INLS 520: Organization of Information
Spring 2018

Basic Information

Date and time: Tuesdays and Thursdays, 12:30 p.m. to 1:45 p.m.
Location: Manning 01

Instructor Information

Instructor: Melanie Feinberg
E-mail: mfeinber@unc.edu
Office: Manning 24 (on the garden level, just like Manning 01)
Office hours: Tuesdays from 2 p.m. to 3 p.m.
Anyone can come to office hours to discuss anything, without making an appointment in advance. It's a great time to ask questions about assignments, to ask for help, or just to say hello.

Introduction

In this version of INLS 520, we will focus on fundamental concepts of organizing systems that transcend particular implementations or professional contexts. We will not restrict ourselves to the traditional concerns of information science, narrowly defined, because organizing systems are not so restricted.

You will be able to use what you learn in INLS 520 in all information professions. INLS 520 will help you to understand, use, explain, create, assess, and interrogate any organizing system.

Although organzing systems are simple in the abstract, they become incredibly complex in practice. This is because organizing systems attempt to make an unruly, messy, and ambiguous world appear systematic and orderly—and, often, the world isn't having it. For INLS 520, this means that easy answers are impossible, and you cannot find refuge in following rules. But this is what makes organizing information fun—and fascinating.

Learning Objectives

At the end of this course, you will understand:
- Basic elements that constitute the structure and arrangement of organizing systems:
    - Things (entities, resources, items, phenomena...).
    - Categories (attributes, dimensions, properties, elements, fields...).
    - Values (terms, tags, descriptors, categories...).
    - Relationships (between things, between categories, between values).
- The role of categorization in language and cognition.
- The ubiquity of organizing systems and categorization processes and their complex integration throughout our forms of life—social, cultural, scientific, technical.
- The inherent instability, ambiguity, and arbitrariness of any organizing system.

At the end of this course, you will be able to:
- Design an organizing system.
- Implement an organizing system.
    - Explain how others should implement it.
- Assess an organizing system.
- Explain an organizing system.

Course Structure

The course meets twice a week.

Usually, one meeting per week will emphasize more abstract and conceptual topics. These sessions will be oriented around discussions, with some lectures, demonstrations, and games.

Our second meeting of the week will typically emphasize more concrete and practical topics. These sessions are often focused around project work: creating organizing systems (the schema and taxonomy projects) and explaining organizing systems (the organizing system analysis project). There will be occasional lectures, discussions, and games.

The semester calendar presents topics for each day in the course, along with associated readings and preparatory activities. Readings for each week are available in Sakai.

Projects

There are three projects.

Project	*Due date*
Designing a descriptive schema	Due Tuesday, February 20, at the beginning of class.
Designing a taxonomy	Due Tuesday, March 27, at the beginning of class.
Explaining an organizing system	Due Friday, May 4, at noon (the scheduled time of the final exam).

The descriptive schema and taxonomy project documents should be printed and brought to class. *Do not send me an electronic copy.*

The organizing system explanation should be submitted as a PDF document in the Assignments area of Sakai. Please name your file "*<your last name>* INLS 520 explanation" (e.g., Hernandez INLS 520 explanation, Zhao INLS 520 explanation). Remember to also include your name in the document itself.

Details for each project appear in their own subsequent sections.

For all graded course components, grading is based entirely upon the criteria provided in the project details. Points are divided as equally as possible amongst the listed criteria. *There will be no surprises.*

No busy work principle
No one wants to do boring things for no reason, including me! If something is specified as part of a project, it has a purpose that requires thinking. If some component of a project seems like busy work, I probably haven't articulated the purpose well. First reread the instructions, and then be sure to ask me about it, so that I can better explain what the task is supposed to achieve.

Citation policy and paper presentation details
All written work needs to properly acknowledge the ideas of others via in-text references, even when not directly quoting from a source. If you are not familiar with scholarly standards for academic integrity as employed in the United States, then ask me about this as soon as possible.

In making in-text references or preparing reference lists for outside sources, you may adopt any standard citation style you prefer (such as APA or the Chicago Manual of Style).

You may select whatever font, font size, margin, spacing, and other options that you like, as long as your paper is professionally presented. I will not actually count the words in a paper; directions about length are guidelines only.

