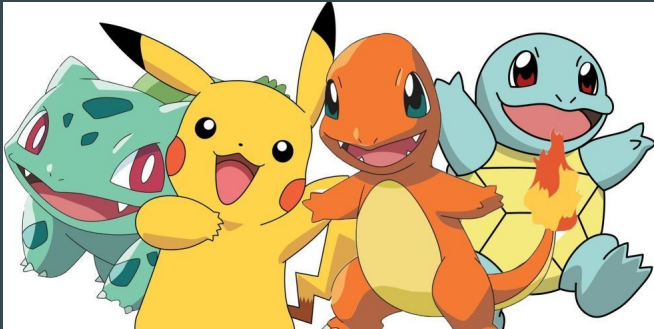


When I started my job, I wanted another way to teach DM

Taught several workshops with 2-3 people, despite strong marketing

Little engagement, very dull atmosphere, no discussion. Needed a reframe!

My background as researcher/teacher in pop culture and Certified Geek Status™ came in handy....



Pedagogy using Popular Culture

Popular culture is a resource for learning and education in formal and informal spaces (Koh & Benson, 2011)

Popular culture encourages us to look at the world in new ways, encouraging us to challenge our prior knowledge and/or opinions about a topic (Jubas et al, 2015)

Librarians are taking the lead across the country and the world to provide data management education to researchers and data users (Eaker, 2014)

Considering the pedagogical value of pop culture, equipping data librarians with teaching experiences around pop culture and data management is useful!

I created 3 lesson plans that provide instructions for teaching a spatial data management concept through popular culture

Lesson plan topics (and why are they important to spatial data management?)

1. **Metadata** - you can't (easily) reuse data without good metadata, and people can't (easily) reuse your data without good metadata. Especially important considering dynamic nature of geospatial data.
1. **Documentation/Workflows** - don't assume you'll remember what you did! Good workflows for geospatial projects are just as important as the data itself.
1. **File naming** - Data can get very messy without a good file naming system!

Lesson Plan 1

(1) Metadata: Design a D&D Adventure Location

Step 1. Is the setting in a city? A rural area? A village?

Step 2. What natural physical features are on the landscape? Water? Mountains? In what ways do they support or inhibit mobility?

Step 3. What human-built/non-natural features are present? Forts? Homes? Shelters? In what ways do they support or inhibit mobility?



Lesson Plan 2

(2) Documentation/Workflows: Let's Draw Pokémon!

Step 1: Choose a Pokémon from Bulbapedia

Step 2: Without naming the Pokémon, type out a list of steps for how another person might draw this Pokémon. Use appropriate terms (colors, body size/type, and other features) to describe the Pokémon.

Step 3: Share your instructions with assigned partner

Step 4: On a physical piece of paper or online paint tool, try to draw the Pokémon based on another person's description!



Documentation

Documenting your data allows others to understand and even reproduce your work (if applicable).

Documentation should include your step-by-step processes (what you did) and place the work in a larger context (why you did it).

Electronic-based lab notebooks (ELNs) can be used, but Google Docs or any word processing tool will work too!

Consistency is important - writing down what you did as soon as possible after you've done it is key!

Codebooks

Variable	Variable Name	Measurement Unit	Allowed Values	Description
User Number	User	numeric	1-6	A numeric ID assigned to participants in sequential order
Question	Question	alphanumeric	Q1-Q11	An ID given to each question in the questionnaire in sequential order
Initial Answer	Pre	numeric	1-5	The score given based on the score chart given to participants, before watching the episode of Doctor Who
Final Answer	Post	numeric	1-5	The score given based on the score chart given to participants, after watching the episode of Doctor Who

Lesson Plan 3

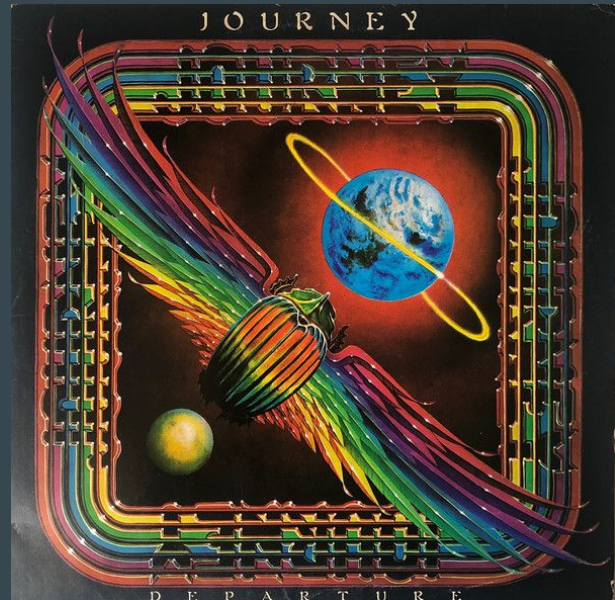
(3) File Naming: Let's Name 1980s Album Covers!