Grading

The class has four graded components:

Schema	40 points
Taxonomy	40 points
Organizing system explanation	40 points
Participation	30 points
	150 points total

For graduate students, course grades will be determined according to the following schedule:

143 or above	H
112 to 142	P
90 to 111	L
below 90	F

For undergraduate students, course grades will be determined according to the following schedule:

143 and above	A
136 to 142	A-
132 to 135	B+
127 to 131	B
121 to 126	B-
117 to 120	C+
112 to 116	C
106 to 111	C-
102 to 105	D+
90 to 102	D
<90	F

Participation

The class will be mostly based around discussions, in-class activities, and project work, with relatively few lectures. Class participation is a vital component of the course.

The essence of good participation is in helping the class to attain a greater understanding of concepts, readings, and activities. Asking questions and talking about things that you don't understand are *excellent* forms of participation.

Grading criteria
Excellent participation involves these characteristics:
- You take responsibility for making our class sessions worthwhile and engaging by contributing to discussions and activities.
- Your contributions to discussions and activities demonstrate that you have prepared for class by doing the assigned readings and preparatory activities.
- Your contributions to discussions and activities show evidence of thoughtful reflection.

- You listen to others and respond to them respectfully and constructively.

Attendance affects participation; if you have excessive absences, your participation will necessarily suffer.

Semester Calendar

For each day of the course, read the listed materials and perform the described activities **before class.** *Optional readings are just that. They are extra material for those with an interest.*

Date and theme	Topics	To read before class	To do before class	What we will do in class
Thursday, January 11 Class introduction	Organizing systems	Course syllabus		• Introductions • Examples of organizing systems • Syllabus Q and A
Tuesday, January 16 Defining things	Entities Naming	• Kent • Domonoske, 2017 • Hui, 2017		• Game • Discussion • Schema project overview
Thursday, January 18 Snow day Class cancelled				•
Tuesday, January 23 Defining information things	Works, texts, documents	• Wilson • Buckland	Brainstorm 1-3 ideas for a set of things to describe with your schema	• Game • Project work: discuss ideas for your set of things • Schema project details
Thursday, January 25 Identifying things	Disambiguation Controlled vocabularies and authority control Identifiers	• Handout on disambiguation and control • Coyle	*Bring a printed copy to class for instructor feedback:* A proposal for the set of things to describe with your schema: your sense of its domain, scope, and means of identification	• Lecture • Project work: Discuss domain, scope, and identification
Tuesday, January 30 Language, cognition, and categorization	Internal category structure in thought and language	• Lakoff • Winograd and Flores		• Demonstrations • Lecture

Date and theme	Topics	To read before class	To do before class	What we will do in class
Thursday, February 1 Describing things systematically	Attributes and values Schemas	• Handout on attributes and values • Gilliland, 2015 • Dublin Core metadata standard *Optional* • Dublin Core implementation guidelines for collaborative digitization project, 2005	Brainstorm preliminary ideas for attributes in your schema	• Discussion • Project work: Discuss ideas for schema attributes and associated values
Tuesday, February 6 Culture, cognition, and categorization	Cultural integration with internal category structure Conflict and incommensurability	• Basso • Zerubavel • Eddy and Bennett • Gyasi		• Discussion •
Thursday, February 8 Developing a schema and description protocol	The practice of implementing data infrastructure		Document an initial set of attributes and value parameters and for your schema and bring it to class. Bring to class three things (or a source of information about the things) to be described with your schema. One thing should be central to your set of things and one thing should be peripheral.	• Project work: test your schema by having others use it to describe something
Tuesday, February 13 Organizing systems as scientific infrastructure	How organizing systems are implemented and used in science: biological species	• Ereshevsky (Plus, handy reading notes on Ereshevsky to help you...)		• Discussion • Game

Date and theme	Topics	To read before class	To do before class	What we will do in class
Thursday, February 15 Using a schema to describe something systematically	The practice of implementing data infrastructure, part 2		Revise your schema and documentation based on last week's test.	• Project work: Retest revised schemas with new users.
Tuesday, February 20 Organizing systems as sociotechnical infrastructure	How organizing systems are implemented and used in social contexts: the International Classification of Diseases	• Bowker and Star	*Final schemas due at beginning of class.*	• Discussion
Thursday, February 22 Relating categories	Hierarchical relationships Associative relationships	• Handout on classification basics		• Lecture • Taxonomy project overview
Tuesday, February 27 Organizing systems for information objects: traditional goals	Objective representation for retrieval Documentation (Paul Otlet)	• Rayward *Optional* • Day		• Discussion
Thursday, March 1 Designing category systems: for disambiguation	Equivalence relationship	• Handout on equivalence *Optional* • Furnas	*Bring a printed copy to class for instructor feedback:* A proposal for the set of things you'll arrange with your taxonomy (e.g., superheroes), the property that the taxonomy is based on (e.g., superpowers) and a list of potential unorganized descriptors (e.g., telepathy, flying)	• Lecture • Project work: Discuss project ideas with others.
Tuesday, March 6 Organizing systems for information objects: traditional conceptual foundations	Practical effects of epistemological assumptions in organizing systems	• Mai *Optional* • Furner		• Discussion • Game

Date and theme	Topics	To read before class	To do before class	What we will do in class
Thursday, March 8 Using category systems to relate things	Faceted structure and interfaces	• Hunter	Bring your set of potential descriptors to class.	• Project work: Begin to arrange your descriptors in hierarchical relationships.
Tuesday, March 13 *Spring break* *No class*				
Thursday, March 15 *Spring break* *No class*				
Tuesday, March 20 Organizing systems for information objects: alternate foundations	Practical effects of cultural assumptions in organizing systems	• Hur-Li Lee • Light, Shklovski, and Powell		• Discussion
Thursday, March 22 Designing category systems: for interaction	Project work day		Complete a draft of your taxonomy and descriptor definitions and bring it to class. Bring 5 items (or information about those items) to class, so that others can attempt to place those items within your taxonomy.	• Project work: test your taxonomy by having others use it to categorize things
Tuesday, March 27 Collections as expression	Selection, description, and arrangement as communicative acts	• Clifford • Cvetkovich	*Final taxonomy due at beginning of class*	• Discussion • Game
Thursday, March 29 The production of meaning through organizing systems	Explaining an organizing system			• Project work: Organizing system analysis overview; brainstorm ideas for the project • Instructions for next Thursday's exercise.

Date and theme	Topics	To read before class	To do before class	What we will do in class
Tuesday, April 3 Non-retrieval interactions with collections	Designing for interactions other than retrieval	• Ingold	*Bring a printed copy to class for instructor feedback:* A proposal for your explanation project that includes the system's you'll compare and the set of things that you'll be examining (e.g., hot sauce in two supermarkets or database courses at UNC and Coursera)	•
Thursday, April 5 Designing collections of things	Selection, categorization, and arrangement of resources as design activities	•	Investigate the selection, categorization, and arrangement of *one* of the following at at least one supermarket: 　• Cheese. 　• Wine. 　• Tea. 　• Oil. Be sure to find all of the places where these things are located. Take notes! How does the selection, arrangement, and relationship of the instances in these categories present an interpretation of what this entity is?	• Project work: the supermarket exercise is practice for the kind of explanation you will do for your paper. We'll share and discuss your findings.

Date and theme	Topics	To read before class	To do before class	What we will do in class
Tuesday, April 10

Material environments and organizing systems: the database | "The database" as an environment for organizing systems | • Manovich
• Dourish | | • Discussion
• Demonstrations |
| Thursday, April 12 | Selection, categorization, and arrangement of resources as design activities | | Investigate the selection, categorization, and arrangement of *either* men's or women's "work shoes" at the following Web sites:
• Amazon
• Zappos
• Shoes.com

Be sure to find the categories associated with "work" shoes (in other words, do NOT search for the words "work shoes").