Step 1. Look at each of the following images and pretend they are actual image files (.jpeg, .png, etc.) on your computer.

Step 2. In the Zoom chat, type out how you would name this file on your computer, paying attention to any metadata you see with the image.

Step 3. After 30 seconds, everyone will hit “Enter” and put their responses into chat





Good Habits for File Naming

Include the most important elements to you + collaborators

No spaces in the file name; use underscores to separate elements

Ex: “Gunderman_20200609_map1_v1.pdf”, not “Gunderman map 1.pdf”

Dates written in ISO 8601 format: YYYY-MM-DD, ex: 2020-06-27

Less than 35 characters

Any file naming scheme is better than nothing - don't stress about “perfection”

Good Habits for File Naming, cont.

Think about how your files will sort in a file explorer

Be extensible. “ex001” not “ex1”



```
RawData1.xlsx  
RawData10.xlsx  
RawData2.xlsx  
    *  
    *  
    *
```



```
RawData01.xlsx  
RawData02.xlsx  
    *  
    *  
    *  
RawData10.xlsx
```

File Naming Conventions (FNC)

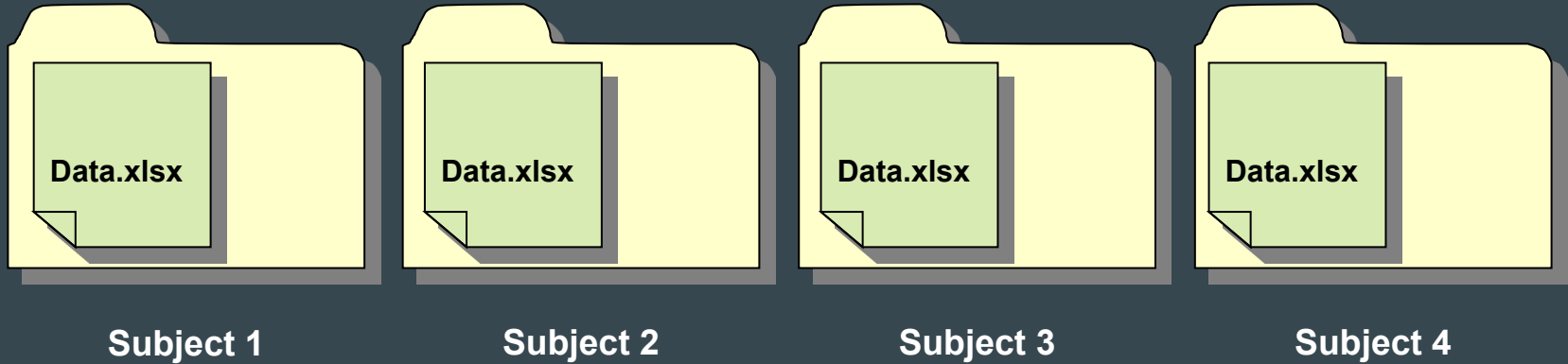
Create your FNC by identifying key elements of the project, e.g. date of creation, author's name, project name, or section

Have a code book or data dictionary that documents your file naming scheme - keep it in a place you can see!

Don't rely fully on folder structure!