How does the selection, description, and arrangement of "work shoes" present an interpretation of what "work shoes" are and what "work" is? | • Project work: the exercise is practice for the kind of explanation you will do for your paper. We'll share and discuss your findings. |
| Tuesday, April 17

Material environments and information systems: the network | Linked data as an environment for organizing systems | • RDF Primer | | • Lecture
• Game |
| Thursday, April 19

The role of human organizing in automatic organizing | Human decisions and automatic classification | • Rieder | Prepare draft of organizing system explanation and bring two copies to class to exchange with peer reviewers. | • Discussion
• Game |

Date and theme	Topics	To read before class	To do before class	What we will do in class
Tuesday, April 24 Peer review of organizing system analysis papers	Project work day		Prepare written comments on your colleagues' drafts.	• Project work: Discuss paper drafts with peer reviewers.
Thursday, April 26	Description as a "loving art"	• Doty	*Organizing system analysis due on, at noon, via the Assignments tool in Sakai*	• Discussion

Policies

Instructor communication
For specific, concrete questions, e-mail is the most reliable means of contact for me. You should receive a response within a day or so, but sometimes it may take 2-3 days. If you do not receive a response after a few days, please follow up. It is always helpful if your e-mail includes a targeted subject line that begins with "INLS 520."

For more complicated questions or help, come to office hours (no appointment necessary!) or make an appointment to talk with me at a different time.

You are welcome to call me by my first name ("Melanie"). However, you may also use "Dr. Feinberg" if that is more comfortable for you. Either is fine.

Attendance
Attendance is not taken. You do not need to inform me of absences, nor do you need to "make up" anything if you are absent. While participation is an important part of your grade, and attendance is important, there are no requirements for mandatory attendance.

Late work
Late work is not acceptable.

If an assignment is late, ten percent of the possible points will be deducted from the score.

Example
If the descriptive schema, worth 40 points, is one day late, the maximum number of points is 36, or 40-4.

An assignment is one day late when the time it is due is passed, and it continues to be one day late until 24 hours later (that is, if an assignment is due at 12 p.m., when class begins, it is late at 12:01 p.m., and it is one day late until 12 p.m. the next day).

Extensions
Extensions for project work may be granted under reasonable circumstances, *when negotiated with the instructor in advance.* A request for an extension minutes before a due date will likely be denied. A request for an extension made a month before the due date is likely to be accepted.

Students who anticipate difficulties with completing work on time, or who encounter unexpected and severe challenges, should consult with the instructor as soon as possible so that alternate solutions can be discussed.

Academic integrity
The UNC Honor Code states that:

It shall be the responsibility of every student enrolled at the University of North Carolina to support the principles of academic integrity and to refrain from all forms of academic dishonesty...

This includes prohibitions against the following:
- Plagiarism.
- Falsification, fabrication, or misrepresentation of data or citations.
- Unauthorized assistance or collaboration.
- Cheating.

All scholarship builds on previous work, and all scholarship is a form of collaboration, even when working independently. Incorporating the work of others, and collaborating with colleagues, is welcomed in academic work. However, the honor code clarifies that you must always acknowledge when you make use of the ideas, words, or assistance of others in your work. This is typically accomplished through practices of reference, quotation, and citation.

If you are not certain what constitutes proper procedures for acknowledging the work of others, please ask the instructor for assistance. It is your responsibility to ensure that the honor code is appropriately followed. (The UNC Office of Student Conduct provides a variety of honor code resources.)

The UNC Libraries has online tutorials on citation practices and plagiarism that you might find helpful.

Students with disabilities
Students with disabilities should request accommodations from the UNC office of Accessibility Resources and Service (https://accessibility.unc.edu/).

Descriptive Schema Project Details

Project overview
In this project, you will define a set of things, detailing its domain, scope, and means for establishing that one item is different from another. You will then outline a structure of attributes and associated values to systematically describe your set of things. Next, you will develop documentation to help someone else (not you) to use the schema to describe instances of the things in your set.

To assess your schema and improve it, you will use the schema to describe (create metadata for) five varied instances of the things in your set. In class, you will further assess your schema by having someone else use it to describe three things. After these assessments, you may decide to revise your schema or the instructions.

Finally, you will write a short essay that reflects on your experience developing and assessing the schema.

This project is NOT designing a database. Your project is merely to instruct other people how to describe a set of things in a systematic way. (A good database design requires this kind of conceptual thinking also, but this project is not specific to a database implementation.)

Project component 1: Your set of things
This part of your project includes three parts:
- Domain.
- Scope.
- Identification.

Domain
You will *define a group of things* to describe. This could be anything: concrete, physical things, informational things, or abstract, conceptual things. Some examples that students have previously used:

- Spoons.
- Historical sites in Beijing.
- Jerky.
- Characters based on Sherlock Holmes in film and television.
- Knitting patterns.
- Reality television series.
- Web comics.
- Yoga poses.
- Representations of "the Aztec" in cinema.

As part of the domain, you will articulate a *purpose* and associated *target audience* to motivate your description. For example, you might want to help novice knitters find patterns that make nice gifts, or you might want to interrogate stereotypes latent in "Aztec" imagery. Each situation will suggest a different set of attributes for the same set of things, so define the audience and purpose carefully.

Scope
Here you will clarify what is in, and what is out, of your set of things.

For example, is a yoga pose invented by your teacher a proper yoga pose? Is a ladle a spoon? What are central members of your set of things, and what are peripheral members? What doesn't belong at all? Thinking about central and border cases will help you create attributes that apply equally to all members of your set of things.

Identification

Now that you've clearly defined your scope, you should be able to more precisely define your things. This involves deciding on a level of *abstraction*: for example, are you organizing individual physical books, or abstract literary expressions that may be manifested in various forms and editions? Are you describing a specific package of jerky or all instances of a certain product?

You also need to think about *parts* and *granularity*: do your things have parts that need to be kept track of? Are your things themselves collections? What about the *persistence* of your things: do they change over time? How much can a thing change before it is no longer the same thing?

Explain how you will distinguish between two different things. Do they have some intrinsic property that you can rely on for identification? Will you need to assign identifiers?

Project component 2: Attributes, value parameters, and documentation

You will articulate a set of 10-15 attributes to define your things in support of your identified audience and purpose. You will label and document each attribute in sufficient detail so that someone else can assign values for things of the type that you have described. For each attribute, you will set parameters for acceptable values and provide guidelines that show how values should be expressed.

Preliminary assessment

Once you have sufficiently defined your attributes, use the structure that you have developed to preliminarily describe five instances to represent both central and border cases of your entity set. If there are cases where you are unable to satisfactorily describe an instance, use this as an opportunity to revise the schema and clarify your attribute definitions. (You might even need to clarify the boundaries of your group of entities and sharpen its description.) Then use your revised schema to create five final descriptions for your entity instances.

User assessment

You will further assess your schema by having someone else use it to describe three things. We will do this in class, but you will include your assessors' results with your final submission.

Project component 3: Reflection essay

Finally, write a brief critical reflection on your design process and resulting product. You might discuss questions such as the following:

- Did designing the schema clarify or complicate any of the ideas we've been reading about in class?
- What was difficult about designing the schema?
- How did you decide which attributes to include in the schema?
- How do you know what makes an attribute good or useful?
- How do you know if you've defined an attribute well?
- What might you keep in mind when designing similar kinds of organizing systems?

These are *examples* of questions that you *might* discuss. To create a concise yet cohesive essay, you will need to concentrate on a few design issues of particular relevance to your project. *Do not merely answer the questions here.*

Note that the point of this reflective essay is *not* to justify why your schema is awesome. Clearly, it is awesome, and you don't need to persuade me of that. Instead, the goal of this essay is to explore how the practical experience of designing a schema provokes insight onto the conceptual foundations of information organization.

Deliverables
Your final assignment should include:

1. The domain, scope, and identification information for your set of things.
2. Your attribute descriptions, value parameters, and associated guidelines for using the schema to describe the things. The description for each attribute should follow a consistent format. (You can use something similar to the NISO standard for Dublin Core metadata elements or devise your own format. You may use tables if you wish.)
3. Your descriptions of five instances. Use a consistent format for each record (perhaps a table for each instance).
4. The instance descriptions created by your peer testers.
5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Grading criteria
A successful schema will exhibit these characteristics:
- The following are clearly described: what constitutes a member of the defined set of things, the schema's audience and purpose, and how a thing should be identified and distinguished from other things.
- The defined attributes effectively represent the selected things in the context of the described purpose, and the value space effectively represents the extent of the attributes. For example, when describing yoga poses for students, an attribute that indicates level of difficulty might be appropriate. However, such an attribute might seem less appropriate if describing yoga poses in relation to the history of Hindu thought and culture. In addition, the values described for the potential level of difficulty attribute for yoga poses should encompass the full range of possibilities at an appropriate level of detail for the audience and purpose.
- The documentation is sufficient to describe actual things accurately and comprehensively within the context of the selected purpose.
- The critical reflection thoughtfully considers the design process, product, or both, using the experience of creating the descriptive schema to productively engage larger issues of theory and practice (that is, the reflection does not merely summarize or justify the design process or product; it interrogates it).
- All project components follow a logical document structure, are clearly written, and use correct grammar and punctuation.
- All the project components are included.