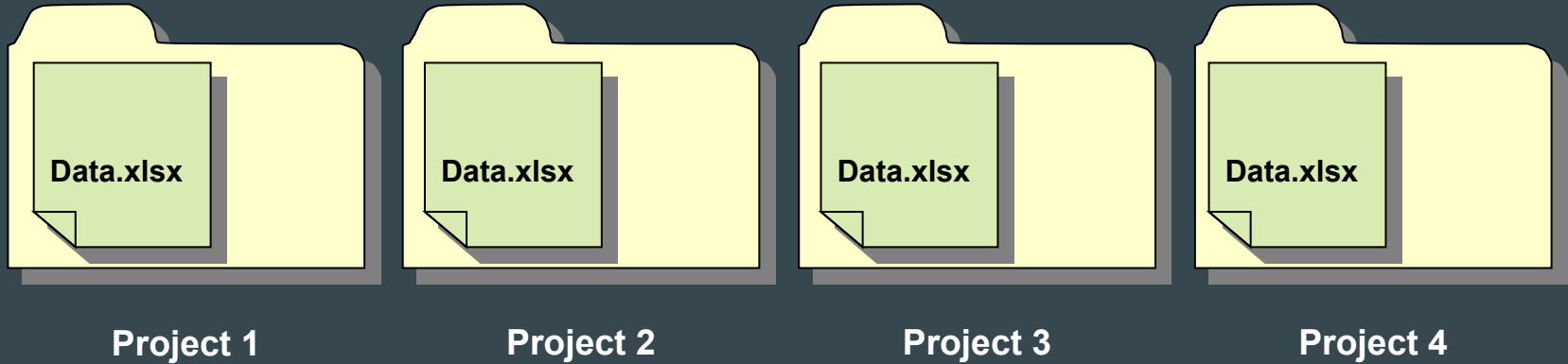
File Names should...

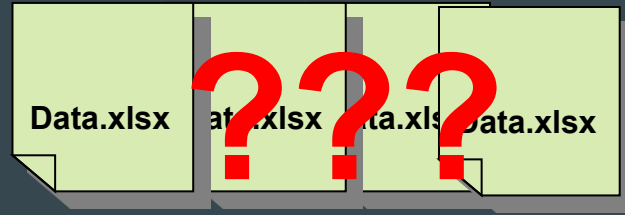
Be unique, where possible and practical. Avoid 20 files called “data.xlsx” in different folders



File Names should...

Be unique, where possible and practical. Avoid 20 files called “data.xlsx” in different folders





Subject 1



Subject 2



Subject 3



Subject 4

Example

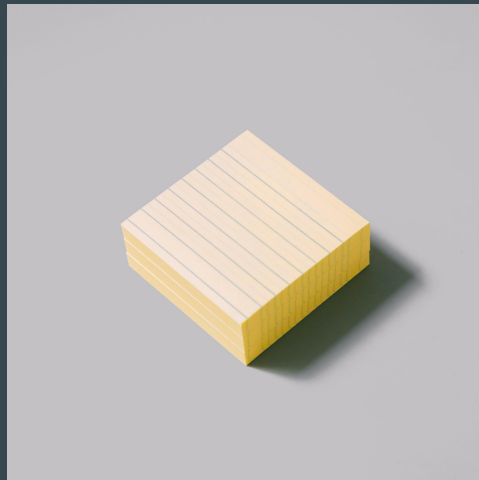
“All experiment results will follow this structure:

YYYYMMDD_Exp#_HCG.csv”

“All observations will follow this structure:

YYYYMMDD_Ob#_HCG.csv”

This lives on a sticky note by my computer and in online documentation!



Learn good file naming habits through gaming!

“What’s in a Name?”

Created for the University of Pennsylvania Libraries Fall 2018 Digital Research Fair by Margaret Janz.

Oh, no! Your research partner is stuck in the Arctic! You need to look at their flash drive to get your data so can submit it with your journal article.

data.xlsx

arctic-data-public20200912.csv

data_FINAL.xlsx

data_FINAL_v2.csv

Conclusions

Access to Lesson Plans and Article

[Lesson Plans](#)

[Open-access version of article](#) from the *Journal of Map and Geography Libraries*

Your next steps!

What are three ways you can incorporate data management practices into your current research workflow, or in a workflow for research you'd like to explore? Feel free to write them in the Google Doc (can be anonymous).

If three things feels like too much, what about one thing?

Can you devote 10 minutes a week to these techniques? If that is not possible, what about 5 minutes?

Data Management Support at UC Davis Library

- Michele Tobias - Geospatial Data Specialist (mmtobias@ucdavis.edu)
- Wesley Brooks - Research Data Scientist (wbrooks@ucdavis.edu)
- Arthur Koehl - Research Data Scientist (avkoehl@ucdavis.edu)
- Nick Ulle - Senior Research Data Scientist (naulle@ucdavis.edu)

Questions or comments?
Thank you for listening!

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Possible discussion prompts

- Are there things in popular culture that you'd like to learn about data management through?
- Have you ever had a learning experience where something was taught through a pop culture lens? How was the experience?