Taxonomy Project Details

Project overview
In this project, you will develop a taxonomy of categories to relate and arrange the things that you described with your schema. You will document the taxonomy so that someone else can use it to put things within the categories that you define. In class, you will assess the taxonomy and its documentation by having others use the taxonomy to classify things. Finally, you will write a short essay that reflects on your experience developing and assessing the taxonomy.

Project component 1: Taxonomy
First, you will decide on a property to organize your things. This could be an attribute from your schema or it could be a new property.

To create a worthwhile taxonomy, the property that you select must be complex enough so that its values can be arranged in multiple levels of hierarchy. You might need to play around with several ideas before making your final selection. To begin, select a property that has between 10-15 specific values that can then be organized under more general categories.

Here are some examples.

If your entity set was *yoga poses,* you might create a taxonomy of *skills* associated with each pose: for example, arm strength, open hamstrings, balance, breath control, mental presence.

If you entity set was *spoons,* you might create a taxonomy of *materials:* teak, silver, plastic, bone, glass.

If your entity set was *still-life paintings,* you might create a taxonomy of depicted *objects:* lemons, oysters, goblets, petunias.

If your entity set was *gardening implements,* you might create a taxonomy of gardening *activities* that the implements are used in: weeding, insect spraying, harvesting, sowing, mulching.

We will work on creating the basic taxonomy structure in class, but here are the fundamental steps for a bottom-up design approach:
1. Identify 10-15 specific values—the ones that you would have specified in your descriptive schema.
2. For each value, generalize it into a broader category. From lemons, go to citrus, or fruit. From teak, go to wood. From arm strength, go to upper body strength. From insect spraying, go to pest control.
3. For each broader category, go up another level, until you get to your top term: skills, materials, objects.
4. Now comes the hard part. Arrange, redefine, remove, add, and relabel your categories so that they are organized into proper hierarchial relationships with a single principle of division at each level of the hierarchy. (We'll talk about what this means in class.)
5. Ensure that your taxonomy follows good design practice for hierarchies: at each level, categories are jointly exhaustive and mutually exclusive, and at a similar level of abstraction. (You'll get a set of design principles in class.)

Your final taxonomy should include from 25-40 categories, dispersed throughout all its levels. It should be at least four levels deep (the root term, two intermediate levels, and terminating values). Arrange your final taxonomy in a diagram that shows the relationships between categories. (There is no advantage to creating a fancy diagram.)

Project component 2: Taxonomy documentation
To enable someone else to use your taxonomy to categorize actual things, you need to define each category in your taxonomy and provide guidance about which kinds of things to put where.

Here are some issues that you need to think about:
- Can things be placed into higher-level categories or only at the bottom level? If things can go into higher-level categories, when might this occur?
- Can things go into multiple categories or just one?
- If a thing seems to fall in between or outside the existing categories, where should it go?

Your definitions should explain what the categories mean in the context of your taxonomy. For example, if you had a category of Bone to describe materials that spoons are made of, you would not transcribe the dictionary definition for Bone; that would be silly. You might write something like this:

Bone   Place here any spoons made of animal bone, tusks, teeth, or horn. Do not use Bone for spoons made from shells of marine animals.

Project component 3: reflection essay
Finally, write a brief critical reflection on your design process and resulting product. You might discuss questions such as the following:
- Did designing the taxonomy clarify or complicate any of the ideas we've been reading about in class?
- What was difficult about designing the taxonomy?
- How did you decide which categories to include in the taxonomy?
- How do you know what makes a category good or useful?
- How do you know if you've defined a category well?
- What might you keep in mind when designing similar kinds of organizing systems?

These are *examples* of questions that you *might* discuss. To create a concise yet cohesive essay, you will need to concentrate on a few design issues of particular relevance to your project. *Do not merely answer the questions here.*

Note that the point of this reflective essay is *not* to justify why your taxonomy is awesome. Clearly, it is awesome, and you don't need to persuade me of that. Instead, the goal of this essay is to explore how the practical experience of designing a taxonomy provokes insight onto the conceptual foundations of information organization. U

Deliverables
Your final assignment should include:
1. A summary of the set of things to be arranged with the taxonomy, and the audience and purpose associated with organizing these things (this may come directly from your schema project).
2. A diagram that includes all the categories in the taxonomy and shows their relationships.
3. Your taxonomy documentation, including general guidelines and category definitions.
4. The category assignments made by your peer assessors.
5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Grading criteria
A successful taxonomy will exhibit these characteristics:
- The taxonomy itself includes an appropriate number of categories, arranged in well-formed hierarchical relationships, that follow best practices for taxonomy design.

- The selected categories represent the set of things well in the context of its identified audience and purpose (from the descriptive schema).
- The documentation is sufficient to categorize actual things accurately within the context of the selected purpose.
- The critical reflection thoughtfully considers the design process, product, or both, using the experience of creating the taxonomy to productively engage larger issues of theory and practice (that is, the reflection does not merely summarize or justify the design process or product; it interrogates it).
- All project components follow a logical document structure, are clearly written, and use correct grammar and punctuation.
- All the project components are included.

Organizing System Explanation Project Details

Project overview
In this project, you will write a paper to explain and compare, in detail, how a set of things is presented in two or three organizing systems in the real world. These should be systems that are available to the public (that is, not the sock drawer in your house). They can organize physical or digital items. Your explanation will have several parts:

- A explanation of the category structure in each organizing system and the kinds of items placed in each category.
- An interpretation of each category structure that attempts to understand the ideas it communicates about the entity set.
- A comparison of the different ideas presented in each organizing system.

Your goal in this paper is to understand how each organizing system interprets the entity set: how it gives the entity set a particular meaning. Your goal is not to assess the effectiveness of the organizing system for retrieval. It doesn't matter if it's easy or difficult for you to find items in the entity set.

The real-world set of things
To write a meaningful, detailed, incisive explanation, you will need to focus on just one part of each organizing system. That is why you will keep your analysis to one type of things within the system. Here are some examples:

- The organization of light fixtures at Home Depot and Lowes.
- The organization of chips at CVS and Harris Teeter.
- The organization of mystery novels at Flyleaf Books and at Amazon.
- The organization of Legos at the Southpoint Target and online, via the Lego Web site.
- The organization of Japanese woodblock prints at two different online galleries.

As with defining an entity set to organize with your schema, you will need to identify a set of things that is specific enough to analyze in depth but broad enough to enable you to say something interesting about it. So the entire supermarket would be too broad, but just the Cheerios would be too narrow. The cereal at the supermarket might be just right.

Explanation of category structure
Your paper will need to explain each category structure that you're investigating. Let's say you're looking at the cereal in a supermarket. Here are the kinds of questions you might ask:

- What different kinds of organizing principles are at play in arranging the cereal? Are the cereals arranged by size, price, brand, primary ingredients, level of sugar? How are these principles deployed—are the most expensive items on the top shelves or the bottom shelves?
- What principles inform the selection of items within the category? How many different kinds of cereal are there? What kinds are represented the most, and what kinds the least?
- Can you define central and peripheral members of the set of "cereal" each supermarket, and on what basis can you make that determination?
- How is cereal related to other entities? What is next to it?

Note that your set of things might be split up into multiple locations within the organizing system: for cereal, there might be cereal in the bulk section, or in the International section. You'll need to investigate these as well.

When you describe the category structure in your paper, focus on *explaining* it, not documenting it. There is no need to map out or transcribe each item in the cereal section! That would be silly. Your goal is to explain how the cereal section works, not to merely copy it down.

In creating your explanation, make use of the readings and class activities from throughout the semester.

Interpretation of category structure
This is the fun part. What does the category structure that you've explained tell us about the set of things?

Here's an example.

Let's say my entity set is Noodles, and I'm looking at the Harris Teeter. Most of the noodles are in a section labeled Pasta that is near the tomato sauce. Indeed, based on the selection and arrangement of pasta varieties, the central idea of "noodle" is oriented around the notion of spaghetti and tomato sauce as a common meal. However, not all the noodles are in the Pasta section. Rice noodles are with other "Asian" foods in the International section. These noodles are not near the tomato sauce. Rice noodles might be similarly shaped to spaghetti, but in the organizing system of the supermarket, they are far away from spaghetti. They are, in a sense, more Asian than noodle. They certainly do not appear to be interchangeable, based on their placement within the organizing system of the supermarket. There are implications to this: the supermarket is saying, in a way, that if you invited a friend over for pasta and served pad kee mao, your friend might be surprised. And yet, aren't rice noodles also noodles? (If you were defining "noodles" as an entity set for your descriptive schema, would you have excluded them? Probably not.)

While I encourage you to think deeply about the category structures that you're investigating, *make sure to ground your interpretation within the evidence provided by your explanation.* You need to show how your interpretation arises from that evidence.

In making your interpretation, you should also make use of the readings we've done throughout the semester.

Comparison of different organizing systems
In comparing the two (or three) organizing systems that you are investigating, you might consider the following kinds of questions:
- What are the different ideas presented by each organizing system about the entity set? Are these ideas compatible or incompatible? (For example, rice at the Li Ming Global Mart is the foundation of one's diet—it's in its own section in 25-lb bags. But rice at the Harris Teeter is just an occasional companion item.)
- Would items from one organizing system take on a different character in the other organizing system? (For example, sugary cereal might be common at the Harris Teeter but uncommon at Whole Foods.)
- Would any items from one organizing system be excluded from the other system? (For example, spaghetti probably doesn't appear at the Li Ming Global Mart, although there might be wheat noodles of similar shape.)

Paper writing details
Your explanations, interpretations, and comparisons should take the form of a cohesive essay of about 3,000 words (about 10 or so pages). Your essay should have a clearly identified argument and structure. For example, your argument might be "noodles are defined by culture, not physical properties" or "cereal has two identities: convenience food and healthy food" or "green salad is not actually salad" (based on evidence from supermarket buffets).

Although your paper needs to include your explanation of category structure, your interpretation of category structure, and your comparison of organizing systems, it does NOT need to put these into

separate sections. You should structure your paper in the way that makes the most sense for your argument.

Peer review
On Thursday, April 19, you will bring two copies of a paper draft to class. Two people will be assigned to read your draft and provide written and oral feedback on it at the next class session, on Tuesday, April 24; you will do the same for two drafts.

In your peer review, you will provide written answers to the following questions:
- What is this paper's argument?
- What is the evidence used to make this argument?
- What does the paper do well?
- How can the paper be strengthened?

You will give this feedback to the paper's author. (We will also discuss the drafts in class.) You will also turn in the feedback that you have written as part of your final paper submission.

Your goal in writing peer review feedback is to help make the paper better. Harsh criticism is not helpful; neither is mindless praise. Be honest, constructive, and compassionate. Also be a mindful and attentive reader: your feedback should not direct the writer to do things your way but help the writer to accomplish his or her goals more effectively.

Grading criteria
A successful organizing system explanation will exhibit these characteristics:
- The paper has a clearly identified argument.
- The explanations of each organizing system are adequate and cogent.
- The interpretations of each organizing system are insightful and well supported by evidence.
- The comparison of organizing systems is insightful and well supported by evidence.
- Material from course readings and activities is usefully employed to extend the argument.
- Peer reviews of others' drafts provide helpful, constructive feedback.
- The paper follows a logical document structure, is clearly written, and uses correct grammar and punctuation.

Readings

All readings are available in Sakai except for the following:
Mark Doty. 2002. *Still life with oysters and lemon.* Boston: Beacon Press.

The Doty book is available as an electronic resource via the UNC Libraries, and I have put a print copy on 24-hour reserve in the SILS library. You can also purchase it from Amazon or other sources. It's a lovely little book, and I recommend buying it.

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